

October 1, 2014

Mr. Greg Malinao Duggins Construction, Inc. 341 W. Crown Court Imperial, CA 92251

SUBJECT: DOUBLE DATE PROJECT TRIP GENERATION EVALUATION

Dear Mr. Greg Malinao:

We are pleased to submit the following trip generation evaluation for the proposed Double Date Project (referred to as "Project"). The Project is located on the south side of Industrial Way abutting the west side of the Coca Cola distribution facility in the City of Coachella.

As the City of Coachella does not have specific traffic study guidelines, this analysis has been prepared in accordance with the County of Riverside *Traffic Impact Analysis Preparation Guide* (most recently updated August of 2008). It is our understanding that the City accepts the County of Riverside traffic study guidelines and outlined methodologies. The County's traffic study guidelines indicate that if a project generates fewer than 100 peak hour trips, a formal traffic study is typically not required as off-site improvements are assumed to be nominal for low traffic generating uses.

## **SUMMARY OF FINDINGS**

The proposed Project is anticipated to generate less than 100 peak hour trips during both the morning (7-9 AM) and evening (4-6 PM) peak hours. The Project's potential to impact off-site intersections is anticipated to be less-than-significant as the Project would generate less than the 100 peak hour trip threshold utilized by the County of Riverside.

## PROJECT DESCRIPTION

The Project is proposed to construct a new warehouse facility consisting of three main structures with a total area of 38,906 square feet including a date packing plant and related cold-storage structures.

## PROJECT TRIP GENERATION

Trip generation represents the amount of traffic which is both attracted to and produced by a development. Determining traffic generation for a specific project is therefore based upon forecasting the amount of traffic that is expected to be both attracted to and produced by the specific land uses being proposed for a given development.

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The ITE Trip Generation manual is a nationally recognized source for estimating site specific trip generation. ITE recently released an updated edition of the Trip Generation manual (9th Edition) in 2012. Trip generation rates used to estimate Project traffic are shown in Table 1 and a summary of the Project's trip generation is shown in Table 2. The trip generation rates are based upon data collected by the Institute of Transportation Engineers (ITE) for Warehouse (ITE Land Use Code 150) in their recently published Trip Generation manual, 9th Edition, 2012.

The ITE *Trip Generation* manual includes very limited data regarding the types of vehicles that are generated (passenger cars and various sizes of trucks). Data regarding the vehicle mix has therefore been obtained from a separate report; the *City of Fontana Truck Trip Generation Study* (August 2003) for the Project.

Passenger Car Equivalents (PCE) factors have been applied to the trip generation rates for heavy trucks (large 2-axles, 3-axles, 4+-axles). Consistent with standard traffic engineering practice in Southern California, PCE factors have been utilized due to the expected heavy truck component for the proposed Project land use. PCE factors allow the typical "real-world" mix of vehicle types to be represented as a single, standardized unit, such as the passenger car, for the purposes of capacity and level of service analyses. PCE factors are applied to large truck types such as large two-axles, three-axles, 4+-axles. A PCE factor of 1.5 has been applied to large 2-axle trucks, a factor of 2.0 for 3-axle trucks and a factor of 3.0 for 4+-axle trucks. These PCE factors are consistent with the values recommended by the San Bernardino County CMP and are accepted factors in the County of Riverside.

As shown on Table 2, the Project is anticipated to generate a net total of approximately 181 PCE tripends per day with 15 PCE AM peak hour trips and 16 PCE PM peak hour trips.

## **CONCLUSIONS**

As discussed previously, the proposed Project is anticipated to generate approximately 15 and 16 trips during the AM and PM peak hours, respectively. Based on County of Riverside Traffic Impact Analysis guidelines, a traffic impact analysis, beyond this trip generation evaluation, is not required as the Project is anticipated to generate less than 100 peak hour trips.

If you have any questions, please contact me directly at (949) 660-1994 ext. 217.

Respectfully submitted,

URBAN CROSSROADS, INC.

Haseeb Qureshi Senior Associate



TABLE 1: PROJECT TRIP GENERATION RATES<sup>1</sup>

Actual Vehicles												
Land Use <sup>1</sup>	Units <sup>2</sup>	ITE LU Code	AM Peak Hour			PI	D-11.					
			In	Out	Total	In	Out	Total	Daily			
Warehouse <sup>3</sup>	TSF	150	0.240	0.060	0.300	0.080	0.240	0.320	3.560			
79.57% Passenger Cars			0.191	0.048	0.239	0.064	0.191	0.255	2.833			
	0.008	0.002	0.010	0.003	0.008	0.011	0.123					
	0.011	0.003	0.014	0.004	0.011	0.015	0.165					
	0.030	0.007	0.037	0.010	0.030	0.039	0.439					
Passenger Car Equivalent (PCE)												
Land Use <sup>1</sup>	Units <sup>2</sup>	ITE LU Code	AM Peak Hour			PI	5 "					
			In	Out	Total	In	Out	Total	Daily			
Warehouse <sup>3</sup>	TSF	150	0.240	0.060	0.300	0.080	0.240	0.320	3.560			
	0.191	0.048	0.239	0.064	0.191	0.255	2.833					
3.46% 2-Axle Trucks (PCE = 1.5)			0.012	0.003	0.016	0.004	0.012	0.017	0.185			
4.64% 3-Axle Trucks (PCE = 2.0)			0.022	0.006	0.028	0.007	0.022	0.030	0.330			
12.33% 4-Axle+ Trucks (PCE = 3.0)			0.089	0.022	0.111	0.030	0.089	0.118	1.317			



<sup>&</sup>lt;sup>1</sup> Trip Generation Source: Institute of Transportation Engineers (ITE), <u>Trip Generation Manual</u>, Ninth Edition (2012).

<sup>2</sup> TSF = thousand square feet

<sup>3</sup> Vehicle Mix Source: City of Fontana Truck Trip Generation Study for LU 150, August 2003. PCE rates are per SANBAG.

**TABLE 2: PROJECT TRIP GENERATION SUMMARY** 

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	Actual	Vehicles							
Land Use	Quantity	Units <sup>1</sup>	AM Peak Hour			PM Peak Hour			Daile
Land Ose			In	Out	Total	In	Out	Total	Daily
Building 1	38.906	TSF							
Passenger Cars:			7	2	9	2	7	10	110
Truck Trips:									
2-axle:			0	0	0	0	0	0	5
3-axle:			0	0	1	0	0	1	6
4+-axle:			1	0	1	0	1	2	17
- Net Truck Trips (Actual)			2	0	2	1	2	3	28
TOTAL NET TRIPS (Actual)				2	12	3	9	12	139
Pass	enger Car Equi	valent (PCI	E) Veh	icles					
	Quantity	Units <sup>1</sup>	AM Peak Hour			PM Peak Hour			
Land Use			In	Out	Total	In	Out	Total	Daily
Building 1	38.906	TSF							
Passenger Cars:			7	2	9	2	7	10	110
Truck Trips:									
2-axle:			0	0	1	0	0	1	7
3-axle:			1	0	1	0	1	1	13
4+-axle:			3	1	4	1	3	5	51
- Net Truck Trips (PCE) <sup>2</sup>			5	1	6	2	5	6	71
TOTAL NET TRIPS (PCE) <sup>3</sup>				3	15	4	12	16	181

<sup>&</sup>lt;sup>1</sup> TSF = thousand square feet

Vehicle Mix Source: City of Fontana Truck Trip Generation Study for LU 150, August 2003. PCE rates are per SANBAG.

TOTAL TRIPS (PCE) = Passenger Cars + Net Truck Trips (PCE).