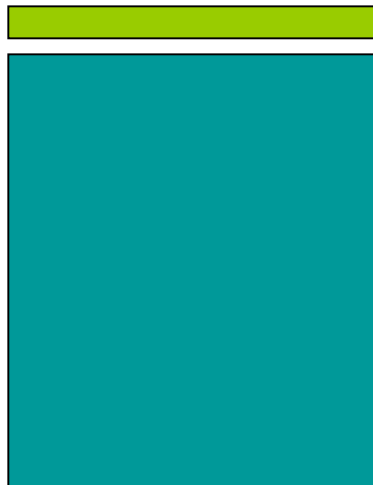


The Standard Hotel

traffic evaluation



prepared for:
FERRADO

Traf Tech
ENGINEERING, INC.

August 2016

August 24, 2016

Monika H. Entin, Esq.
Becow Radell & Fernandez, P.A.
200 S. Biscayne Boulevard
Suite 850
Miami, Florida 33131

Re: The Standard Hotel - Traffic Evaluation

Dear Monika:

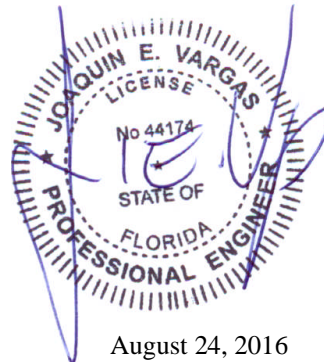
Traf Tech Engineering, Inc. is pleased to provide you with the results of the traffic evaluation undertaken for the proposed on-site parking for The Standard Hotel located on Island Avenue off of Venetian Causeway in the City of Miami Beach in Miami-Dade County, Florida. The subject on-site parking is to better accommodate the hotel guests of the subject lodging facility.

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

Sincerely,

TRAF TECH ENGINEERING, INC.

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



August 24, 2016

TABLE OF CONTENTS

INTRODUCTION	1
INVENTORY AND ANALYSIS	3
Existing Land Uses and Parking/Valet Operation	3
Proposed Land Uses and Parking/Valet Operation	3
Roadway System and Analysis	7
Traffic Calming	7
Other Modes of Transportation.....	7
Taxi Drop-off/Pick-up Operation	7
Pedestrian Path Connectivity	8
Delivery Trucks	8
TRIP GENERATION	9
CONCLUSIONS	11

LIST OF FIGURES

FIGURE 1 – Project Location Map	2
FIGURE 2 – Existing Valet Parking Route	4
FIGURE 3 – Parking Route with On-Site Parking Garage	5
FIGURE 4 – Retrieval Route with On-Site Parking Garage	6

LIST OF TABLES

TABLE 1 – Trip Generation Summary	9
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INTRODUCTION

The Standard Hotel is an existing hotel located on Belle Isle in the City of Miami Beach in Miami-Dade County, Florida. The site is currently developed with a 105-room hotel and supporting facilities such as restaurants, a pool deck, a spa, a gym, banquet/conference rooms, etc. The hotel provides valet service to all patrons via a drop-off/pickup circular driveway off of Island Avenue. All vehicles are parked at an existing valet-only parking lot located on the east side of West Avenue just north of 18th Street (approximately one-half mile from the hotel).

Traf Tech Engineering, Inc. was retained by Ferrado to conduct a traffic evaluation in connection with the subject lodging facility. The study addresses the traffic generated by the existing hotel and proposed hotel expansion, traffic conditions along Venetian Causeway/Dade Boulevard, and existing and proposed parking/valet operations as a result of a new on-site parking proposed at the hotel site.

This study is divided into three (3) sections, as listed below:

1. Inventory and Analysis
2. Trip Generation
3. Conclusions



INVENTORY AND ANALYSIS

Existing Land Uses and Parking/Valet Operation

The project site currently consists of a 105-room hotel and supporting facilities. A circular valet driveway is located on the south side of the hotel building. Valet service is provided at the hotel. The parking lot for the valet service is located at a surface parking lot located on the east side of West Avenue just north of 18th Street (approximately one-half mile from the hotel premises). After a vehicle is dropped off at the valet station located in front of the hotel's entrance off of Island Avenue, valet drivers proceed east on Venetian Causeway/Dade Boulevard and turn left (north) on West Avenue.

The valet vehicle retrieval route consists of exiting the parking lot to proceed south on West Avenue heading toward Dade Boulevard. At Dade Boulevard, valet drivers proceed west toward Venetian Causeway in order to access the hotel site off of Island Avenue.

A shuttle vehicle picks-up and drops-off the valet runners between the valet parking lot and the hotel site. Therefore, for every inbound trip associated with a hotel guest, two additional outbound trips (hotel guest's vehicle with valet driver and the shuttle vehicle) head towards the valet parking lot plus one additional inbound trip (shuttle vehicle returning with the valet runner) are generated. Similarly, for every outbound trip associated with a departing hotel guest, one additional outbound trip (shuttle vehicle with valet runner heading towards the valet parking lot) plus two additional inbound trips (returning shuttle vehicle and hotel's guest vehicle with valet driver) are generated.

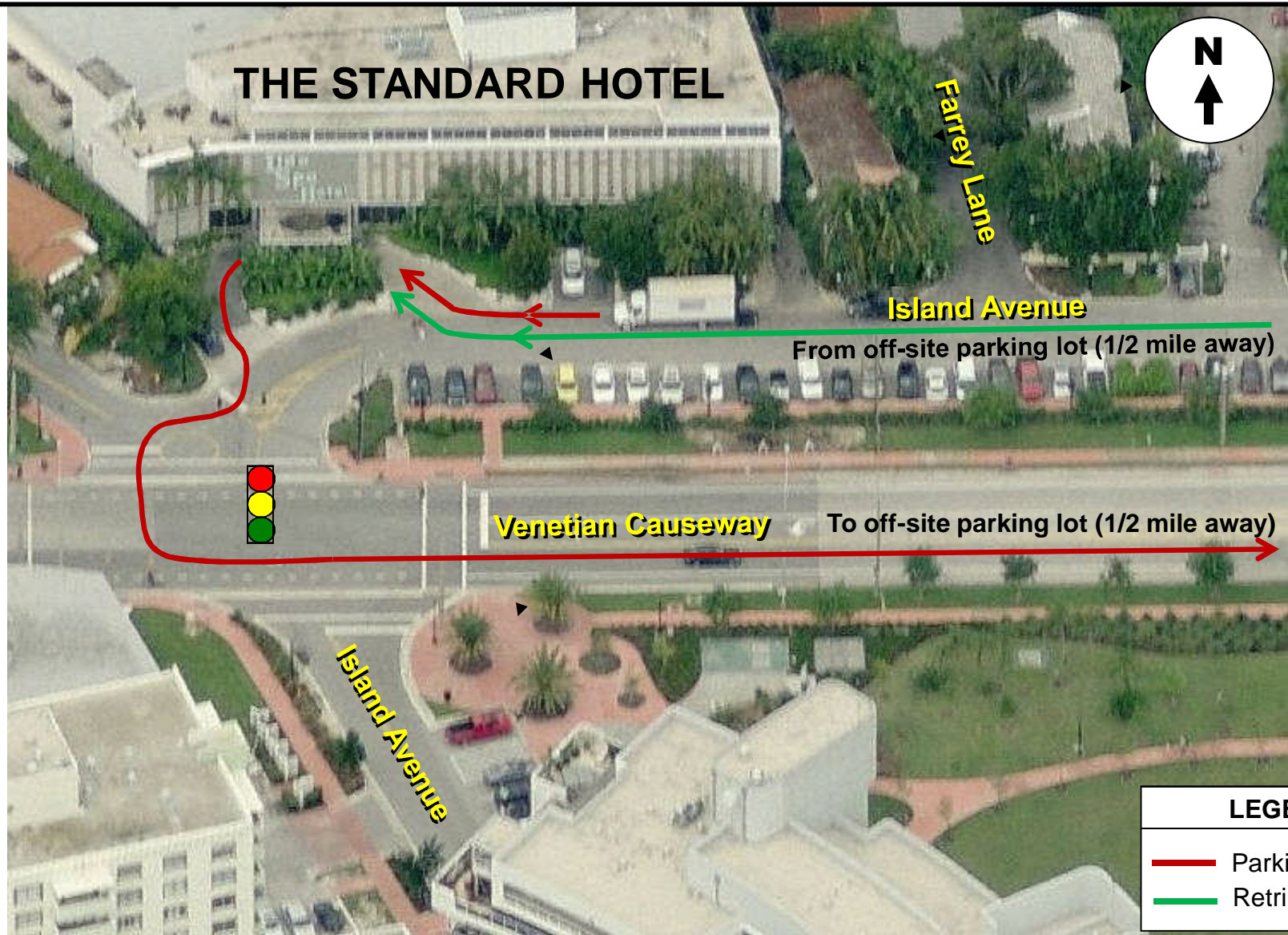
Based on the above, for every peak hour trip generated by a hotel guest, three additional trips are produced by the valet service for not having on-site parking.

The existing valet parking route is graphically depicted in Figure 2.

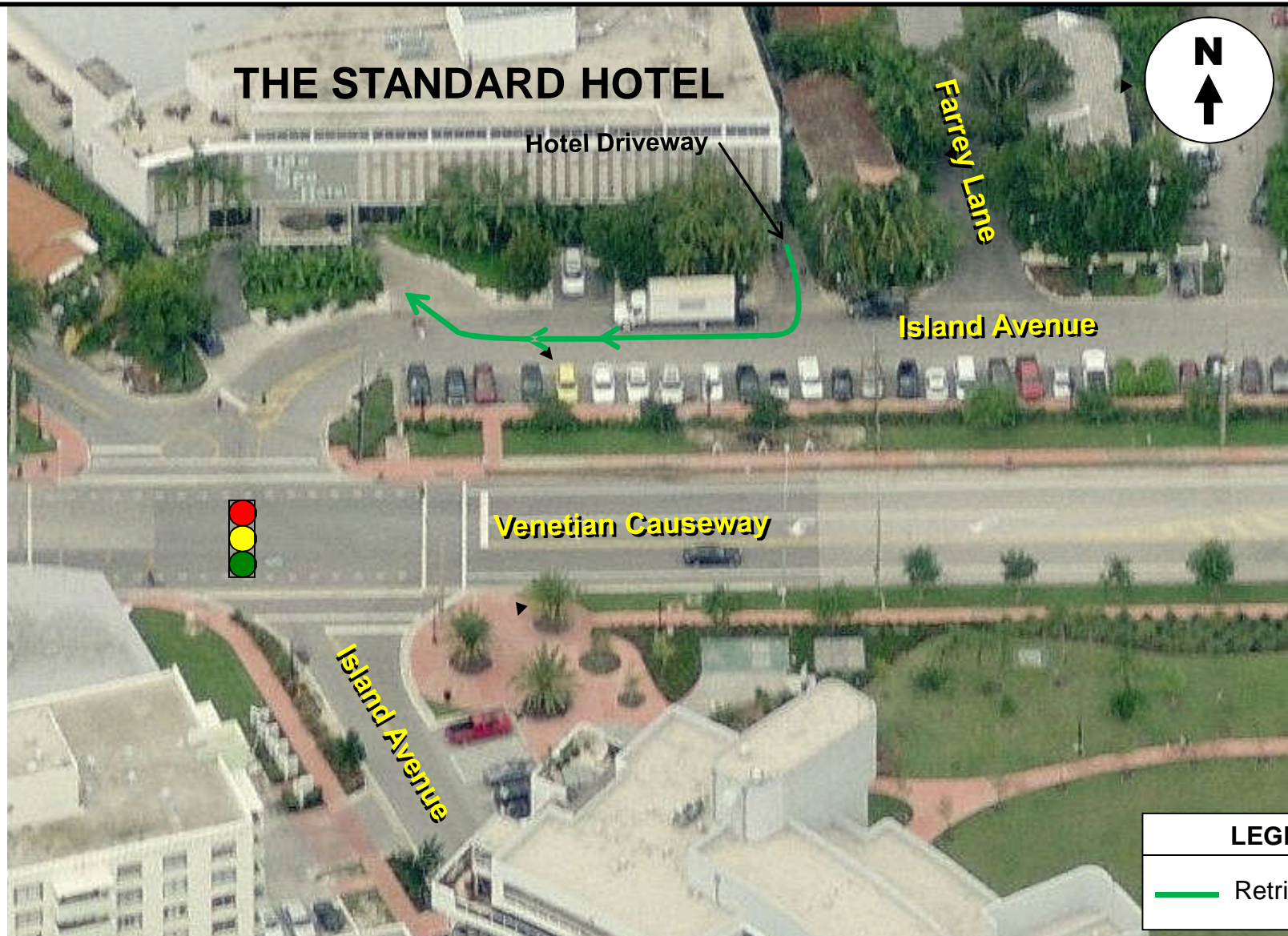
Proposed Land Uses and Parking/Valet Operation

The hotel site will maintain the same number of rooms (105) and supporting facilities. Additionally, 80 on-site parking spaces will be provided. With the new parking facility provided on site, the valet service between the hotel and the off-site parking lot will not be required. Hence, up to three (3) trips will be eliminated from Venetian Causeway/Dade Boulevard for every peak hour trip generated by a hotel guest due to the proposed on-site parking.

The future valet parking route (with the proposed on-site parking) is illustrated in Figures 3 and 4.







Roadway System and Analysis

One major roadway (Venetian Causeway/Dade Boulevard) is located adjacent to the project site. Venetian Causeway is a two-lane east-west roadway linking Miami Beach with the City of Miami across the Biscayne Bay.

According to FDOT's 2009 Quality/Level of Service Handbook, Venetian Causeway/Dade Boulevard has a maximum level-of-service "D" capacity of approximately 1,197 vehicles per hour. Recent traffic counts recorded by the Florida Department of Transportation on Venetian Causeway/Dade Boulevard between Belle Isle and Alton Road show daily traffic volumes of approximately 14,245 vehicles and a maximum peak hour volume of approximately 987 vehicles. Hence, Venetian Causeway/Dade Boulevard near The Standard Hotel is operating at level of service "D" with approximately 210 peak hour trips of excess/reserved capacity.

Traffic Calming

During public outreach meetings with nearby neighbors, mention was made relative to speeding traffic along Island Avenue. This undesirable situation was also discussed with the City of Miami Beach staff. In order to reduce speeds along Island Avenue, a speed hump could be considered. The location of the subject traffic calming device should be discussed and agreed to with the City of Miami Beach staff. A potential location includes a small area just east of Ferry Lane. If implemented, "Speed Hump" signs (W17-1) shall be placed on both sides of the speed-reduction device in compliance with MUTCD standards.

Other Modes of Transportation

As suggested by the City of Miami Beach staff, bicycle racks should be incorporated inside the parking facility or within the hotel grounds for employees and potential hotel guests, if feasible. This traffic-demand strategy will benefit traffic flow on Belle Isle.

Taxi Drop-off/Pick-up Operation

Taxi services for hotel guests are required to use the porte-cochere adjacent to the hotel entrance door. During peak accumulation periods due to the off-site parking associated with the valet service, taxi drivers oftentimes prefer to park on Island Avenue in order to avoid joining the traffic queues associated with the valet operation. However, with the proposed on-site parking facility, the traffic queues are anticipated to be reduced and therefore, taxi drivers should be able to use the porte-cochere for drop-off and pick-up of hotel patrons.

Pedestrian Path Connectivity

Adequate pedestrian features are provided along Venetian Causeway (sidewalks on both sides of the roadway), Island Avenue (south side of the parking row), and at the signalized intersection of Venetian Causeway and Island Avenue/Century Lane (crosswalk across Venetian Causeway with pedestrian signals and push buttons). However, no pedestrian connection is provided between the two sidewalks located on the north side of the causeway and The Standard Hotel. In order to improve pedestrian connectivity, a pedestrian crosswalk should be implemented across Island Avenue. It appears that the best location for the subject crosswalk is at the western end of Island Avenue (at its intersection with Century Lane). “Pedestrian Crossing” signs (W11-2) with a diagonal pointing arrow (W17-7P) shall be placed on both sides of the crosswalk location.

Delivery Trucks

Delivery trucks (linen, food service, etc.) use Island Avenue for drop-off and pick-up operation. These trucks usually arrive/depart early in the morning (starting at 6:30 AM) and during the late afternoon period (around 6:30 PM). These trucks currently park on Island Avenue and mix with the queues associated with the current valet operation (with the parking off site). The proposed on-site parking facility will reduce the queues associated with the valet operation and consequently will minimize conflicts with parked delivery trucks.

TRIP GENERATION

A trip generation analysis was conducted for The Standard Hotel. The analysis was performed using the trip generation rates published in the Institute of Transportation Engineer's *ITE Trip Generation Manual* (9th Edition). The trip generation analysis was undertaken for daily, AM peak hour, and PM peak hour conditions. According to ITE's *Trip Generation Manual* (9th Edition), the most appropriate "land use" category for the existing hotel is:

HOTEL (ITE Land Use 310)

Daily Trips

$$T = 8.17 (X)$$

Where T = average daily vehicle trip ends

X = number of hotel rooms

AM Peak Hour

$$T = 0.53 (X) \text{ (59\% inbound and 41\% outbound)}$$

Where T = average AM peak hour vehicle trip ends

X = number of hotel rooms

PM Peak Hour

$$T = 0.60 X \text{ (51\% inbound and 49\% outbound)}$$

Where T = average PM peak hour vehicle trip ends

X = number of hotel rooms

Using the above-listed trip generation rates from the ITE document, a trip generation analysis was undertaken for the existing and proposed land uses. The results of this effort are documented in Table 1.

TABLE 1 Trip Generation Summary The Standard Hotel – Miami Beach, Florida				
		Number of Trips		
Land Use	Size	Daily	AM Peak	PM Peak
EXISTING USE (With Off-Site Valet Operation ¹) – Based on ITE and Off-Site Valet				
Hotel	105 rooms	3,432	224	252
PROPOSED USE (Without Off-Site Valet Operation) – Based on ITE				
Hotel	105 rooms	858	56	63
Difference		-2,574	-168	-189

Source: *ITE Trip Generation Manual* (8th Edition)

¹ Trips based on ITE rates multiplied by 4 to account for the additional trips generated by the current valet operation.

As indicated in Table 1, the existing hotel with valet service generates approximately 3,432 daily trips, approximately 224 AM peak hour trips and approximately 252 trips during the typical afternoon peak hour. The proposed on-site parking facility (without the valet service between the hotel and the off-site parking lot) is projected to generate approximately 2,574 less daily trips, approximately 168 less AM peak hour trips, and approximately 189 less trips during the afternoon peak hour.

Based on the above analysis, the proposed on-site parking facility will significantly reduce the amount of traffic traveling east and west along the Venetian Causeway/Dade Boulevard between the hotel site and West Avenue. The level of service on the subject segment of this east-west roadway will improve as a result of the proposed The Standard Hotel project.

CONCLUSIONS

The Standard Hotel is an existing hotel located on Belle Isle in the City of Miami Beach in Miami-Dade County, Florida. The site is currently developed with a 105-room hotel and supporting facilities such as restaurants, a pool deck, a spa, a gym, banquet/conference rooms, etc. The hotel provides valet service to all patrons via a drop-off/pickup circular driveway off of Island Avenue. All vehicles are parked at an existing valet-only parking lot located on the east side of West Avenue just north of 18th Street (approximately one-half mile from the hotel).

Traf Tech Engineering, Inc. was retained by Ferrado to conduct a traffic evaluation in connection with the subject lodging facility. The study addresses the traffic generated by the existing hotel and proposed hotel expansion, traffic conditions along Venetian Causeway/Dade Boulevard, and existing and proposed parking/valet operations as a result of a new parking structure proposed at the hotel site.

The existing hotel with valet service generates approximately 3,432 daily trips, approximately 224 AM peak hour trips and approximately 252 trips during the typical afternoon peak hour. The proposed on-site parking structure (without the valet service between the hotel and the off-site parking lot) is projected to generate approximately 2,574 less daily trips, approximately 168 less AM peak hour trips, and approximately 189 less trips during the afternoon peak hour.

The proposed on-site parking facility will significantly reduce the amount of traffic traveling east and west along the Venetian Causeway/Dade Boulevard between the hotel site and West Avenue. The level of service on the subject segment of this east-west roadway will improve as a result of the proposed The Standard Hotel project.

In order to reduce speeds along Island Avenue, a speed hump could be considered. The location of the subject traffic calming device should be discussed and agreed to with the City of Miami Beach staff. A potential location includes a small area just east of Ferry Lane. If implemented, “Speed Hump” signs (W17-1) shall be placed on both sides of the speed-reduction device in compliance with MUTCD standards.

Bicycle racks should be incorporated inside the parking facility or within the hotel grounds for employees and potential hotel guests, if feasible.

Taxi services for hotel guests are required to use the porte-cochere adjacent to the hotel entrance door. During peak accumulation periods due to the off-site parking associated with the valet service, taxi drivers oftentimes prefer to park on Island Avenue in order to avoid joining the traffic queues associated with the valet operation.

However, with the proposed on-site parking facility, the traffic queues are anticipated to be reduced and therefore, taxi drivers should be able to use the porte-cochere for drop-off and pick-up of hotel patrons.

In order to improve pedestrian connectivity, a pedestrian crosswalk should be implemented across Island Avenue. It appears that the best location for the subject crosswalk is at the western end of Island Avenue (at its intersection with Century Lane). “Pedestrian Crossing” signs (W11-2) with a diagonal pointing arrow (W17-7P) shall be placed on both sides of the crosswalk location.

The proposed on-site parking facility will reduce the queues associated with the valet operation and consequently will minimize conflicts with parked delivery trucks.



APPENDIX A

Site Plan for Parking Garage

[illegible]

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WWW.RENEGONZALEZARCHITECT.COM
AA # 0003351

THE STANDARD HOTEL
401 ISLAND AVENUE.
MIAMI BEACH, FL 33139

DATE:
SCALE:
REVISIONS: 12.18.2015

LANDSCAPE

Index

naturalficial, inc. www.naturalficial.com

LA-1.0

APPENDIX B

Traffic Counts for Venetian Causeway/Dade Boulevard (Source: FDOT)

COUNTY: 87
STATION: 8350
DESCRIPTION: VENETIAN CSWY, 200' EAST OF WEST AVENUE
START DATE: 08/19/2015
START TIME: 0000

TIME	DIRECTION: E					DIRECTION: W					COMBINED TOTAL	
	1ST	2ND	3RD	4TH	TOTAL	1ST	2ND	3RD	4TH	TOTAL		
0000	38	14	18	19	89	29	27	23	13	92	181	
0100	7	8	8	12	35	14	15	10	10	49	84	
0200	11	10	3	3	27	5	9	8	8	30	57	
0300	3	2	7	4	16	5	12	4	2	23	39	
0400	6	4	7	6	23	5	7	3	9	24	47	
0500	4	11	14	11	40	17	12	22	18	69	109	
0600	19	19	21	49	108	44	34	70	107	255	363	
0700	56	57	52	67	232	69	86	119	110	384	616	
0800	103	87	98	88	376	108	138	126	124	496	872	
0900	87	94	101	103	385	162	127	102	143	534	919	
1000	93	117	110	93	413	119	147	148	124	538	951	
1100	104	95	108	92	399	114	127	104	140	485	884	
1200	92	109	112	103	416	105	125	116	129	475	891	
1300	111	114	98	111	434	139	110	131	121	501	935	
1400	112	101	102	109	424	117	142	139	130	528	952	
1500	92	101	106	117	416	128	129	105	117	479	895	
1600	97	116	93	94	400	125	110	114	136	485	885	
1700	90	91	87	105	373	122	135	123	147	527	900	
1800	98	110	100	96	404	126	136	111	114	487	891	
1900	94	92	81	73	340	130	117	118	99	464	804	
2000	102	83	82	85	352	94	92	67	82	335	687	
2100	72	55	67	60	254	69	75	58	61	263	517	
2200	70	60	53	37	220	55	44	59	49	207	427	
2300	55	46	44	38	183	43	39	47	27	156	339	
24-HOUR TOTALS:					6359						7886	14245

PEAK VOLUME INFORMATION							
DIRECTION: E				DIRECTION: W			
	HOUR	VOLUME		HOUR	VOLUME		
A.M.	800	376		815	550		
P.M.	1230	440		1415	539		
DAILY	1230	440		945	557		
TRUCK PERCENTAGE				22.53	4.92	12.78	

CLASSIFICATION SUMMARY DATABASE																
DIR	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	TOTTRK TOTVOL
E	268	3988	670	102	196	180	7	421	62	129	0	0	30	306	0	1433 6359
W	203	6380	884	39	154	85	9	38	31	28	0	0	4	0	31	388 7886

COUNTY: 87
STATION: 8350
DESCRIPTION: VENETIAN CSWY, 200' EAST OF WEST AVENUE
START DATE: 08/20/2015
START TIME: 0000

TIME	DIRECTION: E					DIRECTION: W					COMBINED TOTAL	
	1ST	2ND	3RD	4TH	TOTAL	1ST	2ND	3RD	4TH	TOTAL		
0000	39	22	23	19	103	32	22	25	25	104	207	
0100	19	10	15	5	49	23	16	13	14	66	115	
0200	12	9	11	9	41	17	7	12	9	45	86	
0300	6	8	4	5	23	13	12	6	9	40	63	
0400	3	5	11	8	27	9	5	9	11	34	61	
0500	6	5	19	22	52	13	20	24	35	92	144	
0600	15	19	17	49	100	38	43	70	107	258	358	
0700	51	57	51	75	234	69	86	119	110	384	618	
0800	87	93	83	71	334	108	138	126	124	496	830	
0900	93	95	81	86	355	162	127	102	143	534	889	
1000	99	89	93	93	374	119	147	148	124	538	912	
1100	93	87	95	87	362	114	127	104	140	485	847	
1200	85	93	106	87	371	105	107	141	131	484	855	
1300	103	86	86	87	362	145	163	118	136	562	924	
1400	87	99	99	93	378	132	137	143	117	529	907	
1500	84	89	112	78	363	132	139	131	134	536	899	
1600	87	103	91	96	377	140	107	129	134	510	887	
1700	89	88	81	76	334	160	130	153	141	584	918	
1800	103	93	97	89	382	179	151	141	134	605	987	
1900	89	93	69	78	329	146	126	115	100	487	816	
2000	74	67	73	52	266	103	102	84	90	379	645	
2100	79	60	63	49	251	57	55	51	56	219	470	
2200	50	45	53	62	210	41	41	40	51	173	383	
2300	69	59	45	37	210	37	37	28	22	124	334	
24-HOUR TOTALS:					5887						8268	14155

PEAK VOLUME INFORMATION						
DIRECTION: E			DIRECTION: W		COMBINED DIRECTIONS	
A.M.	HOUR	VOLUME	HOUR	VOLUME	HOUR	VOLUME
	830	342	815	550	815	890
P.M.	1215	389	1730	624	1800	987
DAILY	1215	389	1730	624	1800	987
TRUCK PERCENTAGE		37.80	5.08		18.69	

CLASSIFICATION SUMMARY DATABASE																
DIR	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	TOTTRK TOTVOL
E	254	2691	717	119	341	150	6	725	82	234	0	0	56	512	0	2225 5887
W	205	6679	923	39	166	95	13	44	29	30	0	0	4	0	41	420 8268