

August 1, 2024 Updated January 28, 2025

Eric Czerniejewski, P.E. The Corradino Group 5200 NW 33<sup>rd</sup> Avenue, Suite 203 Fort Lauderdale, Florida 33309

RE: Ambassador Residential

Traffic Evaluation
Palm Beach, Florida
Kimley-Horn #140802001

#### Dear Eric:

Kimley-Horn and Associates, Inc. has been retained to perform a traffic impact evaluation for the proposed redevelopment of the site located at 2720 and 2730 S Ocean Boulevard in the Town of Palm Beach, Florida (see Figure 1). The site is currently contains hotel uses in multiple buildings comprising a total of 135 rooms. The site is proposed to be redeveloped with 41 condominium units. The Parcel Control Numbers (PCN) for the project site are 50-43-44-23-00-001-0020 and 50-43-43-26-00-001-0010. This analysis was conducted to evaluate compliance with the Traffic Performance Standards (TPS) of Palm Beach County, as defined in Article 12 of the County's Unified Land Development Code (ULDC) and the Transportation Element of the Town of Palm Beach Comprehensive Plan (Policy 2.1). A letter confirming compliance with Palm Beach County TPS requirements has been issued and is attached to this letter for reference.

#### TRIP GENERATION DETERMINATION

A trip generation determination was prepared to determine the potential impacts of the proposed redevelopment. Rates and equations published by the Palm Beach County Traffic Division (which are generally based on the rates published by the Institute of Traffic Engineers (ITE) in the *Trip Generation Manual*, 11<sup>th</sup> Edition) were used to calculate the daily, AM peak hour, and PM peak hour trip generation calculations for the existing and proposed site. Table 1 summarizes the trip generation calculations for the proposed redevelopment. As shown in Table 1, the proposed redevelopment of the site results in a reduction 785 net new external trips, a reduction of 41 net new external AM peak hour trips (-28 inbound, -13 outbound), and a reduction of 56 net new external PM peak hour trips (-27 inbound, -29 outbound).



Table 1: Trip Generation Calculations

Land Use	Intensity	Daily Trips	I	AM Peak Hou	ır	F	PM Peak Hou	r
Land 036	illicitsity	Daily IIIps	Total	In	Out	Total	ln	Out
		Existing	Scenario >5	Years				
Hotel	135 Rooms	1,079	62	35	27	80	41	39
	Subtotal	1,079	62	35	27	80	41	39
Drivewa	y Volumes	1,079	62	35	27	80	41	39
Net New E	xternal Trips	971	56	31	25	72	37	35
		Prop	osed Scenar	io				
MultifamilyMid-Rise	41 DU	186	15	3	12	16	10	6
	Subtotal	186	15	3	12	16	10	6
Drivewa	y Volumes	186	15	3	12	16	10	6
Net New E	xternal Trips	186	15	3	12	16	10	6
Proposed Net Externa	l Trips-Existing Net New	-785	-41	-28	-13	-56	-27	-29
External Trips		-703	-41	-20	-13	-30	-21	-27
Land Use	<u>Daily</u>	ļ	AM Peak Hou	<u>r</u>		PM Peak Hou	r	Pass By
Hotel	7.99 trips/Rooms	0.46 trips	s/Rooms (56% in,	44% out)	0.59 trip	49% out)	10.0%	
Multifamily Mid-Rise	4.54 trips/DU	0.37 tri	ips/DU (23% in, 7	7% out)	0.39 tr	ips/DU (61% in, 39	9% out)	0.0%





## **LEGEND**



Figure 1
Ambassador Residential
KH #140802001
Site Location





#### **TEST 1 / TEST 2 ANALYSIS**

Based on the reduction in trips on a daily, AM peak hour and PM peak hour basis, no Test 1 or Test 2 analysis is required.

## TOWN OF PALM BEACH ROADWAY ANALYSIS (COMPREHENSIVE PLAN – TRANSPORTATION ELEMENT POLICY 2.1)

In addition to the evaluation conducted to determine compliance with the County's Traffic Performance Standards, the following additional analysis has been prepared to determine the LOS for affected road segments in the Town in comparison to the Town's Comprehensive Plan Transportation Element. As noted, this application results in a reduction in trip generation potential compared to existing development. Therefore, this evaluation only addresses the directly accessed segment of SR A1A adjacent to the site.

Peak Hour volumes were taken from the Town of Palm Beach 2024 Annual Traffic Count report. The relevant tables from that report are attached for reference. The LOS capacities were obtained from the FDOT QLOS Handbook (2020). The closest count station is on SR A1A south of Via Pelicano.

As summarized in these tables, the segment of SR A1A is projected to meet the Town's two-way peak hour LOS standard identified in the Comprehensive Plan Standards during future background and total future conditions. The project does not create any new roadway link deficiencies on the surrounding transportation network.

**EXISTING** 2024 EXISTING 2029 BACKGROUND PROJEC1 2029 TOTAL NUMBER VOLUME GROWTH VOLUME VOLUME OF LANES ASSIGNMENT SVC. VOLUME (vph) ROADWAY FROM (vph) S Ocean Blvd. Lake Worth Road Project 2L 1.330 50% 821 D 1.00% 863 D -21 842 D D S Ocean Blvd. Project 1.330 50% 821 D 1.00% 863 -21 842

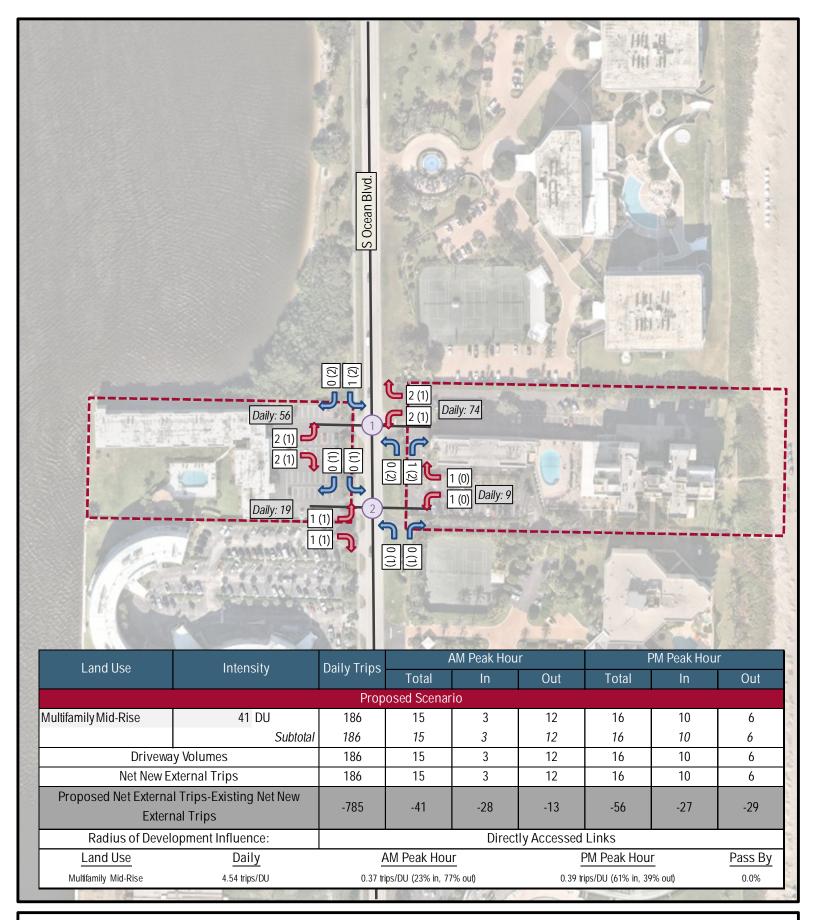
Table 2: AM Peak Hour LOS Analysis

Table 3: I	PM Peak	Hour I	LOS A	Analysis
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			EXISTING	TWO-WAY				ROADWAY	Los analys	SIS			
			NUMBER	LOS D	PROJECT %	2024 EXI	STING		2029 BACK	GROUND	PROJECT	2029 TO	DTAL
			OF LANES	GENERAL	ASSIGNMENT	VOLUME		GROWTH	VOLUME		TRIPS	VOLUME	
ROADWAY	FROM	TO	OI LANES	SVC. VOLUME	ASSIGNWENT	(vph)	LOS	RATE	(vph)	LOS	(vph)	(vph)	LOS
S Ocean Blvd.	Lake Worth Road	Project	2L	1,330	50%	1,099	D	1.00%	1,155	D	-28	1,127	D
S Ocean Blvd.	Project	Southern Blvd.	2L	1,330	50%	1,099	D	1.00%	1,155	D	-28	1,127	D

#### **DRIVEWAY ACCESS**

Access to the site is currently provided via three full-access driveways on the west side of SR A1A and two full-access driveways on the east side of SR A1A which is under the jurisdiction of the Florida Department of Transportation (FDOT). The number of access driveways on the west side of SR A1A will be reduced to two driveways, and the number of the east side will remain at two driveways, with the locations adjusted so that both driveways on each side of SR A1A aligned with the corresponding driveways on the other side of SR A1A. A preapplication meeting was held with FDOT on May 23, 2024 to review the driveway access locations and parameters. The pre-application letter is still pending and will be provided upon receipt. Permitting approval for the driveway connections will occur under the jurisdiction of FDOT. No exclusive turn lanes are proposed at the driveways. For reference, the driveway volumes are shown in Figure 2.









Site Location

XX (XX) AM (PM) Peak Hour Volumes

## Figure 2

Ambassador Residential KH #140802001 Driveway Volumes





#### **VALET OPERATIONAL ANALYSIS**

The redeveloped site is proposed to include valet operations. Following is a review of the proposed valet routing, anticipated queuing and pick-up/drop-off operations for each side of the property.

#### West Side:

The valet stand for the west side of the site is to be located within the vehicular circulation loop near the southeast side of the property. Vehicle routes associated with patron arrival are illustrated in Figure 3 and a narrative is provided below. Vehicle routes associated with patron departure are illustrated in Figure 4 and a narrative is provided below. Valet service will be provided in continuous operation.

#### Valet Route

**Visitor arrival:** Visitor vehicles will arrive via either driveway on SR A1A and proceed to the valet stand within the pick-up/drop-off loop. At the valet stand, the visitor will exit the vehicle and the valet operator will proceed to park the vehicle within the valet parking lot. (see routes outlined in Figure 3).

*Visitor departure:* The valet operator will retrieve the visitor vehicle from parking area to return the vehicle to the valet stand. The patron will then retrieve the vehicle and exit the site onto SR A1A (see routes outlined in Figure 4).

#### Valet Queuing Calculations

Calculations have been undertaken for this side of the site and are included in Table A-1 in the Appendix. Following is further detail of the calculations undertaken.

**Queue length calculation:** The anticipated queue length at the valet stand was calculated using the following assumptions and data:

**Peak hour vehicles (from trip generation calculations):** PM peak hour: 8 (total: 5 vph arriving; 3 vph departing)

Percent valet: 33% (3 total vehicles)

Assumed average vehicle dwell time for passenger loading/unloading: 75 seconds / vehicle

Number of valet positions used for patron loading/unloading: 1 valet position

Calculations are provided in the attached Table A -1. As noted in that table, the 95<sup>th</sup> percentile valet queue calculations result in the following:

Total: 1 vehicle

Therefore, the 95<sup>th</sup> percentile queue of vehicles at the valet stand is anticipated to be one vehicle or fewer.



#### **East Side:**

The valet stand for the east side of the site is to be located within the vehicular circulation loop near the northeast side of the property. Vehicle routes associated with patron arrival are illustrated in Figure 3 and a narrative is provided below. Vehicle routes associated with patron departure are illustrated in Figure 4 and a narrative is provided below. Valet service will be provided in continuous operation.

#### Valet Route

**Visitor arrival:** Visitor vehicles will arrive via the north driveway on SR A1A and proceed to the valet stand within the pick-up/drop-off loop. At the valet stand, the visitor will exit the vehicle and the valet operator will proceed to park the vehicle within the valet parking lot. (see routes outlined in Figure 3).

**Visitor departure:** The valet operator will retrieve the visitor vehicle from parking area to return the vehicle to the valet stand. The patron will then retrieve the vehicle and exit the site onto SR A1A (see routes outlined in Figure 4).

#### Valet Queuing Calculations

Calculations have been undertaken for this side of the site and are included in Table A-1 in the Appendix. Following is further detail of the calculations undertaken.

**Queue length calculation:** The anticipated queue length at the valet stand was calculated using the following assumptions and data:

**Peak hour vehicles (from trip generation calculations):** PM peak hour: 8 (total: 5 vph arriving; 3 vph departing)

Percent valet: 33% (3 total vehicles)

Assumed average vehicle dwell time for passenger loading/unloading: 75 seconds / vehicle

Number of valet positions used for patron loading/unloading: 1 valet positions

Calculations are provided in the attached Table A -1. As noted in that table, the 95<sup>th</sup> percentile valet queue calculations result in the following:

Total: 1 vehicle

Therefore, the 95<sup>th</sup> percentile queue of vehicles at the valet stand is anticipated to be one vehicle or fewer.



#### **VALET SERVICE TIMES**

Calculations were also undertaken to outline the valet attendant service times (time it takes to/from the site from/to the valet lot), in order to determine the number of valet staff needed at the site. Following is a summary of the parameters undertaken for this analysis:

#### West Side:

#### Valet Park/Retrieval

**Vehicle route:** Customer arrives at valet stand on site. Customer exits vehicle, valet attendant takes vehicle and proceeds to parking area. For the purposes of the time it takes to traverse this route, an average travel speed of 8 MPH was used for the full route within the site. The route between the valet stand site to the furthest parking spaces is approximately 450 feet. Assuming an average travel speed of 11.7 feet per second, it would take 39 seconds to travel to the parking space. The distance for the valet attendant to traverse the distance between the furthest parking spaces and valet stand by foot is approximately 400 feet. Assuming a travel speed of 4 ft/sec, the return time on foot is approximately 100 seconds

#### Calculation:

Maximum number of vehicles serviced by 1 attendant per hour: 3600 sec / (39 + 100 sec) = 25.9 vehicles

Therefore, one attendant is needed at this stand.

#### **East Side:**

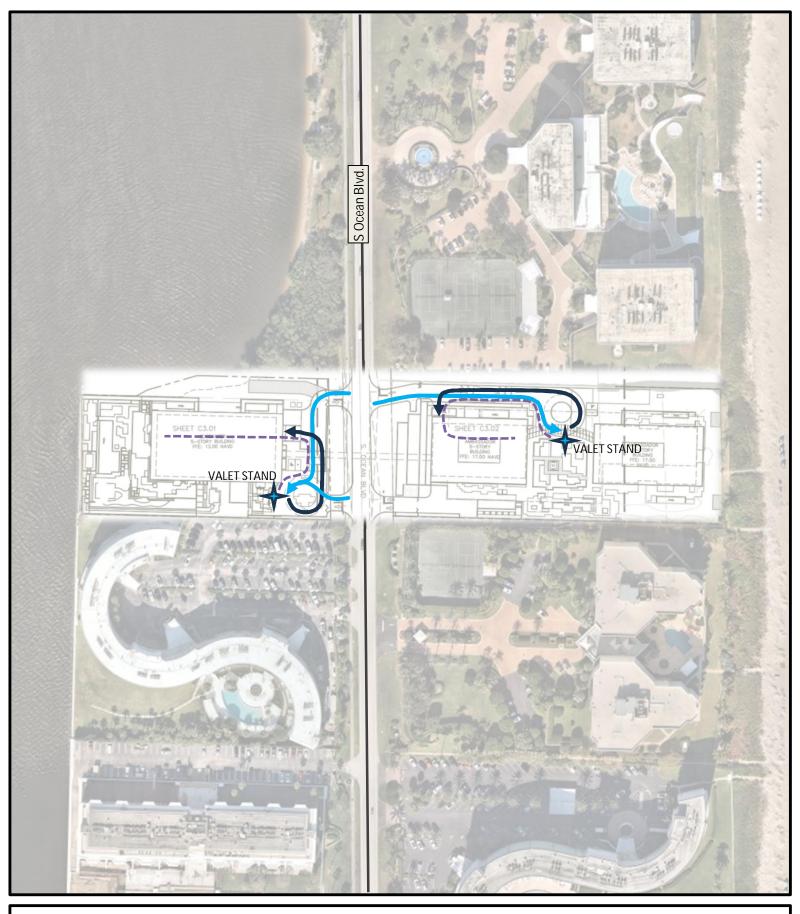
#### Valet Park/Retrieval

**Vehicle route:** Customer arrives at valet stand on site. Customer exits vehicle, valet attendant takes vehicle and proceeds to parking area. For the purposes of the time it takes to traverse this route, an average travel speed of 8 MPH was used for the full route within the site. The route between the valet stand site to the furthest parking spaces is approximately 480 feet. Assuming an average travel speed of 11.7 feet per second, it would take 47 seconds to travel to the parking space. The distance for the valet attendant to traverse the distance between the furthest parking spaces and valet stand by foot is approximately 550 feet. Assuming a travel speed of 4 ft/sec, the return time on foot is approximately 120 seconds

#### Calculation:

Maximum number of vehicles serviced by 1 attendant per hour: 3600 sec / (47 + 120 sec) = 21.5 vehicles

Therefore, one attendant is needed at this stand.









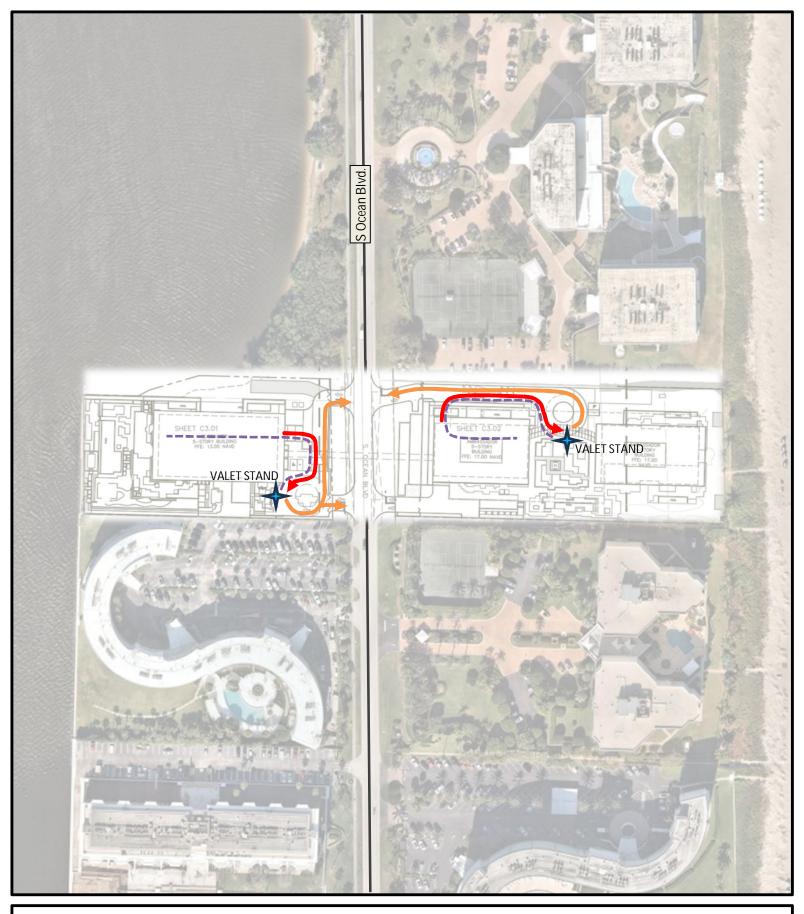
Valet Driver Route to Parking

Valet Attendant Route (on foot)

## Figure 3

Ambassador Residential KH #140802001 Valet Routing (Patron Arrival)







## **LEGEND**

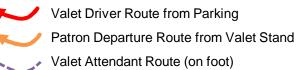


Figure 4
Ambassador Residential KH #140802001 Valet Routing (Patron Departure)





#### CONCLUSION

Kimley-Horn and Associates, Inc. has prepared a traffic study to evaluate the potential traffic impacts associated with redevelopment of the project site located at 2720 and 2730 S Ocean Boulevard in the Town of Palm Beach, Florida. The site currently contains a hotel with 135 rooms. The proposed redevelopment plan is the construction of 41 dwelling units of multifamily mid-rise apartments.

As shown in the analysis, the redevelopment plan results in a decrease in trip generation potential for the site, and therefore no further analysis is required to demonstrate compliance with the TPS requirements defined in Article 12 of the Palm Beach County Unified Land Development Code. Driveway access approval and permitting is under the jurisdiction of the FDOT as the site driveways are located on SR A1A. The proposed access plan results in a reduction the number of access driveways on the west side of SR A1A (from three existing driveways to two driveways) and adjusts the driveway locations such that the remaining two driveways on each side of SR A1A are aligned with one another. No exclusive turn lanes are warranted at any of the site driveways.

A review of valet operations demonstrates that the 95<sup>th</sup> percentile queue at each stand is one vehicle, and one attendant would be needed at each stand.

Please contact me via telephone at (561) 840-0248 or via e-mail at chris.heggen@kimley-horn.com should you have any questions regarding this evaluation.

Sincerely,

KIMLEY-HORN AND ASSOCIATES, INC.

Christopher W. Heggen, P.E. Transportation Engineer

Florida Registration Number 58636 Registry No. 35106

Attachments

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## **APPENDIX**

Parcel Control Number:					
raicei Connoi Number.	50-43-44-23-00-001-0010	Location Address:	2730 S OCEAN BL	VD	
Owners:	PALM BEACH AMBASSADOR	Municipality:	PALM BEACH		
Mailing Address:	FEE BORROWER LLC 4100 NE 2ND AVE STE 307, , MIAI	• •			
Last Sale:	OCT-2022	Book/Page#:	33898 / 00160	Price: \$10	
Property Use Code:	3900 - MOTEL	Zoning:	NZ - NOT ZONED		
Legal Description:	23-44-43, S 47 FT OF GOV LT 1 LYG E OF & ADJ TO S OCEAN BLVD R/W & N 169 FT OF GOV LT 2 LYG E OF & ADJ TO S OCEAN BLVD R/W	Total SF:	113115	Acres 3.17	82
	Ocean Blvd				
2023 Values	vo	2023 Taxes			
Improvement Value	\$11,177,002				
Land Value	\$20,001,000	Ad Valorem Non Ad Valorem			596,430 \$58,594
Total Market Value	\$39,728,602	Total Tax			ه56,394 655,024
Assessed Value	\$39,728,602	2023 Qualified Ex	emptions		
Exemption Amount Taxable Value	\$0	Applicants			
All values are as of January 1st	\$39,728,602	,,			
Building Footprint (Bu		Subarea and Squa	re Footage (Buildi	ng 1 )	
		Description		Area Sq.	Footage
		WAREHOUSE	2	2100	Č
		HOTEL HIGH RISE	8	3388	
		HOTEL HIGH RISE	5	88705	
		BANQUET ROOM	1	.648	
		HOTEL HIGH RISE		0093	
1707 17 531 51 1717	(1892) (1892) 17 17 17 17 18	HOTEL LOBBY		316	
	10) A8 (8348) 48	HOTEL LOBBY		0681	
196487 76 (10093) 113271211 95	1717 1717				
76 (10093) 17 (10093) 17 (10093) 17 (10093)	1717 1717 1207 1207	WAREHOUSE		13115	
17 (1002) 17 (1002) 17 (1002) 17 (1002) 1802 (1002) 1803 (1002) 18	1207 1207 1207 1207 1207 1207 1207 1207 1207	To	4 tal Square Footage: 1		
10 (10 (10 (10 (10 (10 (10 (10 (10 (10 (	1807 1807 1807 1807 1807 1807 1807 1807	Extra Features		13115	T I:4
17 (1000) 17 (1000) 18 (1000) 18 (1000) 18 (1000) 19 (10	1007 1707 1202 1202 1202 1202 1202 1202	To Extra Features Description		13115 Year Built	
10 (004) 42	100 100 100 100 100 100 100 100 100 100	Extra Features Description Paving- Asphalt	tal Square Footage : 1	13115 Year Built 1947	37646
10000000000000000000000000000000000000	10 (10 (1741) 3916 (10 (1741) 3916 (10 (1741) 3916 (10 (1741) 3916 (10 (1741) 3916 (1741)	To Extra Features Description	tal Square Footage : 1	13115 Year Built	
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10 (000) 17 (17) 180 190 10 (000) 17 (17) 190 10 (000) 17 (17) 10 (000) 17 (17) 10 (000) 17 (17) 10 (000) 17 (17) 10 (000) 17 (17) 10 (000) 17 (17) 10 (000) 17 (17) 10 (000) 17 (17) 10 (000) 10 (000) 10 (000) 10 (000) 10 (000) 10 (000) 10 (000) 10 (000) 10 (000) 10 (000)	100 100 100 100 100 100 100 100 100 100	Extra Features Description Paving- Asphalt Swimming Pool Cor Paving- Asphalt	tal Square Footage : 1	Year Built 1947 1947 1947	37646 1388 3056
50 6 17 17 17 17 17 17 17 17 17 17 17 17 17	1303 1303 1303 1303 1303 1303 1303 1303	Extra Features Description Paving- Asphalt Swimming Pool Cor Paving- Asphalt Walkway-Concrete Patio	tal Square Footage : 1	Year Built 1947 1947 1947 1947 1947	37646 1388 3056 1287 7280
Structural Details (Bui	Iding 1)	Extra Features Description Paving- Asphalt Swimming Pool Cor Paving- Asphalt Walkway-Concrete Patio Unit may represent the peri	tal Square Footage : 1	Year Built 1947 1947 1947 1947 1947	37646 1388 3056 1287 7280
Description	Iding 1)	Extra Features Description Paving- Asphalt Swimming Pool Cor Paving- Asphalt Walkway-Concrete Patio Unit may represent the perior other measurement.	tal Square Footage : 1	Year Built 1947 1947 1947 1947 1947	37646 1388 3056 1287 7280
Description 1 Year Built		Extra Features Description Paving- Asphalt Swimming Pool Cor Paving- Asphalt Walkway-Concrete Patio Unit may represent the perior other measurement.	tal Square Footage : 1	Year Built 1947 1947 1947 1947 1947	37640 1388 3056 1287 7280
<del>-</del>	RISE	Extra Features Description Paving- Asphalt Swimming Pool Cor Paving- Asphalt Walkway-Concrete Patio Unit may represent the perior other measurement.	tal Square Footage : 1 nmercial meter, square footage, linear	Year Built 1947 1947 1947 1947 1947 footage, total number	37646 1388 3056 1287 7280

Dorothy Jacks, CFA, AAS PALM BEACH COUNTY PROPERTY APPRAISER www.pbcgov.org/PAPA

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## Department of Engineering and Public Works

P.O. Box 21229

West Palm Beach, FL 33416-1229

(561) 684-4000

FAX: (561) 684-4050

www.pbcgov.com

Palm Beach County Board of County Commissioners

Maria Sachs, Mayor

Maria G. Marino, Vice Mayor

Gregg K. Weiss

Michael A. Barnett

Marci Woodward

Sara Baxter

Mack Bernard

#### County Administrator

Verdenia C. Baker

"An Equal Opportunity Affirmative Action Employer" August 15, 2024

Adam B. Kerr, P.E. Kimley-Horn and Associates, Inc., 477 S Rosemary Ave, Suite 215 West Palm Beach, FL 33401

RE: Ambassador Residential

Project #: 240805

Traffic Performance Standards (TPS) Review

Dear Mr. Kerr:

The Palm Beach County Traffic Division has reviewed the above referenced project Traffic Impact Study, dated August 1, 2024, pursuant to the Traffic Performance Standards in Article 12 of the Palm Beach County (PBC) Unified Land Development Code (ULDC). The project is summarized as follows:

Municipality: Palm Beach

Location: W of S Ocean Dr, 0.5 mi N of Lake Worth Rd

PCN: 50-43-44-23-00-001-0020, 50-43-43-26-00-001-0010
Access: Two full each on west and east side of S Ocean Dr

(As used in the study and is NOT necessarily an approval by the County through this TPS letter)

Existing Use: Hotel = 135 Rooms
Proposed Use: Redevelop the site with:

Multi-Family Mid-Rise = 49 DU

Net Daily Trips: -749

Net Peak Hr Trips: -38 (-27/-11) AM; -53 (-25/-28) PM

**Proj Daily Trips:** 222

**Proj Pk Hr Trips:** 18 (4/14) AM; 19 (12/7) PM

Build-out: December 31, 2027

Based on our review, the Traffic Division has determined that the redevelopment plan of the existing site will result in decrease in trips and no detailed traffic analysis is required.

A conceptual driveway approval letter from FDOT for access on S Ocean Blvd is required.

Please note the receipt of a TPS approval letter does not constitute the review and issuance of a Palm Beach County Right-of-Way (R/W) Construction Permit nor does it eliminate any requirements that may be deemed as site related. For work within Palm Beach County R/W, a detailed review of the project will be provided upon submittal for a R/W permit application. The project is required to comply with all Palm Beach County standards and may include R/W dedication.

No building permits are to be issued by the Town after the build-out date specified above. The County traffic concurrency approval is subject to the Project Aggregation Rules set forth in the Traffic Performance Standards Ordinance.



Adam B. Kerr, P.E. August 15, 2024 Page 2

The approval letter shall be valid no longer than one year from date of issuance, unless an application for a Site Specific Development Order has been approved, an application for a Site Specific Development Order has been submitted, or the approval letter has been superseded by another approval letter for the same property.

If you have any questions regarding this determination, please contact me at 561-684-4030 or email QBari@pbc.gov

Sincerely,

Quazi Bari, P.E., PTOE

Manager - Growth Management

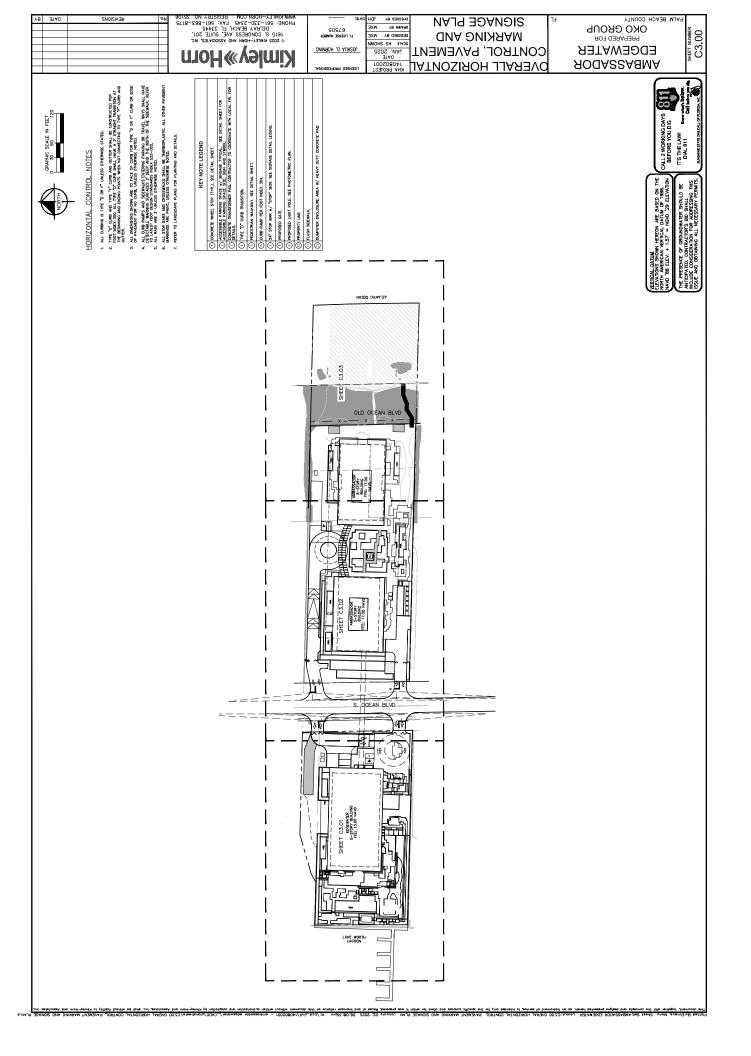
Traffic Division

QB:jb

ec: Addressee

Paul Castro, Zoning Administrator, Town of Palm Beach Alberto Lopez, Technical Assistant III, Traffic Division

File: General - TPS - Mun - Traffic Study Review F:\TRAFFIC\HA\MUNICIPALITIES\APPROVALS\2024\240805 - AMBASSADOR RESIDENTIAL.DOCX;



## **Palm Beach County Trip Generation Rates**

(Must be used with traffic studies submitted to the County on or after 9/1/2022. However, immediate use is highly recommended)

		ITE		·			AM Peak Hour		PM Peak Hour
Gr	Landuse	Code	Unit	Daily Rate/Equation	Pass-By %	In/Out	Rate/Equation	In/Out	Rate/Equation
	General Light Industrial	110	1000 S.F.	4.87	10%	88/12	0.74	14/86	0.65
<u>ia</u>	Manufacturing	140	1000 S.F.	4.75	10%	76/24	0.68	31/69	0.74
Industrial	Warehouse	150	1000 S.F.	1.71	10%	77/23	0.17	28/72	0.18
Ind	Mini-Warehouse/SS	151	1000 S.F.	1.45	10%	59/41	0.09	47/53	0.15
	HCF Center Warehouse - Non Sort	155	1000 S.F.	1.81	10%	81/19	0.15	39/61	0.16
	Single Family Detached	210	Dwelling Unit	10	0%	26/74	0.7	63/37	0.94
_	Multifamily Low-Rise Housing upto 3 story (Apartment/Condo/TH)	220	Dwelling Unit	6.74	0%	24/76	0.4	63/37	0.51
Residential	Multifamily Mid-Rise Housing 4-10 story (Apartment/Condo/TH)	221	Dwelling Unit	4.54	0%	23/77	0.37	61/39	0.39
esi	55+ SF Detached	251	Dwelling Unit	4.31	0%	33/67	0.24	61/39	0.30
<u>~</u>	55+ SF Attached	252	Dwelling Unit	3.24	0%	34/66	0.2	56/44	0.25
	Congregate Care Facility	253	Dwelling Unit	2.21	0%	58/42	0.08	49/51	0.18
	Assisted Living Facility	254	Beds	2.6	0%	60/40	0.18	39/61	0.24
Ldg	Hotel	310	Rooms	7.99	10%	56/44	0.46	51/49	0.59
Rec	Golf Course	430	Holes	30.38	5%	79/21	1.76	53/47	2.91
å	Health/Fitness Club	492	1000 S.F.	32.93	5%	51/49	1.31	57/43	3.45
	Elementary School	520	Students	2.27	0%	54/46	0.74	46/54	0.16
	Middle/Junior School	522	Students	2.1	0%	54/46	0.67	48/52	0.15
al	High School	525	Students	1.94	0%	68/32	0.52	48/52	0.14
Institutional	Private School (K-8)	530	Students	3.17 <sup>a</sup>	0%	56/44	1.01	46/54	0.26
Ē	Private School (K-12)	532	Students	2.48	0%	63/37	0.79	43/57	0.17
lus	Church/Synagogue <sup>b</sup>	560	1000 S.F.	7.6	5%	62/38	0.32	44/56	0.49
	Day Care	565	Students	4.09	50%	53/47	0.78	47/53	0.79
	Library	590	1000 S.F.	72.05	10%	71/29	1	48/52	8.16
þ	Hospital	610	1000 S.F.	10.77	10%	67/33	0.82	35/65	0.86
Med	Nursing Home	620	Beds	3.06	10%	72/28	0.14	33/67	0.14
	General Office (10k-250k SF GFA) <sup>h</sup>	710	1000 S.F.	10.84	10%	88/12	1.52	17/83	1.44
	General Office (>250k SF GFA) <sup>h</sup>	710	1000 S.F.	Ln(T) = 0.87 Ln(X) + 3.05	10%	88/12	Ln(T) = 0.86Ln(X) + 1.16	17/83	1.44
Office	Small Office Building (<=10k SF GFA)	712	1000 S.F.	14.39	10%	82/18	1.67	34/66	2.16
Off	Medical Office (Stand-Alone)	720	1000 S.F.	T=42.97(X)-108.01	10%	79/21	3.10	30/70	3.93
	Medical Office (Near Hospital)	720	1000 S.F.	31.86	10%	81/19	2.68	25/75	2.84
	Government Office	730	1000 S.F.	22.59	10%	75/25	3.34	25/75	1.71

### **Palm Beach County Trip Generation Rates**

(Must be used with traffic studies submitted to the County on or after 9/1/2022. However, immediate use is highly recommended)

		ITE					AM Peak Hour		PM Peak Hour
Gr	Landuse	Code	Unit	Daily Rate/Equation	Pass-By %	In/Out	Rate/Equation	In/Out	Rate/Equation
	Nursery (Garden Center)	817	Acre	108.1	0%	50/50	2.82	50/50	8.06
	Nursery (Wholesale)	818	Acre	19.50	0%	50/50	0.23	50/50	0.36
	Landscape Services	PBC	Acre <sup>c</sup>	121.70	0%	40/60	34.4	58/42	15.1
	Shop Center (>150ksf)	820	1000 S.F.	37.01	24%	62/38	0.84	48/52	3.4
	Shop Plaza (40-150ksf) w/Sup Market	821	1000 S.F.	94.49	39%	62/38	3.53	48/52	9.03
Retail	Shop Plaza (40-150ksf) w/out Sup Market	821	1000 S.F.	67.52	39%	62/38	1.73	49/51	5.19
Re	Strip Retail Plaza (<40ksf)	822	1000 S.F.	54.45	63%	60/40	2.36	50/50	6.59
	Automobile Sales (New)	840	1000 S.F.	27.84	15%	73/27	1.86	40/60	2.42
	Automobile Parts Sales	843	1000 S.F.	54.57	28%	55/45	2.51	48/52	4.9
	Tire Store	848	1000 S.F.	27.69	28%	64/36	2.61	43/57	3.75
	Supermarket	850	1000 S.F.	93.84	36%	59/41	2.86	50/50	8.95
	Pharmacy + DT	881	1000 S.F.	108.40	50%	52/48	3.74	50/50	10.25
	Drive-In Bank	912	1000 S.F.	100.35	47%	58/42	9.95	50/50	21.01
	Fine Dining Restaurant	931	1000 S.F.	83.84	44%	50/50	0.73	67/33	7.8
	High Turnover Sit-Down Rest.	932	1000 S.F.	107.2	43%	55/45	9.57	61/39	9.05
v	Fast Food Restaurant w/o DT	933	1000 S.F.	450.49	45%	58/42	43.18	50/50	33.21
Services	Fast Food Restaurant + DT	934	1000 S.F.	467.48	49%	51/49	44.61	52/48	33.03
Ser.	Coffee/Donut Shop w/o DT	936	1000 S.F.	441.88 <sup>d</sup>	45%	51/49	93.08	50/50	32.29
"	Coffee/Donut Shop + DT	937	1000 S.F.	533.57	49%	51/49	85.88	50/50	38.99
	Coffee/Donut Shop + DT w/No Seat	938	DT Lanes	179	49%	50/50	39.81	50/50	15.08
	Gas Station w/Convenience Store <sup>e</sup>	FDOT	FP, 1000 S.F.	14.3*PM Trips	61%	50/50	Note f	50/50	12.3*FP+15.5*(X)
	Carwash (Automated) <sup>g</sup>	PBC	Lane	166.00	0%	50/50	11.97	50/50	13.65

- a) Based on Daily to AM peak ratio for LUC 532 (Private School (K-12)
- b) Weekend peak hour rate = 10.36 per 1,000 s.f. with a 48/52 directional split
- c) Landscape Services acreage consists of overnight vehicle and equipment storage as well as areas (covered or uncovered) for chemicals, fertilizers, landscape materials (excluding plants) and other items needed for day-to-day operations. Not included are drive aisles, customer/employee parking structures shared by nursery and landscape services, facilities that solely serve the onsite landscape activities or any nursery growing areas.
- d) Based on Daily to PM ratio for ITE Code 937 (Coffee Donut Shop + DT)
- e) FP=Fueling Position. Use both FP and Convenience Store size in estimating trips using the provided equation. Note that no internalization between the gas pumps and convenience store, as per ULDC Artice 12, should be applied to estimate the net trips.
- f) Use PM rates
- g) Daily rate taken from PBC trip gen. study. Peak hour rates derived by applying peak to daily ratios for gas station to daily carwash rate from older ITE TGM. New PBC rate study underway.
- h) Based on PBC analysis of ITE TGM data plots

<u>Modification History</u> **3/2/2020**: Added Landscape Services, modification history, edited

formatting

**7/25/2022**: Updated with ITE TG Manual 11th ed information

# TABLE 2 EXISTING 2024 AM PEAK HOUR PEAK SEASON COUNTS TOWN OF PALM BEACH

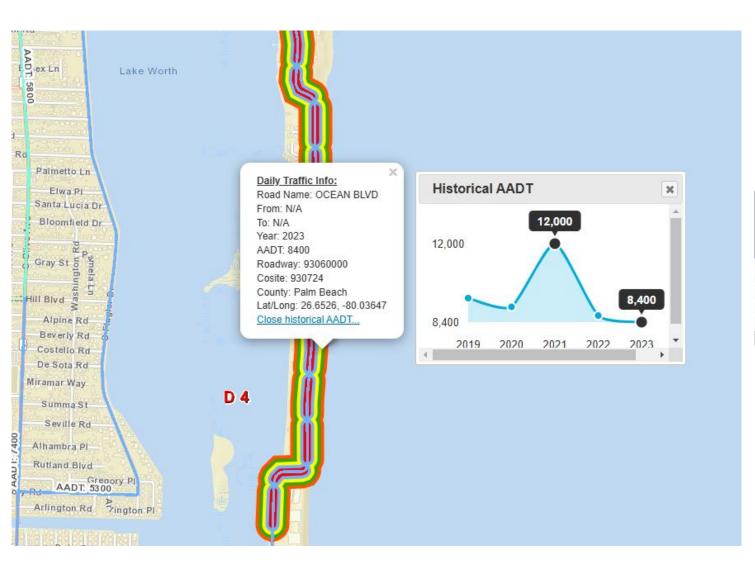
(Counts collected between Tuesday, March 12 to Thursday, March 14, 2024)

Location No.	Ctreat Commant	Facility Type	AM Peak Hour Volume					
Location No.	Street Segment	Facility Type	Tue.	Wed.	Thurs.	AVG.		
1	Southern Blvd	2L ART		1,212	1,147	1 100		
<b>'</b>	(Just West of SR-A1A)	Undivided	] -	1,212	1,147	1,180		
2	SR A1A	2L ART	1,177	1,272	1,241	1,230		
2	(North of Via Del Lago)	Undivided	1,177	1,272	1,241	1,230		
3	SR A1A	2L ART	803	852	808	821		
J	(South of Via Pelicano)	Undivided	003	032	000	021		
4	Ocean Boulevard	2L COLL	837	902	857	865		
4	(North of El Vedado Road)	Undivided	037	702	037	003		
5	South County Road	4L ART	789	830	843	821		
3	(North of Royal Palm Way)	Undivided	707	030	043	021		
6	North County Road	4L ART	1,239	1,329	1,319	1,296		
Ü	(North of Breakers Row)	Undivided	1,239			1,270		
7	North County Road	4L ART	1,576	1,642	1,565	1,594		
7	(North of Royal Poinciana Way)	Undivided	1,370	1,042	1,303	1,074		
8	Cocoanut Row	2L COLL	691	684	731	702		
0	(South of Seabreeze Avenue)	Undivided	071	004	731	702		
9	Cocoanut Row	2L COLL	729	732	789	750		
7	(North of Whitehall Way)	Undivided	127	732	707	730		
10	Bradley Place	2L COLL	1,223	1,306	1,219	1,249		
10	(North of Royal Poinciana Way)	Undivided	1,223	1,300	1,217	1,247		
11	Royal Palm Way	4L ART	1,182	1,320	1,356	1,286		
1.1	(East of Hibiscus Avenue)	Divided	1,102	1,320	1,550	1,200		
12	Royal Palm Way	4L ART	1,298	1,435	1,471	1,401		
12	(West of Hibiscus Avenue)	Divided	1,270	1,433	1,471	1,401		
13	Royal Poinciana Way	4L ART	1,764	1,911	1,718	1,798		
13	(West of Cocoanut Row)	Divided	1,704	1,711	1,710	1,/98		
14	Royal Poinciana Way	4L ART	1,296	1,348	1,276	1,307		
14	(West of County Road)	Divided	1,270	1,340	1,270	1,307		

# TABLE 3 EXISTING 2024 PM PEAK HOUR PEAK SEASON COUNTS TOWN OF PALM BEACH

(Counts collected between Tuesday, March 12 to Thursday, March 14, 2024)

Location No.	Street Segment	Facility Type		PM Peak H	our Volume		
LOCATION NO.	Street Seyment	гаспиу гуре	Tue.	Wed.	Thurs.	AVG.	
1	Southern Blvd	2L ART		1,486	1,369	1,428	
'	(Just West of SR-A1A)	Undivided	-	1,400	1,307	1,420	
2	SR A1A	2L ART	1,398	1,484	1,491	1,458	
2	(North of Via Del Lago)	Undivided	1,370	1,404	1,471	1,430	
3	SR A1A	2L ART	1,076	1,125	1,097	1,099	
3	(South of Via Pelicano)	Undivided	1,070	1,123	1,077	1,077	
4	Ocean Boulevard	2L COLL	951	1,001	1,322	1,091	
4	(North of El Vedado Road)	Undivided	731	1,001	1,322	1,071	
5	South County Road	4L ART	902	913	931	915	
J	(North of Peruvian Avenue)	Undivided	702	713	731	710	
6	North County Road	4L ART	1,298	1,646	1,341	1,428	
U	(North of Breakers Row)	Undivided	1,270	1,040	1,341	1,420	
7	North County Road	4L ART	1,427	1,552	1,480	1,486	
,	(North of Royal Poinciana Way)	Undivided	1,427	1,332	1,400	1, 100	
8	Cocoanut Row	2L COLL	709	759	818	762	
O	(South of Seabreeze Avenue)	Undivided	707	737	010	702	
9	Cocoanut Row	2L COLL	804	843	889	845	
,	(North of Whitehall Way)	Undivided	004	043	007	040	
10	Bradley Place	2L COLL	1,264	1,259	1,256	1,260	
10	(North of Royal Poinciana Way)	Undivided	1,204	1,237	1,230	1,200	
11	Royal Palm Way	4L ART	1,553	1,499	1,526	1,526	
11	(East of Hibiscus Avenue)	Divided	1,000	1,477	1,020	1,020	
12	Royal Palm Way	4L ART	1,668	1,642	1,651	1,654	
12	(West of Hibiscus Avenue)	Divided	1,000	1,042	1,031	1,004	
13	Royal Poinciana Way	4L ART	2,205	2,183	2,119	2,169	
13	(West of Cocoanut Row)	Divided	2,203	۷,۱۷۵	۷,117		
14	Royal Poinciana Way	4L ART	1,314	1,347	1,314	1,325	
14	(West of County Road)	Divided	1,314	1,547	1,314	1,320	



## SOURCE: FDOT Florida Traffic Online

## **Growth Rate Calculation**

	Site Location & Number	
Year	SR A1A	Total Average
	FDOT REF#	
	930724	
2023	8400	8400
2022	8700	8700
2021	12000	12000
2020	9100	9100
2019	9500	9500
Growth Rate	-2.89%	-2.89%

Note that calculated growth rate is negative; therefore 1% growth rate used in the calculations in Tables 2 and 3

### TABLE A-1 : CALCULATIONS - Valet Stand (East and West) Valet Queuing Analysis

## Assumptions: 1 valet position

		Valet Stand
Assumptions: Service Rate Volume	=	75 seconds per vehicle 0.33*(16 PM Peak Hour Inbound Vehicles) = 3 veh/hr
Probability of the	queue occu	ring 95% of the time
Calculations	Q =	60 min/hr = 48 veh/hr 1.25 min/veh
	ρ =	3 veh/hr = 0.06 48 veh/hr
	Queue =	$\left[\frac{LN(0.05)-LN(0.06)}{LN(0.06)}\right] = 0.065 \text{ veh}$