The Sterling Building – 927 Lincoln Road
HOTEL OPERATIONS PLAN

A. Number of Employees per Shift

AM Shift - Total of 16 associates

1 General Manager

8 housekeepers

1 houseman

1-2 laundry attendants for offsite transfer

2 front desk associates

1 engineer

PM Shift - Total of 4 Associates

1 General Manager

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. 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).

2. The owner shall provide transit information to its guests and employees, including route schedules and maps.

3. The owner shall provide a carpool incentive program for employees.

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. The plans shall include six foot hallways and elevators that can accommodate bicycles.

6. There are 11 bicycle docks along Jefferson Avenue on the east side of the Property, and 3 bicycle docs on the SE corner of the Property. Additionally, there are 16 bike share docks at the east side of Jefferson Avenue, north of Lincoln Lane North.

7. 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.

8. 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 at the pore-cochere along Lincoln Lane North for drop-off and pick-up.
2. The porte-cochere provides space for 3 vehicles – 2 for valet and 1 for ride share drop-off and pick-up.
3. Self-parking is available for retail patrons in the Lincoln Parking Garage located just north of the site, as well as several other garages and public parking lots around Lincoln Road.

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 one full service restaurant.
6. There is no proposed entertainment at the restaurant.
7. Outdoor speakers will be used in the rooftop pool area, but will be limited to ambient background music.
8. The restaurants will be open to the general public, not only guests of the hotel.
9. The Applicant has not determined the branding of the restaurants, as it still in the preliminary stages, so there is no sample menu available.

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 or the nearby commercial loading zone. 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 9:00 am
Waste/Trash pickup	7 days per week	Morning
Beverage	1 day per week	7:00am to 9:00 am
Food Products	3 days per week	7:00 am to 9:00 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.

The Sterling Building – 927 Lincoln Road
RETAIL OPERATIONS PLAN

A. Number of Employees per Shift

Day Shift - Estimated Total of 40 employees

Evening Shift - Total of 55 Employees

B. Employee Parking Plan

1. Employees will be encouraged to use bike transportation. There are 11 bicycle docks along Jefferson Avenue on the east side of the Property, and 3 bicycle docs on the SE corner of the Property. Additionally, there are 16 bike share docks at the east side of Jefferson Avenue, north of Lincoln Lane North.

2. Employees shall be encouraged to use ride sharing transportation modes such as Uber or Lyft.

3. 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.

4. Employees that use cars will be able to park at the Lincoln Parking Garage located just north of the site, as well as several other garages and public parking lots around Lincoln Road.

C. Parking Plan

1. Self-parking is available for retail patrons in the Lincoln Parking Garage located just north of the site, as well as several other garages and public parking lots around Lincoln Road.

D. Delivery and Trash Pick-up Schedule

All deliveries shall occur through the designated off-street delivery area or the nearby commercial loading zone. Additionally, trash pickup will also occur internally within the property, as noted on the plans.

Type of Delivery	**Day of Week**	**Time of Day**
Retail Products	Varies per tenant	varies per tenant
Waste/Trash pickup	7 days per week	Morning
Beverage	1 day per week	7:00am to 9:00 am
Food Products	3 days per week	7:00 am to 9:00 am

E. Security Plan

1. Cameras will be provided throughout the property in order to assist with security.
2. In conjunction with the hotel on the site, 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 for the property.

Kimley»Horn

MEMORANDUM

To: Firat Akcay, City of Miami Beach

From: Adrian K. Dabkowski, P.E., PTOE
Alex Iliev, E.I.

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

Date: August 15, 2019

Subject: 927 Lincoln Road/The Sterling Building
Maneuverability Analysis

Kimley-Horn and Associates, Inc. has prepared a maneuverability analysis for the 927 Lincoln Road redevelopment. The areas included in the analysis include the valet drop-off/pick-up area and loading areas. The analysis was performed using Transoft Solutions Inc.'s *AutoTurn 10* 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*, 7th Edition. The analysis was prepared using passenger car (P) design vehicle for the valet drop-off/pick-up areas. Delivery vans comparable to P design vehicles will be used for deliveries and loading activities in the loading bays. The following summarizes the results of this analysis.

Valet

Access to the valet drop-off/pick-up will be provided via Lincoln Lane North along the north side of the property. A P design vehicle will be able to maneuver into the porte-cochere area allowing space for up to three (3) vehicles of stacking and by-pass the porte-cochere as Lincoln Lane North is 17-feet wide, refer to Attachment A.

Loading Area Access

Delivery vans, comparable to P vehicles, will be used for loading activities at the site and will be able to maneuver through Lincoln Lane North into the loading areas, refer to Attachment A.

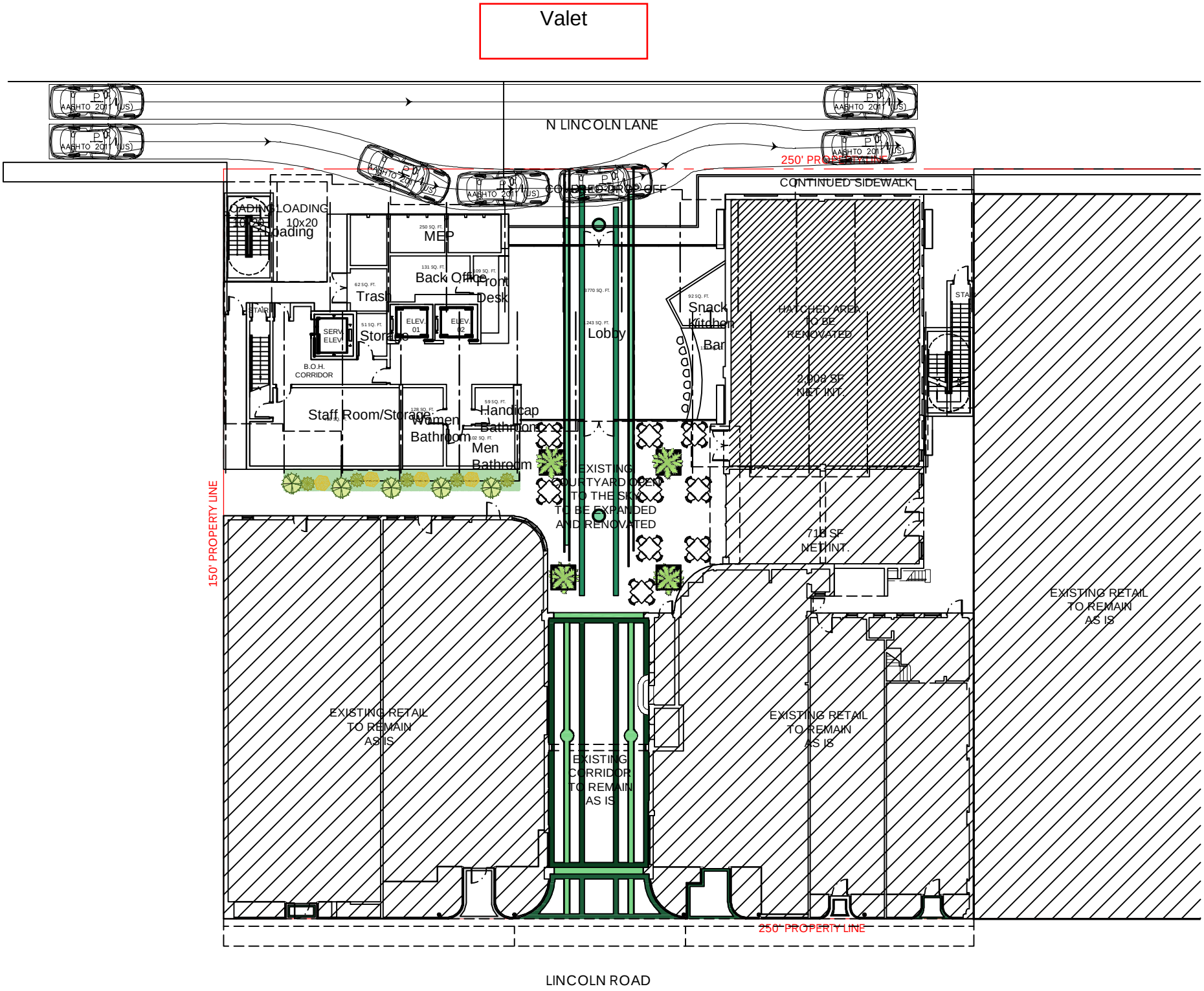
Conclusion

In conclusion, passenger vehicles and delivery van traffic will be able to ingress, egress, and travel through the site's porte-cochere area without any conflicts.

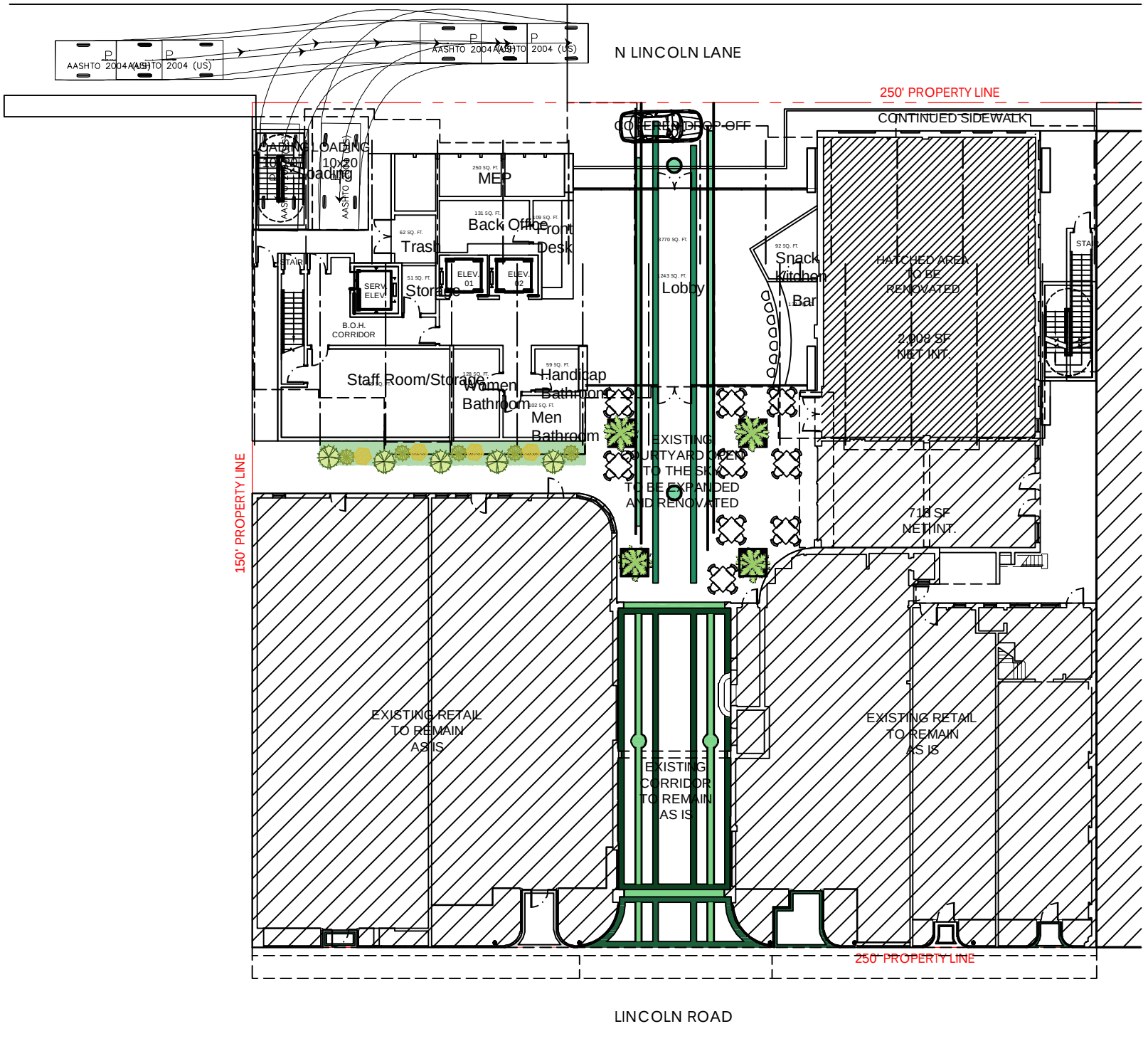
K:\FTL_TPTO\143115000-927 Lincoln Rd\Correspondence\927 Lincoln Road Maneuverability Analysis.docx

Attachment A

Maneuverability Plots


Valet
N LINCOLN LANE
250' PROPERTY LINE
CONTINUED SIDEWALK
COVERED DROP OFF
LOADING 10x20
LOADING 10x20
MEP
Back Office
Front Desk
Trash
Storage
SERV. ELEV.
ELEV. 01
ELEV. 02
STAIR
B.O.H. CORRIDOR
Staff Room/Storage
Women Bathroom
Handicap Bathrooms
Men Bathroom
Lobby
Snack
Kitchen
Bar
HATCHED AREA TO BE RENOVATED
2,008 SF NET INT.
EXISTING COURTYARD OPEN TO THE SKY TO BE EXPANDED AND RENOVATED
718 SF NET INT.
150' PROPERTY LINE
EXISTING RETAIL TO REMAIN AS IS
EXISTING CORRIDOR TO REMAIN AS IS
EXISTING RETAIL TO REMAIN AS IS
EXISTING RETAIL TO REMAIN AS IS
250' PROPERTY LINE
LINCOLN ROAD

Loading


N LINCOLN LANE
250' PROPERTY LINE
CONTINUED SIDEWALK
COVERED DROP-OFF
LOADING
10'x30'
Loading
MEP
Back Office
Front Desk
Trash
Storage
SERV. ELEV.
ELEV. 01
ELEV. 02
B.O.H. CORRIDOR
Staff Room/Storage
Women Bathroom
Handicap Bathroom
Men Bathroom
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Snack
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HATCHED AREA TO BE RENOVATED
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EXISTING COURTYARD OPEN TO THE SKY TO BE EXPANDED AND RENOVATED
718 SF NET INT.
150' PROPERTY LINE
EXISTING RETAIL TO REMAIN AS IS
EXISTING CORRIDOR TO REMAIN AS IS
EXISTING RETAIL TO REMAIN AS IS
250' PROPERTY LINE
LINCOLN ROAD

Kimley»Horn

August 15, 2019

Firat Akcay
City of Miami Beach
Transportation Department
1688 Meridian Avenue, Suite 801
Miami Beach, Florida 33139

Re: 927 Lincoln Road/The Sterling Building Redevelopment
Traffic Assessment
Miami Beach, Florida

Dear Mr. Akcay:

Kimley-Horn and Associates, Inc. has performed a traffic assessment for the proposed 927 Lincoln Road redevelopment located on the south side of Lincoln Lane North between Michigan Avenue and Jefferson Avenue in Miami Beach, Florida. The parcels proposed for redevelopment currently consist of 32,378 square feet of retail space and 11,162 square feet of office space. The proposed redevelopment consists of 27,736 square feet of retail space and a 145-room hotel. A project location map and conceptual site plan are provided in Attachment A-1. The traffic assessment's methodology is consistent with the requirements outlined by the City of Miami Beach. Methodology correspondence details and assessment requirements are included in Attachment B-1. The following sections summarize the completed analysis.

TRIP GENERATION

Trip generation calculations for the proposed project were performed using the Institute of Transportation Engineers' (ITE) *Trip Generation Manual*, 10th Edition. Trip generation for the existing land uses was based on ITE Land Use Codes (LUC) 820 (Shopping Center) and LUC 710 (General Office Building). Trip generation for the proposed land uses was based on LUC 820 (Shopping Center) and LUC 310 (Hotel).

A multimodal (public transit, bicycle, and pedestrian) factor based on US Census *Means of Transportation to Work* data was reviewed for the census tracts in the vicinity of the redevelopment. A multimodal factor of 51.3 percent (51.3%) was found within the vicinity of the redevelopment. However, based on the input from the City of Miami Beach and to provide a conservative analysis, a multimodal factor of 20.0 percent (20.0%) was applied to the trip generation calculations to account for the urban environment in which the project site is located. It is expected that employees, guests, and patrons will choose to walk, bike, or use public transit to and from the proposed redevelopment.

Internal capture is expected between complementary land uses within the project. Internal capture trips for the project were determined based upon methodology contained in the ITE's *Trip Generation Handbook,* 3rd Edition. An internal capture rate of 7.4 percent (7.4%) was calculated for the existing development during the A.M. peak hour and 3.0 percent (3.0%) for the P.M. peak hour. An internal capture rate of 2.7 percent (2.7%) is expected for the proposed redevelopment during the A.M. peak hour and 5.1 percent (5.1%) during the P.M. peak hour.

Lincoln Road districtwide internal capture/captive market trip rates were determined based on average pass-by capture rates provided in the ITE's *Trip Generation Handbook*, 3rd Edition. Lincoln Road is a destination where patrons visit multiple sites. Therefore, a pass-by rate of 34.0 percent (34.0%) was utilized for the retail during the P.M. peak hour. Note that retail trips are expected to self-park in one (1) of the areawide parking garages, arrive by rideshare, and walk or bicycle to the site and Lincoln Road

The redevelopment is expected to generate 23 weekday net new A.M. peak hour trips and 36 weekday net new P.M. peak hour trips. Detailed trip generation calculations and US Census *Means of Transportation to Work* data are included in Attachment C-1.

Based on data collected from the Cadillac Hotel, it was assumed that 42.6 percent (42.6%) of net new hotel trips will be taxi/rideshare and the remaining hotel trips will be valet. Detailed rideshare and valet trip data are included in Attachment C-1.

HOTEL VALET SERVICE AND OPERATIONS ANALYSIS

The hotel patrons of the redevelopment will be served by one (1) porte-cochere along Lincoln Lane North providing valet drop-off and pick-up operations. The porte-cochere provides storage for approximately three (3) vehicles. It is expected that two (2) spaces will be used for valet operations and one (1) space will be used for taxi/rideshare. The drop-off/pick-up spaces are flexible in order to meet actual demand. Note that Lincoln Lane North is 17-feet wide and can accommodate two (2) vehicles side-by-side.

Self-parking for retail patrons is available in the Lincoln Parking Garage located north of the site. All other guests and patrons visiting the hotel not utilizing taxi/rideshare will have their vehicles valeted on-site.

Vehicles dropped-off in the valet will be driven by the valet attendant eastbound on Lincoln Lane North, northbound on Jefferson Avenue, and westbound to the Lincoln Parking Garage located north of the site. To provide a conservative analysis it is assumed that valet vehicles will be parked on the 6th floor of the garage. Valet pick-up vehicles will exit on the east side of the Lincoln Parking Garage, travel northbound on Jefferson Avenue, travel westbound on 17th Street, travel southbound on Michigan Avenue, and travel eastbound back on Lincoln Lane North to access the on-site porte-cochere. Figure 2 contained in Attachment D-1 provides a graphic illustration of the proposed valet routes to and from the parking garage.

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 Lincoln Lane North. Valet operations were analyzed for the number of valet attendants and required vehicle stacking. The valet analysis was prepared for the hotel porte-cochere.

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 in the Lincoln Parking Garage and return to the valet station. 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. 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 minute)
- Valet attendant drives vehicle from porte-cochere to parking garage (3.3 minutes)
- Valet attendant returns to valet station (1.3 minutes)
- Total service rate: 5.6 minutes

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

- Valet attendant proceeds to the garage to retrieve the vehicle (1.3 minutes)
- Valet attendant drives vehicle from parking garage to the porte-cochere (5.9 minutes)
- Exchange between valet attendant and driver and loading baggage (1.0 minutes)
- Total service rate: 8.2 minutes

The calculated average service time for vehicles valeted from the on-site porte-cochere is 5.6 minutes for valet drop-off and 8.2 minutes for valet pick-up. Processing times include the time for the exchange between the driver and valet attendants and time to unload and load baggage. Detailed travel time calculations are included in Attachment D-1.

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/rideshare. Note that the valet analysis assumes two (2) spaces will be used for valet and one (1) space will be used for taxi/rideshare. The drop-off/pick-up spaces are flexible in order to meet actual demand.

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 calculation worksheets are provided in Attachment D-1.

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

DELIVERIES

Parking on site for delivery vehicles will be provided by two (2) 10 feet by 20 feet loading bays located on the northwest corner of the redevelopment on Lincoln Lane North. Additionally, the Jefferson Avenue on-street loading zone located east of the site will be used for larger delivery vehicles that cannot access Lincoln Lane North. Detailed loading zone locations are shown in Attachment E-1.

BICYCLE PARKING

Currently, 11 bicycle docks are provided along Jefferson Avenue on the east side of the project site and three (3) bicycle docks are provided on the southeast corner of the project site at the intersection of Jefferson Avenue and Lincoln Road. Additional bicycle parking is not proposed in the vicinity of the project site.

A 16 dock Citibike station is located on the east side of Jefferson Avenue north of Lincoln Lane North. A 16 dock Citibike station is also located on the west side of Michigan Avenue north of Lincoln Road.

MID-BLOCK CROSSWALK WARRANT ANALYSIS

A mid-block crosswalk warrant analysis was conducted for a 200-foot segment on Jefferson Avenue, 100 feet north of Lincoln Lane North and 100 feet south of Lincoln Lane North. Traffic data was collected during a 12-hour period from 10:00 A.M. to 10:00 P.M. for three (3) days, August 1st, 2019 (Thursday) to August 3rd , 2019 (Saturday). Traffic data is provided in Attachment F-1.

A mid-block crosswalk warrant analysis was conducted based upon the guidelines contained in the Florida Department of Transportation's (FDOT), *Traffic Engineering Manual* (TEM), 2019. The TEM was used to evaluate the need for a mid-block crosswalk and the appropriate treatment for the crosswalk.

The results from the TEM's mid-block crosswalk analysis are summarized in Table 1. As shown, Lincoln Lane North between Lincoln Road (south) and 17th Street (north) satisfies all applicable criteria under Section 3.8.5(3) and Section 3.8.5(4) in the TEM with the exception of Criterion 4(b) on August 2nd, 2019 (Friday).

Table 1: TEM Mid-Block Crosswalk Analysis	
TEM Mid-Block Crosswalk Warrant Section 3.8.5	**Analysis Results**
3(b)-1: Minimum of 20 pedestrians in one hour	Satisfied
3(b)-2: Minimum of 18 pedestrians during each of any two hours of an average day	Satisfied
3(b)-3: Minimum of 15 pedestrians during each of any three hours of an average day	Satisfied
4(a): Minimum roadway volume >2,000 ADT	Satisfied
4(b): Minimum distance to alternative crossing 300 feet	Not Satisfied
4(c): Minimum block length/intersection spacing 660 feet	Not Applicable
4(d): Located outside of intersection influence	Satisfied

TRANSPORTATION DEMAND MANAGEMENT STRATEGIES

The applicant has committed to providing the following TDM strategies to encourage people to use public transportation, use bicycles and walk, use car/vanpools, and find alternatives to the typical workday hours to reduce the impacts of the project traffic on the surrounding roadway network:

- Providing 20 subsidized transit passes for employees
- Provide transit information including route schedules and maps at the hotel
- Carpool incentive program for employees
- Six-foot wide hallways
- Elevators that can accommodate bicycles
- Improved sidewalks around the site by providing a 5-foot wide sidewalk on Lincoln Lane North

CONCLUSION

The redevelopment is expected to generate 23 weekday net new A.M. peak hour trips and 36 net new P.M. peak hour trips.

A valet operations analysis was conducted to determine the that the 95th percentile valet queue would not extend beyond the valet service area onto Lincoln Lane North. Based upon the conservative assumptions applied to the highest traffic demand condition, it was estimated that a maximum of 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.

Additionally, a mid-block crosswalk warrant analysis was conducted based upon the guidelines contained in the Florida Department of Transportation's (FDOT), *Traffic Engineering Manual* (TEM). The results of the TEM warrant analysis indicate that all criteria under Section 3.8.5(3) and Section 3.8.5(4) in the TEM are warranted with the exception of Criterion 4(b).

TDM strategies are also proposed as part of the redevelopment to relieve the impacts of project traffic on the surrounding roadway network. The applicant will be providing subsidized transit passes for employees, provide travel information at the hotel, car pool incentives for employees, wide hallways and elevators to accommodate bicycles, and improve the sidewalk on Lincoln Lane North.

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

Sincerely,

KIMLEY-HORN AND ASSOCIATES, INC.

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

Copy To: Josiel Ferrer, P.E., City of Miami Beach

ADRIAN K. DABKOWSKI
LICENSE
No. 78828
STATE OF FLORIDA
PROFESSIONAL ENGINEER

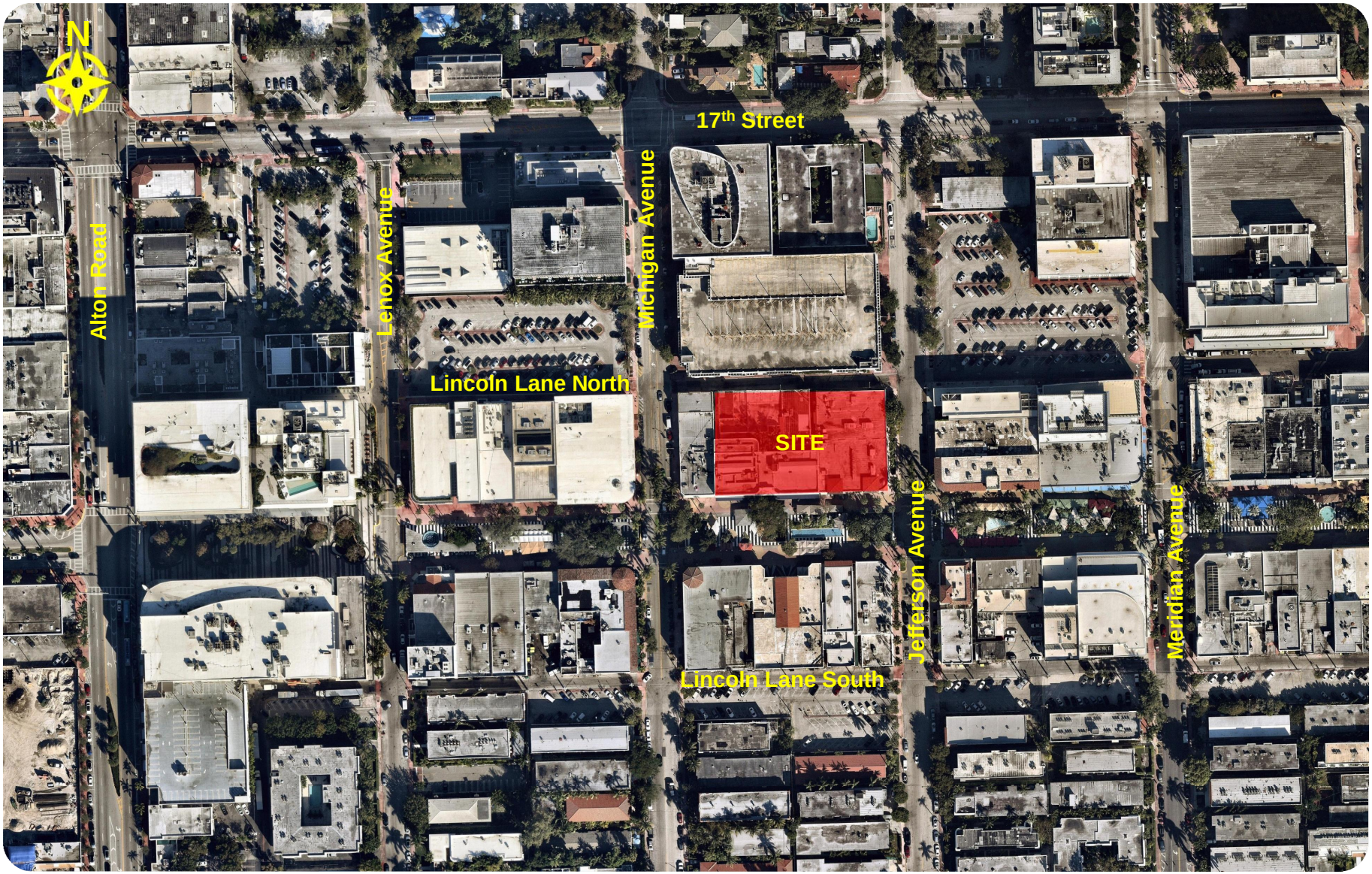
8/15/19

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

K:\FTL_TPTO\143115000-927 Lincoln Rd\Correspondence\ltr\Traffic assessment.docx

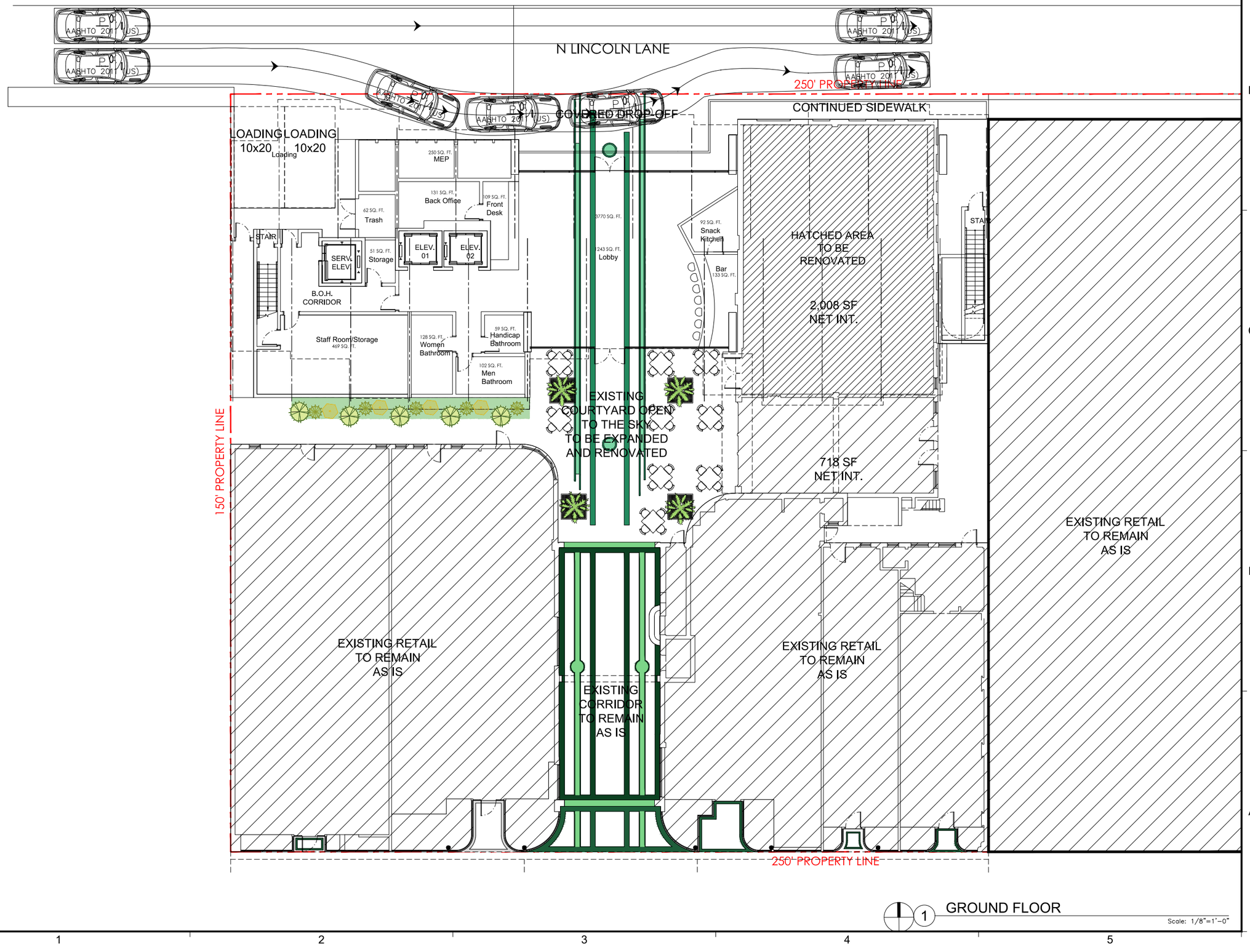
Attachment A-1

Location Map and Site Plan



Kimley»Horn

Figure 1
Location Map
927 Lincoln Road
Miami Beach, Florida



1 GROUND FLOOR

Scale: 1/8"=1'-0"

REVISIONS / SUBMISSIONS

1883

927-929 LINCOLN RD
12000 NORTH BAYSHORE DRIVE
MIAMI BEACH, FL 33139

GROUND FLOOR

Lic. # AR0012578

ARCHITECTURE
INTERIOR DESIGN
PLANNING
AIA ASID NCARB
2915 Biscayne Boulevard
Suite 200
Miami, Florida 33137
O. 305.573.1818
F. 305.573.3766
WWW.KOBIKARP.COM

KOBI KARP

DRAWN BY:	
CHECKED BY:	KK, MP
DATE:	07/08/2019

A3.01

Attachment B-1

Methodology Correspondence

Iliev, Alex

From: Akcay, Firat <FiratAkcay@miamibeachfl.gov>
Sent: Wednesday, August 14, 2019 4:00 PM
To: Dabkowski, Adrian
Cc: Ferrer, Josiel; Mickey Marrero; Iliev, Alex
Subject: RE: 927 Lincoln Road Redevelopment | Traffic Assessment Methodology

Categories: External

Adrian, the methodology is ok to proceed.

Mickey, we understand fully that this hotel being located on Lincoln Road will have minor impact to traffic. However, the loading operations from Lincoln Lane North is still a concern. If there is a way to modify the loading zone to be tandem totaling 40' in length rather than side to side this would be preferable and would eliminate blocking of traffic when loading and unloading. The concern is that alley's are used as commercial loading zones that do not require a permit and deliveries can and will take place here. The vehicular traffic on Lincoln Lane North will suffer from the commercial loading use of the alley which will negatively impact the hotel patrons.
Thank you

MIAMIBEACH RISING ABOVE

Firat Akcay, M.S.C.E. MBA
Transportation Analyst
Transportation Department
1688 Meridian Avenue, Suite 801, Miami Beach, FL 33139
Tel: 305-673-7000, ext 6839

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 <Adrian.Dabkowski@Kimley-horn.com>
Sent: Wednesday, July 31, 2019 6:10 PM
To: Akcay, Firat <FiratAkcay@miamibeachfl.gov>
Cc: Ferrer, Josiel <JOSIELFERRER@miamibeachfl.gov>; Mickey Marrero <mmarrero@brzoninglaw.com>; Iliev, Alex <Alex.Iliev@kimley-horn.com>
Subject: 927 Lincoln Road Redevelopment | Traffic Assessment Methodology

Good afternoon Firat:

Thank you for taking the time to meet with us on Monday to discuss the 927 Lincoln Road Redevelopment project. Our proposed traffic assessment methodology is attached. Let us know if the City has any comments.

Kimley»Horn

MEMORANDUM

To: Firat Akcay
City of Miami Beach

Cc: Josiel Ferrer-Diaz, P.E., City of Miami Beach

From: Adrian K. Dabkowski, P.E., PTOE
Alex Iliev, E.I.

Date: July 31, 2019

Subject: 927 Lincoln Road
Traffic Assessment Methodology

The purpose of this memorandum is to summarize the traffic assessment methodology for the 927 Lincoln Road redevelopment located at 927-929 Lincoln Road in Miami Beach, Florida. On-site parking will not be provided. Hotel patrons will be able to valet or self-park. Additionally, a portion of patrons are expected to utilize rideshare. The parcels proposed for redevelopment contain 32,378 square feet of retail space and 11,162 square feet of office space. The proposed redevelopment consists of 27,736 square feet of retail space and a 145-room hotel. A location map and conceptual site plan for the proposed redevelopment are included in Attachment A. The following sections summarize our proposed methodology.

TRIP GENERATION

Trip generation calculations for the proposed project were performed using the Institute of Transportation Engineers' (ITE) *Trip Generation Manual*, 10th Edition. Trip generation for the existing land uses was based on ITE Land Use Codes (LUC) 820 (Shopping Center) and 710 (General Office Building). Trip generation for the proposed land use was based on 820 (Shopping Center) and LUC 710 (Hotel).

A multimodal (public transit, bicycle, and pedestrian) factor based on US Census *Means of Transportation to Work* data was reviewed for the census tracts in the vicinity of the development. The US Census data indicated that there is a 51.3 percent (51.3%) multimodal factor within the vicinity of the redevelopment. However, to provide a conservative analysis, a multimodal factor of 20.0 percent (20.0%) was applied to the trip generation calculations to account for the urban environment in which the project site is located. It is expected that guests and patrons will choose to walk, bike, or use public transit to and from the proposed redevelopment as no on-site parking is provided.

Internal capture is expected between complementary land uses within the project. Internal capture trips for the project were determined based upon methodology contained in the ITE's *Trip Generation Handbook,* 3rd Edition. An internal capture rate of 7.4 percent (7.4%) was calculated for the existing development during the A.M. peak hour and 2.0 percent (2.0%) for the P.M. peak hour. An internal capture rate of 2.7 percent (2.7%) is expected for the proposed redevelopment during the A.M. peak hour and 5.1 percent (5.1%) during the P.M. peak hour.

Lincoln Road districtwide internal capture/captive market trip rates were determined based on average pass-by capture rates provided in the ITE's *Trip Generation Handbook*, 3rd Edition. Lincoln Road is a destination where patrons visit multiple sites. Therefore, a pass-by rate of 34.0 percent (34.0%) was utilized for the retail during the P.M. peak hour.

The redevelopment is expected to generate 23 weekday net new A.M. peak hour trips and 35 weekday net new P.M. peak hour trips. Detailed trip generation calculations and US Census *Means of Transportation to Work* data are included in Attachment B.

It was assumed 42.6 percent (42.6%) of net new trips will be taxi/rideshare and the remaining will be valet based on data collected from the Cadillac Hotel. Detailed rideshare and valet trip data are included in Attachment C.

VALET ANALYSIS

A valet operations queuing analysis will be prepared for the vehicle drop-off/pick-up area to determine if queues spill back into public right-of-way.

Trip generation estimates will be utilized to provide for the highest demand (weekday P.M. peak hour) scenario. The valet operations queuing analysis will be conducted consistent with procedures described in ITE's *Transportation and Land Development*, 1988. A traffic circulation figure will be prepared to illustrate the valet routes to and from the vehicle drop-off/pick-up area.

MID-BLOCK CROSSWALK ASSESSMENT

Pedestrian features around the site will be evaluated including a mid-block crossing at the intersection of Jefferson Avenue and Lincoln Lane North.

Pedestrian count data will be collected and analyzed for a 12-hour period at the intersection of Jefferson Avenue and Lincoln Lane North on a Thursday, Friday and Saturday between 10:00 A.M. and 10:00 P.M. for pedestrians crossing Jefferson Avenue within 100 feet of Lincoln Lane North.

A mid-block crosswalk warrant analysis will be conducted based upon the guidelines contained the Florida Department of Transportation's (FDOT) *Traffic Engineering Manual* (TEM) and the Federal Highway Administration's (FHWA), *Manual on Uniform Traffic Control Devices* (MUTCD). The TEM will be used to evaluate the need for a mid-block crosswalk and the appropriate treatment for the crosswalk, if warranted.

ON-SITE BICYCLE PARKING

The existing and proposed parking for bicycles (short-term, long-term, and Citibike locations) will be documented. The site plan will denote bicycle parking that can be accommodated on-site.

DELIVERIES

The proposed delivery circulation and loading areas will be documented as part of the assessment.

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.

DOCUMENTATION OF FINDINGS

A technical letter documenting the trip generation, valet analysis, mid-block crosswalk assessment, on-site bicycle parking, deliveries, and TDM strategies will be provided. The letter will include supporting documents including data collection, calculations, and analysis findings. The letter will also include text and graphics necessary to summarize the assumptions and analysis.

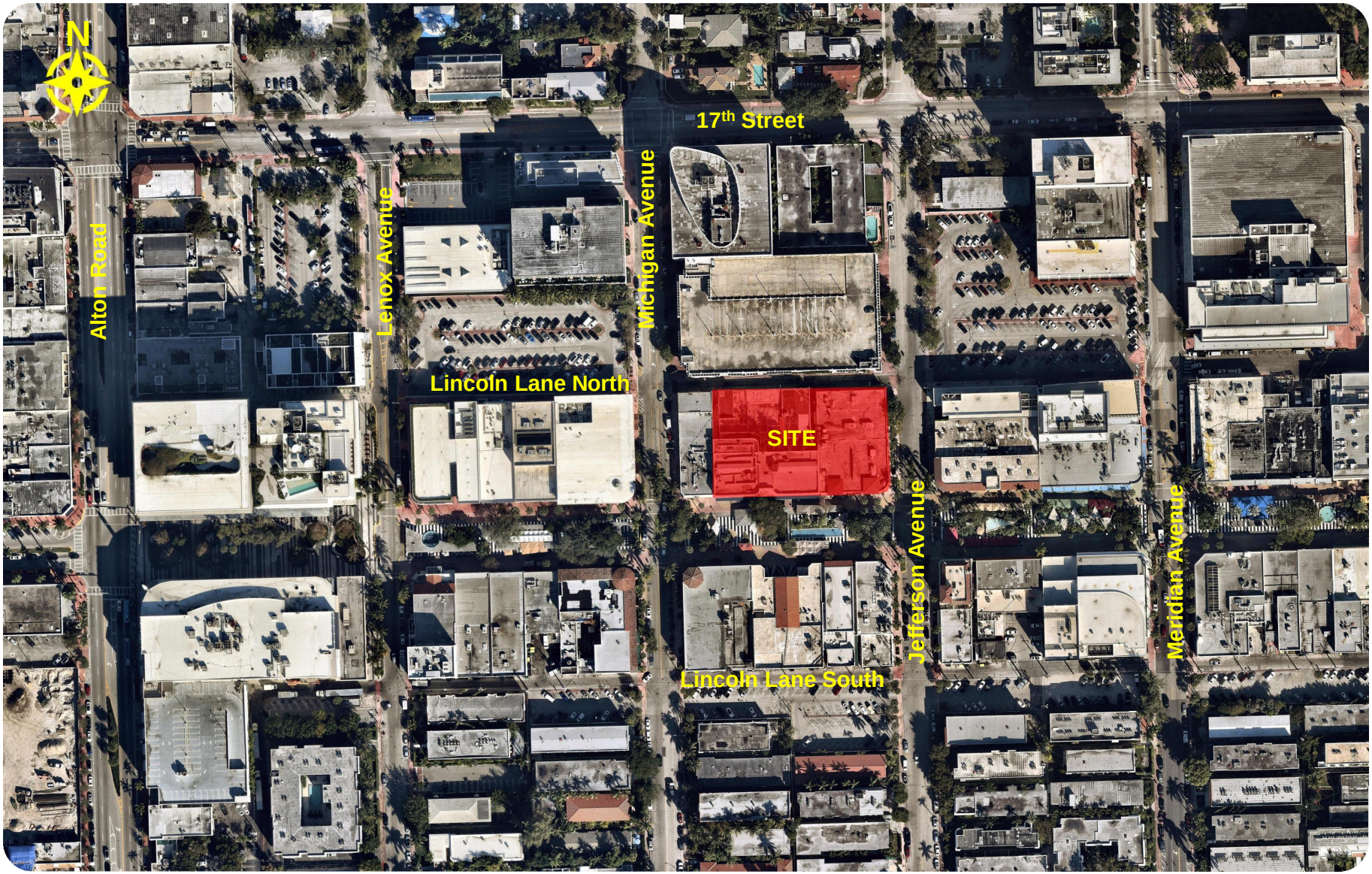
MANEUVERABILITY ANALYSIS

A maneuverability analysis for the porte-cochere areas and loading will be performed utilizing Transoft Solutions' *AutoTURN* software. Deficiencies related to maneuverability, traffic flow, and vehicular conflicts will be documented in a technical memorandum.

kimley-horn.com | 600 North Pine Island Road, Suite 450, Plantation, FL 33324 | 954 535 5100

Attachment A

Location Map and Conceptual Site Plan



Kimley»Horn

Figure 1
Location Map
927 Lincoln Road
Miami Beach, Florida

150' PROPERTY LINE

COVERED DROP-OFF

CONTINUED SIDEWALK

LOADING 10x20

LOADING 10x20

15' PEDESTAL REAR SETBACK

265 SQ. FT. MEP

131 SQ. FT. Back Office

109 SQ. FT. Front Desk

62 SQ. FT. Trash

STAIR

SERV. ELEV

51 SQ. FT. Storage

ELEV. 01

ELEV. 02

B.O.H. CORRIDOR

3786 SQ. FT.

283 SQ. FT. Lobby

92 SQ. FT. Snack Kitchen

HATCHED AREA TO BE RENOVATED

2,008 SF NET INT.

133 SQ. FT. Bar

STAIR

Staff Room/Storage 469 SQ. FT.

128 SQ. FT. Women Bathroom

59 SQ. FT. Handicap Bathroom

102 SQ. FT. Men Bathroom

150' PROPERTY LINE

12' INTERIOR SIDE PEDESTAL SETBACK

EXISTING COURTYARD OPEN TO THE SKY TO BE EXPANDED AND RENOVATED

718 SF NET INT.

12' INTERIOR SIDE PEDESTAL SETBACK

150' PROPERTY LINE

EXISTING RETAIL TO REMAIN AS IS

EXISTING CORRIDOR TO REMAIN AS IS

EXISTING RETAIL TO REMAIN AS IS

EXISTING RETAIL TO REMAIN AS IS

20' PEDESTAL FRONT SETBACK

150' PROPERTY LINE

1 GROUND FLOOR

Scale: 1/8"=1'-0"

REVISIONS / SUBMISSIONS

1883

927-929 LINCOLN RD
12000 NORTH BAYSHORE DRIVE
MIAMI BEACH, FL 33139

GROUND FLOOR

Lic. # AR0012578

ARCHITECTURE
INTERIOR DESIGN
PLANNING

AIA ASID NCARB

2915 Biscayne Boulevard
Suite 200
Miami, Florida 33137
P: 305.573.1818
F: 305.573.3766

WWW.KOBIKARP.COM

KOBI KARP

DRAWN BY:

CHECKED BY: KK, MP

DATE: 07/08/2019

A3.01

Attachment B

Trip Generation Calculations and U.S. Census Data

AM PEAK HOUR TRIP GENERATION COMPARISON

EXISTING WEEKDAY AM PEAK HOUR TRIP GENERATION

		ITE TRIP GENERATION CHARACTERISTICS					DIRECTIONAL DISTRIBUTION		GROSS VOLUMES			MULTIMODAL REDUCTION		EXTERNAL TRIPS			INTERNAL CAPTURE		NET NEW 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	MR Trips	In	Out	Total	Percent	IC Trips	In	Out	Total	Percent	PB Trips	In	Out	Total
GROUP 1	1	Shopping Center	10	820	32.378	ksf	62%	38%	19	11	30	20.0%	6	15	9	24	8.3%	2	14	8	22	0.0%	0	14	8	22
	2	General Office Building	10	710	11.162	ksf	86%	14%	32	5	37	20.0%	7	26	4	30	6.7%	2	25	3	28	0.0%	0	25	3	28
	3																									
	4																									
	5																									
	6																									
	7																									
	8																									
	9																									
	10																									
	11																									
	12																									
	13																									
	14																									
	15																									
							Total:		51	16	67	20.0%	13	41	13	54	7.4%	4	39	11	50	0.0%	0	39	11	50

ITE Land Use Code	Rate or Equation
820	Y=0.94(X)
710	Y=0.94*(X)+26.49

PROPOSED WEEKDAY AM PEAK HOUR TRIP GENERATION

		ITE TRIP GENERATION CHARACTERISTICS					DIRECTIONAL DISTRIBUTION		GROSS VOLUMES			MULTIMODAL REDUCTION		EXTERNAL TRIPS			INTERNAL CAPTURE		NET NEW 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	MR Trips	In	Out	Total	Percent	IC Trips	In	Out	Total	Percent	PB Trips	In	Out	Total
GROUP 2	1	Shopping Center	10	820	27.736	ksf	62%	38%	16	10	26	20.0%	5	13	8	21	4.8%	1	12	8	20	0.0%	0	12	8	20
	2	Hotel	10	310	145	room	59%	41%	40	27	67	20.0%	13	32	22	54	1.9%	1	32	21	53	0.0%	0	32	21	53
	3																									
	4																									
	5																									
	6																									
	7																									
	8																									
	9																									
	10																									
	11																									
	12																									
	13																									
	14																									
	15																									
							Total:		56	37	93	20.0%	18	45	30	75	2.7%	2	44	29	73	0.0%	0	44	29	73

ITE Land Use Code	Rate or Equation
820	Y=0.94(X)
310	Y=0.5*(X)+-5.34

	IN	OUT	TOTAL
NET NEW TRIPS	**5**	**18**	**23**

PM PEAK HOUR TRIP GENERATION COMPARISON

EXISTING WEEKDAY PM PEAK HOUR TRIP GENERATION

		ITE TRIP GENERATION CHARACTERISTICS					DIRECTIONAL DISTRIBUTION		GROSS VOLUMES			MULTIMODAL REDUCTION		EXTERNAL TRIPS			INTERNAL CAPTURE		NET NEW 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	MR Trips	In	Out	Total	Percent	IC Trips	In	Out	Total	Percent	PB Trips	In	Out	Total
GROUP 1	1	Shopping Center	10	820	32.378	ksf	48%	52%	113	123	236	20.0%	47	90	99	189	1.1%	2	88	99	187	34.0%	64	58	65	123
	2	General Office Building	10	710	11.162	ksf	16%	84%	2	12	14	20.0%	3	1	10	11	18.2%	2	1	8	9	0.0%	0	1	8	9
	3																									
	4																									
	5																									
	6																									
	7																									
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	9																									
	10																									
	11																									
	12																									
	13																									
	14																									
	15																									
		ITE Land Use Code		Rate or Equation				**Total:**	115	135	250	20.0%	50	91	109	200	2.0%	4	89	107	196	32.7%	64	59	73	132
		820		LN(Y) = 0.74*LN(X)+2.89																						
		710		LN(Y) = 0.95*LN(X)+0.36																						

PROPOSED WEEKDAY PM PEAK HOUR TRIP GENERATION

		ITE TRIP GENERATION CHARACTERISTICS					DIRECTIONAL DISTRIBUTION		GROSS VOLUMES			MULTIMODAL REDUCTION		EXTERNAL TRIPS			INTERNAL CAPTURE		NET NEW 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	MR Trips	In	Out	Total	Percent	IC Trips	In	Out	Total	Percent	PB Trips	In	Out	Total
GROUP 2	1	Shopping Center	10	820	27.736	ksf	48%	52%	101	109	210	20.0%	42	81	87	168	3.6%	6	79	83	162	34.0%	55	52	55	107
	2	Hotel	10	310	145	room	51%	49%	42	41	83	20.0%	17	33	33	66	9.1%	6	29	31	60	0.0%	0	29	31	60
	3																									
	4																									
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	10																									
	11																									
	12																									
	13																									
	14																									
	15																									
		ITE Land Use Code		Rate or Equation				**Total:**	143	150	293	20.0%	59	114	120	234	5.1%	12	108	114	222	24.8%	55	81	86	167
		820		LN(Y) = 0.74*LN(X)+2.89																						
		310		Y=0.75*(X)+-26.02																						

	IN	OUT	TOTAL
NET NEW TRIPS	**22**	**13**	**35**

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 (EXISTING)

GROSS TRIP GENERATION

INPUT

Land Use	A.M. Peak Hour		P.M. Peak Hour	
	Enter	Exit	Enter	Exit
Office	26	4	1	10
Retail	15	9	90	99
Restaurant	0	0	0	0
Cinema/Entertainment	0	0	0	0
Residential	0	0	0	0
Hotel	0	0	0	0
	41	13	91	109

INTERNAL TRIPS

OUTPUT

Land Use	A.M. Peak Hour		P.M. Peak Hour	
	Enter	Exit	Enter	Exit
Office	1	1	0	2
Retail	1	1	2	0
Restaurant	0	0	0	0
Cinema/Entertainment	0	0	0	0
Residential	0	0	0	0
Hotel	0	0	0	0
	2	2	2	2

OUTPUT

Total % Reduction	*7.4%*	*2.0%*
Office	6.7%	18.2%
Retail	8.3%	1.1%
Restaurant		
Cinema/Entertainment		
Residential		
Hotel		

EXTERNAL TRIPS

OUTPUT

Land Use	A.M. Peak Hour		P.M. Peak Hour	
	Enter	Exit	Enter	Exit
Office	25	3	1	8
Retail	14	8	88	99
Restaurant	0	0	0	0
Cinema/Entertainment	0	0	0	0
Residential	0	0	0	0
Hotel	0	0	0	0
	39	11	89	107

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	A.M. Peak Hour		P.M. Peak Hour	
		Enter	Exit	Enter	Exit
INPUT	Office	0	0	0	0
	Retail	13	8	81	87
	Restaurant	0	0	0	0
	Cinema/Entertainment	0	0	0	0
	Residential	0	0	0	0
	Hotel	32	22	33	33
		45	30	114	120

INTERNAL TRIPS

	Land Use	A.M. Peak Hour		P.M. Peak Hour	
		Enter	Exit	Enter	Exit
OUTPUT	Office	0	0	0	0
	Retail	1	0	2	4
	Restaurant	0	0	0	0
	Cinema/Entertainment	0	0	0	0
	Residential	0	0	0	0
	Hotel	0	1	4	2
		1	1	6	6

OUTPUT	*Total % Reduction*	*2.7%*	*5.1%*
	Office		
	Retail	4.8%	3.6%
	Restaurant		
	Cinema/Entertainment		
	Residential		
	Hotel	1.9%	9.1%

EXTERNAL TRIPS

	Land Use	A.M. Peak Hour		P.M. Peak Hour	
		Enter	Exit	Enter	Exit
OUTPUT	Office	0	0	0	0
	Retail	12	8	79	83
	Restaurant	0	0	0	0
	Cinema/Entertainment	0	0	0	0
	Residential	0	0	0	0
	Hotel	32	21	29	31
		44	29	108	114

B08301

MEANS OF TRANSPORTATION TO WORK
Universe: Workers 16 years and over
2013-2017 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 Technical 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.

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.

(71+271+335)/1,319=51.3%

	Census Tract 42.04, Miami-Dade County, Florida	
	Estimate	Margin of Error
Total:	1,319	+/-253
Car, truck, or van:	447	+/-147
Drove alone	424	+/-142
Carpooled:	23	+/-27
In 2-person carpool	8	+/-12
In 3-person carpool	15	+/-25
In 4-person carpool	0	+/-13
In 5- or 6-person carpool	0	+/-13
In 7-or-more-person carpool	0	+/-13
Public transportation (excluding taxicab):	71	+/-62
Bus or trolley bus	71	+/-62
Streetcar or trolley car (carro publico in Puerto Rico)	0	+/-13
Subway or elevated	0	+/-13
Railroad	0	+/-13
Ferryboat	0	+/-13
Taxicab	49	+/-45
Motorcycle	10	+/-16
Bicycle	271	+/-159
Walked	335	+/-121
Other means	52	+/-48
Worked at home	84	+/-58

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 2013-2017 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 populations, 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, 2013-2017 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.

Attachment C

Cadillac Hotel Rideshare and Valet Data

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

Taxi vs Valet Trips								
Time	Total Site Pick-up Trips	Total Site Drop-off Trips	Taxi Trips	Taxi Pick-up Trips	Taxi Drop-off Trips	Taxi + Valet + Self Park	Valet Pick-up	Valet Drop-off
18:00	17	18	23	16	7	71	1	11
18:15	17	10	16	12	4	77	5	6
18:30	15	7	16	12	4	83	3	3
18:45	41	13	12	9	3	101	32	10
19:00	24	4	10	7	3	83	17	1
19:15	20	8	11	8	3	79	12	5
19:30	20	15	11	8	3	66	12	12
19:45	27	6	9	7	2	61	20	4
20:00	21	8	15	11	4	74	10	4
20:15	18	2	20	15	1	60	3	1
20:30	26	8	15	11	4	56	15	4
20:45	46	6	15	11	4	37	35	2

42.6% Taxi Trips Observed

Attachment C-1

Trip Generation Calculations and U.S. Census Data

AM PEAK HOUR TRIP GENERATION COMPARISON

EXISTING WEEKDAY AM PEAK HOUR TRIP GENERATION

		ITE TRIP GENERATION CHARACTERISTICS					DIRECTIONAL DISTRIBUTION		GROSS VOLUMES			MULTIMODAL REDUCTION		EXTERNAL TRIPS			INTERNAL CAPTURE		NET NEW 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	MR Trips	In	Out	Total	Percent	IC Trips	In	Out	Total	Percent	PB Trips	In	Out	Total
GROUP 1	1	Shopping Center	10	820	32.378	ksf	62%	38%	19	11	30	20.0%	6	15	9	24	8.3%	2	14	8	22	0.0%	0	14	8	22
	2	General Office Building	10	710	11.162	ksf	86%	14%	32	5	37	20.0%	7	26	4	30	6.7%	2	25	3	28	0.0%	0	25	3	28
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							Total:		51	16	67	20.0%	13	41	13	54	7.4%	4	39	11	50	0.0%	0	39	11	50

ITE Land Use Code	Rate or Equation
820	Y=0.94(X)
710	Y=0.94*(X)+26.49

PROPOSED WEEKDAY AM PEAK HOUR TRIP GENERATION

		ITE TRIP GENERATION CHARACTERISTICS					DIRECTIONAL DISTRIBUTION		GROSS VOLUMES			MULTIMODAL REDUCTION		EXTERNAL TRIPS			INTERNAL CAPTURE		NET NEW EXTERNAL TRIPS			PASS-BY CAPTURE		NET NEW EXTERNAL TRIPS		
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	2	Hotel	10	310	145	room	59%	41%	40	27	67	20.0%	13	32	22	54	1.9%	1	32	21	53	0.0%	0	32	21	53
	3																									
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							Total:		56	37	93	20.0%	18	45	30	75	2.7%	2	44	29	73	0.0%	0	44	29	73

ITE Land Use Code	Rate or Equation
820	Y=0.94(X)
310	Y=0.5*(X)+-5.34

	IN	OUT	TOTAL
NET NEW TRIPS	**5**	**18**	**23**

PM PEAK HOUR TRIP GENERATION COMPARISON

EXISTING WEEKDAY PM PEAK HOUR TRIP GENERATION

		ITE TRIP GENERATION CHARACTERISTICS					DIRECTIONAL DISTRIBUTION		GROSS VOLUMES			MULTIMODAL REDUCTION		EXTERNAL TRIPS			INTERNAL CAPTURE		NET NEW 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	MR Trips	In	Out	Total	Percent	IC Trips	In	Out	Total	Percent	PB Trips	In	Out	Total
GROUP 1	1	Shopping Center	10	820	32.378	ksf	48%	52%	113	123	236	20.0%	47	90	99	189	1.6%	3	88	98	186	34.0%	63	58	65	123
	2	General Office Building	10	710	11.162	ksf	16%	84%	2	12	14	20.0%	3	2	9	11	27.3%	3	1	7	8	0.0%	0	1	7	8
	3																									
	4																									
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	12																									
	13																									
	14																									
	15																									
		ITE Land Use Code		Rate or Equation				**Total:**	115	135	250	20.0%	50	92	108	200	3.0%	6	89	105	194	32.5%	63	59	72	131
		820		LN(Y) = 0.74*LN(X)+2.89																						
		710		LN(Y) = 0.95*LN(X)+0.36																						

PROPOSED WEEKDAY PM PEAK HOUR TRIP GENERATION

		ITE TRIP GENERATION CHARACTERISTICS					DIRECTIONAL DISTRIBUTION		GROSS VOLUMES			MULTIMODAL REDUCTION		EXTERNAL TRIPS			INTERNAL CAPTURE		NET NEW 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	MR Trips	In	Out	Total	Percent	IC Trips	In	Out	Total	Percent	PB Trips	In	Out	Total
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	2	Hotel	10	310	145	room	51%	49%	42	41	83	20.0%	17	33	33	66	9.1%	6	29	31	60	0.0%	0	29	31	60
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	14																									
	15																									
		ITE Land Use Code		Rate or Equation				**Total:**	143	150	293	20.0%	59	114	120	234	5.1%	12	108	114	222	24.8%	55	81	86	167
		820		LN(Y) = 0.74*LN(X)+2.89																				**Valet Trip Percentage of Hotel Trips** [1]		57.4%	57.4%	57.4%
		310		Y=0.75*(X)+-26.02																				**Proposed Hotel Valet Trips**		17	18	35

(1) Valet trip percentage based off Cadillac Hotel rideshare and valet data.

	IN	OUT	TOTAL
NET NEW TRIPS	**22**	**14**	**36**

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 (EXISTING)

GROSS TRIP GENERATION

	Land Use	A.M. Peak Hour		P.M. Peak Hour	
		Enter	Exit	Enter	Exit
INPUT	Office	26	4	2	9
	Retail	15	9	90	99
	Restaurant	0	0	0	0
	Cinema/Entertainment	0	0	0	0
	Residential	0	0	0	0
	Hotel	0	0	0	0
		41	13	92	108

INTERNAL TRIPS

	Land Use	A.M. Peak Hour		P.M. Peak Hour	
		Enter	Exit	Enter	Exit
OUTPUT	Office	1	1	1	2
	Retail	1	1	2	1
	Restaurant	0	0	0	0
	Cinema/Entertainment	0	0	0	0
	Residential	0	0	0	0
	Hotel	0	0	0	0
		2	2	3	3

OUTPUT	*Total % Reduction*	*7.4%*	*3.0%*
	Office	6.7%	27.3%
	Retail	8.3%	1.6%
	Restaurant		
	Cinema/Entertainment		
	Residential		
	Hotel		

EXTERNAL TRIPS

	Land Use	A.M. Peak Hour		P.M. Peak Hour	
		Enter	Exit	Enter	Exit
OUTPUT	Office	25	3	1	7
	Retail	14	8	88	98
	Restaurant	0	0	0	0
	Cinema/Entertainment	0	0	0	0
	Residential	0	0	0	0
	Hotel	0	0	0	0
		39	11	89	105

Internal Capture Reduction Calculations

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

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

SUMMARY (PROPOSED)

GROSS TRIP GENERATION

INPUT

Land Use	A.M. Peak Hour		P.M. Peak Hour	
	Enter	Exit	Enter	Exit
Office	0	0	0	0
Retail	13	8	81	87
Restaurant	0	0	0	0
Cinema/Entertainment	0	0	0	0
Residential	0	0	0	0
Hotel	32	22	33	33
	45	30	114	120

INTERNAL TRIPS

OUTPUT

Land Use	A.M. Peak Hour		P.M. Peak Hour	
	Enter	Exit	Enter	Exit
Office	0	0	0	0
Retail	1	0	2	4
Restaurant	0	0	0	0
Cinema/Entertainment	0	0	0	0
Residential	0	0	0	0
Hotel	0	1	4	2
	1	1	6	6

OUTPUT

Total % Reduction	*2.7%*	*5.1%*
Office		
Retail	4.8%	3.6%
Restaurant		
Cinema/Entertainment		
Residential		
Hotel	1.9%	9.1%

EXTERNAL TRIPS

OUTPUT

Land Use	A.M. Peak Hour		P.M. Peak Hour	
	Enter	Exit	Enter	Exit
Office	0	0	0	0
Retail	12	8	79	83
Restaurant	0	0	0	0
Cinema/Entertainment	0	0	0	0
Residential	0	0	0	0
Hotel	32	21	29	31
	44	29	108	114

B08301

MEANS OF TRANSPORTATION TO WORK
Universe: Workers 16 years and over
2013-2017 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 Technical 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.

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.

(71+271+335)/1,319=51.3%

	Census Tract 42.04, Miami-Dade County, Florida	
	Estimate	Margin of Error
Total:	1,319	+/-253
Car, truck, or van:	447	+/-147
Drove alone	424	+/-142
Carpooled:	23	+/-27
In 2-person carpool	8	+/-12
In 3-person carpool	15	+/-25
In 4-person carpool	0	+/-13
In 5- or 6-person carpool	0	+/-13
In 7-or-more-person carpool	0	+/-13
Public transportation (excluding taxicab):	71	+/-62
Bus or trolley bus	71	+/-62
Streetcar or trolley car (carro publico in Puerto Rico)	0	+/-13
Subway or elevated	0	+/-13
Railroad	0	+/-13
Ferryboat	0	+/-13
Taxicab	49	+/-45
Motorcycle	10	+/-16
Bicycle	271	+/-159
Walked	335	+/-121
Other means	52	+/-48
Worked at home	84	+/-58

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 2013-2017 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 populations, 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, 2013-2017 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.

Attachment D-1

Valet Analysis

Valet Routing

Kimley»Horn

Figure 2
Proposed Valet Routing
927 Lincoln Road
Miami Beach, Florida

Valet Data

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

Taxi vs Valet Trips								
Time	Total Site Pick-up Trips	Total Site Drop-off Trips	Taxi Trips	Taxi Pick-up Trips	Taxi Drop-off Trips	Taxi + Valet + Self Park	Valet Pick-up	Valet Drop-off
18:00	17	18	23	16	7	71	1	11
18:15	17	10	16	12	4	77	5	6
18:30	15	7	16	12	4	83	3	3
18:45	41	13	12	9	3	101	32	10
19:00	24	4	10	7	3	83	17	1
19:15	20	8	11	8	3	79	12	5
19:30	20	15	11	8	3	66	12	12
19:45	27	6	9	7	2	61	20	4
20:00	21	8	15	11	4	74	10	4
20:15	18	2	20	15	1	60	3	1
20:30	26	8	15	11	4	56	15	4
20:45	46	6	15	11	4	37	35	2

42.6% Taxi Trips Observed

Valet Processing Time

Valet Drop-off/Pick-Up Calculated Travel Time

Parking Garage Calculated Travel Time

VALET DROP-OFF	
VEHICLE TRAVEL TIME	VALET ATTENDANT TRAVEL TIME
Travel Times (Assume 15 mph speed)	Travel Times (Assume 5 ft/s speed)
To Valet Garage (In vehicle)	Return from Valet Garage (Walk/Run) to Valet Area
Distance: 0.83 miles	Travel Time: 3.3 minutes
Distance: 0.07 miles	Travel Time: 1.3 minutes
Controlled Delay: 1.0 Minutes	
Total Time: 5.6 Minutes	

Parking Garage Calculated Travel Time

VALET PICK-UP	
VALET ATTENDANT TRAVEL TIME	VEHICLE TRAVEL TIME
Travel Times (Assume 5 ft/s speed)	Travel Times (Assume 15 mph speed)
To Valet Garage (Walk/Run)	Return from Valet Garage (In Vehicle) to Valet Area
Distance: 0.07 miles	Travel Time: 1.3 minutes
Distance: 0.98 miles	Travel Time: 3.9 minutes
Controlled Delay: 3.0 Minutes	
Total Time: 8.2 Minutes	

Valet Analysis

Parking Garage Valet Drop-Off Analysis

Arrival Rate

IN	OUT	
17	18	veh/hr

Service Rate

IN	OUT	
5.60	8.20	mins/veh

Service Time = 6.94 mins/veh

Number of Valet Attendants (N) =	7	
Level of Confidence =	0.95	
Storage Provided On-Site =	2	vehicles
Total Entering and Exiting Vehicles(q) =	35	veh/hr
Service Capacity per N (60 mins/Service Rate) (Q) =	8.65	veh/hr/pos
Average Service Rate (t) =	6.94	mins/veh
rho (t/Q) =	0.578	

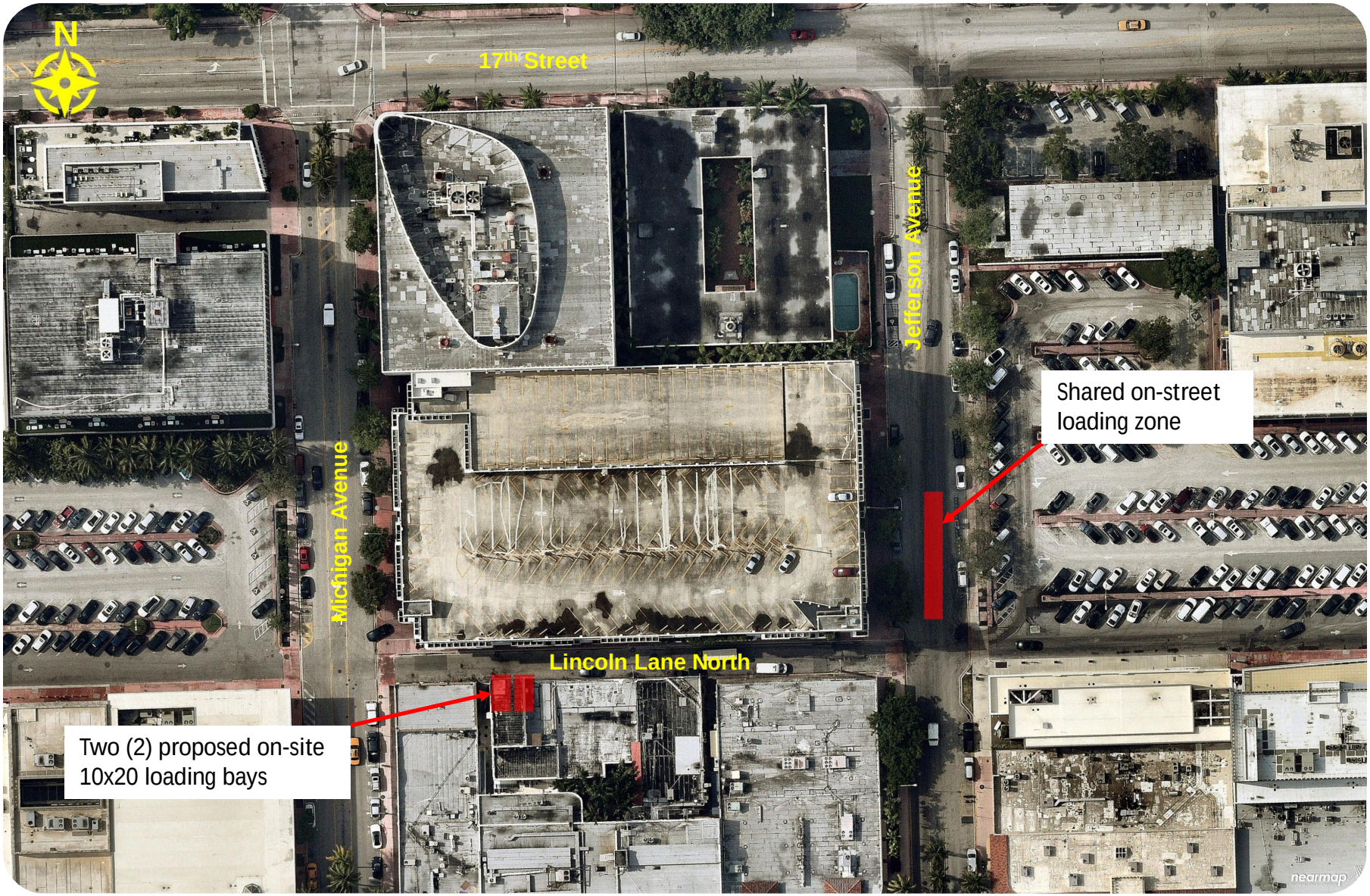
Expected (avg.) number of vehicles in the system	E(m)=	0.19	
Expected (avg.) number of vehicles waiting in queue	E(n)=	4.24	
Mean time in the queue	E(w)=	0.33	mins
Mean time in system	E(t)=	7.27	mins

Proportion of customers who wait (P) (E(w) > 0)=	14.18%	
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 0.7 vehicles

Attachment E-1

Loading Zone Locations



Kimley»Horn

Figure 3
Loading Areas
927 Lincoln Road
Miami Beach, Florida

Attachment F-1

Traffic Data

Traffic Data Location

Kimley»Horn

Figure 4
Pedestrian Count Location
927 Lincoln Road
Miami Beach, Florida

Pedestrian and Bicycle Crossing Data

Prepared by Nationwide Traffic Data

Pedestrian Study

Location: Jefferson Ave B Date: 08/01/2019
City: Miami Beach Day: Thursday

TIME	Peds		15-Min Total	Hourly Total
	EB	WB		
10:00 AM	6	7	13	52
10:15 AM	7	5	12	54
10:30 AM	7	3	10	49
10:45 AM	8	9	17	44
11:00 AM	12	3	15	34
11:15 AM	4	3	7	30
11:30 AM	2	3	5	38
11:45 AM	4	3	7	54
12:00 PM	6	5	11	64
12:15 PM	6	9	15	75
12:30 PM	10	11	21	108
12:45 PM	9	8	17	122
1:00 PM	15	7	22	141
1:15 PM	18	30	48	
1:30 PM	23	12	35	
1:45 PM	16	20	36	
Totals	*153*	*138*	*291*	
2:00 PM	7	7	14	83
2:15 PM	12	9	21	97
2:30 PM	4	18	22	108
2:45 PM	13	13	26	115
3:00 PM	13	15	28	134
3:15 PM	7	25	32	138
3:30 PM	15	*14*	29	136
3:45 PM	27	18	45	123
4:00 PM	15	17	32	112
4:15 PM	11	19	30	109
4:30 PM	6	10	16	107
4:45 PM	19	15	34	117
5:00 PM	9	20	29	110
5:15 PM	11	17	28	103
5:30 PM	12	14	26	101
5:45 PM	16	11	27	95
6:00 PM	13	9	22	102
6:15 PM	10	16	26	110
6:30 PM	14	6	20	102
6:45 PM	19	15	34	110
7:00 PM	17	13	30	94
7:15 PM	8	10	18	88
7:30 PM	11	17	28	83
7:45 PM	10	8	18	74
8:00 PM	14	10	24	71
8:15 PM	9	4	13	56
8:30 PM	9	10	19	51
8:45 PM	3	12	15	51
9:00 PM	5	4	9	45
9:15 PM	2	6	8	
9:30 PM	12	7	19	
9:45 PM	8	1	9	
Totals	*361*	*390*	*751*	
Grand Total	*514*	*528*	*1042*	

Prepared by Nationwide Traffic Data

Pedestrian Study

Location: Jefferson Ave B Date: 08/02/2019
City: Miami Beach Day: Friday

TIME	Peds		TOTAL	Hourly Total
	EB	WB		
10:00 AM	9	3	*12*	53
10:15 AM	2	6	*8*	53
10:30 AM	5	10	*15*	65
10:45 AM	8	10	*18*	73
11:00 AM	6	6	*12*	70
11:15 AM	11	9	*20*	95
11:30 AM	10	13	*23*	110
11:45 AM	6	9	*15*	114
12:00 PM	15	22	*37*	125
12:15 PM	15	20	*35*	120
12:30 PM	14	13	*27*	102
12:45 PM	19	7	*26*	100
1:00 PM	18	14	*32*	94
1:15 PM	8	9	*17*	
1:30 PM	14	11	*25*	
1:45 PM	12	8	*20*	
Totals	*172*	*170*	*342*	
2:00 PM	21	11	*32*	130
2:15 PM	23	8	*31*	139
2:30 PM	16	19	*35*	131
2:45 PM	19	13	*32*	133
3:00 PM	18	23	*41*	143
3:15 PM	10	13	*23*	133
3:30 PM	21	*16*	*37*	147
3:45 PM	25	17	*42*	127
4:00 PM	19	12	*31*	110
4:15 PM	13	24	*37*	115
4:30 PM	2	15	*17*	111
4:45 PM	10	15	*25*	127
5:00 PM	13	23	*36*	132
5:15 PM	14	19	*33*	128
5:30 PM	16	17	*33*	114
5:45 PM	14	16	*30*	124
6:00 PM	14	18	*32*	125
6:15 PM	10	9	*19*	120
6:30 PM	20	23	*43*	127
6:45 PM	17	14	*31*	117
7:00 PM	16	11	*27*	109
7:15 PM	11	15	*26*	118
7:30 PM	15	18	*33*	127
7:45 PM	12	11	*23*	114
8:00 PM	18	18	*36*	119
8:15 PM	18	17	*35*	115
8:30 PM	12	8	*20*	94
8:45 PM	10	18	*28*	110
9:00 PM	12	20	*32*	109
9:15 PM	3	11	*14*	
9:30 PM	23	13	*36*	
9:45 PM	10	17	*27*	
Totals	*475*	*502*	*977*	
Grand Total	*647*	*672*	*1319*	

Prepared by Nationwide Traffic Data

Pedestrian Study

Location: Jefferson Ave B Date: 08/03/2019
City: Miami Beach Day: Saturday

TIME	Peds		TOTAL	Hourly Total
	EB	WB		
10:00 AM	3	6	*9*	35
10:15 AM	3	3	*6*	43
10:30 AM	6	6	*12*	56
10:45 AM	5	3	*8*	47
11:00 AM	11	6	*17*	61
11:15 AM	8	11	*19*	54
11:30 AM	2	1	*3*	49
11:45 AM	11	11	*22*	65
12:00 PM	6	4	*10*	66
12:15 PM	6	8	*14*	92
12:30 PM	10	9	*19*	111
12:45 PM	13	10	*23*	109
1:00 PM	12	24	*36*	113
1:15 PM	18	15	*33*	
1:30 PM	10	7	*17*	
1:45 PM	10	17	*27*	
Totals	*134*	*141*	*275*	
2:00 PM	16	9	*25*	106
2:15 PM	15	20	*35*	112
2:30 PM	17	12	*29*	117
2:45 PM	11	6	*17*	109
3:00 PM	20	11	*31*	120
3:15 PM	20	20	*40*	99
3:30 PM	13	*8*	*21*	93
3:45 PM	15	13	*28*	113
4:00 PM	5	5	*10*	124
4:15 PM	15	19	*34*	135
4:30 PM	22	19	*41*	136
4:45 PM	23	16	*39*	117
5:00 PM	3	18	*21*	96
5:15 PM	15	20	*35*	113
5:30 PM	14	8	*22*	91
5:45 PM	8	10	*18*	102
6:00 PM	7	31	*38*	100
6:15 PM	8	5	*13*	91
6:30 PM	20	13	*33*	95
6:45 PM	7	9	*16*	85
7:00 PM	21	8	*29*	100
7:15 PM	8	9	*17*	96
7:30 PM	9	14	*23*	113
7:45 PM	13	18	*31*	115
8:00 PM	8	17	*25*	104
8:15 PM	20	14	*34*	99
8:30 PM	13	12	*25*	75
8:45 PM	11	9	*20*	69
9:00 PM	5	15	*20*	87
9:15 PM	6	4	*10*	
9:30 PM	7	12	*19*	
9:45 PM	25	13	*38*	
Totals	*420*	*417*	*837*	
Grand Total	*554*	*558*	*1112*	

Average Daily Traffic Data

Prepared by Nationwide Traffic Data

VOLUME

Jefferson Ave Bet. Lincoln Rd Mall & 17th St

Day: Thursday
Date: 8/1/2019

City: Miami Beach
Project #: FL19_1018_001

DAILY TOTALS	NB	SB	EB	WB	Total
	1,146	828	0	0	1,974

AM Period	NB		SB		EB		WB		TOTAL		PM Period	NB		SB		EB		WB		TOTAL	
00:00	4		3						7		12:00	23		14						37	
00:15	9		6						15		12:15	15		12						27	
00:30	6		1						7		12:30	18		13						31	
00:45	6	25	4	14					10	39	12:45	24	80	14	53					38	133
01:00	4		3						7		13:00	18		25						43	
01:15	3		2						5		13:15	25		10						35	
01:30	0		0						0		13:30	22		15						37	
01:45	0	7	0	5					0	12	13:45	26	91	12	62					38	153
02:00	1		1						2		14:00	21		9						30	
02:15	1		1						2		14:15	21		10						31	
02:30	0		0						0		14:30	23		9						32	
02:45	2	4	0	2					2	6	14:45	21	86	9	37					30	123
03:00	0		1						1		15:00	30		7						37	
03:15	0		1						1		15:15	25		21						46	
03:30	0		0						0		15:30	15		10						25	
03:45	1	1	1	3					2	4	15:45	25	95	13	51					38	146
04:00	0		0						0		16:00	35		19						54	
04:15	0		0						0		16:15	19		17						36	
04:30	2		0						2		16:30	26		19						45	
04:45	0	2	3	3					3	5	16:45	21	101	9	64					30	165
05:00	0		1						1		17:00	23		27						50	
05:15	0		0						0		17:15	23		18						41	
05:30	1		1						2		17:30	28		27						55	
05:45	2	3	2	4					4	7	17:45	25	99	23	95					48	194
06:00	2		1						3		18:00	18		16						34	
06:15	1		1						2		18:15	26		18						44	
06:30	1		0						1		18:30	22		7						29	
06:45	0	4	5	7					5	11	18:45	34	100	21	62					55	162
07:00	4		3						7		19:00	18		10						28	
07:15	0		2						2		19:15	14		9						23	
07:30	3		4						7		19:30	16		11						27	
07:45	5	12	7	16					12	28	19:45	12	60	12	42					24	102
08:00	4		5						9		20:00	16		13						29	
08:15	9		4						13		20:15	16		13						29	
08:30	5		11						16		20:30	20		11						31	
08:45	9	27	6	26					15	53	20:45	20	72	9	46					29	118
09:00	11		15						26		21:00	14		10						24	
09:15	7		6						13		21:15	13		15						28	
09:30	9		9						18		21:30	9		9						18	
09:45	11	38	16	46					27	84	21:45	10	46	11	45					21	91
10:00	15		12						27		22:00	17		4						21	
10:15	14		13						27		22:15	14		4						18	
10:30	21		9						30		22:30	11		5						16	
10:45	14	64	18	52					32	116	22:45	6	48	3	16					9	64
11:00	2		16						18		23:00	6		5						11	
11:15	19		18						37		23:15	8		7						15	
11:30	10		13						23		23:30	7		0						7	
11:45	20	51	11	58					31	109	23:45	9	30	7	19					16	49
TOTALS		238		236						474	TOTALS		908		592						1500
SPLIT %		50.2%		49.8%						24.0%	SPLIT %		60.5%		39.5%						76.0%

DAILY TOTALS	NB	SB	EB	WB	Total
	1,146	828	0	0	1,974

AM Peak Hour	11:45	10:45			11:15	PM Peak Hour	15:45	17:00			17:00
AM Pk Volume	76	65			128	PM Pk Volume	105	95			194
Pk Hr Factor	0.826	0.903			0.865	Pk Hr Factor	0.750	0.880			0.882
7 - 9 Volume	39	42	0	0	81	4 - 6 Volume	200	159	0	0	359
7 - 9 Peak Hour	08:00	07:45			08:00	4 - 6 Peak Hour	16:00	17:00			17:00
7 - 9 Pk Volume	27	27	0	0	53	4 - 6 Pk Volume	101	95	0	0	194
Pk Hr Factor	0.750	0.614	0.000	0.000	0.828	Pk Hr Factor	0.721	0.880	0.000	0.000	0.882

Prepared by Nationwide Traffic Data

VOLUME

Jefferson Ave Bet. Lincoln Rd Mall & 17th St

Day: Friday
Date: 8/2/2019

City: Miami Beach
Project #: FL19_1018_001

DAILY TOTALS	NB	SB	EB	WB	Total
	1,213	798	0	0	2,011

AM Period	NB		SB		EB		WB		TOTAL		PM Period	NB		SB		EB		WB		TOTAL	
00:00	0		2						2		12:00	17		12						29	
00:15	6		0						6		12:15	20		11						31	
00:30	7		1						8		12:30	19		18						37	
00:45	5	18	2	5					7	23	12:45	20	76	6	47					26	123
01:00	3		1						4		13:00	14		6						20	
01:15	5		1						6		13:15	10		10						20	
01:30	3		0						3		13:30	24		14						38	
01:45	2	13	0	2					2	15	13:45	11	59	12	42					23	101
02:00	1		0						1		14:00	21		9						30	
02:15	1		0						1		14:15	25		19						44	
02:30	1		0						1		14:30	28		16						44	
02:45	1	4	1	1					2	5	14:45	29	103	19	63					48	166
03:00	1		0						1		15:00	25		17						42	
03:15	0		1						1		15:15	26		15						41	
03:30	0		0						0		15:30	33		15						48	
03:45	0	1	2	3					2	4	15:45	27	111	12	59					39	170
04:00	1		0						1		16:00	26		21						47	
04:15	0		0						0		16:15	27		12						39	
04:30	0		3						3		16:30	21		11						32	
04:45	3	4	2	5					5	9	16:45	25	99	22	66					47	165
05:00	0		3						3		17:00	20		21						41	
05:15	1		0						1		17:15	25		18						43	
05:30	1		2						3		17:30	29		22						51	
05:45	3	5	3	8					6	13	17:45	23	97	20	81					43	178
06:00	0		1						1		18:00	28		21						49	
06:15	3		1						4		18:15	11		6						17	
06:30	1		1						2		18:30	19		14						33	
06:45	1	5	2	5					3	10	18:45	18	76	18	59					36	135
07:00	7		7						14		19:00	23		14						37	
07:15	5		4						9		19:15	19		12						31	
07:30	3		5						8		19:30	18		18						36	
07:45	4	19	6	22					10	41	19:45	29	89	16	60					45	149
08:00	3		4						7		20:00	19		12						31	
08:15	3		6						9		20:15	25		11						36	
08:30	7		8						15		20:30	19		10						29	
08:45	7	20	10	28					17	48	20:45	14	77	11	44					25	121
09:00	7		10						17		21:00	24		8						32	
09:15	6		10						16		21:15	23		4						27	
09:30	9		10						19		21:30	18		5						23	
09:45	8	30	9	39					17	69	21:45	24	89	10	27					34	116
10:00	13		11						24		22:00	24		11						35	
10:15	13		8						21		22:15	4		5						9	
10:30	11		13						24		22:30	20		5						25	
10:45	11	48	9	41					20	89	22:45	15	63	5	26					20	89
11:00	14		12						26		23:00	13		6						19	
11:15	10		3						13		23:15	21		5						26	
11:30	14		14						28		23:30	12		5						17	
11:45	10	48	12	41					22	89	23:45	13	59	8	24					21	83
TOTALS		215		200						415	TOTALS		998		598						1596
SPLIT %		51.8%		48.2%						20.6%	SPLIT %		62.5%		37.5%						79.4%

DAILY TOTALS	NB	SB	EB	WB	Total
	1,213	798	0	0	2,011

AM Peak Hour	11:45	11:45			11:45	PM Peak Hour	14:45	16:45			17:15
AM Pk Volume	66	53			119	PM Pk Volume	113	83			186
Pk Hr Factor	0.825	0.736			0.804	Pk Hr Factor	0.856	0.943			0.912
7 - 9 Volume	39	50	0	0	89	4 - 6 Volume	196	147	0	0	343
7 - 9 Peak Hour	08:00	08:00			08:00	4 - 6 Peak Hour	16:00	16:45			16:45
7 - 9 Pk Volume	20	28	0	0	48	4 - 6 Pk Volume	99	83	0	0	182
Pk Hr Factor	0.714	0.700	0.000	0.000	0.706	Pk Hr Factor	0.917	0.943	0.000	0.000	0.892

Prepared by Nationwide Traffic Data

VOLUME

Jefferson Ave Bet. Lincoln Rd Mall & 17th St

Day: Saturday
Date: 8/3/2019

City: Miami Beach
Project #: FL19_1018_001

DAILY TOTALS	NB	SB	EB	WB	Total
	1,058	681	0	0	1,739

AM Period	NB		SB		EB		WB		TOTAL		PM Period	NB		SB		EB		WB		TOTAL	
00:00	14		5						19		12:00	16		17						33	
00:15	11		6						17		12:15	24		11						35	
00:30	7		3						10		12:30	13		8						21	
00:45	4	36	5	19					9	55	12:45	17	70	14	50					31	120
01:00	5		1						6		13:00	17		16						33	
01:15	8		1						9		13:15	12		14						26	
01:30	5		4						9		13:30	20		7						27	
01:45	3	21	2	8					5	29	13:45	15	64	12	49					27	113
02:00	0		0						0		14:00	15		17						32	
02:15	3		1						4		14:15	27		17						44	
02:30	3		0						3		14:30	28		17						45	
02:45	0	6	0	1					0	7	14:45	20	90	17	68					37	158
03:00	1		0						1		15:00	15		19						34	
03:15	2		0						2		15:15	29		13						42	
03:30	1		1						2		15:30	18		7						25	
03:45	0	4	0	1					0	5	15:45	19	81	14	53					33	134
04:00	1		2						3		16:00	17		14						31	
04:15	1		0						1		16:15	29		14						43	
04:30	0		0						0		16:30	26		12						38	
04:45	0	2	3	5					3	7	16:45	21	93	13	53					34	146
05:00	1		1						2		17:00	22		14						36	
05:15	0		1						1		17:15	22		12						34	
05:30	0		0						0		17:30	26		15						41	
05:45	0	1	0	2					0	3	17:45	16	86	14	55					30	141
06:00	0		3						3		18:00	30		19						49	
06:15	2		1						3		18:15	21		8						29	
06:30	2		1						3		18:30	5		4						9	
06:45	1	5	2	7					3	12	18:45	0	56	0	31					0	87
07:00	0		1						1		19:00	0		0						0	
07:15	0		1						1		19:15	14		4						18	
07:30	2		1						3		19:30	17		10						27	
07:45	0	2	1	4					1	6	19:45	19	50	14	28					33	78
08:00	2		3						5		20:00	23		11						34	
08:15	1		3						4		20:15	24		7						31	
08:30	2		3						5		20:30	12		13						25	
08:45	5	10	6	15					11	25	20:45	14	73	12	43					26	116
09:00	5		3						8		21:00	23		10						33	
09:15	6		5						11		21:15	15		11						26	
09:30	5		4						9		21:30	18		11						29	
09:45	7	23	4	16					11	39	21:45	13	69	7	39					20	108
10:00	6		9						15		22:00	18		9						27	
10:15	11		8						19		22:15	22		14						36	
10:30	8		6						14		22:30	12		1						13	
10:45	17	42	4	27					21	69	22:45	19	71	6	30					25	101
11:00	11		15						26		23:00	19		8						27	
11:15	11		8						19		23:15	13		6						19	
11:30	13		7						20		23:30	9		5						14	
11:45	17	52	19	49					36	101	23:45	10	51	9	28					19	79
TOTALS		204		154						358	TOTALS		854		527						1381
SPLIT %		57.0%		43.0%						20.6%	SPLIT %		61.8%		38.2%						79.4%

DAILY TOTALS	NB	SB	EB	WB	Total
	1,058	681	0	0	1,739

AM Peak Hour	11:30	11:45			11:45	PM Peak Hour	16:15	14:15			14:15
AM Pk Volume	70	55			125	PM Pk Volume	98	70			160
Pk Hr Factor	0.729	0.724			0.868	Pk Hr Factor	0.845	0.921			0.889
7 - 9 Volume	12	19	0	0	31	4 - 6 Volume	179	108	0	0	287
7 - 9 Peak Hour	08:00	08:00			08:00	4 - 6 Peak Hour	16:15	17:00			16:15
7 - 9 Pk Volume	10	15	0	0	25	4 - 6 Pk Volume	98	55	0	0	151
Pk Hr Factor	0.500	0.625	0.000	0.000	0.568	Pk Hr Factor	0.845	0.917	0.000	0.000	0.878