5.16 WILDFIRE

This section describes impacts of the Proposed Project on wildfire. The information in this section is based on architectural plans, including building elevations, section views, visual simulations, and review of aerial photographs, street views, and other available information.

5.16.1 Environmental Setting

5.16.1.1 REGULATORY BACKGROUND

California Department of Forestry and Fire Protection

The Department of Forestry and Fire Protection (CAL FIRE) is dedicated to the fire protection and stewardship of over 31 million acres of California's wildlands. The Office of the State Fire Marshal supports the CAL FIRE mission to protect life and property through fire prevention engineering programs, law and code enforcement, and education. The State Fire Marshal provides for fire prevention by enforcing fire-related laws in state-owned or -operated buildings, investigating arson fires in California, licensing those who inspect and service fire protection systems, approving fireworks as safe and sane for use in California, regulating the use of chemical flame retardants, evaluating building materials against fire safety standards, regulating hazardous liquid pipelines, and tracking incident statistics for local and state government emergency response agencies. Classification of a zone as moderate, high, or very high fire hazard is based on a combination of how a fire will behave and the probability of flames and embers threatening buildings. Each area of the map gets a score for flame length, embers, and the likelihood of the area burning. Scores are then averaged over the zone areas. Final zone class (moderate, high, and very high) is based on the average scores for the zone (CAL FIRE 2012).

The Board of Forestry and Fire Protection (Board) is a government-appointed body within the CAL FIRE. It is responsible for developing the general forest policy of the state, determining the guidance policies of the CAL FIRE, and representing the state's interest in federal forestland in California. Together, the Board and the CAL FIRE work to carry out the California Legislature's mandate to protect and enhance the state's unique forest and wildland resources.

The Board is charged with protecting all wildland forest resources in California that are not under federal jurisdiction. These resources include major commercial and non-commercial stands of timber, areas reserved for parks and recreation, woodlands, brush-range watersheds, and all private and state lands that contribute to California's forest resource wealth.

2018 Strategic Fire Plan for California

The Board has adopted these Strategic Fire Plans for California since the 1930s and periodically updates them to reflect current and anticipated needs of California's wildland. The Strategic Fire Plan is the state's road map for reducing the risk of wildfire through planning and prevention to reduce firefighting costs and property losses, increase firefighter safety, and contribute to ecosystem health. The Strategic Fire Plan is adopted to better respond to the changes of the environmental, social, and economic landscape of California's wildlands and to

provide the CAL FIRE with appropriate guidance for adequate statewide fire protection of state responsibility areas. The latest Strategic Fire Plan is dated August 22, 2018.

CAL FIRE implements and enforces the Board's policies and regulations. The 2018 Strategic Fire Plan reflects CAL FIRE's focus on (1) fire prevention and suppression activities to protect lives, property, and ecosystem services, and (2) natural resource management to maintain the state's forests as a resilient carbon sink to meet California's climate change goals and to serve as important habitat for adaptation and mitigation.

California Office of Emergency Services

The California Emergency Management Agency was incorporated into the Governor's Office on January 1, 2009, by Assembly Bill (AB) 38 (Nava), and merged the duties, powers, purposes, and responsibilities of the Governor's Office of Emergency Services (Cal OES) with those of the Governor's Office of Homeland Security. Cal OES is responsible for the coordination of overall state agency response to major disasters in support of local government. The agency is responsible for ensuring the state's readiness to respond to and recover from all hazards—natural, man-made, emergencies, and disasters—and for assisting local governments in their emergency preparedness, response, recovery, and hazard mitigation efforts.

The Cal OES Fire and Rescue Division coordinates statewide response of fire and rescue mutual aid resources to all types of emergencies, including hazardous materials. Operations Section under the Fire and Rescue Division coordinates the California Fire and Rescue Mutual Aid System, and coordinated response through the Mutual Aid System includes responses to major fires, earthquakes, tsunamis, hazardous materials and other disasters.

California Building Code

The California Building Standards Code (CBC), in Part 2 of Title 24 of the California Code of Regulations (CCR), identifies building design standards, including those for fire safety. The CBC is based on the International Building Code but has been amended for California conditions. The CBC is updated every three years, and the current 2016 CBC went into effect January 1, 2017. It is effective statewide, but a local jurisdiction may adopt more restrictive standards based on local conditions under specific amendment rules prescribed by the State Building Standards Commission. Commercial and residential buildings are plan-checked by local city and county building officials for compliance with the CBC. Typical fire safety requirements of the CBC include the installation of fire sprinklers in all new residential, high-rise, and hazardous materials buildings; the establishment of fire resistance standards for fire doors, building materials, and particular types of construction; and clearance of debris and vegetation within a prescribed distance from occupied structures in wildfire hazard areas.

California Fire Code

The California Fire Code (CFC), contained in Part 9 of CCR Title 24, incorporates by adoption the International Fire Code of the International Code Council, with California amendments. The CFC is updated every three years, and the current 2016 CFC went into effect January 1, 2017. It is effective statewide but a local jurisdiction may adopt more restrictive standards based on local conditions under specific amendment rules

prescribed by the State Building Standards Commission. The California Fire Code regulates building standards in the CBC, fire department access, fire protection systems and devices, fire and explosion hazards safety, hazardous materials storage and use, and standards for building inspection.

Very High Fire Hazard Severity Zone

Government Code 51175 to 51189 directs CAL FIRE to identify areas of very high fire hazard within local responsibility areas. Mapping of Very High Fire Hazard Severity Zones (VHFHSZ) is based on data and models of potential fuels over a 30- to 50-year time horizon and their associated expected fire behavior and expected burn probabilities in order to quantify the likelihood and nature of vegetation fire exposure (including firebrands) to buildings.

Local Responsibility Area VHFHSZ maps were initially developed in the mid-1990s and are now being updated based on improved science, mapping techniques, and data.

In late 2005, effective in 2008, the California Building Commission adopted CBC Chapter 7A, requiring new buildings in VHFHSZ to use ignition-resistant construction methods and materials. CBC Chapter 7A is applicable to building materials, systems, and/or assemblies used in the exterior design and construction of new buildings in a Wildland-Urban Interface Fire Area as defined in CBC Section 702A. Chapter 7A establishes minimum standards for the protection of life and property by increasing the ability of a building in any fire hazard severity zone within State Responsibility Areas or any wildland-urban interface fire area to resist the intrusion of flames or burning embers projected by a vegetation fire, and therefore contributes to a systematic reduction in conflagration losses.

VHFHSZs are delineated and used to identify property whose owners must comply with natural hazards disclosure requirements at time of property sale and a 100-foot defensible space clearance.

5.16.1.2 EXISTING CONDITIONS

A wildfire is an unplanned ignition in the wildland. Wildfires burn in many types of vegetation—forest, woodland, scrub (including chaparral, sage scrub, and desert scrub), and grassland. Many species of native California plants are adapted to fire (CLA FIRE 1999).

Wildfire Trends in Recent Decades

In the past decades, wildfire season in the West lengthened from an average of five months to an average of seven months, and the number of large wildfires (>1,000 acres) has increased from 140 to 250 per year. And more recently, wildfires now burn year-round in California (SBFFP and CAL FIRE 2018), and Orange County experiences destructive wildland fires almost every year. Wildland fires in the county, particularly in the fall, range from small, localized fires to fires covering thousands of acres (County of Orange and OCFA 2015). This is occurring as average annual temperatures in the West have risen by nearly two degrees Fahrenheit since the 1970s, and the winter snow pack has declined. Increases in acres burned can now be attributed, in part, to climate change (GEOS 2018).

Warming and drying due to human-caused climate change is estimated to have approximately doubled the total area burned by forest fire in the western United States between 1984 and 2015 compared to the total area expected to have burned without climate change (Abatzoglou and Williams 2016). Frequent wildfires reduce recovery of shrubs and trees—especially shrubs and trees that must produce seeds to regenerate after fire—and increase invasion of nonnative grasses (USGS 2012). Nonnative grasses are generally more flammable than the chaparral and sage scrub vegetation that is replaced; thus, such conversion exacerbates wildfire hazards (UC ANR 2009).

The latest large wildfire in Orange County, known as Canyon 2 Fire, occurred on October 9, 2017. Canyon 2 Fire was the largest Orange County wildland fire in nearly a decade, consuming 9,217 acres. The Canyon 2 Fire started in the Anaheim Hills area of the City of Anaheim near the SR-91 and Gypsum Canyon Road and the fire front spread rapidly into multiple jurisdictions. The evacuation area included south of SR-91 and east of Weir Canyon Road and Serrano Avenue; about 16,570 residents in the Cities of Anaheim, Orange, and Tustin, and County of Orange had to evacuate (Wikipedia 2019).

Project Site

The Project Site and its vicinity are within a VHFHSZ of the Local Responsibility Area (LRA). The Anaheim General Plan Safety Element, Figure S-5, *Fire Protection Areas*, also identifies the Project Site as in the VHFHSZ or Special Protection Area. Outside of the City boundaries to the south are State or Federal Responsibility Area VHFHSZ.

5.16.2 Thresholds of Significance

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if located in or near state responsibility areas or lands classified as very high fire hazard severity zones the project would:

W-1 Substantially impair an adopted emergency response plan or emergency evacuation plan.

W-2 Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire.

W-3 Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment.

W-4 Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes.

5.16.3 Plans, Programs, and Policies

Regulatory Requirements

RR W-1 The Proposed Project is required to comply with the following regulatory requirements:

- California Fire Code
- California Building Code

5.16.4 Environmental Impacts

5.16.4.1 IMPACT ANALYSIS

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

Impact 5.16-1: The Proposed Project would not substantially impair an adopted emergency response plan or emergency evacuation plan. [Threshold W-1]

See Section 5.8.4.1, *Hazards and Hazardous Materials*, *Impact Analysis*, Impact 5.8.1.

Level of Significance Before Mitigation: Potentially significant.

Impact 5.16-2: The Proposed Project would not expose Project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire due to slope, prevailing winds, and other factors exacerbating wildfire risks. [Threshold W-2]

The Project Site is already fully developed with neighborhood commercial uses and is bordered by residential uses to the north and east, and roadways to the west and south. Although the surrounding area slopes to the north, the Project Site is relatively flat. The Proposed Project would be constructed in compliance with the Fire Code and California Building Code, and would not expose project occupants to pollutant concentrations from wildfire or the uncontrolled spread of a wildfire by exacerbating wildfire risks. Impacts would be less than significant.

Level of Significance Before Mitigation: Less than significant.

Impact 5.16-3: Implementation of the Proposed Project would not require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment. [Threshold W-3]

The Project Site is in the VHFHSZ, but it is already developed with neighborhood commercial uses and served by roads, power lines, water sources, and other utilities. The Proposed Project would not require the installation or maintenance of associated infrastructure beyond already existing conditions. The Project Site is bordered by residential uses and roadways and is not directly adjacent to wildlands that require fuel breaks. Therefore,

implementation of the Proposed Project would not require installation of new or increased level of infrastructure maintenance that could exacerbate fire risk or result in temporary or ongoing impacts to the environment. Impacts would be less than significant.

Level of Significance Before Mitigation: Less than significant.

Impact 5.16-4: The Proposed Project would not expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes. [Threshold W-4]

The Project Site is already fully developed with neighborhood commercial uses and is bordered by residential uses to the north and east and roadways to the west and south. Although the surrounding area slopes to the north, the Project Site is relatively flat. According to the Geotechnical Exploration Report prepared for the Proposed Project, the Project Site is not located within an area that has been identified by the State of California as being potentially susceptible to seismically induced landslides and would not be adversely affected by the potential for landsliding associated with the 1993 Santiago Landslide. The Project Site is also not within a flooding hazard zone, and the Proposed Project would not expose people or structure to significant downstream flooding impacts as a result of runoff or drainage changes. The Project Site is approximately 92 percent impervious, and the Proposed Project would decrease the impervious surfaces to 84 percent (Hunsaker 2018). Implementation of the Proposed Project would not exacerbate the existing downslope or downstream flooding or landslides. Impacts would be less than significant.

Level of Significance Before Mitigation: Less than significant.

5.16.5 Cumulative Impacts

The Project Site is in the VHFHSZ in LRA, and the area for cumulative impacts are lands within Orange County that are categorized as high and very high FHSZ in LRA and State Responsibility Area (SRA), since wildfire can spread rapidly across city and county limits. Implementation of the Proposed Project, combined with other projects in Orange County, would not result in increased wildfire hazard risks. Implementation of the Proposed Project, combined with other development in Orange County would not result in increased exposure to wildfire risks. Urban development projects that are constructed in compliance with applicable CBC and CFC would ensure that appropriate measures, including fire prevention and fuel modification features are provided, so that urban development do not expose project occupants to increased and uncontrolled wildfire hazards. The Proposed Project is surrounded by urban development and served by existing infrastructure, therefore, its development would not contribute incrementally with other projects in Orange County to create environment that could exacerbate wildfire risks. Cumulative wildfire hazard impacts would be less than significant.

5.16.6 Level of Significance Before Mitigation

Upon implementation of regulatory requirements and standard conditions of approval, some impacts would be less than significant: 5.16-2, 5.16-3, and 5.16-4.

Without mitigation, these impacts would be **potentially significant**:

- **Impact 5.16-1** The Proposed Project could potentially impair an adopted emergency response plan or emergency evacuation plan during construction.

5.16.7 Mitigation Measures

Impact 5.16-1 (also see Impact 5.8-2)

HAZ-1 A site-specific construction worksite staging and traffic control plan shall be prepared and submitted to the City of Anaheim for review and approval prior to the start of any construction work. This plan shall include such elements as the location of any potential partial lane closures, hours during which lane closures (if any) would not be allowed, local traffic detours (if any), protective devices and traffic controls (such as barricades, cones, flag persons, lights, warning beacons, temporary traffic signals, warning signs). The Proposed Project will be required to comply with the City-approved plan measures.

5.16.8 Level of Significance After Mitigation

The mitigation measure would reduce potential impacts associated with wildfire hazards to a level that is less than significant. Therefore, no significant unavoidable adverse impacts relating to wildfire have been identified.

5.16.9 References

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