5.12 TRANSPORTATION

This section of the DEIR evaluates the potential for implementation of the Solana Residential Development Project to result in transportation and traffic impacts in the City of Torrance and the communities surrounding the proposed project site. The traffic impact analysis evaluates the baseline and future operating conditions at eighteen (18) baseline intersections and two (2) baseline roadway segments within the project vicinity as well as future operating conditions for two (2) project driveways.

It also estimates the trip generation potential of the proposed project and superimposes the project-related traffic volumes on the circulation system as it currently exists. In addition, the analysis forecasts cumulative (near-term) operating conditions, based both on approved and reasonably foreseeable future projects and growth projections conditions, and where necessary, identifies appropriate intersection improvements/mitigation measures. The analysis in this section is based in part on the following technical report(s):

Traffic Impact Study, Solana Torrance, Torrance, California. KHR Associates, February 28, 2019.

A complete copy of this study is in the technical appendices to this DEIR (Appendix J).

One hundred-fifty-eight comments relating to transportation and traffic were received in response to the Initial Study (IS)/Notice of Preparation (NOP) circulated for the proposed project. The concerns were related to the increase in traffic from the proposed project on arterial and local roadways, potential roadway hazards from the project's driveways along Hawthorne Boulevard and Via Valmonte, and construction related traffic impacts. The potential impacts of the proposed project's construction and operational traffic have been analyzed in this section.

Bicycle facilities, sidewalks, and public transit are addressed in the Initial Study (Appendix A to this DEIR) and are not addressed below.

5.12.1 Environmental Setting

5.12.1.1 BASELINE ROADWAY NETWORK

The baseline roadway network is described below. Study area intersections and roadways are mapped on Figure 5.12-1, *Traffic Study Area.*

Regional Access

Regional access to the project site is provided via the Pacific Coast Highway (SR-1), San Diego Freeway (I-405) and the Harbor (I-110) Freeway. The Pacific Coast Highway, located north of the project site, is a major state highway running along most of the Pacific coastline of California and is a designated Major Arterial within the City of Torrance. The I-405 Freeway, located north of the project site, is a major highway that extends throughout Orange and Los Angeles County and runs in a northwest-southeast orientation through the City of Torrance. The I-110 Freeway, located east of the project site, is a major highway in Los Angeles County that runs in a north-south direction, connecting San Pedro and the Port of Los Angeles with Downtown Los Angeles and Pasadena.

Local Street Network

The principal local network of streets serving the project site are Via Valmonte and Hawthorne Boulevard. The following discussion provides a brief description of these key area streets.

Hawthorne Boulevard: (SR-107) runs in a primarily north to south direction from Century Boulevard to Palos Verdes Drive, respectively. Hawthorne Boulevard is classified as a Principal Arterial and is generally an eight-lane divided roadway with a raised median. Adjacent to the project site, Hawthorne Boulevard is six lanes, divided. SR-107 extends from SR-1 north to the I-405 Freeway in the City of Lawndale. North of the Pacific Coast Highway, SR-107 is under the jurisdiction of Caltrans.

Via Valmonte is a Collector street providing access to the residential neighborhood adjacent to the development site. Trending in an east to west direction, terminating at Hawthorne Boulevard to the east and Paseo Del Campo to the west, Via Valmonte consists of two lanes, undivided.

Pacific Coast Highway (SR-1) is a major state highway running along most of the Pacific coastline of California. Within the City of Torrance, Pacific Coast Highway is designated a Major Arterial, tending in an east-west direction with six lanes, divided. Throughout the City, SR-1 is under the jurisdiction of Caltrans.

Rolling Hills Road is a four-lane undivided roadway

244th Street is a two-lane local street

Newton Street is a two-lane local street

Via Valmonte is a two-lane local street

Whiffle Tree Lane is a two-lane local street

Fallenleaf Drive is a two-lane local street

Crenshaw Boulevard between SR-1 and Rolling Hills Road is a six-lane divided arterial roadway

Anza Avenue is a four-lane divided roadway

Vista Montana is four lanes with a two-way median turn lane

Palos Verdes Drive North is a two-lane divided roadway in most of the study area

Calle Mayor is two lanes with a two-way median turn lane west of SR-1, and four lanes with a median turn lane east of SR-1.

Madison Street south of SR-1 is a two-lane local street.

Study Roadway Segments

The TIS also analyzed the operation on two roadway segments: Hawthorne Boulevard south of Via Valmonte; and Via Valmonte west of Hawthorne Boulevard.

Study Intersections

Key study intersections are described below in Table 5.12-1, *Baseline Intersections*, were selected based on the location in relation to the vicinity of the project and whether potential significant project-related traffic would pass through such intersections.

Table 5.12-1 Baseline Intersections

Intersection	Jurisdiction	Traffic Control
Hawthorne Blvd/Pacific Coast Hwy	Caltrans	Signalized
Hawthorne Blvd/244th Street	Torrance	Signalized
Hawthorne Blvd/Newton Street	Torrance	Signalized
Hawthorne Blvd/Via Valmonte	Torrance	Signalized
Hawthorne Blvd/Rolling Hills Road	Torrance	Signalized
Whiffletree Lane/Rolling Hills Road	Torrance	Signalized
Fallenleaf Drive/Rolling Hills Road	Torrance	Signalized
Crenshaw Blvd/Rolling Hills Road	Torrance	Signalized
Crenshaw Blvd/Pacific Coast Hwy	Caltrans	Signalized
Anza Avenue/Vista Montana & Pacific Coast Hwy	Caltrans	Signalized
Via Valmonte & Palos Verdes Dr. N	Palos Verdes Estates	All-Way Stop
Hawthorne Blvd/Palos Verdes Dr. N	Rolling Hills Estates	Signalized
Crenshaw Blvd/Palos Verdes Dr. N	Rolling Hills Estates	Signalized
Rolling Hills Rd/Palos Verdes Dr. N	Rolling Hills Estates/Rolling Hills	Signalized
Newton Street & Calle Mayor	Torrance	Cross-Street Stop
Vista Montana & Newton Street	Torrance	All-Way Stop
Madison Street & Newton Street	Torrance	All-Way Stop
Pacific Coast Hwy/Calle Mayor	Caltrans	Signalized

Source: KHR 2019

5.12.1.2 BASELINE TRAFFIC CONDITIONS

Baseline (2017) traffic conditions at fourteen intersections were modeled based on traffic counts taken in 2016 and adding a one percent annual ambient growth factor for one year. The A.M. and P.M. peak-period intersection turning movement counts were collected by National Data Surveying and Services (NDS) in the month of April 2016 on a Wednesday. Additionally, four intersections were added to the traffic study in 2017 and traffic counts at those intersections were taken in 2017.

Intersection Level of Service (LOS) Methodology

In conformance with the City of Torrance requirements, baseline A.M. and P.M. peak hour operating conditions for the key study intersections were evaluated using the Intersection Capacity Utilization (ICU) Methodology and Highway Capacity Manual (HCM) Methodology. Each method yields a Level of Service (LOS), which is a qualitative measure of traffic conditions with a six-point scale ranging from level of service (LOS) "A", indicating free-flowing traffic with no delays, to LOS "F", indicating severe congestion with long delays. The ICU methodology describes the LOS of signalized intersections based on a Volume-to-Capacity Ratio (V/C Ratio). The six qualitative categories of LOS for signalized intersections using the ICU method, defined by the City of Torrance, are shown in Table 5.12-2, *LOS Criteria for Signalized Intersections (ICU Methodology)*.

Table 5.12-2 LOS Criteria for Signalized Intersections (ICU Methodology)

LOS	Volume to Capacity Ratio	Definitions
A	≤0.60	**Excellent operation.** All approaches to the intersection appear quite open, turning movements are easily made, and nearly all drivers find freedom of operation.
B	>0.60≤0.70	**Very good operation.** Many drivers begin to feel somewhat restricted within platoons of vehicles. This represents stable flow. An approach to an intersection may occasionally be fully utilized and traffic queues start to form.
C	>0.70≤0.80	**Good operation.** Occasionally backups may develop behind turning vehicles. Most drivers feel somewhat restricted.
D	>0.80≤0.90	**Fair operation.** There are no long-standing traffic queues. This level is typically associated with design practice for peak periods.
E	>0.90≤1.00	**Poor operation.** Some long-standing vehicular queues develop on critical approaches.
F	>1.00	**Forced flow.** Represents jammed conditions. Backups from locations downstream or on the cross street may restrict or prevent movements of vehicles out of the intersection approach lanes. Potential for stop-and-go-type traffic flow.

Source: KHR 2019

HCM methodology is used to determine the operating LOS at an intersection based on stopped delays experienced by drivers at signalized and unsignalized intersections (Torrance 2010). The LOS criteria for unsignalized and signalized intersection using the HCM method is shown in Table 5.12-3, *LOS Criteria for Signalized Intersections (HCM Methodology)*. Caltrans evaluates intersection impacts using the HCM method and four of the eighteen studied intersections that are located along Pacific Coast Highway are under the jurisdiction of Caltrans.

Table 5.12-3 LOS Criteria for Unsignalized and Signalized Intersections (HCM Methodology)

Level of Service (LOS)	Intersection Delay (in Seconds)	
	Unsignalized Intersection	Signalized Intersection
A	≤10.0	≤10.0
B	>10.0≤15.0	>10.0≤20.0
C	>15.0≤25.0	>20.0≤35.0
D	>25.0≤35.0	>35.0≤55.0
E	>35.0≤50.0	>55.0≤80.0
F	>50.0	>80.0

Source: KHR 2019

Baseline Intersection Level of Service

In order to effectively estimate future traffic conditions at the project completion, an ambient growth factor was included in the evaluations per the recommendation of the City of Torrance. Volumes recorded in 2016 for study roadways and intersections were increased by one percent of Annual Growth to estimate current 2017 conditions.

ICU Method of Analysis

Table 5.12-4, *Baseline (2017) Intersection Level of Service (ICU Method of Analysis)* summarizes the baseline peak hour service level calculations for the baseline key signalized study intersections based on ICU method of

analysis. As shown, most intersections operate within acceptable levels of LOS "D" or better during both A.M. and P.M. peak commute hours on a "typical" weekday with the exception of the following:

- Crenshaw Blvd/Pacific Coast Hwy — LOS "E" in the P.M. peak hour
- Crenshaw Blvd/Palos Verdes Dr. N. — LOS "E" in the A.M. peak hour
- Rolling Hills Rd/Palos Verdes Dr. N. — LOS "F" in both A.M. and P.M. peak hours
- Pacific Coast Hwy/Calle Mayor — LOS "E" in the A.M. / LOS "F" in the P.M. peak hour

Table 5.12-4 Baseline (2017) Intersection Level of Service (ICU Method of Analysis)

Intersection/Segment	A.M. Peak Hour		P.M. Peak Hour	
	V/C Ratio	LOS[1]	V/C Ratio	LOS[1]
Intersections				
Hawthorne Blvd/Pacific Coast Hwy[A]	0.878	D	0.870	D
Hawthorne Blvd/244th Street[B]	0.504	A	0.521	A
Hawthorne Blvd/Newton Street[B]	0.627	B	0.773	C
Hawthorne Blvd/Via Valmonte[B]	0.576	A	0.633	B
Hawthorne Blvd/Rolling Hills Road[B]	0.658	B	0.606	B
Whiffletree Lane/Rolling Hills Road[B]	0.393	A	0.399	A
Fallenleaf Drive/Rolling Hills Road[B]	0.318	A	0.288	A
Crenshaw Blvd/Rolling Hills Road[B]	0.780	C	0.840	D
Crenshaw Blvd/Pacific Coast Hwy[A]	0.882	D	0.980	**E**
Anza Avenue/Vista Montana & Pacific Coast Hwy[A]	0.779	C	0.843	D
Hawthorne Blvd/Palos Verdes Dr. N[D]	0.764	C	0.709	C
Crenshaw Blvd/Palos Verdes Dr. N[D]	0.939	**E**	0.884	D
Rolling Hills Rd/Palos Verdes Dr. N[D/E]	1.398	**F**	1.401	**F**
Pacific Coast Hwy/Calle Mayor[A]	0.974	**E**	1.028	**F**

Under the Jurisdiction of [A] Caltrans; [B] Torrance; [C] Palos Verdes Estates; [D] Rolling Hills Estates; [E] Rolling Hills
[1] LOS in **boldface** are unacceptable (LOS E or worse)
Source: KHR 2019

HCM Method of Analysis

Table 5.12-5, *Baseline (2017) Intersection Level of Service (HCM Method of Analysis)* summarizes the baseline peak hour service level calculations for the key study intersections based on HCM method of analysis. As shown, the key intersections currently operate at an acceptable LOS during both A.M. and P.M. peak commute hours of a "typical" weekday with the exception of the following:

- Hawthorne Blvd/Pacific Coast Hwy — LOS "E" in the P.M. peak hour
- Crenshaw Blvd/Rolling Hills Road. — LOS "E" in the A.M. peak hour
- Crenshaw Blvd/Pacific Coast Hwy — LOS "E" in the P.M. peak hour
- Anza Avenue/Vista Montana/Pacific Coast Hwy — LOS "E" in the A.M. peak hour
- Hawthorne Blvd/Palos Verdes Dr. N. — LOS "E" in the A.M. peak hour
- Crenshaw Blvd/Palos Verdes Dr. N. — LOS "F" in both A.M. and P.M. peak hours
- Rolling Hills Rd/Palos Verdes Dr. N. — LOS "F" in both A.M. and P.M. peak hours
- Pacific Coast Hwy/Calle Mayor — LOS "F" in both A.M. and P.M. peak hours

Table 5.12-5 Baseline (2017) Intersection Level of Service (HCM Method of Analysis)

Intersection/Segment	AM Peak Hour		PM Peak Hour	
	Delay	LOS1	Delay	LOS1
Intersections				
Hawthorne Blvd/Pacific Coast Hwy[A]	50.3	D	67.2	**E**
Hawthorne Blvd/244th Street[B]	21.8	C	21.9	C
Hawthorne Blvd/Newton Street[B]	10.9	B	12.6	B
Hawthorne Blvd/Via Valmonte[B]	11.6	B	15.0	B
Hawthorne Blvd/Rolling Hills Road[B]	17.5	B	13.7	B
Whiffletree Lane/Rolling Hills Road[B]	5.4	A	4.2	A
Fallenleaf Drive/Rolling Hills Road[B]	6.3	A	4.9	A
Crenshaw Blvd/Rolling Hills Road[B]	67.3	**E**	46.2	D
Crenshaw Blvd/Pacific Coast Hwy[A]	48.5	D	59.7	**E**
Anza Avenue/Vista Montana & Pacific Coast Hwy[A]	72.3	**E**	44.8	D
Via Valmonte & Palos Verdes Dr, N[C]	29.7	D	26.7	D
Hawthorne Blvd/Palos Verdes Dr. N[D]	55.3	**E**	31.2	C
Crenshaw Blvd/Palos Verdes Dr. N[D]	103.5	**F**	104.1	**F**
Rolling Hills Rd/Palos Verdes Dr. N[D/E]	292.0	**F**	257.2	**F**
Newton Street & Calle Mayor[B]	14.0	B	11.8	B
Vista Montana & Newton Street[B]	15.0	C	11.1	B
Madison Street & Newton Street[B]	8.7	A	9.2	A
Pacific Coast Hwy/Calle Mayor[A]	112.1	**F**	179.9	**F**

Under the Jurisdiction of [A] Caltrans; [B] Torrance; [C] Palos Verdes Estates; [D] Rolling Hills Estates; [E] Rolling Hills
[1] LOS in **boldface** are unacceptable (LOS E or worse)
Source: KHR 2019

Baseline Roadway Daily Traffic Volumes

The daily traffic volume on the segment of Hawthorne Boulevard south of Via Valmonte in 2017 was 36,253 with a LOS of B; while the volume on Via Valmonte west of Hawthorne Boulevard was 6,437 with a LOS of A. Both of the study roadway segments currently operate at an acceptable level of service.

Figure 5.12-1 - Traffic Study Area
5. Environmental Analysis

ID	Roadway Segments
A	Hawthorne Boulevard south of Via Valmonte
B	Via Valmonte west of Hawthorne Boulevard
No.	**Intersection**
1	Hawthorne Boulevard & Pacific Coast Highway
2	Hawthorne Boulevard & 244th Street
3	Hawthorne Boulevard & Newton Street
4	Hawthorne Boulevard & Via Valmonte
5	Hawthorne Boulevard & Rolling Hills Road
6	Rolling Hills Road & Whiffle Tree Lane
7	Rolling Hills Road & Fallenleaf Drive
8	Crenshaw Boulevard & Rolling Hills Road
9	Crenshaw Boulevard & Pacific Coast Highway
10	Anza Avenue/Vista Montana & Pacific Coast Highway
11	Via Valmonte & Palos Verdes Drive North
12	Hawthorne Boulevard & Palos Verdes Drive North
13	Crenshaw Boulevard & Palos Verdes Drive North
14	Rolling Hills Road & Palos Verdes Drive North
15	Newton Street & Calle Mayor
16	Vista Montana & Newton Street
17	Madison Street & Newton Street
18	Pacific Coast Highway & Calle Mayor

Source: KHR, 2018

5. Environmental Analysis
TRANSPORTATION

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5.12.1.3 REGULATORY FRAMEWORK

The regulatory framework discusses the regulatory agencies/policies that affect transportation in the City of Torrance and the project study area. Major policy documents impacting the transportation system in the City of Torrance include laws at the state level and planning documents at a regional level.

State

Sustainable Communities and Climate Protection Act

The Sustainable Communities and Climate Protection Act (SB 375) was signed into law on September 30, 2008. The SB 375 regulation provides incentives for cities and developers to bring housing and jobs closer together and to improve public transit. The goal behind SB 375 is to reduce automobile commuting trips and length of automobile trips, thus helping to meet the statewide targets for reducing greenhouse gas (GHG) emissions set by the California Global Warming Solutions Act of 2006 (AB 32). SB 375 requires each metropolitan planning organization to add a broader vision for growth, called a "sustainable communities strategy" (SCS), to its transportation plan. The SCS must lay out a plan to meet the region's transportation, housing, economic, and environmental needs in a way that enables the area to lower greenhouse gas emissions. The SCS should integrate transportation, land use, and housing policies to plan for achievement of the regional emissions target.

Senate Bill 743

On September 27, 2013, Senate Bill (SB) 743 was signed into law. The legislature found that with the adoption of SB 375, the state had signaled its commitment to encourage land use and transportation planning decisions and investments that reduce vehicle miles traveled (VMT) and thereby contribute to the reduction of greenhouse gas emissions, as required by AB 32.

SB 743 started a process that could fundamentally change transportation impact analysis as part of CEQA compliance. These changes will include the elimination of auto delay, LOS, and similar measures of vehicular capacity or traffic congestion as the basis for determining whether a project will have a significant impact on the environment in many parts of California (if not statewide). As part of the new CEQA Guidelines, the new criteria "shall promote the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses" (Public Resources Code § 21099[b][1]). On December 2018, the Governor's Office of Planning and Research released updates to the CEQA guidelines for the implementation of SB743. While the updated CEQA Guidelines went into effect in December 2018, the update provides agencies with an opt-in period until July 1, 2020 to adopt the new VMT-based criteria under the updated CEQA Guidelines. Due to the opt-in period, automobile delay based on level of service can still be utilized to determine the traffic impacts of a proposed project.

California Department of Transportation

The California Department of Transportation (Caltrans), plans and maintains the state routes, highways, and freeways in California. Caltrans is the owner/operator of Hawthorne Boulevard north of Pacific Coast Highway, as well as Pacific Coast Highway throughout the City, and has developed transportation impact analysis guidelines for use when assessing state facilities, "Guide for the Preparation of Traffic Impact Studies".

The intent of the guide is to provide a starting point and a consistent basis for how Caltrans evaluates federal, state, and local agency development projects and their potential traffic impacts to state highway facilities.

Regional

Southern California Association of Governments

In accordance with statutory requirements of SB 375, the Southern California Association of Governments adopted the 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) to provide a regional transportation plan for six counties in Southern California: Orange, San Bernardino, Riverside, Los Angeles, Ventura, and Imperial. The primary goal of the regional transportation plan is to increase mobility for the region. With recent legislation, this plan also encompasses sustainability as a key principle in future development. Current and recent transportation plan goals generally focus on balanced transportation and land use planning that:

Maximize mobility and accessibility for all people and goods in the region.

Ensure travel safety and reliability for all people and goods in the region.

Preserve and ensure a sustainable regional transportation system.

Maximize the productivity of our transportation system.

Protect the environment and health of residents by improving air quality and encouraging active transportation (e.g., bicycling and walking).

Encourage land use and growth patterns that facilitate transit and active transportation.

Los Angeles County General Plan Mobility Element

The Los Angeles County General Plan Mobility Element identifies the goals and policies related to circulation and mobility within the County. The Department of Public Works uses LOS to analyze the congestions of roadways in the transportation system. Generally, LOS "D" is the desired minimum level of service. However, it can be determined on a case by case basis. For instance, in order to further General Plan goals and policies such as to protect environmentally sensitive areas, promote active transportation, and encourage infill development, a LOS worse than "D" could be considered acceptable.

Congestion Management Program

Los Angeles County Metropolitan Transportation Authority (Metro) is required by state law to prepare and update the Congestion Management Program (CMP). In October 2010, Metro adopted the update CMP which is intended to address the impact of local growth on regional transportation system. When preparing for a project's EIR, local jurisdictions are responsible for assessing the impacts of new development on the CMP system to ensure that impacts to the route will be considered. As identified in the Plan, the acceptable LOS standard in the County is LOS "E", except when the base year LOS is worse than "E". In such cases, the base year LOS is the standard (Metro 2010). CMP highways that are located in the study area include the Pacific Coast Highway.

It should also be noted that on June 28, 2018, the Board of Directors of Metro approved initiating the process for Los Angeles County and all its local jurisdictions to opt out of the California Congestion Management Program, as authorized under the California Government Code Sections 65082 et seq. (Metro 2018). The City of Torrance has not opted out of the Congestion Management Program.

Local

City of Torrance Circulation and Infrastructure Element

The City of Torrance Circulation and Infrastructure Element, adopted on April 6, 2010, describes the goals and policies needed to attain circulation objectives and introduces other techniques that can be used to improve traffic flow. The City's target for intersection operation is a LOS "D" or better. The LOS "D" objective for the roadway system design reflects the City's desire to maintain stable traffic flow, realizing that peak-hour congestion may occur at locations near freeways or other locations with unusual traffic characteristics due to regional traffic flow. As discussed in the General Plan, policies pertaining to improving circulation are addressed in multiple chapters of the General Plan. Objectives and associated policies are presented below (Torrance 2010).

- **OBJECTIVE CI.3:** To maintain a Level of Service D or better at intersections within the City
  - **Policy CI-3.1:** Pursue trip reduction and transportation systems management measures to reduce and limit congestion at intersections and along streets throughout the City.
  - **Policy CI.3.2:** Monitor the capacity of critical intersections throughout the City.
  - **Policy CI.3.3:** Interconnect traffic signals and perform similar Intelligent Transportation System (ITS) improvements to maximize the smooth progression of traffic flows and to minimize delay and stop-and-go conditions.
  - **Policy CI.3.5:** Encourage site and building design that reduces automobile trips and parking space demand.
  - **Policy CI.3.6:** Implement the near-term and long-range recommended improvements set forth in this Element.
- **OBJECTIVE CI.4:** To provide a safe, efficient, and comprehensive circulation system that serves local needs, meets forecasted demands, and reduces traffic impacts on neighborhoods
  - **Policy CI-4.1:** Protect residential neighborhoods from cut-through traffic by enhancing the capacity of Arterials and Collectors, improving signage, guiding traffic away from residential areas, and employing appropriate traffic-calming methods based on identified needs.
  - **Policy CI.4.6:** Require the equitable sharing between the public and private sector of the full fair-share cost of improvements needed to mitigate traffic impacts.
  - **Policy CI.4.7:** Consider all alternatives for increasing street capacity before widening is pursued for streets that immediately serve residential neighborhoods.

5.12.2 Thresholds of Significance

In accordance with State CEQA Guidelines, the effects of a project are evaluated to determine whether they would result in a significant adverse impact on the environment. An EIR is required to focus on these effects

and offer mitigation measures to reduce or avoid any significant impacts. The criteria used to determine the significance of impacts may vary depending on the nature of the project. According to Appendix G of the State CEQA Guidelines Update approved in December 2018, the proposed project would have a significant impact related to transportation if it would:

T-1 Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities.

T-2 Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b).

T-3 Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).

T-4 Result in inadequate emergency access.

5.12.2.1 STANDARD OF SIGNIFICANCE THRESHOLD

The project study area includes intersections under the jurisdictions of the City of Torrance, Rolling Hills Estates, Palos Verdes Estates, and the California Department of Transportation (Caltrans). As discussed above, the ICU methodology is used for City of Torrance signalized intersections and the HCM methodology is used for unsignalized intersections and those under the jurisdiction of Caltrans. Under the ICU method of analysis, the City of Torrance defines a significant traffic impact as when project traffic increases volume/capacity by .02 or more and the resulting LOS is E or worse. Under the HCM analysis, neither the City of Torrance's regulation nor Caltrans's regulation provides a specific threshold of significance. However, under the City' General Plan, the City's target for intersection operation is a LOS "D" or better. Therefore, for purposes of this DEIR, the City considers impacts to be significant if a) a decrease in LOS occurs, changing the designation from acceptable (LOS >D) to unacceptable (LOS <E), or b) any decrease in LOS occurs if an intersection is already operating at unacceptable operating conditions.

The City of Rolling Hills Estates considers a significant impact as a change in LOS from C to D, or D to E, or a change in volume/capacity by .02 or more within LOS C or D, or a change of .01 within LOS E or F. This EIR utilizes the City of Rolling Hills Estates threshold for intersections under its jurisdiction.

The City of Palos Verdes Estates determines that a project's transportation impact at an intersection shall be deemed "significant" in accordance with the following:

- Existing LOS = C an increase equal or greater than 4.0 seconds
- Existing LOS = D an increase equal or greater than 3.0 seconds
- Existing LOS = E an increase equal or greater than 2.0 seconds
- Existing LOS = F an increase equal or greater than 2.0 seconds

This EIR utilizes the City of Palos Verdes Estate threshold for intersections under its jurisdiction.

For, the purposes of the this DEIR, the City considers impacts to roadway segments to be significant if a) a decrease in LOS occurs, changing the designation of any roadway segment that accesses the project site from

acceptable (LOS >D) to unacceptable (LOS <E), or b) any decrease in LOS occurs if a roadway is already operating at unacceptable operating conditions.

5.12.3 Environmental Impacts

5.12.3.1 METHODOLOGY

Project Trip Generation

Trip generation refers to the number of trip ends generated by a given development or land use over a specific time period, usually per day and during morning and late afternoon peak hours of traffic demand (typically 7:00 to 9:00 A.M. and 4:00 to 6:00 P.M.). For the proposed project, the land use code that applies to the project is 211 "Multifamily Housing (Mid-Rise)" which is defined in the Tenth Edition of *Trip Generation*, published by the Institute of Transportation Engineers (ITE), as buildings containing three to ten floors in a General Urban/Suburban setting. Table 5.12-6, *Project Trip Generation Rates and Forecast*, shows the project's forecasted daily and peak hour traffic volumes for a typical weekday. As shown, the proposed project is estimated to generate 1,349 daily trips: 89 trips in the A.M. peak hour, and 109 trips in the P.M. peak hour.

Table 5.12-6 Project Trip Generation Rates and Forecast

Land Use Code: Multi-Family Residential (221)						
Trip Generation Factors	**Size (DU[1])**	**Trip Rate[2]**	**Inbound/ Outbound[2]**	**Inbound Trip Ends[3]**	**Outbound Trip Ends[3]**	**Total Trip Ends[3]**
Average Daily Trips on Weekday	248	5.44/DU	50%/50%	674	675	1,349
Weekday A.M. Peak Hour of Adjacent Street Traffic	248	0.36/DU	26%/74%	23	66	89
Weekday P.M. Peak Hour of Adjacent Street Traffic	248	0.44/DU	61%/39%	66	43	109

Source: KHR 2019; *Trip Generation*, 10th Edition, Institute of Transportation Engineers (ITE), Washington, D.C. (2017).
1 DU=Dwelling Units
2 Trip Generation Rate & Percentage of Inbound/Outbound Trips Per *Trip Generation Manual*, 10th Ed., Institute of Transportation Engineers
3 All Trip Ends Rounded to Nearest Whole Unit.

Trip Distribution

In addition to trip generation, travel demand forecasting also includes trip distribution and trip assignment. Both were formulated with input from the City of Torrance Public Works Department, Traffic and Transportation Division. Trip distribution signifies by general direction (i.e., east, west, north, and south) the percentage of all traffic generated to and from a given project site based on travel routes taken by those residing, working and traveling within the regional proximity of the project site. The project trip distribution is shown on Figure 5.12-2, *Project Trip Distribution*. As shown, the majority of the trips (80 percent) are oriented toward the north, where the most employment centers, commercial businesses, and schools are located while the remaining 20 percent are oriented to the south along Hawthorne Boulevard where access exists to Crenshaw Boulevard, Palos Verdes Drive, and Western Avenue.

Trip Assignment

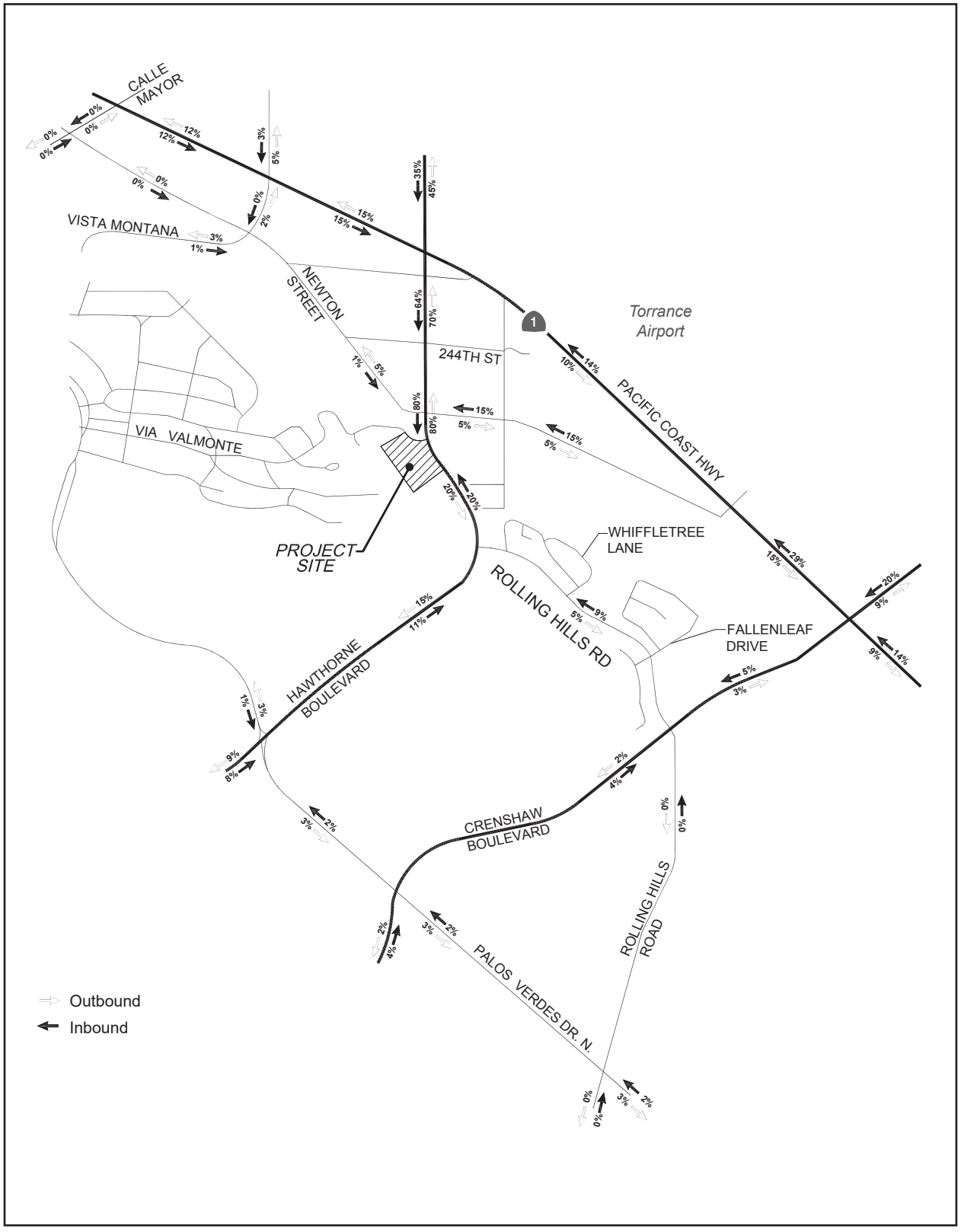
Trip assignment identifies the particular routes used by traffic generated to and from a given project site and is used to predict traffic patterns generated from a given project site. The project trip assignments were made based on the trip distribution described above as well as other physical and operational constraints which affect

the roadways and intersections, such as direction and time of day, roadway and intersection capacities, and intersection traffic controls. Details about the peak hour, project-only intersection turning movement volumes and daily traffic volumes on the two roadway segments can be found in the TIS included as Appendix J to this DEIR.

Proposed Site Access

Proposed site access was analyzed by reviewing the project site plan, the proposed off-site improvements, and other constraints and opportunities for access to the site. The proposed site access would be via two driveways. The main entrance would be accessed via a right-in-right-out only driveway from Hawthorne Boulevard, approximately 185 feet south of the intersection of Hawthorne Boulevard and Via Valmonte. The second exit-only driveway would be a right-turn only driveway along Via Valmonte, approximately 180 feet west of the same intersection. Raised traffic movement barriers would be installed at the Via Valmonte driveway to allow emergency vehicles to access the property from Via Valmonte. The two proposed driveways are shown on Figure 3-6, *Site Plan*, in Chapter 3 *(Project Description)* of this EIR.

Figure 5.12-2 - Project Trip Distribution
5. Environmental Analysis



Source: KHR, 2018

5. Environmental Analysis
TRANSPORTATION

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Proposed Roadway Improvements

The proposed project includes the following proposed roadway improvements, as shown on Figure 3-12, *Proposed Roadway Improvements*:

- **On Via Valmonte**: Widening of the eastbound Via Valmonte approach to its intersection with Hawthorne Boulevard to provide an additional travel lane for optional left turn, through movement, or right turns. This improvement will include a new roadway surface, curb, gutter, sidewalk, and parkway on the south side of Via Valmonte, a new crosswalk across Via Valmonte at Hawthorne Boulevard, and new accessible ramps on the northwest and southwest corners of the intersection, as well as modifications to the traffic signal at the Via Valmonte/Hawthorne Boulevard intersection.

- **On Hawthorne Boulevard**: Widening and restriping a traffic lane to add a southbound right turn lane between Via Valmonte and the proposed driveway for vehicles to decelerate and enter the project site. This improvement will include a new sidewalk contiguous to the street curb, a landscaped parkway between the sidewalk and the project property line wall, and modifications to the traffic signal at the Via Valmonte/Hawthorne Boulevard intersection.

- **At the intersection of Hawthorne Boulevard and Via Valmonte**: "Splitting" the eastbound and westbound movements (designating the eastbound movement as the lead) and adding a left turn arrow to the eastbound approach on Via Valmonte. This will allow all eastbound vehicles (far greater in volume than the westbound) to clear first, followed by the westbound movement from the shopping center driveway.

Capital Improvements

The City is currently undertaking capital improvements to the intersection of Hawthorne Boulevard and Pacific Coast Highway, and the intersections of Pacific Coast Highway and Vista Montana Anza Avenue. These projects are summarized below:

- **Pacific Coast Highway/Hawthorne Boulevard**: This City project will increase the capacity of the intersection of Hawthorne Blvd and Pacific Coast Highway by providing three through lanes, dual left turn lanes, and dedicated right-turn lanes in all four directions. This intersection is owned and operated by the State of California Department of Transportation (Caltrans) requiring all work to comply with Caltrans standards and permit conditions. Right-of-way has been acquired from several properties adjacent to the project to make way for the enhancements. Relocation of utilities poles is also required and will be performed by Southern California Edison Company. Construction is anticipated in Fall 2019.

- **Pacific Coast Highway/Vista Montana Anza Avenue**: The City project is intended to upgrade the intersection by providing dual dedicated left-turn (LT) lanes from southbound Anza Avenue and northbound Vista Montana onto PCH. On Anza Avenue, just north of PCH, the southbound roadway will be reconfigured to convert 4 lanes [1 through (TH), 1 shared LT/TH, 1 LT, and 1 right-turn (RT)] to 5 lanes (2 TH, 2 LT, and 1 RT). On Vista Montana, just south of PCH, the west sidewalk will be narrowed, and the northbound roadway will be widened and reconfigured to convert 3 lanes (1 TH, 1 LT, and 1 shared RT/TH) to 4 lanes (1 TH, 2 LT, 1 shared RT/TH). By providing the additional designated left-turn lanes, it will improve intersection circulation. The project will also lengthen the northbound left-turn lanes to

accommodate additional vehicles. The proposed improvements will eliminate the back up of vehicles along the Anza Avenue and Vista Montana segments. In addition, it would allow better circulation of the local streets in the vicinity of the intersection. Construction is anticipated to begin Fall 2019.

Scenarios Analyzed

As part of the traffic impact study (Appendix J), the following scenarios were analyzed in addition to baseline conditions:

- **Baseline (2017) With-Project Traffic Conditions:** Estimated by adding project-generated traffic volumes to baseline traffic conditions.
- **Ambient (2019) Without-Project Traffic Conditions**: Estimated using baseline (2017) conditions and a one percent annual ambient growth factor for two years (2017 to 2019).
- **Ambient (2019) With-Project Traffic Conditions**: Estimated by adding project-generated traffic volumes to ambient (2019) without-project traffic volumes.
- **Cumulative (2019) Without-Project Traffic Conditions**: Estimated by adding traffic generation from the cumulative developments to ambient (2019) without-project traffic conditions
- **Cumulative (2019) With-Project Traffic Conditions**: Estimated by adding traffic generation from the cumulative developments to ambient (2019) with-project traffic conditions.

Baseline (2017) Without-Project Traffic Conditions are described above in Section 5.12.1.2, *Baseline Traffic Conditions*. Baseline levels of service for the study intersections are shown in Table 5.12-4 based on the ICU method of analysis, while the level of service based on the HCM method of analysis are shown in Table 5.12-5. The Ambient (2019) Without-Project Traffic Conditions and Cumulative (2019) Without-Project Traffic Conditions are presented below.

Ambient (2019) Without-Project Traffic Conditions

Intersection Capacity Analysis (ICU Method)

Table 5.12-7, *Ambient (2019) Without-Project Intersection Operation, ICU Method,* summarizes the ambient (2019) peak hour service level calculations for the studied signalized intersections using the ICU method. As shown, intersections operate at an acceptable LOS, with the exception of the following:

- Crenshaw Blvd/Pacific Coast Hwy — LOS "E" in the P.M. peak hour
- Crenshaw Blvd/Palos Verdes Dr. N — LOS "E" in both A.M. and P.M. peak hours
- Rolling Hills Road/Palos Verdes Dr. N — LOS "F" in both A.M. and P.M. peak hours
- Pacific Coast Hwy/Calle Mayor — LOS "E" in the A.M / LOS "F" in the P.M. peak hour

Table 5.12-7 Ambient (2019) Without-Project Intersection Operation, ICU Method

Intersection/Segment	A.M. Peak Hour		P.M. Peak Hour	
	V/ C Ratio	LOS[1]	V/C Ratio	LOS[1]
Intersections				
Hawthorne Blvd/Pacific Coast Hwy[A]*	0.809	C	0.700	C
Hawthorne Blvd/244th Street[B]	0.512	A	0.529	A
Hawthorne Blvd/Newton Street[B]	0.638	B	0.786	C
Hawthorne Blvd/Via Valmonte[B]	0.586	A	0.643	B
Hawthorne Blvd/Rolling Hills Road[B]	0.670	B	0.617	B
Whiffletree Lane/Rolling Hills Road[B]	0.397	A	0.404	A
Fallenleaf Drive/Rolling Hills Road[B]	0.323	A	0.292	A
Crenshaw Blvd/Rolling Hills Road[B]	0.795	C	0.854	D
Crenshaw Blvd/Pacific Coast Hwy[A]	0.897	D	0.998	**E**
Anza Avenue/Vista Montana & Pacific Coast Hwy[A]*	0.794	C	0.858	C
Hawthorne Blvd/Palos Verdes Dr. N[D]	0.778	C	0.721	C
Crenshaw Blvd/Palos Verdes Dr. N[D]	0.956	**E**	0.900	**E**
Rolling Hills Rd/Palos Verdes Dr. N[D/E]	1.424	**F**	1.429	**F**
Pacific Coast Hwy/Calle Mayor[A]	0.992	**E**	1.047	**F**

Under the Jurisdiction of [A] Caltrans; [B] Torrance; [C] Palos Verdes Estates; [D] Rolling Hills Estates; [E] Rolling Hills
[1] LOS in **boldface** are unacceptable (LOS E or worse)
* includes planned capital improvement for that intersection
Source: KHR 2019

Intersection Capacity Analysis (HCM Method)

Table 5.12-8, *Ambient (2019) Without-Project Intersection Operation, HCM Method*, summarizes the ambient peak hour service level calculations for the studied signalized and stop controlled intersections using the HCM method. As shown, most intersections operate at an acceptable LOS, with the exception of the following:

- Hawthorne Blvd/Pacific Coast Hwy LOS "E" in the P.M. peak hour
- Crenshaw Blvd/Rolling Hills Road LOS "E" in the A.M. peak hour
- Crenshaw Blvd/Pacific Coast Hwy LOS "E" in the P.M. peak hour
- Hawthorne Blvd/Palos Verdes Dr. N. LOS "E" in the A.M. peak hour
- Crenshaw Blvd/Palos Verdes Dr. N. LOS "F" in both A.M. and P.M. peak hours
- Rolling Hills Road/Palos Verdes Dr. N. LOS "F" in both A.M. and P.M. peak hours
- Pacific Coast Hwy/Calle Mayor LOS "F" in both A.M. and P.M. peak hours

Table 5.12-8 Ambient (2019) Without-Project Intersection Operation, HCM Method

Intersection/Segment	A.M. Peak Hour		P.M. Peak Hour	
	Delay[1]	LOS[2]	Delay[1]	LOS[2]
Intersections				
Hawthorne Blvd/Pacific Coast Hwy[A]*	47.5*	D	64.4*	**E**
Hawthorne Blvd/244th Street[B]	24.1	C	24.1	C
Hawthorne Blvd/Newton Street[B]	11.0	B	12.9	B
Hawthorne Blvd/Via Valmonte[B]	11.9	B	10.7	B
Hawthorne Blvd/Rolling Hills Road[B]	18.5	B	13.6	B
Whiffletree Lane/Rolling Hills Road[B]	5.5	A	4.2	A
Fallenleaf Drive/Rolling Hills Road[B]	6.4	A	4.9	A
Crenshaw Blvd/Rolling Hills Road[B]	72.4	**E**	47.4	D
Crenshaw Blvd/Pacific Coast Hwy[A]	50.9	D	63.9	**E**
Anza Avenue/Vista Montana & Pacific Coast Hwy[A]*	49.1*	D	37.1*	D
Via Valmonte & Palos Verdes Dr. N[C] **(ST)**	34.4	D	29.7	D
Hawthorne Blvd/Palos Verdes Dr. N[D]	56.8	**E**	31.8	C
Crenshaw Blvd/Palos Verdes Dr. N[D]	107.1	**F**	107.7	**F**
Rolling Hills Rd/Palos Verdes Dr. N[D/E]	303.3	**F**	269.3	**F**
Newton Street & Calle Mayor[B] **(ST)**	14.5	B	12.1	B
Vista Montana & Newton Street[B] **(ST)**	15.6	C	11.3	B
Madison Street & Newton Street[B] **(ST)**	8.7	A	9.3	A
Pacific Coast Hwy/Calle Mayor[A]	119.6	**F**	190.1	**F**

Under the Jurisdiction of [A] Caltrans; [B] Torrance; [C] Palos Verdes Estates; [D] Rolling Hills Estates; [E] Rolling Hills
ST = stop-sign-controlled intersection
* includes planned capital improvement for that intersection
[1] Average Intersection Delay for All Movements. Note: Overall Average Delay May Decrease Slightly with Added Traffic if the Added Volumes are within the Least Impacted Movements (per Conversation w/ McTrans Center, University of Florida – Authors of the HCM Software)
[2] LOS in **boldface** are unacceptable (LOS E or worse)
Source: KHR 2019

Cumulative (2019) Without-Project Traffic Conditions

Intersection Capacity Analysis (ICU Method)

Table 5.12-9, *Cumulative (2019) Without-Project Intersection Operation, ICU Method*, summarizes the cumulative peak hour service level calculations for the studied signalized intersections using the ICU method. As shown, most intersections operate at an acceptable LOS, with the exception of the following:

- Crenshaw Blvd/Pacific Coast Hwy — LOS "E" in A.M. / LOS "F" in the P.M. peak hour
- Crenshaw Blvd/Palos Verdes Dr. N. — LOS "E" in both A.M. and P.M. peak hours
- Rolling Hills Road/Palos Verdes Dr. N. — LOS "F" in both A.M. and P.M. peak hours
- Pacific Coast Hwy/Calle Mayor — LOS "F" in both A.M. and P.M. peak hours

Table 5.12-9 Cumulative (2019) Without-Project Intersection Operation, ICU Method

Intersection/Segment	A.M. Peak Hour		P.M. Peak Hour	
	V/C Ratio	LOS[1]	V/C Ratio	LOS[1]
Intersections				
Hawthorne Blvd/Pacific Coast Hwy[A]*	0.772	C	0.769	C
Hawthorne Blvd/244th Street[B]	0.530	A	0.549	A
Hawthorne Blvd/Newton Street[B]	0.647	B	0.809	D
Hawthorne Blvd/Via Valmonte[B]	0.522	A	0.609	B
Hawthorne Blvd/Rolling Hills Road[B]	0.684	B	0.628	B
Whiffletree Lane/Rolling Hills Road[B]	0.399	A	0.407	A
Fallenleaf Drive/Rolling Hills Road[B]	0.326	A	0.294	A
Crenshaw Blvd/Rolling Hills Road[B]	0.811	D	0.867	D
Crenshaw Blvd/Pacific Coast Hwy[A]	0.913	**E**	1.032	**F**
Anza Avenue/Vista Montana & Pacific Coast Hwy[A]*	0.772	C	0.727	C
Hawthorne Blvd/Palos Verdes Dr. N[D]	0.792	C	0.736	C
Crenshaw Blvd/Palos Verdes Dr. N[D]	0.961	**E**	0.913	**E**
Rolling Hills Rd/Palos Verdes Dr. N[D/E]	1.429	**F**	1.451	**F**
Pacific Coast Hwy/Calle Mayor[A]	0.998	**F**	1.059	**F**

Under the Jurisdiction of [A] Caltrans; [B] Torrance; [C] Palos Verdes Estates; [D] Rolling Hills Estates; [E] Rolling Hills
[1] LOS in **boldface** are unacceptable (LOS E or worse)
*Includes Planned Capital Improvements
Source: KHR 2019

Intersection Capacity Analysis (HCM Method)

Table 5.12-10, *Cumulative (2019) Without-Project Intersection Operation, HCM Method*, summarizes the cumulative peak hour service level calculations for the studied signalized and stop-controlled intersections using the HCM method. As shown, most intersections operate at an acceptable LOS, with the exception of the following:

- Hawthorne Blvd/Pacific Coast Hwy LOS "E" in the A.M. / LOS "F" in the P.M. peak hour
- Crenshaw Blvd/Rolling Hills Road LOS "F" in the A.M. peak hour
- Crenshaw Blvd/Pacific Coast Hwy LOS "E" in the P.M. peak hour
- Hawthorne Blvd/Palos Verdes Dr. N. LOS "E" in the A.M. peak hour
- Crenshaw Blvd/Palos Verdes Dr. N. LOS "F" in both A.M. and P.M. peak hours
- Rolling Hills Road/Palos Verdes Dr. N. LOS "F" in both A.M. and P.M. peak hours
- Pacific Coast Hwy/Calle Mayor LOS "F" in both A.M. and P.M. peak hours

Table 5.12-10 Cumulative (2019) Without-Project Intersection Operation, HCM Method

Intersection/Segment	A.M. Peak Hour		P.M. Peak Hour	
	Delay[1]	LOS[2]	Delay[1]	LOS[2]
Intersections				
Hawthorne Blvd/Pacific Coast Hwy[A]	55.2	**E**	81.3	**F**
Hawthorne Blvd/244th Street[B]	37.0	D	30.7	C
Hawthorne Blvd/Newton Street[B]	11.3	B	13.5	B
Hawthorne Blvd/Via Valmonte[B]	14.5	B	12.0	B
Hawthorne Blvd/Rolling Hills Road[B]	20.0	C	13.5	B
Whiffletree Lane/Rolling Hills Road[B]	5.5	A	4.3	A
Fallenleaf Drive/Rolling Hills Road[B]	6.5	A	5.0	A
Crenshaw Blvd/Rolling Hills Road[B]	82.8	**F**	50.9	D
Crenshaw Blvd/Pacific Coast Hwy[A]	54.4	D	69.5	**E**
Anza Avenue/Vista Montana & Pacific Coast Hwy[A]	52.2	D	37.9	D
Via Valmonte & Palos Verdes Dr. N[C] **ST**	34.3	D	29.7	D
Hawthorne Blvd/Palos Verdes Dr. N[D]	58.6	**E**	33.6	C
Crenshaw Blvd/Palos Verdes Dr. N[D]	107.0	**F**	112.6	**F**
Rolling Hills Rd/Palos Verdes Dr. N[D/E]	302.0	**F**	278.1	**F**
Newton Street & Calle Mayor[B] **ST**	14.6	B	12.1	B
Vista Montana & Newton Street[B] **ST**	16.0	C	11.4	B
Madison Street & Newton Street[B] **ST**	8.8	A	9.0	A
Pacific Coast Hwy/Calle Mayor[A]	120.3	**F**	189.0	**F**

Under the Jurisdiction of [A] Caltrans; [B] Torrance; [C] Palos Verdes Estates; [D] Rolling Hills Estates; [E] Rolling Hills
ST = stop-sign-controlled intersection
[1] Average Intersection Delay for All Movements. Note: Overall Average Delay May Decrease Slightly with Added Traffic if the Added Volumes are within the Least Impacted Movements (per Conversation w/ McTrans Center, University of Florida – Authors of the HCM Software)
[2] LOS in **boldface** are unacceptable (LOS E or worse)
Source: KHR 2019

Cumulative Developments

Cumulative developments are development projects that are within the regional area of the project site that are either in the design or advanced planning stages or are under construction. The City of Torrance's Community Development Department in coordination with Traffic Engineering Division of Public Works provided a list of known development projects within the vicinity of this project and directed the applicant to include additional projects or contact adjacent cities based on comments received from the public. All projects included in the analysis were identified by the cities of Torrance, Rancho Palos Verdes, Rolling Hills Estates, Lomita, and Redondo Beach. The locations of these projects are shown on Figure 5.12-3, *Cumulative Projects Map*. Trip generation estimated for each of the projects is shown below in Table 5.12-11, *Cumulative Projects Estimated Trip Generation*.

Table 5.12-11 Cumulative Developments Estimated Trip Generation

Address and City	Land Use	Size and Units	Trip Generation		
			Daily	A.M. Peak Hour	P.M. Peak Hour
3210 Sepulveda Boulevard, Torrance	Assisted Living	130 beds	356	18	27
Near 3405 West Carson Street, Torrance	Independent Living/Assisted Living/Hotel	360 units	1,253	29	40
21515 Hawthorne Boulevard, Torrance	Commercial (Health Club & Gym/ Restaurant)	45,000 SF/ 12,000 SF	4,238	126	365
23104 Hawthorne Boulevard, Torrance	Day Care	10,023 SF	800	12	132
23550 Hawthorne Boulevard, Torrance	Restaurant/ Bank	1,500 SF/ 2,000 SF	1,387	109	123
24000 Garnier Street, Torrance	Medical Office	36,866 SF	1,332	91	137
2640 Lomita Boulevard, Torrance	Commercial (Costco w/ Car Wash/Gas) Replacing Prev. Costco + Medical Off.	13,500 SF net (Costco) + 75,000 SF medical office	3,696	201	286
24444 Hawthorne Boulevard, Torrance	Office/Residential	2,700 SF/ 8 DU	51	10	11
5601 Crestridge Road, Rancho Palos Verdes	Senior Condominiums	60 DU	480	33	44
927 Deep Valley Drive, Rolling Hills Estates	Condominiums/ Commercial (Replace Medical, Office, Retail Use)	75 DU 2,000 SF	-42	-14	-17
Near 67 Peninsula Center, Rolling Hills Estates	Commercial	16,000 SF	2,296	196	219
627 Deep Valley Drive, Rolling Hills Estates	Condominiums/ Commercial	58 DU 5,810 SF	636	13	51
250th & Narbonne, Lomita	Condominiums/ Commercial/ Industrial	20 DU 2,035 SF 4,281 SF	202	15	21
24516 Narbonne Avenue, Lomita	Townhomes/ Retail	22 DU 3,700 SF	128	10	11
25114 Narbonne Avenue, Lomita	Townhomes/ Retail	11 DU 3,500 SF	219	10	15
1730-1734 Pacific Coast Highway, Lomita	Commercial/ Retail	850 SF 180 SF	204	48	9
Mixed-Use Development, Torrance	Mixed-Use	11 DU 2,525 SF	85	15	16
337-341 Calle Miramar Redondo Beach	Mixed-Use	52 DU 10,108 SF	406	5	-36
1700 S Pacific Coast Highway, Redondo Beach	Mixed-Use	Not available	1,347	99	122
Total			**19,074**	**1,142**	**1,576**

Source: KHR 2019
DU= Dwelling Unit
SF= Square Feet

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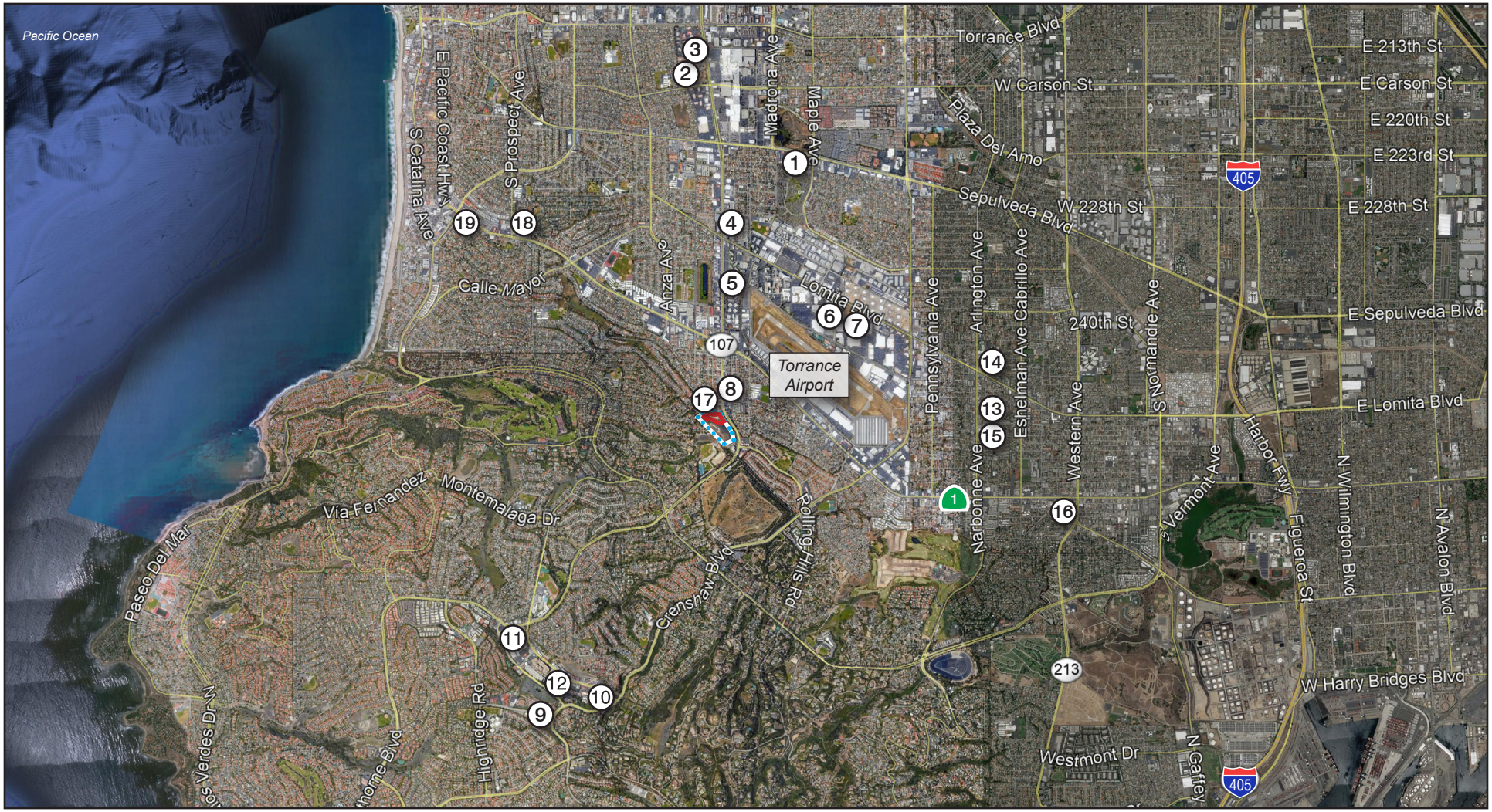
Analysis of Future Traffic Conditions

Future traffic conditions (Baseline with-project, Ambient with and without-project, and Cumulative with and without-project) were modeled using both ICU and HCM methods separately. All 18 intersections were analyzed using the HCM method; the 14 signalized intersections were also analyzed using the ICU method. Caltrans evaluates intersection impacts using the HCM method, and unsignalized stop-controlled intersections are analyzed using the HCM method. For the purposes of calculating the estimates under with-project and cumulative traffic conditions, capital improvements slated for Pacific Coast Highway/Hawthorne Boulevard and Pacific Coast Highway/Vista Montana intersections were included. Additionally, under all with-project conditions, the Hawthorne Boulevard/Via Valmonte intersection analysis includes additional capacity provided by the additional left turn lane under proposed roadway improvements.

Figure 5.12-3 - Cumulative Developments Map

5. Environmental Analysis



Project Site | Development Area | (1) Development Projects (19)

0 1
Scale (Miles)

Source: KHR, 2018, Google Earth Pro, 2019

5. Environmental Analysis
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5.12.3.2 IMPACT ANALYSIS

The following impact analysis addresses thresholds of significance for which the Initial Study disclosed potentially significant impacts. The applicable thresholds are identified in brackets after the impact statement.

Impact 5.12-1: Project-related trip generation would not conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities. [Threshold T-1]

Impact Analysis: The TIS evaluated project-related traffic impacts on the City's circulation system utilizing both methodologies: ICU and HCM. As discussed, potential project-related traffic impacts were evaluated for five scenarios to determine potential project-related traffic impacts: (1) Baseline (2017) with-project Traffic Conditions; (2) Ambient (2019) without-project Traffic Conditions; (3) Ambient (2019) with-project Traffic Conditions; (4) Cumulative (2019) without-project Traffic Conditions; and (5) Cumulative (2019) with-project Traffic Conditions.

Baseline (2017) With-Project Traffic Conditions

Intersection Capacity Analysis (ICU Method)

Table 5.12-12, *Baseline With and Without-Project Impact Summary, ICU Method*, summarizes the baseline with-project peak hour service level with the comparison to baseline peak hour service level calculations for the studied signalized intersections using the ICU method. As shown, under both the Baseline (2017) and the Baseline (2017) With-Project scenario, most intersections operate at an acceptable LOS, with the exception of the following:

- Crenshaw Blvd/Pacific Coast Hwy LOS "E" in the P.M. peak hour
- Crenshaw Blvd/Palos Verdes Dr. N LOS "E" in the A.M. peak hour
- Rolling Hills Road/Palos Verdes Dr. N. LOS "F" in both A.M. and P.M. peak hours
- Pacific Coast Hwy/Calle Mayor LOS "E" in the A.M / LOS "F" in the P.M. peak hour

Table 5.12-12 Baseline With and Without-Project Impact Summary, ICU Method

	Baseline (2017) without project				Baseline (2017) with project				Change		
	A.M.		P.M.		A.M.		P.M.		A.M.	P.M.	
Intersections	V/C Ratio	LOS[1]	V/C Ratio	LOS[1]	V/C Ratio	LOS[1]	V/C Ratio	LOS[1]	V/C Ratio	V/C Ratio	Significance
Hawthorne Blvd/Pacific Coast Hwy[A]	0.878	D	0.870	D	0.886	D	0.878	D	0.008	0.008	No
Hawthorne Blvd/244th Street[B]	0.504	A	0.521	A	0.514	A	0.528	A	0.01	0.007	No
Hawthorne Blvd/Newton Street[B]	0.627	B	0.773	C	0.640	B	0.794	C	0.013	0.021	No
Hawthorne Blvd/Via Valmonte[B]*	0.576	A	0.633	B	0.521*	A	0.609*	B	0.055	0.024	No
Hawthorne Blvd/Rolling Hills Road[B]	0.658	B	0.606	B	0.660	B	0.609	B	0.002	0.003	No
Whiffletree Lane/Rolling Hills Road[B]	0.393	A	0.399	A	0.394	A	0.402	A	0.001	0.003	No
Fallenleaf Drive/Rolling Hills Road[B]	0.318	A	0.288	A	0.318	A	0.290	A	0	0.002	No
Crenshaw Blvd/Rolling Hills Road[B]	0.780	C	0.840	D	0.782	C	0.846	D	0.002	0.006	No
Crenshaw Blvd/Pacific Coast Hwy[A]	0.882	D	0.980	**E**	0.897	D	0.986	**E**	0.015	0.006	No
Anza Avenue/Vista Montana & Pacific Coast Hwy[A]	0.779	C	0.843	D	0.783	C	0.847	D	0.004	0.004	No
Hawthorne Blvd/Palos Verdes Dr. N[D]	0.764	C	0.709	C	0.766	C	0.712	C	0.002	0.003	No
Crenshaw Blvd/Palos Verdes Dr. N[D]	0.939	**E**	0.884	D	0.940	**E**	0.885	D	0.001	0.001	No
Rolling Hills Rd/Palos Verdes Dr. N[D/E]	1.398	**F**	1.401	**F**	1.399	**F**	1.402	**F**	0.001	0.001	No
Pacific Coast Hwy/Calle Mayor[A]	0.974	**E**	1.028	**F**	0.976	**E**	1.030	**F**	0.002	0.002	No

Under the Jurisdiction of [A] Caltrans; [B] Torrance; [C] Palos Verdes Estates; [D] Rolling Hills Estates; [E] Rolling Hills
* Includes Project Related Improvements
[1]LOS in **boldface** are unacceptable (LOS E or worse)
Source: KHR 2019

As shown in Table 5.12-12, the Baseline (2017) With-Project scenario under the ICU method does not increase volume/capacity by .02 or more and have a resulting LOS of E or worse at any study intersection within the City of Torrance, nor does the project result in a significant impact under Caltrans, the City of Rolling Hills Estate or Palos Verdes Estates at their respective intersections. Therefore, project impacts under this scenario are considered less than significant.

Intersection Capacity Analysis (HCM Method)

Table 5.12-13, *Baseline With and Without-Project Impact Summary, HCM Method*, summarizes the baseline with-project peak hour service level with the comparison to baseline peak hour service level calculations for the studied signalized and stop-controlled intersections using the HCM method. As shown, under both the Baseline (2017) and the Baseline (2017) With-Project scenario, most intersections operate at an acceptable LOS, with the exception of the following:

- Hawthorne Blvd/Pacific Coast Hwy — LOS "E" in the P.M. peak hour
- Crenshaw Blvd/Rolling Hills Road — LOS "E" in the A.M. peak hour
- Crenshaw Blvd/Pacific Coast Hwy — LOS "E" in the P.M. peak hour
- Anza Avenue/Vista Mtn & Pacific Coast Hwy — LOS "E" in the A.M. peak hour
- Hawthorne Blvd/Palos Verdes Dr. N. — LOS "E" in the A.M. peak hour
- Crenshaw Blvd/Palos Verdes Dr. N. — LOS "F" in all conditions
- Rolling Hills Road/Palos Verdes Dr. N. — LOS "F" in all conditions
- Pacific Coast Hwy/Calle Mayor — LOS "F" in all conditions

Table 5.12-13 Baseline With and Without-Project Impact Summary, HCM Method

	Baseline (2017) without project				Baseline (2017) with project				Change		
	A.M.		P.M.		A.M.		P.M.		A.M.	P.M.	
Intersections	Delay[1]	LOS[2]	Delay[1]	LOS[2]	Delay[1]	LOS[1]	Delay[1]	LOS[2]	Delay	Delay	Significance
Hawthorne Blvd/Pacific Coast Hwy[A]	50.3	D	67.2	**E**	52.5	D	70.5	**E**	2.2	3.3	No
Hawthorne Blvd/244th Street[B]	21.8	C	21.9	C	26.3	C	24.8	C	4.5	2.9	No
Hawthorne Blvd/Newton Street[B]	10.9	B	12.6	B	11.1	B	13.3	B	0.2	0.7	No
Hawthorne Blvd/Via Valmonte[B]	11.6	B	15.0	B	14.3	B	18.7	B	2.7	3.7	No
Hawthorne Blvd/Rolling Hills Road[B]	17.5	B	13.7	B	17.7	B	13.7	B	0.2	0	No
Whiffletree Lane/Rolling Hills Road[B]	5.4	A	4.2	A	5.4	A	4.2	A	0	0	No
Fallenleaf Drive/Rolling Hills Road[B]	6.3	A	4.9	A	6.3	A	4.9	A	0	0	No
Crenshaw Blvd/Rolling Hills Road[B]	67.3	**E**	46.2	D	68.5	**E**	46.5	D	1.2	0.3	No

Table 5.12-13 Baseline With and Without-Project Impact Summary, HCM Method

	Baseline (2017) without project				Baseline (2017) with project				Change		
	A.M.		P.M.		A.M.		P.M.		A.M.	P.M.	
Intersections	Delay[1]	LOS[2]	Delay[1]	LOS[2]	Delay[1]	LOS[1]	Delay[1]	LOS[2]	Delay	Delay	Significance
Crenshaw Blvd/Pacific Coast Hwy[A]	48.5	D	59.7	**E**	49.4	D	60.8	**E**	0.9	1.1	No
Anza Avenue/Vista Montana & Pacific Coast Hwy[A]	72.3	**E**	44.8	D	76.9	**E**	45.6	D	4.6	0.8	No
Via Valmonte & Palos Verdes Dr. N[C]	29.7	D	26.7	D	29.8	D	26.8	D	0.1	0.1	No
Hawthorne Blvd/Palos Verdes Dr. N[D]	55.3	**E**	31.2	C	56.1	**E**	31.6	C	0.8	0.4	No
Crenshaw Blvd/Palos Verdes Dr. N[D]	103.5	**F**	104.1	**F**	104.3	**F**	104.7	**F**	0.8	0.6	No
Rolling Hills Rd/Palos Verdes Dr. N[D/E]	292.0	**F**	257.2	**F**	294.0	**F**	260.2	**F**	2	3	No
Newton Street & Calle Mayor[B]	14.0	B	11.8	B	14.0	B	11.8	B	0	0	No
Vista Montana & Newton Street[B]	15.0	B	11.1	B	15.1	C	11.1	B	0.1	0	No
Madison Street & Newton Street[B]	8.7	A	9.2	A	8.7	A	9.2	A	0	0	No
Pacific Coast Hwy/Calle Mayor[A]	112.1	**F**	179.9	**F**	113.4	**F**	181.5	**F**	1.3	1.6	No

Under the Jurisdiction of [A] Caltrans; [B] Torrance; [C] Palos Verdes Estates; [D] Rolling Hills Estates; [E] Rolling Hills
[1] Average Intersection Delay for All Movements. Note: Overall Average Delay May Decrease Slightly with Added Traffic if the Added Volumes are within the Least Impacted Movements (per Conversation w/ McTrans Center, University of Florida – Authors of the HCM Software)
[2] LOS in boldface are unacceptable (LOS E or worse)
Source: KHR 2019

As shown in Table 5.12-13, the Baseline (2017) With-Project scenario under the HCM method does not result in a decrease from acceptable to unacceptable LOS or result in any change of operation conditions if already operating at unacceptable operation conditions at any study intersection under the thresholds established for the Cities of Torrance, Rolling Hills Estates and Palos Verde Estates, or Caltrans. Therefore, project impacts under this scenario are considered less than significant.

Ambient (2019) With-Project Traffic Conditions

Intersection Capacity Analysis (ICU Method)

Table 5.12-14, *Ambient (2019) With and Without-Project Impact Summary, ICU Method*, summarizes the ambient (2019) with-project peak hour service level with the comparison to ambient (2019) without-project peak hour service level calculations for the studied signalized intersections using the ICU method. As shown, under both the Ambient Without (2019) and the Ambient (2019) With-Project scenario, most intersections operate at an acceptable LOS, with the exception of the following:

- Crenshaw Blvd/Pacific Coast Hwy LOS "E" in the P.M. peak hour
- Crenshaw Blvd/Palos Verdes Dr. N LOS "E" in the A.M. peak hour

- Rolling Hills Road/Palos Verdes Dr. N. LOS "F" in both A.M. and P.M. peak hours
- Pacific Coast Hwy/Calle Mayor LOS "E" in the A.M / LOS "F" in the P.M. peak hour

Table 5.12-14 Ambient (2019) With and Without-Project Impact Summary, ICU Method

	Ambient (2019) without project				Ambient (2019) with project				Change		
	A.M.		P.M.		A.M.		P.M.		A.M.	P.M.	
Intersections	V/C Ratio	LOS	V/C Ratio	LOS	V/C Ratio	LOS	V/C Ratio	LOS	V/C Ratio	V/C Ratio	Significance
Hawthorne Blvd/Pacific Coast Hwy[A]*	0.809	C	0.700	C	0.817	D	0.761	C	0.008	0.061	No
Hawthorne Blvd/244th Street[B]	0.512	A	0.529	A	0.522	A	0.536	A	0.01	0.007	No
Hawthorne Blvd/Newton Street[B]	0.638	B	0.786	C	0.652	B	0.807	D	0.014	0.021	No
Hawthorne Blvd/Via Valmonte[B]	0.586	A	0.643	B	0.529**	A	0.619**	B	0.057	0.024	No
Hawthorne Blvd/Rolling Hills Road[B]	0.670	B	0.617	B	0.672	B	0.620	B	0.002	0.003	No
Whiffletree Lane/Rolling Hills Road[B]	0.397	A	0.404	A	0.399	A	0.407	A	0.002	0.003	No
Fallenleaf Drive/Rolling Hills Road[B]	0.323	A	0.292	A	0.324	A	0.294	A	0.001	0.002	No
Crenshaw Blvd/Rolling Hills Road[B]	0.795	C	0.854	D	0.796	C	0.854	D	0.001	0	No
Crenshaw Blvd/Pacific Coast Hwy[A]	0.897	D	0.998	**E**	0.899	D	0.998	**E**	0.002	0	No
Anza Avenue/Vista Montana & Pacific Coast Hwy[A]*	0.794	C	0.858	C	0.798	C	0.862	C	0.004	0.004	No
Hawthorne Blvd/Palos[D] Verdes Dr. N	0.778	C	0.721	C	0.779	C	0.724	C	0.001	0.003	No
Crenshaw Blvd/Palos Verdes Dr. N[D]	0.956	**E**	0.900	**E**	0.957	**E**	0.900	**E**	0.001	0	No
Rolling Hills Rd/Palos Verdes Dr. N[D/E]	1.424	**F**	1.429	**F**	1.427	**F**	1.429	**F**	0.003	0	No
Pacific Coast Hwy/Calle Mayor[A]	0.992	**E**	1.047	**F**	0.994	**E**	1.048	**F**	0.002	0.001	No

Under the Jurisdiction of [A] Caltrans; [B] Torrance; [C] Palos Verdes Estates; [D] Rolling Hills Estates; [E] Rolling Hills
* Includes Planned Capital Improvements
**Includes Project Related Improvements
[1]LOS in boldface are unacceptable (LOS E or worse)
Source: KHR 2019

As shown in Table 5.12-14, the Ambient (2019) With-Project scenario under the ICU method does not increase volume/capacity by .02 or more and have a resulting LOS of E or worse at any study intersection within the City of Torrance, nor does the project result in a significant impact under Caltrans, the City of Rolling Hills Estate or Palos Verdes Estates at their respective intersections. Therefore, project impacts under this scenario are considered less than significant.

Intersection Capacity Analysis (HCM Method)

Table 5.12-15, *Ambient (2019) With and Without-Project Impact Summary, HCM Method*, summarizes the baseline with-project peak hour service level with the comparison to baseline peak hour service level calculations for the studied signalized and stop-controlled intersections using the HCM method. As shown, under both the Ambient Without (2019) and the Ambient (2019) With-Project scenario, most intersections operate at an acceptable LOS, with the exception of the following:

- Hawthorne Blvd/Pacific Coast Hwy — LOS "E" in the P.M. peak hour
- Crenshaw Blvd/Rolling Hills Road — LOS "E" in the A.M. peak hour
- Crenshaw Blvd/Pacific Coast Hwy — LOS "E" in the P.M. peak hour
- Hawthorne Blvd/Palos Verdes Dr. N. — LOS "E" in the A.M. peak hour
- Crenshaw Blvd/Palos Verdes Dr. N. — LOS "F" in both A.M. and P.M. peak hours
- Rolling Hills Road/Palos Verdes Dr. N. — LOS "F" in both A.M. and P.M. peak hours
- Pacific Coast Hwy/Calle Mayor — LOS "F" in both A.M. and P.M. peak hours

Table 5.12-15 Ambient (2019) With and Without-Project Impact Summary, HCM Method

	Ambient (2017) without project				Ambient (2017) with project				Change		
	A.M.		P.M.		A.M.		P.M.		A.M.	P.M.	
Intersections	Delay[1]	LOS[2]	Delay[1]	LOS[2]	Delay[1]	LOS[2]	Delay[1]	LOS[2]	Delay	Delay	Significance
Hawthorne Blvd/Pacific Coast Hwy[A]*	47.5*	D	64.4*	**E**	49.8	D	71.4	**E**	2.3	7	No
Hawthorne Blvd/244th Street[B]	24.1	C	24.1	C	29.8	C	27.4	C	5.7	3.3	No
Hawthorne Blvd/Newton Street[B]	11.0	B	12.9	B	11.4	B	13.7	B	0.4	0.8	No
Hawthorne Blvd/Via Valmonte[B]	11.9	B	10.7	B	14.5	B	12.0	B	2.6	1.3	No
Hawthorne Blvd/Rolling Hills Road[B]	18.5	B	13.6	B	18.7	B	13.6	B	0.2	0	No
Whiffletree Lane/Rolling Hills Road[B]	5.5	A	4.2	A	5.4	A	4.3	A	0.1	0.1	No
Fallenleaf Drive/Rolling Hills Road[B]	6.4	A	4.9	A	6.4	A	4.9	A	0	0	No
Crenshaw Blvd/Rolling Hills Road[B]	72.4	**E**	47.4	D	73.7	**E**	47.8	D	1.3	0.4	No
Crenshaw Blvd/Pacific Coast Hwy[A]	50.9	D	63.9	**E**	52.1	D	65.1	**E**	1.2	1.2	No
Anza Avenue/Vista Montana & Pacific Coast Hwy[A]*	49.1*	D	37.1*	D	51.1*	D	37.6*	D	2	0.5	No

Table 5.12-15 Ambient (2019) With and Without-Project Impact Summary, HCM Method

	Ambient (2017) without project				Ambient (2017) with project				Change		
	A.M.		P.M.		A.M.		P.M.		A.M.	P.M.	
Intersections	Delay[1]	LOS[2]	Delay[1]	LOS[2]	Delay[1]	LOS[2]	Delay[1]	LOS[2]	Delay	Delay	Significance
Via Valmonte & Palos Verdes Dr. N[C]	34.4	D	29.7	D	34.4	D	30.2	D	0	0.5	No
Hawthorne Blvd/Palos Verdes Dr. N[D]	56.8	**E**	31.8	C	58.7	**E**	32.2	C	1.9	0.4	No
Crenshaw Blvd/Palos Verdes Dr. N[D]	107.1	**F**	107.7	**F**	108	**F**	108.3	**F**	0.9	0.6	No
Rolling Hills Rd/Palos Verdes Dr. N[D/E]	303.3	**F**	269.3	**F**	305.4	**F**	272.4	**F**	2.1	3.1	No
Newton Street & Calle Mayor[B]	14.5	B	12.1	B	14.5	B	12.1	B	0	0	No
Vista Montana & Newton Street[B]	15.6	C	11.3	B	15.8	C	11.3	B	0.2	0	No
Madison Street & Newton Street[B]	8.7	A	9.3	A	8.7	A	9.4	A	0	0.1	No
Pacific Coast Hwy/Calle Mayor[A]	119.6	**F**	190.1	**F**	120.9	**F**	191.7	**F**	1.3	1.6	No

Under the Jurisdiction of [A] Caltrans; [B] Torrance; [C] Palos Verdes Estates; [D] Rolling Hills Estates; [E] Rolling Hills
*Includes Planned Capital Improvements
[1] Average Intersection Delay for All Movements. Note: Overall Average Delay May Decrease Slightly with Added Traffic if the Added Volumes are within the Least Impacted Movements (per Conversation w/ McTrans Center, University of Florida – Authors of the HCM Software)
[2] LOS in boldface are unacceptable (LOS E or worse)
Source: KHR 2019

As shown in Table 5.12-15, the Ambient (2019) With-Project scenario under the HCM method does not result in a decrease from acceptable to unacceptable LOS or result in any change of operation conditions if already operating at unacceptable operation conditions at any study intersection. Therefore, project impacts under this scenario are considered less than significant.

Cumulative (2019) With-Project Traffic Conditions

Intersection Capacity Analysis (ICU Method)

Table 5.12-16, *Cumulative (2019) With and Without-Project Impact Summary, ICU Method*, summarizes the cumulative (2019) with-project peak hour service level with the comparison to cumulative (2019) without-project peak hour service level calculations for the studied signalized intersections using the ICU method. As shown, under both the Cumulative Without (2019) and the Cumulative (2019) With-Project scenario, most intersections operate at an acceptable LOS, with the exception of the following:

- Crenshaw Blvd/Pacific Coast Hwy — LOS "E" in the all peak hour for Cumulative Without-Project; LOS "E" in A.M./LOS "F" in P.M. for Cumulative With-Project
- Crenshaw Blvd/Palos Verdes Dr. N — LOS "E" in both A.M. and P.M. peak hours
- Rolling Hills Road/Palos Verdes Dr. N. — LOS "F" in both A.M. and P.M. peak hours
- Pacific Coast Hwy/Calle Mayor — LOS "F" in both A.M. and P.M. peak hours

Table 5.12-16 Cumulative (2019) With and Without-Project Impact Summary, ICU Method

	Cumulative (2019) without project				Cumulative (2019) with project				Change		
	A.M.		P.M.		A.M.		P.M.		A.M.	P.M.	
Intersections	V/C Ratio	LOS	V/C Ratio	LOS	V/C Ratio	LOS	V/C Ratio	LOS	V/C Ratio	V/C Ratio	Significance
Hawthorne Blvd/Pacific Coast Hwy[A]*	0.772	C	0.769	C	0.779	C	0.776	C	0.007	0.007	No
Hawthorne Blvd/244th Street[B]	0.530	A	0.549	A	0.540	A	0.556	A	0.01	0.007	No
Hawthorne Blvd/Newton Street[B]	0.647	B	0.809	D	0.660	B	0.830	D	0.013	0.021	No
Hawthorne Blvd/Via Valmonte[B]	0.522	A	0.609	B	0.540**	A	0.633**	B	0.018	0.024	No
Hawthorne Blvd/Rolling Hills Road[B]	0.684	B	0.628	B	0.686	B	0.631	B	0.002	0.003	No
Whiffletree Lane/Rolling Hills Road[B]	0.399	A	0.407	A	0.401	A	0.410	A	0.002	0.003	No
Fallenleaf Drive/Rolling Hills Road[B]	0.326	A	0.294	A	0.327	A	0.296	A	0.001	0.002	No
Crenshaw Blvd/Rolling Hills Road[B]	0.811	D	0.867	D	0.813	D	0.868	D	0.002	0.001	No
Crenshaw Blvd/Pacific Coast Hwy[A]	0.913	**E**	1.032	**F**	0.919	**E**	1.033	**F**	0.006	0.001	No
Anza Avenue/Vista Montana & Pacific Coast Hwy[A]*	0.772	C	0.727	C	0.776	C	0.780	C	0.004	0.053	No
Hawthorne Blvd/Palos Verdes Dr. N[D]	0.792	C	0.736	C	0.793	C	0.739	C	0.001	0.003	No
Crenshaw Blvd/Palos Verdes Dr. N[D]	0.961	**E**	0.913	**E**	0.962	**E**	0.914	**E**	0.001	0.001	No
Rolling Hills Rd/Palos Verdes Dr. N[D/E]	1.429	**F**	1.451	**F**	1.431	**F**	1.451	**F**	0.002	0	No
Pacific Coast Hwy/Calle Mayor[A]	0.998	**F**	1.059	**F**	1.000	**F**	1.061	**F**	0.002	0.002	No

Under the Jurisdiction of [A] Caltrans; [B] Torrance; [C] Palos Verdes Estates; [D] Rolling Hills Estates; [E] Rolling Hills
* Includes Planned Capital Improvements
**Includes Project Related Improvements
[1]LOS in boldface are unacceptable (LOS E or worse)
Source: KHR 2019

As shown in Table 5.12-16, the Cumulative (2019) With-Project scenario under the ICU method does not increase volume/capacity by .02 or more and have a resulting LOS of E or worse at any study intersection

within the City of Torrance, nor does the project result in a significant impact under Caltrans, the City of Rolling Hills Estate or Palos Verdes Estates at their respective intersections.

Intersection Capacity Analysis (HCM Method)

Table 5.12-17, *Cumulative (2019) With and Without-Project Impact Summary, HCM Method*, summarizes the baseline with-project peak hour service level with the comparison to baseline peak hour service level calculations for the studied signalized and stop-controlled intersections using the HCM method. As shown, under both the Cumulative Without (2019) and the Cumulative (2019) With Project scenario, most intersections operate at an acceptable LOS, with the exception of the following:

- Hawthorne Blvd/Pacific Coast Hwy — LOS "E" in the P.M. peak hour
- Crenshaw Blvd/Rolling Hills Road — LOS "E" in the A.M. peak hour
- Crenshaw Blvd/Pacific Coast Hwy — LOS "E" in the P.M. peak hour
- Hawthorne Blvd/Palos Verdes Dr. N. — LOS "E" in the A.M. peak hour
- Crenshaw Blvd/Palos Verdes Dr. N. — LOS "F" in both A.M. and P.M. peak hours
- Rolling Hills Road/Palos Verdes Dr. N. — LOS "F" in both A.M. and P.M. peak hours
- Pacific Coast Hwy/Calle Mayor — LOS "F" in both A.M. and P.M. peak hours

Table 5.12-17 Cumulative (2019) With and Without-Project Impact Summary, HCM Method

	Cumulative (2019) without project				Cumulative (2019) with project				Change		
	A.M.		P.M.		A.M.		P.M.		A.M.	P.M.	
Intersections	Delay[1]	LOS[2]	Delay[1]	LOS[2]	Delay[1]	LOS[2]	Delay[1]	LOS[2]	Delay	Delay	Significance
Hawthorne Blvd/Pacific Coast Hwy[A]*	55.2	**E**	81.3	**F**	56.2*	**E**	84.4*	**F**	1	3.1	No
Hawthorne Blvd/244th Street[A]	37.0	D	30.7	C	36.0	D	34.3	C	-1	3.6	No
Hawthorne Blvd/Newton Street[B]	11.3	B	13.5	B	11.6	B	14.4	B	0.3	0.9	No
Hawthorne Blvd/Via Valmonte[B]	14.5	B	12.0	B	14.7	B	12.3	B	0.2	0.3	No
Hawthorne Blvd/Rolling Hills Road[B]	20.0	C	13.5	B	20.2	C	13.5	B	0.2	0	No
Whiffletree Lane/Rolling Hills[B] Road	5.5	A	4.3	A	5.5	A	4.3	A	0	0	No
Fallenleaf Drive/Rolling Hills Road[B]	6.5	A	5.0	A	6.5	A	5.0	A	0	0	No
Crenshaw Blvd/Rolling Hills Road[B]	82.8	**F**	50.9	D	82.9	**F**	51.0	D	0.1	0.1	No
Crenshaw Blvd/Pacific Coast Hwy[A]	54.4	D	69.5	**E**	54.8	D	69.9	**E**	0.4	0.4	No
Anza Avenue/Vista Montana & Pacific Coast Hwy[A]*	52.2	D	37.9	D	53.2*	D	38.0*	D	1	0.1	No
Via Valmonte & Palos Verdes Dr. N[C]	34.3	D	29.7	D	34.4	**D**	30.2	C	.1	0.5	No
Hawthorne Blvd/Palos Verdes Dr. N[D]	58.6	**E**	33.6	C	59.1	**E**	33.9	C	0.5	0.3	No

Table 5.12-17 Cumulative (2019) With and Without-Project Impact Summary, HCM Method

	Cumulative (2019) without project				Cumulative (2019) with project				Change		
	A.M.		P.M.		A.M.		P.M.		A.M.	P.M.	
Intersections	Delay[1]	LOS[2]	Delay[1]	LOS[2]	Delay[1]	LOS[2]	Delay[1]	LOS[2]	Delay	Delay	Significance
Crenshaw Blvd/Palos Verdes Dr. N[D]	107.0	**F**	112.6	**F**	107	**F**	112.5	**F**	0	-0.1	No
Rolling Hills Rd/Palos Verdes Dr. N[D/E]	302.0	**F**	278.1	**F**	301.7	**F**	278.3	**F**	-0.3	0.2	No
Newton Street & Calle Mayor[B]	14.6	B	12.1	B	14.6	B	12.1	B	0	0	No
Vista Montana & Newton Street[B]	16.0	C	11.4	B	16.2	C	11.5	B	0.2	0.1	No
Madison Street & Newton Street[B]	8.8	A	9.0	A	8.8	A	9.6	A	0	0.6	No
Pacific Coast Hwy/Calle Mayor[A]	120.3	**F**	189.0	**F**	120.1	**F**	188.6	**F**	-0.2	-0.4	No

Under the Jurisdiction of [A] Caltrans; [B] Torrance; [C] Palos Verdes Estates; [D] Rolling Hills Estates; [E] Rolling Hills
*Includes Planned Capital Improvements
[1] Average Intersection Delay for All Movements. Note: Overall Average Delay May Decrease Slightly with Added Traffic if the Added Volumes are within the Least Impacted Movements (per Conversation w/ McTrans Center, University of Florida – Authors of the HCM Software)
[2] LOS in **boldface** are unacceptable (LOS E or worse)
Source: KHR 2019

As shown in Table 5.12-17, the Cumulative (2019) With-Project scenario under the HCM method does not result in a decrease from acceptable to unacceptable LOS or result in any change of operating conditions if already operating at unacceptable operation conditions at any study intersection under the thresholds established for the Cities of Torrance, Rolling Hills Estates and Palos Verde Estates, or Caltrans. Therefore, project impacts under this scenario are considered less than significant.

Project Impacts Summary

As shown in Tables 5.12-12, 5.12-14, and 5.12-16, the Baseline (2017), Ambient (2019) With-Project, and the Cumulative (2019) With and Without-Project Impact Summary, scenarios under the ICU method does not increase volume/capacity by .02 or more and have a resulting LOS of E or worse within the City of Torrance, nor does the project result in a significant impact under Caltrans, the City of Rolling Hills Estate or Palos Verdes Estates at their respective intersections. Therefore, all scenarios under ICU method are considered less than significant.

Additionally, as shown in Tables 5.12-13, 5.12-15, and 5.12-17, Baseline (2017), Ambient (2019) and Cumulative (2019) With-Project scenario under the HCM method does not decrease from acceptable to unacceptable LOS or result in any change of operation conditions if already operating at unacceptable operation conditions under the thresholds established for the Cities of Torrance, Rolling Hills Estates and Palos Verde Estates, or Caltrans. Therefore, all scenarios under HCM method are considered less than significant.

Roadway Segment Analysis

Table 5.12-18, *Roadway Segment Analysis*, summarizes the daily traffic volume roadway segment LOS results for the roadways that would allow access to the project site. As shown, the only change in roadway segment LOS is on Via Valmonte adjacent to the project site from LOS "A" to "B" under the cumulative with project traffic

conditions. Compared to the Baseline condition, the proposed project would not result in a degradation of service. Overall, all roadway segments would continue to operate at acceptable LOS under all conditions and no impacts would occur.

Table 5.12-18 Roadway Segment Operation

	Baseline (2017)		Ambient (2019) without project		Ambient (2019) with project		Cumulative (2019) with project	
	Volume	LOS	Volume	LOS	Volume	LOS	Volume	LOS
Hawthorne Boulevard south of Via Valmonte	36,253	B	36,982	B	37,791	B	38,616	B
Via Valmonte west of Hawthorne Boulevard	6,437	A	6,566	A	7,106	A	7,523	B

Source: KHR 2019

Level of Significance before Mitigation: Project related trip generation would not result in a significant delay or increase in level of service at any identified intersection within the Cities of Torrance, Rolling Hills Estates, Palos Verdes Estates or at a Caltrans intersection or roadway.

Impact 5.12-2: Project-related trip generation in combination with baseline and proposed cumulative development would not result in designated road and/or highways exceeding county congestion management agency service standards. [Threshold T-2]

Impact Analysis: This section presents an analysis of the potential impact on the regional transportation system. The analysis was conducted in accordance with the procedures outlined in the Congestion Management Program (CMP) for Los Angeles County, which was adopted by Metro in 2010. The CMP requires that, when an EIR is prepared for a project, local jurisdictions are responsible for assessing the impacts of new development on the CMP system. As defined in the Plan, the acceptable LOS standard in Los Angeles County is LOS "E" or the base year LOS, where the base year LOS is worse than "E".

The only CMP Highway System located within the study area is the Pacific Coast Highway. As shown in Table 5.12-16, project impacts to CMP roadways and intersections would not be significant at any of the CMP intersections along Pacific Coast Highway and impacts would be less than significant.

Level of Significance before Mitigation: Project generated traffic would not result in a delay of service at any CMP roadway or intersection. This Impact would be less than significant.

Impact 5.12-3: Project-related construction traffic would not exceed traffic threshold volumes; however, construction could result in temporary and short-term traffic detours and disruptions. [Threshold T-1]

Impact Analysis: For purposes of determining if construction of the proposed project would result in a significant traffic impact, an analysis of the projects construction trips was qualitatively performed. The construction analysis is based on information provided by the project applicant and included in the CalEEMod construction analysis. The construction duration is assumed to be approximately 29 months (assumes a 5 day per week, 8-hour per day work schedule), which includes the following construction phases:

Grading: 4 months
Building Construction, Parking Garage: 7 months
Paving: 2 months
Building Construction, Residential (above parking): 18 months
Application of Architectural Coatings: 3 months

The 4-month grading phase will include site grading, remediation, temporary shoring, and installation of utilities. The temporary shoring would be approximately 125 feet long.

Both the parking garage and the residential development would be painted during the three-month architectural coating phase. The residential building construction phase and the architectural coating phase would end during the same month because the residential building construction phase duration includes finalization of the project construction and exterior improvements as well as demobilization.

The rough grading and haul phase are anticipated to result in the highest trip generation potential when compared to the remaining phases and thus has been selected for analysis. Construction-worker estimates and vendor truck trips by construction phase were based on CalEEMod default values. Haul truck trips during the grading phase were based on project applicant–provided earthwork quantities. Grading is estimated to involve 120,915 cubic yards (CY) of cut and 1,646 CY of fill, resulting in 119,270 CY of soil for export. Assuming an industry standard haul truck capacity of 16 CY per truck, earth-moving activities would result in approximately 7,455 round trips (14,910 one-way truck trips) during the grading phase. As shown in Table 5.2-6, Construction Scenario Assumptions, the proposed project would generate 24 worker passenger vehicles and 171 one-way truck trips per day. Project construction-related traffic is less than the net proposed project traffic at buildout. As determined under Impact 5.12-1, the proposed project would not result in significant traffic impacts or exceed LOS for any of the five scenarios analyzed (Baseline With-Project, Ambient (2019) With and Without-Project, and Cumulative With and Without-Project Summary). Since the construction phase would result in less trips than the buildout phase, impacts resulting from construction traffic would be less than significant.

Project Construction Management Plan Criteria

Project construction related trips associated with trucks and employees traveling to and from the project site in the morning and afternoon during project construction activities may result in some minor traffic delays. It is anticipated that all of the construction-related traffic will utilize Hawthorne Boulevard to access the I-405 Freeway or Pacific Coast Highway and the I-110 Freeway to gain regional access to the project site.

Temporary and short-term traffic detours and traffic disruptions could result during project construction activities including implementation of access and circulation improvements to the project site. Accordingly, the project applicant would be responsible for the preparation and submittal of a construction area traffic management plan to ensure that project related construction traffic does not interfere with operations along Hawthorne Boulevard or Via Valmonte.

Potential traffic interference caused by construction vehicles may create a temporary/short-term impact to vehicles using the street system in the immediate area in the morning and afternoon hours. The TIA includes further recommendations to incorporate in the Construction Traffic Management Plan to minimize temporary traffic impacts on the local circulation system.

Level of Significance before Mitigation: Impact 5.12-3 would be potentially significant.

Impact 5.12-4: Implementation of the proposed project would not conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities. [Threshold T-1]

Impact Analysis: The nearest bicycle facility to the project site shown on the Metro Bike Map is a signed (Class III) bike route on Rolling Hills Road extending east from Hawthorne Boulevard (Metro 2014). A sidewalk is present on the north side of Via Valmonte near the northeast corner of the project site. Two public transit bus lines, Metro Line 344 and City of Los Angeles Department of Transportation (LADOT) Commuter Express 448, operate on Hawthorne Boulevard past the site (Metro 2016). Metro Line 344 extends north-south from the Community of Harbor Gateway in the City of Los Angeles to the City of Rancho Palos Verdes, and LADOT Route 448 extends north-south from downtown Los Angeles to the City of Rancho Palos Verdes. The nearest bus stops to the project site are on Hawthorne Boulevard near Newton Street and near Rolling Hills Road.

Project development would not interfere with existing bus stops on Hawthorne Boulevard or with the bike route on Rolling Hills Road. The project proposes sidewalks on the site frontages along Hawthorne Boulevard and Via Valmonte and along parts of the proposed network of driveways onsite. The project would improve pedestrian access to and near the site, and impacts would be less than significant.

Impact 5.12-5: Project circulation improvements have been designed to adequately address potentially hazardous conditions (sharp curves, etc.), potential conflicting uses, and emergency access. [Thresholds T-3, T-4]

Impact Analysis: The TIS evaluated the proposed site plan and circulation system to evaluate the potential for hazardous conditions, and adequate emergency access. Conflicts have the potential to occur if: 1) there is inadequate site access; 2) there is inadequate sight distance, 3) there is an inadequate capacity that would lead to vehicle queuing; or 4) there is inadequate emergency access.

Site Access

As discussed in Chapter 3, *Project Description*, and Figure 3-6, *Site Plan,* vehicular access for the project site would be provided via two driveways: one main driveway on Hawthorne Boulevard and one exit-only driveway on Via Valmonte. Both turn movements at these two driveways will be restricted to right turns only, with the exception of emergency vehicle access at the driveway on Via Valmonte. Additionally, there are no gates or speed bumps impeding traffic to enter the project site. Therefore, there would be no queuing of entering vehicles that could back up onto Hawthorne Boulevard and no impact related to site access would occur.

Sight Distance

A sight distance analysis from exiting vehicles on the proposed driveway on Hawthorne Boulevard was conducted to determine if the design of the driveway would create a hazardous roadway condition. As discussed above, the proposed driveway on Hawthorne Boulevard would provide right-in-right-out access only, with all vehicles requiring stopping before entering onto Hawthorne Boulevard. Assuming a design speed of 45 miles per hour, the line of sight northward from the driveway exit lane limit line would be 290 feet to the center of

the lane closest to the sidewalk curb and 495 feet to the center of the lane nearest the median. The traffic formed by these two lines of sight is within the cone of visibility by a driver exiting the project site. Therefore, the proposed driveway and improvements to Hawthorne Boulevard, including the widening and restriping of a traffic lane to add a southbound right turn lane between Via Valmonte and the proposed driveway for vehicles to decelerate and enter the project site, would provide adequate sight distance at the intersection of the driveway and Hawthorne Boulevard and would not result in hazardous conditions at that intersection due to inadequate sight distance. Impacts related to sight distance would be less than significant and no mitigation is required.

Queuing Analysis

The TIS also included a queuing analysis of eastbound vehicles queuing at the intersection of Hawthorne Boulevard and Via Valmonte to show the number of vehicles that typically wait during the A.M. peak hour period. Two field surveys were conducted in total to identify the number of vehicles stopped in the left turn lane at each traffic signal cycle: the first conducted in 2016 between 7:00 A.M. and 8:00 A.M. and the second conducted in 2018 between 7:00 A.M. and 9:00 A.M. According to the results, the total number of vehicles that have to wait in the left turn lane during a red light during the peak hour period was 162 vehicles and the longest queue observed was nine vehicles. Additionally, there were a total of 40 traffic signal cycles, 90 seconds each.

In order to estimate the impact of additional project related trips to the left turn queue, the trip generation/distribution during the A.M. peak hour (refer to Appendix J) was added to the surveyed vehicles. A total of 55 A.M. peak hour, left turning Project vehicles were shown leaving the site from the Via Valmonte driveway, which divided by 40 traffic signal cycles, equals an average of 1.4 vehicles per cycle. The 55 Project vehicles added to the surveyed 162 vehicles brought the future hourly total to an estimated 217 vehicles turning left during the A.M. hour with Project buildout. Divided by 40 traffic signal cycles, the average queue for left turn movements is 5.4 vehicles during the A.M. peak hour.

To estimate a worst-case scenario, the average Project vehicles per cycle (i.e., 1.4) added to the 95th percentile of the maximum observed queue (i.e., nine x .95 = 8.6) brought the total worst-case queue to 10 vehicles. As discussed above, the proposed improvements to Via Valmonte would provide 250 feet of total queuing length in the two proposed lanes on eastbound Via Valmonte, which would accommodate at least 10 vehicles spaced 25 feet apart (refer to Appendix J for details on calculations for the queuing analysis) . Therefore, with the proposed intersection improvements, there would be adequate capacity to accommodate the total estimate number of vehicles generated from the project during the A.M. peak hour period.

Additionally, queuing was also analyzed for a signal cycle of two minutes, that is, 30 cycles per hour, at the request of the City of Torrance. Under the new signal cycle, the estimated worst-case queue with a two-minute signal cycle including project-generated traffic would be 14 vehicles. This would exceed the proposed queueing capacity of the eastbound approach to the affected intersection by 4 vehicles. This would be a potentially significant impact without mitigation.

A second queuing analysis was performed for the northbound left-turn movement at the Hawthorne Boulevard/Pacific Coast Highway intersection. Results of the analysis showed an average vehicle movement of 11 vehicles per cycle and determined a worst-case queuing demand of 19 vehicles. The left-turn lane capacity is approximately 21 vehicles, indicating sufficient left-turn lane capacity to accommodate A.M. peak hour demands. During the P.M. peak hour, an average of 12 vehicles per cycle was observed, resulting in the same

worst-case queuing demand of 21 vehicles, equaling capacity. Proposed Capital Project improvements for the northbound left-turn movement include construction of an asphalt berm at the 242nd St. crossing and elimination of the existing "keep clear" zone, which would provide queuing capacity for two additional vehicles. Project related traffic is anticipated to result in 10 additional vehicles per cycle during the A.M. peak period. This would result in a "worst-case" condition of 19 vehicles, which is below the current capacity of 21 vehicles and the future capacity of 23 vehicles. Impacts to circulation in this regard would be less than significant.

Emergency Access

Raised traffic movement barriers in the entrance to the Via Valmonte driveway would allow only emergency vehicles to turn left into the driveway from westbound Via Valmonte. The Via Valmonte driveway would otherwise be restricted to right-in-right-out movements only. The project would provide sufficient emergency access to the site, and no impact would occur due to insufficient emergency access.

Level of Significance before Mitigation: On-site circulation would not result in significant impacts related to site access, vehicle-pedestrian conflicts, or emergency access; the project would not impede evacuation routes. Off-site queueing delay from the project driveway on Via Valmonte would not exceed the capacity of the existing left-turn pocket at the intersection of Via Valmonte and Hawthorne Boulevard with the project implemented roadway improvements.

5.12.4 Project VMT

As stated in Section 5.11.1.1, Regulatory Setting, SB 743 started a process that could fundamentally change transportation impact analysis as part of CEQA compliance. These changes in many parts of California (if not statewide) will include the elimination of auto delay, LOS, and similar measures of vehicular capacity or traffic congestion as a basis for determining significant impacts. As part of the new CEQA Guidelines, the new criteria "shall promote the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses" (Public Resources Code Section 21099(b)(1)). While the updated CEQA Guidelines went into effect in December 2018, the update provides agencies with an opt-in period until July 1, 2020 to adopt the new VMT-based criteria under the updated CEQA Guidelines. Since the City of Torrance has not yet opted to adopt the new VMT-based criteria, the City still considers automobile delay as a significant impact, and the City will continue to use the established LOS criteria.

5.12.5 Cumulative Impacts

Cumulative traffic impacts are analyzed above in Impact 5.12-1. The cumulative scenario analyzed in the TIS involved traffic generation by 19 related projects in the cities of the cities of Torrance, Rancho Palos Verdes, Rolling Hills Estates, Lomita, and Redondo Beach. Cumulative impacts would be less than significant.

Other impacts—such as hazardous conditions and emergency access—are site-specific and would not combine with impacts of other projects to cause cumulative impacts.

5.12.6 Baseline Regulations and Standard Conditions

This analysis describes compliance with all applicable laws. The following codes, rules, and regulations pertain to traffic were described in Section, 5.12.1.3 *Regulatory Background.*

State

- Sustainable Communities and Climate Protection Act (SB 375)
- Senate Bill 743

Regional

- Los Angeles County General Plan Mobility Element
- Congestion Management Program
- Regional Transportation Plan

City of Torrance

- City of Torrance General Plan Circulation and Infrastructure Element
- City of Torrance Development Impact Fees

5.12.7 Level of Significance Before Mitigation

Upon implementation of regulatory requirements and standard conditions of approval, the following impacts would be less than significant: Impact 5.12-1 (exceedance of LOS on local roadway network); Impact 5.12-2 (CMP facilities); Impact 5.12-4 (alternative transportation policies); and Impact 5.12-5 (project safety features/queuing).

Without mitigation, these impacts would be potentially significant:

- **Impact 5.12-3:** Project-related construction traffic would not exceed traffic threshold volumes; however, could result in temporary and short-term traffic detours and disruptions.

5.12.8 Mitigation Measures

The following mitigation measures have been identified to reduce potential construction related impacts.

Impact 5.12-3

TR-1 Prior to the issuance of grading permits, the project applicant shall prepare a Construction Traffic Management Plan in coordination with the City of Torrance City Traffic Engineer. The Plan, at a minimum, shall include the following:

- All construction vehicles accessing the site shall be of legal weight, length, width and height unless oversize load permits are secured from the City and all other agencies through which loads will be carried.
- All trucks used in the construction of this project shall travel only on Truck Routes as defined in Section 61.9.2 of the Torrance Municipal Code.
- All construction traffic shall enter the site from the north via a right turn from southbound Hawthorne Boulevard. All construction traffic and shall exit the site via a right turn onto

Via Valmonte and then left turn onto northbound Hawthorne Boulevard. No traffic shall be allowed on Via Valmonte west of the site and no construction truck traffic shall be allowed to travel south on Hawthorne Boulevard.

- No construction vehicle(s) shall be allowed at any time to stage or queue on City streets or rights-of-way. All truck staging or queuing shall take place on-site.
- Vehicle parking for all workers at the site shall be accommodated on-site with no worker parking permitted on City streets. The developer shall provide areas for worker parking at all times during construction.
- Construction trucks shall not travel on any street within the City of Torrance on Saturdays and Sundays. Construction trucks shall not travel on any City street before 8:30 AM or after 4:00 PM on weekdays (Monday through Friday).
- Spillage of material of any kind from trucks is prohibited. All construction vehicles shall be enclosed and sealed to prevent any material spillage onto any street in the City.
- Trucks and truck wheels and tires shall be cleaned before entering City streets from the site to prevent any wheel tracking or deposition of material on any City street.
- Haul trucks entering or exiting public streets shall at all times yield to public traffic.
- If hauling operations cause any damage to existing pavement, street, curb and/or gutter along the haul route, the applicant will be fully responsible for repairs. The repairs shall be completed to the satisfaction of the City Engineer.
- All constructed-related parking and staging of vehicles will be kept out of the adjacent public roadways and parking lots and will occur on-site.
- This Plan shall meet standards established in the current California Manual on Uniform Traffic Control Device (MUTCD) as well as City of Torrance requirements.

5.12.9 Level of Significance After Mitigation

Impact 5.12-3

Mitigation Measure TR-1 would ensure that a construction traffic management plan is in place to eliminate the potential for conflicts related to construction equipment, haul trips, and worker trips. Compliance with the construction traffic management plan would ensure that temporary construction related traffic impacts would be less than significant.

5.12.10 References

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