

March 27, 2023

Mr. Tim O'Brien  
 Legacy Partners  
 5141 California Avenue, Suite 100  
 Irvine, CA. 92617

LLG Reference: 2.22.4668.1

Subject: **Traffic Circulation Assessment for the Proposed  
 Hive Apartments Project**  
 Costa Mesa, California

**Engineers & Planners**

Traffic  
 Transportation  
 Parking

**Linscott, Law &  
 Greenspan, Engineers**

2 Executive Circle  
 Suite 250  
 Irvine, CA 92614  
**949.825.6175** T  
 949.825.6173 F  
 www.llgengineers.com

Pasadena  
 Irvine  
 San Diego  
 Woodland Hills

Dear Mr. O'Brien:

Linscott, Law & Greenspan, Engineers (LLG) is pleased to submit the following Traffic Impact Assessment for the proposed Hive Apartments to replace the existing and entitled office development on west side of Susan Street between Sunflower Avenue and South Coast Drive in the City of Costa Mesa, California. This analysis evaluates the potential traffic circulation impacts associated with the proposed multifamily residential replacement Project consistent with City of Costa Mesa requirements based on the *City of Costa Mesa Transportation Impact Analysis Guidelines, (October 2020)*.

## PROJECT LOCATION AND DESCRIPTION

The existing development on the site consists of 172,176 (SF) office development within three (3) buildings and the entitled development consists of 80,000 SF of office use on the portion of the Project site currently occupied with a professional football training field. **Figure 1** presents existing site aerial, which shows the existing development on the site. The proposed Project will consist of demolishing the existing office buildings and football training field to construct 1,050 multifamily dwelling units within three (3) five-story apartments buildings. **Figure 2** presents the proposed site plan for the Project, prepared by Architects Orange, which shows the proposed apartment development. Site access for the proposed apartments will continue to be provided via the two (2) existing driveways along Susan Street.

Philip M. Linscott, PE (1924-2000)  
 Jack M. Greenspan, PE (Ret.)  
 William A. Law, PE (Ret.)  
 Paul W. Wilkinson, PE  
 John P. Keating, PE  
 David S. Shender, PE  
 John A. Boarman, PE  
 Clare M. Look-Jaeger, PE  
 Richard E. Barretto, PE  
 Keil D. Maberry, PE

## PROJECT TRAFFIC CHARACTERISTICS

### *Trip Generation Forecast Comparison*

Traffic generation is expressed in vehicle trip ends, defined as one-way vehicular movements, either entering or exiting the generating land use. Generation equations and/or rates used in the traffic forecasting procedure are found in the Eleventh Edition of *Trip Generation*, published by the Institute of Transportation Engineers (ITE) [Washington D.C., 2021].

**Table 1**, attached, summarizes the trip generation rates used in forecasting the vehicular trips generated for the proposed Project and existing/entitled land use and also presents the proposed Project's net forecast peak hour and daily traffic volumes. As shown in the upper portion of *Table 1*, the trip generation potential of the proposed Project was estimated using the using ITE Land Use 221: *Multifamily Housing (Mid-Rise) Not Close to Rail Transit* trip rates whereas the existing/entitled uses were estimated using the using ITE Land Use 710: *General Office Building*. Review of the middle of *Table 1* indicates that the proposed apartment Project is forecast to generate 4,858 daily trips, with 396 trips (91 inbound, 305 outbound) produced in the AM peak hour and 417 trips (254 inbound, 163 outbound) produced in the PM peak hour on a "typical" weekday.

Next, review of the following section of *Table 1* indicates that the existing/entitled 252,176 SF office use is forecast to generate 2,733 daily trips, with 384 trips (338 inbound, 46 outbound) produced in the AM peak hour and 363 trips (62 inbound, 301 outbound) produced in the PM peak hour on a "typical" weekday.

As shown on the last row of *Table 1*, the net trip generation potential of the proposed Project compared to the trip generation of the existing/entitled office use is 2,034 net greater daily trips, with 5 net greater trips (-249 inbound, +254 outbound) produced in the AM peak hour and 47 net greater trips (+188 inbound, -141 outbound) produced in the PM peak hour on a "typical" weekday.

As a result, based on the net trip generation forecast for the proposed Project compared to the existing/entitled uses for the Project site (< 50 peak hour trips) as well as the directionality of the net positive peak hour trips, which is generally opposite the peak directionality of traffic flow in the area, the proposed Project will not significantly impact the surrounding transportation system and does not require the preparation of a traffic impact study including level of service.

## CONCLUSION

Based on the results of the aforementioned net project trip generation forecast for the proposed Hive Apartments Project, which is 2,034 net greater daily trips, with 5 net greater trips (-249 inbound, +254 outbound) produced in the AM peak hour and 47 net greater trips (+188 inbound, -141 outbound) produced in the PM peak hour on a “typical” weekday, we conclude that the proposed Project’s traffic circulation impact is considered “insignificant” based on the City’s “50-trip threshold” and directionality of the net positive peak hour trips. Therefore, the Project would not require any specific traffic analysis that includes level of service.

We appreciate the opportunity to provide this Traffic Impact Assessment. Should you need further assistance, or have any questions regarding this analysis, please call us at (949) 825-6175.

Very truly yours,

**Linscott, Law & Greenspan, Engineers**



Keil D. Maberry, P.E.  
Principal

Attachments





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LINSCOTT  
LAW &  
GREENSPAN  
engineers



NO SCALE

SOURCE: GOOGLE

KEY

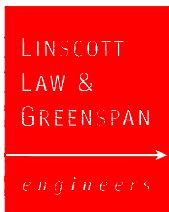
 = PROJECT SITE

# FIGURE 1

EXISTING SITE AERIAL  
HIVE APARTMENTS, COSTA MESA



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NO SCALE

SOURCE: ARCHITECTS ORANGE

# FIGURE 2

PROPOSED SITE PLAN  
HIVE APARTMENTS, COSTA MESA

TABLE 1  
PROJECT TRAFFIC GENERATION RATES AND FORECAST<sup>1</sup>  
HIVE APARTMENTS, COSTA MESA

ITE Land Use Code / Project Description	Daily 2-Way	AM Peak Hour			PM Peak Hour		
		Enter	Exit	Total	Enter	Exit	Total
<b><u>Trip Generation Rates:</u></b>							
▪ 221: Multifamily Housing (Mid-Rise) Not Close to Rail Transit (TE/DU)	4.54	23%	77%	0.37	61%	39%	0.39
▪ 710: General Office Building (TE/TSF)	10.84	88%	12%	1.52	17%	83%	1.44
<b><u>Proposed Project Trip Generation Forecast:</u></b>							
▪ Hive Apartments (1,050 DU)	4,767	89	300	389	250	160	410
<b>Total Proposed Project Trip Generation</b>	<b>4,767</b>	<b>89</b>	<b>300</b>	<b>389</b>	<b>250</b>	<b>160</b>	<b>410</b>
<b><u>Existing and Entitled Trip Generation Forecast:</u></b>							
▪ Existing Office Buildings (172,176 SF)	1,866	231	31	262	42	206	248
▪ Entitled Office Buildings (80,000 SF) <sup>2</sup>	1,075	107	15	122	20	95	115
<b>Total Existing/Entitled Trip Generation</b>	<b>2,733</b>	<b>338</b>	<b>46</b>	<b>384</b>	<b>62</b>	<b>301</b>	<b>363</b>
<b>Net Project Trip Generation Forecast (Proposed Project vs. Entitled)</b>	<b>2,034</b>	<b>(249)</b>	<b>254</b>	<b>5</b>	<b>188</b>	<b>(141)</b>	<b>47</b>

Notes:

- TE/DU = trip end per dwelling unit
- TE/TSF = trip ends per 1,000 square feet

<sup>1</sup> Source: *Trip Generation*, 11<sup>th</sup> Edition, Institute of Transportation Engineers (ITE), Washington, D.C. (2021).

<sup>2</sup> Source: *North Costa Mesa Specific Plan*.