3.9 HAZARDOUS MATERIALS, WILDFIRE, AND OTHER HAZARDS

This section describes the potential impacts of the proposed Phillip Road Project related to hazardous materials. This section also evaluates the effects of the project on wildfire and wildfire-related risks and other hazards, including proximity to airports and potential obstruction of an emergency response plan. Service levels by fire personnel and other emergency responders are addressed in Section 3.10, "Public Services and Recreation." The evaluation provided in this section is based on review of available documents, the Phase I environmental site assessment (ESA), including a data search of various agency lists, and the Limited Phase II Site Investigation completed for the project site by ATC Group Services (ATC) (ATC 2021a, 2021b). The ATC reports are provided in Appendix E.

For purposes of this section, the term "hazardous materials" refers to both hazardous substances and hazardous wastes. A "hazardous material" is defined in the Code of Federal Regulations (CFR) as "a substance or material that … is capable of posing an unreasonable risk to health, safety, and property when transported in commerce" (49 CFR 171.8). California Health and Safety Code Section 25501 defines a hazardous material as follows:

> "Hazardous material" means any material that, because of its quantity, concentration, physical, or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment if released into the workplace or the environment. "Hazardous materials" include, but are not limited to, hazardous substances, hazardous waste, and any material which a handler or the administering agency has a reasonable basis for believing that it would be injurious to the health and safety of persons or harmful to the environment if released into the workplace or the environment.

"Hazardous wastes" are defined in California Health and Safety Code Section 25141(b) as wastes that:

> … because of their quantity, concentration, or physical, chemical, or infectious characteristics, [may either] cause, or significantly contribute to an increase in mortality or an increase in serious illness [or] pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, disposed of, or otherwise managed.

Several comment letters regarding hazards and hazardous materials and wildfire were received in response to the notice of preparation (see Appendix A). The California Department of Toxic Substances Control (DTSC) recommended that the City address the potential presence of contaminants of concern (COCs) and pesticides and organochlorine pesticides (OCPs) on the project site, as well as perform soil sampling and testing for imported soil and fill material to assess whether COCs meet DTSC's screening levels. These comments are addressed in this section. Additionally, one commenter requested that the City restrict on-site uses to biosafety level 1 or 2. This comment is addressed in this section and in Chapter 2, "Project Description," which states that proposed land uses could include laboratories, but these would not exceed biosafety level 2 and that biosafety level 3 and 4 uses would not be permitted.

3.9.1 Regulatory Setting

FEDERAL

Management of Hazardous Materials

Various federal laws address the proper handling, use, storage, and disposal of hazardous materials, as well as requiring measures to prevent or mitigate injury to health or the environment if such materials are accidentally released. The US Environmental Protection Agency (EPA) is the agency primarily responsible for enforcement and implementation of federal laws and regulations pertaining to hazardous materials. Applicable federal regulations pertaining to hazardous materials are primarily contained in CFR Titles 29, 40, and 49. Hazardous materials, as defined in the Code of Federal Regulations, are listed in 49 CFR 172.101. Management of hazardous materials is governed by the following laws.

- The Toxic Substances Control Act of 1976 (15 US Code [USC] Section 2601 et seq.) regulates the manufacturing, inventory, and disposition of industrial chemicals, including hazardous materials. Section 403 of the Toxic Substances Control Act establishes standards for lead-based paint hazards in paint, dust, and soil.
- The Resource Conservation and Recovery Act of 1976 (42 USC 6901 et seq.) is the law under which EPA regulates hazardous waste from the time the waste is generated until its final disposal ("cradle to grave").
- The Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (also called the Superfund Act or CERCLA) (42 USC 9601 et seq.) gives EPA authority to seek out parties responsible for releases of hazardous substances and ensure their cooperation in site remediation.
- The Superfund Amendments and Reauthorization Act of 1986 (Public Law 99-499; USC Title 42, Chapter 116), also known as SARA Title III or the Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA), imposes hazardous materials planning requirements to help protect local communities in the event of accidental release.
- The Spill Prevention, Control, and Countermeasure (SPCC) rule includes requirements for oil spill prevention, preparedness, and response to prevent oil discharges to navigable waters and adjoining shorelines. The rule requires specific facilities to prepare, amend, and implement SPCC Plans. The SPCC rule is part of the Oil Pollution Prevention regulation, which also includes the Facility Response Plan rule.

Transport of Hazardous Materials

The US Department of Transportation regulates transport of hazardous materials between states and is responsible for protecting the public from dangers associated with such transport. The federal hazardous materials transportation law, 49 USC 5101 et seq. (formerly the Hazardous Materials Transportation Act 49 USC 1801 et seq.) is the basic statute regulating transport of hazardous materials in the United States. Hazardous materials transport regulations are enforced by the Federal Highway Administration, the US Coast Guard, the Federal Railroad Administration, and the Federal Aviation Administration.

Worker Safety

The federal Occupational Safety and Health Administration (OSHA) is the agency responsible for assuring worker safety in the handling and use of chemicals identified in the Occupational Safety and Health Act of 1970 (Public Law 91-596, 9 USC 651 et seq.). OSHA has adopted numerous regulations pertaining to worker safety, contained in CFR Title 29. These regulations set standards for safe workplaces and work practices, including standards relating to the handling of hazardous materials and those required for excavation and trenching.

Laboratory Biosafety Levels

Biosafety in Microbiological and Biomedical Laboratories is a foundational guidance document jointly published by the Centers for Disease Control and Prevention (CDC) and the National Institutes of Health (NIH) that outlines best practices for safely handling biological agents in laboratory settings (CDC and NIH 2020). First released in 1984 and now in its sixth edition, the *Biosafety in Microbiological and Biomedical Laboratories* is not a regulatory document, but it serves as an authoritative reference for biosafety protocols across the US. Its core principle is protocol-driven risk assessment, recognizing that no single set of rules can cover all laboratory scenarios. The document defines the four biosafety levels (BSL-1 to BSL-4), provides agent summary statements, and includes updated appendices on topics such as inactivation verification, laboratory sustainability, and large-scale biosafety.

The four primary biosafety levels for laboratories consist of combinations of facility design features and safety equipment (primary and secondary barriers), facility practices and procedures, and personal protective equipment. The four biosafety levels are summarized below (CDC and NIH 2020: 68-69).

Biosafety Level 1: Basic Level

- Biological Agents: Not known to consistently cause disease in healthy adults. These agents are considered to have a low risk for people with normal immune systems (e.g., *E. coli* non-pathogenic strains).
- Standard Practices: Standard microbiological practices.

- Safety Equipment: No special equipment; work is done on open bench tops.
- Facility Requirements: Basic lab with a sink and door.

Biosafety Level 2: Moderate Risk

- Biological Agents: Pose moderate hazards. These are agents that can cause human disease, but the diseases are typically not serious and are usually treatable or preventable (e.g., *Staphylococcus aureus*, *Salmonella*).
- Standard Practices: Limited access, biohazard warning signs, sharps precautions.
- Safety Equipment: Biosafety cabinets (Class I or II) for procedures that may cause aerosols.
- Facility Requirements: Autoclave available, eyewash station, self-closing doors.

Biosafety Level 3: High Risk

- Biological Agents: Can cause serious or potentially lethal disease via inhalation. These are infectious agents that can cause severe illness or death, especially if not treated promptly or properly (e.g., *Mycobacterium tuberculosis*, SARS-CoV-2).
- Standard Practices: Controlled access, decontamination of all waste and lab clothing.
- Safety Equipment: Biosafety cabinets (Class II or III), respiratory protection as needed.
- Facility Requirements: Negative airflow, sealed windows, double-door entry.

Biosafety Level 4: Extreme Risk

- Biological Agents: Dangerous and exotic pathogens with high risk of aerosol-transmitted infections and no known treatments (e.g., Ebola, Marburg viruses).
- Standard Practices: Strict protocols, personnel must change clothes before entering and shower upon exiting.
- Safety Equipment: Full-body, air-supplied suits or Class III biosafety cabinets.
- Facility Requirements: Isolated building or lab, dedicated air supply and waste management systems.

As described in Chapter 2, "Project Description," proposed land uses that would be developed on the project site could include laboratories, but these would not exceed biosafety level 2; biosafety level 3 and 4 uses would not be permitted.

STATE

Management of Hazardous Materials

In California, both federal and state community right-to-know laws are coordinated through the Governor's Office of Emergency Services. The federal law, SARA Title III or EPCRA, described above, encourages and supports emergency planning efforts at the state and local levels and to provide local governments and the public with information about potential chemical hazards in their communities. Because of the community right-to-know laws, information is collected from facilities that handle (e.g., produce, use, store) hazardous materials above certain quantities. The provisions of EPCRA apply to four major categories:

- emergency planning,
- emergency release notification,
- reporting of hazardous chemical storage, and
- inventory of toxic chemical releases.

The corresponding state law is Chapter 6.95 of the California Health and Safety Code (Hazardous Materials Release Response Plans and Inventory). Under this law, qualifying businesses are required to prepare a Hazardous Materials Business Plan, which would include hazardous materials and hazardous waste management procedures and emergency response procedures, including emergency spill cleanup supplies and equipment. At such time as the

applicant begins to use hazardous materials at levels that reach applicable state and/or federal thresholds, the plan is submitted to the administering agency.

DTSC, a division of the California Environmental Protection Agency, has primary regulatory responsibility over hazardous materials in California, working in conjunction with EPA to enforce and implement hazardous materials laws and regulations. As required by Section 65962.5 of the California Government Code, DTSC maintains a hazardous waste and substances site list for the State, known as the Cortese List. Individual regional water quality control boards (RWQCBs) are the lead agencies responsible for identifying, monitoring, and cleaning up leaking underground storage tanks (USTs). The Central Valley RWQCB has jurisdiction over the project site.

Transport of Hazardous Materials and Hazardous Materials Emergency Response Plan

The State of California has adopted US Department of Transportation regulations for the movement of hazardous materials originating within the state and passing through the state; state regulations are contained in 26 California Code of Regulations (CCR). State agencies with primary responsibility for enforcing state regulations and responding to hazardous materials transportation emergencies are the California Highway Patrol and the California Department of Transportation (Caltrans). Together, these agencies determine container types used and license hazardous waste haulers to transport hazardous waste on public roads.

California has developed an emergency response plan to coordinate emergency services provided by federal, state, and local governments and private agencies. Response to hazardous materials incidents is one part of the plan. The plan is managed by the Governor's Office of Emergency Services, which coordinates the responses of other agencies in the project vicinity.

Management of Construction Activities

Through the Porter-Cologne Water Quality Act and the National Pollution Discharge Elimination System (NPDES) program, RWQCBs have the authority to require proper management of hazardous materials during project construction. For a detailed description of the Porter-Cologne Water Quality Act, the NPDES program, and the role of the Central Valley RWQCB, see Section 3.12, "Hydrology and Water Quality."

The State Water Board adopted the statewide NPDES General Permit in August 1999. The state requires that projects disturbing more than one acre of land during construction file a Notice of Intent with the RWQCB to be covered under this permit. Construction activities subject to the General Permit include clearing, grading, stockpiling, and excavation. Dischargers are required to eliminate or reduce non-stormwater discharges to storm sewer systems and other waters. A stormwater pollution prevention plan (SWPPP) must be developed and implemented for each site covered by the permit. The SWPPP must include best management plans (BMPs) designed to prevent construction pollutants from contacting stormwater and keep products of erosion from moving off-site into receiving waters throughout the construction and life of the project; the BMPs must address source control and, if necessary, pollutant control.

Worker Safety

The California Occupational Safety and Health Administration (Cal/OSHA) assumes primary responsibility for developing and enforcing workplace safety regulations within the state. Cal/OSHA standards are typically more stringent than federal OSHA regulations and are presented in Title 8 of the CCR. Cal/OSHA conducts onsite evaluations and issues notices of violation to enforce necessary improvements to health and safety practices.

Title 8 of the CCR also includes regulations that provide for worker safety when blasting and explosives are utilized during construction activities. These regulations identify licensing, safety, storage, and transportation requirements related to the use of explosives in construction.

California Department of Forestry and Fire Protection

The California Department of Forestry and Fire Protection (CAL FIRE) is dedicated to the fire protection and stewardship of over 31 million acres of the state's privately-owned wildlands. Public Resource Code (PRC) Sections 4125-4137 establish that CAL FIRE has the primary financial responsibility of preventing and suppressing fires in the State Responsibility Area (SRA). PRC Section 4290 states that CAL FIRE also has responsibility for enforcement of Fire

Safe Standards including road standards for fire equipment access; standards for signs identifying streets, roads, and buildings; minimum private water supply reserves for emergency fire use; fuel breaks and greenbelts. PRC Section 4291 gives CAL FIRE the authority to enforce 100 feet of defensible space around all buildings and structures on non-federal SRA lands, or non-federal forest-covered lands, brush-covered lands, grass-covered lands, or any land that is covered with flammable material.

Additionally, CAL FIRE is responsible for a broad range of programs that guide forest policy and planning within California, such as the *CAL FIRE Strategic Plan 2024*, discussed below, and for implementing the Fire and Resource Assessment Program (FRAP). FRAP assesses the amount and extent of California's forests and rangelands, analyzes their conditions, and identifies alternative management and policy guidelines. Fire Hazard Severity Zones (FHSZs) for community planning are developed under FRAP and identify areas with very high fire hazards in both the SRA and local responsibility area (LRA).

2024 Strategic Fire Plan for California

The *2024 Strategic Fire Plan for California* lays out central goals for reducing and preventing the impacts of fire in the state (CAL FIRE 2024). The goals are meant to establish, through local, state, federal, and private partnerships, a natural environment that is more resilient and human-made assets that are more resistant to the occurrence and effects of wildland fire.

Public Resources Code

PRC Section 4427 includes fire safety statutes that restrict the use of equipment that may produce a spark, flame, or fire; require the use of spark arrestors on construction equipment with internal combustion engines; specify requirements for the safe use of gasoline-powered tools in fire hazard areas; and specify fire suppression equipment that must be provided on site for various types of work in fire-prone areas.

California Fire Code

The California Fire Code (Title 24, Part 9, California Code of Regulations [CFC]) establishes minimum requirements to safeguard public health from hazards of fire, explosion, or dangerous conditions in new and existing buildings, structures, and premises, and to provide safety and assistance to fire fighters and emergency responders during emergency situations. The CFC specifies fire resistant ratings for building materials and finishes, installation of sprinklers, use and storage of hazardous or flammable materials, and means of egress. Many local jurisdictions have adopted the CFC as part of their local codes.

Emergency Response and Evacuation Plans

The State of California Emergency Plan was adopted on October 1, 2017 and describes how state government mobilizes and responds to emergencies and disasters in coordination with partners in all levels of government, the private sector, non-profits, and community-based organizations. The Plan also works in conjunction with the California Emergency Services Act and outlines a robust program of emergency preparedness, response, recovery, and mitigation for all hazards, both natural and human-caused. All local governments with a certified disaster council are required to develop their own emergency operations plan for their jurisdiction that meet state and federal requirements. Local emergency operations plans contain specific emergency planning considerations, such as evacuation and transportation, sheltering, hazard specific planning, regional planning, public-private partnerships, and recovery planning (California Governor's OES 2017). As of the writing of this document, the 2024 State Emergency Plan is being developed and is currently undergoing public review. See the website for additional information (https://www.caloes.ca.gov/office-of-the-director/operations/planning-preparedness-prevention/planning-preparedness/2024-state-emergency-plan/).

LOCAL

City of Roseville General Plan

The Safety Element of the City of Roseville General Plan (City of Roseville 2020) contains the following policies that may be applicable to the project:

- **Policy SAFE 4.1:** Continue to pursue and promote fire prevention programs and standards.
- **Policy SAFE 4.2:** Continue to follow service level response times, as listed in the City's Standards of Cover document.
- **Policy SAFE 4.4:** Provide a comprehensive emergency medical services program to deliver basic and advanced life support services.
- **Policy SAFE 4.5:** Provide highly trained personnel to ensure effective suppression of fires and safety for firefighters.
- **Policy SAFE 4.7:** Phase the timing of the construction of fire stations to be available to serve the surrounding service area.
- **Policy SAFE 4.8:** Continually update the Roseville Emergency Operations Plan and ensure that participants are prepared to efficiently carry out assigned functions.

City of Roseville 2025 Design and Construction Standards

Section 8 of the Roseville design standards require a minimum flow of water for fire protection in accordance with the California Fire Code, as adopted by the Roseville Fire Department. For single-family detached houses, water mains must provide a flow of 1,500 gallons per minute. The required fire flow for multi-family, commercial, business, industrial, and school areas is determined on a case-by-case basis by the Roseville Fire Department, but may not exceed 4,000 gallons per minute, provided the buildings are fully sprinklered. For buildings that are not sprinklered, project applicants must contact the Roseville Fire Department.

Fire hydrants shall be placed at street intersections wherever possible. Fire hydrants and blow-offs not located at intersections shall be installed on property lines between lots. Fire hydrants and blow-offs shall have a maximum spacing of 500 feet measured along the street frontage in residential areas and a maximum spacing of 350 feet in all other areas. Hydrants shall be required within a cul-de-sac or dead-end street measuring more than 250 feet as measured from the curb return of the intersecting street and the end of the bulb or street.

Sections 5, 6, and 7 of the Roseville design standards contain requirements that are intended to provide safe access to property and on streets throughout the City for motorists and emergency vehicles including driveways, turn lanes, streets, and traffic lights.

Roseville Emergency Operations Plan and Multi-Hazard Mitigation Plan

The City of Roseville's Emergency Operations Plan (City of Roseville 2025a) describes organizational and operational responsibilities in the event of an emergency, including hazardous materials emergencies and clean up and de-contamination procedures. The Emergency Operations Plan is an extension of the City's Multi-Hazard Mitigation Plan and follows nationally adopted Incident Command System guidelines.

The City's *Multi-Hazard Mitigation Plan: 2023 Update*, adopted in November 2023, was developed to evaluate hazards within the City and identifies planning tools, policy changes, programs, projects, and other activities that can mitigate the impacts of hazards (City of Roseville 2023). Through mutual aid agreements, the Roseville Fire Department can also request services from the Placer County, City of Sacramento, and Sacramento Metropolitan Fire District Hazardous Materials Response Teams in the event of a large-scale incident. The Roseville Fire Department also assists the California Highway Patrol (CHP), OES, and other responding agencies as requested, in the event of a hazardous materials spill on State Route 65 or Interstate 80.

City of Roseville Fire Department

Fire suppression services for the City of Roseville, including the project site, are provided by local fire stations operated by the Roseville Fire Department. The City of Roseville Fire Department has a Fire & Life Safety Division that manages a comprehensive inspection program that includes annual fire inspections, Certified Unified Protection Agency (CUPA) inspections, and construction inspections.

Roseville Fire Department's CUPA permitting responsibilities include the following:

- Any business or institution handling hazardous materials or wastes above reporting thresholds will be required to submit a Hazardous Materials Business Plan in the California Environmental Reporting System and obtain CUPA approval prior to operation; and
- Any future proposal to use substances regulated by the California Accidental Release at or above threshold quantities would require Risk Management Plan review and approval by the City's CUPA.

3.9.2 Environmental Setting

HAZARDS AND HAZARDOUS MATERIALS

Phase I ESA and Limited Phase II Site Investigation

A Phase I ESA for the Phillip Road Project at 6382 Phillip Road (the project site) in Roseville, California, was conducted by ATC (ATC 2021a). The purpose of the Phase I ESA was to identify evidence or indications of "recognized environmental conditions" (REC) as defined by the American Society for Testing and Materials' (ASTM) *Designation E 1527-13: Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process*. Section 1.1.1 of ASTM Designation E 1527-13 defines a REC as "the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to any release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment" (ATC 2021a).

The Phase I ESA included a query of federal, state, and local hazardous materials databases by Environmental Data Resources; a review of information available on GeoTracker and DTSC's EnviroStor (http://www.envirostor.dtsc.ca.gov/public/) online database; Placer County Environmental Health Department records; City of Roseville Fire Department records; an evaluation of the historical use of the site; a site reconnaissance visit to the project site; and an interview for information regarding past and present use of the project site and the potential for impacts related to the use, storage, or disposal of hazardous substances or petroleum on the project site (ATC 2021a).

No evidence of hazardous materials or hazardous wastes was observed within the project site. ATC observed small areas of non-hazardous trash/debris along the south and east borders of the project site and two agricultural water wells within the project site. One water well, located close to the southern edge of the project site did not appear to be in use and had a metal lid welded to the casing. The second water well was located along the eastern edge of the site and appeared to be active. The presence of two agricultural water wells on the property does not represent a REC based on the nature of the wells. However, the Phase I ESA states that based on the historical agricultural use of the property as an orchard from approximately 1937 to at least 1947, pesticides and/or herbicides may have been used on the property and near-surface soils may have at one time contained these compounds. The orchard on the east side represents a REC. Review of aerial photographs did not identify any other past uses indicating other potential RECs at the project site or the surrounding properties (ATC 2021a).

As part of the Phase I ESA, ATC also conducted a Tier 1 vapor encroachment screen in accordance with ASTM E2600-15 *Standard Guide for Vapor Encroachment Screening on Property Involved in Real Estate Transactions* for potential vapor encroachment conditions (VECs). A VEC is the presence or likely presence of vapors of chemicals of concern in the property's vadose zone (i.e., the zone between the land surface and water table where moisture content is less than saturation level). VECs are typically caused by the release of vapors from contaminated soil or groundwater either on or near the property. Reported releases were not identified; therefore, ATC did not identify any VECs within the project site.

Based on information collected from the Phase I ESA, ATC recommended (1) decommissioning the two water wells prior to redevelopment, according to the appropriate City of Roseville and Placer County well regulations, and (2) performing shallow soil sampling in the former orchard area.

Consistent with the recommendations of the Phase I ESA, ATC prepared a Limited Phase II Site Investigation (ATC 2021b) to evaluate potential environmental impacts to shallow soil from the historical orchards and potential impacts from application of herbicides and pesticides at in the eastern portion of the project site. ATC conducted soil sampling of a 2-acre area on the east side of the project site, just south of Pleasant Grove Creek that was depicted as part of an orchard on aerial photographs dated 1937 and 1947. The composited soil samples were analyzed for organochlorine pesticides by EPA Method 8081A, organophosphorus pesticides by EPA method 8141A, chlorinated herbicides by EPA Method 8151A, and arsenic and lead by EPA Method 6010B. No pesticides were detected in any of the soil samples (ATC 2021b).

Arsenic and lead were detected above the respective reporting limits in all four soil samples; however, arsenic and lead were detected in concentrations generally consistent with background levels for these naturally occurring elements. While a site-specific background concentration of arsenic for the project area has not been established, as measured by the US Geological Survey, arsenic background levels in California soils that are not impacted by anthropogenic sources range from 0.3 to 69 milligram/kilogram (mg/kg) with a mean of 6.6 mg/kg. The overall range of arsenic across the state is between 0.6 and 11.0 mg/kg (ATC 2021b). The overall range of lead across the state is between 12.4 and 97.1 mg/kg with a mean of 23.9 mg/kg. Given that the arsenic concentrations at the project site range from 2.6 mg/kg to 3.7 mg/kg and the lead concentrations range from 3.5 mg/kg to 6.3 mg/kg, the levels of both arsenic and lead at the project site are well within background levels and, therefore, no further investigation was recommended (ATC 2021b).

Schools

The nearest school to the project site is Orchard Ranch Elementary School, which is 0.63 miles south of the site. Orchard Ranch Elementary School serves transitional kindergarten through 5th grade. Additionally, a new school is proposed to be located in the Amoruso Ranch Specific Plan area, approximately 0.6 miles northeast of the project site.

Airports

The nearest airport is Lincoln Regional Airport, which is approximately 7 miles northeast of the project site in the City of Lincoln. The Lincoln Regional Airport is a public airport. The project site is not within an airport land use plan area.

WILDFIRE

Wildfire Behavior and Controlling Factors

Wildfire behavior is a product of several variables, primarily climate, vegetation, topography, and human influences that intermix to produce local and regional fire regimes that affect how, when, and where fires burn. The fire regime in any area is defined by several factors, including fire frequency, intensity, severity, and area burned. Each of these are important for an understanding of how the variables that affect fire behavior produce fire risks. Fire frequency refers to the number of fires that occur in a given area over a given period of time; fire intensity refers to the speed at which fire travels and the heat that it produces; fire severity involves the extent to which ecosystems and existing conditions are affected or changed by a fire; and area burned is the size of the area burned by wildfire.

Human influence on wildfire is broad and can be substantial. It includes direct influences such as the ignition and suppression of fires, and indirect influences such as through alterations in land use patterns that support modified vegetative regimes and increased development in the Wildland-Urban Interface.

Wildfires are a significant threat in California, particularly in recent years as the landscape responds to climate change and decades of fire suppression. As climate change persists, it is anticipated to produce increasing temperatures and drier conditions that would generate abundant dry fuels. All wildfires (those initiated by both natural and manmade sources) tend to be larger under drier atmospheric conditions and when fed by drier fuel sources (Balch et al. 2017).

Additionally, climate change has led to exacerbation of wildfire conditions during a longer period of the year as the spring season has warmed—driving an earlier spring snowmelt, and as winter precipitation has decreased overall (Westerling et al. 2006). Further, wildfire activity is closely related to temperature and drought conditions, and in recent decades, increasing drought frequency and warming temperatures have led to an increase in wildfire activity (Westerling et al. 2006; Schoennagel et al. 2017). In particular, the western US, including California, has seen increases in wildfire activity in terms of area burned, number of large fires, and fire season length (Westerling et al. 2006; Abatzoglou and Williams 2016).

Wildfire Environment within the City of Roseville

As discussed in Section 3.9.1, "Regulatory Setting," CAL FIRE maintains FHSZ maps for the LRA and SRA. These areas are mapped based on fuels, terrain, weather, and other relevant factors. The closest SRA to the city of Roseville is located east and northeast of the cities of Rocklin and Loomis, respectively (Figure 3.9-1). The closest areas designated as "Very High" FHSZs within the SRA are located in El Dorado County and Auburn, which are 16 and 22 miles from the project site, respectively (CAL FIRE 2025).

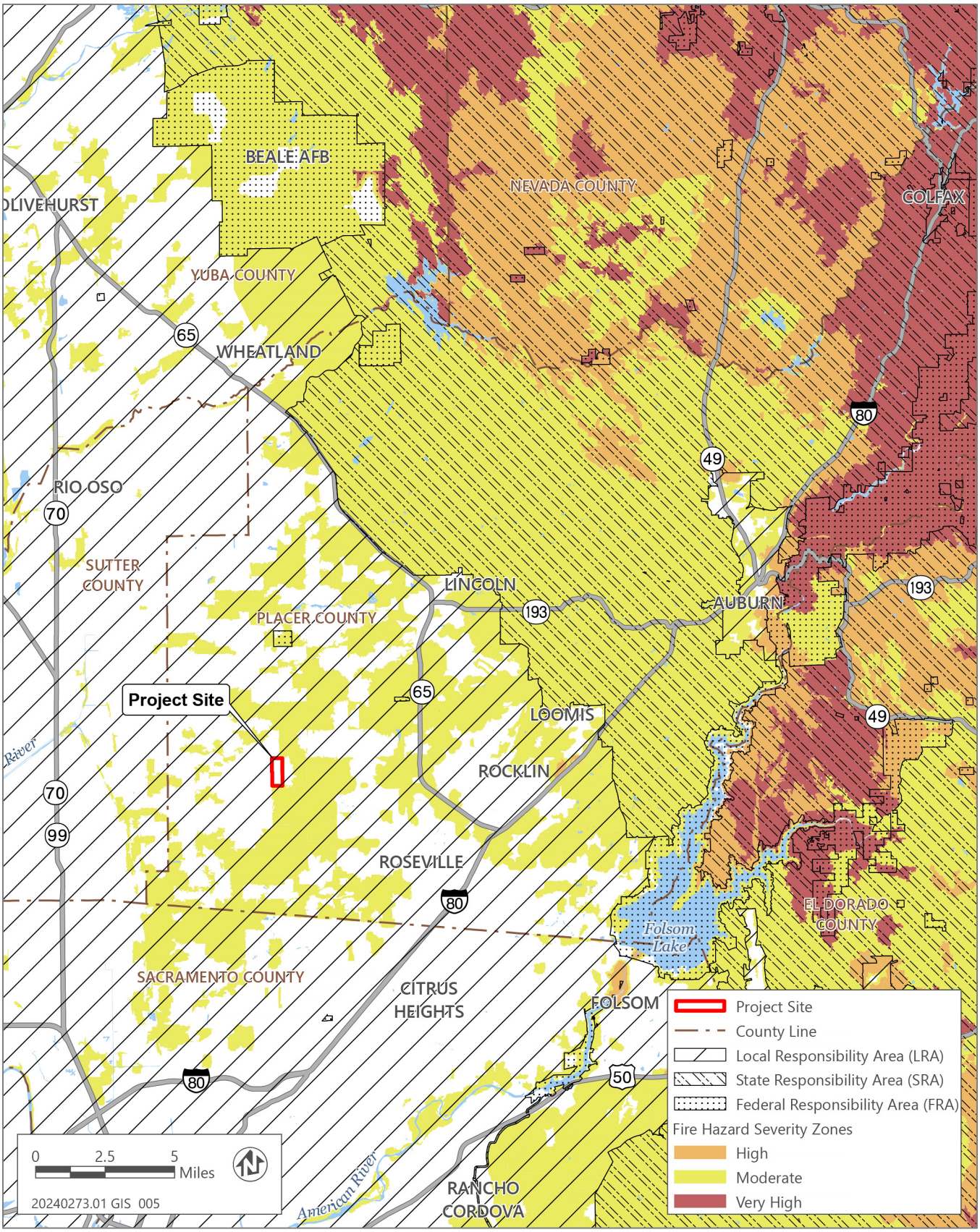
According to the *City of Roseville General Plan* (2020), and consistent with the FHSZ map database available from CAL FIRE, the city is designated as LRA and there are no "Very High" FHSZ within the city (CAL FIRE 2025). The closest area designated as "Very High" FHSZ within the LRA is located south of Baseline Road, over 4 miles south of the project site (Figure 3.9-2).

Wildfire Environment at the Project Site

The project site is undeveloped and/or grazing land. The project site is predominantly flat with low hills due to previous grading and agricultural operations. Pleasant Grove Creek traverses the property in an east–west direction, bisecting the site into north and south parcels. The project site is within the LRA, and, as shown in Figure 3.9-2, portions of the project site are located within a moderate FHSZ. The majority of the project site is designated as "Non Wildland" (City of Roseville 2025b). Evidence of a recent (2021) fire immediately west of the project site was identified during a site visit conducted by Ascent in 2021. The fire appeared to have started near the entrance of the Al Johnson Wildlife Area and burned east toward the project site. However, the fire stopped at Pleasant Grove Creek, and the project site was not directly affected. Additionally, during a fall 2025 site visit, City staff observed evidence of a grass fire that occurred in August 2025, originating south of the project site and crossing Phillip Road onto the project site. City fire personnel responded to the incident and extinguished the fire.

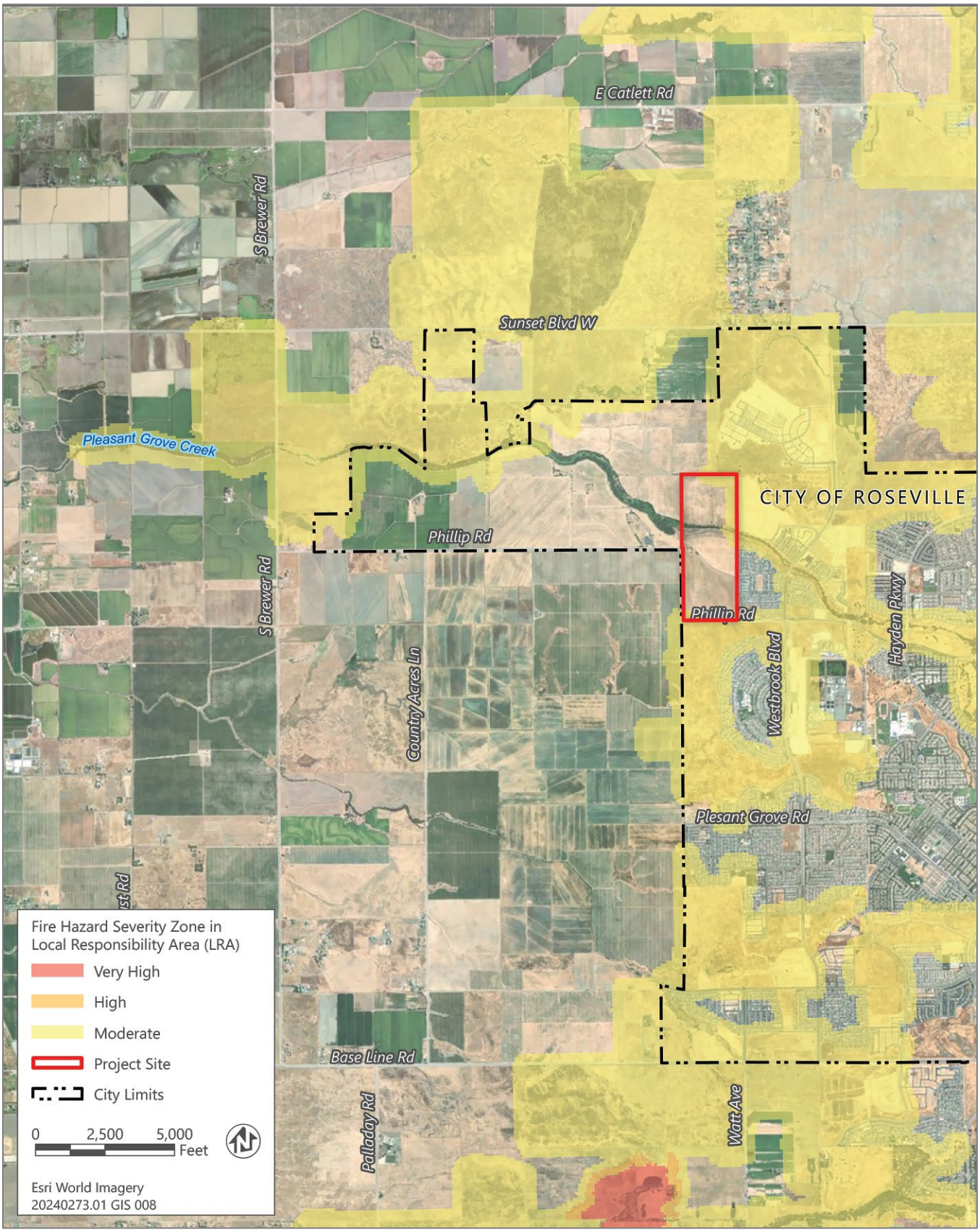
The project site is within Roseville Fire Department Fire District 9 and is served by Fire Station #9 located approximately 1.3 miles southeast of the project site at 2451 Hayden Parkway (City of Roseville 2025c). Additionally, a new fire station has been approved and will be located in the Amoruso Ranch Specific Plan area, approximately 0.8 miles northeast of the project site.

No emergency response/evacuation plan currently exists for the project site; however, the City of Roseville Emergency Operations Plan (City of Roseville 2011) covers emergency response within the city, including the project site.



Source: Data downloaded from CAL FIRE in 2025; adapted by Ascent in 2025.

Figure 3.9-1 Fire Hazard Severity Zones within the SRA



Source: Data downloaded from CAL FIRE in 2025; adapted by Ascent in 2025.

Figure 3.9-2 Fire Hazard Severity Zones within the LRA

3.9.3 Environmental Impacts and Mitigation Measures

METHODOLOGY

Hazards and Hazardous Materials

The following reports and data sources document potential hazardous conditions at the project site and were reviewed for this analysis:

- available literature, including documents published by federal, state, and local agencies;
- applicable elements from the *City of Roseville General Plan*;
- Phase I Environmental Site Assessment for the project, prepared by ATC (2021a); refer to Appendix E; and
- Limited Phase II Site Investigation for the project, prepared by ATC (2021b); refer to Appendix E.
- Project construction and operation were evaluated together with the hazardous materials information gathered from these sources to determine whether any risks to public health and safety or other conflicts would occur.

Wildfire

The analysis of environmental impacts on wildfire risk focuses on the potential for new or increased project-related risks associated with wildfire, including impairment of an emergency response plan, exposing people or structures to uncontrolled fire, and post-fire risks such as slope instability or debris-flows. Information used in this section was obtained from the *City of Roseville General Plan*, CAL FIRE's FHSZ map database, relevant fire and emergency-related plans, scientific journals, and relevant reports.

THRESHOLDS OF SIGNIFICANCE

Thresholds of significance are based on Appendix G of the State CEQA Guidelines. The project would cause a significant impact related to hazards and hazardous materials if it would:

- create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials;
- create a significant hazard to the public or the environment through reasonably foreseeable upset and/or accident conditions involving the release of hazardous materials into the environment;
- emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school;
- be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment;
- for a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area; or
- impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.

The project would cause a significant impact related to wildfire if the project is located in or near SRAs or lands classified as Very High FSHZs and would do any of the following:

- 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;

- 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; or
- 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.

ISSUES NOT DISCUSSED FURTHER

The school nearest to the project site is Orchard Ranch Elementary School, which is 0.63 miles south of the site. Additionally, a new school is proposed to be located in the Amoruso Ranch Specific Plan area, approximately 0.6 miles northeast of the project site. Because there are no schools within 0.25 miles of the site and the project would not emit hazardous materials, this issue is not discussed further in this Draft EIR.

The project site is not on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 (Cortese List) (ATC 2021a). Therefore, this issue is not discussed further in this Draft EIR.

The nearest airport is Lincoln Regional Airport, which is approximately 7 miles northeast of the project site in the city of Lincoln. The project site is not within an airport land use plan area or within 2 miles of a public airport or public use airport, or within the vicinity of a private airstrip. Implementing the project would not result in an aviation-related safety hazard for people residing or working in the project area. Therefore, this issue is not discussed further in this Draft EIR.

The project site is not located within an SRA or a FHSZ. The closest SRA to the city of Roseville is located east and northeast of the cities of Rocklin and Loomis, respectively. The closest areas designated as "Very High" FHSZs within the SRA are located in the cities of El Dorado County and Auburn, which are 16 and 22 miles from the project site, respectively (CAL FIRE 2025). The flat topography of the project site and its proximity to water do not exacerbate wildfire risk. Because the location and topography of the project do not exacerbate wildfire risk, factors such as slope and prevailing wind would not further exacerbate the wildfire risk because the risk is already minimal; therefore, the potential to expose project residents or workers to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire due to slope, prevailing winds, and other factors, or exacerbate wildfire risks is not discussed further. In addition, due to the relatively flat character of the site, the potential for the project to 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 is not discussed further.

ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Impact 3.9-1: Storage, Use, Disposal, Transport, or Upset of Hazardous Materials

Construction of the proposed project would involve the storage, use, and transport of hazardous materials at the project site. Handling of hazardous materials would be required to comply with local, state, and federal regulations. Operation of the project may also require storage, use, and transport of hazardous materials. Although the types and amounts of hazardous materials needed for operation of the project are not yet known, residents and businesses that would store or use hazardous materials would be required to comply with laws and regulations intended to reduce potential impacts to residents, workers, and the environment associated with routine transport or accidental release of hazardous materials. This impact would be **less than significant**.

Project construction would involve the temporary storage, use, and transport of hazardous materials (e.g., fuels, lubricants, paint, solvents, cleaners). Use of hazardous materials during construction would be in small quantities and would be temporary. Transportation of hazardous materials on area roadways is regulated by the CHP and Caltrans, whereas use of these materials is regulated by DTSC, as outlined in 22 CCR. The project applicant and its contractors would also be required to use, store, and transport hazardous materials in compliance with local, state, and federal regulations during construction.

Operation of the project would involve residential, medical, retail, innovation, parks, and open space uses that may require the storage, use, and transport of larger quantities of hazardous materials in the long-term. It should be noted, however, that the special area overlay (described in Chapter 2, "Project Description") would prohibit hazardous materials handling as a primary use, although there are other allowable land uses that would likely include hazardous materials use/storage as an ancillary use. As described in Chapter 2, "Project Description," proposed land uses that would be developed on the project site could include laboratories, but these would not exceed biosafety level 2; biosafety level 3 and 4 uses would not be permitted.

While the residential, medical, retail, innovation, parks, and open space uses that could be developed as a result of the proposed project are not expected to introduce any unusual hazardous materials to the area, some typical hazardous materials would be used in varying amounts during operation of the proposed development. Materials would consist mostly of typical household-type cleaning products and maintenance products. Additionally, grounds and landscape maintenance within the project site could utilize a wide variety of commercial products formulated with hazardous materials (including fuels, cleaners and degreasers, solvents, paints, lubricants, adhesives, sealers, and pesticides/herbicides).

Any storage or use of hazardous materials during project operation would be required to comply with appropriate regulatory agency standards such as CFR Titles 29, 40, and 49, and Chapter 6.95 of the California Health and Safety Code designed to avoid releases of hazardous materials. Examples of these requirements include preparation and implementation of a spill prevention, control, and countermeasures plan and a hazardous materials business plan. In addition, the project would be required to comply with the Roseville Fire Department's CUPA permitting responsibilities, which include the following:

- Any business or institution handling hazardous materials or wastes above reporting thresholds will be required to submit a Hazardous Materials Business Plan in the California Environmental Reporting System and obtain CUPA approval prior to operation; and
- Any future proposal to use substances regulated by the California Accidental Release at or above threshold quantities would require Risk Management Plan review and approval by the City's CUPA.

Although the specific businesses and activities and associated types and amounts of hazardous materials to be used on-site are not yet known, residents and businesses that would store or use hazardous materials would be required to comply with laws and regulations intended to reduce potential impacts to residents, workers, and the environment associated with routine transport or accidental release of hazardous materials. Therefore, this impact would be **less than significant**.

Mitigation Measures

No mitigation is required.

Impact 3.9-2: Impair an Adopted Emergency Response Plan or Emergency Evacuation Plan

The City of Roseville maintains an Emergency Operations Plan (City of Roseville 2025a) that serves as the official emergency plan for the city. As part of project operation, adequate emergency access routes to and from the development area would be established and emergency response would not be impaired. However, construction activities associated with the project could result in temporary lane closures, increased traffic, and other roadway conditions that could interfere with or slow down emergency vehicle access and services. Therefore, this impact would be **potentially significant**.

The City of Roseville manages emergencies including in the project area and maintains an Emergency Operations Plan that describes how the City would manage emergency incident or disaster mitigation, preparedness, response, and restoration related to fire and rescue. The Emergency Operations Plan includes an emergency alert and notification process, guidelines to ensure fire and dispatch centers are adequately equipped, and law enforcement coordination for evacuation and rescue procedures.

In the long-term, the project would result in 1,550–1,650 residents and 910–980 employees working on-site that would increase the use of Blue Oaks Boulevard and other area roadways. Multiple emergency response resources are in place to address emergencies within the City, including the Roseville Fire Department, Roseville Police Department, and mutual aid resources from other fire and law enforcement agencies. If there is an incident, evacuation of the project site would be at the discretion of the Incident Commander, who may keep everyone on-site in a safe refuge area, have people shelter in place, or call for an evacuation depending on the conditions of the emergency. These multiple emergency response resources would adequately allow for the evacuation of the project site with emergency alert notifications, rapid dispatch and emergency response, and law enforcement coordination to implement evacuation operations. Further, adequate emergency access routes to and from the development area would be established as required by state and local regulations, and with input and approval from the Roseville Fire Department.

However, construction activities would involve truck traffic that could result in temporary lane closures, increased traffic, and other roadway conditions that could interfere with or slow down emergency vehicle access and services. Therefore, this impact would be **potentially significant**.

Mitigation Measures

Mitigation Measure 3.9-2: Provide Adequate Emergency Access in Case of Temporary Lane Closures During Construction

If temporary lane closures are required during project construction, the applicant shall notify the City of Roseville Police and Fire Departments. The applicant shall provide for temporary traffic controls as appropriate during construction activities to facilitate traffic flow and to permit the movement of emergency vehicles. Temporary traffic controls could include measures such as signage, physical barriers and channelizing devices, reduced speed limit, detours, and flaggers. Throughout project construction, emergency vehicle access shall be maintained in compliance with the City's emergency vehicle access standards.

Significance after Mitigation

Implementation of this mitigation measure would reduce potential impacts to emergency access to a **less-than-significant** level because emergency access would be maintained, and lane closures would be coordinated with emergency service providers.

Impact 3.9-3: Exacerbate Wildfire Risk as a Result of Installation of Infrastructure

Construction within the project site would include construction of buildings and associated infrastructure to support residential, medical, retail, innovation, parks, and open space uses. The project would also require installation and maintenance of infrastructure including an electrical substation, extension of nearby electrical infrastructure, and improvements along Blue Oaks Boulevard and Phillip Road. Infrastructure would be installed in compliance with state and local regulations; however, there would still be the potential for wildfire ignition during construction. This impact would be **potentially significant**.

Construction within the project site would include construction of buildings, an electrical substation, and associated infrastructure to support residential, medical, retail, innovation, parks, and open space uses. Short-term construction would include installation of Stormwater Pollution Prevention Plan best management practices; clearing and grubing; mass grading and soil stabilization; installation of footings, slab, wall panels, roof structure; installation of mechanical, electrical, and plumbing infrastructure and building envelope and finishes; installation of underground wet and dry utilities, hardscape/paving, and irrigation and landscaping. These construction activities would introduce new temporary sources of ignition in the form of worker commute vehicles and use of heavy construction equipment. Use of motorized equipment can contribute to increased wildfire ignition risk through various mechanisms including sparks resulting from metal equipment contacting rocks or other hard material, vehicle catalytic converters becoming hot and contacting vegetation under the vehicle, and faulty equipment catching fire during operation.

The project would also require installation and maintenance of infrastructure including an electrical substation, extension of nearby electrical infrastructure, and improvements along Blue Oaks Boulevard and Phillip Road. The electrical substation

property would be 225 feet by 175 feet. Although substation design is not completed yet, the substation would likely be steel structures, approximately 40 feet tall with 70 feet tall steel poles and associated electrical equipment.

The project site and surrounding area are not within an SRA or a "Very High" FHSZ. The closest SRA to the city of Roseville is located east and northeast of the cities of Rocklin and Loomis, respectively. The closest areas designated as "Very High" FHSZs within the SRA are located in the cities of El Dorado County and Auburn, which are 16 and 22 miles from the project site, respectively (CAL FIRE 2025). All construction of new infrastructure would be subject to City Fire Code Requirements, which includes safety measures to minimize the threat of fire. Title 24 of the CCR sets forth the minimum development standards for emergency access, fuel modification, setback, signage, and water supply, which help minimize fire risk. Moreover, utilities would primarily be installed underground although some limited utility infrastructure would be installed overhead (i.e., electrical lines to substation), and the electrical substation would be installed in a combination of paved and crushed-rock covered area. Further, development would be constructed and maintained in compliance with state and local regulations for fire protection, including the use of fire-resistant building materials, fire-resistant landscaping, defensible space, adequate water supply, and emergency access. Therefore, installation and maintenance of infrastructure would not exacerbate wildfire risk.

Although the project would not exacerbate wildfire risk in the long-term, there would still be an increased potential for wildfire ignition during construction. This impact would be **potentially significant**.

Mitigation Measures

Mitigation Measure 3.9-3a: Prepare and Implement a Fire Risk Management Plan

A fire risk management plan shall be prepared prior to the start of construction by the contractor. The plan shall describe the potential for fires to occur as a result of project construction, describe fire response procedures and protocols for staff, and contain measures necessary to minimize fire risks, including at a minimum those listed in Mitigation Measure 3.9-3b. The plan shall be prepared in consultation with the City of Roseville Fire Department; City approval of the plans will be required prior to initiating construction activities.

Mitigation Measure 3.9-3b: Implement Fire Prevention Measures during Construction

During all construction activities, the contractor shall implement, at a minimum, the following fire risk reduction measures:

- Maintain all areas clear of vegetation and other flammable materials for at least a 50-foot-radius of any welding or grinding operations, or the use of an open flame;
- Spray nearby vegetation with water, if not already cleared, using a water truck or other suitable equipment, prior to any welding or grinding operations or the use of an open flame;
- All equipment, gasoline-powered hand tools, and construction and maintenance vehicles shall be equipped with spark arresters;
- Equip all construction and maintenance vehicles entering the project site, including welding trucks or rigs, with minimal fire suppression equipment (e.g., ax, bucket, 5-pound fire extinguisher, shovels);
- Maintain at least one half-full water truck or water tanker at each work site during all periods of work and for 1 hour after all work has ceased for the day;
- Clearly mark and maintain fire-suppression materials and equipment adjacent to all areas of work including staging areas; and
- Use a dedicated fire watch during all welding activities within existing operational stations.

Significance after Mitigation

With the implementation of Mitigation Measures 3.9-3a and 3.9-3b and adherence to all applicable regulations, potential impacts associated with wildfires during construction of the project would be **less than significant** because a fire risk management plan and fire prevention measures plan would be prepared and implemented.