

June 18, 2021

Mr. Patrick Tritz
Rexco Development
285 Corona Pointe Court, Suite 102
Corona, CA 92879

LLG Reference: 2.18.4039.1

Subject: **Trip Generation Assessment for the
Latitude Business Park**
Corona, California

Dear Mr. Tritz:

Linscott, Law & Greenspan, Engineers (LLG) is pleased to submit this Trip Generation Assessment for the Latitude Business Park Project (herein referred to as “Project”), located on a currently vacant site in the northwest quadrant of Temescal Canyon Road and Tom Barnes Street in the City of Corona, California. This letter report will outline the traffic generation forecast potential for the proposed Project and compare it to the previously approved traffic generation forecast presented in the *General Plan Conformance Traffic Analysis for the Proposed Latitude Business Park Project*, prepared by LLG and dated November 20, 2019.

The previously amended Project consists of 1,074,771 square-feet (SF) of total development comprised of 174,055 SF of industrial park, 205,767 SF of light industrial, 159,744 SF of manufacturing, and 535,205 SF of warehousing within fifteen (15) buildings. Access to the proposed Project site will be provided via one (1) full access driveway at the existing intersection of Grand Oaks at Tom Barnes Street. Twelve (12) full access driveways will be provided along a new public street cul-de-sac in the westerly portion of the Project site that will connect to the existing intersection of Tuscany Street at Tom Barnes Street. As a result of the site access analyses, the Project proposes to convert the two (2) existing intersections along Tom Barnes Street to all-way stop controlled intersections.

The proposed Project will remain consistent with the total development of the previously approved Project but will include the addition of high cube cold storage warehousing. The proposed Project will consist of 1,074,771 SF of total development comprised of 174,055 SF of industrial park, 205,767 SF of light

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industrial, 159,744 SF of manufacturing, 360,205 SF of warehousing, and 175,000 SF of high cube cold storage warehousing.

PROJECT TRAFFIC GENERATION FORECAST

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 Tenth Edition of *Trip Generation*, published by the Institute of Transportation Engineers (ITE) [Washington D.C., 2017].

Table 1, located at the rear of this letter report, summarizes the trip generation rates used in forecasting the vehicular trips generated by the proposed Project. As shown in the upper portion of *Table 1*, the trip generation potential for the proposed Project was estimated using the ITE Land Use Code 110: General Light Industrial trip rates, ITE Land Use Code 130: Industrial Park trip rates, ITE Land Use Code 140: Manufacturing trip rates, ITE Land Use Code 150: Warehousing trip rates, ITE Land Use Code 157: High Cube Cold Storage Warehousing trip rates. The middle portion of *Table 1* summarizes the trip generation potential used in forecasting the vehicular trips, both autos and trucks, generated by the Project using recommended factors published in the *Truck Trip Generation Study – City of Fontana, August 2003*. Consistent with standard traffic engineering practice, passenger car equivalent (PCE) factors have been utilized due to the expected heavy truck component of the Project uses. A PCE factor of 1.5, 2.0, and 3.0 has been applied to large 2-axle, 3-axle, and 4+-axle trucks, respectively. It should be noted that since the manufacturing, high-cube warehouse, and cold storage warehouse use areas were separated out from the Industrial Park use area, which would account for the total PCE effect of the Project, and given the relatively low amount of docks associated with industrial park and general light industrial buildings, no PCE factor was applied to the industrial park and general light industrial base trip generations.

Table 2 presents the forecast daily and peak hour traffic volumes for “typical” weekday. Review of *Table 2* shows that the proposed Project is forecast to generate 3,672 daily trips, 446 (363 inbound, 83 outbound) AM peak hour trips, and 453 (106 inbound, 347 outbound) PM peak hour trips. It should be noted that these estimates include the conversion of truck-related trips to passenger car equivalents (PCE). Further review of the lower portion of *Table 2* shows that the previously approved Project (i.e. November 2019 General Plan Conformance Traffic Analysis) is forecast to generate 3,585 daily trips, 462 (370 inbound, 92 outbound) AM peak hour trips, and 469 (112 inbound, 357 outbound) PM peak hour trips.

Review of the last row of *Table 2* shows that the proposed Project is forecast to generate 87 greater daily trips, 16 fewer AM peak hour trips, and 16 fewer PM peak hour trips when compared to the trip generation of the previously approved Project.

CONCLUSION

Comparison of the trips generated by the previously approved Project land uses to the trips generated by the proposed Project shows that the proposed Project will generate 87 greater daily trips, 16 fewer AM peak hour trips, and 16 fewer PM peak hour trips. Based on the net traffic generation potential of the proposed Project, we conclude that the proposed Project will not require the preparation of a revised traffic impact analysis report and that the trips associated with the proposed Project will not significantly impact the existing surrounding roadway network beyond the previously approved Project.

We appreciate the opportunity to provide this Trip Generation Assessment letter. Should you have any questions, please call me at (949) 825-6175.

Very truly yours,

Linscott, Law & Greenspan, Engineers



Keil D. Maberry, P.E.
Principal



Attachment

TABLE 1
PROJECT TRIP GENERATION FORECAST RATES¹
LATITUDE BUSINESS PARK, CORONA

ITE Land Use Code / Project Description	Daily 2-Way	AM Peak Hour			PM Peak Hour		
		Enter	Exit	Total	Enter	Exit	Total
<i>Trip Generation Factors:</i>							
▪ 110: General Light Industrial (TE/TSF)	4.96	0.62	0.08	0.70	0.08	0.55	0.63
▪ 130: Industrial Park (TE/TSF)	3.37	0.32	0.08	0.40	0.08	0.32	0.40
▪ 140: Manufacturing (TE/TSF)	3.93	0.48	0.14	0.62	0.21	0.46	0.67
□ Passenger Cars – 80.3% of Daily (TE/TSF)	3.16	0.38	0.12	0.50	0.17	0.37	0.54
□ 2-Axle Trucks – 5.2% Daily (TE/TSF)	0.20	0.03	0.00	0.03	0.01	0.02	0.03
□ 3-Axle Trucks- 4.5% Daily (TE/TSF)	0.18	0.02	0.01	0.03	0.01	0.02	0.03
□ 4+ Axle Trucks – 10.0% Daily (TE/TSF)	0.39	0.05	0.01	0.06	0.02	0.05	0.07
▪ 150: Warehousing (TE/TSF)	1.74	0.13	0.04	0.17	0.05	0.14	0.19
□ Passenger Cars – 80.3% of Daily (TE/TSF)	1.40	0.10	0.03	0.13	0.04	0.11	0.15
□ 2-Axle Trucks – 5.2% Daily (TE/TSF)	0.09	0.01	0.00	0.01	0.00	0.01	0.01
□ 3-Axle Trucks- 4.5% Daily (TE/TSF)	0.08	0.01	0.00	0.01	0.00	0.01	0.01
□ 4+ Axle Trucks – 10.0% Daily (TE/TSF)	0.17	0.01	0.01	0.02	0.01	0.01	0.02
▪ 157: High Cube Cold Storage Warehousing (TE/TSF)	2.12	0.08	0.03	0.11	0.03	0.09	0.12
□ Passenger Cars – 80.3% of Daily (TE/TSF)	1.70	0.06	0.03	0.09	0.03	0.06	0.09
□ 2-Axle Trucks – 5.2% Daily (TE/TSF)	0.11	0.01	0.00	0.01	0.00	0.01	0.01
□ 3-Axle Trucks- 4.5% Daily (TE/TSF)	0.1	0.00	0.00	0.00	0.00	0.01	0.01
□ 4+ Axle Trucks – 10.0% Daily (TE/TSF)	0.21	0.01	0.00	0.01	0.00	0.01	0.01

Notes:

- TE/TSF = Trip End per 1,000 Square Feet of Gross Floor Area

¹ Source: Trip rates based on *Trip Generation, 10th Edition, Institute of Transportation Engineers (ITE), Washington, D.C. (2017)*. Recommended mix of traffic, including mix of 2-axle, 3-axle and 4+axle trucks, based on *Truck Trip Generation Study – City of Fontana, August 2003* average rate used.

TABLE 2
PROJECT TRIP GENERATION FORECAST²
LATITUDE BUSINESS PARK, CORONA

ITE Land Use Code / Project Description	Daily 2-Way	AM Peak Hour			PM Peak Hour		
		Enter	Exit	Total	Enter	Exit	Total
<u>Manufacturing Trip Generation Forecast:</u>							
140: Manufacturing (159,744 SF)							
❑ Passenger Cars	505	60	19	79	26	60	86
❑ 2-Axle Trucks	32	5	0	5	2	3	5
❑ 3-Axle Trucks	29	3	2	5	2	3	5
❑ 4+ Axle Trucks	<u>62</u>	<u>8</u>	<u>2</u>	<u>10</u>	<u>3</u>	<u>8</u>	<u>11</u>
<i>Manufacturing Gross Trip Generation Forecast</i>	628	76	23	99	33	74	107
<u>PCE³ Manufacturing Trip Generation Forecast:</u>							
140: Manufacturing (159,744 SF)							
❑ Passenger Cars	505	60	19	79	26	60	86
❑ 2-Axle Trucks	48	8	0	8	3	5	8
❑ 3-Axle Trucks	58	6	4	10	4	6	10
❑ 4+ Axle Trucks	<u>186</u>	<u>24</u>	<u>6</u>	<u>30</u>	<u>9</u>	<u>24</u>	<u>33</u>
<i>PCE Manufacturing Trip Generation Forecast [A]</i>	797	98	29	127	42	95	137
<u>Warehousing Trip Generation Forecast:</u>							
150: Warehousing (360,205 SF)							
❑ Passenger Cars	505	35	11	46	14	39	53
❑ 2-Axle Trucks	32	4	0	4	0	4	4
❑ 3-Axle Trucks	29	4	0	4	0	4	4
❑ 4+ Axle Trucks	<u>61</u>	<u>4</u>	<u>3</u>	<u>7</u>	<u>4</u>	<u>3</u>	<u>7</u>
<i>Warehousing Gross Trip Generation Forecast</i>	627	47	14	61	18	50	68
<u>PCE³ Warehousing Trip Generation Forecast:</u>							
150: Warehousing (360,205 SF)							
❑ Passenger Cars	505	35	11	46	14	39	53
❑ 2-Axle Trucks	48	6	0	6	0	6	6
❑ 3-Axle Trucks	58	8	0	8	0	8	8
❑ 4+ Axle Trucks	<u>183</u>	<u>12</u>	<u>9</u>	<u>21</u>	<u>12</u>	<u>9</u>	<u>21</u>
<i>PCE Warehousing Trip Generation Forecast [B]</i>	794	61	20	81	26	62	88
<u>Warehousing Trip Generation Forecast:</u>							
157: Cold Storage Warehousing (175,000 SF)							
❑ Passenger Cars	297	11	4	15	6	9	15
❑ 2-Axle Trucks	19	2	0	2	0	2	2
❑ 3-Axle Trucks	18	0	0	0	0	2	2
❑ 4+ Axle Trucks	<u>37</u>	<u>2</u>	<u>0</u>	<u>2</u>	<u>0</u>	<u>2</u>	<u>2</u>
<i>Cold Storage Warehousing Gross Trip Generation Forecast</i>	371	15	4	19	6	15	21
<u>PCE³ Warehousing Trip Generation Forecast:</u>							
157: Cold Storage Warehousing (175,000 SF)							
❑ Passenger Cars	297	11	4	15	6	9	15
❑ 2-Axle Trucks	29	3	0	3	0	3	3
❑ 3-Axle Trucks	36	0	0	0	0	4	4
❑ 4+ Axle Trucks	<u>111</u>	<u>6</u>	<u>0</u>	<u>6</u>	<u>0</u>	<u>6</u>	<u>6</u>
<i>PCE Cold Storage Warehousing Trip Generation Forecast [C]</i>	473	20	4	24	6	22	28
<u>Industrial Park Trip Generation Forecast:</u>							
130: Industrial Park (174,055) [D]							
	587	57	13	70	15	55	70
<u>Light Industrial Trip Generation Forecast:</u>							
110: General Light Industrial (205,767 SF) [E]							
	1,021	127	17	144	17	113	130
<i>Project Total Trip Generation Forecast [A+B+C+D+E]</i>	3,672	363	83	446	106	347	453
<i>General Plan Conformance Project Total Trip Generation Forecast</i>	3,585	370	92	462	112	357	469
<i>Net Project Total Trip Generation Forecast</i>	+87	-7	-9	-16	-6	-10	-16

Notes:

- TE/TSF = Trip End per 1,000 Square Feet of Gross Floor Area

² Source: Trip rates based on *Trip Generation, 10th Edition, Institute of Transportation Engineers (ITE), Washington, D.C. (2017)*.

³ All 2-axle, 3-axle and 4+axles trucks converted to passenger car equivalents using a factor of 1.5 vehicles per truck, 2.0 vehicles per truck, and 3.0 vehicles per truck, respectively.