

This section discusses the environmental setting, existing conditions, regulatory context, and potential impacts of the proposed project relative to wildfire. The information and analysis in this section is based on the *Fire Protection Plan* prepared by FIREWISE 2000, Inc. (FIREWISE 2022; Appendix O). Additionally, information was taken from will serve letter provided by the Encinitas Fire Department (EFD) which will serve the project site (EFD 2022; Appendix N). Third-party technical reports have been peer reviewed by Michael Baker International and the City of Encinitas.

ENVIRONMENTAL SETTING

Climate

The project site is situated in an area classified as having a Mediterranean-type climate, subject to mild, wet winters and typically hot, dry summers. Multi-year droughts occur occasionally. Santa Ana winds typically occur in the late autumn months, when the moisture content of non-irrigated vegetation is at its lowest point. These winds originate from desert areas to the north/northeast and are therefore hot and dry. During the summer, winds typically flow on-shore from the south/southwest and are typically weaker winds with greater humidity. Winds originating from other directions, while potentially strong, typically contain more moisture.

On-site Land Uses and Vegetation

Portions of the southernmost parcel have been previously graded and/or cleared and currently support a mixture of grasses and weeds. Portions of this parcel where prior disturbance has not occurred generally support a variety of native plant species, namely coastal sage, buckwheat, prickly pear, tree tobacco, coyote brush, mission manzanita, chamise, annual grasses, and weeds. The off-site preserve area supports dense vegetation and is considered to have a high fuel load (FIREWISE 2022). This parcel also includes areas where the steepest on-site slopes occur, generally sloping uphill into the project site.

Surrounding Land Uses and Vegetation

Land uses in the vicinity of the project site include residences to the east and southeast and vegetated areas to the north, south, and west. Managed fuel treatment zones are visible in the residential neighborhoods east of the project site. Piraeus Street and Interstate 5 are located to the west of the site, both of which represent barriers to wildland fire progression. Plato Place forms the southern property boundary.

The project site is bordered by undeveloped, vegetated lands to the north and northwest, with existing residential uses to the east. Piraeus Street generally forms the western property boundary, with Interstate 5 farther to the west, and La Costa Avenue trends east–west to the north of the parcel. Such roadways may contribute to hindering the spread of wildfire.

REGULATORY FRAMEWORK

State

California Department of Forestry and Fire Protection (Cal Fire)

Cal Fire protects the people of California from fires, responds to emergencies, and protects and enhances forest, range, and watershed values providing social, economic, and environmental benefits to rural and urban citizens. In 2020, Cal Fire, in combination with the US Forest Service, reportedly responded to 8,648 fires, totaling approximately 4,304,379 acres; in 2021, these events included 8,835 fires totaling 2,568,948 acres (Cal Fire 2022).

The Office of the State Fire Marshal supports Cal Fire’s mission by focusing on fire prevention. It provides support through a wide variety of fire safety responsibilities including by regulating buildings in which people live, congregate, or are confined; by controlling substances and products which may, in and of themselves, or by their misuse, cause injuries, death, and destruction by fire; by providing statewide direction for fire prevention in wildland areas; by regulating hazardous liquid pipelines; by reviewing regulations and building standards; and by providing training and education in fire protection methods and responsibilities.

State Fire Regulations

Fire regulations for California are established in Sections 13000 et seq. of the California Health and Services Code and include regulations for structural standards (similar to those identified in the California Building Code); fire protection and public notification systems; fire protection devices such as extinguishers and smoke alarms; standards for high-rise structures and childcare facilities; and fire suppression training. The State Fire Marshal is responsible for enforcement of these established regulations and building standards for all state-owned buildings, state-occupied buildings, and state institutions within California.

2018 Strategic Fire Plan

The 2018 Strategic Fire Plan for California is a cooperative effort between the State Board of Forestry and Fire Protection and Cal Fire. The 2018 Plan reflects a 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. The Plan aims to achieve a natural environment that is more fire resilient; buildings and infrastructure that are more fire resistant; and a society that is more aware of and responsive to the benefits and threats of wildland fire, achieved through partnerships established at the local, state, federal, and tribal levels.

California Public Resources Code

Fire Hazard Severity Zones - Public Resources Code Sections 4201–4204

Public Resources Code (PRC) Sections 4201–4204 and Government Code Sections 51175–89 direct Cal Fire to map areas of significant fire hazards based on fuels, terrain, weather, and other relevant factors. These zones, referred to as fire hazard severity zones (FHSZ), define the application of various mitigation strategies to reduce risk associated with wildland fires. The off-site preserve area and the majority of the project site are designated as a very high fire hazard severity zone (VHFHSZ) within the Local Responsibility Area (LRA) for the City of Encinitas. The southern portion of the project site is designated as being within a non-VHFHSZ area within the LRA. The site is not identified as being within a state or federal responsibility area (Cal Fire n.d.).

California Fire Code

The 2019 California Fire Code (Title 24, Part 9 of the California Code of Regulations) establishes regulations to safeguard against the hazards of fire, explosion, or dangerous conditions in new and existing buildings, structures, and premises. The Fire Code also establishes requirements intended to provide safety for and assistance to firefighters and emergency responders during emergency operations. The provisions of the Fire Code apply to the construction, alteration, movement, enlargement, replacement, repair, equipment, use and occupancy, location, maintenance, removal, and demolition of every building or structure throughout California. The Fire Code includes regulations regarding fire-resistance-rated construction, fire protection systems such as alarm and sprinkler systems, fire services features such as fire apparatus access roads, means of egress, fire safety during construction and demolition, and wildland-urban interface areas.

Title 10, Fire Prevention, of the City of Encinitas Municipal Code establishes minimum requirements for fire prevention. As stated in Section 10.04.010 of the Municipal Code, the City has adopted the 2018 International Fire Code and 2019 California Fire Code as the Fire Code for the City of Encinitas. Such standards are implemented through the City's building permit process.

Senate Bill 1241

In 2012, Senate Bill 1241 added Section 66474.02 to Title 7 Division 2 of the California Government Code, commonly known as the Subdivision Map Act. The statute prohibits subdivision of parcels designated very high fire hazard, or that are in a State Responsibility Area, unless certain findings are made prior to approval of the tentative map. The statute requires that a city or county planning commission make three new findings regarding fire hazard safety before approving a subdivision proposal. The three findings are, in brief: (1) the design and location of the subdivision and its lots are consistent with defensible space regulations found in PRC Section 4290-91, (2) structural fire protection services will be available for the subdivision through a publicly funded entity, and (3) ingress and egress road standards for fire equipment are met per any applicable local ordinance and PRC Section 4290.

Regional**San Diego County Multi-Jurisdictional Hazard Mitigation Plan**

In 2010, San Diego County and 18 local jurisdictions, including the City of Encinitas, adopted the Multi-Jurisdictional Hazard Mitigation Plan (MHMP). The MHMP is a countywide plan that identifies risks and ways to minimize damage by natural and man-made disasters. It is a comprehensive document that serves many purposes, including creating a decision tool for management, promoting compliance with state and federal program requirements, enhancing local policies for hazard mitigation capability, and providing interjurisdictional coordination. The plan was last updated in 2018. Hazard mitigation goals, objectives, and related potential actions for wildfire (and other) hazards specific to the City of Encinitas are included in the MHMP as Section 5.8, City of Encinitas, of the document.

Local**City of Encinitas General Plan**

The City's General Plan includes background information, goals, and policies aimed at minimizing the loss of life, injury, and property damage as a result of natural disasters and man-made hazards, including fires. Relevant goals and policies are listed below.

Public Safety Element

GOAL 1: **Public health and safety will be considered in future Land Use Planning.**

Policy 1.8: New residential and commercial construction shall provide for smoke detector and fire sprinkler systems to reduce the impact of development on service levels.

- Policy 1.9: Adequate safety service levels shall be maintained and provided for by new development.
- Policy 1.10: The public safety program shall provide for a response plan that strives to reduce life and property losses through technology, education, training, facilities, and equipment.
- Policy 1.11: The public safety system shall provide standards and levels of service guidelines that assure a quality of life and protection of life and property from preventable losses.
- Policy 1.13: In areas identified as susceptible to brush or wildfire hazard, the City shall provide for construction standards to reduce structural susceptibility and increase protection. Brush clearance around structures for fire safety shall not exceed a 30-foot perimeter in areas of native or significant brush, and as provided by Resource Management Policy 10.1.
- GOAL 2: The City of Encinitas will make an effort to minimize potential hazards to public health, safety, and welfare and to prevent the loss of life and damage to health and property resulting from both natural and man-made phenomena.**
- Policy 2.1: The City will cooperate with and support in every way possible current federal, state, and county agencies responsible for the enforcement of health, safety, and environmental laws.
- Policy 2.2: Implement an emergency preparedness program (referenced by the State as a Multi-Hazard Function Plan) to ensure that emergency shelters and emergency evacuation and response routes are provided and clearly identified.
- Policy 2.4: Setbacks, easements, and accesses, necessary to assure that emergency services can function with available equipment, shall be required and maintained.
- Policy 2.5: Emergency equipment response routes and evacuation procedures shall be defined and provided for.

Resource Management Element

GOAL 10: **The City will preserve the integrity, function, productivity, and long term viability of environmentally sensitive habitats throughout the City, including kelp-beds, ocean recreational areas, coastal water, beaches, lagoons and their up-lands, riparian areas, coastal strand areas, coastal sage scrub and coastal mixed chaparral habitats.**

Policy 10.1: The City will minimize development impacts on coastal mixed chaparral and coastal sage scrub environmentally sensitive habitats by preserving within the inland bluff and hillside systems, all native vegetation on natural slopes of 25% grade and over other than manufactured slopes. A deviation from this policy may be permitted only upon a finding that strict application thereof would preclude any reasonable use of the property (one dwelling unit per lot). This policy shall not apply to construction of roads of the City's circulation element, except to the extent that adverse impacts on habitat should be minimized to the degree feasible. Encroachments for any purpose, including fire break brush clearance around structures, shall be limited as specified in Public Safety Policy 1.2. Brush Clearance, when allowed in an area of sensitive habitat or vegetation, shall be conducted by selective hand clearance.

GOAL 13: **Create a desirable, healthful, and comfortable environment for living while preserving Encinitas' unique natural resources by encouraging land use policies that will preserve the environment.**

Policy 13.1: The City shall plan for types and patterns of development which minimize water pollution, air pollution, fire hazard, soil erosion, silting, slide damage, flooding and severe hillside cutting and scarring.

City of Encinitas Municipal Code

Title 10, Fire Prevention, of the City's Municipal Code establishes minimum requirements for fire prevention. As stated in Section 10.04.010 of the Municipal Code, the City has adopted the 2018 International Fire Code and 2019 California Fire Code as the Fire Code for the City of Encinitas to regulate and govern the safeguarding of life and property from fire hazards and related events. Section 10.02.010, Fire Map, of the Municipal Code identifies those land areas within the City considered to be Very High Fire Hazard Severity Zones, and therefore, to be at greater risk for potential wildfire occurrence.

STANDARDS OF SIGNIFICANCE

Thresholds of Significance

In accordance with the California Environmental Quality Act (CEQA) Guidelines, the effects of a potential project are evaluated to determine whether they would result in a significant adverse impact on the environment. An EIR is required to focus on these effects and offer mitigation measures to reduce or avoid any significant impacts that are identified. The criteria used to determine the significance of impacts may vary, depending on the nature of the proposed project. According to Appendix G of the State CEQA Guidelines, the proposed project would have a significant impact related to wildfire if it is located in or near state responsibility areas or lands classified as very high fire hazard severity zones and would:

1. Substantially impair an adopted emergency response plan or emergency evacuation plan.
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 wildfire.
3. Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water resources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment.
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.

PROJECT IMPACTS AND MITIGATION

SUBSTANTIAL IMPAIRMENT OF AN ADOPTED EMERGENCY RESPONSE PLAN OR EMERGENCY EVACUATION PLAN

Impact 3.15-1	The project would not substantially impair an adopted emergency response plan or emergency evacuation plan. Impacts would be less than significant.
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The project site is located in a developed urban area surrounded by residential uses and open space. According to the Cal Fire Encinitas Fire Hazard Severity Zone Map, all of the off-site preserve area and the northern portion of the project site are identified as being in a VHFHSZ in an LRA, and therefore, the site is considered to have an increased potential for the occurrence of wildfire events (Cal Fire n.d.).

Emergency response and evacuation within Encinitas is the responsibility of the City of Encinitas Fire Department. The Disaster Preparedness Division of the Fire Department develops emergency

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procedures, activities, and disaster operation plans to be implemented in the event of a natural or man-made emergency (City of Encinitas n.d.-a). Additionally, the County of San Diego maintains the San Diego County Emergency Operations Plan, which was approved in 2018 (San Diego County 2018). The Emergency Operations Plan is used by agencies that respond to major emergencies and disasters, including those related to environmental health.

The project site is located within the response area of the Encinitas Fire Department. The closest fire station is Station #3, located at 801 Orpheus Avenue, approximately 1.5 miles to the south. Estimated response time (get away and travel) from the station to the site is approximately five minutes. Carlsbad Fire Station #4 is located approximately 1.8 miles north of the site at 6885 Batiquitos Drive in Carlsbad with a response time of approximately six minutes. Engines may respond from other stations farther away or from other incidents (FIREWISE 2022). The Encinitas Fire Department has indicated that it can adequately provide fire protection services to the project as proposed (City of Encinitas 2022; see Appendix N).

Emergency access to the project site would be provided from Piraeus Street and Plato Place. Improvements are proposed to provide adequate ingress/egress to/from the site and to ensure that activities associated with the project do not impede the free movement of emergency response vehicles, as well as other vehicles, along local roadways. The project site is not identified as being located along an established route for wildfire evacuation (City of Encinitas n.d.-b), and therefore, would not be anticipated to interfere with emergency response in this regard.

During construction, materials would be placed within the project boundaries adjacent to the current phase of construction to avoid any access conflicts in case of emergency evacuations. Project construction would not result in closures along local roadways that may have an effect on emergency response or evacuation plans in the vicinity of the site. It is anticipated that all local roadways would remain open during project construction and operation. Construction activities occurring within the project site would comply with all adopted conditions, including grading permit conditions regarding lay-down and fire access, and would not restrict access for emergency vehicles responding to incidents on-site or in the surrounding area. It is anticipated that all vehicles and construction equipment would be staged on-site, off of adjacent public roadways, and would therefore not block any established emergency access routes.

During project operations, existing off-site roadways would be adequate to serve the development for purposes of emergency evacuation in the event of a wildfire. Further, the project would not interfere with the ability of the San Diego County Sheriff's Department, which serves the project site, to safely evacuate the area in the event of an emergency (see Section 3.7, Hazards and Hazardous Materials; Section 3.11, Public Services and Recreation; and Section 3.12, Transportation). The project has been designed in conformance with City Fire Department access and roadway design requirements related to fire prevention and is subject to approval by the

City's Planning Division to ensure that public safety and adequate vehicular circulation can be maintained over the long term.

Therefore, the project would not substantially impair an adopted emergency response plan or emergency evacuation plan. Impacts would be **less than significant**.

Mitigation Measures: None required.

Level of Significance: Less than significant.

EXACERBATE WILDFIRE RISKS DUE TO SLOPE, PREVAILING WINDS, AND OTHER FACTORS

Impact 3.15-2	The project would not exacerbate wildfire risks due to slope, prevailing winds, and other factors and therefore would not expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of wildfire. Impacts would be less than significant with mitigation incorporated.
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As stated, the proposed off-site preserve area and the northern portion of the project site are designated as a VHFHSZ within the LRA for the City of Encinitas. The southern portion of the project site is designated as being within a non-VHFHSZ area within the LRA. The site is not identified as being within a state or federal responsibility area (Cal Fire n.d.).

On-site elevations range from approximately 100 feet to 170 feet above mean sea level. The project site is located on uneven terrain with slopes ranging between 2 percent and 40 percent. A steep slope is in the vicinity of where the proposed development area abuts the proposed off-site preserve area. A significant portion of the site was previously graded and a large area that is nearly level is present (FIREWISE 2022).

The climate within the project area is characterized as Mediterranean with generally mild, wet (12-14 inches per year) winters, with the bulk of the annual precipitation falling between December and March. Long, hot, and very dry summer seasons frequently occur with occasional multi-year droughts. Off-shore winds from the north/northeast, typically referred to as a Santa Ana wind, have the potential to increase fire risk in the region. Such winds are typically strong (greater than 40 miles per hour), hot, dry winds with very low (less than 15 percent) relative humidity. Such winds originate over the dry desert land and may occur at any time of the year; however, they are more typical during the months of September through November, which is also when non-irrigated vegetation has its lowest moisture content (FIREWISE 2022).

Prevailing summer wind patterns are generally from the south or southwest and normally of a lower velocity (5-15 miles per hour with occasional gusts to 30 miles per hour) and are associated with higher relative humidity readings (greater than 30 percent and frequently more than 60

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percent) due to a moist air on-shore flow from the ocean. All other wind directions (from the northwest, south, and west) may be occasionally strong and gusty. However, such winds are associated with cooler moist air and higher relative humidity (greater than 40 percent). Such winds are considered a serious wildland fire weather condition when wind speeds exceed 20 miles per hour (FIREWISE 2022).

The off-site preserve area (to the north) would remain as undeveloped land. A concrete masonry block retaining wall would be constructed along the northern boundary of the proposed development area, which would further discourage potential intrusion into this open space preserve. No trails into the adjacent open space are proposed and the appropriate signage would be installed to prohibit access, thus limiting the potential for human intrusion and reducing potential sources of fire ignition.

All interior vegetation within the proposed development area would be removed with site grading. Existing vegetation on the off-site preserve area would remain, as no development would occur. Chaparral located to the north of the proposed development area consists of heavy fuels that are taller and denser than the coastal sage, grass, and weeds present to the west and south of the project site. A wildland fire burning in this area under a Santa Ana wind conditions may pose a threat to the planned on-site residential uses. However, it was determined that brush clearing proposed between the northernmost on-site structures and the natural area to the north, combined with implementation of fire protection features as recommended in the Fire Protection Plan, would substantially reduce the potential risk of wildfire occurrence in this area (FIREWISE 2022).

Wildfires occurring in the project vicinity could also result in embers being carried for long distances (one mile or more) by fire drafts or strong winds. Wind and/or topography driven wildfires, burning under a northeastern (Santa Ana) wind pattern, would represent a wildland fire hazard to all proposed on-site structures due to falling embers. Additionally, all wildland plants and grasses would pose a fire hazard annually as the plants lose fuel moisture during hot and dry summer seasons. However, as determined in the Fire Protection Plan, the proposed fuel modification treatments; irrigated landscaping; use of ignition-resistant building materials; and additional required construction features recommended in the Fire Protection Plan would mitigate the potential loss of any structures due to direct fire impingement or radiant heat around the perimeter of the residential uses to a level of less than significant (FIREWISE 2022).

Proposed structures would be required to meet applicable wildland/interface standards to the satisfaction of the Encinitas Fire Department and would be designed and constructed with ignition-resistant building materials. All construction methods and ignition-resistive building materials would meet the current International Wildland-Urban Interface Code and amendments; City of Encinitas Ordinances 2019-27 and 2021-08; and the California Fire and

Building Codes. Additionally, all on-site structures, including garages, would be required to incorporate automatic fire sprinkler systems and all accessory structures such as decks, balconies, patios, covers, gazebos, and fences would be constructed from non-combustible or ignition-resistant materials.

During occupancy and operations, the project may introduce potential ignition sources including vehicles, gas- or electric-powered small hand tools (i.e., for maintenance), and standard substances used for routine household cleaning and landscaping maintenance. Such conditions are not anticipated to substantially exacerbate wildfire risks or increase the risk of exposure of residents to associated pollutant concentrations.

The project would be constructed in compliance with access and design requirements of the City of Encinitas Fire Department (conditions of approval) and recommendations of the Fire Protection Plan, and would be subject to payment of public safety services impact fees (refer to Section 3.11, Public Services and Recreation) to ensure that risks from wildfire are minimized.

As discussed above, the project has the potential to exacerbate wildfire risks or otherwise expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire. Impacts are therefore considered to be potentially significant. To ensure the potential for fire threat and/or spread is minimized to the extent feasible, mitigation measures **WF-1** and **WF-2** would be implemented to require incorporation of the design and management measures identified in the Fire Protection Plan. Project impacts relative to wildfire would be reduced to **less than significant with mitigation incorporated**.

Mitigation Measures:

WF-1 Fire Protection Plan

Prior to occupancy, the following measures identified in the Fire Protection Plan (Firewise2000, LLC 2022) shall be implemented to reduce potential fire threat and provide heightened fire protection.

1. A fuel modification zone shall be provided to the north of the proposed retaining wall located along the northern boundary of the development area, extending 100 feet from the north side of the wall. This fuel modification zone shall include 50 feet of irrigated Zones 1A and 1B adjacent to each structure followed by 50 feet of non-irrigated thinning Zone 2. The homeowners association shall be required to oversee and perform the described fuel treatments as described in the Fire Protection Plan on an ongoing basis.

2. Prior to occupancy, the homeowners association shall be approved and in place to ensure ongoing fire safety.
3. All newly constructed structures shall be built to ignition resistant building requirements, including the installation of automatic interior fire sprinkler systems.
4. All vents used in the proposed on-site structures shall be “Brandguard,” “O’Hagin Fire & Ice Line – Flame and Ember Resistant,” or equivalent type vents.
5. All operable windows shall be provided with metal (not vinyl) mesh bug screens over the operable opening to prevent embers from entering the structure during high wind conditions when windows may be inadvertently left open.
6. As mitigation for driveways that exceed 150 feet in length, the following additional building measures shall be required of the structures shown in grey on the Fire Protection Plan Map (Appendix F of the Fire Protection Plan; Firewise2000, LLC 2022):
 - a. Exterior walls facing the driveway shall have two hour rated walls.
 - b. Interior fire sprinkler shall be extended to the attic space including the areas over bathrooms and closets.

WF-2 Construction Fire Protection Plan

1. Prior to the commencement of project construction, the following measures shall be completed:
 - a. During construction, at least 50 feet of clearance around the structures shall be kept free of all flammable vegetation as an interim fuel modification zone, with exception of where habitat protection is required.
 - b. In reference to mitigation measure BIO-8, a Limited Building Zone easement shall be granted to the City of Encinitas.

Level of Significance: Less than significant with mitigation incorporated.

EXACERBATE FIRE RISKS DUE TO REQUIRED INSTALLATION OR MAINTENANCE OF ASSOCIATED INFRASTRUCTURE

Impact 3.15-3	The 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. Impacts would be less than significant.
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Primary access to the site would be provided from a proposed driveway off of Piraeus Street; emergency access would occur from the same access points. No new off-site roadways are proposed to be constructed that would exacerbate fire risk or result in environmental impacts. Existing off-site roadways in the project vicinity (e.g., Piraeus Street, La Costa Avenue, and Plato Place) would remain and would continue to serve as potential breaks that may help to reduce the spread of wildfire during such an event.

Brush management zones would be provided with the project consistent with the measures recommended in the site-specific Fire Protection Plan prepared by FIREWISE and as required by the Encinitas Fire Department; refer to Figures 3.15-1A and -1B, Brush Management Plan. Zone 1A (Irrigated Zone) would be maintained by the homeowners association (HOA) and would include an irrigated landscaped zone typically 50 feet in width from each proposed structure, with combustible building materials prohibited within the zone. Zone 1B (Irrigated Zone) would include an irrigated landscaped zone up to 50 feet in width, located on lands that are publicly owned but maintained by the HOA (including manufactured slopes located more than 50 feet from a structure). Zone 2 (Thinning Zone) would be HOA maintained and begin on the north side of the proposed retaining wall located to the north of the northernmost on-site buildings and extending northward for a distance of 80 feet from the front of each building face. This area may include single or small clusters of trimmed fire-resistant native plants and grasses and trimmed native trees. Roadside fuel treatment zones (HOA maintained) are also proposed on the downhill and uphill sides of roadways and driveways and would be cleared of all combustible vegetation and landscaped to Zone 1A criteria. Such brush management measures, when combined with the required construction features described in the Fire Protection Plan, were determined to adequately mitigate any radiant heat or direct flame impingement under a worst-case weather and fuels scenario. As the proposed brush management zones are intended to reduce the potential for wildfire risk and slow wildfire spread, such improvements would not exacerbate fire risk or result in temporary or ongoing impacts to the environment; refer also to Section 3.3, Biological Resources, for evaluation of potential effects of vegetation removal on-site.

San Diego Gas & Electric currently provides electrical service to the project vicinity. Although the project applicant is requesting elimination of the City's requirement to underground existing overhead utilities pursuant to Encinitas Municipal Code Section 23.36.120 (in order to financially

enable the project to instead provide for deed-restricted affordable housing on-site), allowing this existing utility infrastructure to remain aboveground would not exacerbate potential wildfire risk. With City approval, such utility poles and electrical lines would simply remain in their current state and location with project implementation.

Public water service for the project would be provided by the San Dieguito Water District. Water and sewer utility improvements would include connection to the existing public infrastructure systems, and the project has been designed to achieve the minimum fire flow requirement of 2,500 gallons per minute at 20 pounds per square inch residual pressure for a 2-hour duration (FIREWISE 2022). No improvements are proposed to provide an emergency water source, other than installation of two new fire hydrants located within the interior of the site along the east side of the main driveway. None of the infrastructure improvements proposed would exacerbate wildfire risk, and all potential temporary or ongoing effects on the environment resulting with such improvements have been evaluated in Sections 3.1 to 3.14 of this EIR.

The project would not require the installation or maintenance of associated infrastructure that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment. Impacts would be **less than significant**.

Mitigation Measures: None required.

Level of Significance: Less than significant.

EXPOSURE TO SIGNIFICANT RISKS

Impact 3.15-4	The 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. Impacts would be less than significant.
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Topography is relatively flat within the area proposed for development, with slopes on the western and northern edges. A steep slope is present in the vicinity of where the proposed development area abuts the proposed off-site preserve area.

In conformance with the City of Encinitas's stormwater design standards and the multiple separate storm sewer system permit, all runoff generated on-site (from the development area) would be conveyed to a proposed biofiltration basin adjacent to Plato Place. The biofiltration basin would be sized for pollution and flow control purposes. Flow rates generated on-site would be controlled via a low-flow orifice consistent with hydromodification program requirements as outlined in the City of Encinitas Best Management Practices Design Manual (City of Encinitas 2016). In larger storm events, runoff not filtered through the engineered soil would be conveyed

via an overflow outlet structure consisting of a 3-foot by 3-foot grate located on top of the outlet structure. Runoff conveyed via the outlet structure would bypass the treatment and flow control structure and would be conveyed directly to the proposed storm drain system perpendicular to Piraeus Street.

The project has been designed to retain and treat stormwater runoff on-site and would not result in an increase in the rate or quantity of runoff post-construction as compared to existing drainage conditions; refer to Section 3.8, Hydrology and Water Quality. Therefore, the project would not contribute to the exposure of people or structures to a significant risk of downstream flooding as a result of runoff or drainage changes.

A documented landslide occurred on the project site in 2001 that closed adjacent Piraeus Street. The landslide area extends from Piraeus Street at its toe roughly 140 feet into the property to the east. The City of Encinitas removed portions of the slide and installed two groundwater observation wells and two horizontal drains. The excavated soil was placed within a depression on the southern portion of the property. The western property margin currently contains the landslide remnant with an upper scarp area that has down dropped approximately 5 to 10 feet (Geocon 2022).

The landslide debris is unsuitable to be left in place and complete removal would be required during remedial grading operations. Removal of the slope would result in a buttress fill which would mitigate potential future instabilities in this area of the site (Geocon 2022). Additionally, with conformance during grading and construction to the California Building Code, local building codes, and engineering recommendations identified in the geotechnical report, the project would not expose people or structures to a significant risk from landslides. Refer also to Section 3.6, Geology and Soils.

Based on the above conditions, the 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. Impacts would be **less than significant**.

Mitigation Measures: None required.

Level of Significance: Less than significant.

CUMULATIVE IMPACTS

Impact 3.15-5	The project would not result in cumulative impacts. Impacts would be less than cumulatively considerable.
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Geographic Scope

Projects that would have the potential to be considered in a cumulative context with the project's incremental contribution to a potential cumulative impact relative to wildfire are identified in Table 3.0-1 and Figure 3.0-1 in Section 3.0, Environmental Analysis, of this EIR. The inclusion of all projects in Table 3.0-1 was based on the location of these projects in the general vicinity of the project site and the possibility that these projects, in combination with the proposed project, may have the potential to contribute to increased risk or occurrence of wildfire. Additionally, to be conservative, the cumulative impact analysis includes 2019 Housing Element Update sites to the extent they may contribute to certain issue-specific cumulative effects; refer to Table 3.0-2.

Potential Cumulative Impacts**Substantial Impairment of an Adopted Emergency Response Plan or Emergency Evacuation Plan**

Existing and future development in the cumulative study area would be subject to a regional emergency response and/or evacuation in the event of a wildfire or other significant event (e.g., a major earthquake). The County's Office of Emergency Services oversees implementation of the County's Multi-Jurisdictional Hazard Mitigation Plan, which outlines mechanisms to ensure proper protocols are followed in the event of a regional emergency. All existing and future development in the cumulative study area would be subject to the measures in the plan, which are intended to ensure that emergency access routes are maintained and proper evacuation procedures implemented, thereby reducing potential risk for public endangerment or impairment of evacuation in the event of an emergency. Prior to approval, future development projects would be subject to review to ensure that they do not interfere or conflict with implementation of the plan.

In the event of a wildfire, various neighborhoods or communities within the cumulative study area may be evacuated in a similar time frame as the proposed project, depending on the type of wildfire emergency. As such, the proposed project has been evaluated for its potential to contribute to impairment of evacuation of the subject site and/or surrounding lands. It is anticipated that, due to the limited size of the subject property and proximity to local roadways, as well as Interstate 5, that with a wildfire approaching from any direction, there would be adequate time for a full evacuation of the site and surrounding area. Further, the project site is not located along any designated evacuation routes and is therefore not anticipated to interfere

with such operations in the event of an emergency. The proposed project would generate an estimated 371 new residents in the area and, under a worst case scenario with all residents leaving the site at one time, would not contribute a substantial number of vehicles to area roadways during an emergency evacuation.

All cumulative projects within the study area would be required to demonstrate that no adverse effects on emergency response or evacuation would occur with development as proposed. Further, all such development would be required to conform with applicable emergency response plans and requirements for the area to ensure that public safety is maintained over the long term.

The project is therefore not anticipated to contribute to a cumulative impact by impairing implementation of or physically interfering with an adopted emergency response plan or emergency evacuation plan. When considered with other cumulative projects in the study area, a less than significant cumulative impact would occur. Impacts would be **less than cumulatively considerable** in this regard.

Exacerbate Wildfire Risks due to Slope, Prevailing Winds, and Other Factors

Wildfire has the ability to rapidly spread from one community to another if uncontained, thereby not only affecting localized areas but having the potential to cause damage on a regional scale. Winds can broaden the reach of wildfire effects by carrying embers that may ignite structures or vegetation located at a distance from the core of a fire, or by dispersing smoke and other hazardous contaminants through the air, thus reducing air quality and resulting in adverse effects on public health.

All future development within the cumulative study area would be evaluated for potential fire risk and occurrence, with particular consideration of whether a site may be located within an area designated as a VHFHSZ. Such evaluation would consider existing wind patterns and on-site topography and slopes, vegetation, and other factors to determine whether specific design measures, consistent with state and local regulations, should be identified and implemented to reduce potential wildfire risk to the extent feasible.

As determined in the Fire Protection Plan, the proposed fuel modification treatments; irrigated landscaping; use of ignition-resistant building materials; and additional required construction features recommended in the Fire Protection Plan would reduce the potential loss of any structures due to direct fire impingement or radiant heat around the perimeter of the proposed residential uses to a level of less than significant (FIREWISE 2022). As discussed above, the project has the potential to exacerbate wildfire risks or otherwise expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire; impacts are considered

3.15 Wildfire

to be potentially significant. To ensure the potential for fire threat and/or spread is minimized to the extent feasible, mitigation measures WF-1 and WF-2 would be implemented to require incorporation of the design and management measures identified in the Fire Protection Plan. Project impacts relative to wildfire would be reduced to less than significant with mitigation incorporated.

The project, along with other cumulative projects, would be required to meet applicable wildland/interface standards to the satisfaction of the Encinitas Fire Department and would be designed and constructed with ignition-resistant building materials, as appropriate. All construction methods and ignition-resistive building materials would meet the current International Wildland-Urban Interface Code and amendments; City of Encinitas Ordinances 2019-27 and 2021-08; and the California Fire and Building Codes, as applicable.

With incorporation of mitigation measures WF-1 and WF-2, the potential for the project to contribute to a significant cumulative impact due to slope, prevailing winds, and other factors that would exacerbate wildfire risk or expose project occupants to pollutant concentrations from wildfire or the uncontrolled spread of wildfire would be reduced to less than significant. Impacts would be **less than cumulatively considerable** in this regard.

Exacerbate Fire Risks Due to Required Installation or Maintenance of Associated Infrastructure

Although wildland fires occurring in the area could combine on a cumulative level, all future development would be subject to applicable state and local requirements aimed at minimizing the risk and occurrence of wildfire events through management techniques (e.g., brush clearing), building design and materials, and/or operational restrictions, as appropriate. Additionally, existing development in the San Diego region is subject to local requirements for brush management on individually owned parcels to reduce the potential for ignition and spread of wildfire in such an event. Such measures would help to reduce the potential risk and effects of wildland fire on both a cumulative and regional level.

Development of the project site would convert the subject property from undeveloped (or partially developed) land with readily ignited fuels (e.g., vegetated lands) to ignition-resistant structures and landscape, in combination with fuel modification zones that would serve as preventive buffers for the spread of wildfire onto adjacent lands (or onto the project site). These measures would provide greater fire protection for area residents who do not presently have fire-resistant features on their homes (e.g., tile roofing). Similarly, future development in the study area that converts undeveloped, vegetated lands into developed lands would further contribute to a reduction in the type of fuels that are more prone to the occurrence of wildfire.

The project and other projects within the cumulative study area would be subject to review by the City, including the Encinitas Fire Department, to ensure that adequate utilities and services can be provided relative to reducing the risk or spread of wildfire and for conformance with applicable design and operational regulations. All future development would be required to meet minimum fire flow requirements and pay impact fees to reduce potential demands on fire protection services. Further, as with the proposed project, all cumulative projects would be subject to discretionary review to evaluate potential temporary or ongoing effects on the environment resulting with installation or maintenance of associated infrastructure. Mitigation measures would be identified as appropriate to reduce such impacts to the extent feasible.

For the reasons above, the project is not considered to contribute to a significant cumulative impact due to the installation or maintenance of associated infrastructure that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment. Impacts would be **less than cumulatively considerable**.

Expose People or Structures to Significant Risk

As with the proposed project, all future development projects within the cumulative study area would be subject to discretionary review for conformance with the City of Encinitas's stormwater design standards and the multiple separate storm sewer system permit. Measures would be identified, as appropriate, to ensure that stormwater runoff can be adequately accommodated and that downstream flooding does not occur as a result of runoff or drainage changes.

Individual sites would be evaluated for topographical conditions (e.g., slope stability) and for the potential for landslide occurrence as part of the discretionary process. As with the proposed project, conformance with state and local engineering design standards and regulations, including the California Building Code, would be required to ensure that potential geologic risks are minimized through construction techniques and that the potential for exposure of people or structures to a significant risk from landslides is reduced to the extent feasible.

For the reasons above, the project would not contribute to a significant impact relative to exposure of people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire instability, or drainage changes. Impacts would be **less than cumulatively considerable**.





Mitigation Measures: Implement mitigation measures **WF-1** and **WF-2**.

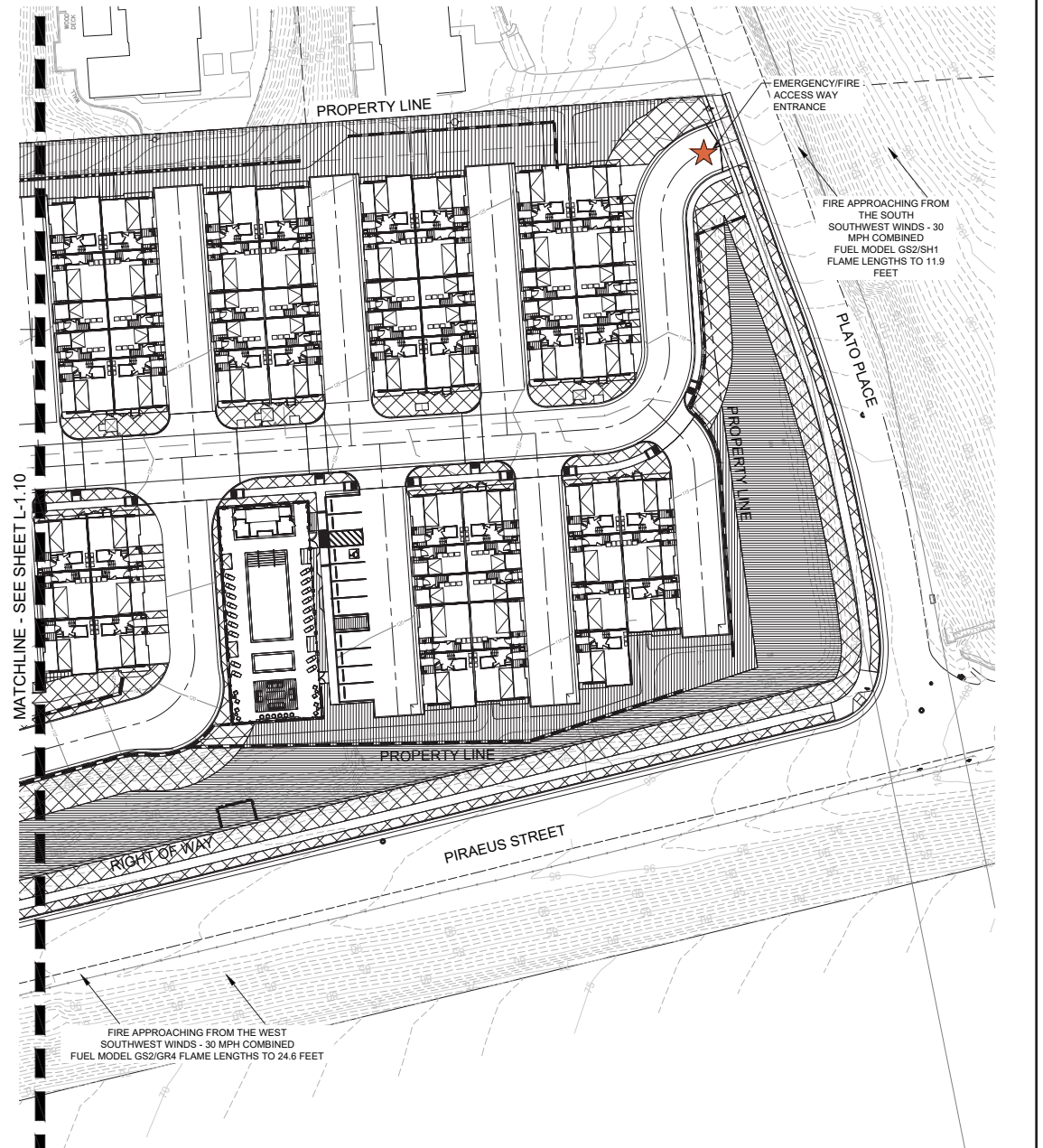
Level of Significance: Less than cumulatively considerable.

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FIRE PROTECTION LEGEND

-  IRRIGATED ZONE 1A (HOA MAINTAINED)
AN IRRIGATED LANDSCAPE ZONE TYPICALLY 50 FEET IN WIDTH FROM EACH STRUCTURE. ONLY PLANTS FROM THE APPROVED CITY OF ENCINITAS PLANT LIST ARE TO BE INSTALLED AND MAINTAINED. ALL COMBUSTIBLE BUILDING MATERIALS INCLUDING COMBUSTIBLE DECKS, PATIO COVERS AND GAZEBOES ARE PROHIBITED IN THIS ZONE. SEE FIRE PROTECTION PLAN FOR DETAILS.
-  IRRIGATED ZONE 1B (HOA MAINTAINED)
AN IRRIGATED LANDSCAPED ZONE UP TO 50 FEET IN WIDTH THAT IS LOCATED ON THE LANDS THAT ARE PUBLICLY OWNED BUT MAINTAINED BY THE PIRAEUS DEVELOPMENT HOA. IT ALSO INCLUDES MANUFACTURED SLOPES LOCATED MORE THAN 50 FEET FROM A STRUCTURE. SEE ZONE 1A ABOVE FOR FURTHER DETAILS.
-  THINNING ZONE 2 (HOA MAINTAINED)
AN AREA THAT BEGINS ON THE NORTH SIDE OF THE RETAINING WALL NORTH OF THE NORTHERN BUILDINGS THAT EXTENDS NORTHWARD FOR A DISTANCE OF 100 FEET FROM THE FRONT OF EACH BUILDING FACE. THIS AREA MAY INCLUDE SINGLE OR SMALL CLUSTERS OF TRIMMED FIRE RESISTANCE NATIVE PLANTS UP TO 18 INCHES IN HEIGHT AND TRIMMED NATIVE TREES LIMBED UP TO 6 FEET FROM THE GROUND WHERE 50% OF THE VEGETATION IS REMOVED. SELECTED NATIVE PLANT CLUSTERS MUST BE SEPARATED BY AT LEAST 1 1/2 TIMES MATURE HEIGHT OF THE RETAINED PLANTS. THE GRASSES SHALL BE WEED WHIPPED AND MAINTAINED AT LEAST ANNUALLY TO 4" OR LESS IN STUBBLE HEIGHT ONCE THEY HAVE CURED. SEE FIRE PROTECTION PLAN FOR ADDITIONAL DETAILS.
-  ROADSIDE FUEL TREATMENT (HOA MAINTAINED)
A MINIMUM OF 20 FEET IN WIDTH ON THE DOWNHILL SIDE AND 20 FEET IN WIDTH ON THE UPHILL OF THE ROADWAY OR DRIVEWAY PRISM THAT IS CLEAR OF ALL COMBUSTIBLE VEGETATION AND LANDSCAPED TO ZONE 1A CRITERIA. THE LAND UPON WHICH THIS ZONE EXISTS MAY BE PRIVATELY OR PUBLICLY OWNED.



PIRAEUS POINT
ENVIRONMENTAL IMPACT REPORT

Brush Management Plan

Figure 3.15-1B

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