

November 30, 2020

Ryan Birdseye Birdseye Planning Group 1354 York Drive Vista, CA 92084

Subject: Revised Trip Generation and VMT Assessment for the Jersey Industrial Complex Project

Dear Mr. Birdseye,

Mizuta Traffic Consulting (MTC) is pleased to submit this letter summarizing the estimated trip generation and VMT forecasted by your project, which consists of constructing a 159,580 square foot (sf) warehouse (herein referred to as the "project") on a vacant parcel (APN 0229-111-60-0-000). The warehouse will include areas for storage, offices, and an electrical room. The project is located on the northwest corner of the Milliken Avenue & Jersey Boulevard intersection at 11298 Jersey Boulevard in the City of Rancho Cucamonga, CA.

## Trip Generation

Trip generation represents the amount of traffic produced by a development. Determining the trip generation for a specific project is therefore based upon forecasting the amount of traffic that is expected to be attracted to and produced by the specific land use of a given development. For the project, trip generation rates published by the Institute of Transportation Engineers (ITE) Trip Generation Manual, 10th Edition were applied to the proposed use in order to determine the traffic generation characteristics of the site. The ITE Trip Generation Manual is a nationally recognized source for estimating site specific trip generation.

After review of all the land use categories contained in the ITE Trip Generation Manual, the Warehousing land use (Land Use Code 150) was found to be the most relevant since the project is anticipated to operate in a similar matter. A Warehousing is described as the following:

"A warehouse is primarily devoted to the storage of materials, but it may also include office and maintenance areas.""

A warehouse land use typically has a larger percentage of truck traffic. The City of Fontana Truck Trip Generation Study, August 2013 was referenced to identify the vehicle mix for a warehouse land use. Based on the Fontana Truck Study, 79.57 percent of the traffic generated were passenger cars and the remaining 20.43 percent were trucks. Furthermore, trucks were classified based on the axle-type, which resulted in approximately 17 percent of the truck traffic comprised of 2-axle trucks, 23 percent of 3-axle trucks, and the remaining 60% of 4+-axle trucks.



Additionally, the truck traffic was converted to passenger cars by utilizing a passenger car equivalent (PCE) factor, which accounts for the fact that trucks utilize more capacity on the roadway than a passenger car due to its large size and slower acceleration. A PCE factor of 1.5 was used for 2-axle trucks, 2.0 for 3-axle trucks, and 3.0 for 4+ axle trucks. The PCE factors are based on the data contained in the San Bernardino County CMP, 2016 Update.

Table I summarizes the new traffic that is estimated to be generated by the project. As shown in the table, the project is estimated to generate 278 daily trips with 28 trips in the AM peak-hour and 31 trips in the PM peak-hour. After applying the PCE rates to the forecasted trucks, the project is estimated to generate 364 daily trips with 35 trips in the AM peak-hour and 41 trips in the PM peak-hour.

Table 1: Trip Generation Summary

TRIP GENERATION RATES <sup>1</sup>										
	ITE			AM PEAK			PM PEAK			
Land Use	Code	Weekday D	aily	Rate	In:Ou	t Ratio	Rate	In:Ou	t Ratio	
Warehousing	150	1.74 trips /	ksf	0.17	0.77	: 0.23	0.19	0.27	: 0.73	
TRIP GENERATION CALCULATIONS										
				AM PEAK			PM PEAK			
Land Use		Amount	ADT	In	Out	Total	In	Out	Total	
Jersey Industrial Complex	159.580 ksf		278	22	6	28	9	22	31	
Passenger Cars (79.57%) <sup>2</sup> :			221	18	5	23	7	18	25	
Trucks (20.43%) <sup>2</sup> :			57	4	1	5	2	4	6	
2-axle (3.46%, PCE = 1.5) <sup>2, 3</sup> :			14	1	0	1	1	1	2	
3-axle (4.64%, PCE = 2) <sup>2,3</sup> :			26	2	0	2	1	2	3	
4+ axle (12.33%, PCE = 3) <sup>2,3</sup> :			103	7	2	9	4	7	11	
Subtotal (Trucks with PCE):			143	10	2	12	6	10	16	
Total Trip Generation (Passenger Cars and Trucks with PCE)			364	28	7	35	13	28	41	

## Notes:

ksf-1000 square feet

- 1. The trip rates for the project's land uses are based on the Institute of Transportation Engineers (ITE) Trip Generation Manual, 10th Edition.
- 2. The recommended truck mix percentages are based on the Heavy Warehouse land use contained in the City of Fontana Truck Trip Generation Study, August 2003.
- 3. The PCE factors are based on the San Bernardino County CMP, 2016 Update.

The project is estimated to generate fewer than 50 trips during the peak periods, which is the threshold for requiring a traffic study based on the *City's Traffic Impact Analysis Guidelines, June* 2020. As a result, the project does not warrant any additional traffic analysis.

## VMT Screening Assessment

According to the City's Traffic Impact Analysis Guidelines, CEQA Assessment – VMT Analysis, June 2020, there are three types of screening criteria that can be applied to effectively screen projects from VMT project-level assessments. The three types include the following:

- 1. Transit Priority Area (TPA) Screening
- 2. Low VMT Area Screening
- 3. Project Type Screening



If the project meets any of the steps above, they are presumed to not have a significant impact and are screened out from completing additional VMT analysis. The SBCTA VMT Screening Tool was then utilized to determine if the project could be screened out. The project is located in TAZ 53692301. The Metrolink transit station (11208 Azusa Court) is located within a half-mile from the project site. Table 2 summarizes the results of the three screening types.

Table 2: VMT Project Screening

Screening Type	Criteria Met?
TPA	Yes
Low VMT	No
Project Type	No

As shown in the table, the project is located within a TPA. Projects located in a TPA may be presumed to have a less than significant impact if it meets all of the following criteria:

- 1. Has a Floor Area Ratio (FAR) of greater than 0.75
- 2. Includes less parking for use by residents, customers, or employees of the project that required by the City
- 3. Is consistent with the applicable Sustainable Communities Strategy
- 4. Does not replace affordable residential units with a smaller number of moderate- or high-income residential units

The FAR was calculated by dividing the total building area by the net buildable lot area. The net buildable area takes into account the undevelopable areas such as setbacks, landscape, and required break area requirements. Additionally, the net buildable area takes into account the minimum drive aisle required for truck and trailers to circulate throughout the site and access the loading docks. Table 3 summarizes the FAR for the project.

Table 3: Project FAR

Criteria	Area (sf)
Total lot size (sf)	321,988
Net buildable lot area (sf)¹	155,777
Total building area (sf)	159,580
FAR	1.02

Notes:

As shown in the table, the FAR of 1.02 exceeds the 0.75 FAR requirement for Criteria 1.

The parking required for the warehouse (including mezzanine) is 68 parking spaces. The parking required for the offices is 33 parking spaces for a total of 91 parking spaces required for the entire project. The project is providing 91 parking spaces and satisfies Criteria 2.

The project is located in a Minimum Impact Heavy Industrial (MI/HI) zone. No zone change is required by the project. As a result, the project is consistent with the City's Sustainable Community Action Plan and satisfies Criteria 3.

<sup>1.</sup> The net buildable area was provided by the architect and includes the landscaped and required setback areas.



Criteria 4 is not applicable as the project is not a residential project. As a result, Criteria 4 is satisfied.

Since all criteria for the TPA screening was met, the project is presumed to have a less than significant impact and will not require additional VMT analyses.

Please call me at 858-752-8212 or by email at mizutatrafficconsulting@gmail.com if you have any questions.

Sincerely,

Mizuta Traffic Consulting

Marc Mizuta, PE, TE, PTOE

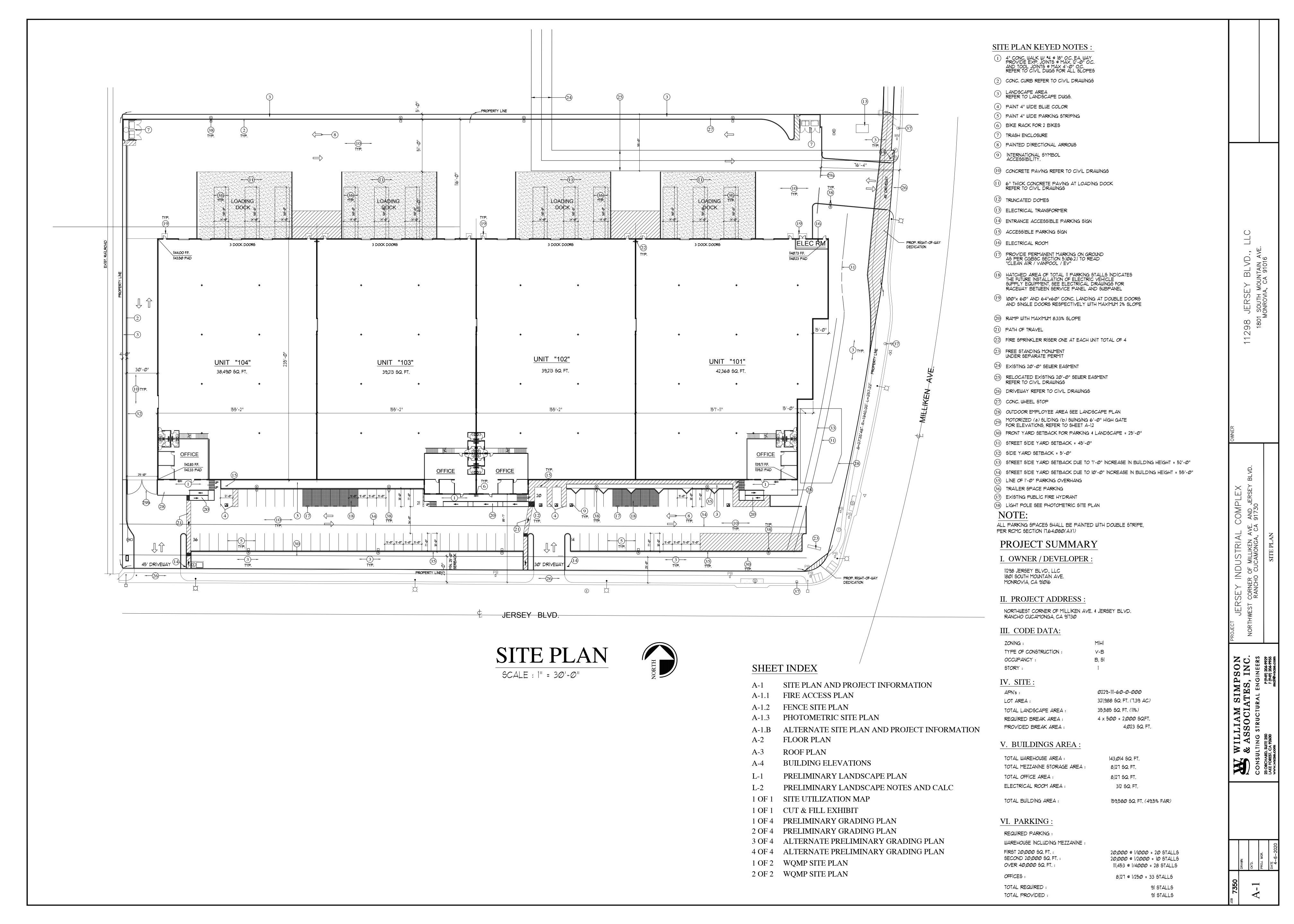
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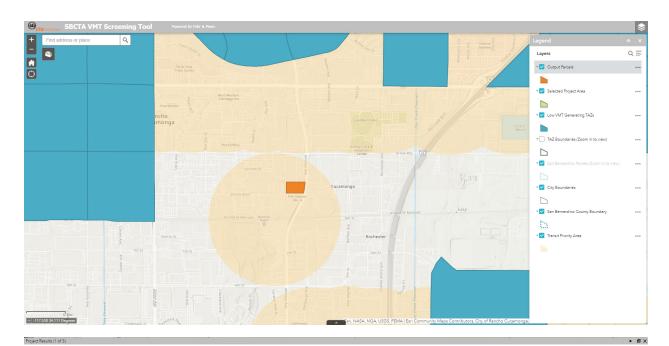
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## Attachments

- Site Plan
- VMT Screening MapFAR Figure





Within a TPA? Yes (Pass)
Within a low VMT generating TAZ? Yes (Pass)

Note Screening results are based on location of parcel centroids. If results are desired considering the full parcel, please refer to the associated map layers to visually review parcel and TAZ boundary relationsh

