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To: City of Torrance Engineering Department
Site: 205th Torrance Industrial Project
Subject: Trip Generation and Vehicle Miles Traveled (VMT) Screening Analysis

This technical memorandum evaluates the trip generation and need to prepare a level of service (LOS) or vehicle miles traveled (VMT) analysis for the proposed 205th South Torrance Industrial Project. The project is located at 2271 and 2281 205th Street in The City of Torrance. This memo will evaluate the project using the City of Torrance Traffic Impact Analysis (TIA) Guidelines (January 2021).

The project site is currently occupied by 5 office buildings totaling 86,995 square feet (sf). The project involves demolishing the existing buildings and replacing them with a 132,425 SF industrial building, of which 105,940 SF is analyzed as general light industrial, and 26,485 SF is analyzed as cold storage warehouse. Access to the project is provided by two driveways on 205th Street. The project site plan is shown in Figure 1.

Project Trip Generation and LOS Analysis Screening

The existing business park project trip generation was prepared using trip rates for Business Park (Land Use Code 770) from the Institute of Transportation Engineers (ITE)¹, and Project trips were forecast using rates for General Light Industrial (ITE Land Use Code 110) and Warehouse (ITE Land Use Code 150) (the SCAQMD composite vehicle split was used to account for 20% cold storage.)². To account for the additional roadway capacity required by trucks, a passenger car equivalent factor was added to the truck trip generation to convert truck volumes into passenger car equivalent (PCE) volumes. Table 1 presents the trip generation estimate for the proposed project. As shown in Table 1, the project is forecast to generate 261 fewer net daily PCE trips compared to the existing use, including 3 net PCE trips during the AM peak hour and 2 net PCE trips during the PM peak hour. The City's guidelines state that projects that generate 500 or less net daily trips do not require a LOS-based Traffic Circulation Analysis (TCA) report. Based on the project's net daily negative trip generation, the project would not meet the City's threshold for preparation of a LOS-based TCA.

VMT Screening Analysis

Senate Bill (SB) 743 was signed by Governor Brown in 2013 and required the Governor's Office of Planning and Research (OPR) to amend the CEQA Guidelines to provide an alternative to LOS for evaluating Transportation impacts. SB743 specified that the new criteria should promote the reduction of greenhouse gas emissions, the development of multimodal transportation networks and a diversity of land uses. The bill also specified that delay-based level of service could no longer be considered an indicator of a significant impact on the environment. In response, Section 15064.3 was added to the CEQA Guidelines beginning January 1, 2019. Section 15064.3 - Determining the Significance of Transportation Impacts states that Vehicle Miles Traveled (VMT) is the most appropriate measure of transportation impacts and provides lead agencies with the discretion to choose the most appropriate methodology and thresholds for evaluating VMT.

¹ *Trip Generation*, 11th Edition, Institute of Transportation Engineers (ITE). 2021.

² *Warehouse Truck Trip Study Data Results and Usage*, South Coast Air Quality Management District (SCAQMD). July 17, 2014.

City of Torrance VMT Screening

Section 3.2 of the City's Traffic Impact Analysis Guidelines provides VMT screening thresholds to identify projects that would be considered to have a less-than significant impact on VMT and therefore could be screened out from further analysis. If a project meets one of the following criteria, then the VMT impact of the project would be considered less-than significant and no further analysis of VMT would be required:

1. The project is a small project (net increase of 110 or less daily trips).
2. The project is a residential or office project in a low VMT generating area.
3. The project is located within one-half mile of either an existing major transit stop or an existing stop along an existing high quality transit corridor.
4. The project has 100% affordable housing units.
5. The project contains a retail use of 50,000 sf or less.
6. The project is a locally serving public facility.

The applicability of each criterion to the project is discussed below.

Screening Criteria 1 – Small Projects: According to the City's guidelines, projects which would generate fewer than 110 average daily trips (ADT) would not cause a substantial increase in the total citywide or regional VMT. As shown in Table 1, the project would generate 521 fewer ADT (without PCE) than the existing land use. Because the project would not create any new trips, it is presumed to have a less than significant impact on VMT and further analysis would not be required.

Screening Criteria 2 – Map-Based Screening for Residential and Office Projects: The City's guidelines include maps showing locations of low VMT generating areas. Low VMT generating areas are defined as traffic analysis zones (TAZs) with a total daily VMT/Service Population (employment plus population) that is 15% less than the baseline level for the County. The project is in TAZ 21293100, which is not in a low VMT generating area. Therefore, the project would not meet Screening Criteria 2 – Map-Based Screening for Residential and Office Projects.

Screening Criteria 3 – Proximity to Transit: According to the City's guidelines, projects within one-half mile of either an existing major transit stop or an existing stop along an existing high quality transit corridor may be presumed to have a less than significant impact. Based on Figure 10 – Transit Priority Area Map in the City's guidelines, the project is not within a High-Quality Transit area does not satisfy Screening Criteria 3 – Proximity to Transit.

Screening Criteria 4 – Affordable Residential Development: According to the City's guidelines, residential projects with 100% affordable housing units may be presumed to have a less than significant impact. The project is not a residential development; therefore, it does not satisfy Screening Criteria 4 – Affordable Residential Development.

Screening Criteria 5 – Local-Serving Retail: According to the City's guidelines, retail uses of 50,000 sf or less may be presumed to have a less than significant impact. The project is not a retail development; therefore, it does not satisfy Screening Criteria 5 – Local-Serving Retail.

Screening Criteria 6 – Local-Serving Public Facility: According to the City's guidelines, local-serving public facilities may be presumed to have a less than significant impact. The project is not a public facility; therefore, it does not satisfy Screening Criteria 6 – Local-Serving Public Facility.

Summary

As shown in Table 1, the project is forecast to generate 261 fewer daily PCE trips compared to the existing use, including 3 net PCE trips during the AM peak hour and 2 net PCE trips during the PM peak hour. The City's Guidelines do not require projects to prepare a LOS analysis if they generate fewer than 500 daily trips. Based on the daily trip generation of 261 fewer daily PCE trips than the existing land use, the project would not meet the City's threshold for preparation of a LOS TIA.

The project was evaluated using the City of Torrance VMT screening thresholds to determine if the project would require a vehicle mile traveled (VMT) analysis. The project would meet the City's screening criteria for Small Projects (fewer than 110 new ADT). Therefore, the project VMT impacts would be considered less than significant and further analysis of VMT would not be required.

If you have any questions about this information, please contact me at (949) 794-1180 or alex@epdsolutions.com.

Table 1: Project Trip Generation

Land Use	Units	AM Peak Hour			PM Peak Hour				
		Daily	In	Out	Total	In	Out	Total	
<u>Trip Rates</u>									
Business Park ¹	TSF	12.44	1.15	0.20	1.35	0.32	0.90	1.22	
General Light Industrial ²	TSF	4.87	0.65	0.09	0.74	0.09	0.56	0.65	
Warehouse ³	TSF	1.71	0.13	0.04	0.17	0.05	0.13	0.18	
<u>Existing Use</u>									
Business Park ¹	86.995 TSF	1082	100	18	118	28	79	107	
<u>Proposed Project</u>									
General Light Industrial ²	105.940 TSF	516	69	9	78	10	59	69	
Warehouse ³	26.485 TSF	45	3	1	4	1	3	4	
Net New Trips (Without PCE Conversion)			-521	-28	-8	-36	-17	-17	-34
	TSF	561	72	10	82	11	62	73	
<u>Vehicle Mix</u> ⁴		<u>Percent</u>							
Passenger Vehicles	69.00%	387	50	7	57	8	43	51	
2-Axle Trucks	6.80%	38	5	1	6	1	4	5	
3-Axle Trucks	5.50%	31	4	1	5	1	3	4	
4+-Axle Trucks	18.70%	105	13	2	15	2	12	14	
		561	72	11	83	12	62	74	
<u>PCE Trip Generation</u> ⁵		<u>PCE Factor</u>							
Passenger Vehicles	1.0	387	50	7	57	8	43	51	
2-Axle Trucks	1.5	57	8	2	9	1	6	8	
3-Axle Trucks	2.0	62	8	2	10	2	6	8	
4+-Axle Trucks	3.0	315	39	6	45	6	36	42	
Total PCE Trip Generation		821	105	17	121	17	91	109	
Net New PCE Trip Generation		-261	5	-1	3	-11	12	2	

TSF = Thousand Square Feet

PCE = Passenger Car Equivalent

TOP = The Ontario Plan

¹ Trip rates from the Institute of Transportation Engineers, *Trip Generation, 11th Edition, 2021*. Land Use Code 770 - Business Park

² Trip rates from the Institute of Transportation Engineers, *Trip Generation, 11th Edition, 2021*. Land Use Code 110 - General Light Industrial

³ Trip rates from the Institute of Transportation Engineers, *Trip Generation, 11th Edition, 2021*. Land Use Code 150 - Warehousing

⁴ Vehicle Mix from the SCAQMD Warehouse With Cold Storage Truck Trip Study, July 2014. SCAQMD Composite.

⁵ Passenger Car Equivalent (PCE) factors from San Bernardino County CMP, Appendix B - Guidelines for CMP Traffic Impact Analysis Reports in San Bernardino County, 2016