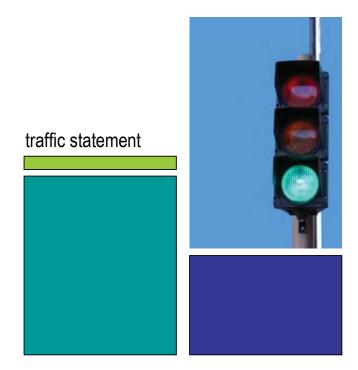
Beach Boys Plaza



prepared for: Falkanger Snyder Martineau & Yates



September 2018

Revised December 2018



December 21, 2018

Mr. Rob Orcutt, RA, NCARB, LEED AP BD+C Falkanger Snyder Martineau & Yates 888 South Andrews Avenue, Suite 300 Fort Lauderdale, Florida 33316

Re: Beach Boys Plaza – Traffic Study

Dear Rob:

Traf Tech Engineering, Inc. is pleased to provide you with the results of this traffic study undertaken for the proposed Beach Boys Plaza development to be located at 401 South Fort Lauderdale Beach Boulevard in Fort Lauderdale Beach, Broward County, Florida. The location of the proposed re-development and its relationship to the existing transportation network is depicted in figure 1 at the end of this document. Appendix A contains a copy of the proposed site plan.

The purpose of this traffic study is to addresses trip generation, access to the site, traffic impacts on the nearby transportation network, and potential roadway improvement intended to mitigate the new trips generated by the project, if any. The traffic methodology for this re-development project is contained in Appendix E. For this evaluation, the following tasks were undertaken:

- 1. Documented the existing lane geometry of the study area. Figure 2 illustrates the turn lanes within the study area.
- 2. Collected intersection turning movement counts during the critical peak periods (11:00 AM to 1:00 PM) and (4:00 PM to 6:00 PM) at the following locations:
 - A1A Southbound & Las Olas Boulevard
 - A1A Northbound & Las Olas Boulevard
 - A1A Southbound & SE 5th Street
 - A1A Southbound & SE 5th Street

The above traffic counts were recorded on April 25, 2017. The raw traffic counts were adjusted by utilizing a peak season factor of 1.04. Figure 3 shows the results of the AM and PM peak hour traffic counts. These traffic counts are included in Appendix B.

3. Obtained the signal timing plans from Broward County Traffic Engineering Division for the intersections located in the vicinity of the proposed project. Appendix C contains the signal timing plans for the signalized intersections.

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Determined the trips associated with the proposed development. Table 1 documents the trips generated associated with the proposed project. The new trips consist of approximately 1,991 daily trips, approximately 142 AM peak hour trips (85 inbound and 57 outbound), and approximately 155 PM peak hour trips (80 inbound and 75 outbound). Please note that the restaurant and retail land uses provide ancillary services to the hotel. These trips were distributed throughout the study area and are shown in Figure 4.

TABLE 1 Trip Generation Summary Beach Boys Plaza												
		Daily	AN	/ Peak Hour		PM Peak Hour						
Land Use	Size	Trips	Total Trips	Inbound	Outbound	Total Trips	Inbound	Outbound				
Existing Land Use												
Restaurant LUC 931	4,100 sf	369	23	19	4	31	21	10				
Retail LUC 826	6,090 sf	270	17	10	7	17	7	10				
Existing Gross Trips	10,190 sf	639	40	29	11	48	28	20				
Internal Trips (see worksheet)			-2	-1	-1	-12	-6	-6				
Existing Driveway Trips			38	28	10	36	22	14				
Pass-by Retail/Retail (-25%) (1)			-10	-7	-3	-8	-5	-3				
Existing External Trips		375	28	21	7	28	17	11				
Proposed Land Uses												
Hotel LUC 310	205 rooms	1,829	130	75	55	144	71	73				
Retail LUC 826	8,100 sf	359	22	12	10	22	10	12				
Restaurant LUC 931	7,400 sf	666	41	34	7	55	37	18				
Future Gross Trips		2,854	193	121	72	221	118	103				
Internal Trips (see worksheet)			-9	-5	-5	-24	-12	-12				
Future Driveway Trips			183	116	67	197	106	91				
Pass-by Retail/Retail (-25%) (1)			-13	-10	-3	-14	-9	-5				
Future External Trips		2,366	170	106	64	183	97	86				
Net New Trips (Proposed - Existing)		1,991	142	85	57	155	80	75				

- Source: ITE Trip Generation Manual (9th Edition)
 (1) Based on FDOT Site Impact Handbook
- 4. Figures 5 and 6 present the future traffic volumes for the study area. Figure 5 includes background traffic only (without the proposed project) and Figure 6 includes the additional traffic anticipated to be generated by the Beach Boys Plaza development. The background traffic includes peak season adjustment factor, growth, committed developments (FLLB Hotel and Suites, SE 5th Street Hotel and Bahia Mar), as provided by the City of Fort Lauderdale (refer to Appendix D).
- 5. Intersection capacity analyses were performed for the four study intersections and the project driveway. The analyses were undertaken following the capacity/level of service procedures outlined in the Highway Capacity Manual using the SYNCHRO software. The results of the intersection analyses are summarized in Table 2. Appendix D contains the computer printouts of the intersection capacity analyses.



TABLE 2 Level of Service Beach Boys Plaza											
	Existing 2017		,	ground)20	Future 2020 with Project						
Intersection/Movement	LOS	Delay (sec)	Delay (sec)	Delay (sec)	Delay (sec)	Delay (sec)					
A1A Southbound & Las Olas	B	19.4	B	19.9 (20.0)	C	21.0					
Boulevard	(B)	(19.1)	(B)		(C)	(21.1)					
A1A Northbound & Las Olas	B	12.6	B	11.9	B	11.8 (10.7)					
Boulevard	(B)	(11.0)	(B)	(10.7)	(B)						
A1A Southbound & SE 5th	A	7.9	A	8.8	A	9.0					
Street	(A)	(8.1)	(A)	(8.4)	(A)	(9.5)					
A1A Northbound & SE 5th Street	A	0.2	A	0.2	A	0.3					
	(A)	(0.2)	(A)	(0.3)	(A)	(0.3)					
A1A Southbound & Driveway 2 WB					C (D)	20.7 (26.3)					

SOURCE: Synchro 10 Light

In summary, all intersections are projected to operate adequately with the proposed project in place. Furthermore, the access driveway is projected to operate at acceptable level of service "C" and "D" during the AM and PM peak hours, respectively.

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

Sincerely,

TRAF TECH ENGINEERING, INC.

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