3.5 GREENHOUSE GAS EMISSIONS

This section describes existing climate change issues, identifies associated regulatory requirements, evaluates potentially adverse impacts related to greenhouse gas (GHG) emissions during construction and operation of the proposed project, and identifies mitigation measures related to implementation of the proposed project.

3.5.1 Environmental Setting

The Greenhouse Effect and Greenhouse Gases

Climate change refers to any significant change in measures of climate, such as temperature, precipitation, or wind, lasting for an extended period (decades or longer). Gases that trap heat in the atmosphere are often called GHGs. The greenhouse effect traps heat in the troposphere through a threefold process: short-wave radiation emitted by the Sun is absorbed by the Earth, the Earth emits a portion of this energy in the form of long-wave radiation, and GHGs in the upper atmosphere absorb this long-wave radiation and emit it into space and back toward the Earth. This trapping of the long-wave (thermal) radiation emitted back toward the Earth is the underlying process of the greenhouse effect.

Principal GHGs include carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), ozone (O₃), and water vapor (H₂O). Some GHGs, such as CO₂, CH₄, and N₂O, can occur naturally and are emitted into the atmosphere through natural processes and human activities. Of these gases, CO₂ and CH₄ are emitted in the greatest quantities from human activities. Emissions of CO₂ are largely byproducts of fossil-fuel combustion, whereas CH₄ results mostly from off-gassing associated with agricultural practices and landfills. Human-caused GHGs, which are produced by certain industrial products and processes, have a much greater heat-absorption potential than CO₂. They include fluorinated gases, such as hydrofluorocarbons, perfluorocarbons, sulfur hexafluoride (SF₆), and nitrogen trifluoride (NF₃) (CAT 2006).

The greenhouse effect is a natural process that contributes to regulating the Earth's temperature. Without it, the temperature of the Earth would be about 0 degrees Fahrenheit (°F) (-18 degrees Celsius (°C)) instead of its current 57°F (14°C). Global climate change concerns are focused on whether human activities are leading to an enhancement of the greenhouse effect.

The effect each GHG has on climate change is measured as a combination of the mass of its emissions and the potential of a gas or aerosol to trap heat in the atmosphere, known as its global warming potential (GWP). The GWP varies between GHGs; for example, the GWP of CH_4 is 21, and the GWP of N_2O is 310. Total GHG emissions are expressed as a function of how much

warming would be caused by the same mass of CO_2 . Thus, GHG emissions are typically measured in terms of tons or metric tons (MT) of CO_2 equivalent (CO_2E).¹

Contributions to Greenhouse Gas Emissions

In 2014, the United States produced 6,870 million metric tons (MMT) of CO_2E . The primary GHG emitted by human activities in the United States was CO_2 . This primary GHG represented approximately 80.9% of total GHG emissions. The largest source of CO_2 , and of overall GHG emissions, was fossil-fuel combustion, which accounted for approximately 93.7% of CO_2 emissions in 2014 (EPA 2016).

According to the 2013 GHG inventory data compiled by CARB for the California Greenhouse Gas Inventory for 2000–2013, California emitted 459 MMT CO₂E of GHGs, including emissions resulting from out-of-state electrical generation (CARB 2015). The primary contributors to GHG emissions in California are transportation, industry, electric power production from both in-state and out-of-state sources, agriculture, and other sources, which include commercial and residential activities. These primary contributors to California's GHG emissions and their relative contributions in 2013 are presented in Table 3.5-1.

Source Category	Annual GHG Emissions (MMT CO ₂ E)	Percent of Total ^a
Transportation	169.02	37%
Industrial Uses	92.68	20%
Electricity Generation	90.45 ^b	20%
Residential and Commercial uses	43.54	9%
Agriculture	36.21	8%
High Global Warming Potential Substances	18.5	4%
Recycling and Waste	8.87	2%
Totals	459.28	100%

Table 3.5-1Greenhouse Gas Sources in California (2013)

Source: CARB 2015.

Notes: MMT CO₂E = million metric tons carbon dioxide equivalent per year

^a Percentage of total has been rounded.

^b Includes emissions associated with imported electricity, which account for 39.99 MMT CO₂E annually.

¹ The CO₂E for a gas is derived by multiplying the mass of the gas by the associated GWP, such that metric tons of $CO_2E = (metric tons of a GHG) \times (GWP of the GHG)$. The California Emissions Estimator Model (CalEEMod) assumes that the GWP for CH₄ is 21, which means that emissions of 1 metric ton of CH₄ are equivalent to emissions of 21 metric tons of CO₂, and the GWP for N₂O is 310, based on the Intergovernmental Panel on Climate Change (IPCC) *Second Assessment Report*. The IPCC has released subsequent Assessment Reports with updated GWPs, and the California Air Resources Board (CARB) reporting and other statewide documents are beginning to transition to the use of the GWPs in the IPCC *Fourth Assessment Report*. Furthermore, the use of the different GWPs will not substantially change the overall project GHG emissions, which are primarily CO₂. As such, it is appropriate to use the hardwired GWP values in CalEEMod from the IPCC *Second Assessment Report*.

Table 3.5-2, presents the City's 2008 GHG emissions and the percent contribution of each emissions sector (transportation, commercial/industrial energy use, residential energy use, wastewater treatment, solid waste, and water consumption).

Emissions Sector	Annual GHG Emissions (MT CO ₂ E/year)	Percent of Total ^a
Transportation	361,350	62%
Commercial/Industrial Energy Use	116,197	20%
Residential Energy Use	70,378	12%
Wastewater Treatment	20,981	4%
Solid Waste	8,543	1%
Water Consumption	5,764	1%
Totalª	583,213	100%

 Table 3.5-2

 City of West Hollywood Baseline Greenhouse Gas Emissions Inventory (2008)

Source: City of West Hollywood 2011a.

Notes: MT CO₂E = metric tons of carbon dioxide equivalent per year

^a Total may not sum due to rounding.

As shown on Table 3.5-2, the primary generators of GHGs in the City were attributed to transportation and commercial/industrial energy uses, accounting for 62% and 20% of the City's GHG emissions in 2008, respectively. Residential energy uses accounted for approximately 12%, and wastewater treatment, solid waste, and water consumption accounted for the remaining 6% of the City's GHG emissions.

Potential Effects of Human Activity on Climate Change

Globally, climate change has the potential to affect numerous environmental resources through uncertain impacts related to future air temperatures and precipitation patterns. The 2014 *Intergovernmental Panel on Climate Change Synthesis Report* indicated that warming of the climate system is unequivocal, and since the 1950s, many of the observed changes are unprecedented over decades to millennia. Signs that global climate change has occurred include warming of the atmosphere and ocean, diminished amounts of snow and ice have, and rising sea levels (IPCC 2014).

In California, climate change impacts have the potential to affect sea level rise, agriculture, snowpack and water supply, forestry, wildfire risk, public health, and electricity demand and supply (CCCC 2006). The primary effect of global climate change has been a 0.2° C rise in average global tropospheric temperature per decade, determined from meteorological measurements worldwide between 1990 and 2005. Scientific modeling predicts that continued emissions of GHGs at or above current rates would induce more extreme climate changes during the twenty-first century than were observed during the twentieth century. A warming of about 0.2° C (0.36° F) per decade is projected, and there are identifiable signs that global warming could be taking place. Although climate change is driven by global atmospheric conditions, climate change impacts are felt locally. A scientific consensus confirms that climate change is already affecting California. The average temperatures in California have increased, leading to more extreme hot days and fewer cold nights; shifts in the water cycle have been observed, with less winter precipitation falling as snow, and both snowmelt and rainwater running off earlier in the year; sea levels have risen; and wildland fires are becoming more frequent and intense due to dry seasons that start earlier and end later (CAT 2010a).

An increase in annual average temperature is a reasonably foreseeable effect of climate change. Observed changes over the last several decades across the western United States reveal clear signals of climate change. Statewide average temperatures increased by about 1.7°F from 1895 to 2011, and warming has been greatest in the Sierra Nevada (CCCC 2012). By 2050, California is projected to warm by approximately 2.7°F above 2000 averages, a threefold increase in the rate of warming over the last century. By 2100, average temperatures could increase by 4.1°F to 8.6°F, depending on emissions levels. Springtime warming—a critical influence on snowmelt—will be particularly pronounced. Summer temperatures will rise more than winter temperatures, and the increases will be greater in inland California, compared to the coast. Heat waves will be more frequent, hotter, and longer. There will be fewer extremely cold nights (CCCC 2012). A decline of Sierra snowpack, which accounts for approximately half of the surface water storage in California, by 30% to as much as 90% is predicted over the next 100 years (CAT 2006).

Model projections for precipitation over California continue to show the Mediterranean pattern of wet winters and dry summers with seasonal, year-to-year, and decade-to-decade variability. For the first time, however, several of the improved climate models shift toward drier conditions by the mid-to-late 21st century in Central and, most notably, Southern California. By late-century, all projections show drying, and half of them suggest 30-year average precipitation will decline by more than 10% below the historical average (CCCC 2012).

Wildfire risk in California will increase as a result of climate change. Earlier snowmelt, higher temperatures and longer dry periods over a longer fire season will directly increase wildfire risk. Indirectly, wildfire risk will also be influenced by potential climate-related changes in vegetation and ignition potential from lightning. However, human activities will continue to be the biggest factor in ignition risk. It is estimated that the long-term increase in fire occurrence associated with a higher emissions scenario is substantial, with increases in the number of large fires statewide ranging from 58% to 128% above historical levels by 2085. Under the same emissions scenario, estimated burned area will increase by 57% to 169%, depending on location (CCCC 2012).

Reduction in the suitability of agricultural lands for traditional crop types may occur. While effects may occur, adaptation could allow farmers and ranchers to minimize potential negative effects on agricultural outcomes through adjusting timing of plantings or harvesting and changing crop types.

Public health-related effects of increased temperatures and prolonged temperature extremes, including heat stroke, heat exhaustion, and exacerbation of existing medical conditions, could be particular problems for the elderly, infants, and those who lack access to air conditioning or cooled spaces (CNRA 2009a).

3.5.2 Relevant Plan, Policies, and Ordinances

Federal

Massachusetts v. U.S. Environmental Protection Agency

On April 2, 2007, in *Massachusetts v. U.S. Environmental Protection Agency*, the U.S. Supreme Court directed the EPA administrator to determine whether GHG emissions from new motor vehicles cause or contribute to air pollution that may reasonably be anticipated to endanger public health or welfare, or whether the science is too uncertain to make a reasoned decision. In making these decisions, the EPA administrator is required to follow the language of Section 202(a) of the Clean Air Act. On December 7, 2009, the administrator signed a final rule with two distinct findings regarding GHGs under Section 202(a) of the Clean Air Act:

- The elevated concentrations of GHGs— CO_2 , CH₄, N₂O, hydrofluorocarbons, perfluorocarbons, and SF₆—in the atmosphere threaten the public health and welfare of current and future generations. This is referred to as the "endangerment finding."
- The combined emissions of GHGs—CO₂, CH₄, N₂O, and hydrofluorocarbons—from new motor vehicles and new motor vehicle engines contribute to the GHG air pollution that endangers public health and welfare. This is referred to as the "cause or contribute finding."

These two findings were necessary to establish the foundation for regulation of GHGs from new motor vehicles as air pollutants under the Clean Air Act.

Energy Independence and Security Act

On December 19, 2007, President George W. Bush signed the Energy Independence and Security Act of 2007. Among other key measures, the act would do the following to aid in the reduction of national GHG emissions:

- 1. Increase the supply of alternative fuel sources by setting a mandatory Renewable Fuel Standard requiring fuel producers to use at least 36 billion gallons of biofuel by 2022.
- Set a target of 35 miles per gallon (mpg) for the combined fleet of cars and light trucks by model year 2020 and direct the National Highway Traffic Safety Administration (NHTSA) to establish a fuel economy program for medium- and heavy-duty trucks and create a separate fuel economy standard for work trucks.

3. Prescribe or revise standards affecting regional efficiency for heating and cooling products and procedures for new or amended standards, energy conservation, energy efficiency labeling for consumer electronic products, residential boiler efficiency, electric motor efficiency, and home appliances.

EPA and National Highway Traffic Safety Administration Joint Final Rule for Vehicle Standards

The EPA and NHTSA announced a joint final rule to establish a national program consisting of new standards for light-duty vehicles model years 2012 through 2016 (April 2010) that is intended to reduce GHG emissions and improve fuel economy. The EPA approved the first-ever national GHG emissions standards under the Clean Air Act, and NHTSA approved Corporate Average Fuel Economy (CAFE) standards under the Energy Policy and Conservation Act (75 FR 25324–25728), which became effective on July 6, 2010 (75 FR 25324–25728).

The EPA's GHG standards require new passenger cars, light-duty trucks, and medium-duty passenger vehicles to meet an estimated combined average emissions level of 250 grams of CO₂ per mile in model year 2016. The CAFE standards for passenger cars and light trucks will be phased in between 2012 and 2016. The rules will simultaneously reduce GHG emissions, improve energy security, increase fuel savings, and provide clarity and predictability for manufacturers (EPA 2013). In August 2012, the EPA and NHTSA approved a second round of GHG and CAFE standards for model years 2017 and beyond (77 FR 62624–63200). These standards will reduce motor vehicle GHG emissions for cars and light-duty trucks by model year 2025.

State

California Code of Regulations, Title 24

Title 24 of the California Code of Regulations was established in 1978 and serves to enhance and regulate California's building standards. While not initially promulgated to reduce GHG emissions, Part 6 of Title 24 specifically establishes energy efficiency standards for residential and non-residential buildings constructed in the State of California in order to reduce energy demand and consumption. The premise for the standards is that energy-efficient buildings require less electricity, natural gas, and other fuels. Electricity production from fossil fuels and on-site fuel combustion (typically for space and water heating) results in GHG emissions. Therefore, increased energy efficiency in buildings results in relatively lower rates of GHG emissions on a building-by-building basis. The Title 24, Part 6 standards are updated every three years. The currently applicable amendments are the 2013 standards. Buildings constructed in accordance with the 2013 standards will use 25% less energy for lighting, heating, cooling, ventilation, and water heating than the 2008 standards. Additionally, the standards will save 200 million gallons of water per year and avoid 170,500 tons of GHG emissions per year (CEC 2012). The most recent amendments to

Title 24, Part 6, referred to as the 2016 standards, became effective on January 1, 2017. In general, single-family homes built to the 2016 standards are anticipated to use about 28% less energy for lighting, heating, cooling, ventilation, and water heating than those built to the 2013 standards, and nonresidential buildings built to the 2016 standards will use an estimated 5% less energy than those built to the 2013 standards (CEC 2015). Although the project would be required to comply with 2016 Title 24 standards because it is anticipated to be constructed during or after 2017, this GHG analysis conservatively does not quantify the increase energy efficiency associated with the more stringent 2016 Title 24 standards.

Title 24 also includes Part 11, known as California's Green Building Standards. California's Green Building Standards, which initially took effect in January 2011, were updated effective January 1, 2014, and instituted mandatory minimum environmental performance standards for all ground-up, new construction of commercial, low-rise residential, and state-owned buildings, as well as schools and hospitals. The mandatory standards require the following:

- A 20% mandatory reduction in indoor water use.
- Diversion of 50% of construction and demolition waste from landfills.
- Mandatory inspections of energy systems to ensure optimal working efficiency.
- Low-pollutant emitting exterior and interior finish materials, such as paints, carpets, vinyl flooring, and particleboard.

California's Green Building Standards also include voluntary efficiency measures that are provided at two separate tiers and implemented per the discretion of local agencies and applicants.

Assembly Bill 1493

In response to the transportation sector accounting for more than half of California's CO₂ emissions, Assembly Bill (AB) 1493 (Pavley) was enacted on July 22, 2002. AB 1493 required CARB to set GHG emission standards for passenger vehicles, light-duty trucks, and other vehicles determined by the state board to be vehicles whose primary use is noncommercial personal transportation in the state. The bill required that CARB set GHG emission standards for motor vehicles manufactured in 2009 and all subsequent model years. CARB adopted the standards in September 2004. The near-term (2009–2012) standards resulted in a reduction of about 22% in GHG emissions compared to the emissions from the 2002 fleet, and the mid-term (2013–2016) standards will result in a reduction of about 30%.

Executive Order S-3-05

Executive Order S-3-05 (June 2005) established California's GHG emissions reduction targets. The executive order established the following goals: GHG emissions should be reduced to 2000 levels by 2010, GHG emissions should be reduced to 1990 levels by 2020, and GHG emissions

should be reduced to 80% below 1990 levels by 2050. Under the executive order, the California Environmental Protection Agency is directed to report biannually on progress made toward meeting the GHG targets and the impacts to California due to global warming, including impacts to water supply, public health, agriculture, the coastline, and forestry. The Climate Action Team (CAT) was formed, which subsequently issued the 2006 Climate Action Team Report to Governor Schwarzenegger and the Legislature (CAT 2006).

The 2009 Climate Action Team Biennial Report (CAT 2010b) expands on the policy outlined in the 2006 assessment. The 2009 report identifies the need for additional research in several different aspects that affect climate change in order to support effective climate change strategies. Subsequently, the 2010 Climate Action Team Report to Governor Schwarzenegger and the California Legislature (CAT 2010a) reviews past climate action milestones including voluntary reporting programs, GHG standards for passenger vehicles, the Low Carbon Fuel Standard (LCFS), a statewide renewable energy standard, and the cap-and-trade program.

Assembly Bill 32

In furtherance of the goals established in Executive Order S-3-05, the legislature enacted AB 32 (Núñez and Pavley), the California Global Warming Solutions Act of 2006, which Governor Schwarzenegger signed in September 2006. The GHG emissions limit is equivalent to the 1990 levels, which are to be achieved by 2020.

CARB was assigned to carry out and develop the programs and requirements necessary to achieve the goals of AB 32. Under AB 32, CARB must adopt regulations requiring the reporting and verification of statewide GHG emissions. This program will be used to monitor and enforce compliance with the established standards. CARB is also required to adopt rules and regulations to achieve the maximum technologically feasible and cost-effective GHG emissions reductions. AB 32 allows CARB to adopt market-based compliance mechanisms to meet the specified requirements. Finally, CARB is ultimately responsible for monitoring compliance and enforcing any rule, regulation, order, emission limitation, emission reduction measure, or market-based compliance mechanism adopted.

The first action under AB 32 resulted in the adoption of a report listing early action GHG emissions reduction measures in June 2007. The early actions include three specific GHG control rules. In October 2007, CARB approved an additional six early action GHG reduction measures under AB 32. The three original early action regulations meeting the narrow legal definition of "discrete early action GHG reduction measures" include the following:

- 1. A low-carbon fuel standard to reduce the "carbon intensity" of California fuels.
- 2. Reduction of refrigerant losses from motor vehicle air conditioning system maintenance to restrict the sale of "do-it-yourself" automotive refrigerants.

3. Increased methane capture from landfills to require broader use of state-of-the-art methane capture technologies.

The additional six early action regulations, which were also considered "discrete early action GHG reduction measures," consist of the following:

- 1. Reduction of aerodynamic drag and, thereby, fuel consumption from existing trucks and trailers through retrofit technology.
- 2. Reduction of auxiliary engine emissions of docked ships by requiring port electrification.
- 3. Reduction of perfluorocarbons from the semiconductor industry.
- 4. Reduction of propellants in consumer products (e.g., aerosols, tire inflators, and dust removal products).
- 5. Requirements that all tune-up, smog check, and oil change mechanics ensure proper tire inflation as part of overall service in order to maintain fuel efficiency.
- 6. Restriction on the use of SF_6 from non-electricity sectors if viable alternatives are available.

As required under AB 32, on December 6, 2007, CARB approved the 1990 GHG emissions inventory, thereby establishing the emissions limit for 2020. The 2020 emissions limit was set at 427 MMT CO₂E. In addition to the 1990 emissions inventory, CARB also adopted regulations requiring mandatory reporting of GHGs for large facilities that account for 94% of GHG emissions from industrial and commercial stationary sources in California. Approximately 800 separate sources fall under the new reporting rules and include electricity generating facilities, electricity retail providers and power marketers, oil refineries, hydrogen plants, cement plants, cogeneration facilities, and other industrial sources that emit CO_2 in excess of specified thresholds.

In December 2008, CARB approved the *Climate Change Proposed Scoping Plan: A Framework for Change* (Scoping Plan) (CARB 2008) to achieve the goals of AB 32. The Scoping Plan establishes an overall framework for the measures that will be adopted to reduce California's GHG emissions. The Scoping Plan evaluates opportunities for sector-specific reductions, integrates all CARB and Climate Action Team early actions and additional GHG reduction measures by both entities, identifies additional measures to be pursued as regulations, and outlines the role of a cap-and-trade program.

The key elements of the Scoping Plan include the following:

- Expanding and strengthening existing energy efficiency programs as well as building and appliance standards.
- Achieving a statewide renewables energy mix of 33%.

- Developing a California cap-and-trade program that links with other Western Climate Initiative partner programs to create a regional market system and caps sources contributing 85% of California's GHG emissions.
- Establishing targets for transportation-related GHG emissions for regions throughout California, and pursuing policies and incentives to achieve those targets.
- Adopting and implementing measures pursuant to existing state laws and policies, including California's clean car standards, goods movement measures, and the LCFS.
- Creating targeted fees, including a public goods charge on water use, fees on high GWP gases, and a fee to fund the administrative costs of the State of California's long-term commitment to AB 32 implementation

An update to the Scoping Plan (Scoping Plan Update) was adopted in May 2014 (CARB 2014). Based on updated information, the Scoping Plan Update revises the 2020 emissions target to 431 MMT CO₂E (based on updated GWPs for GHGs) and also builds upon the initial Scoping Plan with new strategies and recommendations. The update identifies opportunities to leverage existing and new funds to further drive GHG emission reductions through strategic planning and targeted low carbon investments. The update defines CARB's climate change priorities for the next 5 years and sets the groundwork to reach California's long-term climate goals set forth in Executive Orders S-3-05 and B-16-2012. Executive Order B-16-2012 directed state entities under the governor's direction and control to facilitate development and distribution of zero-emission vehicles. The governor's reactive order sets a long-term target of reaching 1.5 million zero-emission vehicles on California's roadways by 2025. On a statewide basis, the executive order also establishes a target reduction of GHG emissions from the transportation sector equaling 80% less than 1990 levels by 2050.

The Scoping Plan Update highlights California's progress toward meeting the near-term 2020 GHG emission reduction goals defined in the initial Scoping Plan. These efforts were pursued to achieve the near-term 2020 goal and have created a framework for ongoing climate action that can be built upon to maintain and continue economic sector-specific reductions beyond 2020, as required by AB 32. The Scoping Plan Update identifies key focus areas or sectors including energy, transportation, agriculture, water, waste management, natural and working lands, short-lived climate pollutants, green buildings, and the cap-and-trade program. The update also recommends that a statewide mid-term target and mid-term and long-term sector targets be established toward meeting the 2050 goal established by Executive Order S-3-05 to reduce California's GHG emissions to 80% below 1990 levels, although no specific recommendations are made.

Senate Bill 1368

In September 2006, Governor Schwarzenegger signed Senate Bill (SB) 1368, which requires the California Energy Commission (CEC) to develop and adopt regulations for GHG emissions performance standards for the long-term procurement of electricity by local publicly owned utilities. These standards must be consistent with the standards adopted by the California Public Utilities Commission (CPUC). This effort will help protect energy customers from financial risks associated with investments in carbon-intensive generation by allowing new capital investments in power plants whose GHG emissions are as low as or lower than new combined-cycle natural gas plants by requiring imported electricity to meet GHG performance standards in California and by requiring that the standards be developed and adopted in a public process.

Executive Order S-1-07

Issued on January 18, 2007, Executive Order S-1-07 sets a declining LCFS for GHG emissions measured in CO_2E grams per unit of fuel energy sold in California. The target of the LCFS is to reduce the carbon intensity of California passenger vehicle fuels by at least 10% by 2020. The carbon intensity measures the amount of GHG emissions in the lifecycle of a fuel, including extraction/feedstock production, processing, transportation, and final consumption, per unit of energy delivered. CARB adopted the implementing regulation in April 2009. The regulation is expected to increase the production of biofuels, including those from alternative sources, such as algae, wood, and agricultural waste. In addition, the LCFS would drive the availability of plug-in hybrid, battery electric, and fuel-cell power motor vehicles. The LCFS is anticipated to lead to the replacement of 20% of the fuel used in motor vehicles with alternative fuels by 2020.

Senate Bill 375

In August 2008, the legislature passed, and in September 2008, Governor Schwarzenegger signed SB 375 (Steinberg), which addresses GHG emissions associated with the transportation sector through regional transportation and sustainability plans. By September 30, 2010, CARB was required to assign regional GHG reduction targets for the automobile and light truck sector for 2020 and 2035. The targets are required to consider the emission reductions associated with vehicle emission standards (see SB 1493), the composition of fuels (see Executive Order S-1-07), and other CARB-approved measures to reduce GHG emissions. Regional metropolitan planning organizations will be responsible for preparing a Sustainable Communities Strategy (SCS) within the Regional Transportation Plan (RTP). The goal of the SCS is to establish a development plan for the region that, after considering transportation measures and policies, will achieve the GHG reduction targets, if feasible. If a SCS is unable to achieve the GHG reduction target, a metropolitan planning organization must prepare an Alternative Planning Strategy demonstrating how the GHG reduction target would be achieved through alternative development patterns,

infrastructure, or additional transportation measures or policies. SB 375 provides incentives for streamlining CEQA requirements by substantially reducing the requirements for "transit priority projects," as specified in SB 375, and eliminating the analysis of the impacts of certain residential projects on global warming and the growth-inducing impacts of those projects when the projects are consistent with the SCS or Alternative Planning Strategy. In September 2010, CARB adopted the SB 375 targets for the regional metropolitan planning organizations.

The targets for SCAG are an 8% reduction in emissions per capita by 2020 and a 13% reduction by 2035. SCAG prepared its RTP/SCS, which was adopted by the SCAG Regional Council on April 4, 2012. The plan quantified a 9% reduction by 2020 and a 16% reduction by 2035. On June 4, 2012, the CARB executive officer issued an executive order accepting SCAG's quantification of GHG reductions and the determination that the SCS would achieve the GHG emission reduction targets established by CARB. On April 7, 2016, SCAG adopted the 2016–2040 RTP/SCS which looks to build on the success of the 2012–20135 RTP/SCS. Targets for SCAG region in the updated plan includes an 8% per capita reduction in GHG emissions from automobiles and light trucks by 2020, an 18% reduction by 2035, and a 21% reduction by 2040 compared with 2005 levels (SCAG 2016).

Executive Order S-13-08

Governor Schwarzenegger issued Executive Order S-13-08 on November 14, 2008. The Executive Order is intended to hasten California's response to the impacts of global climate change, particularly sea-level rise. It directs state agencies to take specified actions to assess and plan for such impacts. It directed the California Natural Resources Agency (CNRA), in cooperation with the California Department of Water Resources, the CEC, California's coastal management agencies, and the Ocean Protection Council, to request the National Academy of Sciences to prepare a sea level rise assessment report by December 1, 2010. The order also requires the other state agencies to develop adaptation strategies by June 9, 2009, to respond to the impacts of global climate change that are predicted to occur over the next 50 to 100 years.

Executive Order B-16-12

Executive Order S-16-12 (March 2012) requires that state entities under the governor's direction and control support and facilitate the rapid commercialization of zero-emission vehicles. It orders CARB, the CEC, the CPUC, and other relevant agencies work with the Plug-in Electric Vehicle Collaborative and the California Fuel Cell Partnership to establish benchmarks to help achieve benchmark goals by 2015, 2020, and 2025. On a statewide basis, the Executive Order establishes a target reduction of GHG emissions from the transportation sector equaling 80% less than 1990 levels by 2050.

Senate Bill 605

On September 21, 2014, Governor Jerry Brown signed SB 605, which requires CARB to complete a comprehensive strategy to reduce emissions of short-lived climate pollutants in the state no later than January 1, 2016. As defined in the statute, short-lived climate pollutant means "an agent that has a relatively short lifetime in the atmosphere, from a few days to a few decades, and a warming influence on the climate that is more potent than that of carbon dioxide." SB 605, however, does not prescribe specific compounds as short-lived climate pollutants or add to the list of GHGs regulated under AB 32. In developing the strategy, CARB must complete an inventory of sources and emissions of short-lived climate pollutants in the state based on available data, identify research needs to address any data gaps, identify existing and potential new control measures to reduce emissions, and prioritize the development of new measures for short-lived climate pollutants that offer cobenefits by improving water quality or reducing other air pollutants that impact community health and benefit disadvantaged communities. The draft strategy released by CARB in September 2015 focuses on methane, black carbon, and fluorinated gases, particularly hydrofluorocarbons, as important short-lived climate pollutants. The draft strategy recognizes emission reduction efforts implemented under AB 32 (e.g., refrigerant management programs) and other regulatory programs (e.g., in-use diesel engines, solid waste diversion) along with additional measures to be developed.

Senate Bill 350

Governor Jerry Brown signed SB 350 on October 7, 2015, which expands the Renewable Portfolio Standard (RPS) by establishing a goal of 50% of the total electricity sold to retail customers in California per year by December 31, 2030. In addition, SB 350 includes the goal to double the energy efficiency savings in electricity and natural gas final end uses (such as heating, cooling, lighting, or class of energy uses upon which an energy efficiency program is focused) of retail customers through energy conservation and efficiency. The bill also requires the CPUC, in consultation with the CEC, to establish efficiency targets for electrical and gas corporations consistent with this goal. SB 350 also provides for the transformation of the California Independent System Operator into a regional organization to promote the access of consumers served by the California Independent System Operator to those markets, pursuant to a specified process.

Executive Order B-30-15

On April 29, 2015, Governor Jerry Brown issued an executive order that identified an interim GHG reduction target in support of targets previously identified under S-3-05 and AB 32. Executive Order B-30-15 set an interim target goal of reducing GHG emissions to 40% below

1990 levels by 2030 to keep California on its trajectory toward meeting or exceeding the longterm goal of reducing GHG emissions to 80% below 1990 levels by 2050, as set forth in Executive Order S-3-05. To facilitate achievement of this goal, Executive Order B-30-15 calls for an update to CARB's Scoping Plan to express the 2030 target in terms of million metric tons of CO_2E . The executive order also calls for state agencies to continue to develop and implement GHG emission reduction programs in support of the reduction targets. Sector-specific agencies in transportation, energy, water, and forestry will be required to prepare GHG reduction plans by September 2015, followed by a report on actions taken in relation to these plans in June 2016. The executive order does not require local agencies to take any action to meet the new interim GHG reduction threshold. It is important to note that Executive Order B-30-15 was not adopted by a public agency through a public review process that requires analysis pursuant to CEQA Guidelines Section 15064.4 and that it has not been subsequently validated by a statute as an official GHG reduction target of the State of California. The executive order itself states it is "not intended to, and does not, create any rights or benefits, substantive or procedural, enforceable at law or in equity, against the State of California, its agencies, departments, entities, officers, employees, or any other person."

California Air Pollution Control Officers Association

The California Air Pollution Control Officers Association (CAPCOA) is the association of air pollution control officers representing all 35 air quality agencies throughout California. CAPCOA is not a regulatory body, but it has been an active organization in providing guidance in addressing the CEQA significance of GHG emissions and climate change as well as other air quality issues. The GHG analysis set forth in this EIR has been informed, in part, by the expertise and methodologies described in the following documents published by CAPCOA: (1) *CEQA & Climate Change: Evaluating and Addressing Greenhouse Gas Emissions from Projects Subject to the California Environmental Quality Act* (CAPCOA 2008) and (2) *Quantifying Greenhouse Gas Mitigation Measures: A Resource for Local Government to Assess Emission Reductions from Greenhouse Gas Mitigation Measures* (CAPCOA 2010).

Local

City of West Hollywood General Plan 2035 Infrastructure, Resources, and Conservation

The Infrastructure, Resources, and Conservation Element of the West Hollywood General Plan 2035 (City of West Hollywood 2011) includes GHG policies intended to reduce the effects of climate change in the City. The following policies of the Infrastructure, Resources, and Conservation Element are applicable to the proposed project:

• **Policy IRC-4.2**: Promote land use patterns and mobility decisions that result in reduced vehicle trips and therefore reduced overall energy use from the transportation sector.

- **Policy IRC-6**:Reduce the City's contribution to global climate change, and adapt to its effects.
- **Policy IRC-6.2**: Lead by example in reducing municipal GHG emissions.
- **Policy IRC-6.4**: Develop GHG emissions reduction strategies that are rationally related to the sources of emissions identified in the inventory.
- Policy IRC-6.5: Develop adaptation strategies to address the impacts of climate change upon the West Hollywood community and the Los Angeles Metropolitan Region.
- **Policy IRC-6.7**: Implement heat island reduction strategies, including but not limited to strategies to increase permeable surfaces in the streetscape and buildings, increased vegetation and shade, and the use of reflective materials in the streetscape and buildings.
- Policy IRC-6.9: In conjunction with policies in the Mobility Chapter of the City's General Plan, encourage a shift in travel from single-occupant autos to walking, biking, public transit, and ride-sharing, with a focus on policies that promote the following:
 - Increase walking and biking within the City 0
 - Increase transit use and reduce barriers to transit ridership
 - Increase ride-sharing
 - Promote alternatives to automobile ownership.
- **Policy IRC-6.10**: In conjunction with policies in the Parks and Recreation and Land use and Urban Form Chapters of the City's General Plan, increase green spaces throughout the City and provide carbon capture through trees, vegetation, and open space.

City of West Hollywood Climate Action Plan

The City of West Hollywood's Climate Action Plan (CAP) recommends a series of actions that the City, residents, property owners, and businesses can take to reduce its contributions to global climate change by reducing GHG emissions. The City's CAP outlines a course of action to reduce municipal and communitywide GHG emissions that contribute to climate change. The City's CAP seeks to:

- Provide clear guidance to City staff and decision-makers regarding when and how to implement key actions to reduce GHG emissions.
- Place the City on a path to reduce annual communitywide GHG emissions by 20 to 25% below 2008 business-as-usual emission levels by 2035.
- Inspire residents, property owners, and businesses to participate in community efforts to reduce GHG emissions.

• Demonstrate West Hollywood's ability to respond to and comply with California GHG reduction legislation and guidelines.

The City's CAP includes strategies and performance indicators to reduce GHG emissions from both municipal and community-wide activities within the City. These strategies address seven major GHG sources and recommend actions to achieve GHG reductions through the following:

- Community leadership and engagement
- Land use and community design
- Transportation and mobility
- Energy use and efficiency
- Waste use and efficiency
- Waste reduction and recycling
- Green space

City of West Hollywood's Green Building Ordinance

On October 1, 2007, the City adopted one of the nation's first mandatory green building ordinances. A key component of the City's Green Building Program was the Green Building Point System for new construction, which offers incentives for projects that achieve exemplary status across a range of sustainable measures.

3.5.3 Thresholds of Significance

The following thresholds of significance are based on Appendix G of the CEQA Guidelines. Based on these thresholds, implementation of the proposed project would have a significant adverse impact related to GHG emissions if it would:

- a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment
- b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases

3.5.4 Methodology

CEQA Guidelines Section 15183.5 allows jurisdictions to analyze and mitigate the significant effects of GHGs at a programmatic level, by adopting a plan for the reduction of GHG emissions. Later, as individual projects are proposed, project-specific environmental documents may tier from and/or incorporate by reference that existing programmatic review in

their cumulative impacts analysis. Project-specific environmental documents prepared for projects consistent with the City's General Plan and CAP may rely on the programmatic analysis of GHGs contained in the EIR certified for the City's General Plan Update and CAP. A project-specific environmental document that relies on the CAP for its cumulative impacts analysis must identify the specific CAP measures applicable to the project and how the project incorporates the measures.

This methodology is also consistent with the draft thresholds of significance that have been considered by the SCAQMD. The SCAQMD has been evaluating GHG significance thresholds since April 2008. In December 2008, the SCAQMD adopted an interim 10,000 MTCO₂e per year screening level threshold for stationary source/industrial projects for which the SCAQMD is the lead agency. The SCAOMD has continued to consider adoption of significance thresholds for residential and general development projects. The most recent proposal issued in September 2010 uses the following tiered approach to evaluate potential GHG impacts from various uses:

- Tier 1 Determine if CEQA categorical exemptions are applicable. If not, move to Tier 2.
- Tier 2 Consider whether or not the proposed project is consistent with a locally adopted GHG reduction plan that has gone through public hearing and CEQA review, that has an approved inventory, includes monitoring, etc. If not, move to Tier 3.
- Tier 3 Consider whether the project generates GHG emissions in excess of screening thresholds for individual land uses. The 10,000 MTCO₂e per year threshold for industrial uses would be recommended for use by all lead agencies. Under option 1, separate screening thresholds are proposed for residential projects (3,500 MTCO₂e per year), commercial projects (1,400 MTCO₂e per year), and mixeduse projects (3,000 MTCO₂e per year). Under option 2, a single numerical screening threshold of 3,000 MTCO₂e per year would be used for all nonindustrial projects. If the project generates emissions in excess of the applicable screening threshold, move to Tier 4.
- Tier 4 Consider whether the project generates GHG emissions in excess of applicable performance standards for the project service population (population plus employment). The efficiency targets were established based on the goal of AB 32 to reduce statewide GHG emissions to 1990 levels by 2020. The 2020 efficiency targets are 4.8 MTCO₂e per service population for project level analyses and 6.6 $MTCO_{2}$ per service population for plan level analyses. If the project generates emissions in excess of the applicable efficiency targets, move to Tier 5.
- Tier 5 Consider the implementation of CEQA mitigation (including the purchase of GHG offsets) to reduce the project efficiency target to Tier 4 levels.

The thresholds identified above have not been adopted by the SCAQMD or distributed for widespread public review and comment, and the working group tasked with developing the thresholds has not met since September 2010. The future schedule and likelihood of threshold adoption is uncertain.

For the purpose of evaluating the GHG impacts associated with the proposed project, this analysis evaluates the consistency of the proposed project with the City's CAP.

3.5.5 Impact Analysis

Threshold A: Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Construction Emissions

Construction of the proposed project would result in GHG emissions, which are primarily associated with use of off-road construction equipment, on-road haul trucks, on-road vendor trucks, and worker vehicles. The SCAQMD has not proposed or adopted relevant quantitative GHG thresholds for construction-generated emissions. Nonetheless, GHG emissions generated during construction of the proposed project are included in this assessment for disclosure purposes.

CalEEMod was used to calculate the annual GHG emissions based on the construction scenario described in Section 3.2, Air Quality. It is anticipated that construction of the project would commence in April 2017 and reach completion in October 2019. On-site sources of GHG emissions include off-road equipment and off-site sources including haul trucks, vendor trucks and worker vehicles. Table 3.5-3 presents construction emissions for the proposed project in 2017, 2018, and 2019 from on-site and off-site emission sources.

Veer		CH ₄	N2O	CO ₂ E
rear	(IVI I /year)	(WIT/year)	(IVI I /year)	(IVI I /year)
2017	879.13	0.12	0.00	881.63
2018	908.54	0.12	0.00	911.01
2019	369.96	0.06	0.00	371.19
Combined Total	2,157.64	0.29	0.00	2,163.83

Table 3.5-3Estimated Annual Construction Greenhouse Gas Emissions

Notes: See Appendix C for complete results.

 $MT CO_2$ - metric tons carbon dioxide; $MT CH_4$ - metric tons methane; $MT N_2O$ - metric tons nitrous oxide; $MT CO_2E$ - metric tons carbon dioxide equivalent

As shown in Table 3.5-3, the estimated total GHG emissions during construction would be approximately 2,164 MT CO₂E over the construction period.

Estimated project-generated construction emissions amortized over 30 years would be approximately 72 MT CO_2E per year. As with project-generated construction air quality pollutant emissions, GHG emissions generated during construction of the proposed project would be short-term in nature, lasting only for the duration of the construction period, and would not represent a long-term source of GHG emissions. Because there is no separate GHG threshold for construction, the evaluation of significance is discussed in the operational emissions analysis below.

Operational Emissions

In accordance with Section 15064.4(b)(1) of the CEQA Guidelines, the following section evaluates whether the project would increase or reduce GHG emissions as compared to the existing environmental setting (baseline).

Baseline Operational GHG Emissions Summary

Existing (baseline) operation of the commercial uses results in GHG emissions from the following sources: (1) energy use (natural gas usage and generation of electricity); (2) vehicular traffic to and from the site; (3) solid waste generation; and (4) generation of electricity associated with water supply and treatment and with wastewater treatment.

Annual GHG emissions from these sources were estimated using CalEEMod. The estimation of GHG emissions generated under existing conditions was based on land use types (i.e., retail, health club, restaurant) and respective area (i.e., square footage) in operation at the time the EIR analysis was prepared.

The CalEEMod default "historical" electricity usage option was applied to the existing uses, which adjusts values to the 2005 Title 24 standards. Annual electricity emissions were estimated using the emission factors for Southern California Edison, which would provide electricity for the project, and adjusted to account for 20% RPS by 2013. Vehicle trip generation was based on the rates by land use type in the Traffic Impact Analysis for the project (KOA Corporation 2016; see Appendix J to this EIR).

The operational GHG emissions from electricity usage, motor vehicles, solid waste generation, water consumption, and wastewater treatment associated with the existing (baseline) commercial uses are shown in Table 3.5-4. Additional details regarding these calculations are provided in Appendix C.

Emission Source	MT CO ₂ /year	MT CH₄/year	MT N ₂ O/year	MT CO ₂ E/year
Area	0.00	0.00	0.00	0.00
Energy (natural gas and electricity)	622.36	0.02	0.01	625.41
Mobile sources	2,232.29	0.11	0.00	2,234.70
Solid waste	12.19	0.72	0.00	27.32
Water supply and wastewater	34.38	0.25	0.00	41.58
Baseline total	2,901.22	1.11	0.01	2,929.01

Table 3.5-4Baseline Estimated Operational GHG Emissions

Notes: See Appendix C for detailed results. Notably, compliance with AB 341 (75% waste diversion) was accounted for in CalEEMod as "mitigation" even though the existing uses would comply with the regulation. Thus, the "Mitigated" tables in the CalEEMod outputs represent the actual unmitigated scenario.

MT = metric tons; CO₂ = carbon dioxide; CH₄ = methane; N₂O = nitrous oxide; CO₂E =carbon dioxide equivalent

Project Operational GHG Emissions Summary

The proposed project would result in GHG emissions associated with the vehicular traffic generated by the proposed project. According to the traffic analysis prepared by KOA Corporation (provided as Appendix J), total net project-generated daily traffic is estimated to be 3,351 trips. The subterranean parking garage would not generate additional vehicle trips than those trips generated by the hotel, restaurant, retail, and design show room uses.

CalEEMod default mobile source data, including temperature, trip characteristics, variable start information, emission factors, and trip distances, were conservatively used for the model inputs. Project-related traffic was assumed to be comprised of a mixture of vehicles in accordance with the model outputs for traffic. It is estimated that the project site would be occupied and in operation by late 2019 or early 2020.

CalEEMod was also used to estimate emissions from the project's area sources, which includes operation of gasoline-powered landscape maintenance equipment, which produce minimal GHG emissions.

The estimation of operational energy emissions was based on CalEEMod land use defaults and units or total area (i.e., square footage) of the proposed project. Annual natural gas (non-hearth) and electricity emissions were estimated in CalEEMod using the emissions factors for Southern California Edison, which would be the energy source provider for the project, and adjusted to account for 33% RPS by 2020. The project was conservatively assumed to meet the 2013 California Building Energy Efficiency Standards (Title 24, Part 6, of the California Code of Regulations) rather than the 2016 Title 24 standards. The default energy input ratios for Title 24 and non-Title 24 natural gas and electricity consumption as provided in CalEEMod were utilized for the project (CAPCOA 2013).

Supply, conveyance, treatment, and distribution of water for the project require the use of electricity, which would result in associated indirect GHG emissions. Similarly, wastewater generated by the proposed project requires the use of electricity for conveyance and treatment, along with GHG emissions generated during wastewater treatment. Water consumption estimates for both indoor and outdoor water use and associated electricity consumption from water use and wastewater generation were estimated using CalEEMod default values.

The proposed project would generate solid waste and would therefore result in CO_2E emissions associated with landfill off-gassing. The project would include 75% diversion rate consistent with AB 341 (Chesbro, Chapter 476, Statutes of 2011) (25% increase from the solid waste diversion requirements of AB 939, Integrated Waste Management Act).

The estimated operational project-generated GHG emissions from area sources, energy usage, motor vehicles, solid waste generation, water supply, and wastewater treatment, considering the project design features in 2020, are shown in Table 3.5-5.

	CO ₂	CH4	N ₂ O	CO ₂ E
Emission Source	(MT/year)	(MT/year)	(MT/year)	(MT/year)
Area	0.01	0.00	0.00	0.01
Energy	1,834.20	0.08	0.03	1,843.99
Mobile	4,491.63	0.17	0.00	4,495.28
Solid Waste	12.04	0.71	0.00	26.98
Water Supply and Wastewater	70.88	0.64	0.02	89.16
Total	6,408.76	1.60	0.04	6,455.42
Baseline Total	2,901.22	1.11	0.01	2,929.01
Net Change	3,507.54	0.49	0.03	3,526.41
Amortized Construction Emissions			72.13	
Operation + Amortized Construction Total			3,598.54	

Table 3.5-5Estimated Annual Operational GHG Emissions

Notes: See Appendix C for detailed results. Notably, compliance with AB 341 (75% waste diversion) and the 2013 Title 24 standards were accounted for in CalEEMod as "mitigation" even though the project would comply with these regulations. Thus, the "Mitigated" tables in the CalEEMod outputs represent the actual unmitigated scenario.

MT = metric tons; CO_2 = carbon dioxide; CH_4 = methane; N_2O = nitrous oxide; CO_2E = carbon dioxide equivalent

As shown in Table 3.5-5, estimated net annual project-generated GHG emissions would be approximately 3,526 MT CO_2E per year as a result of project operation. Estimated net annual project-generated operational emissions in 2020 and amortized project construction emissions would be approximately 3,598.54 MT CO2E per year.

As stated above, there is no numeric emissions-based threshold by which the City could evaluate whether the project emissions would exceed a threshold of significance as indicated in Section

15064.4(b)(2) of the CEQA Guidelines. The City has policies in place that address the City's goals to reduce GHGs (as discussed in the following threshold); therefore, impacts related to GHG emissions are considered **less than significant**.

Threshold B: Would the project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

The City adopted its CAP on September 6, 2011 concurrent with the adoption of the City's 2035 General Plan. The City's CAP includes strategies and performance indicators to reduce GHG emissions from municipal and communitywide activities within the City. The City's CAP strategies address seven major GHG sources and recommend actions to achieve GHG reductions through: community leadership and engagement, land use and community design, transportation and mobility, energy use and efficiency, water use and efficiency, waste reduction and recycling, and green space. For each strategy, the City's CAP recommends measures and actions that translate the CAP's vision into on-the-ground action. Measures define the direction that the City will take to accomplish its GHG reduction goals, while actions define the specific steps that City staff and decision-makers will take over time. Overall, the goal of the City's CAP is to reduce the City's communitywide GHG emissions by 20% to 25% below 2008 emission levels by 2035.

Table 3.5-6 describes the project's consistency with the City's applicable CAP measures. As stated in the City's CAP, projects that demonstrate consistency with the goals, strategies, actions, and emission reduction targets contained in the City's CAP would have a less-than-significant impact on climate change.

Reduction Measures	Project Consistency
Land Use a	nd Community Design
LU-1.1: Facilitate the establishment of mixed-use, pedestrian- and transit-oriented development along the commercial corridors and in Transit Overlay Zones	Consistent. The proposed project is a pedestrian-oriented mixed- use hotel that provides hotel, retail, restaurant, other commercial uses, and nightclub on the project site. The project site is located within the Melrose/Beverly District, which is primarily developed with arts and design studios, offices, and related businesses. The proposed project would serve the community within the Melrose/Beverly District, as well as the surrounding community and visitors. The project includes a pedestrian paseo that traverses the project site, providing pedestrian connectivity through the site to La Peer Drive on the west and to West Hollywood Park and other businesses along Robertson Boulevard on the east. The paseo and the street frontages of the proposed building would be lined with ground-floor retail and restaurant uses and would enhance the pedestrian experience relative to existing conditions. The project area is served by bus transit lines operated by the City, the Los

Table 3.5-6Project Consistency with Applicable City of West Hollywood's
Climate Action Plan Reduction Measures

Table 3.5-6 Project Consistency with Applicable City of West Hollywood's **Climate Action Plan Reduction Measures**

Reduction Measures	Project Consistency	
	Angeles County Metropolitan Transportation Authority, and the City of Los Angeles Department of Transportation. In the General Plan Mobility Element, the intersection of Santa Monica Boulevard and San Vicente Boulevard, which is located within a block of the project site, is designated as a "major transfer point" for public transit (City of West Hollywood 2011b). Section 3.11, Transportation and Traffic provides a description of the nearby routes in the project area.	
LU-1.2: Encourage the preservation and reuse of existing buildings.	Consistent. The existing 5,576-square-foot one-story commercial building located along the southernmost site boundary would remain in place), as well as an existing wholesale design showroom, Phyllis Morris, which is also located in the southern portion of the site (this structure is 10,325 square feet). 9,765 square feet of the Factory would also be repurposed.	
Transpo	rtation and Mobility	
T-1.1: Increase the pedestrian mode share in West Hollywood with convenient and attractive pedestrian infrastructure and facilities.	Consistent. The proposed project will be designed to encourage pedestrian activity. Separation of pedestrians from vehicular traffic would be accomplished through several elements on site, such as providing parking in a subterranean parking garage, and creating a Pedestrian Paseo in a manner consistent with the City's Design District Streetscape Master Plan. The Pedestrian Paseo would create a network that would allow residents and visitors to shop at eclectic stores, dine at restaurants, and attend entertainment venues in a vibrant, pedestrian-oriented, village-like setting.	
T-2.1: Increase the bicycle mode share by providing accessible, convenient, and attractive bicycle infrastructure.	Consistent. There are existing bicycle lanes along Santa Monica Boulevard from Almont Drive in the west to Kings Road in the east and along San Vicente Boulevard from Santa Monica Boulevard in the north to Beverly Boulevard in the south. There are also bicycle routes with "share the road" signage along portions of Melrose Avenue, Beverly Boulevard, and San Vicente Boulevard north of Santa Monica Boulevard (City of West Hollywood 2015). The Bicycle Task Force Report shows a proposed bicycle lane along Robertson Boulevard, south of Santa Monica Boulevard. This would involve a striped lane for bicycle travel within the roadway (City of West Hollywood 2011c).	
T-2.2: Install bike racks and bike parking in the City where bike parking infrastructure currently does not exist.	Consistent. The proposed project includes bicycle parking for employees and customers as well as showers on site pursuant to the City's Municipal Code requirements.	
Energy Use and Efficiency		
E-2.2: Require all new construction to achieve California Building Code Tier II Energy Efficiency Standards (Section 503.1.2).	Consistent. In addition to complying with the City's Green Building Ordinance (City of West Hollywood Municipal Code Section 19.20.060), the project would be required to achieve California Building Code Tier II Energy Efficiency Standards which states that new construction must exceed 2007 California Energy Code requirements by 30% over 2007 Title 24 requirements.	

Table 3.5-6Project Consistency with Applicable City of West Hollywood's
Climate Action Plan Reduction Measures

Reduction Measures	Project Consistency	
E-3.2: Require the use of recycled materials for 20% of construction materials in all new construction.	Consistent. The proposed project includes recycled-content materials in the foundation, insulation, and landscaping. As stated in this measure, the proposed project would be required to use a minimum of 20% recycled materials as part of the proposed construction. This is required of all new development projects in the City.	
Water U	Jse and Efficiency	
W-1.1: Reduce per capita water consumption by 30% by 2035.	Consistent. To reduce water use, the proposed project would include low-flow plumbing fixtures consistent with CalGreen building standards.	
W-1.2: Encourage all automated irrigation systems installed in the City to include a weather-based control system.	Consistent. The proposed project would include drought-tolerant, climate appropriate landscaping to reduce the amount of irrigation needed. The irrigation systems installed on the project site would also include a weather-based control system.	
Waste Reduction and Recycling		
SW-1.1: Establish a waste reduction target not to exceed 4.0 pounds per person per day.	Consistent. The proposed project would include space for the collection and storage of recyclables. In addition, at least 80% of construction and demolition waste would be diverted in accordance with WHMC Section 19.20.060. The proposed project would be subject to all applicable State and City requirements for solid waste reduction as they change in the future.	
Urban Forest		
G-1.1: Increase and enhance the City's urban forest to capture and store carbon and reduce building energy consumption.	Consistent. The proposed project includes landscaping on Levels 1, 4, and 9 of the hotel building. The park site would be restored in accordance with the Phase II Park Master Plan designs for West Hollywood Park after construction of the subterranean parking structure.	

As presented in Table 3.5-6, the project is consistent with the applicable CAP reduction measures; therefore, the project would be consistent with the City's climate action reduction measures and would not conflict with the adopted CAP. Additionally, the proposed project would be required to implement Mitigation Measure 3.15-1 from the Final Program EIR for the City's General Plan and CAP. This measure states that to further reduce construction generated-GHG emissions, the project applicant(s) of all project phases shall implement all feasible measures for reducing GHG emissions associated with construction that are recommended by the City and/or SCAQMD at the time individual portions of the site undergo construction.

Prior to releasing each request for bid to contractors for the construction of each development phases, the project applicant(s) shall obtain the most current list of GHG reduction measures that

are recommended by the City and stipulate that these measures be implemented in the respective request for bid as well as the subsequent construction contract with the selected primary contractor.

The project applicant(s) for any particular development phase may submit to the City a report that substantiates why specific measures are considered infeasible for construction of that particular development phase and/or at that point in time. The report, including the substantiation for not implementing particular GHG reduction measures, shall be approved by the City prior to the release of a request for bid by the project applicant(s) for seeking a primary contractor to manage the construction of each development. By requiring that the list of feasible measures be established prior to the selection of a primary contractor, this measure requires that the ability of a contractor to effectively implement the selected GHG reduction measures be inherent to the selection process.

The City's recommended measures for reducing construction-related GHG emissions at the time of writing this EIR are listed below. The list will be updated as new technologies or methods become available. The project applicant(s) shall, at a minimum, be required to implement the following:

- Improve fuel efficiency of construction equipment:
 - Reduce unnecessary idling (modify work practices, install auxiliary power for drive comfort);
 - Perform equipment maintenance (inspections, detect failures early, correction);
 - Train equipment operators in proper use of equipment;
 - Use the proper size of equipment for the job; and
 - Use equipment with new technologies (repowered engines, electric drive trains).
- Use alternative fuels for electricity generators and welders at construction sites such as propane or solar, or use electrical power.
- Use an ARB-approved low-carbon fuel, such as biodiesel, or renewable diesel for construction equipment.
- Encourage and provide carpools, shuttle vans, transit passes, and/or secure bicycle parking for construction worker commutes.
- Reduce electricity use in the construction office by using compact fluorescent bulbs, powering off computers every day, and replacing heating and cooling units with more efficient ones.
- Recycle or salvage nonhazardous construction and demolition debris (goal of at least 75% by weight).

- Use locally sourced or recycled materials for construction materials (goal of at least 20% based on costs for building materials, and based on volume for roadway, parking lot, sidewalk, and curb materials).
- Minimize the amount of concrete used for paved surfaces or use a low carbon concrete option.
- Produce concrete on-site if determined to be less emissive than transporting ready mix.
- Use EPA-certified SmartWay trucks for deliveries and equipment transport. Additional information about the SmartWay Transport Partnership Program is available from ARB's Heavy-Duty Vehicle Greenhouse Gas Measure and EPA.
- Develop a plan to efficiently use water for adequate dust control. This may consist of the use of nonpotable water from a local source.

The proposed project would be designed and constructed in accordance with the City's Green Building Ordinance, which would include implementing energy efficient systems and appliances, installing energy efficient lighting, and using water-efficient landscaping, irrigation systems, and water conserving plumbing and fixtures.

The Scoping Plan, approved by CARB on December 12, 2008, provides a framework for actions to reduce California's GHG emissions and requires CARB and other state agencies to adopt regulations and other initiatives to reduce GHGs. As such, the Scoping Plan is not directly applicable to specific projects. Relatedly, in the Final Statement of Reasons for the Amendments to the CEQA Guidelines, the CNRA observed that "[t]he [Scoping Plan] may not be appropriate for use in determining the significance of individual projects because it is conceptual at this stage and relies on the future development of regulations to implement the strategies identified in the Scoping Plan" (CNRA 2009b). Under the Scoping Plan, however, there are several state regulatory measures aimed at the identification and reduction of GHG emissions. CARB and other state agencies have adopted many of the measures identified in the Scoping Plan. Most of these measures focus on area source emissions (e.g., energy usage, high-GWP GHGs in consumer products) and changes to the vehicle fleet (i.e., hybrid, electric, and more fuel-efficient vehicles) and associated fuels (e.g., LCFS), among others. The proposed project will comply with all applicable regulations adopted in furtherance of the Scoping Plan to the extent required by law.

As discussed in Section 3.5.2, Executive Order S-3-05 established a goal to reduce statewide GHG emissions to the 1990 level by 2020, and to reduce statewide GHG emissions to 80%

below the 1990 level by 2050.² The proposed project would support achievement of the Executive Order's near-term 2020 goal (as codified in AB 32) and the long-term 2050 goal through the project's compliance with the City's CAP (see Table 3.5-6 for a discussion of the project's consistency with the applicable CAP reduction measures).

Because the project would be consistent with the City's CAP, GHG impacts would be **less** than significant.

3.5.6 Mitigation Measures

Impacts would be less than significant. Although no project-specific mitigation measures are required, the project would be required to implement mitigation measure 3.15-1 from the Final Program EIR for the City's General Plan and CAP. This measure states that to further reduce construction-generated GHG emissions, the project applicant(s) of all project phases shall implement all feasible measures for reducing GHG emissions associated with construction that are recommended by the City and/or SCAQMD at the time individual portions of the site undergo construction. The City's recommended measures for reducing construction-related GHG emissions at the time of writing this EIR are listed below. The list will be updated as new technologies or methods become available. The project applicant(s) shall, at a minimum, be required to implement the following:

- Improve fuel efficiency of construction equipment:
 - Reduce unnecessary idling (modify work practices, install auxiliary power for drive comfort);
 - Perform equipment maintenance (inspections, detect failures early, correction);
 - Train equipment operators in proper use of equipment;
 - Use the proper size of equipment for the job; and
 - Use equipment with new technologies (repowered engines, electric drive trains).
- Use alternative fuels for electricity generators and welders at construction sites such as propane or solar, or use electrical power.
- Use a CARB-approved low-carbon fuel, such as biodiesel, or renewable diesel for construction equipment.

² In adopting AB 32, the legislature did not adopt the 2050 horizon-year goal from Executive Order No. S-3-05, and in the last legislative session (2013–2014), the legislature rejected bills proposing to enact the Executive Order's 2050 goal (*Cleveland National Forest Foundation v. SANDAG* 2014; *Professional Engineers in California Government et al. v. Schwarzenegger and Chiang* 2010; OPR 2004).

- Encourage and provide carpools, shuttle vans, transit passes, and/or secure bicycle parking for construction worker commutes.
- Reduce electricity use in the construction office by using compact fluorescent bulbs, powering off computers every day, and replacing heating and cooling units with more efficient ones.
- Recycle or salvage nonhazardous construction and demolition debris (goal of at least 75% by weight).
- Use locally sourced or recycled materials for construction materials (goal of at least 20% based on costs for building materials, and based on volume for roadway, parking lot, sidewalk, and curb materials).
- Minimize the amount of concrete used for paved surfaces or use a low carbon concrete option.
- Produce concrete on-site if determined to be less emissive than transporting ready mix.
- Use EPA-certified SmartWay trucks for deliveries and equipment transport. Additional information about the SmartWay Transport Partnership Program is available from CARB's Heavy-Duty Vehicle Greenhouse Gas Measure and EPA.
- Develop a plan to efficiently use water for adequate dust control. This may consist of the use of nonpotable water from a local source.

3.5.7 Significance after Mitigation

Impacts would be less than significant.

3.5.8 References

- 14 CCR 15000–15387 and Appendices A–L. Guidelines for Implementation of the California Environmental Quality Act, as amended.
- CAPCOA (California Air Pollution Control Officers Association). 2010. Quantifying Greenhouse Gas Mitigation Measures: A Resource for Local Government to Assess Emission Reductions from Greenhouse Gas Mitigation Measures. August 2010.
- CARB (California Air Resources Board). 2008. *Climate Change Scoping Plan: A Framework for Change*. October, approved December 12, 2008. Accessed July 12, 2015. http://www.arb.ca.gov/cc/scopingplan/document/psp.pdf.

- CARB (California Air Resources Board). 2014. First Update to the Climate Change Scoping Plan Building on the Framework Pursuant to AB 32 – The California Global Warming Solutions Act of 2006. May 2014. Accessed February 17, 2016. http://www.arb.ca.gov/cc/scopingplan/ 2013_update/first_update_climate_change_scoping_plan.pdf.
- CARB. 2015. "California Greenhouse Gas Inventory for 2000-2013 by Category as Defined in the Scoping Plan." April 24, 2015. Accessed February 17, 2016. http://www.arb.ca.gov/ cc/inventory/data/tables/ghg_inventory_scopingplan_2000-13_20150831.pdf.
- CAT (California Climate Action Team). 2006. Climate Action Team Report to Governor Schwarzenegger and the Legislature. Sacramento, California: CAT. March 2006. Accessed February 17, 2016. http://www.climatechange.ca.gov/climate_action_team/ reports/2006report/2006-04-03_FINAL_CAT_REPORT.PDF.
- CAT. 2010a. Climate Action Team Report to Governor Schwarzenegger and the California Legislature. Sacramento, California: California Environmental Protection Agency, California Climate Action Team. December 2010. Accessed February 17, 2016. http://www.energy.ca.gov/2010publications/CAT-1000-2010-005/ CAT-1000-2010-005.PDF.
- CAT. 2010b. Climate Action Team Biennial Report. Sacramento, California: CAT. April 2010. Accessed July 12, 2015. http://www.energy.ca.gov/2010publications/ CAT-1000-2010-004/CAT-1000-2010-004.PDF.
- CCCC (California Climate Change Center). 2006. Our Changing Climate: Assessing the Risks to California. CEC-500-2006-077. July 2006. Accessed February 17, 2016. http://www.energy.ca.gov/2006publications/CEC-500-2006-077/ CEC-500-2006-077.PDF.
- CCCC. 2012. Our Changing Climate 2012: Vulnerability & Adaptation to the Increasing Risks from Climate Change in California. July 2012. Accessed February 17, 2016. http://www.energy.ca.gov/2012publications/CEC-500-2012-007/ CEC-500-2012-007.pdf.
- CEC (California Energy Commission). 2012. "Building Energy Efficiency Standards: Frequently Asked Questions." May 2012. Accessed February 17. 2016. http://www.energy.ca.gov/ title24/2013standards/rulemaking/documents/2013 Building Energy Efficiency Standards_FAQ.pdf.

- CEC. 2015. "2016 Building Efficiency Standards Adoption Hearing Presentation." June 2015. Accessed August 2016. http://www.energy.ca.gov/title24/2016standards/rulemaking/ documents/ 2015-06-10_hearing/2015-06-10_Adoption_Hearing_Presentation.pdf#page=8.
- City of West Hollywood. 2011a. City of West Hollywood Climate Action Plan. September 6, 2011. Accessed February 17, 2016. http://www.weho.org/home/showdocument?id=7949.
- City of West Hollywood. 2011b. City of West Hollywood General Plan 2035. Accessed February 17, 2016. http://www.weho.org/Home/ShowDocument?id=7929.
- City of West Hollywood. 2011c. West Hollywood Bicycle Task Force Report Recommendations to City Council. November 21, 2011. Accessed February 19, 2016. http://www.weho.org/city-hall/city-departments-divisions/community-development/ long-range-and-mobility-planning/programs/bike-weho.
- City of West Hollywood. 2015. City of West Hollywood Existing Bicycle Network. Accessed February 19, 2016. http://www.weho.org/home/showdocument?id=11797.
- CNRA (California Natural Resources Agency). 2009a. 2009 California Climate Adaptation Strategy: A Report to the Governor of the State of California in Response to Executive Order S-13-2008. Accessed February 17, 2016. http://resources.ca.gov/docs/climate/ Statewide_Adaptation_Strategy.pdf.
- CNRA. 2009b. Final Statement of Reasons for Regulatory Action: Amendments to the State CEQA Guidelines Addressing Analysis and Mitigation of Greenhouse Gas Emissions Pursuant to SB 97. December 2009.
- EPA (U.S. Environmental Protection Agency). 2016. "Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2014." April 15, 2016. https://www3.epa.gov/climatechange/Downloads/ ghgemissions/US-GHG-Inventory-2016-Main-Text.pdf.
- IPCC (Intergovernmental Panel on Climate Change). 2014. "Summary for Policymakers." In *Climate Change 2014 Synthesis Report*. A Report of the Intergovernmental Panel on Climate Change. Contribution of Working Groups I, II and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change. Accessed February 17, 2016. http://www.ipcc.ch/report/ar5/syr/.
- SCAG (Southern California Association of Governments). 2016. 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy. April 2016. http://scagrtpscs.net/Pages/FINAL2016RTPSCS.aspx.