3.13 TRANSPORTATION AND TRAFFIC

This analysis evaluates the potential environmental effects of the proposed Strand and Pier Hotel Project (Project) on transportation and traffic as defined by the California Environmental Quality Act (CEQA), as well as by the City of Hermosa Beach's (City's) regulations and policies including the Hermosa Beach Municipal Code (HBMC) and PLAN Hermosa. This analysis was prepared based on the *Strand & Pier Hotel Traffic Study* (Traffic Study) prepared by The Mobility Group (2017) (see Appendix I) and independently peer reviewed by the transportation consulting firm Fehr & Peers. The Traffic Study contains a detailed assessment of local traffic circulation issues, with a particular focus on potential Project-related increases in congestion at intersections and along roadway segments in the Downtown Core. Impacts to pedestrian, transit, and bicycle use that could result from construction and operation of the proposed Project have also been assessed and included in this Environmental Impact Report (EIR) analysis. Because of the importance of parking availability to local coastal access and recreation, parking impacts have also assessed in detail in Section 3.3, *Recreation*.

The scope and methodology of the Traffic Study conforms to standards set forth in adopted City guidelines published by the City. The Traffic Study also incorporates analysis from and builds upon PLAN Hermosa and the associated Program EIR. The roadways and intersections included in the Traffic Study were identified jointly by The Mobility Group and City staff based on the location and magnitudes of Project-related trip generation and the potential for new trips to intersections and roadway segments in the Project area. Previous area circulation studies were considered and care was taken to ensure that all potentially affected facilities were included in the analysis. The study area encompasses 15 intersections and generally extends from Pacific Coast Highway (PCH) on the east, Hermosa Avenue on the west, 16th Street on the north, and 8th Street on the south. In addition, the study area includes pedestrian, transit, and bicycle facilities along The Strand, Pier Plaza, and Hermosa Avenue.

3.13.1 Existing Setting

Regional Access and City Street Network

Regional vehicle access to the City is provided by Interstate 405 (I-405), located approximately 3 miles east of the City limits, as well as PCH, which provides a connection between Manhattan Beach, El Segundo, and the Los Angeles International Airport (LAX) to the north, and Redondo Beach and the South Bay to the south (refer to Figure 1-1).

The Project site is accessed by two principal streets, Pier Avenue running from PCH east toward the coast, and Hermosa Avenue which runs from north to south parallel to the coast. West of Hermosa Avenue and near the Project site, Pier Avenue becomes Pier Plaza, a 100-foot-wide pedestrian-only plaza that is lined with commercial uses, particularly restaurants and retail shops. Pier Plaza and The Strand serve as the primary public gathering points in the Downtown Core and the City as a whole (refer to Section 3.3, *Recreation*). Vehicular access to the Project site is provided via Beach Drive as well as 13th Street and 13th Court, which are narrow east-west streets and alleys that run toward the coast between Hermosa Avenue and Beach Drive (refer to Figure 2-1).

The key streets in the vicinity of the Project site are described below:

- **PCH** – PCH is a State Highway and arterial roadway that runs in a north-south direction through the City. PCH is controlled, operated, and maintained by the California Department of Transportation (Caltrans). It is striped as a six-lane roadway but during off-peak hours, parking is generally allowed in the outmost lane nearest to the curb, resulting in two travel lanes in each direction. Parking is prohibited on the east side of the street during the AM peak hour (7:00am to 9:00am) to provide a third northbound travel lane and on the west side of the street during the PM peak hour (3:00pm to 7:00pm) to provide a third southbound travel lane. Traffic flows along PCH in the City are affected by multiple signalized intersections as well as frequent driveways which provide access to adjacent residential and commercial uses. PCH has a traffic volume of 43,854 average daily trips (ADT) between Artesia Boulevard and Aviation Boulevard (City of Hermosa Beach 2017d). Similar to Pier Avenue, PCH is a designated truck route in the City. In the vicinity of the Project site, PCH has 6-foot-wide sidewalks on both sides of the street, interrupted with street lights, utility poles and boxes, signs, trash receptacles, fire hydrants, and bordered by landscaping such as palm trees.

- **Hermosa Avenue** – Hermosa Avenue is the principal roadway providing access to the beach areas. It runs north-south two blocks east of the beach for the entire length of the City. Hermosa Avenue is a four-lane arterial roadway with a median but generally without left-turn lanes, except for a small segment between 10th Street and 14th Street. The majority of intersections on Hermosa Avenue are two-way or four-way stops with pedestrian crosswalks, with the exception of traffic signals located at the intersections of Pier Avenue, 13th Street, and 14th Street. Hermosa Avenue has a traffic volume of 11,128 ADT between 8th Street and 16th Street (City of Hermosa Beach 2017d). Metered curbside parallel parking is provided along the entire length of the roadway and along the center median north of

14th Street and south of 10th Street (refer to Section 3.3, *Recreation* for a thorough discussion of publicly available coastal access parking). In the vicinity of the Project site, Hermosa Avenue has 6- to 8-foot-wide sidewalks on both sides of the street, interrupted with street lights, utility poles and boxes, signs, trash receptacles, mailboxes, fire hydrants, and street trees.

Pier Avenue is a north-south oriented street that is lined with restaurants and retail shops served by angled metered parking (pictured above). For additional information regarding parking along Pier Avenue, refer to Section 3.3, Recreation.

- **Pier Avenue** – Pier Avenue, east of Hermosa Avenue, is a four-lane arterial roadway that runs in an east-west direction and connects Hermosa Avenue to PCH. It is the principal roadway and City designated truck route that runs through the central commercial district and provides access to/from the Downtown Core. Pier Avenue has a traffic volume of 13,352 ADT between Hermosa Avenue and Valley Drive (City of Hermosa Beach 2017d). Between Hermosa Avenue and Valley Drive, Pier Avenue has angled parking on both sides of the street. East of Ardmore Avenue to PCH, there is a painted median and parallel parking. Sidewalks in this area are 8- to 10-feet wide on both sides of the street, interrupted with street lights, utility poles and boxes, signs, trash receptacles, fire hydrants, and palm trees. West of Hermosa Avenue, Pier Avenue is a Walk Street[1] (Pier Plaza) and is closed to traffic. Pier Plaza is lined with seating areas, palm trees and street furniture.

Ardmore Avenue runs in a north-south direction and parallels Valley Drive. The Hermosa Valley Greenbelt is located between these streets and provides a walking/jogging path that is lined with trees and other landscaping.

- **Valley Drive/Ardmore Avenue** – Valley Drive/Ardmore Avenue run in a north-south direction west of PCH. They each generally provide one lane in each direction, with parallel parking allowed

[1] Walk Streets provide pedestrian access only with no vehicular access.

only in certain locations. The Hermosa Valley Greenbelt – a 3.5-mile segment of trail through the cities of Hermosa Beach and Manhattan Beach – separates the two arterial roadways. This greenbelt also interrupts the City's street grid, which tends to funnel traffic onto relatively few east-west roadways (e.g., Gould Avenue and Pier Avenue). Valley Drive has a traffic volume of 6,509 ADT between Pier Avenue and 8th Street, and Ardmore Avenue has a traffic volume of 4,226 ADT between 16th Street and 11th Street (City of Hermosa Beach 2017d). In the vicinity of the Project site, Valley Drive/Ardmore Avenue have 6-foot-wide sidewalks along the opposite sides of the streets from the greenbelt. In addition to landscaping and pedestrian trails, some pedestrian amenities in the greenbelt include exercise equipment and water fountains.

- **8th Street** – 8th Street is an east-west arterial street between Hermosa Avenue and PCH. It has one lane in each direction and generally provides metered parking, except for certain areas between Ardmore Avenue and Loma Drive where parking is not allowed on one or both sides of the street. From Hermosa Avenue to Valley Drive, 8th Street has a traffic volume of 2,616 ADT (City of Hermosa Beach 2017d). In the vicinity of the Project site, 8th Street has 6-foot-wide sidewalks on both sides of the street, interrupted with utility poles, signs, and parking meters, bordered by landscaping and palm trees.

Other Local Streets[2] in the immediate vicinity of the Project site are as follows:

- **Beach Drive** – Beach Drive is a 20-foot-wide, two-way local street that runs north-south between 14th Street and Pier Avenue, one block east of The Strand. Because Pier Avenue is a pedestrian-only street (i.e., Pier Plaza) west of Hermosa Avenue and is closed to traffic, Beach Drive carries little vehicular traffic between 13th Street and Pier Plaza. However, Beach Drive, provides access to 13th Street and 13th Court, which provide access to City-owned parking Lot B (Lot B) and City-owned parking Lot C (Lot C). Beach Drive also provides access to the existing surface parking lot associated with the Mermaid Restaurant. It also provides an informal pedestrian and bicycle route parallel to

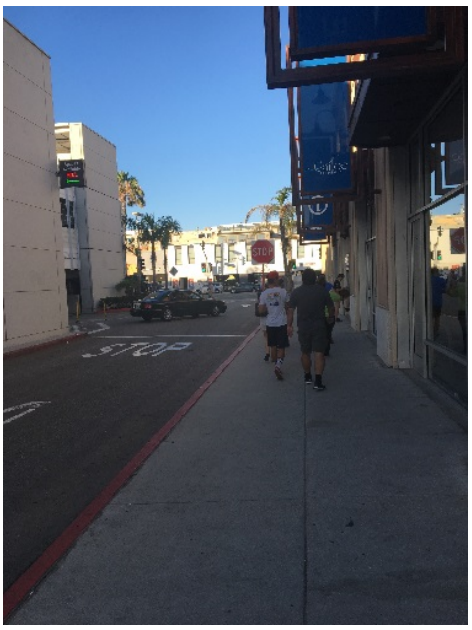
Beach Drive is a narrow stop controlled east-west street that provides access to Hermosa Cyclery and the Mermaid Restaurant surface parking lot within the Project site.

[2] Designed to serve adjacent residential land uses only and provide the lowest accommodation for traffic movement.

The Strand, which receives moderate levels of use during periods of congestion on The Strand, particularly for bicyclists circumventing the "walk-only" portion of The Strand. Beach Drive does not have sidewalks or other pedestrian features and stop signs are located at the intersections of 13th Street and 14th Street. The southernmost 200 feet of Beach Drive traverses the Project site and would be vacated and closed as part of the proposed Project (refer to Section 2.0, *Project Description*).

- **13th Court** – 13th Court is an east-west, 20-foot-wide, one-way alley providing vehicular access to the rear of the Project site from Hermosa Avenue where it would terminate at the proposed eastern end of the mixed-used hotel building. It is narrow and without on-street parking. Access to 13th Court from Hermosa Avenue is right-in/right-out-only at an unsignalized intersection. There are no sidewalks or other pedestrian features along the alleyway.

- **13th Street** – 13th Street is a single-lane, 12-foot-wide, one-way eastbound street from Beach Drive to the stop sign just west of Lot C. This segment of 13th Street provides access to Lot B. From east of the stop sign, 13th Street is a two-way street to Hermosa Avenue. Its intersection with Hermosa Avenue is signalized with all movements allowed. 13th Street provides eastbound access to Lot C, which is heavily utilized, particularly during weekends and the summer months (refer to Section 3.3, *Recreation* for a description of parking utilization). An approximately 7-foot-wide sidewalk runs along the south side of 13th Street. A landing at the corner of 13th Street and Beach Drive allows pedestrian access to Lot C, and a stop sign is located at the vehicular entrance of the parking structure.



13th Street is a one-way east bound street from Beach Drive to the stop sign immediately west of Lot C. 13th Street includes a sidewalk used by pedestrians to access Hermosa Avenue.

- **14th Street** – 14th Street is an east-west, two-way local street between Beach Drive and Hermosa Avenue. Its intersection with Hermosa Avenue is signalized with all movements allowed. It has metered parking on both sides. There are 6-foot-wide sidewalks on both sides of the street, interrupted with street lights/utility poles, parking meters, and some palm trees.

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Existing Bus Routes and Bicycle Facilities

FIGURE 3.13-1

Public Transit Services in the Vicinity of the Project Site

Local and regional public transit in the Project area is provided by the Los Angeles County Metropolitan Transportation Authority (Metro), Los Angeles Department of Transportation (LADOT), and Beach Cities Transit. Bus stops are located on Hermosa Avenue approximately 500 feet east of the Project site between Pier Avenue and 13th Court and 700 feet south of the Project site between 11th Court and 11th Street for southbound travel, and approximately 1,000 feet north of the Project site just south of 16th Street and 1,000 feet south of the Project site, just south of 10th Street for northbound travel. As discussed below, commuter-oriented transit service within the Project vicinity is frequent during weekday peak hours; however, commuter services cease on weekends and local transit service is relatively infrequent, leaving area employees and other users with limited weekend commuter transit options (see Table 3.13-1 and Figure 3.13-1).

Hermosa Avenue is served by multiple transit routes included the LADOT Commuter Express Service 438 runs between Redondo Beach and Downtown Los Angeles.

Table 3.13-1. Existing Public Transit Services

Route	Line	Description	Weekday Hours of Operation	Weekend Hours of Operation	Approximate Headway[1] (minutes)				
					Weekday AM	Weekday PM	Friday 5-9pm	Saturday 12-3pm	Sunday 3-6pm
Metro Local	130	Redondo Beach – Cerritos	5:20am – 9:30pm	6:20am – 10:10pm	40	45	55	60	60
Metro Line	232	Long Beach – LAX	3:48am – 11:24pm	5:25am – 1:01am	30	60	60	60	60
Beach Cities Transit	109	Redondo Beach – LAX City Bus Center	6:20pm – 9:30pm	6:20am – 10:00pm	45	45	60	90	60
LADOT – Commuter	438	Redondo Beach – Downtown LA (AM to Downtown LA only; PM to Redondo Beach only)	6:00am – 7:20pm	-	15	10	10	-	-

Note: [1] Headways are generally defined as the time period between vehicles in a transit system or frequency of service.
Source: The Mobility Group 2017.

Metro Local 130 – Metro Line 130 runs predominantly in an east-west direction from Redondo Beach to Artesia. In the Project vicinity, it runs along Hermosa Avenue and Pier Avenue, with stops at Hermosa and 10th Street (northbound) approximately 1,000 feet south of the Project site, Hermosa and 11th Street (southbound) approximately 700 feet south of the Project site, and Pier Avenue and Valley Drive approximately 2,000 feet east of the Project site. On weekdays, the service operates between 5:20am and 9:30pm, with a headway of approximately 40 minutes in the AM peak hour and 45 minutes in the PM peak hour.[3] During the weekend, the service operates between 6:20am and 10:10pm with headway of approximately 60 minutes in the Saturday midday and Sunday afternoon peak hours.

Metro Line 232 – Metro Line 232 runs from Long Beach to Los Angeles International Airport. In the Project vicinity, it runs along PCH, east of the Project site (see Figure 1-1). On weekdays, the service operates between 3:48am and 11:24pm, with a headway of approximately 30 minutes in the AM peak hour and 60 minutes in the PM peak hour. During the weekend, the service operates between 3:48am and 1:01am with headway of approximately 60 minutes in the Saturday midday and Sunday afternoon peak hours.

Beach Cities Transit – Service 109 provides access north and south of the Project site between the Los Angeles Airport City Bus Center and Redondo Beach. In the Project vicinity, it runs along Hermosa Avenue, with northbound stops at Hermosa Avenue and 8th Street (approximately 1,300 feet south of the Project site), 10th Street (approximately 1,000 feet south of the Project site), and 16th Street (approximately 1,000 feet north of the Project site), and southbound stops at Hermosa Avenue and 8th Street, 11th Street (approximately 700 feet south of the Project site), and 16th Street. On weekdays, the service operates between 6:20am and 9:30pm with approximately 45-minute headways in the AM and PM peak hours. During the weekend, the service operates between 6:20am and 10:00pm with headway of approximately 60 minutes.

LADOT – LADOT Commuter Express Service 438 runs between Redondo Beach and Downtown Los Angeles. In the Project vicinity, it runs along Hermosa Avenue, with northbound stops at Hermosa Avenue and 10th Street and 16th Street, and southbound stops at Hermosa Avenue and 11th Street and 16th Street. Service operates on weekdays between 5:45am and 9:00am and between 3:45pm and 7:30pm, with approximately 15-minute headways in the AM peak hour and 10-minute headways in the PM peak hour.

[3] Headway is defined as the time between each individual bus arriving at a given point.

Pedestrian and Bicycle Facilities in the Project Vicinity

Pedestrian Facilities

The street grid in the Downtown Core – which consists of small street blocks, relatively dense land uses, The Strand, local alleys, and low posted speed limits surrounding the Project site – is geared toward pedestrian accessibility and serves high pedestrian volumes, particularly during weekends and the summer months. Numerous City "Walk Streets" provide safe pedestrian connections between Downtown and the beach, while walking paths on the Hermosa Valley Greenbelt provide north-south pedestrian connections further inland from the beach. Directly adjacent to the Project site, The Strand provides a concrete pathway of up to 25-feet in width immediately adjacent to the beach. The segment of The Strand within the City is part of a larger regional trail that runs for approximately 22 miles from Will Rogers State Beach in Pacific Palisades to its southern terminus at Torrance Beach. The Strand is heavily used year-round by pedestrians, bicyclists, skateboarders, and rollerbladers (see Table 3.13-2). Also located adjacent to the Project site is Pier Plaza, an approximately 100-foot-wide pedestrian-only thoroughfare between The Strand and Hermosa Avenue. The eastern end of Pier Plaza is characterized by restaurants and retail store fronts and is lined with outdoor seating areas, palm trees, and limited street furniture. At its western end, Pier Plaza leads out to the Hermosa Beach Pier (Hermosa Pier). At the intersection of Pier Avenue and Hermosa Avenue, a pedestrian scramble crossing provides pedestrian access across the intersection with Pier Plaza. (The pedestrian scramble provides an all-red signal phase to vehicles to allow pedestrians to cross the intersection diagonally as well as on the regular crosswalks at the same time.)

Within the Downtown, sidewalks are generally in good condition, free of cracks, fissures, or uplift; however, outside of the Downtown, there are locations with obstructions in the sidewalk space (e.g., utility boxes, light poles, missing curb cuts) that pose an impediment to pedestrians, particularly those with disabilities. While pedestrian amenities in the Downtown are plentiful, other areas outside of the Downtown suffer from a lack of continuity. In particular, sidewalks are not continuous throughout the City. In

A scramble pedestrian crossing provides open pedestrian access across the intersection at Pier Avenue and Hermosa Avenue from all intersection corners.

some locations, sidewalks are present on both sides of the roadway, while in others – primarily on local streets (e.g., Gould Avenue) – they are present on just one side or not at all. Other factors that can affect walkability and the pedestrian experience in the City include minimal shading or trees, grade changes, or lack of buffers from vehicles. The City has abundant vegetation that provides a visually attractive streetscape and some canopies; however, ample shade is not a prevalent street feature. With regard to sidewalk grade, north-south streets are generally flat; however, east-west streets slope upward as they move away from the coast. And while buffered space is common throughout the City – commonly provided though pedestrian-only streets, off-street pedestrian paths, and curbside parking – there are some locations that could benefit from wider sidewalks, sidewalk bulb-outs, and signage.

Sidewalks immediately adjacent to the Project site include an approximately 7-foot-wide sidewalk on the south side of 13th Street, as well as a walkway along the perimeter of the Lot C parking structure on the east side of Beach Drive. There are pedestrian crosswalks along Hermosa Avenue, at 13th, 14th, and 16th Streets to the north, and 11th, 10th, and 8th Streets to the south. The sidewalks have street lighting, signage, and limited pedestrian furniture (e.g., street benches).

Bicycle Facilities

Formal developed bicycle facilities in the Project vicinity are limited to The Strand, a multi-use pedestrian and bicycle trail, and a Class III Bicycle Route (with "sharrow" markings on the roadway surface)[4] along Hermosa Avenue and further east along Monterey Boulevard (refer to Figure 3.13-1). However, many of the streets within the City, particularly those west of Hermosa Avenue, are used by bicyclists in lieu of bicycle routes. Except for Pier Avenue and Hermosa Avenue, roads in the Project vicinity generally carry relatively low traffic volumes, and bicyclists mix freely with vehicular traffic. This is particularly common along the east-west oriented streets that provide beach access (e.g., 13th Street). The Project site currently includes a bicycle rental shop, Hermosa Cyclery, which provides rentals, repairs/services, and bicycles and related products for sale. Bicycle parking areas are provided along The Strand, in Pier Plaza between The Strand and Hermosa Avenue, and throughout the Downtown. Additional formal bicycle facilities – including Class I, II, and III bicycle lanes and bicycle friendly streets – are planned by the City on Valley Drive/Ardmore Avenue, Prospect Avenue, Longfellow Avenue, 27th Street, 21st Street, Pier Avenue, Aviation Boulevard, and 8th Street (City of Hermosa Beach 2017c).

[4] Class III Bicycle Route are designated on-street routes that do not have stripped separation from traffic, but have pavement markings or signs indicating a bicycle route and instructing motorists to share the road.

Existing Pedestrian and Bicycle Traffic Volumes

The Strand is heavily used by pedestrians, bicyclists, skateboarders, and rollerbladers, particularly during the summer months.

There is considerable pedestrian and bicycle activity in the Downtown, including the areas in the immediate Project vicinity. Counts taken in August 2015 show that pedestrian volumes on The Strand adjacent to the proposed Project site range from approximately 325 pedestrians in the AM peak hour (7:00am to 9:00am) and PM peak hour (4:00pm – 6:00pm) to 1,515 pedestrians in the Sunday afternoon peak hour (3:00pm – 6:00pm) (see Table 3.13-2). The counts also show pedestrian volumes in Pier Plaza adjacent to the Project site range from approximately 250 pedestrians in the AM peak hour to 2,815 pedestrians in the Sunday PM peak hour. Pedestrian volumes on The Strand and Pier Plaza are also high during the Saturday midday peak hour (12:00pm – 3:00pm) with approximately 1,500 to 1,600 pedestrians during this time period. Pedestrian volumes on Hermosa Avenue north of Pier Avenue range from 50 pedestrians in the AM peak hour to 505 pedestrians in the Sunday afternoon peak hour. Counts taken in August 2015 show that bicycle volumes on The Strand adjacent to the proposed Project range from 160 bicycles during the AM weekday peak hour to as many as 295 bicycles per hour on the weekend peak hours. The counts also show bicycle volumes in Pier Plaza adjacent to the Project site ranging from 45 bicycles in the weekday AM peak hour to as many as 150 bicycles per hour on the weekend peak hours.

These representative pedestrian and bicyclist counts within the City's Downtown Core reflect the area's orientation toward commercial retail, entertainment, and recreational uses, where roadways are intended to prioritize large volumes of pedestrians and bicyclists. These high volumes of pedestrians and bicyclists can affect vehicular delays at some intersections, particularly the signalized intersection of Hermosa Avenue & Pier Avenue, where a pedestrian scramble provides a phase for prioritized pedestrian crossings from all corners of the intersection. While high pedestrian volumes at this pedestrian scramble can increase vehicular delays, this reflects the City's policy priorities in PLAN Hermosa for the pedestrian orientation of the Downtown Core.

Table 3.13-2. Pedestrian and Bicycle Peak-Hour Traffic in the Immediate Project Vicinity

Location	Peak Hour	Pedestrian Count (2015)	Bicycle Count (2015)
The Strand (adjacent to Project site)	AM	325	160
	PM	325	250
	FRI	560	up to 295/hr
	SAT	915	up to 295/hr
	SUN	1,515	up to 295/hr
Pier Avenue (Pier Plaza adjacent to Project site)	AM	250	45
	PM	615	105
	FRI	1,500	up to 150/hr
	SAT	1,630	up to 295/hr
	SUN	2,815	up to 295/hr
Hermosa Avenue (north of Pier Avenue)	AM	50	-
	PM	150	-
	FRI	380	-
	SAT	380	-
	SUN	505	-

Source: The Mobility Group 2017.

Study Intersections and Traffic Volumes

Because traffic flow on urban arterials is most constrained at intersections, detailed traffic flow analyses focus on operating conditions of critical intersections during peak travel periods. The Traffic Study examined 15 intersections in the Project vicinity, selected by The Mobility Group in consultation with the City staff and independently verified by Fehr & Peers. These intersections were identified as locations where the majority of trips associated with the Project would be focused, based on the Project's anticipated distribution of trips. These locations consist of the intersections through which the majority Project trips would travel before dispersing and, therefore, were the locations where potential traffic impacts were most likely to occur. All of the intersections are within the City, including those along PCH, which is under the jurisdiction of Caltrans. Seven of the study intersections examined in the Traffic Study are signalized and eight are unsignalized (see Figure 3.13-2).

New traffic count data was collected for the analysis of all study intersections. In order to conservatively address the highest traffic volume periods of summer, and to also address the peak weekday and weekend time periods, the traffic counts were collected during the peak summer season for five different time periods. These time periods were determined to be the peak periods of highest traffic volumes from 24-hour roadway volume counts conducted for a 7-day period

during the summer period prior to conducting the intersection counts. Weekday peak hour traffic counts were conducted on Thursday August 27, 2015. Traffic counts were also conducted for the Friday PM peak hour on Friday August 21, 2015, for the Saturday midday peak hour on Saturday August 22, 2015, and for the Sunday afternoon peak hour on Sunday August 23, 2015. Schools in the Hermosa Beach area end in mid-June. In most cities, traffic is greatest during the months when schools are in session; however, in Hermosa Beach, traffic is greatest during the summer months, when residents and visitors in the Los Angeles area drive to Hermosa Beach to access the coast.

In order to represent the existing conditions at the time of the Notice of Preparation (NOP) publication, per CEQA Section 15125, the traffic volume counts that were collected in 2015 were factored upward by 1 percent to represent 2016 conditions.[5] The highest volume hours within each period, were typically the following:

- Weekday AM peak hour (7:45am to 8:45am)
- Weekday PM peak hour (5:00pm to 6:00pm)
- Friday PM peak hour (5:15pm to 6:15pm)
- Saturday midday peak hour (1:45pm to 2:45pm)
- Sunday afternoon peak hour (3:30pm to 4:30pm)

Existing peak hour traffic volumes are provided in the Traffic Study (see Appendix I). It should be noted that the Project site is located in the developed area of the Downtown Core, which is already built out with limited traffic growth. No significant new developments have been constructed in the immediate vicinity that would result in substantial changes to the existing traffic between the NOP year and 2018 (refer to Section 3.02, *Cumulative Impacts*).

[5] An evaluation of growth projections from the Los Angeles County Congestion Management Program for Regional Statistical Area 18 (which includes Hermosa Beach) showed an annual growth forecast of 0.25 percent per year between 2015 and 2020. The use of a 1 percent per year growth factor is therefore conservative.

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Study Intersections and Existing LOS

FIGURE 3.13-2

Level of Service

Intersection operation and congestion can be described by measuring the level of service (LOS) of an intersection. LOS is a qualitative method for characterizing the operational conditions at an intersection generally accounting for measures such as speed, delays, travel time, freedom to maneuver, traffic interruptions, and comfort and convenience. In rating intersection operations, LOS A through F are used, with LOS A indicating free-flow operations and LOS F indicating congested operations. The LOS analysis was conducted using the methodology established by the City, described below. All signalized intersections were analyzed using the Intersection Capacity Utilization (ICU) methodology. Unsignalized intersections were analyzed using the *Highway Capacity Manual* (HCM) 2010 methodology.

The ICU method applied to the signalized intersections compares the peak hour volume of traffic at an intersection to the traffic volume the intersection is able to carry under ideal conditions (i.e., the capacity), and defines a volume-to-capacity (V/C) ratio for the intersection as a whole, which is then related to LOS (see Table 3.13-3).

Table 3.13-3. Level of Service Criteria for Signalized Intersections

LOS	Interpretation	V/C Ratio	Delay (Seconds/ Vehicle)
A	Excellent operation. All approaches to the intersection appear quite open, turning movements are easily made, and nearly all drivers find freedom of operation.	<0.600	≤ 10
B	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.	0.601 - 0.700	> 10 – 20
C	Good operation. Occasionally drivers may have to wait for more than 60 seconds, and backups may develop behind turning vehicles. Most drivers feel somewhat restricted.	0.701 - 0.800	> 20 – 35
D	Fair operation. Cars are sometimes required to wait for more than 60 seconds during short peaks. There are no long-standing traffic queues. This level is typically associated with design practice for peak periods.	0.801 - 0.900	> 35 – 55
E	Poor operation. Some long-standing vehicular queues develop on critical approaches to intersections. Delays may be up to several minutes.	0.901 - 1.000	> 55 – 80
F	Forced flow. Represents jammed conditions. Backups from locations downstream or on the cross street may restrict or prevent movement of vehicles out of the intersections approach lanes; therefore, volumes carried are not predictable. Potential for stop-and-go type traffic flow.	Over 1.000	> 80

Source: The Mobility Group 2017.

For the HCM analysis methodology for unsignalized intersections, LOS is defined instead by the average delay in seconds per vehicle occurring at the intersection. In contrast to signalized intersections, where all approaches to the intersection must stop at a red light and wait for the next green light, at stop-controlled intersections only the minor street traffic controlled by the stop sign is required to stop (at two-way stop intersections). Through traffic movements on the major street do not stop, and turning movements from the major street must stop only if there is conflicting traffic approaching in the opposite direction. At all-way stop intersections, all approaches must stop. Table 3.13-4 defines the ranges of delay and their corresponding LOS for unsignalized intersections. For unsignalized intersections these parameters are reported for the minor movements only and not for the major street through moves or for the intersection as a whole.

Table 3.13-4. Level of Service Criteria for Unsignalized Intersections

LOS	Average Control Delay (Seconds/Vehicle)
A	0 to 10
B	> 10 to 15
C	> 15 – 25
D	> 25 – 35
E	> 35 – 50
F	> 50

Source: The Mobility Group 2017.

Existing V/C ratios and corresponding LOS at the analyzed intersections for all time periods are summarized in Table 3.13-5. Study intersection LOS is shown in Figure 3.13-2. Of the 15 intersections studied, 14 operate at excellent or fair LOS (i.e., LOS A through D) while only 1 (PCH & Aviation Boulevard) has a LOS that is currently ranked as "poor" or "failure" during at least one of the peak hours examined in the study (i.e., LOS E during the AM peak hour). As noted above, the signalized intersection of Hermosa Avenue & Pier Avenue operates at LOS D on Sundays reflecting its design with a pedestrian scramble that places equal priority on serving pedestrians, bicyclists and vehicles, consistent with the commercial retail, entertainment, and recreational orientation of the Downtown Core.

Table 3.13-5. Existing (2016) Intersection Levels of Service

Number	Intersection	Type [1]	Peak Hour Period	Existing (2016) Operating Conditions		
				V/C	Delay	LOS
1	Hermosa Avenue & 16th Street	3-Way Stop	AM	-	8.8	A
			PM	-	9.5	A
			FRI	-	9.4	A
			SAT	-	9.1	A
			SUN	-	10.5	B
2	Hermosa Avenue & 14th Street	Signalized	AM	0.255	-	A
			PM	0.314	-	A
			FRI	0.316	-	A
			SAT	0.281	-	A
			SUN	0.439	-	A
3	Hermosa Avenue & 13th Street	Signalized	AM	0.237	-	A
			PM	0.383	-	A
			FRI	0.376	-	A
			SAT	0.405	-	A
			SUN	0.431	-	A
4	Hermosa Avenue & Pier Avenue	Signalized	AM	0.621	-	B
			PM	0.682	-	B
			FRI	0.668	-	B
			SAT	0.689	-	B
			SUN	0.832	-	D
5	Hermosa Avenue & 11th Street	Signalized	AM	0.282	-	A
			PM	0.465	-	A
			FRI	0.370	-	A
			SAT	0.461	-	A
			SUN	0.398	-	A
6	Hermosa Avenue & 10th Street	4-Way Stop	AM	-	9.7	A
			PM	-	10.0	A
			FRI	-	10.3	B
			SAT	-	9.6	A
			SUN	-	13.9	B
7	Hermosa Avenue & 8th Street	3-Way Stop	AM	-	10.0	A
			PM	-	10.2	B
			FRI	-	10.1	B
			SAT	-	10.0	A
			SUN	-	13.2	B

Table 3.13-5. Existing (2016) Intersection Levels of Service (Continued)

Number	Intersection	Type [1]	Peak Hour Period	Existing (2016) Operating Conditions		
				V/C	Delay	LOS
8	Manhattan Avenue West & Pier Avenue	1-Way Stop	AM	-	9.5	A
			PM	-	9.8	A
			FRI	-	10.2	B
			SAT	-	10.9	B
			SUN	-	12.5	B
9	Manhattan Avenue East & Pier Avenue	1-Way Stop	AM	-	11.5	B
			PM	-	12.9	B
			FRI	-	12.7	B
			SAT	-	13.8	B
			SUN	-	23.1	C
10	Monterey Boulevard & Pier Avenue	4-Way Stop	AM	-	9.4	A
			PM	-	10.3	B
			FRI	-	11.1	B
			SAT	-	10.9	B
			SUN	-	15.8	C
11	Valley Drive & Pier Avenue	4-Way Stop	AM	-	13.7	B
			PM	-	19.2	C
			FRI	-	19.5	C
			SAT	-	17.0	C
			SUN	-	13.6	B
12	Ardmore Avenue West & Pier Avenue	4-Way Stop	AM	-	14.3	B
			PM	-	18.5	C
			FRI	-	17.0	C
			SAT	-	14.4	B
			SUN	-	12.3	B
13	PCH & Pier Avenue	Signalized	AM	0.657	-	B
			PM	0.700	-	B
			FRI	0.699	-	B
			SAT	0.574	-	A
			SUN	05.83	-	A
14	PCH & Aviation Boulevard	Signalized	AM	0.952	-	E
			PM	0.820	-	D
			FRI	0.823	-	D
			SAT	0.821	-	D
			SUN	0.765	-	C

Table 3.13-5. Existing (2016) Intersection Levels of Service (Continued)

Number	Intersection	Type [1]	Peak Hour Period	Existing (2016) Operating Conditions		
				V/C	Delay	LOS
15	PCH & 8th Street	Signalized	AM	0.845	-	D
			PM	0.758	-	C
			FRI	0.793	-	C
			SAT	0.617	-	B
			SUN	0.591	-	A

Definitions:
V/C – Volume-to-Capacity Ratio; based on the amount of traffic traveling through the intersection, the lane geometries, and other factors affecting capacity such as one-street parking, bus operations near the intersections, and pedestrian volumes at the street crosswalks.
Delay – Average stopped delay per vehicle, in seconds.
LOS – Level of Service; refer to definitions in Tables 3.13-3 and 3.13-4.
Notes: [1] For signalized intersections, V/C ratio and LOS are shown for the intersection as a whole. For unsignalized intersections, delay values and LOS are shown for worst-case minor (stopped) approach only.
Source: The Mobility Group 2017.

- **AM Peak Hour** – All of the studied intersections currently operate at LOS D or better during the AM peak hour, except for the signalized intersection of PCH & Aviation Boulevard which operates at LOS E. All but two intersections operate at LOS B or better with many operating at LOS A.
- **PM Peak Hour** – All of the studied intersections currently operate at LOS D or better during the PM peak hour, with all but one intersection operating at LOS C or better, and with many operating at LOS A or LOS B.
- **Friday PM Peak Hour** – All of the studied intersections currently operate at LOS C or better during the Friday PM peak hour, except for the signalized intersection of PCH & Aviation Boulevard which operates at LOS D. Many of the intersections operate at LOS A or LOS B.
- **Saturday Midday Peak Hour** – All of the studied intersections currently operate at LOS D or better during the Saturday midday peak hour, with all but one intersection operating at LOS C or better, and with many operating at LOS A or LOS B.
- **Sunday Afternoon Peak Hour** – All of the studied intersections currently operate at LOS D or better during the Sunday afternoon peak hour, with all but one intersection operating at LOS C or better, and with many operating at LOS A or LOS B.

3.13.2 Regulatory Framework

Federal Regulations

Americans with Disabilities Act of 1990

Titles I, II, III, and V of the Americans with Disabilities Act (ADA) have been codified in Title 42 of the U.S. Code (USC), beginning at Section 12101. Title III prohibits discrimination on the basis

of disability in places of public accommodation (i.e., businesses and non-profit agencies that serve the public) and commercial facilities (i.e., other businesses). This regulation includes Appendix A to Part 36, Standards for Accessible Design, which establishes minimum standards for ensuring accessibility when designing and constructing a new facility or altering an existing facility. Examples of key guidelines include detectable warning for pedestrians entering traffic where there is no curb, a clear zone of 48 inches for the pedestrian travel way, and a vibration-free zone for pedestrians.

State Regulations

California Coastal Act

The California Coastal Act (Coastal Act) of 1976 dictates certain policies related to shoreline resources, including transportation issues related to State shorelines. While the Coastal Act does not include a section specifically regarding transportation issues, it does state how development must maintain access to coastal resources and maintain or distribute parking supply or adequate public transportation to minimize adverse impacts. (Coastal access parking availability is addressed in detail in Section 3.3, *Recreation*.)

Parking Cash Out

Parking Cash Out, Assembly Bill (AB) 2109 requires employers of 50 or more employees who lease their parking and subsidize any part of their employee parking to offer their employees the opportunity to give up their parking space and rideshare to work instead. In return for giving up their parking space, the employer pays the employee the cost of the parking space.

Global Warming Solutions Act of 2006

With the passage of the Global Warming Solutions Act (AB 32), the State of California committed itself to reducing statewide greenhouse gas (GHG) emissions to 1990 levels by 2020. The California Air Resources Board (CARB) is coordinating the response to comply with AB 32. PLAN Hermosa proactively incorporates strategies for integrated land use and transportation planning that achieve per capita GHG reduction, vehicle miles traveled (VMT) reduction, and trip reduction that would further the City's efforts to meet the State-wide policy intent of this legislation (refer to Section 3.8, *Greenhouse Gas Emissions*).

Senate Bill 375

CARB adopted a Scoping Plan for AB 32, which included the approval of Senate Bill (SB) 375 as the means for achieving regional transportation-related GHG targets. SB 375 provides guidance

on how curbing emissions from cars and light trucks can help the state comply with AB 32. SB 375 includes measures for to guide the adoption of targets to be met by each Metropolitan Planning Organization (MPO) as well as measures requiring each MPO to create a Sustainable Communities Strategy (SCS) and Regional Transportation Plan (RTP) that provides a plan for meeting regional targets. SB 375 also requires that regional housing elements and transportation plans be synchronized on 8-year schedules.

Senate Bill 743

To further the state's commitment to the goals of SB 375, AB 32, and AB 1358, Governor Brown signed SB 743 on September 27, 2013. SB 743 adds Chapter 2.7, *Modernization of Transportation Analysis for Transit-Oriented Infill Projects*, to Division 13 (Section 21099) of the Public Resources Code. Key provisions of SB 743, including reforming aesthetics and parking CEQA analyses for urban infill projects and eliminating the measurement of automobile delay, or LOS, as a metric that can be used for measuring traffic impacts would apply to the project site. Under SB 743, the focus of transportation analysis will shift from driver delay to reduction of GHG emissions, creation of multimodal networks, and promotion of a mix of land uses.

Specifically, SB 743 requires the Governor's Office of Planning and Research (OPR) to amend the State CEQA Guidelines to provide an alternative to LOS for evaluating transportation impacts. Once the State CEQA Guidelines are amended to include those alternative criteria, auto delay will no longer be considered a significant impact under CEQA. Particularly for areas served by transit, those alternative criteria must "promote the reduction of GHG emissions, the development of multimodal transportation networks, and a diversity of land uses" (Public Resources Code Section 21099[b][1]). Measurements of transportation impacts may include "vehicle miles traveled, vehicle miles traveled per capita, automobile trip generation rates, or automobile trips generated." OPR also has discretion to develop alternative criteria for areas that are not served by transit, if appropriate.

Pursuant to SB 743, OPR released *Proposed Updates to the CEQA Guidelines* in November 2017. OPR's proposed updates include VMT as the replacement metric for LOS in the context of CEQA. While OPR emphasizes that a lead agency has the discretionary authority to establish thresholds of significance, the *Draft of Updates* suggest criteria that indicate when a project may have a significant, or less than significant, transportation impact on the environment. For instance, a project that results in VMTs greater than the regional average for the land use type (e.g. residential, employment, commercial) may indicate a significant impact. Alternatively, a project may have a less than significant impact if it is located within 0.5 mile of an existing major transit stop, or results in a net decrease in VMTs compared to existing conditions.

The Natural Resources Agency will soon begin the formal administrative rulemaking process under the Administrative Procedure Act. That rulemaking process will entail additional public review, and may lead to further revisions. After completing the rulemaking process, the Secretary for the Natural Resources Agency may adopt the changes. Changes would only go into effect after the Office of Administrative Law reviews and approves the changes. These changes are anticipated to be fully in effect by January of 2020.

Regional Regulations

Southern California Association of Governments (SCAG)

SCAG is the designated MPO for six Southern California counties (i.e., Los Angeles, Ventura, Orange, San Bernardino, Riverside, and Imperial), and is federally mandated to develop plans for regional transportation, land use and growth management, hazardous waste management, and air quality. The City is one of many jurisdictions comprising the SCAG.

To address regional planning issues, SCAG has several adopted strategies and plans to implement California's Sustainable Communities and Climate Protection Act (SB 375), and recommended actions local jurisdictions can take to implement regional sustainability goals. The key principles of these strategies include: locating new employment centers and neighborhoods near major transit systems to reduce vehicle trips and peak congestion; creating mini-communities around transit stations, with small businesses, housing and restaurants within walking distance to reduce automobile travel; focusing future growth in urban centers and existing cities to reduce VMT and preserve rural and other natural areas; and preserving established single-family neighborhoods and existing natural and green spaces by accommodating new development with existing urbanized areas and downtowns.

In April 2016, SCAG adopted the 2016-2040 RTP/SCS, which includes goals to increase mobility and enhance sustainability for the region's residents and visitors. SCAG's 2016-2040 RTP/SCS provides growth forecasts that are used in the development of air quality-related land use and transportation control strategies by the SCAQMD. The RTP/SCS includes a strong commitment to reducing GHG emissions from transportation sources and emphasizes the crucial linkages and interrelationships between the economy, the regional transportation system, and land use. Strategies for achieving goals of available, safe, sustainable, and affordable transportation include: 1) investing in bus, light rail, and heavy rail transit; passenger and high-speed rail; pedestrian and bicycle transportation corridors; and infrastructure and transportation demand management (e.g., carpooling to reduce demand for individual transport); 2) encouraging public participation in the

planning processes; and 3) educating the public about available transportation methods available in the region.

The RTP/SCS specifically encourages future growth to occur within existing high-quality transit areas (HQTA), which are described as generally walkable transit districts or corridors that are within 0.5 mile of a major transit stop or a transit corridor with 15-minute or less service frequency during peak commute hours. The PCH corridor, located 0.5 miles east of the Project site, is identified as such an HQTA, although Hermosa Avenue and the immediate Project vicinity are not. The RTP/SCS approach to sustainably manage growth and transportation demand would reduce the distance and barriers between new housing, jobs, and services and would reduce vehicle travel and GHG emissions. Overall, the strategies and policies in the RTP/SCS are projected to exceed the GHG emission-reduction targets set forth by the CARB under SB 375.

Los Angeles County Metropolitan Transportation Authority

The Long Range Transportation Plan (LRTP) for Los Angeles County, prepared by Metro, notes that there is very limited ability to add capacity to regional highways and freeways over the next 25 years. Instead key efforts would focus on increasing the efficiency of the existing network and encouraging greater reliance on carpooling and transit use.

Los Angeles County Congestion Management Program

Metro's Congestion Management Program (CMP) is a state-mandated program that was enacted by the State Legislature with the passage of Proposition 111 in 1990. The CMP designates certain freeway segments and arterial roadways as CMP facilities. Generally, it is intended to address the impact of local growth on the regional transportation system.

South Bay Cities Council of Governments

The South Bay Cities Council of Governments (SBCCOG) is a joint powers authority of 16 cities and the County of Los Angeles focused on addressing regional issues such as water/energy efficiency, transportation/transit services, livable communities, climate action planning, and air quality. The SBCCOG's South Bay Sustainable Integrated Land Use and Transportation Strategy (July 2009) found that development-oriented transit would be more effective for built-out suburban areas, such as Hermosa Beach, than new infrastructure which requires transit-oriented development as recommended by SCAG. The report puts forth an alternate approach for integrating land use and transportation, and includes directives for VMT reduction that relate to land use planning at the local scale.

South Bay Bicycle Master Plan

South Bay Bicycle Master Plan (SBBMP) was funded by the Los Angeles County Department of Health's RENEW grant initiative in 2010 to facilitate more cycling and bicycle infrastructure in seven participating cities in the South Bay region. The City adopted the SBBMP in 2011 and proposes an additional 9.2 miles of bicycle facilities within the City that include connections with other SBBMP facilities in Manhattan Beach and Redondo Beach. The plan prioritizes investments in bicycle infrastructure and incorporates a comprehensive implementation program for the planning of routes and facilities into the circulation network.

Local Regulations

Hermosa Beach Downtown Core Revitalization Strategy

The Downtown Core Revitalization Strategy is a comprehensive approach to increasing the vitality of Downtown. The strategy requires public and private initiatives including capital improvement projects, transportation, changes to parking and zoning, and parking requirements involving private development.

Living Streets Policy

The goal of the City's Living Streets Policy is to promote the health and mobility of all City residents and visitors through provision of high quality pedestrian, bicycling, and transit access to destinations across the city. The policy provides a checklist of procedures that evaluate street projects through a comprehensive "sustainability" lens. It ensures that the various segments of the community – not just vehicle drivers – are considered when determining how to use and improve the public right-of-way.

Sustainability Plan

The City's Sustainability Plan, adopted in June 2011, provides a plan of local actions that the City and residents of Hermosa Beach can implement for a more sustainable future. Section 3 of the City's Sustainability Plan addresses transportation through policies and infrastructure improvements that encourage bicycling, walking, and other alternative modes of transportation as part of the City's greenhouse gas emissions reduction goals and Complete Streets policy.

Livability Plan

The Beach Cities Livability Plan, fostered by the Healthways Blue Zones (Vitality City) Initiative, focuses on how to improve livability and well-being in Hermosa Beach, Manhattan Beach, and Redondo Beach through land use and transportation systems that better support active living. The

plan was adopted by each city and includes recommendations to: 1) develop a regional pedestrian master plan; 2) adopt and implement the SBBMP; and 3) improve and enhance Safe Routes to School programs.

City of Hermosa Beach Coastal Land Use Plan

The Coastal Land Use Plan (CLUP) addresses parking supply and protection in the Coastal Zone. Policies under the CLUP require that access to coastal resources be accessible to all through the implementation of various parking management strategies. Specific CLUP policies include a prohibition against the elimination of existing on- or off-street parking within the Coastal Zone, the control of congestion through the granting of preferential parking permits, and the separation of short- and long-term parkers in the immediate area around the beach.

City of Hermosa Beach Municipal Code

The HBMC includes regulations and standards governing traffic, parking and loading, encroachments on the public right-of-way, and development.

PLAN Hermosa

PLAN Hermosa is a comprehensive update of the City's General Plan. It was released for public review in December of 2015 and adopted by the City Council on August 22, 2017. In addition to the Mobility Element, PLAN Hermosa's Sustainability + Conservation, Parks + Open Space, and Infrastructure elements all incorporate aspects of sustainable transportation development. The elements include policies intended to effectively manage and maintain the City's circulation system with the goal of minimizing congestion, increasing local and regional access opportunities, and enhancing traffic circulation by reducing vehicle trips and increasing access to non-motorized and low-carbon transportation options such as walking, bicycling, and transit.

PLAN Hermosa MOBILITY ELEMENT

Goal 2: A public realm that is safe, comfortable, and convenient for travel via foot, bicycle, public transit, and automobile and creates vibrant, people-oriented public spaces that encourage active living.

Policy 2.1. Prioritize public rights-of-way. Prioritize improvements of public rights-of-way that provide heightened levels of safe, comfortable and attractive public spaces for all non-motorized travelers while balancing the needs of efficient vehicular circulation.

Policy 2.2. Encourage traffic calming. Encourage traffic calming policies and techniques that limit cut-through traffic and efficient movement of people and vehicles along residential areas and highly trafficked corridors.

Policy 2.5. Require sustainable practices. Incorporate environmental sustainability practices into designs and strategic management of road space and public rights-of-way, prioritizing practices that can serve multiple infrastructure purposes.

Goal 3: Public rights-of-way supporting a multimodal and people-oriented transportation system that provides diversity and flexibility on how users choose to be mobile.

Policy 3.1. Enhance public rights-of-way. Where right-of-way clearance allows, enhance public rights-of-way to improve connectivity for pedestrians, bicyclists, disabled persons, and public transit stops.

Policy 3.2. Complete pedestrian network. Prioritize investment in designated priority sidewalks to ensure a complete network of sidewalks and pedestrian-friendly amenities that enhances pedestrian safety, access opportunities and connectivity to destinations.

Policy 3.3. Active transportation. Require commercial development or redevelopment projects and residential projects with four or more units to accommodate active transportation by providing on-site amenities, necessary connections to existing and planned pedestrian and bicycle networks, and incorporate people oriented design practices.

Policy 3.5. Incentivize other modes. Incentivize local shuttle/trolley services, rideshare and car share programs, and developing infrastructure that support low speed, low carbon (e.g., electric) vehicles.

Policy 3.10. Require ADA standards. Require that all public rights-of-way be designed per ADA standards by incorporating crosswalks, curb ramps, pedestrian signals, and other components to provide ease of access for disabled persons.

Goal 4: A parking system that meets the parking needs and demand of residents, visitors, and employees in an efficient and cost-effective manner.

Policy 4.5. Sufficient bicycle parking. Require a sufficient supply of bicycle parking to be provided in conjunction with new vehicle parking facilities by both public and private developments.

Policy 4.9. Encourage Transportation Demand Management (TDM) strategies. Encourage use of transportation demand management strategies and programs such as carpooling, ride hailing, and alternative transportation modes as a way to reduce demand for additional parking supply.

Goal 5: A robust low cost and low carbon transportation system that promotes the City's environmental sustainability and stewardship goals in support of social and economic objectives.

Policy 5.1. Prioritize development of infrastructure. Prioritize the development of roadway and parking infrastructure that encourages private electric and other low carbon vehicle ownership and use throughout the city.

Policy 5.3. Incentivize TDM strategies. Incentivize the use of TDM strategies as a cost-effective method for maximizing existing transportation infrastructure to accommodate mobility demands without significant expansion to infrastructure.

Policy 5.4. Evaluate projects. Ensure the evaluation of projects for transportation and traffic impacts under CEQA consider local and statewide goals related to infill development, the promotion of healthy and active lifestyles through active transportation, and the reduction of greenhouse gases, in addition to traditional congestion management impacts.

Policy 5.5. Multimodal development features. Encourage land use features in development projects to create compact, connected, and multimodal development that supports reduced trip generation, trip lengths, and greater ability to utilize alternative modes of travel.

Goal 7. A transportation system that results in zero transportation-related fatalities and which minimizes injuries.

Policy 7.1. Safe public rights-of-way. Encourage that all public rights-of-way are safe for all users at all times of day where users of all ages and ability feel comfortable participating in both motorized and non-motorized travel.

Policy 7.2. Manage speeds. Monitor vehicle speeds through traffic controls, speed limits, and design features with the intended purpose of minimizing vehicle accidents, creating a pedestrian and bicycle environment, and discouraging cut-through traffic.

Policy 7.5. Appropriate sidewalk widths. Encourage design and construction plans that incorporate sidewalks that are wide enough to safely accommodate high levels of pedestrian activity.

Goal 8: Facilitate sustainable, effective, and safe movement of goods and commercial vehicles.

Policy 8.3. Commercial loading zones. Encourage businesses to provide commercial loading zones on-site where possible, or in the adjacent public right-of-way in a manner that balances the needs of businesses with the impact on traffic conditions and at appropriate delivery times.

PLAN Hermosa PARKS + OPEN SPACE ELEMENT

Goal 4. Direct and accessible routes and connections to parks, recreational facilities, and open space are provided.

Policy 4.2 Enhanced access points. Increase and enhance access to parks and open space, particularly across major thoroughfares, as well as access points that promote physical activity such as pedestrian and bike oriented access points.

Goal 6. The coast and its recreational facilities are easily accessible from many locations and by multiple transportation modes.

Policy 6.3. Safe and accessible connections. Ensure public access points provide safe and accessible connections to The Strand and shoreline, including access for persons with disabilities.

Policy 6.5. Wayfinding and coastal access. Maximize all forms of access and safety getting to and around the Coastal Zone through infrastructure and wayfinding improvements.

Policy 6.6. Universal access. Provide resources that improve accessibility to the beach for all visitors.

PLAN Hermosa INFRASTRUCTURE ELEMENT

Goal 2: Roadway infrastructure maintenance supports convenient, attractive, and complete streets and associated amenities.

Policy 2.3. Street and sidewalk standards. Require the use of standardized roadway, sidewalk, parkway, curb, and gutter designs to ensure continuity and consistency as property redevelops over time.

Policy 2.5. Active transportation dedications. Require new development and redevelopment projects to provide land or infrastructure necessary to accommodate active transportation, such as widened sidewalks, bike racks, and bus stops in compliance with ADA accessibility standards.

PLAN Hermosa PUBLIC SAFETY ELEMENT

Goal 8: Transportation noise sources are minimized.

Policy 8.2. Alternative modes of transportation. Reduce noise impacts by encouraging the use of walking, biking, carpooling, use of public transit, and other alternative modes of transportation.

PLAN Hermosa SUSTAINABILITY + CONSERVATION ELEMENT

Goal 3: Improved air quality and reduced air pollution emissions.

Policy 3.2. Mobile source reductions. Support land use and transportation strategies to reduce emissions, including pollution from commercial and passenger vehicles.

3.13.3 Impact Assessment and Methodology

Thresholds of Significance

The following thresholds of significance are based on Appendix G of the 2017 CEQA Guidelines. For purposes of this EIR, implementation of the proposed Project may have a significant adverse impact on traffic if it would do any of the following:

a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?
b) Conflict with an applicable congestion management program, including, but not limited to LOS standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks.
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses.
e) Result in inadequate emergency access.
f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?

The Project Initial Study (see Appendix A) determined that the proposed Project would result in no impact under threshold (c). There are no airports or airstrips within the City and none of the Project components would affect the airports in the regional vicinity (e.g., LAX) or any associated air traffic patterns. No impact would occur as a result the Project; therefore, this issue is not further assessed in this EIR.

CEQA Section 15064.7 also encourages lead agencies to develop and adopt local thresholds of significance. Additional City thresholds of significance for traffic and circulation are listed below and are based on City policy. Standards of significance for transportation impacts in the City are based on automobile LOS, which is common throughout the State. This is partly because the State CEQA Guidelines state significance thresholds need to be:

> "… an identifiable quantitative, qualitative or performance level of a particular environmental effect, noncompliance with which means the effect will normally be determined to be significant by the agency and compliance with which means the effect normally will be determined to be less than significant." (CEQA Section 15064.7)

As previously described, a key provision of SB 743, passed in September 2013, is the elimination of vehicle delay and LOS as a CEQA significance criterion in urban areas. The basic reason for this change at the State level is the recognition that there can be conflicts between improvements that benefit vehicles versus those that benefit other modes of transportation in urban areas. For example, widening streets to improve automobile LOS can often be to the detriment of pedestrians or bicyclists, eliminating bicycle lanes, narrowing sidewalks, and increasing road crossing

distances. Such road widening can also impact the urban fabric through removal of street trees or building demolition. SB 743 also recognizes that continued reliance on automobiles is at odds with State objectives to reduce GHGs (through reductions in VMT), and that mitigation for increased vehicle delay often involves measures which may increase auto use and discourage alternative forms of transportation. When employed in isolation, LOS can lead to ad hoc roadway expansions that deteriorate conditions on the network as a whole, or discourage transportation improvements that improve street function overall by providing better LOS for vehicles, but decreasing service for transit, pedestrians or bicycles. According to the legislative intent contained in SB 743, changes to the current practice of using LOS are necessary to, "*More appropriately balance the needs of congestion management with statewide goals related to infill development, promotion of public health through active transportation, and reduction of greenhouse gas emissions*."

Pursuant to SB 743, OPR released *Proposed Updates to the CEQA Guidelines* in November 2017. OPR's *Proposed Updates to the CEQA Guidelines* utilizes VMT as the replacement metric for LOS in the context of CEQA. However, since OPR has not yet adopted these updates to the CEQA Guidelines, this EIR continues to evaluate the project using the City's adopted significance criteria of automobile delay.[6] However, this EIR also evaluates consistency with PLAN Hermosa policies, which emphasize pedestrian oriented design and the creation of living streets that promote the health and mobility by providing high quality pedestrian, bicycling, and transit access.

Construction Traffic

Traffic impacts associated with construction activities are considered potentially significant if Project construction would materially interfere with the area traffic, pedestrian, or bicycle flow, cause unsafe conditions, or introduce substantial truck traffic through a residential area.

Intersection Delay

The City has established criteria for assessing whether project-related traffic increases result in significant impacts on operating conditions of signalized and unsignalized intersections. The intersection threshold criteria used to determine if the Project has an adverse significant traffic impact at signalized intersections in the City are shown in Table 3.13-6.

[6] The revised CEQA Guidelines regarding use of VMT are expected to be fully in effect by January of 2020.

Table 3.13-6. City of Hermosa Beach Significant Impact Criteria for Signalized Intersections

ICU	Level of Service	Project-Related Increase in ICU
0.000-0.800	LOS A, B or C	Degrades to LOS D, E, or F
>0.801 – 0.900	LOS D	Equal to or great than 0.02 Or Degrades to LOS E or F
>0.901 or greater	LOS E or F	Equal to or greater than 0.05 Or Degrades from LOS E to F

Notes:
ICU – Intersection Capacity Utilization
LOS – Level of Service; refer to Table 3.13-3 for definitions.
Source: The Mobility Group 2017.

The intersection threshold criteria used to determine whether the Project has an adverse significant traffic impact at unsignalized intersections in the City are shown in Table 3.13-7.

Table 3.13-7. City of Hermosa Beach Significant Impact Criteria for Unsignalized Intersections

Level of Service	Final Level of Service
A, B or C	Change to LOS D, E, or F
D, E, or F	Increase in traffic of 10% or more

Notes:
LOS – Level of Service; refer to Table 3.13-3 for definitions.
Source: The Mobility Group 2017.

Regional Transportation Facilities

The 2010 CMP for Los Angeles County (Los Angeles County Metropolitan Transportation Authority 2010) requires that when an EIR is prepared for a proposed project, traffic and transit impact analyses be conducted for select regional facilities based on the quantity of project traffic The CMP guidelines require that the geographic scope of the study area to be analyzed is the first issue to be addressed. The criteria for determining the study area for CMP arterial monitoring intersections and for freeway monitoring locations are:

- All CMP arterial monitoring intersections where the proposed project will add 50 or more trips during either the AM or PM weekday peak hours of adjacent street traffic.
- All CMP mainline freeway monitoring locations where the proposed project will add 150 or more trips, in either direction, during either the AM or PM weekday peak hours.

A significant project-related CMP impact would be identified if:

- The project would increase traffic by 2 percent (V/C greater than 0.02) on a CMP facility causing it to operate at LOS F or if the facility is already at LOS F, the project traffic causes an incremental change in the V/C ratio of 0.02 or greater.

Alternative Transportation Facilities

The analysis of the Project's impacts on alternative transportation facilities reviews to what extent the proposed Project would disrupt, interfere, or conflict with existing alternative transportation facilities and program, plans, and policies supporting alternative transportation, for example, public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities.

An analysis of potential Project impacts on the transit system was also performed, per the CMP requirements and guidelines. Neither the CMP nor the City has significant impact thresholds for transit service. For the purposes of this analysis, the following criteria were established to determine if there would be any significant transit impacts due to the Project:

- The capacity of the transit system serving the Project area would be substantially exceeded.
- The Project would conflict or hinder the goals of plan, programs, or policies supporting alternative transportation.

Methodology

Intersection Delay Impact Analysis

The intersection delay impact analysis presented below summarizes the results of the Traffic Study prepared for the project by The Mobility Group (see Appendix I), which was independently reviewed by Fehr & Peers. The scope of the Traffic Study conforms to standards set forth in adopted City guidelines. The roadways, intersections, and other transportation systems included in the Traffic Study were identified jointly by The Mobility Group and City staff based on the magnitudes and specific locations of Project-generated demand on transportation systems, particularly traffic and the potential for newly generated trips to impact streets and roadways in the immediate vicinity of the Project site. Previous area circulation studies were considered to ensure that potentially affected facilities were included in the analysis.

Peak hour traffic impacts for the Project were evaluated during typical weekday AM (7:00am to 9:00am) and PM (4:00pm to 6:00pm) peak hours, Friday PM peak hour (5:00pm to 9:00pm), Saturday midday peak hour (12:00pm to 3:00pm), and Sunday afternoon peak hour (3:00pm to 6:00pm). These were determined to be the peak periods of highest traffic volumes from 24-hour

roadway volume counts conducted for a 7-day period during the summer period prior to conducting the Project-specific intersection counts. Weekday peak hour traffic counts were conducted on Thursday August 27, 2015. Traffic counts were also conducted for the Friday PM peak hour on Friday August 21, 2015 for the Saturday midday peak hour, on Saturday August 22, 2015 and for the Sunday afternoon peak hour on Sunday August 23, 2015.

In order to evaluate the potential traffic impacts of the proposed Project on the surrounding street system, traffic estimates were developed for the Existing Year (2016) and Future Year (2021) with and without the anticipated Project-generated traffic.

- Estimates of Existing Year (2016) traffic growth were developed for the study area without the addition of Project-related traffic. These future traffic volumes, referred to as Existing (2016) Without Project forecasts, represent the conditions that provide a baseline for the Existing (2016) Plus Project traffic impact analysis. To develop the Existing (2016) Without Project forecasts, the August 2015 traffic volume counts were factored upward by 1 percent to represent 2016 conditions.
- The traffic generated by the proposed Project in the Existing Year (2016) was estimated and trip distribution was modeled across the surrounding street system. The Project traffic was added to the Existing (2016) Without Project forecast to create the Existing (2016) Plus Project traffic forecast.
- Estimates of Future Year (2021) traffic growth were developed for the study area in order to forecast future traffic conditions without the proposed Project. These projected traffic volumes, referred to as Future (2021) Without Project forecast, represent the conditions expected during the Future Year (2021) and provide the baseline for the Future (2021) Plus Project traffic impact analysis. A growth rate of 1 percent per year was applied for this ambient traffic growth based on historical traffic growth.[7] Additionally, cumulative growth associated with specific development projects that are pending, approved, or currently under construction and potentially could be in place by the Future Year (2021).[8]
- The traffic generated by the proposed Project in the Future Year (2021) was estimated and trip distribution was modeled across the surrounding street system. The Project traffic was added to the Future (2021) Without Project forecast to form the Future (2021) Plus Project traffic forecast.

[7] An evaluation of growth projections from the CMP for Regional Statistical Area 18 (which includes Hermosa Beach) showed an annual growth forecast of 0.25 percent per year between 2015 and 2020. The use of 1 percent per year growth factor therefore provides a conservative forecast.

[8] This approach is conservative in that not all of the related projects may be ultimately built, and not all may be built by 2021 (i.e., the buildout year of the proposed Project). Along with the fact that the analysis includes both a list of specific related projects and a general background growth factor, the analysis likely overstates the future growth in traffic without the proposed Project.

Existing Year (2016) Conditions

CEQA Section 15125 directs that an EIR "must include a description of the physical environmental conditions in the vicinity of the project, as they exist at the time the NOP is published, or if no NOP is published at the time environmental analysis is commenced, from both a local and regional perspective. These environmental settings will normally constitute the baseline physical conditions by which a lead agency determines whether an impact is significant."[9]

However, the State CEQA Guidelines and the Courts have recognized that the date for establishing an environmental baseline cannot be rigid. The California Supreme Court determined that "[n]either CEQA nor the State CEQA Guidelines mandate a uniform, inflexible rule for determination of the existing conditions baseline. Rather, an agency enjoys the discretion to decide, in the first instance, exactly how the existing physical conditions without the project can most realistically be measured, subject to review, as with all CEQA factual determinations, for support by substantial evidence."[10] The California Supreme Court further stated that "Environmental conditions may vary from year to year and in some cases it is necessary to consider conditions over a range of time periods. In some circumstances, peak impacts or recurring periods of resource scarcity may be as important environmentally as average conditions. Where environmental conditions are expected to change quickly during the period of environmental review for reasons other than the proposed project, project effects might reasonably be compared to predicted conditions at the expected date of approval, rather than to conditions at the time analysis is begun."[11]

In compliance with CEQA case law and the discretion of the Lead Agency (i.e., the City), the baseline for the transportation and traffic impact analysis in this EIR is 2016, the year the NOP was published (see Appendix A). As discussed in Section 3.13.1, *Existing Setting*, consistent with CEQA Section 15125, the existing conditions are described 2016, the year the NOP was published. It should be noted that the Project site is located in the developed area of the Downtown Core, which is already built out with limited traffic growth. No significant new developments have been constructed in the immediate vicinity that would result in substantial changes to the existing traffic between the NOP year and 2018 (refer to Section 3.02, *Cumulative Impacts*).

[9] 14 California Code of Regulations 15125 (a).
[10] Communities for a *Better Environment v. South Coast Air Quality Management District (2010) 48 Cal.4th 310, 320*
[11] *Communities for a Better Environment, supra, 48 Cal.4th at p. 328.*

Future Cumulative Projects Trip Generation and Distribution

Trip generation estimates for the future cumulative projects were generally taken from the environmental and/or traffic studies prepared for the individual cumulative projects (see Appendix I; Table 3.1 of the Traffic Study). Where the information was not available from previous reports, the cumulative project trip generation was estimated using trip rates developed by the Institute of Transportation Engineers (ITE).[12]

Cumulative trip generation information was available for the weekday AM peak hour and the weekday PM peak hour from the associated cumulative project traffic studies, but not available for the Friday PM peak hour, the Saturday midday peak hour, and the Sunday afternoon peak hour. The ITE trip rates database does not identify trip rates specifically for a Friday. Because the hours of analysis in this study is essentially the same for a Friday PM peak hour (5:15pm – 6:15pm) as for a weekday PM peak hour (5:00pm – 6:00pm), the cumulative project trip generation rates for the weekday PM peak hour were directly applied the Friday PM peak hour scenario. The Project's trips were then added to the existing conditions traffic counts for a Friday PM peak hour (collected on Friday August 21, 2015), which reflect the greater background traffic volumes that cumulatively occur on a Friday PM peak hour than during the typical weekday (i.e., Monday through Thursday) PM peak hour. For the Saturday midday peak hour and the Sunday afternoon peak hour, cumulative trip generation was estimated based on a methodology which included using trip rates in *ITE Trip Generation – 9th Edition* using reasonable assumptions and interpretations and professional judgment. This generally involved estimating the percent of daily trips that would occur in the specific analysis hour, or by using the trip rate for the "peak hour of generator." The cumulative trip rates used in the analysis are presented in the Traffic Study. Similarly, cumulative trip distribution estimates were also taken from previous traffic studies where available or were estimated based on an understanding of the type of the proposed cumulative project, its location, and the Downtown roadway and circulation system. Each of these cumulative trip generation rates was independently reviewed and verified by Fehr & Peers during peer review of the Traffic Study.

[12] ITE trip rates are usually provided for the peak hour of street traffic (AM and PM peak hour), and the "peak hour of generator" (i.e., the hour of highest trip generation for the land use). For the Saturday midday peak hour and Sunday Afternoon peak hour, this peak hour of generator trip rate was used when considered to appropriately represent the analysis time period, though in some cases may result in a conservatively high estimate. In cases where it was considered that the peak hour of generator rate was not applicable, the trip rate for the analysis time period was based on estimates using similar or comparable land uses, or by estimating the percent of daily trips that would occur in the analysis time period and based on professional judgment from available data from other time periods.

Project Trip Generation Methodology

The proposed Project has unique characteristics in that it is located both in the Downtown and adjacent to The Strand, Pier Plaza, and Hermosa Pier, which are areas of exceptionally high pedestrian activity as well as bicycle use. The proposed Project is a mixed-use commercial project with facilities that are primarily for hotel guests, with many open to the public, and independent retail and restaurant uses for the general public. The proposed Project is in a location where many people already come to visit Downtown retail establishments and restaurants on Pier Plaza and Hermosa Avenue, as well as The Strand and the beach. They park one time and then visit multiple destinations as they walk around Downtown, visit the beach, and walk/bike along The Strand. Consequently, the proposed uses at the Project site (e.g., hotel lounge, restaurants, etc.) would, for some, be just one more stop on a visit already made to Downtown. Because they are already visiting Downtown, for many patrons of business at the Project site, their visit would not generate additional vehicle trips.

Standard trip generation rates from the ITE Trip Generation manual are not directly applicable to the proposed mixed-use hotel because they are often derived from and applied to stand-alone uses in suburban locations. ITE trip rates serve as the basis for initial estimates of Project trip generation with appropriate adjustments to adequately reflect the unique circumstances of the Project vicinity described above. This includes adjusting for the fact that some people will already be in the hotel and would not make additional vehicle trips to other Project land uses such as restaurants (internal trips), and some of the external visitors to the Project would already be Downtown and would walk or bike to the Project (non-automotive trips). These types of adjustments then applied to base trip generation rates in *ITE Trip Generation – 9th Edition*, are discussed below, by each type of use in the Project. Where appropriate, empirical data from traffic studies for recently completed similar uses in the Project vicinity (i.e., Beach House Hotel) were used to estimate the trip generation for certain uses proposed by the Project in place of standard ITE trip generation rates. Trip generation estimates for the Project are discussed below. Each of the trip generation adjustments was independently verified by Fehr & Peers during peer review of the Traffic Study to ensure that the adjustments were consistent with similar-type hotels in Southern California.

In order to prepare a conservative analysis, Project uses were each treated individually for the purposes of estimating trip generation, as described below.

- *Hotel Rooms* – Unlike a suburban stand-alone hotel, the proposed hotel is located in a visitor destination area. A primary reason for people staying at the hotel would be for a visit to Downtown and the adjacent beach and Pacific Ocean. Once people have arrived at the hotel there would likely be a strong tendency for guests when they leave the hotel to either walk or rent a bicycle to access local destinations, rather than use a car. This is

demonstrated by empirical data collected at the nearby Beach House Hotel, which identified that vehicle trip rates were only 30 percent of the standard ITE trip rates for a hotel (see Appendix I).

Trip generation estimates for the hotel rooms were therefore based on empirical data collected at the nearby Beach House Hotel – which is directly comparable to the hotel element of the proposed Project. The Beach House Hotel is a luxury 96-room hotel located on The Strand just north of the Project site. The hotel also has approximately 2,285 square feet (sf) of meeting rooms (approximate occupancy of 68 to 134 persons).

- *Hotel Restaurant/Lobby Bar* – In common with many hotels, the proposed hotel would include a hotel restaurant and lobby bar. These would be provided primarily for hotel guests, and would be the primary food service for hotel guests. However, because of the hotel location directly on The Strand and adjacent to Pier Avenue, these uses would also be expected to attract visitors from outside the hotel, although many of those visitors would be people already visiting Downtown and who have already parked and would therefore walk and not drive to the Project.

  Typically, trips to these uses are included in the ITE Hotel trip rate. However, the ITE Hotel trip rate has been modified used for this analysis because the because of the proposed Project's location on The Strand means that many of the visitors to the hotel restaurant and bar lounge would be visitors to the Downtown and not guests of the hotel, and therefore, trips for the hotel restaurant and lobby bar were estimated separately.

  Adjustments and replacements to the standard ITE trip rates were made to reflect the characteristics of these uses described above, with estimates that 50 percent of trips would be internal to the proposed Project, and that 40 percent of external trips would be by automobile (25 percent on weekends due to the typically higher visitor rates to the area at weekends), with the remainder being non-automobile modes (e.g., walk, bicycle, or transit).

- *Hotel Meeting Rooms* – The hotel meeting rooms would be used for meeting/functions where attendees are either staying in the hotel (internal), or not staying in the hotel (external). While the ITE trip rates for hotels include meeting rooms, a conservative analysis addresses a scenario where attendees to meeting room functions are not staying at the hotel and trips are independent of the hotel trip rate.

  While some of the events held in the hotel meeting rooms would be attended primarily by guests staying at the hotel, some events would be attended by outside visitors. In order to prepare a conservative analysis, trip generation for the meeting rooms assumed an event attended entirely by outside visitors. As such events would tend to be "destination" events (i.e., the primary reason for visiting the hotel and Downtown), it is assumed that none of the trips would be internal to the hotel or the Downtown.

  Trips to/from the meeting rooms were estimated using a trip rate of 0.50 trips/attendee. (Based on 128 occupants, all arriving by automobile, with 1.2 persons per vehicle, and 60 percent arrive or depart in the peak hour.)

- *Hotel Terrace/Rooftop Lounge* – The second-floor courtyard terrace and rooftop terrace would provide facilities for hotel guests, but would also be accessible to the public. The terraces would therefore provide an additional amenity to the array of destinations already

provided in Downtown, and many visitors would already have parked in Downtown for their multi-purpose trip.

As the second-floor courtyard terrace and rooftop terrace would be part of the hotel and would provide an amenity for hotel guests, some of the users of these facilities would already be on-site. The terraces would also be used by members of the public – some of whom would already be in the Downtown and would already have parked in the Downtown for their multi-purpose trip. It is estimated that 60 percent of trips would be from hotel guests, and that 50 percent of the external visitors would use automobiles with the remainder using non-automobile modes (i.e., walk, bike, or public transit).[13]

- *Hotel Spa/Wellness Salon* – The spa/wellness center would be comprised of a fitness center, exclusively for the use of hotel guests and spa visitors only, as well as several treatment rooms within the spa itself. While the spa would be open to the public, the small size of the facility is intended as an amenity for hotel guests and would be conducive to hotel guests as opposed to members of the public driving in from off-site. Therefore, it is assumed that 75 percent of patrons would be hotel guests, and that 80 percent of external trips would be by automobile on weekdays and 60 percent on weekends.

- *Beach Quick Service Food* – Two walk-up style casual cafe spaces are planned adjacent to the public plaza at the terminus of 13th Street & Beach Drive. These are programmed with walk-up windows intended to provide quick-serve food service for beach goers and users of The Strand. As these are intended to service people already at the hotel and the large number of pedestrians and bicyclists in the area, it is highly unlikely they would be "destination" uses that people from outside the area would drive to. It was therefore assumed that 95 percent of trips to these uses would already be in the hotel or general area, and that 5 percent of the external visitors would drive.

- *Other Project Land Uses – Retail, Restaurant* – While the retail and restaurant uses in the Project would be separate to the hotel, there would be overlap with the hotel in that some of the retail and restaurant customers would be staying at the hotel. Other retail customers may already be in the Downtown and visit the retail and restaurant uses as one of multiple stops as they walk around Downtown. Neither category of customer would drive to the retail use as they would have already parked elsewhere. Included in the retail uses would be a bicycle shop that would function in the same way as the existing bicycle shop on the Project site, providing bicycle rentals for Downtown visitors. Some of these would include hotel residents as well as people who are already parked in the Downtown (and who would make multiple visits/stops to Downtown destinations without moving their cars).

For the Project's retail and restaurant uses, trip generation estimates were based on ITE trip rates adjusted for the local circumstances. For the small amount of local retail uses, the ITE trip rate for specialty retail was used, and it was estimated that 10 percent of trips would be internal to the proposed Project (already also visiting another part of the Project), and that 40 percent of the external visitors would arrive by automobile with the remainder using non-automobile modes (i.e., walk, bicycle, or transit).

[13] In addition to data from the adjacent Beach House Hotel, data is available from hotels in Santa Monica that found that hotel trip rates were largely consistent between facilities, and ranged between 50 percent and 60 percent of the standard ITE Hotel rates. See further discussion below under *Total Proposed Project Trip Generation*.

For the restaurant uses it was also estimated that 10 percent of trips would be internal to the proposed Project (also already visiting another part of the Project), and that 40 percent of the external visitors would arrive by automobile with the remainder using non-automobile modes (i.e., walk, bicycle, or transit).

Total Proposed Project Trip Generation

Applying the adjustments discussed above, trip rates and the trip generation estimates for the five time periods analyzed total approximately 42 percent of the trips that would be estimated using the standard ITE trip rates, while the trip generation rates for the remaining trips were adjusted for site-specific conditions and empirical data from nearby similar uses (i.e., the Beach House Hotel), as discussed above. The trip rates and estimates reflect the Project's unique location adjacent to the beach in Downtown, amid an area of high pedestrian and bicycle activity and all of the factors discussed above (see Tables 3.13-8 through 3.13-11). They are also consistent with observed experience at other locations in Southern California.

In addition to the data from the adjacent Beach House Hotel, data is available from comparable hotels in Santa Monica that found that hotel trip rates were largely consistent between facilities, and ranged between 50 percent and 60 percent of the standard ITE Hotel rates. The lower rates were explained by the fact that the hotels studied were in dense urban areas where walking is more common, compared to the fact that ITE trip rates are for typically standalone suburban locations; and higher levels of trips captured internally by restaurant uses in the hotels. However, three of the hotels were at least six to seven blocks from the beach, and not directly comparable to the proposed Project, and the reduced trip rate was more due to their location in a walkable downtown than being adjacent to the beach. One hotel (i.e., Holiday Inn Santa Monica Beach [now the Wyndham Hotel Santa Monica]), on the other hand, was located two blocks from the beach in the core of Downtown Santa Monica (and with the most similar location to the proposed Project with respect to beach adjacency), and had lower trip rates than the rest, which were 35 to 45 percent of ITE trip rates for certain peak hours. The data revealed that over 60 percent of trips to/from that hotel were made by foot.

Table 3.13-8. Project Hotel Use Trip Rates and Estimates

Hotel Use	Quantity	Units	Peak Hour	ITE Trip Rate	Adjusted Trips		
					% Internal	% Auto	# Trips
Rooms	100	Rooms	AM	0.17/room	0	NA	17
			PM	0.18/room	0	NA	18
			FRI	0.18/room	0	NA	18
			SAT	0.22/room	0	NA	22
			SUN	0.17/room	0	NA	17
Hotel Restaurant/ Lounge/ Bar	7,019	sf	AM	10.8/1,000 sf	50	40	15
			PM	9.85/1,000 sf	50	40	14
			FRI	9.85/1,000 sf	50	40	14
			SAT	14.07/1,000 sf	50	25	12
			SUN	18.46/1,000 sf	50	25	16
Meeting Rooms	128	occupancy	AM	0.50/occ	NA	NA	64
			PM	0.50/occ	NA	NA	64
			FRI	0.50/occ	NA	NA	64
			SAT	0.50/occ	NA	NA	64
			SUN	0.50/occ	NA	NA	64
Terraces	10,868	sf	AM	0.00/1,000 sf	60	50	0
			PM	11.34/1,000 sf	50	50	25
			FRI	11.34/1,000 sf	60	50	25
			SAT	19.29/1,000 sf	60	50	42
			SUN	16.06/1,000 sf	60	50	35
Spa/Salon	2,857	sf	AM	1.21/1,000 sf	75	80	1
			PM	1.45/1,000 sf	75	80	1
			FRI	1.45/1,000 sf	75	80	1
			SAT	5.08/1,000 sf	75	60	2
			SUN	5.08/1,000 sf	75	60	2
Walk-up Cafés	2,192	sf	AM	43.87/1,000 sf	5	5	5
			PM	26.15/1,000 sf	5	5	3
			FRI	26.20/1,000 sf	5	5	3
			SAT	54.55/1,000 sf	5	5	6
			SUN	36.59/1,000 sf	5	5	4

Table 3.13-9. Project Retail Use Trip Rates and Estimates

Use	Quantity	Units	Peak Hour	ITE Trip Rate	Adjusted Trips		
					% Internal	% Auto	#Trips
Retail	5,215	sf	AM	6.84/1,000 sf	10	40	13
			PM	2.71/1,000 sf			5
			FRI	2.71/1,000 sf			5
			SAT	4.76/1,000 sf			9
			SUN	2.31/1,000 sf			4

Table 3.13-10. Project Restaurant Use Trip Rates and Estimates

Use	Quantity	Units	Peak Hour	ITE Trip Rate	Adjusted Trips		
					% Internal	% Auto	#Trips
Restaurant	5,757	sf	AM	0.81/1,000 sf	10	40	2
			PM	7.49/1,000 sf			16
			FRI	7.49/1,000 sf			16
			SAT	10.82/1,000 sf			22
			SUN	8.38/1,000 sf			17

Table 3.13-11. Existing On-Site Use Trip Rates and Estimates

Existing Use	Quantity	Units	Peak Hour	ITE Trip Rate	Adjusted Trips		
					% Internal	% Auto	#Trips
Restaurant	9,596	sf	AM	0/1,000 sf	0	40	0
			PM	9.85/1,000 sf			38
			FRI	9.85/1,000 sf			38
			SAT	14.07/1,000 sf			54
			SUN	18.5/1,000 sf			71
Retail	6,060	sf	AM	0/1,000 sf	0	40	0
			PM	2.71/1,000 sf			7
			FRI	2.71/1,000 sf			7
			SAT	4.76/1,000 sf			12
			SUN	2.31/1,000 sf			6
West Bay Apartments (Residential)	8	DU	AM	0.51/DU	0	100	4
			PM	0.62/DU			5
			FRI	0.62/DU			5
			SAT	0.52/DU			4
			SUN	0.51/DU			4

Trip Rates for Friday PM Peak Hour, Saturday Midday Peak Hour and Sunday Afternoon Peak Hour

Because it is not standard industry practice, neither the standard ITE trip rates database nor the empirical studies for hotels in the immediate Project vicinity (or for hotels in similar coastal cities) identify trip rates specifically for a Friday. Although the ambient existing background traffic volumes are typically higher in the Downtown on a Friday night (as demonstrated through data collected on Friday August 21, 2015), the Project itself would not be expected to generate a higher number of trips during the Friday afternoon peak hour than during the remainder of the week. Therefore, the Project's estimated trip rates for the weekday PM peak hour were directly adopted for the Friday PM peak hour scenario. For the Saturday midday peak hour and the Sunday afternoon peak hour, trip generation was estimated based on a methodology which included using trip rates in *ITE Trip Generation – 9th Edition* with reasonable assumptions and interpretations and professional judgment. This generally involved using the trip rate for the "peak hour of generator" or by using the information available within *ITE Trip Generation – 9th Edition* to derive best estimates.

Regional Transportation Facilities

The analysis of the Project's impacts on regional facilities is based on the CMP guidelines established in the 2010 CMP for Los Angeles County which analyze impacts to Arterial Intersections, and Mainline Freeway Locations, and the CMP Highway and Roadway system.

Alternative Transportation Facilities

The analysis of the Project's impacts on alternative transportation facilities reviewed to what extent the proposed Project would disrupt, interfere, or conflict with existing alternative transportation facilities and program, plans, and policies supporting alternative transportation. Applicable policies, plans, and programs included but were not limited to the Los Angeles County Long Range Transportation Plan, the South Bay Bicycle Master Plan, and the Hermosa Beach Downtown Core Revitalization Strategy.

Additionally, Section B.8.4 of the CMP provides a methodology for estimating the number of transit trips expected to result from a proposed project based on the projected number of vehicle trips. This methodology assumes an Average Vehicle Ridership (AVR) factor of 1.4 in order to estimate the number of person trips to and from the project and then provides guidance regarding the percent of person trips assigned to public transit depending on the type of use (commercial/other; residential) and its proximity to transit services.

Construction Traffic

The Applicant prepared a preliminary draft Construction Management Plan that addresses all aspects of construction phasing, traffic generation, haul and cement truck routes and staging, lane closures, construction parking and traffic safety measures (see Appendix I). While the plan provides extensive conceptual details, many critical aspects of the plan remain general such as the timing and duration of lane closures, traffic control devices, traffic control flaggers, etc. As a result, the Applicant's preliminary draft Construction Management Plan was utilized as a starting point to assist in determining the location, duration and severity of short-term Project-related construction impacts. Potential impacts were then independently analyzed and mitigation measures were proposed where required, such as adding more detail to initial conceptual proposals contained in the preliminary draft Construction Management Plan. The analysis of the proposed Project's construction impacts considers heavy truck traffic generated from excavation, construction vehicles, and material and equipment delivery over the duration of the 24- to 30-month period of construction. Additionally, the analysis evaluates the potential for construction-related impacts to traffic flows, reduction in lane capacities, delays or alterations of transit service, and impacts to safety, pedestrian and bicycle circulation.

3.13.4 Project Impacts and Mitigation Measures

The proposed Project could potentially create transportation and traffic impacts through the generation of both short-term construction-related traffic (i.e., over approximately 24- to 30-months) as well as long-term increases in operational traffic. As discussed in Impact TT-1 below, potential short-term construction traffic impacts would result from increased excavation-related haul trips, concrete trucks, and closure of traffic lanes and surrounding sidewalks. Potential loss of coastal access parking during construction is discussed further in Section 3.3, *Recreation*. Project implementation would incrementally increase congestion at Downtown intersections as well as congestion along existing bicycle and pedestrian public rights-of-way. These impacts are discussed in detail below.

Impact Description

Would traffic impacts associated with construction activities conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?

TT-1 Construction of the proposed Project would create *significant and unavoidable* temporary, but prolonged impacts in the Project vicinity. Construction

activities would materially interfere with traffic flow through the introduction of substantial numbers of heavy trucks and would result in sidewalk closures, interference with pedestrian and bicycle activity, and transit delays.

As described in Section 2.5.1, *Phasing*, construction activities associated with the proposed Project would occur in five phases of construction beginning in winter 2019 and lasting for approximately 24 to 30 months. Site clearing and demolition of existing development (e.g., buildings, pavements, etc.) on the Project site is anticipated to occur over approximately 3 months. Shoring, excavation, and the installation of dewatering systems would occur over 6 months and construction of the subterranean parking garage and hotel building would occur over 20 months, with completion of the proposed mixed-use hotel anticipated in 2021. As discussed in Impact NOI-1, with the implementation of MM NOI-1a, construction work hours would be restricted to 8:00am to 6:00pm Monday through Friday and 9:00am to 5:00pm Saturday, consistent with HBMC Section 8.24.050. However, the Applicant has proposed concrete pours to occur during the late evening hours (i.e., 7:00pm to 3:00am) in order to reduce potential effects on traffic congestion within the Downtown (refer to Impact NOI-1 for additional discussion regarding noise exemptions for concrete pours).

Construction Site Access and Road Closures

All construction activities during the 24- to 30-month construction period are proposed to be staged within secured construction areas located within or adjacent to the Project site. As described in Section 2.5.5, *Construction Staging, Site Access, and Safety,* the Applicant has proposed the primary construction staging area within Lot B, which would include a truck turn-around area, tower crane staging area, materials and equipment laydown and distribution point, concrete pumping staging and access, soil freezing refrigerant equipment area, construction mockup area, and temporary construction offices. (The use of Lot B for construction activities would be subject to City Council approval for use of City property; refer to the discussion in Section 2.0, *Project Description*.) As discussed in Section 3.3, *Recreation*, this would temporarily eliminate up to 38 coastal access parking spaces (refer to

13th Street would be closed between Lot C and Beach Drive to provide access to inbound and outbound construction-related traffic and equipment accessing the Project site. This is a relative narrow roadway and use by heavy haul trucks could potentially present conflicts with vehicles exiting Lot C.

Impact REC-1). However, in order to reduce short-term, temporary construction-related impacts to coastal access parking, the Applicant shall be required to locate its construction office off-site in nearby vacant tenant space and reach agreements for off-site construction parking with surrounding properties (e.g., AES Redondo Beach Natural Gas Power Plan, Vons, Beach House, etc.). Further, with the implementation of MM REC-1a the Applicant would be required to retain at least 15 parking spaces for public use during the 15-month period of Phase 4 and Phase 5 construction activities.

As described in the Applicant's preliminary draft Construction Management Plan, dedicated construction entry to the Project site would be provided along 13th Street where construction flaggers would be stationed to direct construction traffic and maintain public safety. All construction trucks and deliveries would occur on 13th Street, with right-in and right-out turns at Hermosa Avenue. 13th Street would be closed between Beach Drive and Lot C, which would disrupt existing traffic flows in this area; however, access to and from Lot C along 13th Street would be maintained at all times. Additionally, apart from the 100 feet between Lot B and Beach Drive, 13th Court would remain open at all times for deliveries to existing adjacent uses. Emergency knox boxes (i.e., small, wall-mounted safes that holds building keys for fire departments, emergency medical services, or police) would be kept at the construction site at 13th Street, if emergency access into the Project site is required during after-hours.

Project construction would require the temporary or extended closure of all or parts of traffic lanes (and sidewalks) on surrounding streets (i.e., 13th Street, 13th Court, The Strand, and Pier Plaza) to accommodate utility trenching and installation of other Project-related improvements (e.g., 13th Court Plaza). Certain day-to-day construction activities could also result in partial lane closures on Hermosa Avenue adjacent to the Project site on a temporary and/or intermittent basis for utility relocations/hook-ups, delivery of materials, and other miscellaneous construction activities, as necessary. Such activities would only occur during off-peak hours only on certain days, and would not be regular, recurring events. In these instances, construction flaggers would be used to control traffic movement during the ingress and egress of trucks and heavy equipment. Any such closures would be coordinated with and approved by the City in advance of these activities being implemented.

Heavy Haul Trucks and Concrete Trucks

Construction of the proposed hotel would require the use of heavy construction equipment, including a substantial number of heavy haul trucks, particularly during the first 19 months of construction activity.

During Phase 1 of construction, site clearing would involve export of materials for a 2-week period, with approximately 20, 60-foot long, high-sided dump trucks per day accessing the Project site via two construction entrances on 13th Street and Beach Drive. Demolition would involve loading and hauling of materials for approximately 4 weeks, with up to 25, 60-foot long, high-sided dump trucks per day. During Phase 2 of construction, excavation of the two subterranean levels to a depth of 30.5 feet is anticipated to generate up to a maximum of 42,700 loose cubic yards (cy) of soil that would be exported at a rate of approximately 80, 70-foot long belly dump trucks (and associated trailers) per day for a 10-week period. In total approximately 4,700 heavy haul trucks would be used to export materials from the Project site during a 16-week period over the total 9-month duration of Phase 1 and Phase 2.

During Phase 3 and Phase 4 of construction, the largest truck volumes would be associated with concrete trucks, with an estimated total of up to 140 concrete trucks accessing the Project site on each of the 18 separate concrete pour days. This would result in a total of 2,520 concrete trucks accessing the Project site over the total 10-month duration of Phase 3 and Phase 4. However, as previously described, the Applicant has proposed concrete pours to occur during the late evening hours (i.e., 7:00pm to 3:00am) in order to reduce potential effects on traffic congestion within the Downtown.

Total truck traffic accessing the Project site along haul routes and delivery routes may range from 7,000 to 7,500 trucks over 19 months, when accounting for heavy haul trucks, concrete trucks, and trucks delivering materials and equipment. While the overall volume of trips would be relatively low compared to average daily traffic along the haul route, large heavy haul trucks can disproportionately interfere with traffic flows and roadway operations due to their large size and turning limitations. For example, such trucks may occupy substantial length of a given turn lane or may have difficulty negotiating tight turns, both with potential to increase short-term traffic congestion or delays.

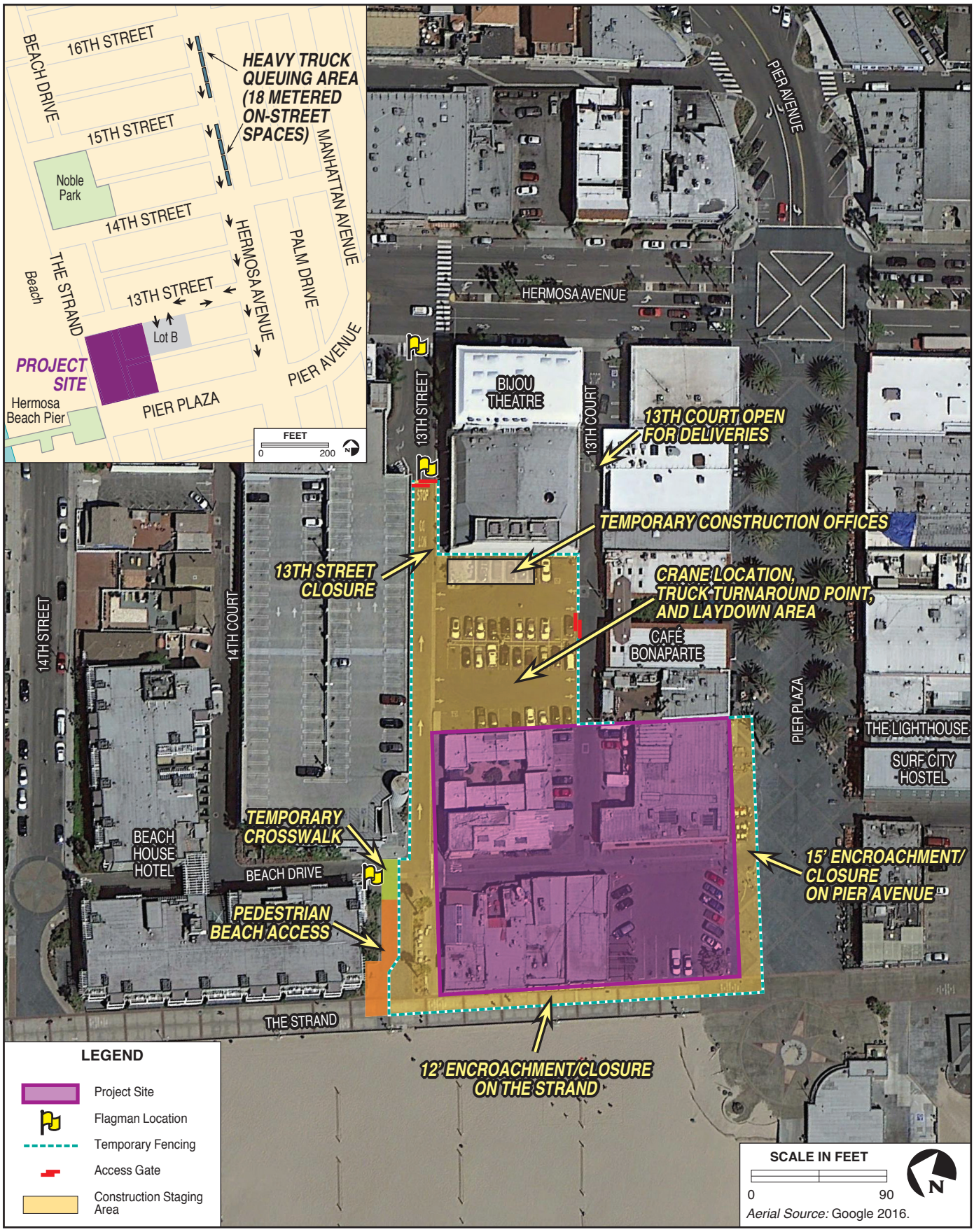
Direct heavy truck access to the Project site would be provided via two construction entrances on 13th Street and Beach Drive, with access to 12th Street off of Hermosa Avenue (see Figure 3.13-3). Regional heavy haul truck traffic would enter the South Bay area via I-405 and would exit on Rosecrans Avenue, Inglewood Avenue, or State Route 107 (SR 107) traveling westbound along Rosecrans Avenue, Manhattan Beach Boulevard, or Artesia Boulevard and turning southbound on North Aviation Boulevard. From North Aviation Boulevard inbound trucks would turn westbound on Artesia Boulevard that merges into Gould Avenue, southbound along Hermosa Avenue, and westbound along 13th Street. Outbound haul trips would follow 13th Street and turn southbound on Hermosa Avenue to eastbound Herondo Street, turning northbound on PCH, eastbound on South

Aviation Boulevard, and eastbound on Artesia Boulevard to access the I-405 (refer to Figure 2-12). Alternative inbound and outbound haul routes are discussed in Section 5.4, *Alternatives Considered but Discarded*. The potential alternative haul routes would not effectively reduce *potentially significant* impacts to residential areas and/or would not adequately accommodate heavy haul truck trips due to limited left turn lane capacity, and particularly inadequate turning radius for large haul tucks which would not be able to negotiate certain turns.

Heavy haul truck trips would generate additional traffic near the Project site and along the haul route, resulting in additional vehicle delays at surrounding intersections and along surrounding roadways during the construction period. Between I-405 and PCH, inbound trucks using this haul route would traverse a mix of four- to six-lane arterials that carry large volumes of traffic (including larger trucks) through a mix of commercial and residential areas. For example, Rosecrans is a six- to eight-lane arterial, while North Aviation Boulevard and Artesia Boulevard are both four- to six-lane arterials.

The inbound route along Aviation Boulevard follows a wide six-lane roadway that is largely boarded by commercial (left) and multi-family residential (right) land uses.

For outbound trucks, with the exception of a wide, well-developed segment of two-lane Herondo Street, these trucks would use wider more heavily traveled four-lane arterials such as Hermosa Avenue, PCH, and Aviation Boulevard before returning to the haul route on Artesia. Such streets typically accommodate higher volumes of heavy trucks with wider travel lane widths, straight alignments and intersection turn lanes. Heavy haul trucks may occupy turn lanes with limited capacity, particularly if operating in multiple truck "platoons," increasing queue lengths that may extend outside of turn lanes, incrementally increasing delays for motorists materially interfering with traffic flows along haul routes during periods of high levels of truck activity. However, these four- to six-lane arterials are typically designed to accommodate truck traffic and daily truck volumes would be relatively low, estimated at a maximum of roughly 80 heavy haul trucks occurring on any one day along the inbound and outbound routes.



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Construction Staging and Access Plan

FIGURE 3.13-3

Of the intersections included in the traffic study, only PCH & Aviation Boulevard currently operates at LOS E during the existing AM peak hour, the addition of 8 truck trips between 8:00am and 9:00am (i.e., the 1-hour period where the construction timing overlaps the AM peak hour) would not be anticipated to substantially degrade intersection operations in this location. In particular, this is because these trucks would be turning right, which is not considered a critical turning movement at this intersection.

Approximately 80 outbound heavy haul truck trips would turn right from PCH onto Aviation Boulevard; however, only 8 of these trips would occur during the AM peak hour when the intersection operates at LOS F. Further, the right-turn at this intersection is not considered a critical turning movement due to the protected right turn lane, which would also provide adequate turning radius for a haul truck.

However, for inbound trucks, west of PCH, a 4,000-foot-long segment of Gould Avenue between Valley Drive and Hermosa Avenue becomes a narrow 24-foot-wide two-lane street. This segment of Gould Avenue is lined with single- and multi-family homes within on-street parking on one or both sides of the paved width. Additionally, this roadway segment has a relatively steep grade of approximately 7 percent. West of Valley Drive, Gould Avenue supports closely spaced residential driveways with cars often parked "head in," requiring backing into traffic. Valley Park, also located along this segment of Gould Avenue, supports approximately 30 perpendicular on-street parking spaces, with motorists also required to back into traffic.

Heavy haul trucks using Gould Avenue would interact with cars backing out of residential driveways as well as those backing out of on-street parking spaces serving Valley Park. The potential for pedestrian-truck conflicts also exists in this area as children and families cross Gould Drive to access Valley Park. The westbound side of Gould Drive opposite Valley Park lacks sidewalks and further west the westbound sidewalks are narrow, with just 2 to 4 feet of pavement creating additional potential for pedestrian conflicts. Thus, the introduction of relatively high volumes of heavy haul truck traffic through this residential area may create traffic hazards and *potentially significant* impacts.


Between Valley Drive and Hermosa Avenue Gould Avenue along the inbound truck route is a narrow 24-foot wide roadway. This segment of Gould Avenue is bordered by residential homes with multiple driveways as well as parallel and head-in parking spaces along the roadway. This segment also passes by Valley Park, which is heavily used by local residents. Crosswalks are provided at Valley Drive and Morningside Drive; however, pedestrians often use the roadway taking a shorter path to the park across the street, or walking on the street to access their vehicles.

Prior to directly accessing the Project site, heavy haul trucks would proceed south along a four-lane segment of Hermosa Avenue and queue along approximately 450 feet of the southbound side of the center median on Hermosa Avenue between 14th Street and 16th Street, until called on by the contractor to export material. Large heavy haul trucks pulling over to queue and pulling out into traffic could potentially interfere with traffic flows along this mixed residential and commercial segment of Hermosa Avenue. However, the Applicant-prepared Construction Management Plan provides for traffic control measures at this location. For example, while heavy haul trucks would queue by existing small businesses and residences the vehicles would not block driveways or otherwise impede access to these adjacent properties. While large trucks pulling out into traffic could potential intermittently slow traffic flow, the intersections along Hermosa Avenue operate at LOS A during the weekday AM and PM peak hours, indicating that traffic along Hermosa Avenue in this area is relatively free flowing. As such, with the incorporation of traffic control measures, overall impacts to traffic flow along Hermosa Avenue would be *less than significant*.

Inbound trucks turning off of Hermosa Avenue onto 13th Street could interfere with traffic flow as trucks execute wide left turns, potentially causing vehicular conflicts with cars exiting or turning onto 13th Street. While such activity is typical of major urban construction the extended duration of heavy haul truck and concrete truck activities could materially interfere with local traffic flows. The Applicant-prepared Construction Management Plan notes that flaggers would be stationed at the intersection of 13th Street & Hermosa Avenue and at the construction entrance gate during all major trucking operations to manage traffic flows, reducing potential turning movement conflicts. Construction trucks could travel along the truck route during the AM peak hour but their activity

would be completed by approximately 3:00pm, so they would not generate trips within in the PM peak hour. Further, no loading, deliveries, or hauling would occur on Saturdays, and consistent with HBMC Chapter 8.24.050, no construction would occur on Sundays, or Federal holidays. Nevertheless, as these turning movements may still create traffic hazards and materially interfere with local traffic flows, they could result in *potentially significant* impacts.

During Phase 3 of construction, three separate concrete pours occurring over a 2-week period would be required for the concrete slab foundation During and Phase 4 of construction an additional 15 pours would occur over a 10-week period for the suspended concrete floor slabs, resulting in a total of 18 separate pours occurring over a period of 12 weeks. Due to the number of concrete trucks necessary to pour the concrete mat foundations and concrete superstructure for the proposed mixed-use hotel (i.e., approximately 200 trucks per event), the concrete pours are proposed to occur during the late evening hours (i.e., 7:00pm to 3:00am) in order to reduce potential effects on traffic congestion along the haul route and within the Downtown (refer to Impact NOI-1 for noise impacts associated with evening use of concrete trucks, both along the haul route and in the Downtown). Two ready-mix delivery and pump staging locations would be established for each pour at 13th Street, just to the west of Beach Drive, and at the westernmost area of Lot B. Concrete trucks with standard mixer capacities of 10 cy, would arrive to the site every 3 minutes with approximately 200 cy of concrete poured per hour. Each individual pour event would place a total of 2,000 cy of concrete. However, movements of trucks from the staging area along the center median on southbound Hermosa Avenue between 14th and 16th Streets to 13th Street and in and out of the Project site, even though controlled by construction flaggers, could potentially cause temporary impacts to traffic flow on Hermosa Avenue, particularly during the evening hours between 7:00pm and 10:00pm. In particular on Thursday and Friday nights or during events on Pier Plaza when restaurants, bars, and nightclubs are most active, trucks entering and leaving 13th Street every 3 minutes could cause disruption in traffic flows given the tight turn into and out of 13th Street and potential conflicts with vehicles existing Lot C via 13th Street. As such, operation of concrete trucks for nighttime pours during these evening periods of heightened activity and would be considered *potentially significant*. During the late evening hours Monday through Wednesday, concrete trucks would not be likely to affect vehicle delays as there are less vehicles on the surrounding roadway network during these hours and impacts would be *less than significant*.

Construction Worker Commutes

As described in Section 2.5.6, *Construction Staffing and Parking,* an estimated 30 to 120 workers would be on-site at any time during construction hours, with a maximum of 120 workers during Phase 5. Construction workers would generally be on-site prior to the commencement of daily construction activities at 8:00am in order to park, unload, and set-up equipment and materials, and the vast majority would leave the Project site around 3:00pm. As such, the majority of these trips would avoid the AM and PM peak hours. Temporary traffic from construction worker trips on the surrounding transportation network during the AM and PM peak hours is therefore not expected to cause significant traffic impacts. In addition, a combination of on- and off-site construction parking facilities (e.g., AES Redondo Beach Natural Gas Power Plant, Vons parking lot, dedicated Beach House parking in Lot C) could potentially be used if agreements with land owners are obtained by the Applicant. All on- and off-site parking locations would be identified in a City-approved Construction Management Plan. Potential impacts to coastal access parking associated with construction working parking is discussed in further detail in Section 3.3, *Recreation*, under Impact REC-1.

Outbound heavy haul truck trips would pass through the Hermosa Avenue & Pier Avenue, which is a pedestrian scramble intersection, and could interfere with pedestrian and bicycle flows.

Pedestrian and Bicycle Impacts

Construction activities, including road closures, sidewalk closures, off-site utility construction, infringement into construction easements on Pier Plaza and The Strand, and construction related traffic, particularly heavy trucks, could interfere with pedestrian and flows within the vicinity of the Project site. With the exception of 13th Street and construction easements encroaching onto The Strand and Pier Plaza, all other sidewalks within the immediate Project vicinity would be maintained during

Throughout the 24- to 30-month construction period, pedestrian access would be maintained from Lot C with a temporary crosswalk across Beach Drive.

construction. As described in Section 2.5.5, *Construction Staging, Site Access, and Safety*, 8-foot high temporary construction fencing would be installed along the boundaries of the Project site and staging areas (e.g., Lot B) on 13th Street, and onto construction easements along The Strand, and Pier Plaza. This temporary site fencing would encroach by up to 12 feet on The Strand and up to 15 feet on Pier Plaza and would constrain pedestrian and bicycle traffic in these heavily used areas, which already experience congestion particularly during weekends, events and festivals, and the peak summer months. In order to limit the temporary congestion along The Strand during construction, the Applicant has proposed to temporarily widen The Strand seaward by 12 feet using beach mats, portable pathways, or modular boardwalk decking to accommodate regular bicycle and pedestrian through traffic. While Project construction would temporarily interfere with and at times temporarily impede beach access for pedestrians and bicyclists on Pier Avenue and at 13th Street west of Beach Drive from Lot C, these areas would continue to remain open for public use. Additionally, a temporary crosswalk would be provided to access Beach Drive from Lot C to maintain pedestrian access to The Strand. However, frequent heavy truck traffic entering and exiting the intersection of 13th Street & Hermosa Avenue could interfere with pedestrian and bicycle flows along southbound Hermosa Avenue as well as the Hermosa Avenue & Pier Plaza pedestrian scramble, particularly during periods of high pedestrian activity such as events and festivals. The closure of Beach Drive and fencing of Lot B would interrupt or re-route pedestrian traffic between Lot C and Pier Plaza to The Strand or Hermosa Avenue. Pedestrians walking from Lot C to Pier Plaza along Hermosa Avenue would intermingle with heavy truck traffic, including concrete trucks during late evening concrete pours, creating potential conflicts with patrons entering and exiting the entertainment district. In addition, trucks exiting the Project site would cross the Hermosa Avenue & Pier Plaza intersection pedestrian scramble. While separate signal phases for pedestrians would minimize truck-pedestrian conflicts, during special events or peak evening periods such as Thursday or Friday nights, conflicts with high pedestrian use could occur. Patrons arriving via Uber, Lyft, or taxi could add to potential conflicts as they are dropped off or picked up, particularly during late evening concrete pours. The Applicant's preliminary draft Construction Management Plan indicates that flaggers would be present at three locations in 13th Street; the intersection with Beach Drive near the main exit from Lot C, at the gated construction entrance, and at Hermosa Avenue (see Appendix I, Figure 3.5 of the Applicant's Construction Management Plan). Although construction flaggers would help reduce impacts to pedestrians and bicyclists, concrete pours during peak utilization periods for Pier Plaza, particularly on Thursdays during the summer and Friday and Saturday nights year-round could create potential pedestrian conflicts and safety hazards. During events and festivals, these impacts could be compounded with potential pedestrian and heavy truck conflicts along Hermosa Avenue and additional pedestrian

congestion along The Strand and Pier Avenue. Consequently, these impacts are considered *potentially significant.*

Construction Impact Summary

Project construction activities, which have been analyzed based on the initial Applicant-prepared Construction Management Plan, could create potentially significant short-term impacts in the immediate vicinity and along major access routes, particularly due to potential heavy haul truck and concrete truck traffic.

Heavy haul trucks and concrete trucks transiting the two-lane segment of Gould Avenue between Valley Drive and Hermosa Avenue may create conflicts and safety issues associated with cars, existing public and private parking areas, and pedestrians. Although these impacts would be temporary, they would be prolonged and considered *potentially significant* particularly due to heavy haul truck traffic transiting residential areas and construction activities materially impeding traffic flows. Additionally, despite the presence of a flagger, large trucks negotiating the tight turn into and out of 13th Street off of Hermosa Avenue would slow and disrupt traffic flows and may require oncoming vehicles exiting Lot C to back up, increasing delays, vehicle queues, and overall congestion. Pedestrians crossing 13th Street could also experience conflicts with trucks entering and exiting the construction zone and trucks moving through the pedestrian scramble at Hermosa Avenue & Pier Avenue may also cause vehicular conflicts. In addition, potential construction traffic occurring simultaneously with events and festivals, common within the Downtown during the high-tourist season, could result in *potentially significant* term impacts in the Project vicinity due to heavy haul and concrete truck conflicts with vehicles, pedestrians, and bicyclists. For example, heavy haul trucks queuing on Hermosa Avenue and pulling into and out of traffic during summer would disrupt traffic flows and the Applicant-prepared Construction Management Plan measures only provide general guidance on how to manage this traffic flow.

The implementation of mitigation measure MM TT-1 would require City approval of a Final Construction Management Plan including construction traffic routing and control, parking management, street closures, pedestrian/bicycle access, and vehicular and pedestrian safety to minimize the effects of construction to the satisfaction of the Community Development Department. This Construction Management Plan would be finalized to reflect conditions in the Project vicinity (e.g., the presence of street festivals or utility improvements) during the Project construction activities, which are anticipated to occur over the 24- to 30-months. More specifically, the plan would include thorough descriptions and depictions of travel lane and street-parking configurations; warning, regulatory, guide, and directional signage; and designated detours for sidewalks, bicycle lanes, and vehicle lanes, as well as detailed City-approved plans for re-routing

pedestrians and bicycles during construction. Additionally, the plan would define construction traffic schedules, permitted construction hours, haul routes and alternatives, approved truck queuing/staging locations, on-site and off-site construction parking facilities, construction access/export locations, traffic control procedures, and community outreach/notifications. While MM TT-1 would reduce the Project's construction traffic impact to the maximum extent practicable, potential impacts associated with heavy haul trucks and concrete trucks traveling along Gould Avenue and entering and existing the Project site via 13th Street & Hermosa Avenue would remain *significant and unavoidable*.

Cumulative Impacts

Depending on the timing of Project construction, construction activities could overlap with various large-scale developments within the City and the surrounding vicinity. In particular, heavy haul truck activities associated with the proposed North School Reconstruction could compound potential Project-related construction impacts along Gould Drive. The proposed North School Reconstruction project, located at 26th Street & Morningside Drive, would adding up to 15 additional heavy haul trucks per day during construction (Hermosa Beach City School District 2017), which could intensify vehicle- and pedestrian-truck conflicts with the 80 inbound heavy haul trucks per day from the proposed Project.

The Skechers Design Center and Offices Project would require the use of haul equipment and delivery trucks during demolition and construction. Additionally, construction worker traffic would temporarily add trips to the roadway infrastructure. The greatest potential for impacts to the adjacent street system would occur during the excavation construction period estimated to last 24 months. Construction activities would generate significant impacts along SR 1 at its intersection with Keats Street, Tennyson Street, and 30th Street; however, no heavy haul trips would be added to Gould Avenue (City of Hermosa Beach 2018).

The Redondo Waterfront Project would add construction related trips along Herondo Street and Pacific Coast Highway. Peaking hauling activity for the north site and south site is anticipated to generate an average of approximately 110 heavy haul trucks on the peak day of activity. Peak construction activity – including construction worker trips – would generate approximately 1,895 daily trips; however, given that a majority of the existing uses would not be operational during project construction and the number of construction related vehicle trips would be less than what would otherwise occur under existing conditions (i.e., existing uses being operations), no significant traffic impacts are anticipated from the Redondo Waterfront Project (City of Redondo Beach 2016).

Mitigation Measures

MM TT-1 ***Final Construction Management Plan.*** *The Applicant shall prepare a Final Construction Management Plan (CMP) for City review and approval prior to issuance of a demolition permit to address and manage traffic during construction which shall build upon the initial Applicant-prepared CMP and be designed to accomplish the following to the satisfaction of the City:*

- *Ensure safety for both those constructing the project and the surrounding community;*
- *Minimize traffic impacts on the surrounding roadway network to the maximum extent feasible during the 24- to 30-month construction period;*
- *Minimize truck traffic through residential neighborhoods;*
- *Minimize coastal access parking impacts both to public parking and access to private parking to the greatest extent practicable; and*
- *Avoid conflicts with planned events and festivals along Pier Plaza to the greatest extent possible to minimize traffic and parking impacts.*

The plan shall, at a minimum, include the following:

Ongoing Requirements throughout the Duration of Construction

- *The CMP shall include thorough descriptions and depictions of travel lane and street-parking configurations; warning, regulatory, guide, and directional signage; and designated detours for sidewalks, bicycle lanes, and vehicle lanes, as necessary. The plan shall include specific information regarding the Project's construction activities that may disrupt normal pedestrian and traffic flow and include specific measures to minimize these disruptions to the maximum extent feasible. Such plans shall be reviewed and approved by the Community Development Department and City Department of Public Works prior to issuance of a demolition permit and implemented in accordance with this approval.*
- *Work within the public right-of-way shall be performed between 9:00am and 4:00pm in order to avoid the AM and PM peak hours, unless work outside of these times receives advanced approval from the City. This work includes dirt and demolition material hauling and construction material delivery. Work*

within the public right-of-way outside of these hours shall only be allowed only after the issuance of an after-hours construction permit from the City.

- *At the discretion of the City, construction work shall not be permitted during City-approved or City-sponsored large events or festivals (e.g., Fourth of July) on Pier Plaza or the beach.*
- *Streets and equipment shall be cleaned in accordance with established City Department of Public Works requirements.*
- *Heavy haul trucks and concrete trucks shall only travel on a City-approved construction route. Truck queuing/staging shall only be allowed at City-approved locations. Limited queuing may occur on the construction site itself. In order to ensure public safety and maintain vehicular, pedestrian and bicycle traffic flows, during all major haul truck and concrete truck operations, the Applicant shall ensure that:*
  - *Evening and early morning concrete pours shall be limited to Monday through Wednesday, with pours only allowed Thursday in the offseason from Labor Day to Memorial Day. No concrete pours shall be permitted Friday through Sunday or during Federal holidays.*
  - *A construction flagger shall be stationed at the Lot C exit to ensure coordination managing traffic exiting Lot C with the proposed flagger at the intersection of 13th Street & Hermosa Avenue. This flagger may also manage the construction gate, but the CMP shall provide detailed methods to address conflicts between the Lot C entrance and truck traffic, including coordination efforts between the construction flaggers.*
  - *Traffic cones and warning signs shall be posted along southbound Hermosa Avenue at the proposed truck queuing location along the center median between 14th Street and 16th Street.*
  - *All haul truck drivers receive a briefing at the beginning of each individual hauling operation or individual concrete pour regarding traffic safety concerns along Gould Avenue, Hermosa Avenue, and the high level of pedestrian and bicyclist activity anticipated to be encountered in the immediate Project vicinity, including the pedestrian scramble at Pier Plaza*

& Hermosa Avenue. Drivers shall be provided with a map of these sensitive locations for reference.

- *Materials and equipment shall be minimally visible to the public; the preferred location for materials is to be on-site, with a minimum amount of materials within a work area in the public right-of-way, subject to a current City permit.*
- *Any requests for work before or after normal construction hours within the public right-of-way shall be subject to review and approval through the City building office.*

Project Coordination Elements That Shall Be Implemented Prior to Commencement of Construction

- *The Applicant shall coordinate construction work with affected agencies in advance of the initiation of construction activities.*
- *The Applicant shall obtain City approval of any haul routes for earth, concrete, or construction materials and equipment hauling.*
- *The Applicant shall obtain an Excavation Permit, Street/Lane Closure Permit, Sewer Permit, Demolition Permit, and any other applicable permits for construction work requiring encroachment into public rights-of-way, detours, or any other work within the public right-of-way.*
- *The Applicant shall provide timely notification of construction schedules to all affected agencies (e.g., public and private transit, Hermosa Beach Fire Department [HBFD], Hermosa Beach Police Department [HBPD], City Department of Public Works, and Community Development Department) and to all owners and residential and commercial tenants of property within a radius of 500 feet.*
- *The Applicant shall advise the traveling public of impending construction activities (e.g., information signs, portable message signs detailing haul truck scheduling, media listing/notification, mailings, e-mail, and social media and implementation of an approved CMP). Signs shall be posted at the following locations:*
  - *The intersection of Beach Drive and the Lot C staircase;*
  - *At the vehicular exit from Lot C;*

- *The Strand at 13th Street and 11th Street;*
- *Hermosa Avenue north of 13th Street;*
- *West of the intersection of Gould Drive and PCH;*
- *West of the intersection of Valley Drive and Gould Avenue;*
- *The Valley Park parking area along Gould Avenue; and*
- *Gould Drive east of Hermosa Avenue.*

- *The Applicant shall mail or e-mail notification of pending construction schedule and activities to business along Hermosa Avenue between 11th Street and 14th Street, business along Pier Plaza and to residents along Gould Avenue between Pacific Coast Highway (PCH) and Hermosa Avenue. The notice shall include details on the dates of all projected major haul truck and cement truck operations along with contact information for the Applicant's construction manager. Major alterations in planned schedules shall require additional noticing.*

Plan Requirements and Timing. The Final CMP shall be subject to review and approval by the following City departments including: Community Development Department, City Department of Public Works, HBFD, and HBPD to ensure that the final plan has been designed in accordance with this mitigation measure. This review shall occur prior to the issuance of any City permits related to on-site preparation, demolition, grading, or construction.

Monitoring. The Community Development Department and City Department of Public Works compliance staff shall observe and ensure compliance with the Final CMP, specifications, and requirements during construction.

Residual Impacts

Implementation of mitigation measure MM TT-1 would minimize impacts related to construction traffic that would occur over the 24- to 30-month construction period. Additionally, public notices, designated detour routes, and Applicant-provided construction flaggers would ensure continued pedestrian, bicycle, and vehicle safety within the vicinity of the Project site throughout the during of construction. However, implementation of this mitigation measure would not eliminate impacts entirely, particularly the impacts to residential areas along Gould Avenue and the commercial and residential areas along Hermosa Avenue in the immediate vicinity of the Project site. The

temporary, but prolonged impacts in these locations would remain *significant and unavoidable* as construction-related activities could materially interfere with area traffic flow (e.g., vehicles turning on 13th Street, exiting Lot C, or pulling out of driveways or parking spaces along Gould Avenue) and interfere with pedestrian and bicycle flows (e.g., along The Strand and Pier Plaza).

Impact Description

Would the project conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?

TT-2 Under Existing (2016) Plus Project conditions, increased traffic generated by the proposed Project would result in a *significant and unavoidable* impact at 1 of the 15 study intersections during the Sunday afternoon peak hour.

In order to evaluate the potential impacts of the proposed Project compared to existing conditions within the vicinity of the Project site, net trip generation was calculated assuming Existing (2016) Plus Project traffic. Project trip generation estimates were determined based on the methodology discussed in Section 3.13.3, *Impact Assessment and Methodology*. Existing uses on the Project site proposed for removal include 9,596 sf of restaurant uses, 6,060 sf of retail uses, and eight studio apartment units (i.e., West Bay Apartments), which currently generate between 50 to 81 vehicle trips per hour, depending on the time period analyzed (see Appendix I; Tables 4.1 to 4.5 of the Traffic Study). Accounting for the removal of these existing uses, an estimated net total of 113 AM peak hour vehicle trips, 96 PM peak hour vehicle trips, 96 Friday PM peak hour vehicle trips, 109 Saturday midday peak hour vehicle trips, and 78 Sunday afternoon peak hour vehicle trips would be generated by the proposed Project (see Table 3.13-12).

Table 3.13-12. Existing (2016) Plus Project Generated Traffic

Peak Hour	Project Trips	Existing Uses	Net Trips Generated
AM	117	-4	113
PM	146	-50	96
FRI	146	-50	96
SAT	179	-70	109
SUN	159	-81	78

Source: The Mobility Group 2017.

Traffic generated by the Project (see Appendix I; Figures 4.5 to 4.9 of the Traffic Study) was then added to Existing Year (2016) traffic volumes (see Appendix I; Figures 2.3 to 2.7 of the Traffic Study) to obtain Existing (2016) Plus Project traffic for peak hours at each of the study intersections (see Appendix I; Figures 4.16 to 4.20 of the Traffic Study).

The intersection LOS analysis for the Existing (2016) Plus Project conditions is summarized in Table 3.13-13 for each of the time periods analyzed. This table also compares the LOS for Existing (2016) Without Project conditions, shows the increase in V/C ratios or delay at each intersection due to the Project, and identifies if the increase in traffic constitutes a significant impact.

The Existing (2016) Plus Project conditions analysis found that 14 of the 15 study intersections analyzed using the City's adopted ICU methodology for signalized intersections and HCM methodology at unsignalized intersections would be expected to operate at an acceptable LOS (see Figure 3.13-4, which depicts the worst-case LOS as well as the proposed Project's contribution to these operations). A change in ICU value (i.e., an increase in V/C ratio of 0.022) caused by the proposed Project at the signalized intersection of Hermosa Avenue & Pier Avenue during the Sunday afternoon peak hour would exceed the threshold for significant impact (refer to Table 3.13-6), although the intersection would continue to operate at LOS D.

AM Peak Hour

During the AM peak hour, all study intersections would continue to operate at LOS D or better with the implementation of the proposed Project, except for the signalized intersection at PCH & Aviation Boulevard, which would operate at LOS E with and without the proposed Project. The proposed Project would not cause a change in LOS at any intersection, except for the stop-controlled intersection at Hermosa Avenue & 8th Street where the LOS would change from LOS A to LOS B. The change in ICU value would not exceed the thresholds for significant impact at any location. Therefore, the Project would not cause any significant impacts in the AM peak hour.

PM Peak Hour

During the PM peak hour, all study intersections would continue to operate at LOS D or better with the implementation of the proposed Project. The Project would not cause a change in LOS at any intersection, except for the stop-controlled intersections at Hermosa Avenue & 8th Street, where the LOS would change from LOS B to LOS C, Hermosa Avenue & 10th Street, where the LOS would change from LOS A to LOS B, Manhattan Avenue West & Pier Avenue, where the LOS would change from LOS A to LOS B, and PCH & Pier Avenue where the LOS would change from LOS B

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Existing (2016) Plus Project Intersection Impacts

FIGURE 3.13-4

to LOS C. However, the change in ICU value would not exceed the thresholds for significant impact at any location (see Table 3.13-13). Therefore, the Project would not cause any significant intersection impacts in the PM peak hour.

Table 3.13-13. Intersections Significantly Impacted by Adverse Changes to Existing (2016) Plus Project Peak Hour Levels of Service

No.	Intersection	Type [1]	Peak Hour	Existing Without Project (2016)			Existing Plus Project (2016)			V/C or Delay Increase	Significant Impact
				V/C	Delay	LOS	V/C	Delay	LOS		
1	Hermosa Avenue & 16th Street	3-Way Stop	AM	-	8.8	A	-	8.9	A	0.1	No
			PM	-	9.5	A	-	9.6	A	0.1	No
			FRI	-	9.4	A	-	9.5	A	0.1	No
			SAT	-	9.1	A	-	9.2	A	0.1	No
			SUN	-	10.5	B	-	10.7	B	0.2	No
2	Hermosa Avenue & 14th Street	Signalized	AM	0.255	-	A	0.257	-	A	0.002	No
			PM	0.314	-	A	0.316	-	A	0.002	No
			FRI	0.316	-	A	0.317	-	A	0.001	No
			SAT	0.281	-	A	0.287	-	A	0.006	No
			SUN	0.439	-	A	0.443	-	A	0.004	No
3	Hermosa Avenue & 13th Street	Signalized	AM	0.237	-	A	0.299	-	A	0.062	No
			PM	0.383	-	A	0.442	-	A	0.059	No
			FRI	0.375	-	A	0.434	-	A	0.058	No
			SAT	0.405	-	A	0.467	-	A	0.062	No
			SUN	0.431	-	A	0.451	-	A	0.020	No
4	**Hermosa Avenue & Pier Avenue**	**Signalized**	AM	0.621	-	B	0.656	-	B	0.035	No
			PM	0.682	-	B	0.704	-	C	0.022	No
			FRI	0.668	-	B	0.690	-	B	0.022	No
			SAT	0.689	-	B	0.720	-	C	0.031	No
			SUN	**0.832**	**-**	**D**	**0.854**	**-**	**D**	**0.022**	**Yes**
5	Hermosa Avenue & 11th Street	Signalized	AM	0.282	-	A	0.292	-	A	0.010	No
			PM	0.465	-	A	0.475	-	A	0.010	No
			FRI	0.370	-	A	0.379	-	A	0.009	No
			SAT	0.461	-	A	0.473	-	A	0.012	No
			SUN	0.398	-	A	0.402	-	A	0.004	No
6	Hermosa Avenue & 10th Street	4-Way Stop	AM	-	9.7	A	-	10.0	A	0.3	No
			PM	-	10.0	A	-	10.2	B	0.2	No
			FRI	-	10.3	B	-	10.5	B	0.2	No
			SAT	-	9.6	A	-	9.8	A	0.2	No
			SUN	-	13.9	B	-	14.2	B	0.3	No

Table 3.13-13. Intersections Significantly Impacted by Adverse Changes to Existing (2016) Plus Project Peak Hour Levels of Service (Continued)

No.	Intersection	Type [1]	Peak Hour	Existing Without Project (2016)			Existing Plus Project (2016)			V/C or Delay Increase	Significant Impact
				V/C	Delay	LOS	V/C	Delay	LOS		
7	Hermosa Avenue & 8th Street	3-Way Stop	AM	-	10.0	A	-	10.2	B	0.2	No
			PM	-	10.2	B	-	10.4	B	0.2	No
			FRI	-	10.1	B	-	10.3	B	0.2	No
			SAT	-	10.0	A	-	10.2	B	0.2	No
			SUN	-	13.2	B	-	13.5	B	0.3	No
8	Manhattan Avenue West & Pier Avenue	1-Way Stop	AM	-	9.5	A	-	9.6	A	0.1	No
			PM	-	9.8	A	-	10.0	B	0.2	No
			FRI	-	10.2	B	-	10.4	B	0.2	No
			SAT	-	10.9	B	-	11.1	B	0.2	No
			SUN	-	12.5	B	-	12.7	B	0.2	No
9	Manhattan Avenue East & Pier Avenue	1-Way Stop	AM	-	11.5	B	-	11.8	B	0.3	No
			PM	-	12.9	B	-	13.1	B	0.2	No
			FRI	-	12.7	B	-	12.9	B	0.2	No
			SAT	-	13.8	B	-	14.2	B	0.4	No
			SUN	-	23.1	C	-	24.0	C	0.9	No
10	Monterey Boulevard & Pier Avenue	4-Way Stop	AM	-	9.4	A	-	9.5	A	0.1	No
			PM	-	10.3	B	-	10.5	B	0.2	No
			FRI	-	11.1	B	-	11.3	B	0.2	No
			SAT	-	10.9	B	-	11.1	B	0.2	No
			SUN	-	15.8	C	-	16.2	C	0.4	No
11	Valley Drive & Pier Avenue	4-Way Stop	AM	-	13.7	B	-	14.1	B	0.4	No
			PM	-	19.2	C	-	19.9	C	0.7	No
			FRI	-	19.5	C	-	20.1	C	0.6	No
			SAT	-	17.0	C	-	17.8	C	0.8	No
			SUN	-	13.6	B	-	13.9	B	0.3	No
12	Ardmore Avenue West & Pier Avenue	4-Way Stop	AM	-	14.3	B	-	14.6	B	0.3	No
			PM	-	18.5	C	-	19.1	C	0.6	No
			FRI	-	17.0	C	-	17.6	C	0.6	No
			SAT	-	14.4	B	-	14.8	B	0.4	No
			SUN	-	12.3	B	-	12.5	B	0.2	No
13	PCH & Pier Avenue	Signalized	AM	0.657	-	B	0.658	-	B	0.001	No
			PM	0.700	-	B	0.706	-	C	0.006	No
			FRI	0.699	-	B	0.704	-	C	0.005	No
			SAT	0.574	-	A	0.582	-	A	0.008	No
			SUN	0.583	-	A	0.589	-	A	0.006	No

Table 3.13-13. Intersections Significantly Impacted by Adverse Changes to Existing (2016) Plus Project Peak Hour Levels of Service (Continued)

No.	Intersection	Type [1]	Peak Hour	Existing Without Project (2016)			Existing Plus Project (2016)			V/C or Delay Increase	Significant Impact
				V/C	Delay	LOS	V/C	Delay	LOS		
14	PCH & Aviation Boulevard	Signalized	AM	0.952	-	E	0.963	-	E	0.011	No
			PM	0.820	-	D	0.828	-	D	0.008	No
			FRI	0.823	-	D	0.830	-	D	0.007	No
			SAT	0.821	-	D	0.826	-	D	0.005	No
			SUN	0.765	-	C	0.769	-	C	0.004	No
15	PCH & 8th Street	Signalized	AM	0.845	-	D	0.846	-	D	0.001	No
			PM	0.758	-	C	0.759	-	C	0.001	No
			FRI	0.793	-	C	0.794	-	C	0.001	No
			SAT	0.617	-	B	06.17	-	B	0.000	No
			SUN	0.591	-	A	0.591	-	A	0.000	No

Definitions:
V/C – Volume-to-Capacity Ratio; based on the amount of traffic traveling through the intersection, the lane geometries, and other factors affecting capacity such as one-street parking, bus operations near the intersections, and pedestrian volumes at the street crosswalks.
Delay – Average stopped delay per vehicle, in seconds.
LOS – Level of Service; refer to definitions in Tables 3.13-3 and 3.13-4.

Notes: [1] For signalized intersections, V/C ratio and LOS are shown for the intersection as a whole. For unsignalized intersections, delay values and LOS are shown for worst-case minor (stopped) approach only.
[2] For the three intersections along PCH, the ICU results are shown for informational purposes for the City of Hermosa Beach, but the analysis conclusions are based on the HCM results for Caltrans methodology.
Source: The Mobility Group 2017.

Friday PM Peak Hour

During the Friday PM peak hour all study intersections would continue to operate at LOS D or better with the implementation of the proposed Project. The Project would not cause a change in LOS at any intersection, except for the signalized intersection at PCH & Pier Avenue where the LOS would change from LOS B to LOS C. The change in ICU value would not exceed the thresholds for significant impact at any location. Therefore, the Project would not cause any significant intersection impacts in the Friday PM peak hour.

Saturday Midday Peak Hour

During the Saturday midday peak hour all study intersections would continue to operate at LOS D or better within the implementation of the proposed Project. The proposed Project would not cause a change in LOS at any intersection, except for the signalized intersection at Hermosa Avenue & Pier Avenue where the LOS would change from LOS B to LOS C, and the stop-controlled intersection at Hermosa Avenue & 8th Street where the LOS would change from LOS A to LOS

B. The change in ICU value would not exceed the thresholds for significant impact at any location. Therefore, the Project would not cause any significant impacts in the Saturday midday peak hour.

Sunday Afternoon Peak Hour

During the Sunday afternoon peak hour all study intersections would continue to operate at LOS D or better with the implementation of the proposed Project. The proposed Project would not cause a change in LOS at any intersection. Many intersections would continue to operate at LOS A or LOS B. However, the increase of 0.022 in ICU value (i.e., the increase in V/C ratio) caused by the proposed Project at the signalized intersection of Hermosa Avenue & Pier Avenue would exceed the threshold for significance of 0.020 (refer to Table 3.13-6), although intersection operations would remain at LOS D. Therefore, the Project would cause a *significant* impact at this intersection in the Sunday afternoon peak hour. The change in ICU value would not exceed the thresholds for significant impact at any other location.

Mitigation Measures

The proposed Project would result in one significant traffic impact during the Sunday afternoon peak hour at the signalized intersection of Hermosa Avenue & Pier Avenue. While the intersection would continue to operate at LOS D, the proposed Project would increase the V/C ratio at the intersection from 0.832 to 0.854. This increase in V/C ratio of 0.022 would slightly exceed the threshold for significance of 0.020 (refer to Table 3.13-6). However, this intersection is currently designed and operated to balance traffic flow with facilitating high volumes of pedestrians and bicyclists in the Downtown Core that access the retail establishments along Pier Avenue, Pier Plaza, and Hermosa Avenue as well as The Strand and the beach. To accomplish these goals, intersection design and operation includes a pedestrian scramble phase where pedestrians can cross the streets on diagonal crosswalks as well as the usual crosswalks. Hermosa Avenue also includes bicycle route with “sharrow” markings on the roadway and accommodates relatively high volumes of bicyclists. On-street parking is provided on Hermosa Avenue and Pier Avenue on all four legs of the intersection. These features reflect the City's multimodal polices of serving and providing for all modes of transportation at this key intersection rather than exclusively prioritizing automobiles. Improvements to enhance traffic capacity at the intersection (e.g., additional turn lanes or turn lane extensions) could only be achieved by removing on-street parking or the landscaped median or by removing the scramble pedestrian phase and reverting to the normal pedestrian crosswalks. As these actions would have potentially significant secondary impacts to pedestrian mobility and public coastal access parking and would conflict with adopted City policies for multimodal circulation in the Downtown, they are considered to be infeasible.

Therefore, one significant traffic impact would remain unavoidable as a result of implementation of the proposed Project. However, the existing LOS at this intersection would not change as a result of the proposed Project and would remain at LOS D.

Impact Description

Would cumulative traffic impacts related to the project conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?

TT-3 Under the Future (2021) Plus Project conditions, increased traffic generated by the proposed Project would result in a *significant and unavoidable* cumulative impact at 1 of 15 study intersections during the Sunday afternoon peak hour.

In order to evaluate the cumulative impact of the proposed Project, Future (2021) Without Project traffic conditions were forecasted based on growth methodology discussed in Section 3.13.3, *Impact Assessment and Methodology*. Future cumulative projects, such as the 500,000-sf Redondo Beach Waterfront Project, were found to generate between approximately 1,220 and 2,355 hourly trips, depending on the time period (see Appendix I; Table 3.1 of the Traffic Study).[14] The cumulative trip estimates were then added to the roadway network and combined with existing volumes and ambient traffic growth to provide the forecasts of traffic conditions in the study area under Future (2021) conditions, for the weekday AM, weekday PM, Friday PM, Saturday midday and Sunday afternoon peak hours, representing the Future Without Project conditions (see Appendix I; Figures 3.2 to 3.6 of the Traffic Study). The Future (2021) Without Project conditions analysis found that 13 of the 15 study intersections analyzed using the City's adopted ICU methodology for signalized intersections and HCM methodology at unsignalized intersections would be expected to operate at an acceptable LOS (refer to Figure 3.13-5).

The intersection LOS analysis for the Future (2021) Plus Project conditions is summarized in Table 3.13-14 for each of the time periods analyzed. This table also compares the LOS for Future (2021) Without Project and Future (2021) Plus Project conditions, shows the increase in V/C ratio or delay at each intersection due to the Project, and identifies if the increase in traffic constitutes a significant impact.

[14] Due to the large geographic distribution of cumulative projects, not all trips would travel through the study area and traverse the study intersections.

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Future Year (2021) Plus Project Intersection Impacts

FIGURE 3.13-5

Table 3.13-14. Intersections Significantly Impacted by Adverse Changes to Future (2021) Plus Project Peak Hour Levels of Service

No.	Intersection	Type [1]	Peak Hour	Future (2021) Without Project			Future (2021) Plus Project			V/C or Delay Increase	Significant Impact
				V/C	Delay	LOS	V/C	Delay	LOS		
1	Hermosa Avenue & 16th Street	3-Way Stop	AM	-	9.0	A	-	9.1	A	0.1	No
			PM	-	9.8	A	-	9.9	A	0.1	No
			FRI	-	9.7	A	-	9.8	A	0.1	No
			SAT	-	9.3	A	-	9.5	A	0.2	No
			SUN	-	11.0	B	-	11.2	B	0.2	No
2	Hermosa Avenue & 14th Street	Signalized	AM	0.269	-	A	0.271	-	A	0.002	No
			PM	0.331	-	A	0.333	-	A	0.002	No
			FRI	0.333	-	A	0.335	-	A	0.002	No
			SAT	0.293	-	A	0.299	-	A	0.006	No
			SUN	0.459	-	A	0.464	-	A	0.005	No
3	Hermosa Avenue & 13th Street	Signalized	AM	0.259	-	A	0.308	-	A	0.049	No
			PM	0.404	-	A	0.462	-	A	0.058	No
			FRI	0.396	-	A	0.454	-	A	0.058	No
			SAT	0.423	-	A	0.486	-	A	0.063	No
			SUN	0.451	-	A	0.472	-	A	0.021	No
4	**Hermosa Avenue & Pier Avenue**	**Signalized**	AM	0.643	-	B	0.678	-	B	0.035	No
			PM	0.708	-	C	0.731	-	C	0.023	No
			FRI	0.693	-	B	0.715	-	C	0.022	No
			SAT	0.716	-	C	0.746	-	C	0.030	No
			SUN	**0.867**	**-**	**D**	**0.888**	**-**	**D**	**0.021**	**Yes**
5	Hermosa Avenue & 11th Street	Signalized	AM	0.297	-	A	0.307	-	A	0.010	No
			PM	0.496	-	A	0.506	-	A	0.010	No
			FRI	0.391	-	A	0.399	-	A	0.008	No
			SAT	0.489	-	A	0.501	-	A	0.012	No
			SUN	0.420	-	A	0.424	-	A	0.004	No
6	Hermosa Avenue & 10th Street	4-Way Stop	AM	-	10.1	B	-	10.4	B	0.3	No
			PM	-	10.5	B	-	106	B	0.1	No
			FRI	-	10.8	B	-	11.1	B	0.3	No
			SAT	-	10.0	A	-	10.2	B	0.2	No
			SUN	-	15.4	C	-	15.9	C	0.5	No

Table 3.13-14. Intersections Significantly Impacted by Adverse Changes to Future (2021) Plus Project Peak Hour Levels of Service (Continued)

No.	Intersection	Type [1]	Peak Hour	Future (2021) Without Project			Future (2021) Plus Project			V/C or Delay Increase	Significant Impact
				V/C	Delay	LOS	V/C	Delay	LOS		
7	Hermosa Avenue & 8th Street	3-Way Stop	AM	-	10.4	B	-	10.7	B	0.3	No
			PM	-	10.7	B	-	10.9	B	0.2	No
			FRI	-	10.6	B	-	10.8	B	0.2	No
			SAT	-	10.4	B	-	10.6	B	0.2	No
			SUN	-	14.5	B	-	14.9	B	0.4	No
8	Manhattan Avenue West & Pier Avenue	1-Way Stop	AM	-	9.6	A	-	9.7	A	0.1	No
			PM	-	10.0	B	-	10.2	B	0.2	No
			FRI	-	10.4	B	-	10.7	B	0.3	No
			SAT	-	11.2	B	-	11.4	B	0.2	No
			SUN	-	13.2	B	-	13.4	B	0.2	No
9	Manhattan Avenue East & Pier Avenue	1-Way Stop	AM	-	11.8	B	-	12.2	B	0.4	No
			PM	-	13.6	B	-	13.8	B	0.2	No
			FRI	-	13.3	B	-	13.6	B	0.3	No
			SAT	-	14.7	B	-	15.2	C	0.5	No
			SUN	-	27.7	D	-	29.1	D	1.4	No
10	Monterey Boulevard & Pier Avenue	4-Way Stop	AM	-	9.6	A	-	9.8	A	0.2	No
			PM	-	10.7	B	-	10.9	B	0.2	No
			FRI	-	11.7	B	-	11.9	B	0.2	No
			SAT	-	11.4	B	-	11.7	B	0.3	No
			SUN	-	17.8	C	-	18.4	C	0.6	No
11	Valley Drive & Pier Avenue	4-Way Stop	AM	-	14.6	B	-	15.0	C	0.4	No
			PM	-	22.0	C	-	22.8	C	0.8	No
			FRI	-	22.3	C	-	23.1	C	0.8	No
			SAT	-	19.1	C	-	20.1	C	1.0	No
			SUN	-	14.8	B	-	15.2	C	0.4	No
12	Ardmore Avenue West & Pier Avenue	4-Way Stop	AM	-	15.5	C	-	15.8	C	0.3	No
			PM	-	21.2	C	-	22.2	C	1.0	No
			FRI	-	19.2	C	-	19.9	C	0.7	No
			SAT	-	15.7	C	-	16.2	C	0.5	No
			SUN	-	13.2	B	-	13.4	B	0.2	No

Table 3.13-14. Intersections Significantly Impacted by Adverse Changes to Future (2021) Plus Project Peak Hour Levels of Service (Continued)

No.	Intersection	Type [1]	Peak Hour	Future (2021) Without Project			Future (2021) Plus Project			V/C or Delay Increase	Significant Impact
				V/C	Delay	LOS	V/C	Delay	LOS		
13	PCH & Pier Avenue	Signalized	AM	0.717	-	C	0.718	-	C	0.001	No
			PM	0.782	-	C	0.787	-	C	0.005	No
			FRI	0.781	-	C	0.786	-	C	0.005	No
			SAT	0.655	-	B	0.663	-	B	0.008	No
			SUN	0.667	-	B	0.672	-	B	0.005	No
14	PCH & Aviation Boulevard	Signalized	AM	1.031	-	F	1.043	-	F	0.012	No
			PM	0.888	-	D	0.896	-	D	0.008	No
			FRI	0.891	-	D	0.899	-	D	0.008	No
			SAT	0.904	-	E	0.909	-	E	0.005	No
			SUN	0.851	-	D	0.854	-	D	0.003	No
15	PCH & 8th Street	Signalized	AM	0.915	-	E	0.916	-	E	0.001	No
			PM	0.839	-	D	0.840	-	D	0.001	No
			FRI	0.875	-	D	0.876	-	D	0.001	No
			SAT	0.695	-	B	0.695	-	B	0.000	No
			SUN	0.667	-	B	0.667	-	B	0.000	No

Definitions:
V/C – Volume-to-Capacity Ratio; based on the amount of traffic traveling through the intersection, the lane geometries, and other factors affecting capacity such as one-street parking, bus operations near the intersections, and pedestrian volumes at the street crosswalks.
Delay – Average stopped delay per vehicle, in seconds.
LOS – Level of Service; refer to definitions in Tables 3.13-3 and 3.13-4.
Notes: [1] For signalized intersections, V/C ratio and LOS are shown for the intersection as a whole. For unsignalized intersections, delay values and LOS are shown for worst-case minor (stopped) approach only.
[2] For the three intersections along PCH, the ICU results are shown for informational purposes for the City of Hermosa Beach, but the analysis conclusions are based on the HCM results for Caltrans methodology.
Source: The Mobility Group 2017.

AM Peak Hour

During the AM peak hour all study intersections would continue to operate at LOS D or better in the Future Year (2021) with the implementation of the proposed Project, except for the signalized intersection at PCH & Aviation Boulevard, which would operate at LOS F with or without the proposed Project, and the signalized intersection at PCH & 8th Street, which would operate at LOS E with or without the proposed Project. The change in ICU value would not exceed the thresholds for significant impact at any location. Therefore, the Project would not cause any significant impacts in the AM peak hour.

PM Peak Hour

During the PM peak hour all study intersections would continue to operate at LOS D or better with the implementation of the proposed Project in the Future Year (2021). The change in ICU value would not exceed the thresholds for significant impact at any location. Therefore, the proposed Project would not cause any significant impacts in the PM peak hour.

Friday PM Peak Hour

During the Friday PM peak hour all study intersections would continue to operate at LOS D or better with the implementation of the proposed Project in the Future Year (2021). The change in ICU value would not exceed the thresholds for significant impact at any location. Therefore, the proposed Project would not cause any significant impacts in the Friday PM peak hour.

Saturday Midday Peak Hour

During the Saturday midday peak hour all study intersections would continue to operate at LOS D or better with the implementation of the proposed Project in the Future Year (2021), except the signalized intersection of PCH & Aviation Boulevard, which would operate at LOS E with and without the Project. The change in ICU value would not exceed the thresholds for significant impact at any location. Therefore, the proposed Project would not cause any significant impacts in the Saturday midday peak hour.

Sunday Afternoon Peak Hour

During the Sunday afternoon peak hour all study intersections would continue to operate at LOS D or better with the implementation of the proposed Project Many intersections would continue to operate at LOS A or LOS B in the Future Year (2021). However, the increase in ICU value of 0.021 (i.e., the increased in V/C ratio) caused by the Project at the intersection of Hermosa Avenue and Pier Avenue would exceed the threshold for significance of 0.020, although the intersection would remain at a LOS D. Therefore, the proposed Project would cause one *significant* impact in the Sunday afternoon peak hour. The change in ICU value would not exceed the thresholds for significant impact at any other location.

Mitigation Measures

The proposed Project would result in one significant traffic impact during the Sunday afternoon peak hour at the signalized intersection of Hermosa Avenue & Pier Avenue. While the intersection would continue to operate at LOS D, the proposed Project would increase the V/C ratio at the

intersection from 0.867 to 0.888. This increase in V/C ratio of 0.021 would slightly exceed the threshold for significance of 0.020 (refer to Table 3.13-6).

However, this intersection is currently designed and operated to balance traffic flow with facilitating high volumes of pedestrians and bicyclists in the Downtown Core that access the commercial establishments along Pier Avenue, Pier Plaza, and Hermosa Avenue as well as The Strand and the beach. To accomplish these goals, intersection design and operation includes a pedestrian scramble phase where pedestrians can cross the streets on diagonal crosswalks as well as the usual crosswalks. Hermosa Avenue also includes a bicycle route with "sharrow" markings on the roadway and accommodates relatively high volumes of bicyclists. On-street parking is provided on Hermosa Avenue & Pier Avenue on all four legs of the intersection. All of these features reflect the City's multimodal polices of serving and providing for all modes of transportation at this key intersection rather than exclusively prioritizing automobiles. Improvements to enhance traffic capacity at the intersection (e.g., additional turn lanes or turn lane extensions) could only be achieved by removing on-street parking or the landscaped median or by removing the scramble pedestrian phase and reverting to the normal pedestrian crosswalks. As these actions would have potentially significant secondary impacts to pedestrian mobility and public coastal access parking and would conflict with adopted City policies for multimodal circulation in the Downtown, they are considered to be infeasible. In addition, as discussed above in Section 3.13.3, *Impact Assessment and Methodology,* Project trip generation and analysis of potential traffic impacts already accounts for a substantial reduction in potential trips associated with the mixed-use character of the proposed Project (i.e., "internal trip capture"), as well as various proposed trip reduction measures (e.g., on-site bicycle rentals). Therefore, mitigation measures aimed at further reducing project trip generation beyond a substantial reduction in project size were also not considered feasible.

Therefore, one significant traffic impact would remain unavoidable as a result of implementation of the proposed Project. However, the existing LOS at this intersection would not change as a result of the proposed Project and would remain at LOS D.

Impact Description

Would the project conflict with an applicable congestion management program, including, but not limited to LOS standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?

TT-4 The proposed Project would be consistent with the Los Angeles County CMP and would have a *less than significant* impact on CMP roadways.

The City has established criteria for CMP intersections as defined in the 2010 CMP for Los Angeles County. The study area for CMP arterial monitoring intersections includes:

- All CMP arterial monitoring intersections where the proposed Project would add 50 or more trips during either the weekday AM or weekday PM peak hours of adjacent street traffic.
- All CMP mainline freeway monitoring locations where the proposed Project would add 150 or more trips, in either direction, during either weekday AM or weekday PM peak hours.

In addition, although neither the CMP nor the City has established thresholds for transit service, CMP requirements and guidelines require an analysis of potential Project impacts on the transit system. For the purposes of this analysis, the following criterion was established to determine if there would be any significant transit impacts due to the Project:

- The capacity of the transit system serving the Project area would be substantially exceeded.

CMP Arterial Intersections

The CMP arterial monitoring intersections nearest to the Project site include:

- PCH & Artesia Boulevard (approximately 1.2 miles from Project site)
- PCH & Torrance Boulevard (approximately 2.2 miles from Project site)
- Inglewood Avenue & Artesia Boulevard (approximately 2.9 miles from Project site)
- Sepulveda Boulevard & Rosecrans Avenue (approximately 3.2 miles from Project site)
- Hawthorne Boulevard & 190th Street (approximately 3.2 miles from Project site)
- Sepulveda Boulevard & El Segundo Boulevard (approximately 4.2 miles from Project site)

However, based on the Traffic Study's Project trip generation and distribution estimates, the proposed Project would not be expected to add more than 50 vehicles per hour to any of these locations during either weekday AM or weekday PM peak hours (see Appendix I; Table 4.16 of the Traffic Study). Therefore, these intersections would not be significantly impacted under the CMP criteria and a CMP arterial intersection analysis is not required by the City.

CMP Freeways

The mainline freeway monitoring locations nearest to the Project site include:

- I-405 North of La Tijera Boulevard (approximately 10.4 miles from Project site)
- I-405 South of Route 110 at Carson Scales (approximately 10.3 miles from Project site)

Based on the Traffic Study's Project trip generation and distribution estimates, the proposed Project would not add enough new traffic to exceed the freeway analysis criteria at these locations. Because Project-related traffic is projected to be well below the minimum criterion of 150 vehicles per hour (see Appendix I; Table 4.17 of the Traffic Study), I-405 would not be significantly impacted under the CMP criteria and a CMP freeway analysis is not required by the City.

CMP Transit

Based on the Traffic Study's Project trip generation and distribution estimates and procedures outlined in the CMP, additional transit trips associated with the proposed Project would comprise approximately 1 percent or less of capacity in the AM and PM peak hours (see Appendix I; Table 4.18 of the Traffic Study). Therefore, the proposed Project would not cause the capacity of the transit system to be substantially exceeded and the Project would not create any significant impacts on the transit systems serving the Project Area. No mitigation would be required.

Impact Description

Would the project conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?

TT-5 The proposed Project would increase the use of pedestrian and bicycle facilities in the vicinity of the Project site, including The Strand and Pier Plaza; however, potential impacts would be *less than significant*.

The proposed mixed-use hotel would encourage pedestrian and bicycle activity in the Downtown Core consistent with PLAN Hermosa policies. While no pedestrian trip generation estimates are available for the proposed mixed-use hotel, with the implementation of the proposed Project, it can reasonably be assumed that The Strand and Pier Plaza in the vicinity of the proposed mixed-used hotel would experience increased pedestrian activity. Pedestrian counts taken in August 2015 show that pedestrian volumes on The Strand adjacent to the Project site range from approximately 325 pedestrians in the AM and PM peak hours to 1,515 pedestrians in the Sunday afternoon peak hour (refer to Table 3.13-2). The counts also show pedestrian volumes in Pier Plaza adjacent to the Project site range from 250 pedestrians in the AM peak hour to 2,815 pedestrians in the Sunday afternoon peak hour. Assuming a maximum occupancy of 250 guests it is likely that The Strand would experience a long-term increase in pedestrian and bicycle activity. In addition, restaurant patrons, retail shoppers, and potential event guests, would also increase pedestrian activity along both The Strand and Pier Plaza. However, as noted in Section 3.13.3, *Impact Assessment and Methodology*, many of the patrons of these the restaurant and retail spaces would already be

visiting the Downtown Core under existing conditions, and therefore would not constitute a Project-generated increase in pedestrian or bicycle activity. The Strand offers a maximum paved width of 25 feet within the vicinity of the Project site, sufficient to accommodate the increase of 250 or more pedestrians and new bicyclists associated with the proposed Project. Similarly, Pier Plaza is approximately 100 feet wide. These pedestrian facilities generally only experience significant congestion during events, which would continue to occur in the Downtown with or without the proposed Project. During a typical weekday or weekend during the busy summer period, additional pedestrian traffic as a result of the proposed mixed-use hotel would not substantially increase delay or otherwise affect the performance of these facilities and impacts would be *less than significant*.

Formal developed bicycle facilities in the Project vicinity are limited to The Strand, which is a multi-use off-road pedestrian and bicycle trail, and a Class III Bicycle Route (with "sharrow" markings on the roadway surface) along Hermosa Avenue and further east along Monterey Boulevard (refer to Figure 3.13-1). However, many of the streets within the City, particularly those west of Hermosa Avenue, are used by bicyclists in lieu of bicycle routes. This is particularly common along the east-west oriented streets that provide beach access (e.g., 13th Street). As with pedestrian facilities, these existing bicycle facilities, particularly The Strand would be expected to see some increase in use. The Strand already accommodates up to 295 bicycle trips during the weekend peak hours and would be expected to accommodate additional trips associated with the hotel without a substantial increase in congestion. Bicyclists would continue to experience significant congestion during special events; however, these events would continue to occur in the Downtown with or without the proposed Project. Overall, impacts related to performance of bicycle facilities would be *less than significant*.

Pending cumulative projects in the City are located more than 0.5 miles inland and would not be expected to generate substantial pedestrian or bicycle trips along The Strand or Pier Plaza. The Redondo Beach Waterfront development would add approximately 500,000 sf of retail, restaurants, office space, hotels, and recreational areas in Redondo Beach. This development would be located approximately 1 mile south of the proposed Project and would likely result in some pedestrian and bicycle traffic along The Strand at the Project site. However, during a typical weekday or weekend during the busy summer period, additional pedestrian traffic as a result of this pending cumulative project would not substantially increase delay or otherwise affect the performance of these facilities and impacts. The implementation of the proposed Project would not substantially contribute to any cumulatively significant impacts related to pedestrian or bicycle facilities.

Potential impacts associated with the removal of lateral access along Beach Drive are discussed further in Section 3.3, *Recreation* under Impact REC-2.

Impact Description

Would the project substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses; or conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?

TT-6 The operation of the proposed Project following construction would not create or increase traffic hazards in the Project area. Impacts would be *less than significant.*

On-site vehicular circulation would include a covered hotel entrance and adjacent ground floor guest lobby entrance off 13th Street (refer to Figure 2-2). Project drop-off and loading zones and the entrance to the subterranean parking garage would be off the 13th Street hotel entrance. All parking on-site would by valet only and accessed at the on-site covered vehicle entrance adjacent to 13th Street; no self-parking would be permitted. A delivery, loading, and trash/recycling area would be located on the ground floor of the hotel accessible from 13th Court and Lot B adjacent to the east of the Project site. Service vehicles would be able to turn around using 13th Court and Lot B. 13th Court is a two-way alley with right-in/right-out access at Hermosa Avenue.

Currently, 13th Street is a two-way street from the intersection with Hermosa Avenue for approximately 110 feet to the entrance/exit for Lot C. From that point west to Beach Drive it is a one-way, one-lane eastbound street, with a 6- to 8-foot-wide sidewalk on the south side and no sidewalk on the north side. The proposed Project would convert 13th Street from one-way eastbound to two-way operation to facilitate direct access/egress to the proposed mixed-use hotel (refer to Figure 2-8). 13th Street would be restriped to allow for two-way vehicle traffic. The sidewalk width along 13th Street would be reduced from 10 feet to 8 feet, which would allow for creation of two, 11-foot wide travel lanes, with traffic flow controlled by a stop sign at the intersection of 13th Street and Beach Drive. An additional stop sign would be installed on the eastbound lane along 13th Street just before Lot C to allow for provision of left-turn eastbound access into the parking structure, as well as through vehicle movements to Hermosa Avenue. 13th Street would also continue to provide access to Lot B on 13th Street immediately east of the Project site, as it currently does. Traffic signs would be installed at the intersection of Hermosa Avenue & 13th Street to indicate the availability of left-turns from Hermosa Avenue onto 13th Street. City staff has reviewed and determined restriping to be feasible. The HBFD has

indicated that this proposed signage and restriping improvements to allow two-way access would result in better access to the Project site and surrounding vicinity.

Vehicle traffic would be expected to increase as a result of the implementation of the proposed Project. However, the on-site valet drop-off/loading and subterranean parking garage entrance zone would increase driver visibility and safety of oncoming pedestrians, bicyclists, and vehicular traffic. Vicinity traffic flow would improve as a result of the restriping of 13th Street from a one-way street to allow for two-way vehicle traffic. The restriping would improve circulation to the hotel's valet drop-off/loading zone, as well as circulation along Beach Drive adjacent to the Project site. The existing traffic signal at 13th Street & Hermosa Avenue would provide for all movements into and out of 13th Street, thus making 13th Street an efficient direct access route to the proposed Project, and avoiding the need for Project traffic to use other streets. Consequently, implementation of the proposed Project would not result in significant impacts associated with increased hazards and no mitigation would be required.

Impact Description

Would the project result in inadequate emergency access?

TT-7 The proposed Project would result in *less than significant* impacts to emergency access.

Emergency access to the Project site is currently provided for emergency vehicles on 13th Street, 13th Court, and Beach Drive. Although typically restricted to pedestrian traffic, emergency access may also be provided along Pier Plaza in the event of a major emergency.

During construction activities associated with the proposed Project, 13th Street would be closed between Beach Drive and the Lot C driveway (refer to Figure 3.13-3). Additionally, Beach Drive would be closed between 13th Street and Pier Avenue, which would be developed as part of the Project (refer to Section 3.3, *Recreation* for discussion on proposed vacation of Beach Drive). 13th Court would remain open for deliveries except for 100 feet between Beach Drive, and Lot B, which would be developed as part of the Project. Emergency vehicle access would be maintained via Pier Avenue and 14th Street. In addition, emergency knox boxes would be kept at the construction gate at 13th Street, in case emergency access into the Project site is required during after-hours.

Once construction is complete, 13th Street, Lot B, and 13th Court would be re-opened. In the event of an emergency, the Project site could be accessed from three entry points: the main hotel entry off 13th Street; the ground floor loading dock from Lot B/13th Court; and along Pier Plaza at the

southeast and southwest corners of the proposed mixed-use hotel. Further, the initial emergency evacuation staging and refuge area for hotel occupants would be the beach area directly west of The Strand in front of the Project site. In addition, prior to operation, the hotel operator would provide an Emergency Response Plan for stipulated refuge areas for emergency evacuations and/or other natural or man-made disasters (refer to MM PS-1b in Section 3.12, *Public Services*). Additionally, the hotel operator would utilize training procedures and an operational handbook that provides processes and procedures for staff to provide the first responder services before calling the HBFD and HBPD. The site plans and Emergency Response Plan for the proposed Project would be reviewed prior to issuance of a building permit to ensure that all HBFD and HBPD safety requirements (including those related to fire and emergency access) would be met.

Neither Project construction nor operation would modify, close, or block emergency access to the Project site or adjacent properties. There would therefore be no significant impacts on property access during construction and no mitigation would be required.

3.14 UTILITIES AND SERVICE SYSTEMS

The following analysis describes existing and planned utilities in the vicinity of the Strand and Pier Mixed-Use Hotel Project (Project) site within the City of Hermosa Beach (City), and evaluates the operation and capacity of these utilities with the development of the proposed Project. Utilities necessary for the operation of the proposed hotel would include wastewater, potable water, solid waste disposal, and energy (i.e., electricity, natural gas) services. Wastewater collection and treatment in the area is provided by the South Bay Cities District. Potable water service is provided by the West Basin Municipal Water District (WBMWD) and the California Water Service Company (Cal Water). Solid waste collection, recycling, and transportation services are provided by Athens Services. For energy services, Southern California Gas Company (SoCalGas) provides natural gas, and Southern California Edison (SCE) provides electricity. Additionally, cable, phone, and internet services are provided to the City by private companies including Time Warner Cable, Verizon, Direct TV, and Dish Network.

The utilities analysis for this section is based on information from the local agencies and service providers, Los Angeles Regional Water Quality Control Board (RWQCB) reports, and Applicant-prepared engineering and technical studies, which have been peer reviewed by City Public Works Department staff. For specific information regarding stormwater drainage and groundwater please refer to Section 3.7, *Hydrology and Water Quality*.

3.14.1 Environmental Setting - Wastewater Services

The Project site is located in the City and within the western limits of the County of Los Angeles (County). Wastewater collection services are provided by the City and wastewater facilities are maintained and operated by the City Public Works Department. The sanitary sewer system serving the City consists of network of approximately 37 miles of gravity flow sewer lines and two pump stations (City of Hermosa Beach 2014). Much of the system is believed to have been installed in the late 1920s. The majority of the original system is concrete with recent replacements of clay pipe (City of Hermosa Beach 2014). The City is included as part of the South Bay Cities District of the Los Angeles County Sanitation Districts (LACSD). The South Bay Cities District provides wastewater collection and treatment to eight cities, including: El Segundo, Hermosa Beach, Manhattan Beach, Palos Verdes Estates, Rancho Palos Verdes, Redondo Beach, Rolling Hills Estates, and Torrance. The South Bay Cities District provides services to an area of 14.6 square miles and a total population of approximately 117,671 (Sanitation Districts of Los Angeles County 2015a).

Wastewater collected by the City sanitary sewer system is conveyed into the LACSD wastewater collection system, which flow north-northwesterly toward Manhattan Beach, where it is then conveyed to a Joint Water Pollution Control Plant (JWPCP) wastewater treatment plant located in the City of Carson, approximately 8 miles southeast of Hermosa Beach. The JWPCP facility provides primary and secondary treatment for approximately 280 million gallons per day (MGD), with a capacity of 400 MGD, making it one of the largest wastewater treatment plants in the world (Sanitation Districts of Los Angeles County 2015b).

The City manages existing sewer infrastructure in accordance with the *Sanitary Sewer Master Plan*, last updated in March 2011 and currently undergoing further revision. This plan identifies specific deficiencies in the existing sewer system – primarily associated with aging infrastructure – and lays out a plan and budget for repairing or upgrading deficient areas over a period of 10 years, to ensure reliable conveyance of wastewater throughout the City (City of Hermosa Beach 2011). The plan shows few deficiencies in the vicinity of the Project site at this time; however, 14th Court and 13th Street are high priority projects that are recommended for infrastructure improvements due to aging infrastructure (e.g., missing pipe, cracks or holes in pipe, etc.) (City of Hermosa Beach 2011). The plan shows no deficiencies within the boundaries of the Project site itself.

Wastewater generation and sewer flows were estimated for the existing development at the Project site by Fuscoe Engineering, Inc. in the Water and Wastewater Infrastructure Assessment Report prepared in July 2016 for the Strand & Pier Hotel Project (see Appendix J). Currently, the Project site utilizes two 8-inch sanitary sewer lines located along Beach Drive and 13th Court. Wastewater and sewage collected by these sewer lines are conveyed to an 8-inch sewer main located along Hermosa Avenue. The two 8-inch sewer lines collect and convey sewage generated by a total of nine subareas within the Project vicinity. In total, wastewater collected and conveyed by the 8-inch sewer lines located along Beach Drive and 13th Court is approximately 55,952 gallons per day (gpd), with a peak daily flow of 139,881 gpd (see Appendix J). Based on County of Los Angeles Sewer Generation Factors, the existing contributing average sewer flow daily demand for the Project site is estimated to be 16,882 gpd, with a peak flow of approximately 42,204 gpd (see Table 3.14-1). The current design capacity of the 8-inch lines located along Beach Drive and 13th Court are approximately 212,626 gpd and 216,626 gpd, respectively.

Table 3.14-1. Estimated Existing Project Site Wastewater Generation

Parcels	Existing Use	Sewage Generation (gpd/unit)[2]	Quantity	Average Daily Flow (gpd)	Peak Daily Flow (gpd)
4183-002-001 (Block 1, 2, and 3)	Mermaid Restaurant	25 gpd/1,000 sf	7,222 sf	181	451
4183-002-002 (Block 4) 4183-002-003	Mermaid Restaurant, The Deck, and Good Stuff	50 gpd/seat	160 seats	8,000	20,000
4183-002-017 (Block 19, 20, and 31)	Playa Hermosa Fish & Oyster Co., Pier Surf Shop, Hooked, Jacob Shaw, Inc.	50 gpd/seat	134 seats	6,700	16,750
4183-002-004	Hermosa Cyclery	100 gpd/1,000 sf	6,010 sf	601	1,503
4183-002-018	Residential Apartments	150 gpd/DU	4 DU	600	1,500
4183-002-019	Residential Apartments	150 gpd/DU	4 DU	800	2,000
Total Existing Daily Flow				**16,882**	**42,204**

Notes:
[1]Project Areas as defined in Appendix J.
[2]Sewer Generation rates based on sewer flow estimates from the County of Los Angeles Sewer Generation Factors
DU = Dwelling Units

3.14.2 Regulatory Framework - Wastewater Services

Federal Regulations

Clean Water Act

The Federal Water Pollution Control Act, also known as the Clean Water Act (CWA), is the primary statute governing water quality. The CWA establishes the basic structure for regulating discharges of pollutants into the waters of the United States and gives the U.S. Environmental Protection Agency (USEPA) the authority to implement pollution control programs, such as setting wastewater standards for industry. The statute's goal is to regulate all discharges into the nation's waters and to restore, maintain, and preserve the integrity of those waters. The CWA sets water quality standards for all contaminants in surface waters and makes it unlawful for any person to discharge any pollutant from a point source into navigable waters unless a permit is obtained under its provisions. The CWA mandates permits for wastewater and stormwater discharges, requires states to establish site-specific water quality standards for navigable bodies of water, and regulates other activities that affect water quality, such as dredging and the filling of wetlands. The CWA also funds the construction of sewage treatment plants and recognizes the need for planning to address nonpoint sources of pollution.

State Regulations

California Regional Water Quality Control Board Los Angeles Region Order No. 20-031

Outlines general water discharge requirements for small commercial and multi-family residential subsurface sewage disposal systems.

Health and Safety Code Section 17921.3

Requires low-flush toilets and urinals in all buildings, including commercial, residential, institutional, and industrial buildings.

Regional Regulations

Enhanced Watershed Management Plan for Beach Cities

Following adoption of the Municipal Separate Storm Sewer System (MS4) permit, the Cities of Hermosa Beach, Manhattan Beach, Redondo Beach, and Torrance (Beach Cities), together with the Los Angeles County Flood Control District, agreed to collaborate in the development of the Enhanced Watershed Management Plan (EMWP) for the Santa Monica Bay and Dominguez Channel Watershed. The EWMP is intended to facilitate effective, watershed-specific permit implementation strategies in accordance with permit Part VI.C., *Watershed Management Program*. The EWMP: summarizes watershed-specific water quality priorities identified by the Beach Cities Watershed Management Group; outlines the program plan, including specific strategies, control measures and best management practices (BMPs), necessary to achieve water quality targets; and describes the quantitative analyses completed to support target achievement and Permit compliance.

Local Regulations

City of Hermosa Beach General Plan (PLAN Hermosa)

The City adopted the General Plan and Local Coastal Program (LCP) (collectively referred to as PLAN Hermosa) on August 22, 2017. This updated document contains goals and policies in the Infrastructure Element related to utilities that apply to the proposed Project. These policies include, but are not limited to:

Goal 4. The sewer system infrastructure is modernized and resilient.

> **Policy 4.4 System capacity reviews**. Require new development and redevelopment projects to demonstrate available sewer system capacity and resiliency.

Hermosa Beach Municipal Code

Chapter 8.36, *Sewage and Industrial Waste*, of the City's Municipal Code regulates the discharge of industrial waste, treated sewage, and sewage throughout the City. It addresses the need to preserve the health, safety, and general welfare of the public and the environment.

Low Impact Development Ordinance

Since adoption of a customized amendment to the California Green Building Code in 2010, the City has required low impact development (LID) BMPs for both residential and commercial projects. All new development within the City that adds or replaces 5,000 square feet (sf) of impervious surface area is required to comply with the established LID requirements.

Hermosa Beach Sanitary Sewer Master Plan

The City has adopted the Sanitary Sewer Master Plan, which provides an overview of existing conditions and recommends a program for facilitating and funding capital improvement projects for the City's sanitary sewer infrastructure.

3.14.3 Impact Assessment and Methodology - Wastewater Services

Thresholds for Determining Significance

The following thresholds of significance are based on Appendix G of the 2017 California Environmental Quality Act (CEQA) Guidelines. For purposes of this Environmental Impact Report (EIR), implementation of the proposed Project may have a significant adverse impact on wastewater infrastructure if:

a) The project would exceed wastewater treatment requirements of the Los Angeles Regional Water Quality Control Board;

b) The project would require or result in the construction of new wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects; or

c) The project would result in a determination by the wastewater treatment provider, which serves or may serve the project that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments.

Methodology

The proposed Project was evaluated for impacts to wastewater utilities based on data published by the LACSD and Los Angeles RWQCB, information provided by the City's Existing Conditions

Report (City of Hermosa Beach 2014), and a Water and Sewer Technical Report for the proposed Project (Fuscoe Engineering, Inc. 2016) and peer reviewed by City Public Works Department staff.

The Initial Study (see Appendix A) prepared for the proposed Project determined that the mixed-use hotel could result in potentially significant impacts to all thresholds associated with wastewater utilities. Potential impacts of the proposed Project were evaluated by reviewing the characteristics of the proposed mixed-use hotel to assess their potential to affect the capacities of wastewater utilities. Projected utility demands for the proposed Project were compared with the current capacity available for allocation within the City. Potential impacts resulting from the proposed Project were compared with criteria from Los Angeles RWQCB, CEQA Appendix G, and the PLAN Hermosa Environmental Impact Report (EIR) to assess their significance. Physical impacts associated with utilities trenching are discussed in Section 3.5, *Geology and Soils,* as well as Section 3.13, *Transportation and Traffic*.

3.14.4 Project Impacts and Mitigation Measures - Wastewater Services

Impact Description

Would the project exceed wastewater treatment requirements of the Los Angeles Regional Water Quality Control Board; result in the construction of new wastewater treatment facilities or expansion of existing facilities; or result in a determination by the wastewater treatment provider that it has inadequate capacity to serve the Project's projected demand in addition to the provider's existing commitments?

UT-1 Wastewater generation resulting from the proposed Project would not exceed Los Angeles RWQCB wastewater treatment requirements and would not result in the need for new or expanded wastewater treatment facilities. However, the proposed Project could exceed the capacity of existing sewer lines serving the areas resulting in impacts that would be *less than significant with mitigation*.

Wastewater generation from construction-related activities is not anticipated to cause a measurable increase in wastewater flows; wastewater generation would not noticeably increase until the completion of the proposed Project. Construction activities for the proposed Project would result in minimal generation of wastewater as a result of construction workers and equipment on-site. Construction impacts associated with wastewater infrastructure would primarily be confined to trenching for the installation of new sewer mains and for the connections to public infrastructure (Fuscoe Engineering, Inc. 2016) (refer to Section 3.5, *Geology and Soils,* as well as Section 3.13,

Transportation and Traffic). Installation of wastewater infrastructure would include on-site wastewater distribution and off-site work associated with the vacation of Beach Drive (Fuscoe Engineering, Inc. 2016). The proposed Project would require removal of approximately 385 feet of sewer lines in Beach Drive and 13th Court, and would require installation of a new sewer main alignment to continue to serve properties adjacent to the Project site. No upgrades to public infrastructure are proposed by the Applicant; however, minor off-site work would be required in order to connect to the public sewer mains. Any impacts (e.g., service interruptions) resulting from installation of wastewater infrastructure required for the proposed Project would be of a relatively short-term duration and would be temporary.

Sewer flow analysis for the proposed Project was conducted for all City-owned sewer lines in the Project vicinity that are tributary to the County-owned sewer line along Hermosa Avenue. The proposed sewer flows were calculated using two methods. In the first method, sewer flows within the study area were calculated using Los Angeles County Sewer Generation Factors; peak sewer demand flow was determined to be 139,881 gpd for existing conditions and 246,333 gpd with the incorporation of the proposed Project (Fuscoe Engineering, Inc. 2016). Table 3.14-2 describes the estimated wastewater generation of the proposed Project.

Table 3.14-2. Estimated Proposed Wastewater Generation

Proposed Use	Sewage Generation (gpd /unit)[1]	Quantity	Average Daily Sewer Flow (gpd)	Peak Flow (gpd)[2]
Hotel	150/room	100 rooms	15,000	37,500
Commercial Shops & Stores	100 gpd/1,000 SF	5,522 SF	552	1,381
Restaurants	50/seat	500 seats	25,000	62,500
Bars, Cocktail Lounges, etc.	20/seat	879 seats	17,580	43,950
Parking	25/1,000 SF	53,209 SF	1,330	3,326
Total Proposed Daily Wastewater Generation			**59,462**	**148,656**
Total Existing Wastewater Generation			**16,882**	**42,204**
Net Wastewater Generation			**+42,580**	**+106,452**

Notes:
[1]Water consumption estimates based on County of Los Angeles Sewer Generation Factors
[2]Peak flow demand is based on a peak factor of 2.5
Source: Fuscoe Engineering, Inc. 2016.

In the second method, existing sewer flows were calculated using the City zoning map and the Los Angeles County Sewer "Zoning Coefficients," where the study area was multiplied by the designated zoning coefficient (Fuscoe Engineering, Inc. 2016). The peak flow produced in the study area was determined to be 131,518 gpd; because the first methodology resulted in a higher

flow demand for both the existing and proposed conditions, it was used to calculate the capacity of the existing sewer main that serves the Project site (Fuscoe Engineering, Inc. 2016).

Average daily operational sewer flow for the proposed Project would be approximately 59,462 gpd with the peak flow at approximately 148,656 gpd (Fuscoe Engineering, Inc. 2016). When accounting for the proposed Project combined with all sub-areas discharging into the 8-inch sewer lines in Beach Drive and 13th Court, the average daily sewer flow would be 98,553 gpd and the peak daily flow would be 246,333 gpd (Fuscoe Engineering, Inc. 2016). As a result of the proposed Project, peak flow would exceed the design capacity of the existing 8-inch lines by approximately 16 percent (Fuscoe Engineering, Inc. 2016). As a result, this sewer line could operate in surcharge (i.e., overflow) conditions, which may require expansion or replacement to increase capacity. With the Applicant's installation of upsized wastewater infrastructure during the construction of the proposed Project, impacts on wastewater utilities associated with Project operations would be *less than significant with mitigation.*

Regionally, the nine sub-area flows are routed towards the Herondo Pumping station that outfalls into the County's trunk on Monterey Avenue, where the sewer effluent is then conveyed through the County regional sanitary sewer system to the JWPCP outfall (Fuscoe Engineering, Inc. 2016). Nevertheless, this increase in wastewater generation would be within the capacity of the wastewater facilities that currently serve the Project site. The JWPCP has a capacity of 400 million gallons; thus the proposed Project's increase in sewer demand would not affect the capacity of the existing local or regional sanitary sewer systems (Fuscoe Engineering, Inc. 2016). As a result, the proposed Project would not conflict with Los Angeles RWQCB policies and standards.

Mitigation Measures (MM)

MM UT-1 ***Wastewater Infrastructure Upgrades.*** *During relocation of the existing sewer utilities, the Applicant shall install upsize wastewater infrastructure directly adjacent to the Project site to replace existing undersized sewer lines. The Applicant shall be required to increase the conveyance capacity of existing sewer lines within and directly adjacent to the Project site by a minimum of 16 percent to accommodate increased peak wastewater conveyance required by the proposed mixed-use hotel.*

Plan Requirements and Timing. Prior to the issuance of any City permits related to site preparation, demolition, grading, or construction the Applicant submit revised construction plans identifying the location and size of the proposed sewer lines, which will connect to the City's sewer system as part of Project construction.

Monitoring. Prior to the issuance of any City permits related to site preparation, demolition, grading, or construction, the City Department of Public Works shall verify that the final construction plans include appropriate upgrades to wastewater facilities that would adequately convey proposed peak flows.

Residual Impacts

With implementation of MM UT-1, potential impacts related to wastewater infrastructure would be less than significant. Implementation of the above-mentioned mitigation measure would ensure that sewer lines are sized adequately sized to serve the proposed Project.

Cumulative Impacts

The cumulative development described in Tables 3.0-1, 3.0-2, and 3.0-3 would result in additional wastewater generation within the City. Further, with development under PLAN Hermosa, future development and reuse projects would increase the amount of wastewater generation and increase demand on wastewater treatment facilities (City of Hermosa Beach 2017). With the implementation of MM UT-1, the proposed Project's contribution to cumulative wastewater generation demand would be incremental in comparison to existing and future planned wastewater capacities of local wastewater treatment providers. Compliance of the proposed Project and future development projects with regulatory requirements that regulate wastewater discharge, such as the Hermosa Beach Municipal Code (HBMC), which includes the City's LID Code, as well as Los Angeles RWQCB wastewater treatment requirements, would assist in ensuring that wastewater generation is minimized and wastewater demand is adequately served on a cumulative basis. If cumulative development projects exceed the capacity of the wastewater infrastructure, developers would be required to reduce water consumption and wastewater flow on a project-specific basis, including implementation of best management practices for water conservation and efficiency, as identified in PLAN Hermosa. Therefore, the proposed Project's contribution to cumulative impacts on wastewater utilities would be *less than significant*.

3.14.5 Environmental Setting - Potable Water Services

Water services for the City are provided through a combination of imported and reclaimed water supplied by the West Basin Municipal Water District (WBMWD) and groundwater, imported surface water, and recycled water supplied by Cal Water.

Cal Water Supplies

The Project site is located within the Hermosa-Redondo District of Cal Water's service area. Formed in 1926, Cal Water has continued to provide reliable water service to the Hermosa-

Redondo District area since 1927 through a combination of local groundwater and surface water supplies purchased from WBMWD, a member agency of Metropolitan Water District of Southern California (MWD).

Water purchased from MWD is imported to the Cal Water service area from the Colorado River and the State Water Project, which supply much of Southern California's municipalities with reliable water supplies. Purchased water supplies from WBMWD by Cal Water meet most the Hermosa-Redondo District service demands, accounting for approximately 80 to 85 percent.

In addition to purchased water, Cal Water relies on groundwater supplies extracted from the West Coast Basin's Silverado aquifer meet approximately 15 to 20 percent of the Hermosa-Redondo District demand. The quantity of water provided through extraction to meet Hermosa-Redondo District demands averages approximately 2,000 acre-feet per year (AFY). Despite production and extraction of only 2,000 AFY, Cal Water has an adjudicated safe yield from the aquifer of 4,070 AFY; however, Cal Water does not does not currently have the ability to sustain production and delivery of its full adjudicated amount (Cal Water 2016). For further discussion of groundwater basin characteristics and hydrology, refer to Section 3.7, *Hydrology and Water Quality*.

The remainder of Cal Water service demands are met through recycled water supplies, which makes up approximately 1 percent of total water served to the Hermosa-Redondo District. Recycled water is provided to the Hermosa-Redondo District by the West Basin Water Recycling Facility (WBWRF), which receives treated effluent from the Los Angeles Hyperion Wastewater Treatment Plant and subjects the water to chemical treatment to meet established drinking water quality criteria. Cal Water recycled water supplies received from the WBWRF are primarily used for groundwater replenishment, land scape irrigation, and industrial process water.

Table 3.14-3. Cal Water Hermosa-Redondo District 2015 Total Water Supplies

Water Supply	Use	Volume (AF)	Percent Supply
Groundwater	Drinking Water	1,734	15.9
Purchased or Imported Water	Drinking Water	9,031	82.8
Recycled Water	Recycled Water (aquifer replenishment, landscape irrigation, etc.)	142	1.3
Total	**-**	**10,907**	**100.0**

Notes: AF = acre-feet
Source: Cal Water 2016.

Over the next 25 years, Cal Water projects a slight increase by approximately 2 percent in total allowable water supplies through 2040, increasing from 12,641 AFY to 12,747 AFY (Cal Water 2016). Due to a flat 4,070 AFY adjudicated right to WBMWD's Silverado aquifer supplies and a projected supply of 150 AFY of recycled water, total available groundwater and recycled water supplies are projected to remain the same of the next 25 years (see Table 3.14-4). The only variable in total projected water supplies are anticipated to occur to purchased supplies, which vary year-by-year based on service area demands and water use conservation.

Table 3.14-4. Projected Hermosa-Redondo District Supplies

Water Supply	Projected Water Supply (AF)				
	2020	2025	2030	2035	2040
Groundwater	4,070	4,070	4,070	4,070	4,070
Purchased or Imported Water	8,421	8,320	8,357	3,425	8,527
Recycled Water	150	150	150	150	150
Total	**12,641**	**12,540**	**12,577**	**12,645**	**12,747**

Notes: AF = acre-feet
Source: Cal Water 2016.

WBMWD Supplies

The WBMWD services a total of 17 cities throughout the southwestern region of the County across a service area of 185 square miles. Water provided by WBMWD is supplied to these municipalities through the purchase of imported water from MWD, which wholesales the water to the cities (West Basin Municipal Water District 2014). In 2015, WBMWD water supplies accounted for a total of 135,369 acre-feet (AF) from several sources, including desalinated brackish groundwater, purchased or imported water, and recycled water (West Basin Municipal Water District 2016).

Imported WBMWD supplies are purchased from MWD, and in 2015, accounted for approximately 80 percent of WBMWD's available supply. Like much of Southern California's imported water supplies, imported water wholesaled to WBMWD by MWD originates from the Colorado River and State Water Project. Remaining 2015 WBMWD supplies consisted of approximately 690 AF of desalinated brackish groundwater and 29,110 AF of recycled water treated at several water recycling facilities and nitrification plants (see Table 3.14-5).

Table 3.14-5. WBMWD 2015 Total Water Supplies

Water Supply	Use	Volume (AF)	Percent Supply
Desalinated Water	Drinking Water	690	0.6
Purchased or Imported Water	Drinking Water	105,569	77.9
Recycled Water	Recycled Water (aquifer replenishment, landscape irrigation, etc.)	29,110	21.5
Total	**-**	**135,369**	**100.0**

Notes: AF = acre-feet
Source: West Basin Municipal Water District 2016.

WBMWD supply projections are designed to reflect WBMWD demand, as WBMWD receives the amount of water necessary to meet wholesale demands. WBMWD supply and demand projections are based on an estimated 4.5 percent WBMWD service area population projections for the next 25 years, as well as the Water Demand Forecasting Model prepared by WBMWD in 2010. Over the next 25 years, WBMWD service area demands are projected to increase by approximately 8,757 AF, or 6.1 percent (see Table 3.14-6).

Table 3.14-6. Projected WBMWD Supply and Demand

Water Supply	Projected Water Supply (AF)					
	2015	2020	2025	2030	2035	2040
Potable and Raw Water	106,259	99,426	100,154	100,173	100,413	99,991
Recycled Water	29,110	38,894	44,135	44,135	44,135	44,135
Total	**135,369**	**138,320**	**144,289**	**144,308**	**144,548**	**144,126**

Notes: AF = acre-feet
Source: West Basin Municipal Water District 2016.

Water Demand

Total water demand for the Hermosa-Redondo District in 2015 equated to 10,765 AF, 1,294 AF of which was used for groundwater recharge (see Table 3.14-7) (Cal Water 2016). Of total district demand, the largest percentage of water use is attributed with residential uses, accounted for approximately 63.4 percent of Hermosa-Redondo District's total demand, with remaining demands attributed to commercial, industrial, and institutional uses. An additional 458 AF, or approximately 4.2 percent of total district demand, was attributed to system water losses. These current totals of water demand slightly differs from the projections in the PLAN Hermosa EIR, which assumes that total water demand in 2015 was 14,506 AF (City of Hermosa Beach 2017). The PLAN Hermosa EIR is based on the 2010 Urban Water Management Plan (UWMP), whereas Table 3.14-7 is based on the 2015 UWMP Update (West Basin Municipal Water District 2016b).

The PLAN Hermosa EIR was drafted prior to the 2015 UWMP Update; therefore, Table 3.14-7 reflects more current and accurate data.

Table 3.14-7. Hermosa-Redondo District 2015 Water Demand by Use

Use Type	Volume (AF)	Percent of Total Demand
Single Family	4,897	45.5
Multi-Family	1,928	17.9
Commercial	1,272	11.8
Industrial	582	5.4
Institutional/Governmental	329	3.1
Other	4	0.0
Losses	458	4.2
Groundwater Recharge	1,294	12.0
Total	**10,765**	**100**

AF = acre-feet
Source: Cal Water 2016.

Water service to the Project site is currently provided through an existing underground 8-inch water main located along Beach Drive, an underground 6-inch water line located along 13th Court, and an underground 12-inch water line running along 13th Street. The average daily demand for water service for the existing Project site is approximately 20,258 gpd (approximately 22.71 AFY), with a peak flow of approximately 50,645 gpd (approximately 56.77 AFY) (see Table 3.14-8).

Drought Conditions

In April 2015, California Governor Brown ordered a statewide 25 percent reduction in urban water use, the first ever statewide mandatory water reduction. In response, the MWD announced a 15-percent cutback in water allowances to its member agencies beginning on July 1, 2015 to help meet the Governor's statewide restriction. As a result of extended drought conditions, both Cal Water and WBMWD water service agencies have elected to pursue measures which would ensure the reliability of water supplies, reduce customer water usage, and promote water conservation measures.

Table 3.14-8. Estimated Existing Water Demand

Parcels	Existing Use	Water Generation (gpd/unit)[2]	Quantity	Average Daily Flow (gpd)	Peak Daily Flow (gpd)
4183-002-001 (Block 1, 2, and 3)	Mermaid Restaurant	30 gpd/1,000 sf	7,222 sf	217	542
4183-002-002 (Block 4) 4183-002-003	Mermaid Restaurant, The Deck, and Good Stuff	60 gpd/seat	160 seats	9,600	24,000
4183-002-017 (Block 19, 20, and 31)	Playa Hermosa Fish & Oyster Co., Pier Surf Shop, Hooked, Jacob Shaw, Inc.	60 gpd/seat	134 seats	8,040	20,100
4183-002-004	Hermosa Cyclery	120 gpd/1,000 sf	6,010 sf	721	1,803
4183-002-018	Residential Apartments	180 gpd/DU	4 DU	720	1,800
4183-002-019	Residential Apartments	240 gpd/DU	4 DU	960	2,400
Total Existing Daily Flow				**20,258**	**50,645**

Notes:
[1]Project Areas as defined in Appendix J.
[2]Water Demands as defined in Appendix J.
DU = Dwelling Units
1,000 gpd = 1.12 AFY

As required of all urban water suppliers by the California Department of Water Resources (DWR), Cal Water has prepared a responsive Water Shortage Contingency Plan designed to effectively enforce staged water use restrictions based on district water demands, agency supplies, and varying drought conditions. Likewise, WBMWD, as part of development of its UWMP, has completed a Water Supply Allocation Plan designed to calculate member agency supply allocations in order to meet State mandated water use reduction targets. Through implementation of these strategic plans, the Cal Water Hermosa-Redondo District has effectively achieved a 18 percent reduction in water usage since 2013 (Cal Water 2016), and the WBMWD has achieved a 27 percent reduction in water usage since 1995 (West Basin Municipal Water District 2016a).

Due to the conservation efforts of both service customers, State residents, and urban water supply agencies, Governor Brown issued Executive Order (EO) B-37-16 on May 9, 2016. This new EO requires continued statewide water conservation measures through the end of January 2017 and allows for varying water conservation regulations across the State to account for differing water supply conditions and agency conservation measures. EO B-40-17, signed on April 7, 2017 ended

the drought state of emergency in all California counties except Fresno, Kings, Tulare, and Tuolumne, where emergency drinking water projects will continue to help address diminished groundwater supplies. However, the EO maintains water reporting requirements and prohibitions on wasteful practices. Further, EO B-37-16, and the associated water use efficiency framework, remains in effect (California Department of Water Resources 2017).

3.14.6 Regulatory Framework - Potable Water Services

Federal Regulations

There are no Federal regulations that pertain to potable water services or resources.

State Regulations

California Governor's Drought Declarations

California Governor Brown on January 17, 2014 proclaimed a State of Emergency and directed state officials to take all necessary actions to make water immediately available. On April 25, 2014, the Governor issued an EO to speed up actions necessary to reduce harmful effects of the drought, and he called on all Californians to redouble their efforts to conserve water. On December 22, 2014 Governor Brown issued EO B-28-14 extending directives to the California DWR and the State Water Resources Control Board (SWRCB) to take actions necessary to make water immediately available through May 31, 2016 and to extend CEQA suspensions for certain water supply projects. On April 1, 2015, the governor issued EO B-29-15. Key provisions include ordering the SWRCB to impose restrictions to achieve a 25-percent reduction in potable urban water usage through February 28, 2016. On May 9, 2016, the governor issued EO B-37-16, establishing longer-term water conservation measures through the end of January 2017, which include monthly water use reporting, strengthened urban drought contingency plans, elimination of wasteful water use practices, and mandated adjustments to emergency water conservation regulations and restrictions during extended drought conditions. These extended water conservation measures recognize differing water supply conditions for many communities, and require that communities develop water efficiency measures and conservations plans specific to the conditions of their respective water supply. The Governor's drought declaration also calls upon local urban water suppliers and municipalities to implement their local water shortage contingency plans immediately in order to avoid or forestall outright restrictions that could become necessary later in the drought season. EO B-40-17, signed on April 7, 2017 ended the drought state of emergency in all California counties except Fresno, Kings, Tulare, and Tuolumne, where emergency drinking water projects will continue to help address diminished groundwater supplies. However, the EO maintains water reporting requirements and prohibitions on wasteful practices.

Further, EO B-37-16, and the associated water use efficiency framework, remains in effect (California Department of Water Resources 2017).

Porter-Cologne Water Quality Act

The Porter-Cologne Water Quality Act of 1969 (Cal Water Code §13000 et seq.) is the water quality control law for California. The act established the SWRCB and divided the state into nine regional basins, each under the jurisdiction of a RWQCB. The SWRCB is the primary State agency responsible for the protection of California's water quality and groundwater supplies. The RWQCBs carry out the regulation, protection, and administration of water quality in each region. Each RWQCB is required to adopt a water quality control plan or basin plan that recognizes and reflects the regional differences in existing water quality, the beneficial uses of the region's ground and surface water, and local water quality conditions and problems.

California Water Plan: Update 2013

The California Water Plan: Update 2013 provides a framework for water managers, legislators, and the public to consider options and make decisions regarding California's water future. The plan outlines actions that together bring reliability, restoration, and resilience to California water resources, reinforcing the value of integrated water management, and examining policies that allow water managers to combine flood management, environmental stewardship, and surface water and groundwater supply.

Urban Water Management Planning Act

The Urban Water Management Planning Act (California Water Code Division 6, Part 2.6, Sections 10610 et seq.) was developed due to concerns over potential water supply shortages throughout California. It requires information on water supply reliability and water use efficiency measures. Urban water suppliers are required, as part of the Act, to develop and implement UWMPs to describe water supply, service area demand, population trends and efforts to promote efficient use and management of water resources. An UWMP is intended to serve as a water supply and demand planning document that is updated every 5 years to reflect changes in the water supplier's service area including water supply trends, and conservation and water use efficiency policies. Specifically, municipal water suppliers that serve more than 3,000 customers or provide more than 3,000 AFY must adopt an UWMP.

California Water Code Sections 10910 et seq.

Senate Bill (SB) 610 was adopted in 2001 and amended the statutes of the Urban Water Management Planning Act, as well as the California Water Code (CWC) Sections 10910 et seq.

SB 610 reflects the growing awareness of the need to incorporate water supply and demand analysis at the earliest possible stage in the land use planning process.

CWC Section 10910 requires that for specified projects subject to CEQA, the urban water supplier must prepare a Water Supply Assessment (WSA) that determines whether the projected water demand associated with a proposed project is included as part of the most recently adopted UWMP. Specifically, the WSA identifies adequate available water supplies necessary to meet the demand, as well as the cumulative demand for the general region over the next 20 years, under average, single dry, and multiple dry year water conditions. Under CWC Section 10910, a WSA need only be prepared if a project exceeds the following specific thresholds of development:

a) A proposed residential development of more than 500 dwelling units.

b) A proposed shopping center or business establishment employing more than 1,000 persons or having more than 500,000 square feet (sf) of floor space.

c) A commercial building employing more than 1,000 persons or having more than 250,000 sf of floor space.

d) A hotel or motel with more than 500 rooms.

e) A proposed industrial, manufacturing, or processing plant, or industrial park, planned to house more than 1,000 persons, occupying more than 40 acres of land, or having more than 650,000 sf of floor area.

f) A mixed-use project that includes one or more of these elements.

g) A project creating the equivalent water demand of 500 residential units.

The WSA must be approved by the public water system at a regular or special meeting and must be incorporated into the CEQA document. The Lead Agency must then make certain findings related to water supply based on the water supply assessment. In addition, under SB 610, an urban water supplier responsible for the preparation and periodic updating of an UWMP must describe the water supply projects and programs that may be undertaken to meet the total projected water use of the service area.

2009 Water Conservation Act (SB x7-7)

SB x7-7 was enacted in November 2009, requiring all water suppliers to increase water use efficiency. The legislation sets an overall goal of reducing per capita urban water use by December 31, 2020 through water use targets for urban water suppliers, water management plans, and best management practices. Urban retailers can achieve the SB x7-7 goal using one of four specified methods:

a) Option 1: 80 percent of baseline use (reduction of 20 percent).

b) Option 2: Sum of specified performance standards.

c) Option 3: 95 percent of California Department of Water Resources Hydrologic Region target from draft 20x2020 plan.

d) Option 4: A flexible alternative designed to adjust to local circumstances.

Urban retail water suppliers must monitor and report compliance on an individual or regional basis. Individual urban retail water suppliers are not required to achieve a reduction in urban per capita water use greater than 20 percent. Compliance with the water reduction target is required for continued State water grants and loan eligibility. After 2021, failure of urban retail water suppliers to meet their targets establishes a violation of law for administrative or judicial proceedings.

Local Regulations

PLAN Hermosa

The City recently adopted the integrated General Plan and LCP (collectively referred to as PLAN Hermosa) on August 22, 2017. This updated document contains goals and policies in the Infrastructure Element related to utilities that apply to the proposed Project. These policies include (but are not limited to):

Goal 3. Adequate water supplies from diverse sources provide for the needs of current and future residents, businesses, and visitors.

> **Policy 3.2 Alternative water supplies**. Pursue expansion of recycled water infrastructure and other alternative water supplies to meet water demands of the community that cannot be offset through conservation measures.
>
> **Policy 3.3 Recycled water infrastructure**. Encourage the use and integration of dual plumbing system hookups to accommodate recycled water into new development.
>
> **Policy 3.6 Water infrastructure**. Support the development of water storage, recycling, greywater treatment, and necessary transmission facilities to meet necessary water demand.

Hermosa Beach Municipal Code

Section 15.48.020 of the HBMC modifies the California Green Building Standards Code, requiring new residential and nonresidential buildings to minimize indoor water use and increase water use efficiency. The section also includes requirements for water heating design, equipment, and

installation; utilization of water permeable surfaces; and, stormwater design requirements for nonresidential buildings, including LID strategies.

Sustainability Plan

Adopted by City Council in 2011, the Hermosa Beach Sustainability Plan was designed to shape the City in a manner that supports and promotes the goal of establishing the City as a leader in sustainability. Section 4 of the Sustainability Plan focuses on water resources and water conservation measures to reduce potable water use and encourage the implementation of strategies for utilization of recycled water, water-efficient landscaping, grey water reuse, urban and stormwater retention, and infiltration for groundwater recharge.

3.14.7 Impact Assessment and Methodology - Potable Water Services

Thresholds for Determining Significance

The following thresholds of significance are based on Appendix G of the 2018 CEQA Guidelines. For purposes of this EIR, implementation of the proposed Project may have a significant adverse impact on water supply and infrastructure if:

a) The project would require or result in the construction of new water facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.

b) The project would not have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed.

Methodology

The proposed Project was evaluated for impacts to potable water utilities based on data published by the WBMWD and Cal Water, information provided by the City's Existing Conditions Report (City of Hermosa Beach 2014), and a Water and Sewer Technical Report for the proposed Project (Fuscoe Engineering, Inc. 2016) and peer reviewed by City Public Works Department Staff.

The Initial Study (see Appendix A) determined that the proposed Project would result in potentially significant impacts to all thresholds associated with potable water utilities. Potential impacts of the proposed Project were evaluated by reviewing the characteristics of the proposed mixed-use hotel to assess their potential to affect the capacities of potable water utilities. Projected utility demands for the proposed Project were compared with the current capacity available for allocation within the City. Potential impacts resulting from the proposed Project were compared with criteria from CEQA Appendix G and the City's General Plan EIR to assess their significance.

3.14.8 Project Impacts and Mitigation Measures - Potable Water Services

Impact Description

Would the project require or result in the construction of new water facilities or expansion of existing facilities; or not have sufficient water supplies available to serve the project from existing entitlements and resources?

UT-2 The proposed Project would increase water demand; however, the proposed Project would not result in the need to expand or construct new water facilities. The proposed mixed-use hotel would be adequately served by existing water supplies; therefore, impacts are *less than significant.*

The proposed Project would utilize City water for construction, operation, and landscaping, along with the proposed greywater system on-site. Water demand for the construction of the proposed Project would be required for dust control, cleaning of equipment, excavation/export of materials, removal and re-compaction of soils, and any rough grading. The approximate average water daily use during construction is anticipated to be 1,500 gpd (Fuscoe Engineering, Inc. 2016). The expected construction schedule is 29 months. Based on the approximate average daily use and construction time, the proposed Project would utilize approximately 850,000 gallons of water. Any increased water use during construction would be limited and would be within the availability of the City's water supply and well below the estimated daily operational demand (Fuscoe Engineering, Inc. 2016). The proposed Project would require construction of new on-site water distribution lines to serve the proposed mixed-use hotel building. Construction impacts associated with installation of water distribution lines would primarily involve trenching in order to place the lines below surface or hanging distribution lines from the parking garage walls (Fuscoe Engineering, Inc. 2016). Interruptions to water service during construction would be short-term and temporary and would not have substantial effects on surrounding properties along The Strand and Pier Plaza. Therefore, impacts on potable water use associated with construction activity would be *less than significant*.

Development of the site for proposed Project operations would increase on-site water demand and impacts to the City's water supply would be potentially significant. Development of the Project site as a mixed-use hotel would result in increased water demand over the current demand of commercial and residential uses on-site. Under the proposed Project, water demands would increase significantly (i.e., by 252 percent) due to the higher density of hotel and commercial uses (Fuscoe Engineering, Inc. 2016). A total of 100 hotel rooms and over 5,500 square feet of

commercial area are proposed; water demands based on proposed land uses of the Project site are described in Table 3.14-9 below.

Table 3.14-9. Estimated Proposed Water Demand

Proposed Use	Water Consumption (gpd /unit)[1]	Quantity	Average Daily Water Demand (gpd)	Peak Flow Demand (gpd)[2]
Hotel	180/room	100 rooms	18,000	45,000
Commercial Shops & Stores	120 gpd/1,000 SF	5,522 SF	663	1,657
Restaurants	60/seat	500 seats	30,000	75,000
Bars, Cocktail Lounges, etc.	24/seat	879 seats	21,096	52,740
Parking	30/1,000 SF	53,209 SF	1,596	3,991
Total Proposed Daily Water Consumption (gpd)			**71,355**	**178,388**
Total Proposed Water Demand (AF-YR)			**80**	**--**
Total Existing Water Demand (gpd)			**20,258**	**50,645**
Net Water Demand			**+51,097**	**+127,742**

Notes:
[1]Water Demands based on sewer flow estimates from County of Los Angeles Sewer Generation Factors (+ 20 percent multiplier)
[2]Peak flow demand is based on a peak factor of 2.5
Source: (Fuscoe Engineering, Inc. 2016).

The average daily operational water flow for the proposed Project is approximately 71,355 gpd, with peak flow at approximately 178,388 gpd (Fuscoe Engineering, Inc. 2016). Although net average daily water demand would increase by 51,097 gpd, no upgrades to public water mains are anticipated under the proposed Project. The City's potable water system has the infrastructure and the capacity to serve the proposed Project. Cal Water has provided a will serve letter to the Applicant indicating that after all of the required permits are obtained, Cal Water will provide water service in accordance with the rules and regulations of the California Public Utilities Commission (CPUC). No new or expanded water entitlements are necessary for the Project.

Additionally, the Project would include LID BMPs, including capture and reuse of stormwater, with installation of a grey water cistern system on the bottom floor of the subterranean parking structure. The 17,400-gallon cistern system would capture 100 percent of storm water volumes and would also serve as the reservoir for proposed greywater recycling. Proposed uses for captured storm water and greywater include landscape irrigation and architectural water features, water for mechanical cooling towers, and water for toilet flushing. Overall, the proposed Project would be consistent with the City's policies (e.g., City's Green Building Code) and impacts on potable water use associated with Project operations would be *less than significant*.

Cumulative Impacts

The geographic context for cumulative impacts analysis on local water supplies is the Cal Water Hermosa-Redondo District. The Project's contribution to cumulative impacts on local water supplies would be incremental in comparison to existing and future planned water supplies in the Hermosa-Redondo District. Compliance of the proposed Project and future development projects with regulatory requirements that promote water conservation such as the HBMC, which includes the City's Green Building Code, as well as Assembly Bill (AB) 32, would also assist in ensuring that adequate water supply is available on a cumulative basis. The Project also involves beneficial water reducing features, such as the grey water and stormwater capture cistern system, which would reduce the Project's potable water demand by reusing water for landscape irrigation, architectural features, and other indoor greywater uses. The Project would comply with regulatory standards to implement water conservation strategies and minimize indoor water use. Therefore, the Project's contribution to cumulative impacts on potable water supplies would be *less than significant*.

3.14.9 Environmental Setting - Solid Waste Disposal

Solid waste services for the City and Project site are provided by Athens Services, a commercial vendor providing solid waste haul and disposal service throughout Southern California. Athens Services provides residential and commercial solid waste collection and recycling services throughout the City and manages several Materials Recovery Facilities (MRF) located in the Los Angeles County area. Solid waste collected in the City is hauled to the Athens Services MRF located in the City of Industry, where it is sorted and recycled before being transported to a range of certified landfills (City of Hermosa Beach 2014). Solid waste received at the City of Industry MRF can be processed at a maximum capacity of 5,000 tons per day (TPD) and is sorted and recycled to ensure compliance with State-mandated waste diversion rates of 75 percent under AB 341. Once sorted, solid waste materials are transported to a variety of landfills located throughout the County and Southern California (see Table 3.14-10). Household hazardous waste materials are disposed of at the Playa Del Rey Hyperion S.A.F.E. Center operated by the City of Los Angeles Bureau of Sanitation.

Table 3.14-10. Summary of Landfills Receiving City Waste

Facility Name	Average Waste Quantities Received (TPD) (2014)	Permitted Daily Capacity (TPD)	Remaining Permitted Capacity (CY)	Estimated Cease Operations Date
Antelope Valley Recycling and Disposal Facility	1,433	1,800	14,944,183	2041
Azusa Land Reclamation	1,012	6,500	59,825,036	2045
Chiquita Canyon landfill	3,558	6,000	1,833,353	2016
Lancaster Landfill	311	3,000	12,009,106	2041
Southeast Resources Recovery Facility	1,470	2,240	N/A	N/A
Sunshine Canyon City/County Landfill	7,582	12,100	64,688,021	2037
Total	15,336	31,640	1.4 billion	N/A

Source: County of Los Angeles 2015.

3.14.10 Regulatory Framework - Solid Waste Disposal

Federal Regulations

There are no Federal regulations that pertain to solid waste resources.

State Regulations

California Integrated Waste Management Act (Assembly Bill 939)

The California Integrated Waste Management Act (CIWMA) of 1989 stablished an integrated waste management hierarchy to guide the California Integrated Waste Management Board and local agencies in implementation, in order of priority: 1) source reduction; 2) recycling and composting; and 3) environmentally safe transformation and land disposal. The Act required each county to establish a task force to coordinate the development of city Source Reduction and Recycling Elements (SRREs) and a countywide siting element. The Act also required each county to prepare, adopt, and submit to the Board an Integrated Waste Management Plan (IWMP).

Additionally, waste diversion mandates were set in AB 939. The law required each city or county plan to include an implementation schedule which shows: diversion of 25 percent of all solid waste from landfill or transformation facilities by January 1, 1995 through source reduction, recycling, and composting activities; and, diversion of 50 percent of all solid waste by January 1, 2000 through source reduction, recycling, and composting activities. A city or county may be deemed exempt from these goals or to reduce the requirements if the city or county demonstrates that attainment of the goals is not feasible due to the small geographic size of the jurisdiction and the

small quantity of waste generated. After January 1, 1995, the Act authorized the Board to establish an alternative goal to the 50 percent requirement, if the Board finds that the local agency is effectively implementing all source reduction, recycling, and composting measures to the maximum extent feasible.

SB 1016

SB 1016 builds on AB 939 compliance requirements by implementing a simplified measure of jurisdictions' performance. SB 1016 accomplishes this by changing the measurement of waste reduction from a diversion rate to a disposal-based indicator – the per capita disposal rate. The purpose of the per capita disposal measurement system is to make the process of goal measurement as established by AB 939 simpler, more timely, and more accurate. Beginning with reporting year 2007 jurisdiction annual reports, diversion rates will no longer be measured. With the passage of SB 1016, only per capita disposal rates are measured. For 2007 and subsequent years, the California Department of Resources Recycling and Recovery (CalRecycle) compares reported disposal tons to population to calculate per capita disposal expressed in pounds/person/day.

Assembly Bill (AB) 341

AB 341 established a State policy goal that no less than 75 percent of solid waste generated be source reduced, recycled, or composted by 2020, and requiring CalRecycle to provide a report to the Legislature that recommends strategies to achieve the policy goal by January 1, 2014. AB 341 mandates local jurisdictions to implement commercial recycling by July 1, 2012. AB 341 requires any business (including schools and government facilities) that generates 4 cubic yards or more of waste per week, and multifamily buildings with five or more units to arrange for recycling services.

Local Regulations

PLAN Hermosa

The City recently adopted the integrate General Plan and LCP (collectively referred to as PLAN Hermosa) on August 22, 2017. This updated document contains goals and policies in the Sustainability and Conservation Element related to utilities that apply to the proposed Project. These policies include, but are not limited to:

Goal 4. A leader in reducing energy consumption and renewable energy production.

> **Policy 4.5 Sustainable building standards**. Use sustainable building checklists to minimize or eliminate waste and maximize recycling in building design, demolition, and construction activities.

Hermosa Beach Municipal Code

Chapter 8.12, *Solid Waste Collection and Disposal*, of the HBMC establishes regulations regarding the collection and disposal of commercial, industrial, and residential solid waste, and regulates the cost of such services.

3.14.11 Impact Assessment and Methodology - Solid Waste Disposal

Thresholds for Determining Significance

The following thresholds of significance are based on Appendix G of the 2018 CEQA Guidelines. For purposes of this EIR, implementation of the proposed Project may have a significant adverse impact on solid waste if:

a) The project would not be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs.

b) The project would not comply with federal, state, and local statutes and regulations related to solid waste.

Methodology

The proposed Project was evaluated for impacts to solid waste facilities based on data published in the County of Los Angeles Countywide Integrated Waste Management Plan and City of Hermosa Beach Sustainability Plan, as well as information provided by the City's Existing Conditions Report (City of Hermosa Beach 2014).

The Initial Study (see Appendix A) determined that the proposed Project would result in potentially significant impacts to all thresholds associated with solid waste facilities. Potential impacts of the proposed Project were evaluated by reviewing the characteristics of the proposed mixed-use hotel to assess their potential to affect capacities of solid waste disposal facilities. Projected solid waste demands for the proposed Project were compared with the current capacity available for allocation within the City. Potential impacts resulting from the proposed Project were compared with criteria from CEQA Appendix G and the City's General Plan EIR to assess their significance.

3.14.12 Project Impacts and Mitigation Measures - Solid Waste Disposal

Impact Description

Would the project be served by a landfill that does not have sufficient permitted capacity to accommodate the solid waste disposal needs; or not comply with federal, state, and local statutes and regulations related to solid waste?

UT-3 The proposed Project would comply with all Federal, State, and local regulations related to solid waste and would be served by a landfill with sufficient permitted capacity to accommodate the proposed Project's solid waste disposal needs. Therefore, impacts would be *less than significant*.

Implementation of the proposed Project would result in the need for solid waste disposal at the County's landfills. Construction of the proposed Project would generate construction and demolition waste, such as asphalt, concrete, glass, and wood. During construction, an estimated 42,700 cubic yards of soil would need to be exported and disposed of, in addition to demolished materials from existing on-site structures. It is anticipated that most the excavated soils could be used as fill at other locations. Further, a portion of the construction-related demolition waste would be recycled at an off-site facility (e.g., Waste Management - Construction & Demolition Recycling Facility in Los Angeles), with the remainder likely disposed of at a sanitary landfill. Such material would be disposed of at the Lancaster Landfill, Antelope Valley Landfill, or Sunshine Canyon Landfill, all of which are located in Los Angeles County and have adequate capacity (see Table 3.14-10). These landfills are not expected to cease operations for at least 20 years. Amount of construction-related waste that would be recycled could decrease incrementally if asbestos is discovered in any of the demolition material. If any asbestos is discovered in building demolition materials, it would be hauled away by a registered hazardous waste transporter to the Playa Del Rey Hyperion S.A.F.E. Center operated by the City's Bureau of Sanitation. Solid waste generated during operation, as well as construction and demolition material, would not exceed the capacity of Athens Services facility and other local and regional solid waste facilities. The proposed Project would comply with all established local, regional, and statewide solid waste regulations. Therefore, impacts to solid waste generation resulting from the proposed Project would be *less than significant*.

Cumulative Impacts

The proposed Project's contribution to cumulative solid waste generation impacts would be incremental in comparison to existing and future planned capacities of local solid waste disposal

facilities. Existing solid waste disposal facilities in Los Angeles County have sufficient remaining capacity to serve the Project and other cumulative projects in the County (see Table 3.14-10). The Los Angeles County Department of Public Works (LACDPW) has estimated an annual landfill disposal demand for the period 2014–2029 in relation to remaining capacity of such facilities. The estimate is based on population projections, per capita solid waste generation, current (60 percent) and future (75 percent) diversion, and availability of transformation and alternative technology facilities (City of Hermosa Beach 2017). Although the population and amount of solid waste generated would increase, the amount of solid waste landfilled is expected to decrease due to the increased diversion rate and policies contained in PLAN Hermosa that would decrease demand for solid waste disposal. Further, in its 2014 annual report, the LACDPW (2015) determined that the cumulative demand on landfill disposal capacity, approximately 99.8 million tons, will not exceed the 2014 remaining permitted capacity of 112 million tons (City of Hermosa Beach 2017). The proposed Project's contribution to cumulative demand on landfill disposal facilities would be negligible in comparison to remaining capacity of such facilities, and would not be cumulatively considerable. Compliance of the Project and future development projects with regulatory requirements that promote diversion of solid waste, such as the HBMC and the California Integrated Waste Management Act, would also assist in ensuring that solid waste facilities have adequate capacity to serve solid waste generation on a cumulative basis. Therefore, the Project's contribution to cumulative impacts on solid waste facilities would be *less than significant*.

3.14.13 Environmental Setting - Energy Resources

California is the most populated State in the U.S. and is rated the world's eighth largest economy. To service such a large population and economy, energy is provided by approximately 81 load serving entities, sending power through 200,000 miles of overhead transmission and distribution lines and 70,000 miles of additional underground lines. In 2014, power generation within the State equated to approximately 196,195 gigawatt hours (GWh), while approximately 99,210 GWh of power were imported into the State (California Energy Commission [CEC] 2016a).

Electricity

The production of electricity requires the consumption or conversion of energy resources including natural gas, coal, water, nuclear, and renewable resources such as wind, solar, and geothermal. Energy, natural gas, and renewable energy production, consumption, research, and conservation within the state of California are maintained by the CEC. In 2015, approximately 59.9 percent of the total electrical generation within the State came from natural gas, 9.4 percent came from nuclear, 5.9 percent came from large (non-renewable) hydroelectric power, 0.3 percent came from coal, and 24.5 percent came from renewable sources (see Table 3.14-11). Renewable energy

sources used to produce electricity include geothermal, small hydroelectric power, wind power, biomass and waste products, and solar energy (CEC 2016a). In 2014, California consumed approximately 281,916 GWh of electricity (CEC 2015a). Energy consumption alone is anticipated to increase at a rate of 1.27 percent annually as the population in California grows over the next few years (CEC 2013).

Table 3.14-11. Southern California Edison Electricity Mix

Energy Resources	2015 SCE Power Mix (Actual)	2015 CA In-State Generation	Total California Power Mix (In-State Plus Imported)
Eligible Renewable Biomass & Waste Geothermal Small Hydroelectric Solar Wind	25% 1% 9% 0% 7% 8%	24.5% 3.2% 6.1% 1.2% 7.7% 6.2%	21.9% 2.6% 4.4% 0.9% 6.0% 8.2%
Coal	0%	0.3%	6.0%
Large Hydroelectric	2%	5.9%	5.4%
Natural Gas	26%	59.9%	44.0%
Nuclear	6%	9.4%	9.2%
Other	0%	0%	0%
Unspecified Sources of Power[1]	41%	N/A	13.5%
Total	**100%**	**100%**	**100%**

Notes: [1] "Unspecified Sources of Power" means electricity from transactions that are not traceable to specific generation sources.
Source: CEC 2016a; SCE 2016.

SCE is the primary local public utility and energy supplier that services most Southern California – including the Project site – via a statewide network of power plants and transmission lines. SCE has delivered electricity to Central and Southern California for more than 125 years as one of the nation's largest electric utilities, conveying electric power to approximately 14 million people in a 50,000 square-mile area across 15 counties (i.e., Fresno, Imperial, Inyo, Kern, Kings, Los Angeles, Madera, Mono, Orange, Riverside, San Bernardino, Santa Barbara, Tuolumne, Tulare, and Ventura) (SCE 2007, 2015). Within Los Angeles County, total electricity consumption equaled 69,529 GWh in 2015 (CEC 2016b), or approximately 24.6 percent of the State's 2014 annual energy consumption.

Various transmission and distribution lines traverse the City, serving to carry electrical power from power plants within the County to electrical substations where power is converted to voltages suitable for distribution to end-users. Most the City's electrical transmission lines run underground and follow existing street rights-of-way. Electrical service for the Project site is currently provided by an existing underground utility line located within the rights-of-way along 13th Court and Beach

Drive. Individual building service connections are made to the existing underground electrical transmission lines along Beach Drive. An underground electrical vault allowing maintenance and shut off electrical transmission facilities is located adjacent to the existing surface parking lot at the southwest corner of the Project site, within the pedestrian corridor of Pier Plaza. In 2012, City-wide electricity demand equated to 90,970,282 kilowatt hours (kWh) (90.97 GWh), approximately 53.6 percent of which was associated with domestic residential demand and 13.3 percent associated with non-residential demands (see Table 3.14-12). Since 2009, City demand for electricity has been reduced by over 9 percent.

Table 3.14-12. Estimated City-wide Electricity Consumption

Rate Class	Rate Class Description	2009 (kWh)	2010 (kWh)	2011 (kWh)	2012 (kWh)
Domestic	Residential	50,190,864	49,906,427	50,200,614	49,778,450
GS-1	Non-residential	10,897,087	10,513,133	10,493,798	11,253,695
GS-2	Non-residential	29,733,546	28,282,699	844,826	872,214
Street Lighting	Street Lighting	9,701,884	9,673,561	64,204	66,719
TC-1	Traffic Control Lighting	76,345	76,346	-	-
TOU-GS	Time-of-Use Non-residential	-	-	27,954,246	28,999,204
Total		**100,599,726**	**98,452,166**	**89,557,688**	**90,970,282**
Percent Change from Previous Year		**-**	**-2.13%**	**-9.03%**	**+1.575**

Source: City of Hermosa Beach 2014.

Natural Gas

Natural gas is a fossil fuel formed when layers of buried organic matter are exposed to intense heat and pressure over thousands of years. The energy is stored in the form of hydrocarbons and can be extracted in the form of natural gas. Natural gas is combusted to generate electricity, enabling this stored energy to be transformed into usable power or used directly for heating, cooking, and other use. Natural gas consumed in California is largely extracted from onshore and offshore sites from the Southwestern U.S. (38 percent), Rocky Mountain States (36 percent), Canada (16 percent), and within California (10 percent) (CEC 2015b). In 2014, California consumed approximately 10,208 million therms[1] of natural gas (CEC 2016c) and as the population in California grows over the next few years, consumption of natural gas is anticipated to steadily increase at a rate of 0.04

[1] Approximately the energy equivalent of burning 100 cubic feet of natural gas; equal to 100,000 British thermal units.

to 0.06 percent annually, with potential to decrease due to expanding natural gas conservation measures (CEC 2013).

Natural gas services are provided to the Project site by SoCalGas, which has delivered natural gas throughout Central and Southern California for more than 145 years as the nation's largest natural gas distribution utility. In 2014, the City consumed a total of 4.27 million therms of natural gas, or approximately 0.041 percent of California's annual natural gas consumption (see Table 3.14-13). Natural gas service for the Project site is currently provided by underground 3-inch natural gas lines located within the right-of-way of 13th Court and Beach Drive.

Table 3.14-13. Estimated City-wide Natural Gas Consumption (2010)

Sector	Natural Gas Use (therms)	Percent of Total
Non-residential	827,116	19%
Multi-Family	558,322	13%
Single-Family	2,889,688	68%
Total	**4,275,126**	**100%**

Source: City of Hermosa Beach 2014.

Petroleum and Transportation Fuel

Petroleum is a thick, flammable mixture of gaseous, liquid, and solid hydrocarbons that occur naturally underground and can be separated into fractions to be used as raw materials for a variety of derivative products including gasoline and diesel fuels for use in automobiles (American Association of Petroleum Geologists [AAPG] 2016). California is currently the third-largest oil-producing State in the nation, behind Texas and Alaska; in 2014, 205.2 million barrels of oil (MMBO) were produced in California with an average production of 562,200 barrels of oil per day (BOPD) (California Department of Conservation, Division of Oil, Gas, & Geothermal Resources [DOGGR] 2015).

California's demand for oil and gas exceeds production within the State. In 2013, California consumed 628.7 MMBO, while 199.6 MMBO were produced within the State that year (DOGGR 2015). Similarly, California consumed 2,345 billion cubic feet of natural gas and the State produced only 199.2 billion cubic feet (approximately 8 percent of the amount consumed). In 2014, California consumed approximately 343,588 thousand barrels of motor gasoline for transportation, approximately 10.5 percent of the total annual consumption of motor gasoline in the U.S. Almost 90 percent of all gasoline consumption in the State of California in 2014 resulted from just light-duty or personal vehicles alone (U.S. Energy Information Administration [USEIA] 2015).

To combat increasing petroleum and motor gasoline consumption, Federal and State agencies have established policies and programs which encourage the development and use of renewable and alternative fuels and technologies to reduce California's dependence on petroleum-based fuels (CEC 2016d). Despite high motor gasoline demand, transportation energy demand forecasts predict motor gasoline fuel consumption reductions up to 3.7 percent per year over the next decade due to improving fuel economy and increasing alternative fuel technologies (CEC 2016d).

Renewable Resources

California has a long history of support for the development and use of renewable energy sources. California leads the U.S. in geothermal, biomass, solar photovoltaic (PV), and solar thermal electric generation capacity, and is second in wind and hydropower generation capacity (American Council on Renewable Energy [ACORE] 2014). In 2014, approximately 22 percent of all electricity produced in California was produced from renewable resources within California, including wind, solar, geothermal, biomass, and small hydroelectric facilities; large hydroelectric plants generated another 6 percent of electricity generated in California (CEC 2015c). However, the renewable energy sector is changing rapidly due to state mandates to further increase reliance on renewable energy.

As of October 31, 2015, the operating capacity of renewable resources within the State was 21.7 gigawatts (GW), which includes 3.7 GW of self-generation capacity (CEC 2015a). In addition, there are 12.93 GW of new renewable capacity proposed that have environmental permits and are in preconstruction or construction stages. Proposed solar PV projects account for more than 90 percent of the new renewable energy capacity expected to come online from July 2015 through December 2016 (CEC 2016d). California has the largest market for solar PV projects in the U.S. In 2013, California was responsible for 57 percent of the nation's capacity additions, with the installation of 2.6 GW of grid-connected solar PV (ACORE 2014). The California Solar Initiative had a goal of installing 3 GW of solar energy systems on homes and businesses by the end of 2016, and California achieved this goal approximately 1.5 years ahead of target (CEC 2016d).

In 2014, SCE delivered approximately 17,700 GWh of renewable energy to the residents and businesses of southern and central California. In addition to providing cleaner, renewable energy, SCE offers incentives and programs, such as their Rooftop Solar Program, to Southern California businesses and households to encourage the implementation of solar stations on rooftops. Since the California Solar Initiative began in 2007, SCE has paid $800 million-plus in rebates to more than 65,000 solar customers.

3.14.14 Regulatory Framework - Energy Resources

Federal Regulations

Federal Energy Regulatory Commission

The Federal Energy Regulatory Commission (FERC) was created through the Department of Energy Organization Act, and FERC assumed the responsibilities of its predecessor, the Federal Power Commission. FERC's legal authority comes from the Federal Power Act of 1935, the Natural Gas Act of 1938, and Natural Gas Policy Act of 1992. It is an independent regulatory agency within the Department of Energy that:

- Regulates the transmission and sale of natural gas for resale in interstate commerce;
- Regulates the transmission of oil by pipeline in interstate commerce;
- Regulates the transmission and wholesale of electricity in interstate commerce;
- Licenses and inspects private, municipal, and state hydroelectric projects;
- Oversees environmental matters related to natural gas, oil, electricity, and hydroelectric projects;
- Administers accounting and financial reporting regulations for conduct of jurisdictional companies; and,
- Approves site selections for and abandonment of interstate pipeline facilities.

Energy Policy Act of 2005

The Energy Policy Act of 2005 seeks to reduce reliance on non-renewable energy resources and provide incentives to reduce current demand on these resources. For example, under the Act, consumers and businesses can obtain Federal tax credits for purchasing fuel efficient appliances and products, including buying hybrid vehicles, building energy-efficient buildings, and improving the energy efficiency of commercial buildings. Additionally, tax credits are available for the installation of qualified fuel cells, stationary microturbine power plants, and solar power equipment.

State Regulations

California Public Utility Commission

The CPUC regulates privately owned electric, telecommunications, natural gas, water, and transportation companies, in addition to household goods movers and rail safety. The CPUC's Energy Division works in setting electric rates, protecting consumers, and promoting energy efficiency, electric system reliability, and utility financial integrity. The CPUC regulates natural

gas local distribution facilities and services, natural gas procurement, intrastate pipelines, and intrastate production and gathering. CPUC also works to provide opportunities for competition when in the interest of consumers, takes the lead in environmental review of natural gas-related projects, recognizes the growing interaction of electric and gas markets, and monitors gas energy efficiency and other public purpose programs.

California Code of Regulations Title 24, Part 6 (California Energy Code)

California Code of Regulations Title 24, Part 6 comprises the California Energy Code, which was first established in 1978 in response to a legislative mandate to reduce California's energy consumption. The standards are updated periodically to increase the baseline energy efficiency requirements. Although it was not originally intended to reduce greenhouse gas (GHG) emissions, electricity production by fossil fuels results in GHG emissions and energy efficient buildings require less electricity. Therefore, increased energy efficiency results in decreased GHG emissions.

California Code of Regulations Title 24, Part 11 (California Green Building Standards Code [CALGreen])

CALGreen, which took effect in January 2011, requires that new buildings reduce water consumption, increase building system efficiencies, divert construction waste from landfills, and install low pollutant-emitting finish materials. CALGreen has approximately 52 nonresidential mandatory measures and an additional 130 provisions that have been placed in the appendix for optional use. Some key mandatory measures for commercial occupancies include specified parking for clean air vehicles, a 20 percent reduction of potable water use within buildings, a 50 percent construction waste diversion from landfills, use of building finish materials that emit low levels of volatile organic compounds, and commissioning for new, nonresidential buildings over 10,000 square feet.

California Code of Regulations Title 20, Section 1604

Establishes efficiency standards that give the maximum flow rate for all new showerheads and lavatory and sink faucets, as specified in the standard approved by the American National Standards Institute (ANSI), ANSI A11.18.1M-1979.

State of California Integrated Energy Policy

In 2002, the State Legislature passed SB 1389, which required the CEC to develop an integrated energy plan every two years for electricity, natural gas, and transportation fuels, for the California Energy Policy Report. The plan calls for the State to assist in the transformation of the transportation system to improve air quality, reduce congestion, and increase the efficient use of

fuel supplies with the least environmental and energy costs. To further this policy, the plan identifies several strategies, including assistance to public agencies and fleet operators in implementing incentive programs for Zero Emission Vehicles and their infrastructure needs, and encouragement of urban designs that reduce vehicles miles traveled and accommodate pedestrian and bicycle access.

The CEC adopted the 2013 Integrated Energy Policy Report on February 20, 2014. The 2013 Integrated Energy Policy Report provides the results of the CEC's assessment of a variety of issues, including:

- Ensuring that the State has sufficient, reliable, and sage energy infrastructure to meet current and future energy demands;
- Monitoring publicly-owned utilities' progress towards achieving 10-year energy efficiency targets; defining and including zero-net-energy goals in state building standards;
- Overcoming challenges to increased use of geothermal heat pump/ground loop technologies and procurement of biomethane;
- Using demand response to meet California's energy needs and integrate renewable technologies;
- Removing barriers to bioenergy development; planning for California's electricity infrastructure needs given potential retirement of power plants and the closure of the San Onofre Nuclear Generating Station;
- Estimating new generation costs for utility-scale renewable and fossil-fueled generation;
- Planning for new or upgraded transmission infrastructure;
- Monitoring utilities' progress in implementing past recommendations related to nuclear power plants;
- Tracking natural gas market trends;
- Implementing the Alternative and Renewable Fuel and Vehicle Technology Program; and,
- Addressing the vulnerability of California's energy supply and demand infrastructure to the effects of climate change; and planning for potential electricity system needs in 2030.

Local Regulations

PLAN Hermosa

The City recently adopted the integrated General Plan and LCP (collectively referred to as PLAN Hermosa) on August 22, 2017. This updated document contains goals and policies in the Sustainability and Conservation Element related to utilities that apply to the proposed Project. These policies include (but are not limited to):

Goal 4. A leader in reducing energy consumption and renewable energy production.

Policy 4.1 Renewable energy generation. Support or facilitate the installation of renewable energy projects on homes and businesses.

Policy 4.5 Sustainable building standards. Use sustainable building checklists to minimize or eliminate waste and maximize recycling in building design, demolition, and construction activities.

Hermosa Beach Municipal Code

Section 15.48.020 of the City's Municipal Code modifies the California Energy Code, requiring new residential and nonresidential buildings to be 15 percent more energy efficient than California Energy Code requirements. The section also includes requirements for cool roofs or roofs with high levels of solar reflectance, energy-efficient appliances, and energy-efficient heating, ventilation, and air conditioning systems.

Hermosa Beach Sustainability Plan

Adopted by City Council in 2011, the City's Sustainability Plan was designed to shape the City in a manner that supports and promotes the goal of establishing the City as a leader in sustainability. Section 5 of the Sustainability Plan focuses on building design and energy reduction measures and projects to reduce municipal energy use and encourage the implementation of renewable energy project at the residential and commercial level.

Energy Efficiency Climate Action Plan

The City, in concert with the South Bay Cities Council of Governments (SBCCOG), prepared an Energy Efficiency Climate Action Plan (EECAP) in December 2015. The City's EECAP details the community and municipal energy and emissions inventory, as well as outlines existing and proposed policies designed to ensure the City continues to strive for a more sustainable, energy efficient, and livable environment. Strategies developed in the EECAP include community and municipal oriented goals designed to increase city-wide energy efficiency. Those energy efficiency goals which would apply to the Project include:

- Community Energy Efficiency Strategies
  - Goal 4: Increase energy efficiency in new commercial development.
    - Measure 4.1: Encourage or require energy efficiency standards exceeding Title 24.
  - Goal 5: Increase energy efficiency through water efficiency.

- Measure 5.1: Promote or require water efficiency through SBX7-7.
- Measure 5.2: Promote water efficiency standards exceeding SBX7-7.

- Goal 6: Decrease energy demand through reducing urban head island effect.
  - Measure 6.1: Promote tree planning for shading and energy efficiency.
  - Measure 6.2: Incentivize or require light-reflecting surfaces.

3.14.15 Impact Assessment and Methodology - Energy Resources

Thresholds for Determining Significance

The significance criteria for this analysis are based on Appendix G of the 2018 CEQA Guidelines. For the purpose of this EIR, implementation of the proposed Project would result in a significant impact associated with energy conservation and resources if it would:

a) Use large amounts of fuel or energy in an unnecessary, wasteful, or inefficient manner;

b) Constrain local or regional energy supplies, affect peak and base periods of electrical demand, require or result in the construction of new electrical generation and/or transmission facilities, or necessitate the expansion of existing facilities, the construction of which could cause significant environmental effects; or

c) Conflict with existing energy standards, including standards for energy conservation.

Methodology

Potential impacts of the proposed Project were evaluated by reviewing the characteristics of the proposed mixed-use hotel to assess their potential to affect the capacities of energy service utilities. Projected utility demands for the proposed Project were compared with the current capacity available for allocation within the City. Potential impacts resulting from the proposed Project were compared with criteria from CEQA Guidelines Appendix G and the City's General Plan EIR to assess their significance.

This section utilizes data from the CEC. Based on this information, this section assesses the availability and level of energy services, any planned improvements to or changes in these utilities and projected increases in energy demand associated with future residential and commercial development from the proposed Project.

Electricity and natural gas demand was estimated using State average energy consumption factors by land use as documented in the CEC's California Commercial End-use Survey (CEC 2006). The proposed Project would cause a significant impact on energy resources if energy consumption exceeds the projected supply or delivery capacity of either the electric or natural gas systems of

the City, or if the proposed mixed-use hotel does not take steps to reduce energy consumption using efficient electrical and mechanical systems.

3.14.16 Project Impacts and Mitigation Measures - Energy Resources

Impact Description

Would the project use large amounts of fuel or energy in an unnecessary, wasteful, or inefficient manner; constrain local or regional energy supplies, affect peak and base periods of electrical demand, require or result in the construction of new electrical generation and/or transmission facilities, or necessitate the expansion of existing facilities; or conflict with existing energy standards, including standards for energy conservation?

UT-4 The proposed Project would not constrain local or regional energy supplies and would not require the expansion or construction of new electrical generation and/or transmission facilities. The proposed Project would comply with all existing energy standards and impacts would be *less than significant*.

Existing uses on the Project site require the use of natural gas and/or electricity utilities; however, not at the scale that would be required for the proposed mixed-use hotel. Existing uses on the Project site have a natural gas demand of approximately 58,710.8 therms per year; the proposed Project is anticipated to have a natural gas demand of approximately 84,291.3 therms per year (see Table 3.14-14). Consequently, the development of the proposed hotel would constitute an increase in the demand for natural gas from the Project site. Natural gas service for the Project site is currently provided by underground 3-inch natural gas lines located within the right-of-way of 13th Court and Beach Drive. The Applicant would be required to submit a formal application to SoCalGas for commercial gas facilities at least 10 to 12 weeks before the gas line and meter would be installed. At this time, a SoCalGas planning representative would plan the installation project and a determination would be made regarding the available energy services. If it is determined that the current natural services in the area are not adequate to support the proposed Project, the Applicant would be required to pay a fee to cover the cost of the additional natural gas services required (SoCal Gas 2010).

Table 3.14-14. Natural Gas Demand Under the Proposed Project

Land Use	Area/Quantity	Consumption Factor[2]	Estimated Electricity Use[2]
Existing Conditions			
Residential	8 units	492.6 therms/unit/yr	3,940.8 therms/yr
Restaurants	25,408 sf	2.10 therms/sf/yr	53,356.8 therms/yr
Retail	2,856 sf	0.05 therms/sf/yr	1,413.2 therms/yr
Total			**58,710.8 therms/yr**
Proposed			
Hotels	136,980 sf	0.42 therms/sf/yr	57,531.6 therms/yr
Restaurant	12,644 sf	10.6 therms/sf/yr	26,552.4 therms/yr
Retail	5,406 sf	0.35 therms/sf/yr	1,892.1 therms/yr
Total			**84,291.3 therms/yr**

Electrical service for the Project site is currently provided by an existing underground utility line located within the rights-of-way along 13th Court and Beach Drive. Existing uses on the Project site have an estimated electricity demand of approximately 1,294,413 kilowatt hours per year; the proposed Project is anticipated to have an estimated electricity demand of approximately 2,337,534 kilowatt hours per year (refer to Table 3.14-15).

Table 3.14-15. Electricity Demand Under the Proposed Project

Land Use	Area/Quantity	Consumption Factor[2]	Estimated Electricity Use[2]
Existing Conditions			
Residential	8 units	6,081 kWh/unit/yr	48,648 kWh/yr
Restaurants	25,408 sf	47.45 kWh/sf/yr	1,205,609.6 kWh/yr
Retail[1]	2,856 sf	14.06 kWh/sf/yr	40,155.4 kWh/yr
Total			**1,294,413.0 kWh/yr**
Proposed			
Hotels	136,980 sf	12.13 kWh/sf/yr	1,661,567.4 kWh/yr
Restaurants	12,644 sf	47.45 kWh/sf/yr	599,957.8 kWh/yr
Retail[1]	5,406 sf	14.06 kWh/sf/yr	76,008.4 kWh/yr
Total			**2,337,533.6 kWh/yr**

It should also be noted that the estimated energy demand is highly conservative as the demand factors do not account for the most current energy efficiency standards of the Title 24 of the California Code of Regulations (CALGreen). SCE has adequate supplies to meet the needs of the

proposed Project, however, the Applicant would be required to engage the SCE planning department and submit a request for a meter spot.

Additionally, conformance of the proposed Project with City policies would reduce impacts associated with increased demand for electricity by implementing energy efficient standards. These standards would help reduce the amount of energy required for lighting, water heating, and heating and air conditioning in the buildings. They would also reduce the energy impact of the building envelope through use of efficient building materials, such as windows, doors, skylights, wall/floor/ceiling assemblies, attics, and roofs. The proposed Project would also implement strategies to promote additional energy conservation. Installation of the solar PV system would reduce the Project's energy demand on local energy providers. The solar cells would overlie the HVAC and mechanical equipment on the roof of the proposed mixed-use hotel and would provide for approximately 25 percent of the Project's electrical power requirements. The combination of the proposed Project's reduced natural gas demand compared to existing development and energy-saving and energy-generating features ensure that the proposed mixed-use hotel would not use energy in a wasteful or inefficient manner.

The incorporation of standard regulatory requirements established by local and regional regulations on energy standards would ensure that the Project is consistent with the City's energy use goals. Therefore, the proposed Project would not constrain local or regional energy supplies, would not require the expansion or construction of new electrical generation and/or transmission facilities, and would not use large amounts of fuel or energy in an unnecessary, wasteful, or inefficient manner. The proposed Project would comply with all existing energy standards and impacts would be *less than significant*.

Cumulative Impacts

The proposed Project's contribution to cumulative impacts on local and regional energy supplies would be incremental in comparison to existing and future planned supplies of natural gas and electricity providers. Potential future development in the Downtown Core, including offices and a hotel on Hermosa Avenue, would incrementally contribute to the need for regional energy production and distribution facilities. As discussed above, these facilities are operated and maintained by private utility companies that plan for anticipated growth. Electric and natural gas services are provided upon demand from consumers and expanded as needed to meet demand, consistent with applicable local, state, and federal regulations. Compliance of the proposed Project and future development projects with standard regulatory requirements that promote energy efficiency and reducing reliance on non-renewable sources of energy, such as CALGreen, the City's EECAP and Sustainability Plan, would also assist in ensuring that natural gas and electricity

service providers have adequate supplies to serve commercial and residential customers on a cumulative basis. Further, the City is pursuing energy conservation through policies and standards that encourage the use of renewable energy technologies (e.g., solar, solid waste conversion, etc.). Therefore, the proposed Project would not substantially contribute to cumulatively considerable impacts on energy resources.

4.0 OTHER CEQA CONSIDERATIONS

This chapter presents the evaluation of additional environmental impacts analyses required by California Environmental Quality Act (CEQA) that are not covered within the other chapters of this Environmental Impact Report (EIR), including significant unavoidable environmental effects of the project, irreversible environmental changes, growth inducing impacts (including removal of obstacles to growth), and resource areas that are found not to be significant. In particular, CEQA Section 15126 requires that all aspects of a project must be considered when evaluating its impact on the environment, including planning, acquisition, development, and operation. Accordingly, in addition to the analysis provided in Chapter 3.0, *Environmental Impact Analysis and Mitigation Measures*, this chapter of the EIR identifies growth inducing impacts and significant irreversible environmental changes that could potentially result from implementation of the proposed Strand and Pier Mixed-Use Hotel Project (Project).

4.1 UNAVOIDABLE SIGNIFICANT ENVIRONMENTAL EFFECTS

CEQA Section 15126.2(b) requires that an EIR describe any significant impacts that cannot be avoided, even with implementation of feasible mitigation measures. Where there are significant impacts, their implications and the reasons why the project is being proposed, notwithstanding their effect, should be described.

Based on the analysis presented in this EIR, implementation of the proposed Project would create significant and unavoidable construction-related impacts to noise as well as operational impacts to transportation and traffic. Please refer to the Impact NOI-1 discussion in Section 3.10, *Noise* as well as the Impact TT-1, TT-2, and TT-3 discussions in Section 3.13, *Transportation and Traffic* for the full analysis.

Noise

All phases of construction associated with the proposed Project would involve the use of heavy construction equipment (e.g., cranes, bulldozers, excavators, etc.). Construction activities would produce increased noise levels that would impact surrounding noise-sensitive receptors. Maximum noise levels could reach as high as 90 A-weighted decibels (dBA) at the exterior of surrounding commercial uses (e.g., the Beach House Hotel adjacent to the north, with the highest noise levels being experienced by guests on balconies or otherwise located outside of the hotel). Recreational uses are mobile and transitory along the City's expansive waterfront; however, the Project location in the City's Downtown Core makes it likely that both City residents and visitors would inevitably be exposed to brief episodes of high noise levels. In particular, it is likely that users of The Strand, Pier Plaza, volleyball players using the beach volleyball courts on the north side of Hermosa Pier,

and other beach goers that frequent this area would experience periodic *significant and unavoidable* noise impacts during the 24- to 30-month construction period.

Off-site construction noise impacts related to the Applicant's proposed late evening concrete pours would potentially disturb surrounding noise sensitive receptors along the concrete truck route (e.g., residents along the narrow two-lane Gould Avenue). Residents have a higher sensitivity to disturbances and changes in ambient noise levels during the typical sleeping hours. Because construction noise would exceed established noise thresholds, and increased noise would occur over a prolonged period during the construction phase, increased noise levels during construction would be considered a *significant and unavoidable* impact to neighboring uses.

Construction of the proposed Project would also generate groundborne vibration from the use of heavy machinery and equipment, particularly during the 6-month excavation of the two-level subterranean basement. Demolition, excavation, and foundation insertion, expected to take place during the first 14 months of the construction, would result in *significant and unavoidable* vibration impacts at the adjacent Beach House Hotel. Additionally, vibration caused by heavy haul trucks and concrete trucks traveling along the truck route would affect off-site sensitive receptors and would also result in *significant and unavoidable* impacts.

Transportation and Traffic

The proposed Project would have temporary, but prolonged, *significant and unavoidable* construction-related impacts as well as long-term operational *significant and unavoidable* impacts to transportation and traffic. Construction of the proposed Project would require substantial numbers of heavy haul trucks traveling to and from the Project site – particularly during the first 19 months of construction activity – and would result in road and sidewalk closures, transit delays, and interference with traffic flow and pedestrian and bicycle activity. Project construction would require the temporary or extended closure of all or parts of traffic lanes and sidewalks on surrounding streets (i.e., 13th Street, 13th Court, The Strand, and Pier Plaza) to accommodate utility trenching and installation of other Project-related improvements (e.g., 13th Court Plaza). Certain day-to-day construction activities could also result in partial lane closures on Hermosa Avenue adjacent to the Project site on a temporary and/or intermittent basis for utility relocations/hook-ups, delivery of materials, and other miscellaneous construction activities, as necessary. The implementation of MM TT-1 would require City approval and Applicant implementation of a Final Construction Management Plan, including construction traffic routing and control, parking management, street closures, pedestrian/bicycle access, and vehicular and pedestrian safety to minimize the effects of construction. Implementation of MM TT-1 would minimize impacts related to construction traffic that would occur over the 24- to 30-month construction period.

However, implementation of this mitigation measure would not eliminate impacts entirely, particularly the impacts to residential areas along Gould Avenue and the commercial and residential areas along Hermosa Avenue in the immediate vicinity of the Project site. The temporary, but prolonged impacts in these locations would remain *significant and unavoidable* as construction-related activities could materially interfere with area traffic flow (e.g., vehicles turning on 13th Street, exiting City-owned Parking Lot C [Lot C], or pulling out of driveways or parking spaces along Gould Avenue) and interfere with pedestrian and bicycle flows (e.g., along The Strand and Pier Plaza).

Even though the proposed Project is a mixed-use development located in Downtown, and geared toward pedestrian and bicycle access, it would measurably increase the number of vehicle trips on the surrounding local street network, particularly along main access routes into the Downtown (e.g., Artesia Boulevard, Pier Avenue, etc.). The Hermosa Avenue & Pier Avenue intersection operates at Level of Service (LOS) D under Existing (2016) and Future Year (2021) conditions during the Sunday Mid-Afternoon peak hour. The addition of 56 Project-generated trips at this intersection during the Sunday Mid-Afternoon peak hour would incrementally increase congestion (i.e., an approximately 4-percent increase from 1,753 vehicle trips to 1,809 vehicle trips). However, due to the configuration and location of this intersection adjacent to Pier Plaza and the existing pedestrian scramble phase, even an incremental increase in traffic at this intersection would exceed delay thresholds for a signalized intersection operating at LOS D. During the Sunday Mid-Afternoon peak hour, the addition of vehicle trips associated with the proposed Project would increase the volume-to-capacity (V/C) ratio by 0.022 at the Hermosa Avenue & Pier Avenue intersection resulting in additional delay and a *significant and unavoidable* traffic impact under projected Existing Plus Project (2016) conditions. In addition, the proposed Project would contribute to a cumulatively considerable impact at this intersection during the Sunday Mid-Afternoon peak hour under Future Year Plus Project (2021) conditions.

The reasons why the Project is being proposed, notwithstanding the significant impacts, are related to the Project objectives stated in Section 2.3, *Project Objectives*. As indicated, the proposed Project is being proposed to achieve the City's goals and policies for Downtown Core, to enhance the Downtown as family-friendly, pedestrian-oriented area for dining, shopping, entrainment, and recreation and to fulfill the Downtown Core Revitalization Strategy, which identified the Project site as a prime location for a mixed-use hotel development.

4.2 IRREVERSIBLE ENVIRONMENTAL CHANGES

CEQA Section 15126.2(c) requires a discussion of "*significant irreversible environmental changes which would be caused by the proposed project should it be implemented. Uses of*