



Kimpton Hotel Palomar South Beach

1750 Alton Road

Miami Beach, Florida 33139

prepared for:

Kimpton Hotel Palomar South Beach

traffic evaluation

TRAFTECH
ENGINEERING, INC.

February 2024

February 12, 2024

Mickey Marrero, Esq.
Bercow Radell Fernandez Larkin + Tapanes
200 S Biscayne Boulevard, Suite 300
Miami, Florida 33131

**Re: Kimpton Hotel Palomar South Beach (1750 Alton Road)
Traffic Engineering Evaluation**

Dear Mickey:

Traf Tech Engineering, Inc. is pleased to provide you with the results of the traffic evaluation undertaken for the proposed plan to allow outside guests to access the pool area located on the rooftop of the subject hotel.

It has been a pleasure working with you on this project.

TRAF TECH ENGINEERING, INC.


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

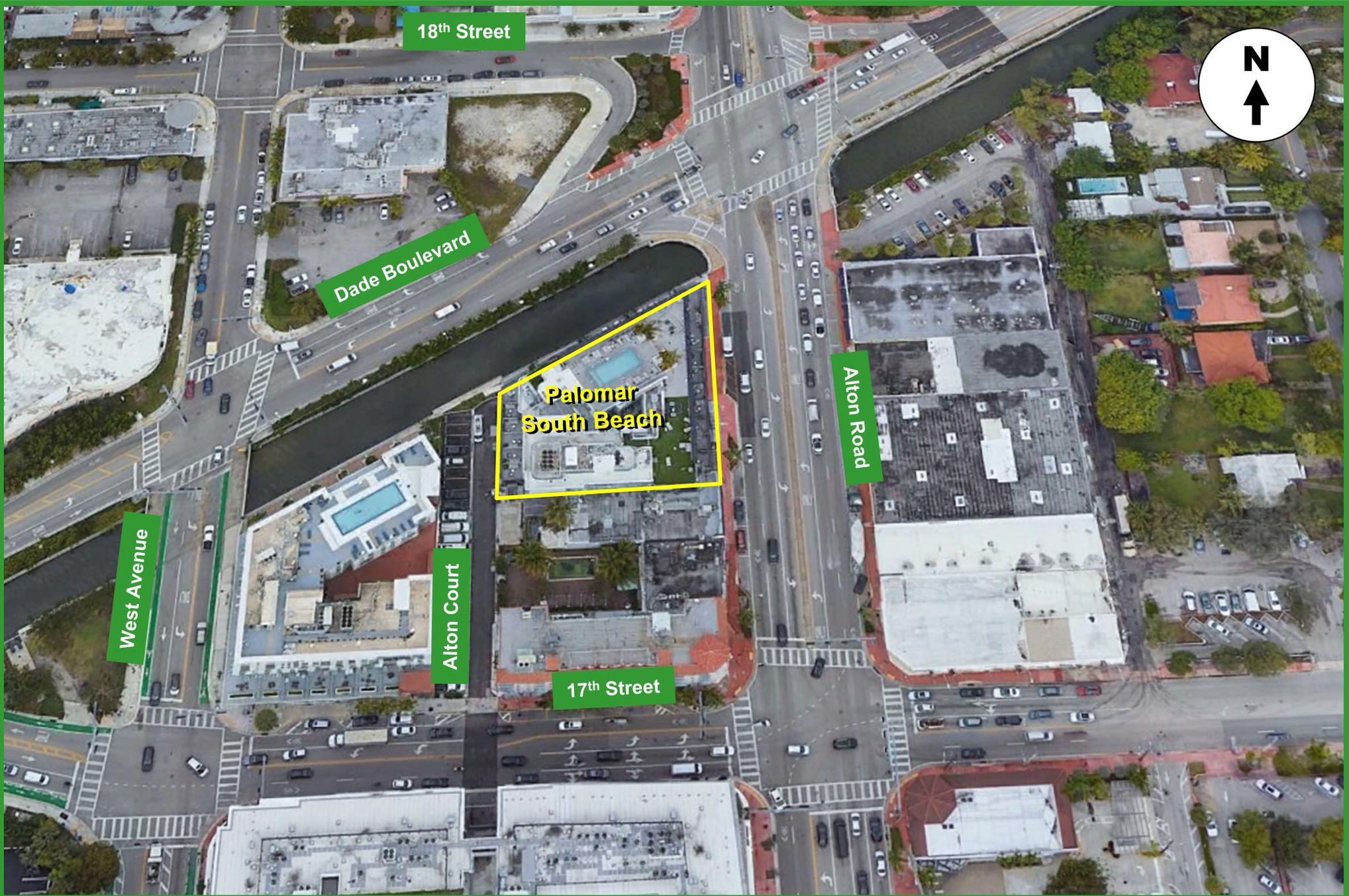
INTRODUCTION

Kimpton Hotel Palomar South Beach is an existing hotel located at 1750 Alton Road, as illustrated in Figure 1. At the rooftop of the hotel, there is a swimming pool where drinks are served to hotel guests only. Limited food can be served on the rooftop to hotel guests. The proposed plan is to allow outside guests to access the pool area and order drinks and limited food, if desired. The size of the rooftop area is approximately 7,320 square feet of occupiable area (refer to site plan contained in Attachment A).

Traf Tech Engineering, Inc. was retained by the Kimpton Hotel Palomar South Beach to determine the traffic implications associated with allowing outside guests to access the pool area and order drinks and limit food. The study addresses the traffic generated by the outside guests, parking needs, and valet operation.

This study is divided into four (4) sections, as listed below:

1. Trip Generation
2. Parking
3. Valet Operation
4. Conclusions



TRIP GENERATION

Trip Generation

The trip generation analysis was based on the Institute of Transportation Engineers (ITE) *Trip Generation Manual (11th Edition)*. Table 1 below documents the trip generation associated with the proposed rooftop lounge. For purposes of this development, ITE's Land Use Code 975 – Drinking Place was used to assess impacts with a conservative approach (the trip generation rate for a drinking place is significantly higher than a restaurant).

Based on ITE Trip Generation Handbook (Third Edition), during the PM peak hour, the internal trips between a hotel and a restaurant (no data is available for drinking place) is higher than 60%. For purposes of this analysis, no internal capture was used between the existing hotel and the proposed rooftop lounge.

TABLE 1								
Trip Generation Summary								
1750 Alton - Rooftop								
Land Use	Size		AM Peak Hour			PM Peak Hour		
			Total Trips	Inbound	Outbound	Total Trips	Inbound	Outbound
Proposed Rooftop (LUC 975)	7,320	sf	0	0	0	114	78	36
Drive-in Use (29%)						33	23	10
Internal with hotel (-0%)						0	0	0
Total Trips			0	0	0	33	23	10
<i>Source: ITE Trip Generation Manual (11th Edition).</i>								
NOTES: Drive-in use = percent of hotel guests arriving by own automobile								
No internal trips assumed between hotel guests and the rooftop lounge (conservative approach)								
Drinking Place - LUC 975								
Daily Trips	= n/a							
AM Peak Hour Trips	= n/a							
PM Peak Hour Trips	= 11.36 (X) with 66% inbound and 34% outbound, where X = 1,000 square feet							
PM Peak of the Generator	= 15.53 (X) with 68% inbound and 32% outbound, where X = 1,000 square feet							

As indicated in Table 1, the new PM peak hour of the generator trips projected by opening the rooftop to outside guests is approximately 33 (approximately one new peak hour trip every 2 minutes). Due to the low trips anticipated by opening the rooftop area to outside guests, the traffic impacts to the nearby transportation system are minimal.

PARKING

The valet operator has a computerized system that keeps a daily log of two numbers. They log in the number of hotel rooms occupied every night, and also record the number of hotel guests that registered a vehicle that is parked on the hotel premises. The drive-in ratio reflects the percentage of occupied hotel rooms that arrived via automobile. (cars parked divided by occupied hotel rooms).

A field verification was performed by Traf Tech Engineering, Inc. on Thursday, February 8, 2024. On the ground floor, there are four (4) regular parking spaces plus one (1) handicap parking stall for a total of five (5) parking spaces on the ground floor. At the second-floor parking, there are a total of 28 lifts for a total of 56 parking spaces. Overall, the hotel provides 61 parking spaces (6 + 56).

Since the facility is 100% valet parking (no self-parking allowed), the parking operator can park more than the marked parking spaces, if needed, by parking on drive-aisles and on the ramp.

Based on information provided by the hotel operator, in the year 2022, the average hotel occupancy was 77%, with an average automobile use (drive-in ratio) of 24%, or 18 occupied parking spaces out of the 61 on-site parking stalls provided. The month with the maximum number of occupied parking spaces was July, with 29% occupancy (22 parking spaces used out of 61 available parking stalls). Therefore, this facility has a very low drive-in vehicular use. Assuming the hotel at 100% occupancy (96 rooms occupied), and the 29% drive-in ratio results in 28 on-site vehicles parked (96×0.29) at 100% occupancy.

As documented in Table 1, approximately 23 new inbound trips are anticipated as a result of allowing outside guests to access the rooftop area. Therefore, a maximum of 51 parking spaces are required (28 for hotel guests plus 23 for outside guests). Since 61 on-site parking spaces are provided, sufficient parking is provided at The Palomar.

Based on the above, sufficient on-site parking spaces are available to serve outside guests of the rooftop area.

VALET ANALYSIS

Valet service will be provided for the outside guests of the rooftop area of the hotel. It was assumed that 100% (conservative assumption) of the outside guest trips will use the valet service. The valet station is provided on the ground-floor as depicted in Figure 2). The parking location for valet vehicles is the parking garage located on the second floor. The parking location is located approximately 350 feet from the valet station.

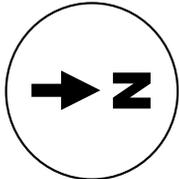
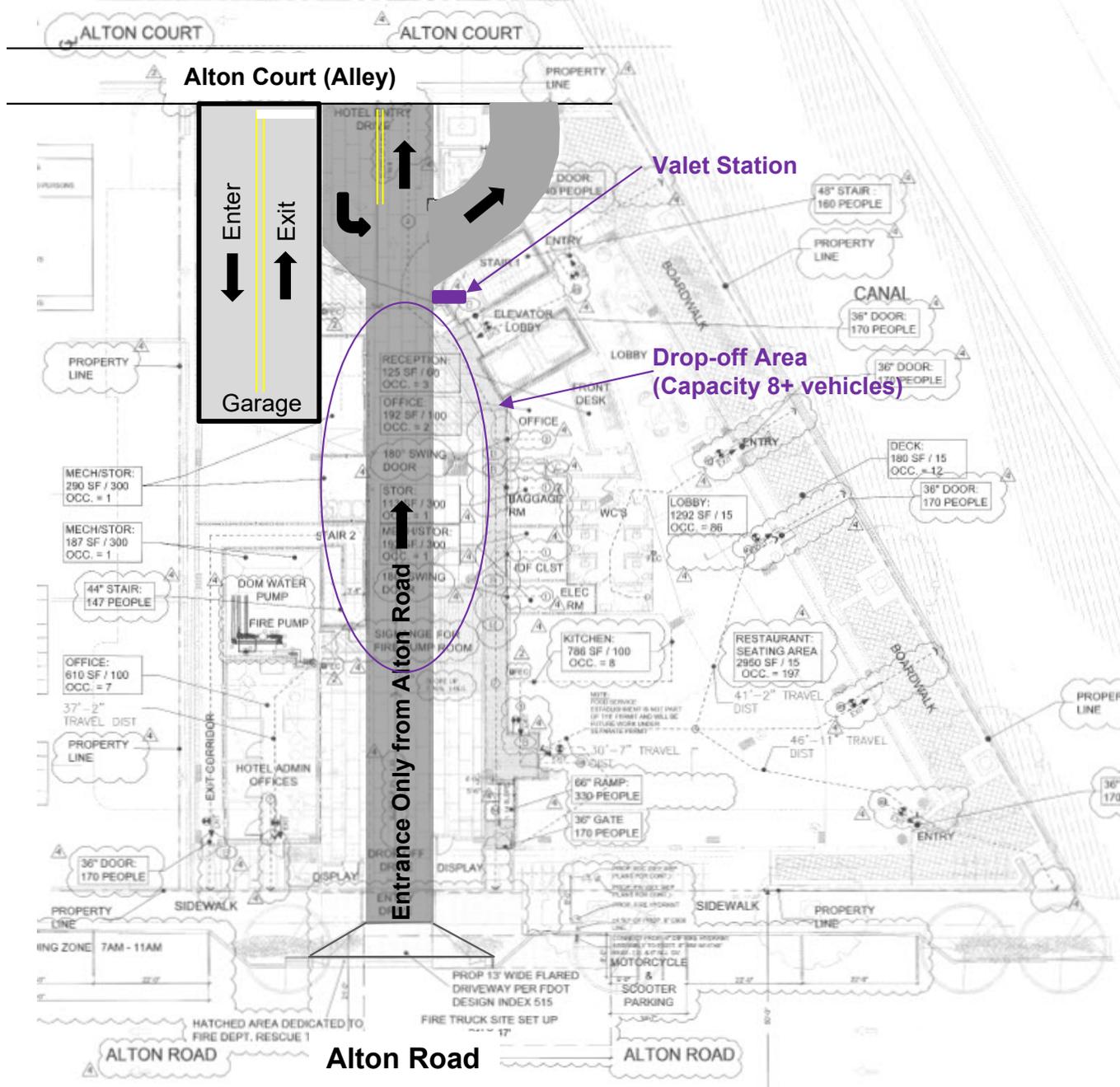
A queuing analysis was conducted for the valet drop-off/pick-up location. The length of queue anticipated was determined using information contained in ITE's *Transportation and Land Development*, Chapter 8 – Drive-In Facilities¹. For this analysis, the following input variables were used:

- Service Rate: The distance between the ground-level valet station and the valet parking garage is approximately 350 feet. Traf Tech Engineering, Inc. met with the valet operator on Thursday, February 8, 2024. During the meeting, the time for the valet operator to park or retrieve a vehicle parked at a lift was used for this purpose. Excluding the ticket processing time, the time to park/retrieve a vehicle ranged from 1' 52" to 2' 47". For purposes of this study, we have assumed a 3.5-minute time to either park a vehicle or retrieve a parked vehicle. Hence, the number of vehicles that a valet runner can park or retrieve per hour is approximately 17 vehicles.
- Demand Rate: A maximum of 33 outside guest valet vehicles were estimated to arrive/depart during the highest hour ($33 \times 100\% = 33$ for PM Peak Hour).

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 three (3) vehicles for the outside guests. Therefore, the on-site valet station should provide parking for four (4) to account for existing hotel customers and outside guest vehicles and have four (4) additional valet runner during peak times. The results of the ITE queuing procedure are included in Appendix B.

Figure 2 provides detailed information about the location of the Valet Station, Parking Garage, and the valet parking inbound and outbound routes on a map.

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



CONCLUSIONS

Kimpton Hotel Palomar South Beach is an existing hotel located at 1750 Alton Road, as illustrated in Figure 1. At the rooftop of the hotel, there is a swimming pool where drinks are served to hotel guests only. Limited food can be served on the rooftop to hotel guests. The proposed plan is to allow outside guests to access the pool area and order drinks and limited food, if desired.

Traf Tech Engineering, Inc. was retained by the Kimpton Hotel Palomar South Beach to determine the traffic implications associated with allowing outside guests to access the pool area and order drinks and limit food.

The conclusions of the traffic evaluation are presented below:

- The new PM peak hour of the generator trips projected by opening the rooftop to outside guests is approximately 33 (approximately one new peak hour trip every 2 minutes). Due to the low trips anticipated by opening the rooftop area to outside guests, the traffic impacts to the nearby transportation system are minimal.
- Sufficient on-site parking spaces are available to serve outside guests of the rooftop area.
- The ground-level valet station should provide parking for three (3) additional outside guest vehicles and have four (4) additional valet runners during peak times.

APPENDIX A

Site Plan for Palomar South Beach

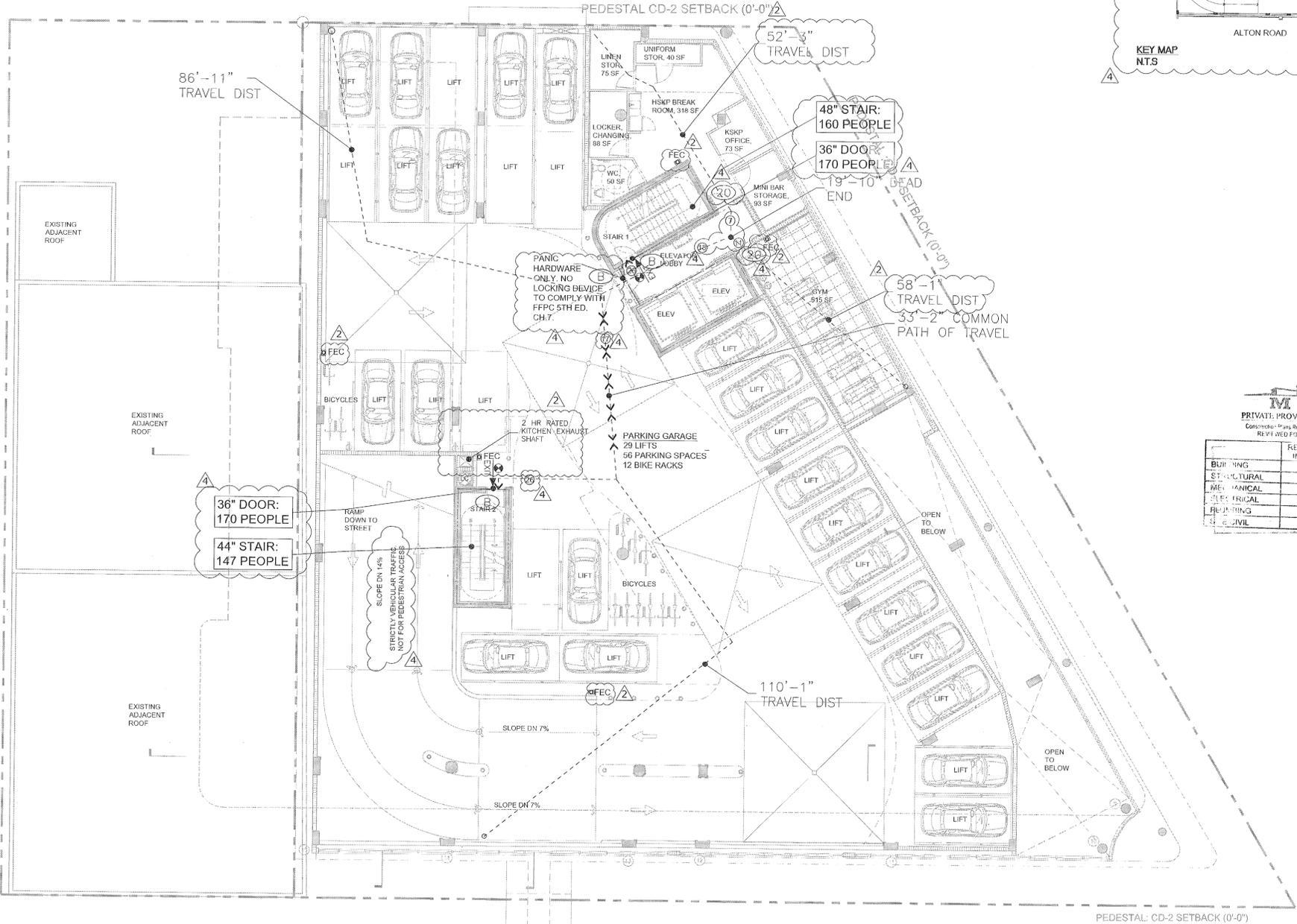
Handwritten signature and date: 11.22.17

STATE OF FLORIDA
REGISTERED ARCHITECT

THESE DRAWINGS AND DOCUMENTS ARE THE
COPYRIGHTED PROPERTY OF PERMUY
ARCHITECTURE, INTERIOR DESIGN AND
PLANNING, INC. AND MAY NOT BE REPRODUCED
EXCEPT WITH SPECIFIC WRITTEN
CONSENT OF THE ARCHITECT. THE
CONTRACTOR MUST CHECK AND VERIFY ALL
DIMENSIONS OF THE JOB AND BE RESPONSIBLE
FOR SAME, REPORTING ANY DISCREPANCIES TO
THE ARCHITECT BEFORE COMMENCING WORK.
DRAWINGS ARE NOT TO BE SCALED.



NOTES:
1- ALL EGRESS DOORS WITH 1/2" MAX ELEVATION, TYPICAL
2- THERE IS NO OPEN TO SKY WITHIN BUILDING FOOTPRINT



LIFE SAFETY OCCUPANT LOAD CALCULATION - 3RD-4TH-5TH FLOORS - FBC, TABLE 1004.12

ROOM	FLOOR AREA	OCCUPANT LOAD FACTOR PER 1000 SF	OCCUPANT LOAD	CATEGORY
PARKING (GARAGE)	9,838 SF.	300 GROSS	33	GARAGE
BUS/HEKP ROOMS	644 SF.	100 GROSS	7	BUSINESS
GYM ROOM	515 SF.	50 GROSS	11	ASSEMBLY
TOTAL -			51 PERSONS	

DOOR AND STAIR EGRESS - 2ND FLOOR - 74 PERSONS

REQUIRED DOOR, 0.2" MIN. WIDTH REQUIRED	REQUIRED STAIR, 0.3" MIN. WIDTH REQUIRED	PROVIDED DOOR, 0.2" MIN. WIDTH REQUIRED	STAIR, 0.3" MIN. WIDTH REQUIRED
14.8" WIDTH	22.2" WIDTH	(2) AT 32" WIDTH	(2) AT 44" WIDTH
TOTAL -			74 PERSONS

MTCI
PRIVATE PROVIDER SERVICES, LLC
Construction Plans Review - Compliance & Code-Book
REVISED FOR CODE COMPLIANCE

REVISION	DATE
1	11/16

KIMPTON HOTEL
PALOMAR
1750 Alton Road, Miami Beach, FL 33139
FINVARB GROUP
1065 Kane Concourse, Suite 201, Bay Harbor Islands, FL 33154

No.	DESCRIPTION	DATE
	PERMIT SET	02.28.17
2	REV. 2	05.31.17
4	REV. 4	11.22.17

City of Miami Beach
Fire Prevention Division
PLANS APPROVED

PROJECT NO: 1613
DATE: 02.28.17
SHEET INDEX:
SCALE: As Noted
SHEET NO:

APPENDIX B
Valet Queuing Analysis

Queuing Analysis based on ITE Procedures Palomar South Beach

$$q = 33 \text{ veh/hr (demand rate)}$$

$$Q = 17 \text{ veh/hr (service rate)}$$

$$p = \frac{q}{NQ} = 0.485 \text{ (N = 4 valet runner)}$$

$$Q_M = 0.485$$

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

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

$$M = \left(\frac{\text{Ln}(0.05) - \text{Ln}(0.485)}{\text{Ln}(0.485)} \right) - 1$$

$$M = \left(\frac{-2.9957 - (-0.7236)}{-0.7236} \right) - 1$$

$$M = 3.14 - 1 = 2.14, \text{ say 3 vehicles}$$

APPENDIX C

Approved Traffic Methodology

PROPOSED TRAFFIC METHODOLOGY

Kimpton Hotel Palomar South Beach (1750 Alton Road – Rooftop)

Proposed Development

Kimpton Hotel Palomar South Beach is an existing hotel located at 1750 Alton Road. At the rooftop of the hotel, there is a swimming pool where drinks are served to hotel guests only. Limited food can be served on the rooftop by hotel guests. The proposed plan is to allow outside guests to access the pool area and order drinks and limited food, if desired. The size of the rooftop area is approximately 7,320 square feet of occupiable area (refer to site plan).

Based on information provided by the hotel operator, in 2022, the average hotel occupancy was 77%, with an average automobile use (drive-in ratio) of 24%, or 18 occupied parking spaces out of the 75 on-site parking stalls provided. The month with the maximum number of occupied parking spaces was July, with 29% occupancy (22 parking spaces used out of 75 available parking stalls). Therefore, this facility has a very low drive-in vehicular use.

Based on the above, sufficient on-site parking spaces are available to serve outside guests of the rooftop area.

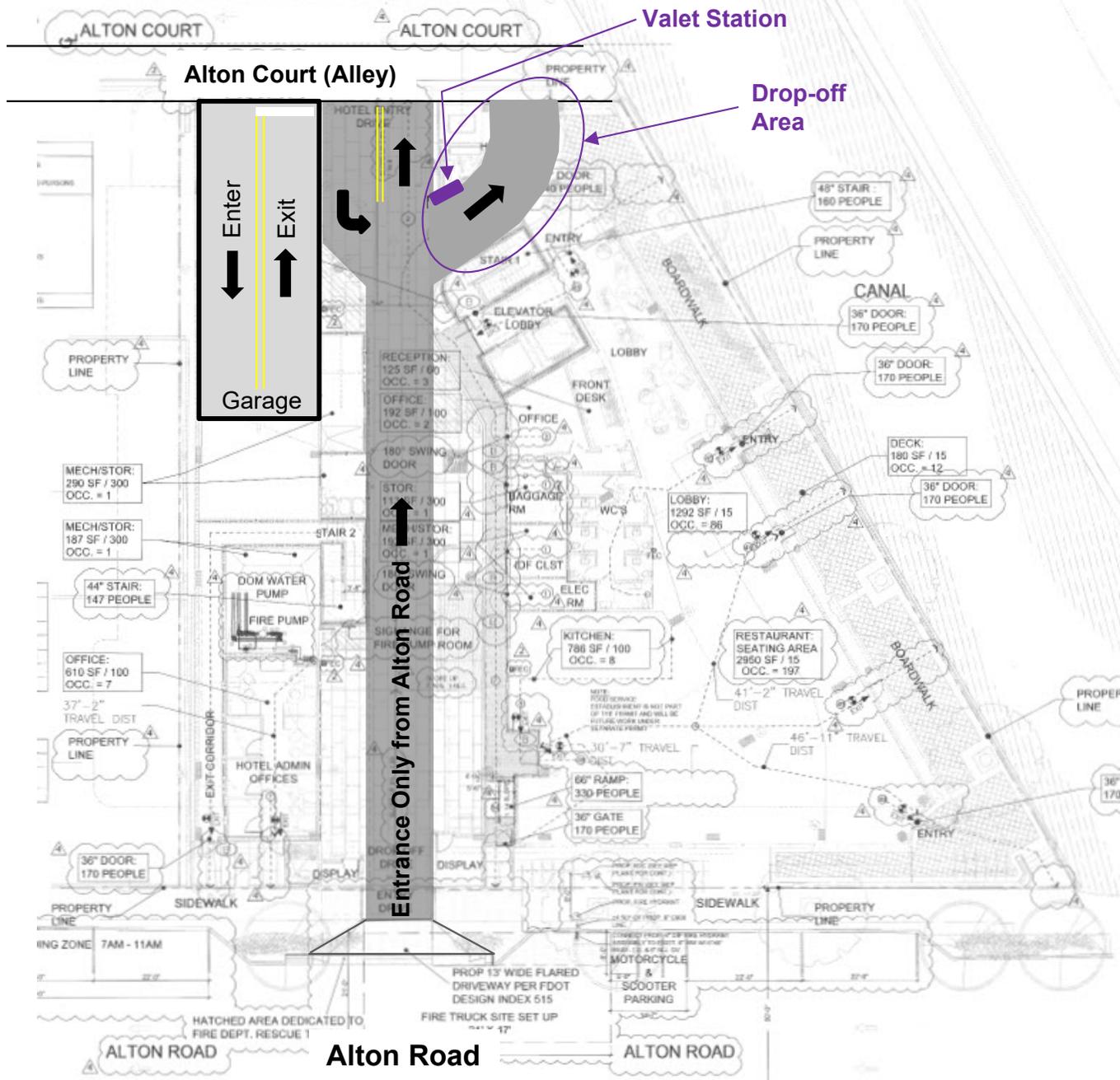
Proposed Traffic Methodology

- The trip generation analysis will be based upon the Institute of Transportation Engineers (ITE) *Trip Generation Manual (11th Edition)*. Table 1 documents the trip generation associated with the proposed rooftop lounge. For purposes of this development, ITE's Land Use Code 975 – Drinking Place was used. The trip generation rate for a drinking place is significantly higher than a restaurant and therefore, this will assess traffic impacts with a conservative approach.
- Based on ITE Trip Generation Handbook (Third Edition), during the PM peak hour, the internal trips between a hotel and a restaurant (no data is available for drinking place) is higher than 60%. For purposes of this analysis, a 25% internal capture was used between the existing hotel and the proposed rooftop lounge.

TABLE 1 Trip Generation Summary 1750 Alton - Rooftop								
Land Use	Size		AM Peak Hour			PM Peak Hour		
			Total Trips	Inbound	Outbound	Total Trips	Inbound	Outbound
Proposed Rooftop (LUC 975)	7,320	sf	0	0	0	114	78	36
Drive-in Use (29%)						33	23	10
Internal with hotel (-0%)						0	0	0
Total Trips			0	0	0	33	23	10
<i>Source: ITE Trip Generation Manual (11th Edition).</i>								
NOTES: Drive-in use = percent of hotel guests arriving by own automobile No internal trips assumed between hotel guests and the rooftop lounge (conservative approach)								
Drinking Place - LUC 975								
Daily Trips	= n/a							
AM Peak Hour Trips	= n/a							
PM Peak Hour Trips	= 11.36 (X) with 66% inbound and 34% outbound, where X = 1,000 square feet							
PM Peak of the Generator	= 15.53 (X) with 68% inbound and 32% outbound, where X = 1,000 square feet							

- As indicated in Table 1, the new PM peak hour of the generator trips projected by opening the rooftop to outside guests is approximately 33 (approximately one new peak hour trip every 2 minutes). Due to the low trips anticipated by opening the rooftop area to outside guests, no traffic counts and level of service analysis is considered necessary.
- Valet service may be provided for the 1750 rooftop project. Therefore, a valet operations plan will be prepared addressing the valet station location, parking and retrieval routes, number of valet attendants required to prevent traffic queues from interfering with the through traffic on nearby public streets or alleys.
- Parking will be addressed. A parking count will be conducted to verify the number of existing parking spaces, the number of parking spaces used per occupied hotel room, and the available parking spaces for future guests of the rooftop area.
- A traffic memorandum will be prepared for the proposed rooftop lounge. The memorandum will address trip generation, driveway volumes, new trips on the surrounding street system, parking, and valet service.

ATTACHMENT C-1
Ground Floor and Rooftop
1750 Alton



Drop-off Area and Garage Entrance

FIGURE 1
1750 Alton
Miami Beach, Florida

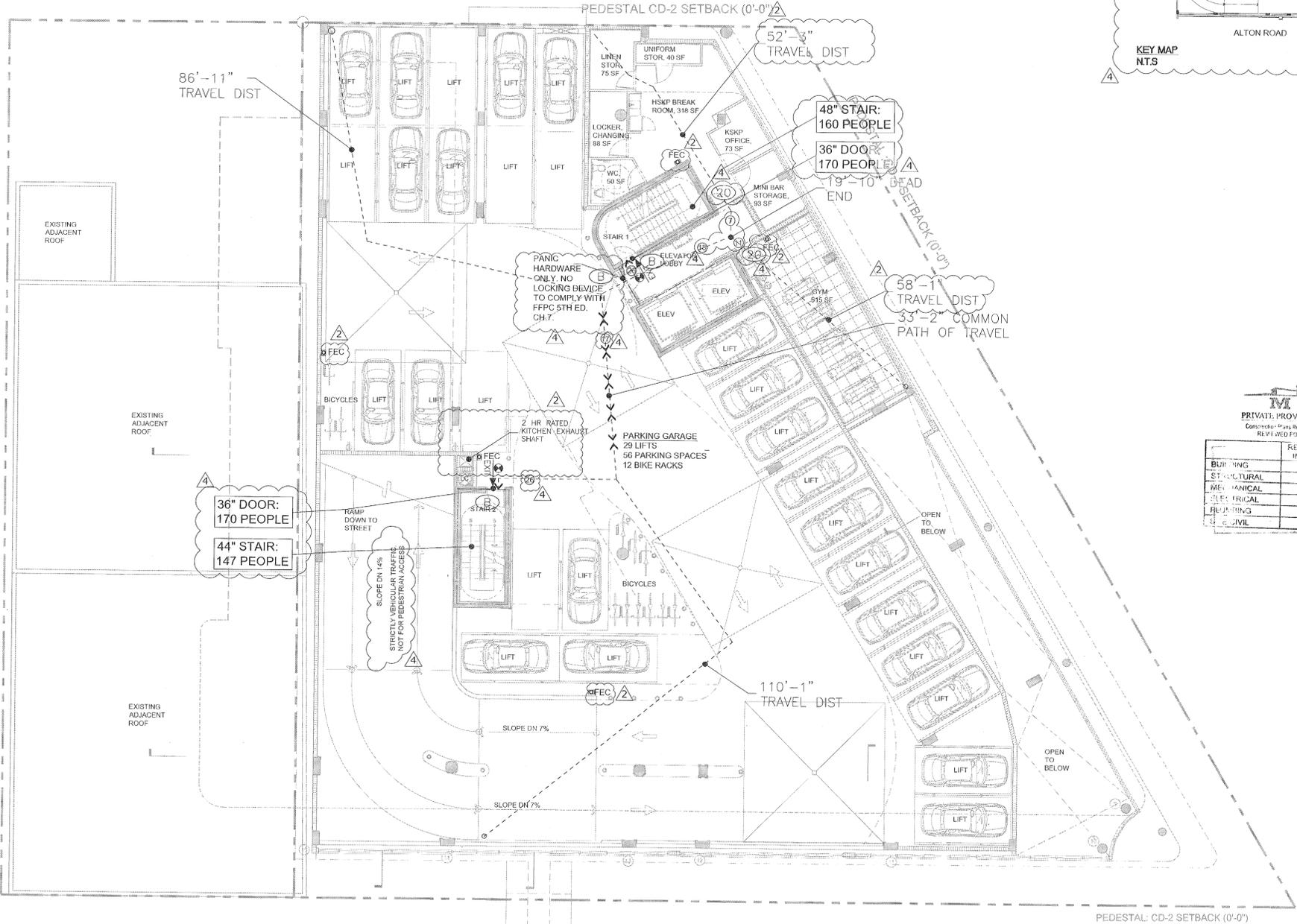
Handwritten signature and date: 11.22.17

STATE OF FLORIDA
HELIO MELIAN ARCHITECT
REGISTRATION #190000000

THESE DRAWINGS AND DOCUMENTS ARE THE
COPYRIGHTED PROPERTY OF PERMUY
ARCHITECTURE, INTERIOR DESIGN AND
PLANNING, INC. AND MAY NOT BE REPRODUCED
EXCEPT WITH SPECIFIC WRITTEN
CONSENT OF THE ARCHITECT. THE
CONTRACTOR MUST CHECK AND VERIFY ALL
DIMENSIONS OF THE JOB AND BE RESPONSIBLE
FOR SAME, REPORTING ANY DISCREPANCIES TO
THE ARCHITECT BEFORE COMMENCING WORK.
DRAWINGS ARE NOT TO BE SCALED



NOTES:
1 - ALL EGRESS DOORS WITH 1/2" MAX ELEVATION, TYPICAL
2 - THERE IS NO OPEN TO SKY WITHIN BUILDING FOOTPRINT



LIFE SAFETY OCCUPANT LOAD CALCULATION - 3RD-4TH-5TH FLOORS - FBC, TABLE 1004.12

ROOM	FLOOR AREA	OCCUPANT LOAD FACTOR PER 1000 SF	OCCUPANT LOAD	CATEGORY
PARKING (GARAGE)	9,836 SF.	300 GROSS	33	GARAGE
BUS/HKFP ROOMS	644 SF.	100 GROSS	7	BUSINESS
GYM ROOM	515 SF.	50 GROSS	11	ASSEMBLY
TOTAL -			51 PERSONS	

DOOR AND STAIR EGRESS - 2ND FLOOR - 74 PERSONS

REQUIRED	REQUIRED	PROVIDED	STAIR, 0.3' MIN. WIDTH REQUIRED
DOOR, 0.2' MIN. WIDTH REQUIRED	STAIR, 0.3' MIN. WIDTH REQUIRED	DOOR, 0.2' MIN. WIDTH REQUIRED	STAIR, 0.3' MIN. WIDTH REQUIRED
14.8' WIDTH	22.2' WIDTH	(2) AT 32' WIDTH	(2) AT 44' WIDTH
TOTAL -			74 PERSONS

MTCI
PRIVATE PROVIDER SERVICES, LLC
Construction Plans Review - Compliance & Code-Admng
REVIEWED FOR CODE COMPLIANCE

REVISION	DATE
1	11/16/17

KIMPTON HOTEL
PALOMAR
1750 Alton Road, Miami Beach, FL 33139
FINVARB GROUP
1065 Kane Concourse, Suite 201, Bay Harbor Islands, FL 33154

No.	DESCRIPTION	DATE
1	PERMIT SET	02.28.17
2	REV. 2	05.31.17
4	REV. 4	11.22.17

City of Miami Beach
Fire Prevention Division
PLANS APPROVED

PROJECT NO: 1613
DATE: 02.28.17
SHEET INDEX:
SCALE: As Noted
SHEET NO:

ATTACHMENT C-2

**ITE Trip Generation for
LUC 925 – Drinking Place**

Land Use: 975

Drinking Place

Description

A drinking place contains a bar, where alcoholic beverages and food are sold, and possibly some type of entertainment, such as music, television screens, video games, or pool tables. Establishments that specialize in serving food but also have bars are not included in this land use.

Additional Data

All data for this land use were collected on Mondays through Thursdays.

The sites were surveyed in the 1980s, the 1990s, and the 2010s in Colorado, Florida, Oregon, Pennsylvania, and South Dakota.

Source Numbers

291, 358, 583, 1020, 1053

Drinking Place (975)

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA

On a: **Weekday,**

Peak Hour of Adjacent Street Traffic,

One Hour Between 4 and 6 p.m.

Setting/Location: General Urban/Suburban

Number of Studies: 12

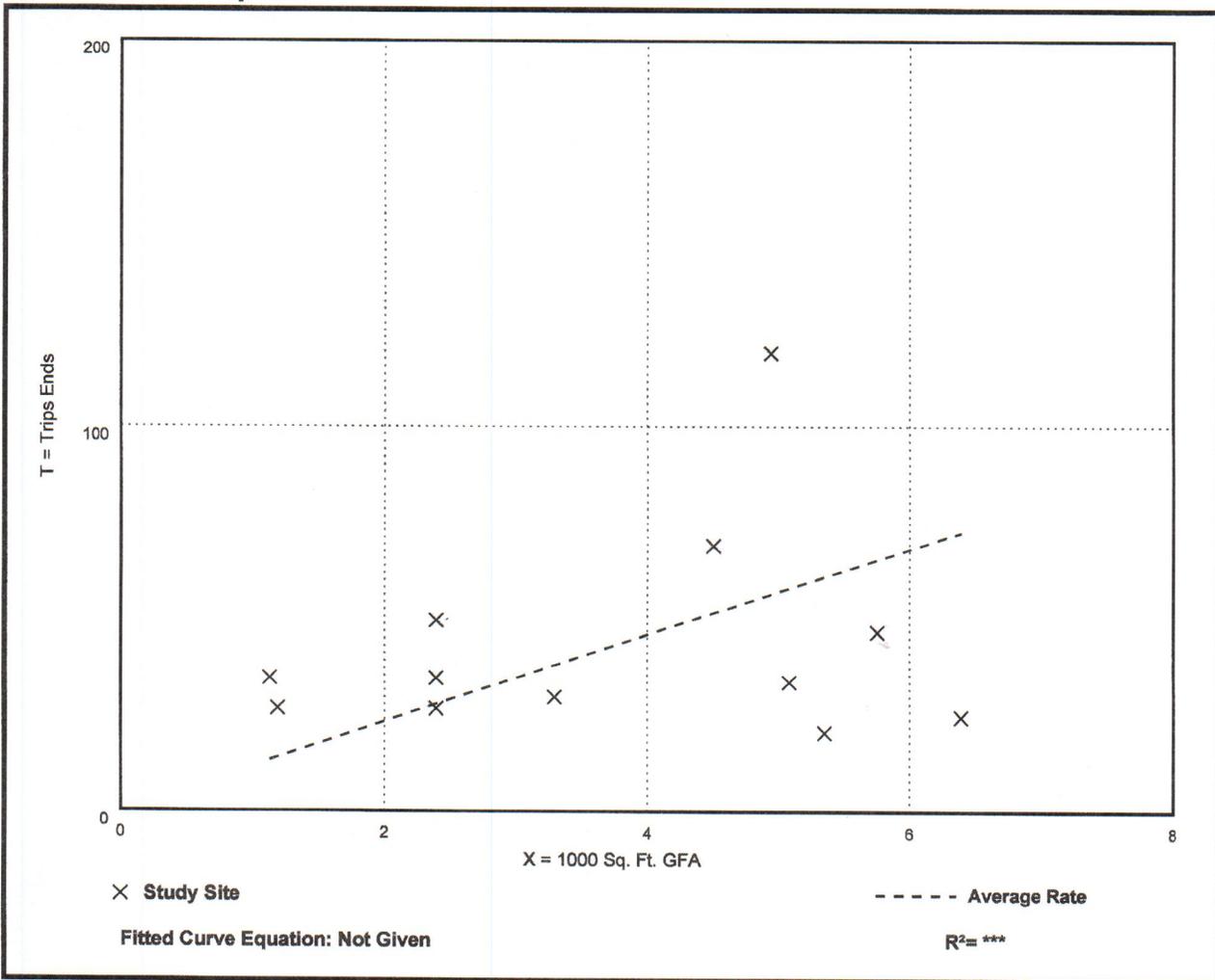
Avg. 1000 Sq. Ft. GFA: 4

Directional Distribution: 66% entering, 34% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
11.36	3.74 - 30.09	7.81

Data Plot and Equation



Drinking Place (975)

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA

On a: **Weekday,**

PM Peak Hour of Generator

Setting/Location: General Urban/Suburban

Number of Studies: 8

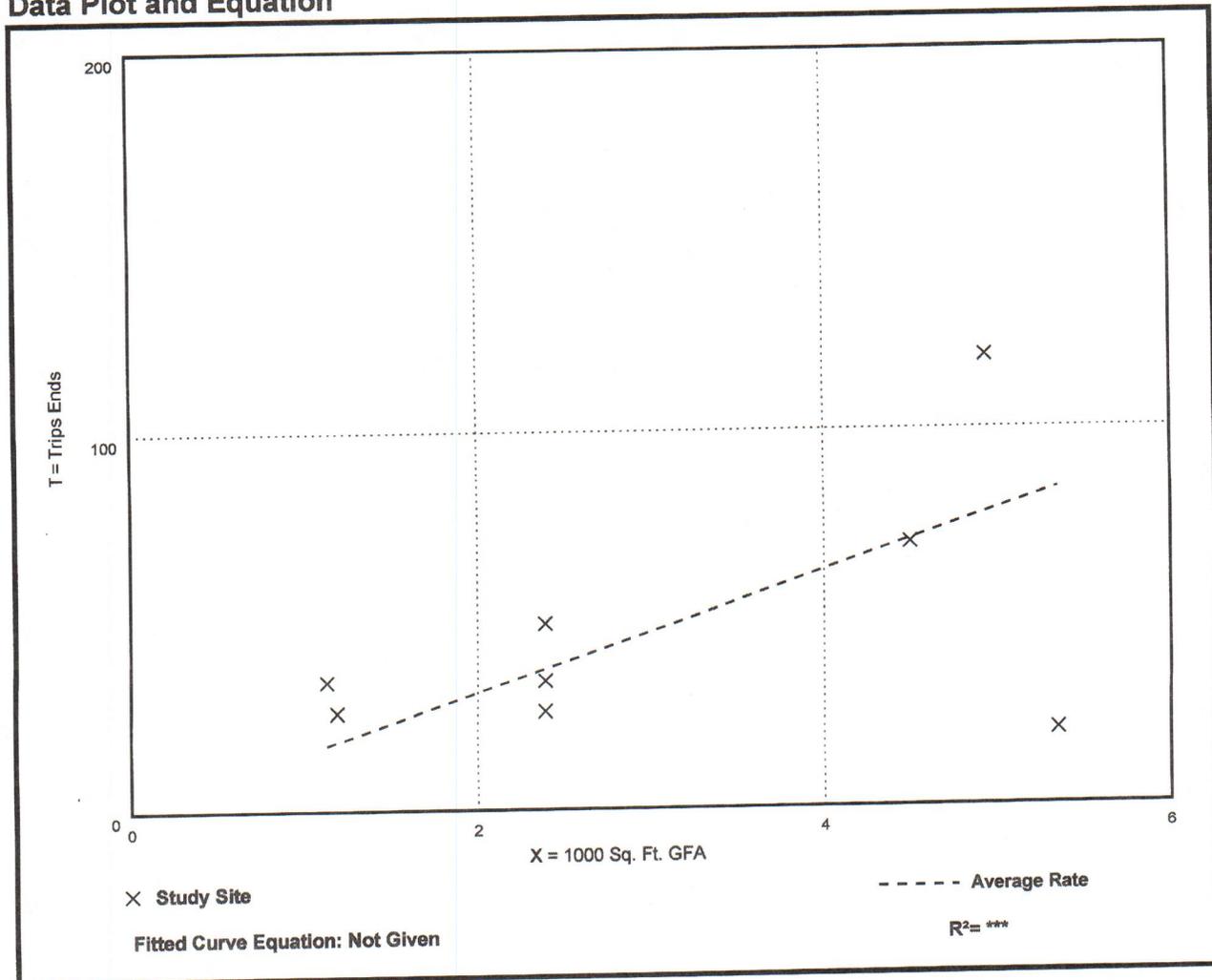
Avg. 1000 Sq. Ft. GFA: 3

Directional Distribution: 68% entering, 32% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
15.53	3.74 - 30.09	8.42

Data Plot and Equation



ATTACHMENT C-3

Drive-in Vehicle Use

(SOURCE: VPNE Parking Solutions)

Palomar Hotel
VPNE Drive-In Ratio
2022

MONTH	DRIVE-IN RATIO
January	28%
February	22%
March	23%
April	15%
May	22%
June	20%
July	29%
August	28%
September	23%
October	24%
November	24%
December	25%
Average	24%