818 Lincoln Road

Miami Beach, Florida 33139

prepared for:

Akerman LLP

traffic report

TRAFTECH ENGINEERING, INC.

July 2022

TRAFTECH
ENGINEERING, INC.

July 25, 2022

818 Lincoln Road
c/o Cecilia Torres-Toledo
Associate – Akerman LLP
98 Southeast Seventh Street
Suite 1000
Miami, Florida 33131

Re: 818 Lincoln Road - Traffic Engineering Evaluation

Dear Cecilia:

Traf Tech Engineering, Inc. prepared a traffic analysis associated with an existing 3-story commercial building located at 818 Lincoln Road in the City of Miami Beach. The building has 10,765 square feet of flexible retail space. The scope of the project is to provide a 40-seat café on the ground floor (523 square feet), a 246-seat high-end restaurant on the second floor (5,724 square feet indoor + 1,707 square feet outdoor), and a 153-seat high-end bar lounge on the third floor (3,850 square feet indoor + 1,777 square feet outdoor). The following topics are addressed in this technical memorandum:

- Trip Generation Comparison Analysis
- Evaluated the valet operation
- Determined the potential impacts to the valet operation as a result of the change in use
- Prepared a Transportation Demand Management (TDM) plan

TRIP GENERATION COMPARISON ANALYSIS

A trip generation comparison analysis was performed between the existing use and the proposed use using the trip generation equations/rates published in the Institute of Transportation Engineer's (ITE) *Trip Generation Manual* (11th Edition). The trip generation comparison analysis was undertaken for daily, AM peak hour, and PM peak hour conditions. The analysis was based on the following assumptions:

EXISTING USE – Retail (10,765 square feet)

PROPOSED USE – Café/Restaurant/Bar Lounge (439 seats)

The results of the trip generation comparison analyses between the existing and proposed land uses are documented in Tables 1 and 2. As indicated in the tables, the proposed land-use is projected to generate approximately 201 new daily trips, approximately seven (7) less AM peak hour trips and approximately 18 new PM peak hour trips when compared against the current land use at the site. Hence, the new trips are considered minimal from a traffic-engineering standpoint (approximately one new peak hour trips every three minutes).

CURRENT OPERATION INCLUDING VALET

The 818 Lincoln Road building consists of a 3-story commercial building with 10,097 square feet of indoor space and approximately 3,484 square feet of outdoor area.

Valet service is provided to all nearby commercial/restaurant customers. A valet station (carp) is placed on the west side of Meridian Avenue and south of Lincoln Road. There are six (6) on-street parking spaces on the west side of Meridian Avenue (between Lincoln Road and the alleyway located just south of the building). The two (2) southernmost parking spaces are used for valet purposes. Three valet runners are assigned to the valet operation starting at approximately 5:00 PM.

Traffic counts (valet use and on-street parking use) were conducted at the valet station, including on-street parking use on Friday, April 23, 2021, from 5:00 PM to 7:00 PM. The traffic counts are presented in Attachment B. As shown in Attachment B, the following observations are noted:

- The peak valet operation occurred between 5:45 PM and 6:45 PM. A total of 14 valet vehicles were counted. No traffic spillback blocking the southbound lane of Meridian Avenue was recorded. The time to park and return by the valet driver/runner ranged between 8 and 12 minutes per valet vehicle. It was observed that many valet vehicles were parked on the small parking lot located on the alleyway, south of Lincoln Road.

TABLE 1
Trip Generation Summary (Existing Use)
818 Lincoln Road

Land Use	Size	Daily Trips	AM Peak Hour			PM Peak Hour		
			Total Trips	Inbound	Outbound	Total Trips	Inbound	Outbound
Retail (LUC 822)	10,765 sf	586	25	15	10	71	36	35
Walking Trips (-30%)		-176	-8	-5	-3	-21	-11	-10
Subtotal		**410**	**17**	**10**	**7**	**50**	**25**	**25**
Pass-by (-40%)		-164	-7	-4	-3	-20	-10	-10
External Trips		**246**	**10**	**6**	**4**	**30**	**15**	**15**

Source: ITE Trip Generation Manual (11th Edition)

TABLE 2
Trip Generation Summary (Proposed Use)
818 Lincoln Road

Land Use	Size	Daily Trips	AM Peak Hour			PM Peak Hour		
			Total Trips	Inbound	Outbound	Total Trips	Inbound	Outbound
Restaurant (LUC 931)	439 seats	1,141	9	5	4	123	82	41
1st Floor	40 seats							
2nd Floor	246 seats							
3rd Floor	153 seats							
Walking Trips (-30%)		-342	-3	-2	-1	-37	-25	-12
Subtotal		**799**	**6**	**3**	**3**	**86**	**57**	**29**
Pass-by (-44%)		-352	-3	-1	-2	-38	-25	-13
External Trips		**447**	**3**	**2**	**1**	**48**	**32**	**16**

Source: ITE Trip Generation Manual (11th Edition)

	Daily	AM Peak	Ins	Out	PM Peak	Ins	Out
Difference in Trips Proposed - Existing)	**201**	**-7**	**-4**	**-3**	**18**	**17**	**1**

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- A total of 40 trips during the peak hour (5:30 PM to 6:30 PM) were recorded using the six (6) on-street parking spaces located on the west side of Meridian Avenue (for valet purposes, drop-off/pick-up or to park/unpark). The 40 trips included 23 inbound trips and 17 outbound trips. Similar to the peak-valet period, no traffic spillback blocking the southbound lane of Meridian Avenue was recorded.

FUTURE OPERATION INCLUDING FUTURE VALET NEEDS

Based on the results of the trip generation comparison analysis, and the results of valet traffic counts, it is recommended that up to five (5) valet runners be designated to the proposed café/restaurant/bar lounge. Two (2) additional on-street parking spaces may be required to accommodate the expected future valet operation.

A valet queuing analysis was undertaken using information contained in ITE's *Transportation and Land Development*, Chapter 8 – Drive-In Facilities[1]. For this analysis, the following input variables were used:

- o Service Rate: Based on the current valet operation, a valet runner parks or unparks a vehicle, on average, in 7.1 minutes. This equates to approximately 8 valet vehicles parked or unparked per hour per valet runner.

- o Demand Rate: Based on the trip generation comparison analysis, 18 additional peak hour trips are expected as a result of the proposed café/restaurant/bar-lounge. These new trips will either park in the vicinity of the 818 Lincoln Road building or use the valet service located on Meridian Avenue. Assuming 70% of the new trip will use the valet service (conservative approach), up to 13 trips were assigned to the existing valet operation.

Using equation 8-9b and Table 8-11 of ITE's *Transportation and Land Development*, the maximum length of queue anticipated at the valet station, at the 95% confidence level, is two (2) vehicles with up to three (3) valet runners. The results of the ITE queuing procedure is contained in Attachment C.

[1] By Vergil G. Stover and Frank J. Koepke.

Directly Accessed Roadway Segment

Since the project is located on Lincoln Road Mall, just west of Meridian Avenue, the nearest roadway segment to the project is Meridian Avenue. This north-south roadway extends from Dade Boulevard on the north to South Pointe Drive on the south. Meridian Avenue (Road Segment 37) is a City of Miami Beach collector roadway with one through lane in each direction, on-street parking on both sides of the roadway and has a posted speed limit of 25 miles per hour. Bicycle lanes are also provided along Meridian Avenue. According to FDOT, Meridian Avenue has an average daily traffic of approximately 7,400 vehicles per day near Lincoln Road Mall.

Loading and Deliveries

Loading and delivery areas plan are contained in Attachment D.

TRANSPORTATION DEMAND MANAGEMENT (TDM)

Traf Tech Engineering, Inc. prepared a Transportation Demand Management (TDM) plan for the 818 Lincoln Road project.

Travel Demand Management plans (TDM) establish policies and mechanisms to reduce automobile trips to and from designated facilities. TDM plans usually use several approaches to address all modes of transportation likely to be used to provide access to a facility such as single occupant driving, carpooling, transit, bicycling and walking. The goal of TDM plans is to increase the use of alternatives modes to single occupant driving, i.e., to reduce the number of automobile trips to and from the facility and consequently, minimizing automobile traffic impacts on the street system.

Successful TDM plans not only address all modes of transportation, but also use policies such as inducements for alternative modes (subsidies), physical enhancements (bike lockers, preferential parking for carpools) and disincentives for automobile use (no free parking for employees).

Potential measures for each mode are addressed below. Use of an employee transportation subsidy is also presented.

Pedestrian Access

Walking not only reduces automobile trips and their contribution to congestion and emissions, it also provides health benefits to the employees who use this mode of transportation. It is, however, the mode that is least likely to be used for a number of reasons. It is unlikely that employees of the restaurant/café/bar lounge will reside within a reasonable walking distance (within ¼ - ½ mile) of the subject facility. However, the area near the subject project is a high pedestrian traffic area and therefore, many existing and future customers of the 818 Lincoln Road development are expected to be walking trips. Sidewalks exist on the east and west sides of Meridian Avenue as well as safe pedestrian crosswalks (with ramps and pedestrian signals) at Lincoln Road. Additionally, Lincoln Road, a pedestrian-only commercial street is located on the north side of the subject building. Hence, a large number of 818 Lincoln Road customers are expected to be pedestrian traffic from Lincoln Road.

Bicycling

The site of the 818 Lincoln Road offers two potential approaches to encourage cycling, the use of the Citi Bike program and use of restaurant/café/bar lounge employee-owned bicycles.

Use of Citi Bike could be supported by providing monthly passes to employees. Monthly passes are $15.00 for unlimited 30-minute rides and $25.00 for unlimited 60-minute rides. Within the immediate area of the project, there is one convenient Citi Bike rental station (Station 169) located approximately 500 feet from the 818 Lincoln Road building: 1674 Meridian Avenue. Customers and employees will be informed of the Citi Bike Station 118. Additionally, the are several bicycle Racks located within walking distance (along Lincoln Road and on Meridian Avenue, just north of Lincoln Road).

(Goal: Offer 2 free City Bike passes to restaurant/café/bar lounge employees. Integrate bikeshare information into communication materials for visitors).

Mass Transit

There is a wealth of transit options for the 818 Lincoln Road development. These transit routes include 150, 120 and C. The nearest bus stop for these services is located on Washington Avenue, just south of Lincoln Road (approximately 1,700 feet from the 818 Lincoln Road building). These transit routes provide frequent service and access within Miami-Dade County as well as connections to other destinations outside of the County. Employers of the restaurant/café/bar lounge can provide a significant inducement to employees to use public transportation (Miami-Dade Transit, MDT) through a transit subsidy. Transit subsidies can also provide tax benefits to both employees and employers.

Additionally, the Miami Beach Trolley (South Beach Loop) provides free public transportation service along Washington Avenue and 17th Street with 20-minute headways.

MDT offers three methods to provide transit subsidies:
The employee uses pre-tax dollars from their salary to purchase monthly transit passes. There is no income tax on the portion of their salary used for transit passes. The pre-tax funds also reduce the employees' taxable salary, reducing the total amount of income tax paid by the employees. The employer pays the total cost of a monthly transit pass using a tax-deductible (to the employer) subsidy. The employer receives a tax deduction equivalent to the value of the

transit subsidies provided to the employees. The transit subsidy is a fringe benefit to employees and is not taxable income.

Both the employer and employees share the cost of transit passes, paying for them with pre-tax dollars. The employer reduces his/her payroll taxes. Employees do not pay income tax on the money used for transit passes.

MDT monthly passes if purchased by an individual are $112.50. Corporate discounts are available based on the number of participating employees. For 4 – 99 employees, monthly passes are $101.25 per employee, for 100 or more employees, the cost is $95.65 per employee.

Goal: Offer 2 free transit passes to restaurant/café/bar lounge employees.

Carpooling

Carpooling is historically the least effective alternative transportation mode, even when implemented on a regional basis. Given the relatively small employee base of three small employers, it is unlikely that carpooling will provide a significant amount of trip reduction. However, free valet parking could be made available to employees that carpool.

Goal: 2 free valet passes to carpool riders.

Please give me a call if you have any questions.

TRAF TECH ENGINEERING, INC.

Joaquin E. Vargas, P.E.
Senior Transportation Engineer

JOAQUIN E. VARGAS
LICENSE
No 44174
STATE OF
FLORIDA
PROFESSIONAL ENGINEER

July 25, 2022

ATTACHMENT A

Traffic Methodology

TRAFTECH ENGINEERING, INC.

TO: 818 Lincoln Road

FROM: Joaquin Vargas DATE: April 13, 2022

SUBJECT: Proposed Traffic Methodology for 818 Lincoln Road

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818 Lincoln Road is an existing 3-story commercial building located at 818 Lincoln Road in the City of Miami Beach. The building has 10,765 square feet of interior space and 3,484 square feet of exterior space. The scope of the project is to have a ground-floor café (90 seats), a high-end restaurant on the 2nd floor (300 seats) and a high-end bar on the 3rd floor (200 seats). The following is a summary of our proposed traffic analysis methodology in connection with the project:

- The current and proposed operation at the site will be documented (uses and intensities, number of seats, vacancies, etc.)

- Evaluate the future valet operation (location of valet station and queueing, parking, number of valet attendants and parking/retrieval routes). We will determine if improvements can be incorporated to the current valet operation serving nearby uses.

- Determine the potential impacts to the valet operation as a result of the proposed café/restaurant/bar. If required, improvements to the valet operation will be identified. Impacts to existing on-street parking and/or bicycle lanes will be addressed/mitigated.

- A Transportation Demand Management (TDM) plan will be prepared for the project. Employee incentives will be provided for the restaurant workers to encourage non-automobile modes of transportation. A TDM coordinator will be identified for the project.

8400 N. University Drive, Suite 309, Tamarac, FL 33321 T: 954-582-0988 F: 954-582-0989

ATTACHMENT B

Valet Operation Traffic Counts

MILA
800 LINCOLN ROAD
MIAMI BEACH, FL. (4/23/2021)
April 23, 2021

TIME	ENTER	EXIT	VALET DEPART	VALET RETURN
5:00-5:15	7	5		
			C 5:17	C 5:18
5:15-5:30	4	3		
5:30-5:45	6	5	C 5:36	C 5:46
			R 5:44	R 5:55
5:45-6:00	4	2	C 5:48	C 5:56
			S 5:54	S 5:56
			C 5:57	C 6:09
			R 5:55	R 6:05
6:00-6:15	7	5	R 6:06	R 6:08
			S 6:07	S 6:08
			C 6:10	C 6:18
			R 6:10	R 6:18
6:15-6:30	6	5	C 6:19	C 6:29
			R 6:19	R 6:29
6:30-6:45	3	3	C 6:31	C 6:47
			R 6:31	R 6:37
			S 6:31	S 6:34
			R 6:39	R 6:47
6:45-7:00	6	5	C 6:50	C 6:57
			R 6:50	R 6:57
			C 6:58	C 7:00

VALET RUNNERS C = CAMILLO R= RENE S= SANTIAGO

ATTACHMENT C

Valet Analysis

Queuing Analysis based on ITE Procedures
818 Lincoln (Parking and Retrieval)

q = 13 veh/hr (inbound/outbound demand rate*)

Q = 8 veh/hr (service rate**)

$$p = \frac{q}{NQ} = 0.5417 \text{ (N = 3 valet runners)}$$

$$Q_M = 0.2860$$

Using Acceptable Probability of 5% (95% Confidence Level)

$$M = \left(\frac{Ln\ (x > M) - Ln\ (Q_M)}{Ln\ (p)} \right) - 1$$

$$M = \left(\frac{Ln(0.05) - Ln(0.2860)}{Ln(0.5417)} \right) - 1$$

$$M = \left(\frac{-2.9957 - (-1.2518)}{-0.6130} \right) - 1$$

M = 2.8 – 1 = 1.8, say 2 vehicles

- As documented at the bottom of Table 2 (Trip Generation), 18 new peak hour trips are anticipated. Assuming 70% of the new trips would use valet service, 13 new valet vehicles are expected.

** The average time to park or unpark a vehicle, based on actual traffic counts was 7.1 minutes, or 8 vehicles per hour.

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location, a 5% probability of back-up onto the adjacent street is judged to be acceptable. Demand on the system for design is expected to be 110 vehicles in a 45-minute period. Average service time was expected to be 2.2 minutes. Is the queue storage adequate?

Such problems can be quickly solved using Equation (8–9b) given in Table 8-10 and repeated below for convenience.

$$M = \left[\frac{\ln P(x > M) - \ln Q_M}{\ln \rho}\right] - 1$$

where:

M = queue length which is exceeded p percent of the time
N = number of service channels (drive-in positions)
Q = service rate per channel (vehicles per hour)
$\rho = \dfrac{\text{demand rate}}{\text{service rate}} = \dfrac{q}{NQ}$ = utilization factor
q = demand rate on the system (vehicles per hour)
Q_M = tabled values of the relationship between queue length, number of channels, and utilization factor (see Table 8.11)

TABLE 8-11
Table of Q_M Values

	$N = 1$	2	3	4	6	8	10
0.0	0.0000	0.0000	0.0000	0.0000			
0.1	.1000	.0182	.0037	.0008	.0000	0.0000	0.0000
.2	.2000	.0666	.0247	.0096	.0015	.0002	.0000
.3	.3000	.1385	.0700	.0370	.0111	.0036	.0011
.4	.4000	.2286	.1411	.0907	.0400	.0185	.0088
.5	.5000	.3333	.2368	.1739	.0991	.0591	.0360
.6	.6000	.4501	.3548	.2870	.1965	.1395	.1013
.7	.7000	.5766	.4923	.4286	.3359	.2706	.2218
.8	.8000	.7111	.6472	.5964	.5178	.4576	.4093
.9	.9000	.8526	.8172	.7878	.7401	.7014	.6687
1.0	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000

$\rho = \dfrac{q}{NQ} = \dfrac{\text{arrival rate, total}}{(\text{number of channels})(\text{service rate per channel})}$

N = number of channels (service positions)

For 4 Valet Runners
0.5000 ------ 0.2368
0.5417 ------ X
0.6000 ------ 0.3548
then X = 0.2860

Solution

Step 1: $Q = \dfrac{60 \text{ min/hr}}{2.2 \text{ min/service}} = 27.3$ services per hour

Step 2: $q = (110 \text{ veh}/45 \text{ min}) \times (60 \text{ min/hr}) = 146.7$ vehicles per hour

Step 3: $\rho = \dfrac{q}{NQ} = \dfrac{146.7}{(6)(27.3)} = 0.8956$

Step 4: $Q_M = 0.7303$ by interpolation between 0.8 and 0.9 for $N = 6$ from the table of Q_M values (see Table 8-11).

Step 5: The acceptable probability of the queue, M, being longer than the storage, 18 spaces in this example, was stated to be 5%. $P(x > M) = 0.05$, and:

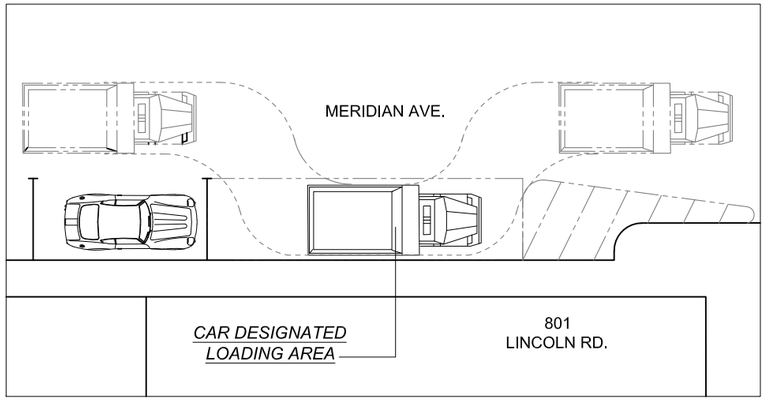
$$M = \left[\frac{\ln 0.05 - \ln 0.7303}{\ln 0.8956}\right] - 1 = \left[\frac{-2.996 - (-0.314)}{-0.110}\right] - 1$$

$$= 24.38 - 1 = 23.38, \text{ say } 23 \text{ vehicles.}$$

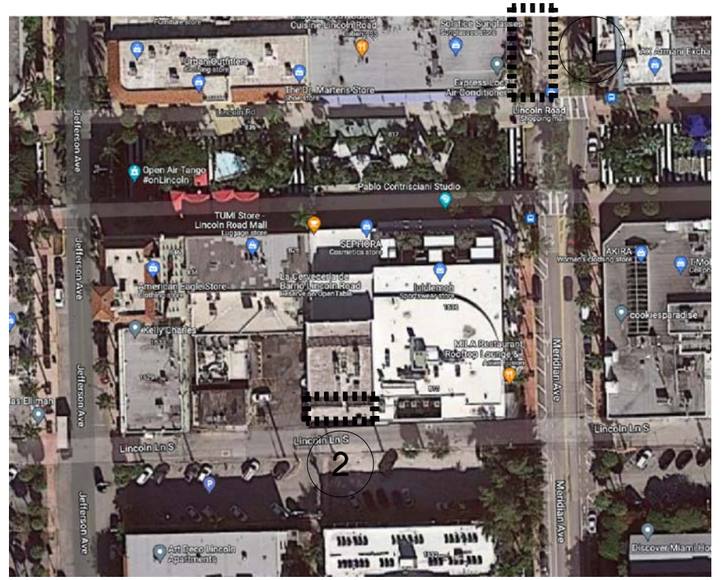
ATTACHMENT D

Delivery and Loading Areas Plan

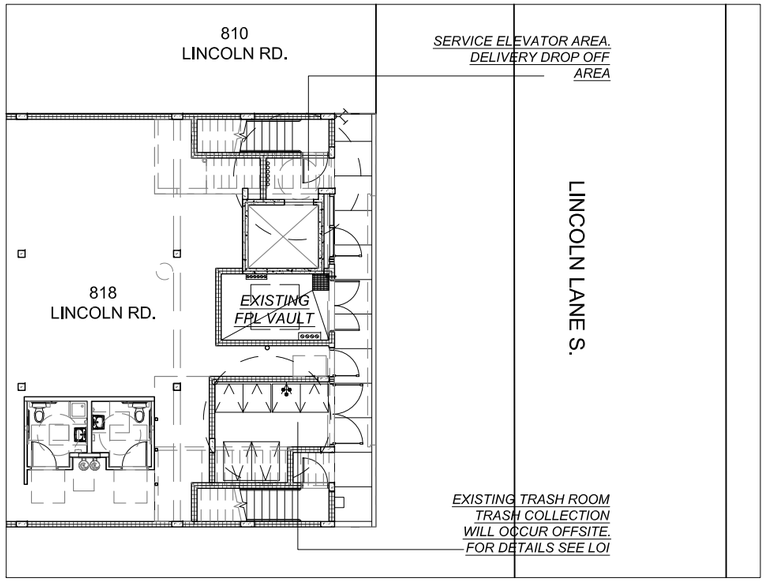
1 MERIDIAN AVE.
CAR DESIGNATED
LOADING ZONE AREA



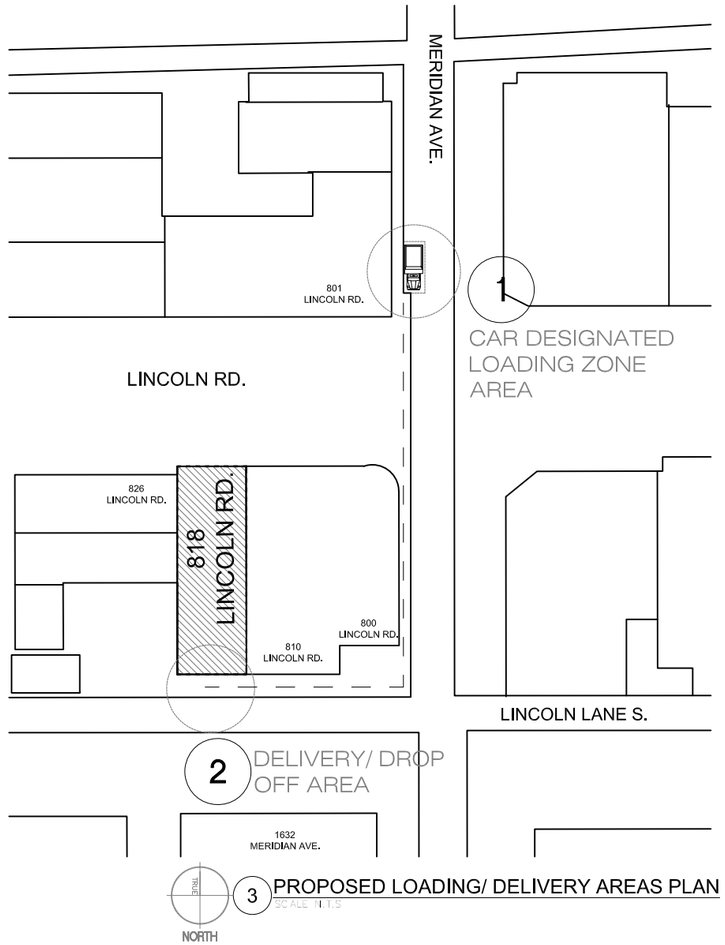
1 LOADING AREA-CAR TURN DIAGRAM-MERIDIAN AVE.
SCALE: N.T.S



2 818 LINCOLN LANE SOUTH.
DELIVERY DROP-OFF AREA



2 DELIVERY DROP OFF AREA-LINCOLN LANES S.
SCALE: N.T.S



3 PROPOSED LOADING/ DELIVERY AREAS PLAN
SCALE: N.T.S

DELIVERIES AND COLLECTIONS

THE FOLLOWING PROCEDURES WILL BE IMPLEMENTED TO ENSURE MINIMAL IMPACT ON LOCAL RESIDENTS. GOLDEN ERA HOSPITALITY, LLC WILL WORK WITH ONE OF THE CITY APPROVED WASTE COLLECTION COMPANIES FOR DAILY COLLECTIONS.

ENCLOSED TRASH ROOM AT THE SOUTHWEST REAR OF THE PROPERTY, LINCOLN LANES SOUTH .

ALL DELIVERIES WILL OCCUR DURING WEEKDAY AS WELL. FOR HOURS OF THESE ACTIVITIES PLEASE REFER TO LOI.

ARCHITECT OF RECORD:
drewtucker
1345 Lincoln Rd Ph 1
Miami Beach, Fl 33139
cell 520.891.0173
office 305.209.9573
www.drewtucker.com

PROJECT:
ORO RESTAURANT
ELIXIR LOUNGE
818 LINCOLN RD
MIAMI BEACH, FL 33139

OWNER:
GOLDEN ERA
HOSPITALITY, LLC

REVISIONS

ISSUE	ISSUE DATE/FOR

Drew Tucker, Architect
LIC#: AR98386

PROJECT No: 2022-04	DRAWN BY: DM/CAPU/PD
SCALE: AS SHOWN	CHECKED BY: DM/CAPU/PD
DATE: JULY 25, 2022	

DRAWING TITLE:
PROPOSED LOADING ZONE
LOCATION PLAN

SHEET NO.:
A5.01