

To: City of Torrance Engineering Department
From: Sina Salehipour, Abby Pal, EPD Solutions Inc
Date: 5/20/2024
Site: 2421 W. 205th Street, City of Torrance
EPD Project Number 24-007
Subject: Vehicle Miles Traveled (VMT) Screening Analysis

This technical memorandum provides an evaluation of two new proposed industrial buildings (Project) located at 2421 W. 205th Street, City of Torrance. The purpose of this analysis is to evaluate the trip generation and determine the need for a Level of Service (LOS) analysis for the proposed Project. The Project site encompasses 8.2 net acres and comprises two parcels identified as Assessor Parcel Numbers (APNs) 7352-018-067 and -068. The proposed Project would demolish the five existing two-story office, commercial, and medical buildings that were analyzed as Business Park totaling approximately 69,288 square feet (SF) and develop two buildings totaling 143,933 SF as industrial buildings. Building 1 (West) would be 79,609 SF, 30% of which would be used for manufacturing (23,883 SF) and 70% of which would be used as a warehouse without cold storage (55,726 SF), including office and mezzanine spaces. Building 2 (East) would be 64,324 SF, 30% of which would be used for manufacturing (19,297 SF) and 70% of which would be used as a warehouse without cold storage (45,027 SF), including office and mezzanine spaces. The Project site plan is shown in Figure 1.

This memo will evaluate the Project using the City of Torrance Traffic Impact Analysis (TIA) Guidelines (January 2021).

Project Trip Generation

The Project trip generation was prepared using trip rates from the Institute of Transportation Engineers (ITE) Trip Generation Manual, 11th Edition (2021). The existing 69,288 SF across five, two-story buildings were analyzed using the Business Park (ITE Land Use Code 770). For the proposed Building 1, 30% i.e. 23,883 SF was analyzed as Manufacturing (ITE Land Use Code 140) and 70% i.e. 55,726 SF as Warehousing (ITE Land Use Code 150). For Building 2, 30% i.e. 19,297 SF was analyzed as Manufacturing (ITE Land Use Code 140) and 70% i.e. 45,027 SF as Warehousing (ITE Land Use Code 150). For both proposed buildings, which include manufacturing and warehousing, the passenger vehicle and truck rates were obtained from the Institute of Transportation Engineers (ITE). The truck splits were then normalized using the South Coast Air Quality Management District (SCAQMD) vehicle splits¹ without cold storage.

Table 1 presents the trip generation estimate for both the existing use and proposed Project. As shown in Table 1, the existing site is expected to generate a total of 862 daily trips, with 94 trips during the AM peak hour and 85 during PM peak hour. The proposed Project would generate a total of 377 daily trips, 46 AM, and 50 PM peak hour trips. In terms of passenger vehicles, the existing site would generate a total of 862 daily trips, and the proposed Project is anticipated to produce 377 daily trips. Taking both existing site and proposed Project into consideration, the Project is forecast to generate net 485 fewer daily trips, with net 48 fewer trips during AM peak hour and net 35 fewer trips during the PM peak hour trips, along with net 565 fewer daily passenger vehicle trips.

¹ South Coast Air Quality Management District (SCAQMD) Warehouse Truck Trip Data Study (2014)

Vehicle Miles Traveled Screening

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, aiming to promote the reduction of greenhouse gas emissions, the development of multimodal transportation networks and a diversity of land uses. In response, Section 15064.3 - Determining the Significance of Transportation Impacts, was added to the CEQA Guidelines which states that VMT is the most appropriate measure of transportation impacts and shall apply statewide beginning on July 1, 2020.

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 a net of 565 fewer ADT (without PCE). Therefore, the Project generates less than 110 average daily trips (ADT) and satisfies Screening Criteria 1. The Project can be 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 for residential and office projects. The project is not a residential or office development. 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 2 – 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.

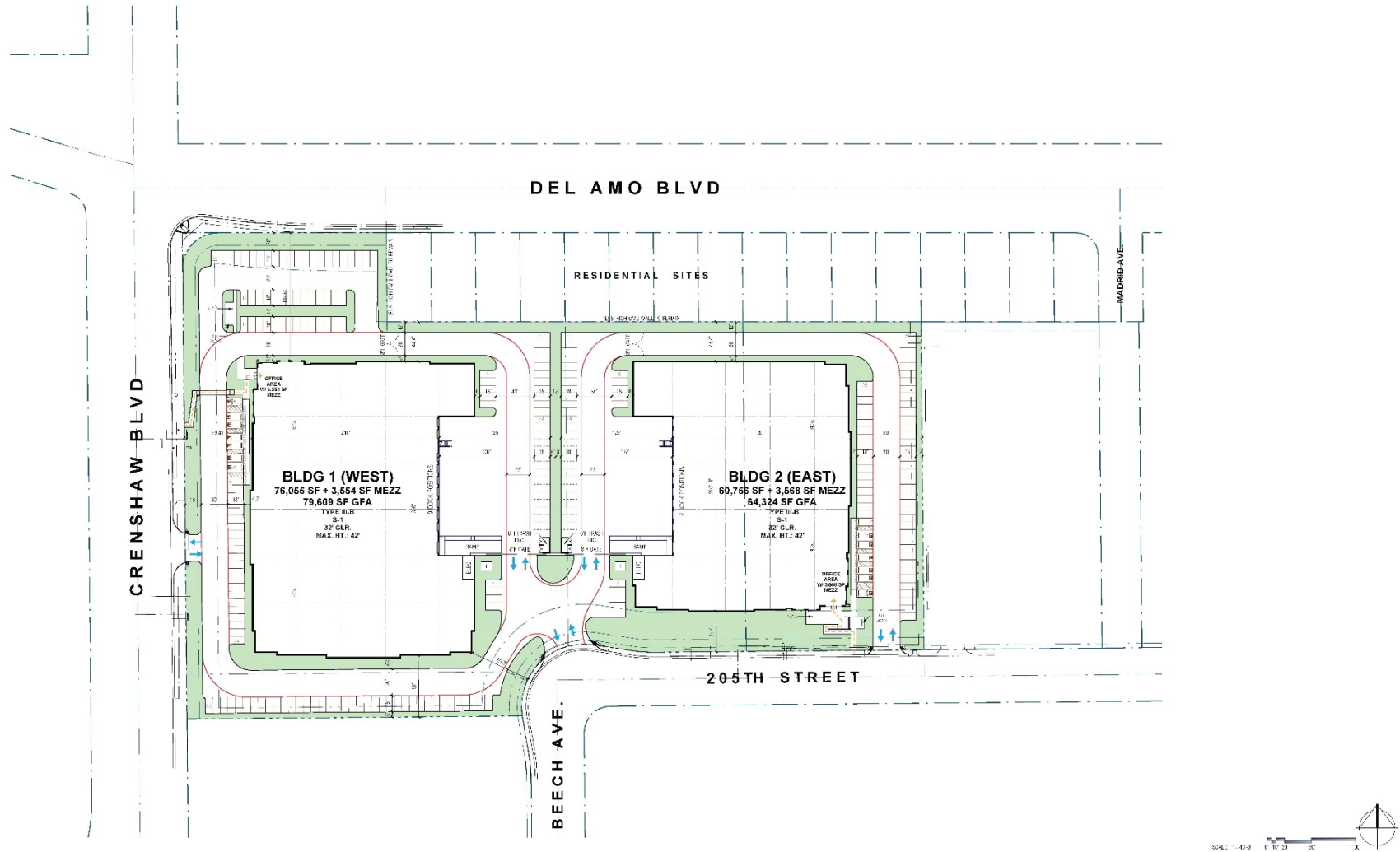
Screening Criteria 5 – Local-Serving Retail: According to the City's guidelines, retail uses of 50,000 sf or less may be presumed to have a less than significant impact. The Project is not a retail development; therefore, it does not satisfy Screening Criteria 5 – Local-Serving Retail.

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

The Project was assessed using the City of Torrance Guidelines thresholds to determine whether it would necessitate a VMT analysis. The six screening criteria identified by the City's TIA guidelines for CEQA analysis were analyzed. The Project does not satisfy Screening Criteria 2 to 6, as it is not applicable to the Project. However, the Project would satisfy Screening Criteria 1 as it would generate net 565 fewer daily passenger trips, less the 110 net daily trips threshold. Therefore, the Project is screened from further VMT analysis and can be presumed to have a less than significant impact on VMT.

Figure 1: Project Site Plan



Source: GAA

Figure 2: Transit Priority Areas (TPAs) in City of Torrance

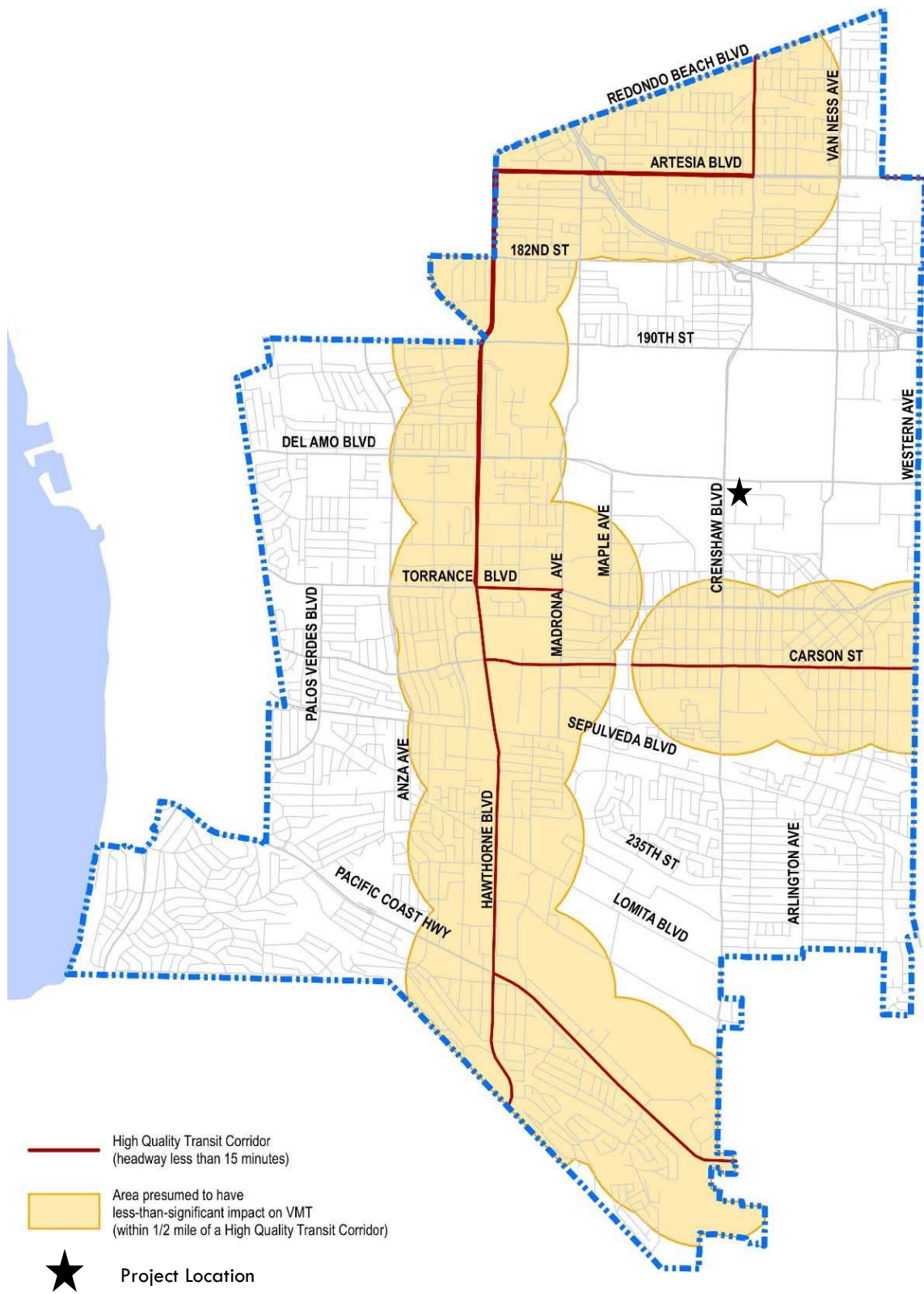


Table 1: Project Trip Generation

Land Use	Units	AM Peak Hour			PM Peak Hour				
		Daily	In	Out	Total	In	Out	Total	
Trip Rates									
770 - Business Park ¹	TSF	12.44	1.15	0.20	1.35	0.32	0.90	1.22	
140 - Manufacturing ²	TSF	4.75	0.52	0.16	0.68	0.23	0.51	0.74	
150 - Warehouse ³	TSF	1.71	0.13	0.04	0.17	0.05	0.13	0.18	
Existing Project Trip Generation									
Existing Business Park ¹	69.288 TSF	862	80	14	94	22	63	85	
Total Existing Trip Generation		862	80	14	94	22	63	85	
Proposed Project Trip Generation									
West Building		79.609	TSF						
Proposed Manufacturing ²	23.883	TSF	113	12	4	16	5	13	18
Vehicle Mix⁴		Percent							
Passenger Vehicles		90.50%	102	11	4	15	5	11	16
2-Axle Trucks		1.59%	2	0	0	0	0	0	0
3-Axle Trucks		1.97%	2	0	0	0	0	1	1
4+-Axle Trucks		5.94%	7	1	0	1	0	1	1
		100%	113	12	4	16	5	13	18
Proposed Warehouse ³	55.726	TSF	95	7	2	9	3	7	10
Vehicle Mix⁵		Percent							
Passenger Vehicles		64.90%	62	5	1	6	2	5	7
2-Axle Trucks		5.86%	6	0	0	0	0	0	0
3-Axle Trucks		7.27%	7	0	1	1	0	0	0
4+-Axle Trucks		21.94%	21	2	0	2	1	2	3
		100%	95	7	2	9	3	7	10
East Building		64.324	TSF						
Proposed Manufacturing ²	19.297	TSF	92	10	3	13	4	10	14
Vehicle Mix⁴		Percent							
Passenger Vehicles		90.50%	83	9	3	12	4	9	13
2-Axle Trucks		1.59%	1	0	0	0	0	0	0
3-Axle Trucks		1.97%	2	0	0	0	0	0	0
4+-Axle Trucks		5.94%	5	1	0	1	0	1	1
		100%	91	10	3	13	4	10	14
Proposed Warehouse ³	45.027	TSF	77	6	2	8	2	6	8
Vehicle Mix⁵		Percent							
Passenger Vehicles		64.90%	50	4	1	5	1	4	5
2-Axle Trucks		5.86%	5	0	0	0	0	0	0
3-Axle Trucks		7.27%	6	1	0	1	0	1	1
4+-Axle Trucks		21.94%	17	1	1	2	1	1	2
		100%	78	6	2	8	2	6	8
Total New Trip Generation			377	35	11	46	14	36	50
Total New Passenger Vehicle Trip Generation			297	29	9	38	12	29	41
Net New Trip Generation			-485	-45	-3	-48	-8	-27	-35
Net New Passenger Vehicle Trip Generation			-565	-51	-5	-56	-10	-34	-44

TSF = Thousand Square Feet

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

² Trip rates from the Institute of Transportation Engineers, Trip Generation Manual, 11th Edition, 2021. Land Use Code 140 - Manufacturing.

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

⁴ Passenger Vehicle and Truck Rate from ITE Land Use 140 - Manufacturing. Note that Daily Truck Rates were used for analysis. Truck Rates were normalized using truck splits from SQAMD Warehouse Truck Trip Study, July 17, 2014. Without Cold Storage.

⁵ Passenger Vehicle and Truck Rate from ITE Land Use 150 - Warehouse. Note that Daily Truck Rates were used for analysis. Truck Rates were normalized using truck splits from SQAMD Warehouse Truck Trip Study, July 17, 2014. Without Cold Storage.

* The table might contain minor rounding errors due to multiple rates and/or percentages being applied. Priority was placed on the total trips and total PCE trips. The minor rounding errors would not impact the overall analysis.