4.11 HAZARDS AND HAZARDOUS MATERIALS

This section presents an overview of the hazardous materials within or adjacent to the proposed Mitchell Farms Subdivision (project) site. Hazards evaluated include those associated with hazardous materials, including potential exposure to hazardous materials used, generated, stored, or transported in or adjacent to the project site, and existing identified or suspected soil and/or groundwater contamination. Impacts related to wildland fires and emergency access and response plans are also evaluated.

No comments relating to hazards and hazardous materials were received in response to the Notice of Preparation for this Environmental Impact Report (EIR). The Notice of Preparation and all comments on the Notice of Preparation are provided in Appendix A.

Information regarding hazardous materials/waste in the project vicinity that may potentially affect the environment on the project site or surrounding area is based on the Phase I Environmental Site Assessment (ESA) prepared for the Sunrise Golf Course and Former Sunrise Fun Center by ADR Environmental Group Inc. (ADR) in April 2016 (included in Appendix G of this EIR). The City of Citrus Heights General Plan and project-specific construction and operation information were also referenced to evaluate potential impacts.

For the purposes of this EIR, the definition of "hazardous materials" is taken from the California Health and Safety Code, Section 25501(o), where the term is defined as material that "because of its quantity, concentration, or 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."

Similarly, the term "hazardous waste," a subset of hazardous materials, is derived from California Health and Safety Code, Section 25517, and the California Code of Regulations, Title 22, Section 66261.2, which defines "hazardous waste" as material that "because of its quantity, concentration, or physical, chemical, or infectious characteristics, may either cause, or significantly contribute to, an increase in mortality or 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."

4.11.1 Environmental Setting

Regional Setting

The City of Citrus Heights (City) is located just south of the Placer County boundary within northeast Sacramento County, California. The unincorporated communities of Fair Oaks, Carmichael, Gold River, Orangevale, Antelope, Foothill Farms, and North Highlands surround

the City, along with unincorporated industrial and agricultural areas. The City of Roseville is located immediately to the north, the City of Rancho Cordova is located approximately 3 miles to the south, and the City of Folsom is located approximately 6 miles to the east. The City is located within the Sacramento Valley, and is underlain primarily by Holocene and Pleistocene-age alluvium, and composed primarily of sediments from the Sierra Nevada and Coast Ranges (City of Citrus Heights 2011a, 2011b).

Existing Site Conditions

The approximately 56-acre project site is located in the City of Citrus Heights, approximately 4.5 miles east of Interstate (I) 80. The project site consists of 20 parcels (Assessor's Parcel Numbers 243-0070-029, and -030; 243-0082-001, -002, -019, -021, -023, and -037; and 243-0480—004, -005, -013, -014, -015, -016, -019, -020, -021, -025, and -033). The project site is generally bounded on the south by Arcadia Drive and commercial development that fronts onto Greenback Lane, Fair Oaks Boulevard to the east, commercial development that fronts onto Sunrise Boulevard to the west, and residential uses and an electrical substation to the north.

The project site is generally flat and developed with a nine-hole public golf course that has been operational since the late 1970s. The site currently contains typical golf tees, greens, and fairways, along with a restaurant/clubhouse, a pro-shop, a portable office building, a driving range, a disc golf course, an occupied residence, and a seasonal fruit stand. In addition, abandoned batting cages and an abandoned miniature golf course occupy the portion of the site along the north side of Arcadia Drive. The project site historically supported a variety of agricultural and farming uses since 1938, as discussed in more detail in Chapter 3, Project Description. An unnamed tributary of Arcade Creek and its associated floodplain bisects the property from east to west and provides primary drainage for the site. The creek and adjacent woodland is highly disturbed as a result of on-site and off-site urban development (Appendix B).

Surrounding Land Uses

Land uses surrounding the project site include a mix of office and commercial uses adjacent to Sunrise Boulevard, residential uses and the Arcade Creek Park Preserve located on the west side of Sunrise Boulevard, and a mix of commercial and retail uses located to the south adjacent to Arcadia Drive and Greenback Lane. Along Fair Oaks Boulevard is a mix of single-family residential and apartments, and a small commercial area located at the corner of Fair Oaks Boulevard and Greenback Lane. To the north is an electrical substation, a Citrus Heights Water District well, and more residential development. Other land uses in the project vicinity include a cemetery, Sunrise Mall, and Tempo Park.

The project site is located approximately 7.4 miles northeast of McClellan Airfield, 8.4 miles north of the Mather Airport, 9.7 miles northeast of Rio Linda Airport, and 17.5 miles east of Sacramento International Airport.

The closest schools to the project site are Trajan Elementary School, located 1 mile east of the project site; Kingswood Elementary School, located 1 mile southwest of the project site; Faith Christian Academy, located 0.9 miles northwest of the project site; Sylvan Middle School, located 1.7 miles northwest of the project site; and San Juan High School, located 1.1 miles west of the project site (SJUSD 2017).

Phase I ESA for the Sunrise Golf Course and Former Sunrise Fun Center

The project site was evaluated for the presence of hazardous materials or other recognized environmental conditions in April 2016 by ADR (Appendix G). The Phase 1 ESA included a review of federal, state, and local public agency records; historical information; information provided by the property owner; and aerial photographs of the property; and a site reconnaissance of the property and its vicinity.

The Phase I ESA prepared by ADR evaluated the project site, which included assessing the existing golf course buildings. Buildings and features reviewed in the ESA were a clubhouse and restaurant, a shed used to store fertilizer, two sheds to store golf carts, a maintenance area/shed, an office trailer, the existing single-family residence in the northern portion of the site, a nine-hole golf course, a driving range, an out-of-service fun center, and a cellular tower. The ESA indicated that the project site was previously used for agriculture starting in 1938 and was developed with the current nine-hole golf course in the late 1970s (ADR 2016). The ESA concluded that no Recognized Environmental Conditions were observed at the site, although environmental concerns not designated as Recognized Environmental Conditions were found. During on-site observations for the Phase I ESA, suspect asbestos-containing materials were identified in unspecified buildings on the project site, including gypsum wallboard texture/joint compound, sheet flooring, and roofing materials. In addition, de minimis (not significant) presence of suspected organochlorine pesticides, arsenic, lead, petroleum hydrocarbons, and nitrogen compounds were detected in on-site soils (ADR 2016).

In conjunction with the Phase I ESA, ADR completed a Surface Soil Characterization Report, dated April 22, 2016. The results of that report are summarized in the Phase I ESA. With the exception of alpha-Chlordane, surface soil samples collected from golf course areas did not contain the presence of organochlorine pesticides, chlorinated herbicides, nitrates, nitrites, ammonia, or Total Kjeldahl Nitrogen. The alpha-Chlordane concentration was well below the U.S. Environmental Protection Agency's (EPA) Region 9 Regional Screening Level (i.e., action level). Similarly, lead concentrations in soil from the golf course areas were detected at

concentrations below the California Department of Toxic Substances Control (DTSC) Human and Ecological Risk Office soil screening guideline. Arsenic concentrations in soil from the golf course were determined to be in the range of regional background concentrations (ADR 2016).

Soil samples collected from the fertilizer shed area contained no concentrations of pesticides or chlorinated herbicides; however, nitrogen compounds and lead were detected below EPA Regional Screening Levels. Soil samples collected from the golf course maintenance area contained no volatile organic compounds, but contained total petroleum hydrocarbons (TPH), as motor oil, at concentrations below the Environmental Screening Levels established by the California Regional Water Quality Control Board (RWQCB), San Francisco Region. These residual TPH concentrations are considered to be relatively immobile, insoluble, and non-volatile compared other types of petroleum hydrocarbons, such as gasoline (ADR 2016).

The Phase I ESA also evaluated properties located adjacent to the project site for the potential presence of Recognized Environmental Conditions. ADR conducted a search of leaking underground storage tanks (LUSTs) recorded by the California RWQCB and Office of Emergency Services. The search identified six reported leaking tank sites within 0.5 miles of the project site. Two of these sites were each listed twice, and all of the LUST cases are closed or eligible for case closure. Based on the distance of the LUST sites from the project site (greater than 300 feet), the hydrologic downgradient location of the LUST sites with respect to the project site, and the regulatory status, it is unlikely that these LUST sites represent an environmental concern to the project site (ADR 2016).

Similarly, based on a site reconnaissance of adjoining properties and a database search (which varied from a radius of 0.25 miles to 1 mile, depending on the individual database), nearby properties are unlikely to represent an environmental concern to the project site with respect to hazardous materials storage, waste disposal activities, and soil/groundwater contamination (ADR 2016).

Hazardous Materials Transportation Routes

A major transportation route for hazardous materials is I-80, located approximately 4.5 miles west of the project site. Other major transportation routes within Citrus Heights include Greenback Lane (bordering the project site), Sunrise Boulevard (bordering the project site), Auburn Boulevard/Old Auburn Road (1.5 miles from the project site), Antelope Road (1.8 miles from the project site), and Madison Avenue (1 mile from the project site). Rail lines are also a common transportation method for hazardous materials. The nearest railway is approximately 4.7 miles east of the project site.

4.11.2 Regulatory Setting

Federal Regulations

Several federal agencies regulate hazardous materials, including the EPA, the Occupational Safety and Health Administration (OSHA), the U.S. Department of Energy, and the U.S. Department of Transportation (DOT). Applicable federal regulations are contained primarily in Title 40 (Chapter I – EPA), Title 29 (Chapter XVII – OSHA), Title 10 (Chapter X – U.S. Department of Energy), and Title 49 (Chapter I – DOT) of the Code of Federal Regulations (CFR). Title 40, Chapter 1 (EPA) regulates water and air contamination, pesticide use, toxic substances, emergency planning, and solid and liquid wastes. Title 29, Chapter 17 (OSHA) regulates worker safety and health concerning environmental hazards. Title 10, Chapter 10 (U.S. Department of Energy) regulates petroleum-based products. Title 49, Chapter 1 (DOT) regulates the transportation of hazardous materials, and details hazardous material spill/release prevention and response plans (ADR 2016).

Hazardous Materials Handling and Transport

At the federal level, the principal agency regulating the generation, transport, and disposal of hazardous wastes is the EPA, under the authority of the Resource Conservation and Recovery Act (RCRA). The RCRA is an all-encompassing federal regulatory program for hazardous substances that is administered by the EPA. Under the RCRA, the EPA regulates the generation, transportation, treatment, storage, and disposal of hazardous wastes. The Hazardous and Solid Waste Amendments of 1984 amended the RCRA to prohibit the use of certain techniques to dispose of various hazardous substances.

The federal Emergency Planning and Community Right-to-Know Act of 1986 (Right-to-Know Act) (42 U.S.C. Sections 11001–11050) is Title III of the Comprehensive Environmental Response, Compensation, and Liability Act, which is commonly referred to as "Superfund" and is administered by the EPA. The Right-to-Know Act imposes hazardous-materials planning requirements to help protect local communities in the event of accidental release of hazardous substances. The EPA has delegated RCRA authority to the State of California. This authority is administered by the state's DTSC.

Transportation of hazardous materials is regulated by the DOT's Office of Hazardous Materials Safety. The office formulates, issues, and revises hazardous materials regulations under the Federal Hazardous Materials Transportation Law. Hazardous materials regulations cover hazardous materials definitions and classifications, hazard communications, shipper and carrier operations, training and security requirements, and packaging and container specifications. The hazardous materials transportation regulations are codified in 49 CFR Parts 100–185.

Hazardous materials transportation regulations require carriers transporting hazardous materials to receive training in the handling and transportation of hazardous materials. All drivers must possess a commercial driver's license as required by 49 CFR Part 383. Vehicles transporting hazardous materials must be properly placarded.

Transportation by rail is regulated per 49 CFR Part 174. Subpart C covers the requirements for marking and placarding of rail cars and the segregation of hazardous materials. Subpart D covers the requirements for handling placarded rail cars, including their position in the train and maximum allowable speeds (50 miles per hour for most hazardous substances). Subparts E, F, G, J, and K include requirements for transportation of explosives, gases, flammable liquids, poisonous materials, and radioactive materials, respectively. Safety requirements include inspections at every stop, specific training, and train crew knowledge of the rail car contents and locations.

Worker Safety Requirements

OSHA is responsible at the federal level for ensuring worker safety. OSHA sets federal standards for implementing workplace training, exposure limits, and safety procedures for the handling of hazardous substances and hazardous materials (as well as other hazards). OSHA also establishes criteria by which each state can implement its own health and safety program.

Asbestos-Containing Materials

The National Emission Standards for Hazardous Air Pollutants (NESHAP) regulations, under the Clean Air Act, specify work practices for asbestos to be followed during demolition and renovation of all structures, excluding residential buildings that have four or fewer dwelling units. The regulations require the owner of the building or the operator to notify the appropriate state agency before any demolition or before any renovations of buildings that could contain a certain threshold amount of asbestos or asbestos-containing materials. The Division of Occupational Safety and Health of California (commonly known as CAL/OSHA) and the Contractors State License Board require the use of a licensed asbestos removal contractor who knows the legal requirements and has the trained staff and equipment to complete the job properly for all asbestos removal.

State Regulations

California Building Code and California Fire Code

Prior to issuance of building permits and during occupancy of the proposed project, the City of Citrus Heights Building Division and Fire Department would be responsible for reviewing plans for facilities proposing to use hazardous materials to ensure that applicable California Building Code and California Fire Code standards are included in project design. These standards address,

among other elements, proper storage and secondary containment for hazardous materials and fire-safe construction and materials. Use of appropriate design features would help reduce the potential for accidental releases of hazardous materials that could affect occupants or require emergency response services.

Hazardous Materials Handling

The California Environmental Protection Agency (CalEPA) and the Office of Emergency Services (OES) establish regulations governing the use of hazardous materials in California. Within CalEPA, the DTSC has primary regulatory responsibility for hazardous waste management. Enforcement of regulations can be delegated to local jurisdictions that enter into agreements with the DTSC for the generation, transport, and disposal of hazardous materials under the authority of the Hazardous Waste Control Law. Along with the DTSC, the RWQCB is responsible for implementing regulations pertaining to management of soil and groundwater investigation and cleanup. The project site is within the jurisdiction of the Central Valley RWQCB. The RWQCB's regulations are contained in Title 27 of the California Code of Regulations (CCR). The DTSC, RWQCB, and/or a local agency typically oversee investigation and cleanup of contaminated sites.

The California Highway Patrol and California Department of Transportation are the enforcement agencies for hazardous materials transportation regulations. Hazardous materials and waste transporters are responsible for complying with all applicable packaging, labeling, and shipping regulations. Trucks transporting any hazardous materials are required to comply with Section 31303 of the California Vehicle Code, which prohibits the transportation of hazardous materials within residential districts and major roads, as well as near places where crowds could congregate.

Emergency Response to Hazardous Materials Incidents

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 this plan. The plan is managed by the California OES, which coordinates the responses of other agencies, including the CalEPA, California Highway Patrol, California Department of Fish and Wildlife, and Central Valley RWQCB.

California Hazardous Waste Control Law

The California Hazardous Waste Control Law is administered by CalEPA to regulate hazardous wastes. Although the Hazardous Waste Control Law is generally more stringent than the RCRA, until the EPA approves the California program, both the state and federal laws apply in California. The Hazardous Waste Control Law lists 791 chemicals and approximately 300 common materials that may be hazardous; establishes criteria for identifying, packaging, and

labeling hazardous wastes; prescribes management controls; establishes permit requirements for treatment, storage, disposal, and transportation; and identifies some wastes that cannot be disposed of in landfills.

Title 22 of the California Code of Regulations (CCR) defines hazardous waste as a waste that exhibits characteristics that may (22 CCR 662610):

A. cause, or significantly contribute to, an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness; or

B. pose a substantial present or potential hazard to human health or environment when improperly treated, stored, transported, disposed of or otherwise managed.

According to Title 22 of the CCR, substances having a characteristic of toxicity, ignitability, corrosivity, or reactivity are considered hazardous waste. Hazardous wastes are hazardous substances that no longer have a practical use, such as material that has been abandoned, discarded, spilled, or contaminated, or that is being stored prior to proper disposal.

State Water Resources Control Board

The State Water Resources Control Board (SWRCB) protects water quality in California by setting statewide policy. The SWRCB supports the nine RWQCBs, which, within their areas of jurisdiction, protect surface water and groundwater from pollutants discharged or threatened to be discharged into the waters of the state. For Sacramento County, the Central Valley RWQCB maintains jurisdiction within the subject basin. This protection is carried out by the RWQCB through the issuance and enforcement of National Pollutant Discharge Elimination System permits, called Waste Discharge Requirements; regulation of LUSTs and contaminated properties from LUSTs; and spills, leaks, investigation, and cleanup programs. The SWRCB also regulates the handling, storage, and disposal of hazardous substances on construction projects. Permits and/or other actions by the SWRCB may be required if contamination of water or soils occurs during construction of the proposed project.

Asbestos-Containing Materials

Handling asbestos-containing materials during demolition is regulated under Title 8 of the CCR, Section 1529. These regulations cover asbestos exposure in all construction work, including demolition or salvage of structures; removal or encapsulation of materials containing asbestos; and construction, alteration, repair, maintenance, or renovation of structures, substrates, or portions thereof that contain asbestos.

Local Regulations

Sacramento County

The Sacramento County Environmental Compliance Division of Sacramento County's Environmental Management Department (EMD) administers the Certified Unified Program Agency Program for local implementation of the California Accidental Release Program and several other hazardous materials and hazardous waste programs. Sacramento County is responsible for regulating hazardous materials business plans and chemical inventories, hazardous materials storage, hazardous materials management plans, and risk management plans. The hazardous materials business plan program requires businesses in Sacramento County to prepare business emergency response plans if their hazardous materials storage equals or exceeds 55 gallons of liquid, 500 pounds of solid, or 200 cubic feet of gas. The goal of EMD is to protect human health and the environment by ensuring that hazardous materials and hazardous waste are properly managed.

The Sacramento County OES provides emergency planning and response services in response to large-scale incidents and disasters. Sacramento County's OES is responsible for alerting and notifying appropriate agencies when disaster strikes, coordinating all agencies that respond, ensuring resources are available and mobilized in times of disaster, developing plans and procedures in response to and recovery from disasters, and developing and providing preparedness materials for the public. The Sacramento County OES has prepared several emergency response plans to aid coordination between local, state, and federal agencies during emergency situations, such as human-caused disasters, natural disasters, and national security incidents.

The Sacramento County Evacuation Plan establishes a strategy for evacuation of people within Sacramento County during an emergency. The plan includes procedures for public alert and warning, transportation, and care and shelter of affected individuals. This evacuation plan is in addition to Sacramento County's Emergency Operations Plan, which sets forth a plan to address response to large-scale disasters before, during, and after the incident. The plan outlines the required organization to mitigate a large-scale emergency or disaster within Sacramento County, designates roles and responsibilities required in this situation, and establishes operational concepts associated with the emergency response and recovery process. The plan includes Emergency Support Functions to facilitate coordination of interagency response within Sacramento County. Sacramento County has also established the Sacramento Operational Area Plan to provide a method for managing information, resources, and priorities during a significant emergency situation within Sacramento County that requires coordination with local governments (Sacramento County 2017).

The Sacramento Metropolitan Air Quality Management District (SMAQMD) is the local government agency responsible for regulating stationary, non-vehicular sources of air pollution in Sacramento County, including Citrus Heights. SMAQMD regulates asbestos renovation and demolition projects, in accordance with SMAQMD Rule 902. However, most (but not all) renovation and demolition projects of residences with four or fewer units are exempt from the rule.

Hazardous Materials Emergency Response

The Sacramento Metropolitan Fire District (fire district) has developed a Hazardous Materials Emergency Response Plan. The plan describes organizational and operation responsibilities in the event of a hazardous materials emergency, including cleanup and decontamination procedures. Through mutual aid agreements, the fire district can request services from Placer County, the City of Sacramento, and the Sacramento Metropolitan Fire District Hazardous Materials Response Teams in the event of a large-scale incident. The fire district also provides assistance to the California Highway Patrol, OES, and other responding agencies, as requested, in the event of a hazardous materials spill on State Route 65 or I-80. The fire district updates its Hazardous Materials Emergency Response Plan every 3 years. The plan is an extension of the City's Multi-Hazard Functional Plan, and follows nationally adopted Incident Command System guidelines.

City of Citrus Heights General Plan

The City of Citrus Heights General Plan includes goals and policies relating to hazardous materials and public safety applicable to the proposed project, as listed below (City of Citrus Heights 2011a):

Goal 51: Protect the community's health, safety, natural resources and property from potential risks associated with the use, transport, treatment, and disposal of hazardous materials.

- **Policy 51.1:** Provide for the safe use and disposal of hazardous materials and appropriate responses to protect the City in the event of a hazardous materials incident.
- **Policy 51.3** Work with Sacramento County and other public agencies to inform businesses and consumers about the proper use and disposal of hazardous materials and waste.

Goal 58: Ensure excellent public safety services and rapid and effective emergency response.

- **Policy 58.8:** Provide fire/emergency staffing as necessary in proportion to population or other appropriate workload indicators.

Policy 58.11: Ensure that new development is constructed, at a minimum, to the fire safety standards contained in the Citrus Heights Fire and Building Codes.

Policy 58.12: Ensure that anticipated fire response times and fire flows are taken into consideration as a part of the development review process.

Policy 58.13: Provide adequate access for emergency vehicles, particularly fire-fighting equipment, in all new development.

Policy 58.14: Regulate the storage of flammable and explosive material and strongly encourage the proper transportation of such materials.

4.11.3 Impacts

Methods of Analysis

The analysis of the potential public safety and hazardous materials impacts is based on information from the Phase I ESA prepared by ADR for the project site (Appendix G). As stated in the ESA report, "the purpose of this ESA is to identify recognized environmental conditions in connection with the subject Property" (ADR 2016).

In determining the level of significance, the analysis assumes that the proposed project would comply with all applicable state and local ordinances and regulations. These requirements are summarized in Section 4.11.2, Regulatory Setting. In addition, impacts of the environment on a project (as opposed to impacts of a project on the environment) are beyond the scope of required CEQA review. "[T]he purpose of an EIR is to identify the significant effects of a project on the environment, not the significant effects of the environment on the project" (*Ballona Wetlands Land Trust v. City of Los Angeles* (2011) 201 Cal.App.4th 455, 473). Nonetheless, an analysis of existing hazardous conditions is provided for informational purposes.

The project site is located approximately 7.4 miles northeast of McClellan Airfield, 8.4 miles north of the Mather Airport, 9.7 miles northeast of Rio Linda Airport, and 17.5 miles east of Sacramento International Airport. Because the project site is not located within 2 miles of an airport, there would be no safety hazard to future residents due to proximity to planes overhead or in the immediate vicinity. Therefore, this issue is not further addressed.

Significance Criteria

Potential significant impacts associated with hazardous waste/materials impacts have been evaluated using the following criteria. Would the project:

- 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 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?
- Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?
- Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?
- Create or expose residents to potential health hazards?

Impact Analysis

IMPACT 4.11-1:	Expose construction workers and/or the environment to hazardous materials due to an accidental release during construction
SIGNIFICANCE:	Potentially Significant
MITIGATION:	Mitigation Measures 4.11a and 4.11b
RESIDUAL SIGNIFICANCE:	Less Than Significant

The proposed project would consist of construction of residential and recreational uses. The project site is currently developed with a nine-hole golf course and driving range, clubhouse, and restaurant; storage sheds; an office trailer; an occupied residence; an out-of-service fun center; and a cellular tower. Construction activities associated with the proposed project would include demolition of existing facilities, including the clubhouse/restaurant, office/arcade building, fun center storage and repair building, residence, and fertilizer storage shed. Suspect asbestos-containing materials were identified on the project site, including gypsum wallboard texture/joint compound, sheet flooring, and roofing materials. Pursuant to federal (NESHAP), state (8 CCR 1529), and county (SMAQMD Rule 902) regulations, all suspect asbestos-containing materials would either be presumed to contain asbestos or adequate rebuttal sampling would be conducted by an accredited building inspector prior to demolition. Demolition contractors would be required to follow applicable regulations and guidelines set forth by federal, state, and county regulations.

In addition, site preparation, grading, and trenching for utilities would be conducted prior to construction of residences. With the exception of alpha-Chlordane, shallow soil samples collected from golf course areas did not detect the presence of organochlorine pesticides, chlorinated herbicides, nitrates, nitrites, ammonia, or Total Kjeldahl Nitrogen. The alpha-Chlordane concentration was well below the EPA Region 9 Regional Screening Level. Similarly, lead concentrations in soil from the golf course areas were detected at concentrations below the DTSC Human and Ecological Risk Office soil screening guideline. Arsenic concentrations in soil from the golf course area were determined to be in the range of regional background concentrations (ADR 2016).

Soil samples collected from the fertilizer shed area contained no concentrations of pesticides or chlorinated herbicides; however, nitrogen compounds and lead were detected below EPA Regional Screening Levels. Soil samples collected from the golf course maintenance area contained no volatile organic compounds, but contained TPH, as motor oil, at concentrations below the Environmental Screening Levels established by the RWQCB, Central Valley Region. Although these residual TPH concentrations are considered to be relatively immobile, insoluble, and non-volatile compared to lighter petroleum hydrocarbons, proposed grading and excavation associated with the project may uncover areas of soil that are beyond the sampled locations and contain elevated levels of petroleum hydrocarbons (ADR 2016). Therefore, a ***potentially significant impact*** could occur. Compliance with Mitigation Measure 4.11a would require implementing procedures to identify and remediate any contamination that may be identified during project construction. This measure would ensure that the impact is reduced to **less than significant**.

In addition, site preparation, grading, and trenching for utilities would be conducted prior to construction of residences. These activities would involve the use of heavy equipment, which could use relatively small amounts of products containing materials defined as hazardous, such as diesel fuels, solvents, cements and adhesives, paints, cleansers, degreasers, and asphalt mixers. The use of these materials may also generate hazardous waste.

Potential adverse impacts associated with use of these types of materials involve the exposure of construction workers and/or the environment to hazardous materials from an accidental release during construction. Hazardous materials associated with construction are typically brought to the site in quantities that are not determined to be hazardous by the manufacturer and would not result in potential hazards to the public or the environment. No acutely hazardous materials such as acrolein, calcium cyanide, or copper cyanide would be used during construction of the project. Furthermore, the construction contractor would be required to ensure that materials handled are used and stored in accordance with existing laws and regulations, and manufacturer requirements.

An accidental release of construction-related hazardous materials may occur even if these regulations are followed. Due to the routine nature of the activities involved in construction

activities, an accidental spill of hazardous materials is unlikely, but if one were to occur, exposure of workers and/or the environment to hazardous materials would be considered a ***potentially significant impact***. Mitigation Measure 4.11b would reduce this impact to **less than significant** by requiring the construction contractor to implement a Site Mitigation Work Plan that establishes best management practices for storage and for responding to any spills of hazardous materials.

IMPACT 4.11-2:	Expose people and/or the environment to hazardous materials due to the routine storage or transport of hazardous materials during operation of the project
SIGNIFICANCE:	Less Than Significant
MITIGATION:	None Required
RESIDUAL SIGNIFICANCE:	Less Than Significant

The proposed project would involve operation of residential and recreational uses that would require the transport, use, and disposal of common residential and landscaping hazardous materials. These include cleansers, solvents, oils, fuels, adhesives, pesticides, herbicides, and fertilizers. The use and storage of these household hazardous materials would not be in quantities substantial enough to produce an impact on the environment. Furthermore, there are various state regulations regarding the use, storage, and disposal of hazardous materials and wastes. All local residents would be required to follow applicable regulations and guidelines set forth by City, state, and federal agencies.

Accidental releases of hazardous materials and hazardous waste during project operation could occur from on-site or off-site sources. During the storage and/or use of chemical products, the risk of an accidental release exists. However, based on the types and quantities of hazardous substances anticipated to be used, the risk of a release of a significant quantity of hazardous substances is considered minimal and commensurate with other residential and recreational land uses. All future residents who reside within the project site would be required by local, state, and federal law to comply with applicable regulations regarding use, transport, and storage of hazardous materials. These requirements for the management of hazardous materials, as outlined in Section 4.11.2, Regulatory Setting, would ensure that the risk of a release of hazardous substances by residents and/or commercial businesses is minimized.

A major transportation route for hazardous materials is I-80, located approximately 4.5 miles west of the project site. Other major transportation routes within Citrus Heights include Greenback Lane (bordering the project site), Sunrise Boulevard (bordering the project site), Auburn Boulevard/Old Auburn Road (1.5 miles from the project site), Antelope Road (1.8 miles from the project site), and Madison Avenue (1 mile from the project site). All classes

of hazardous materials, excluding some high-level radioactive materials, poisons, and explosives, are permitted to be transported along major highways and roadways. The proposed project would inherently increase the number of people living near these routes, and this could increase risk of exposure to various hazardous materials that are being transported along I-80 and other major roadways. However, transportation of hazardous materials along state and interstate highways is considered a safe and efficient mode of transportation for hazardous materials, as it limits the distance travelled (by using the most-direct route) and is typically not close to residential areas. Furthermore, trucks transporting any hazardous materials are required to comply with Section 31303 of the California Vehicle Code, which prohibits the transportation of hazardous materials within residential districts and major roads, as well as near places where crowds could congregate. Rail lines are also a common transportation method for hazardous materials. The nearest railway is approximately 4.7 miles east of the project site, and regulations pertaining to the transportation of hazardous materials by rail line would apply.

The project is not expected to introduce any land uses that require the use, transport, or storage of large volumes of hazards materials or the use of acutely hazardous materials. Therefore, the risk of release of hazardous materials during project operation would be **less than significant.**

IMPACT 4.11-3:	Expose school students and staff to hazardous emissions or hazardous or acutely hazardous materials
SIGNIFICANCE:	Less Than Significant
MITIGATION:	None Required
RESIDUAL SIGNIFICANCE:	Less Than Significant

The closest schools to the project site are Trajan Elementary School, located 1 mile east of the project site; Kingswood Elementary School, located 1 mile southwest of the project site; Faith Christian Academy, located 0.9 miles northwest of the project site; Sylvan Middle School, located 1.7 miles northwest of the project site; and San Juan High School, located 1.1 miles west of the project site (SJUSD 2017). No schools would be located within 0.25 miles of the project site. The use of hazardous materials associated with residential and recreational land uses is not expected to create a risk of hazardous conditions at a school site, since quantities would not be substantial enough to cause an impact to the environment and applicable regulations and guidelines would be adhered to. Any hazardous materials used on site would be typical for construction and of residential and recreational land uses, and would not create hazardous emissions that could adversely affect students or staff at nearby schools. The impact would be **less than significant.**

IMPACT 4.11-4:	Exposure of people to existing hazardous conditions or materials on site
SIGNIFICANCE:	Potentially Significant
MITIGATION:	Mitigation Measure 4.11a
RESIDUAL SIGNIFICANCE:	Less Than Significant

The Phase I ESA prepared for the project site assessed the history of uses at the site and in the project area to identify any potential hazards that could affect future residents, employees, or visitors to the project site. Based on a review of historical information, the ESA revealed evidence of agricultural use on the project site for a vineyard and grass crops starting in 1938 and ending in the early 1970s. Prior agricultural use implies the potential for soil contamination associated with use of pesticides, herbicides, and nitrogen compounds, as well as petroleum hydrocarbons associated with the golf cart maintenance shed area (ADR 2016).

During on-site observations, suspect asbestos-containing materials were found on the project site in unspecified buildings. These include gypsum wallboard compound, sheet flooring, and roofing materials. In conjunction with the Phase I ESA, shallow soil sampling was conducted to determine whether suspected organochlorine pesticides and chlorinated herbicides, arsenic, lead, nitrates, nitrites, ammonia, petroleum hydrocarbons, and/or volatile organic compounds were present on the project site. Sampling was conducted in 10 approximately 62,000-square-foot sections of the project site. No organochlorine pesticides or herbicides were detected in any of the sample locations other than alpha-Chlordane, which was found in one soil sample at a concentration of 0.005 milligrams per kilogram (mg/kg). This level is well below the EPA Regional Screening Level of 1.7 mg/kg (ADR 2016).

Arsenic and lead were also detected on the project site. Concentrations of lead ranged from 6.3 to 23.1 mg/kg, which is less than the soil screening guideline of 80 mg/kg. Arsenic was present in concentrations of 3.2 to 10.2 mg/kg, which exceeds the state DTSC's soil screening guideline of 0.067 mg/kg. It was determined in the Phase I ESA that although arsenic concentrations exceed soil screening levels, arsenic levels on the project site are consistent with typical background concentrations in the region (ADR 2016). The Use of California Human Health Screening Levels (CHHSLs) in Evaluation of Contaminated Properties report states the following (CalEPA 2005):

> Naturally occurring background concentrations of arsenic and other metals in soils may exceed their respective soil CHHSLs. California Environmental Protection Agency generally does not require cleanup of soil to below background levels. This issue is frequently encountered with arsenic. Natural background concentrations of arsenic in California are often well above the health-based,

direct-exposure goals in soil of 0.07 mg/kg for residential land use and 0.24 mg/kg for commercial/industrial land use.

Nitrogen compounds were found in the fertilizer shed area of the project site in levels below the EPA's Regional Screening Levels. Concentrations of TPH, as motor oil, were detected in surficial soils in the golf cart maintenance area, ranging in concentrations from 558 to 2,040 mg/kg, which is below Environmental Screening Levels established by the RWQCB, San Francisco Bay Region. This concentration was not determined to be a significant risk to the subsurface, and TPH, as motor oil, is considered to be relatively immobile, insoluble, and non-volatile compared to lighter petroleum compounds. However, it is possible that elevated concentrations of petroleum hydrocarbons could be uncovered during demolition and construction activities (ADR 2016).

The Phase I ESA found that no unusual or suspicious materials handling or storage practices were observed on accessible portions of adjacent properties. These properties store routine household-related chemicals in quantities that would not substantially impact the project site. ADR conducted a search of LUSTs recorded by the RWQCB and California OES. The search identified six reported leaking tank sites within 0.5 miles of the project site. Two of these sites were each listed twice, and all of the LUST cases are closed or eligible for case closure (ADR 2016). These LUSTs would not impact the project site, as they are greater than 300 feet from the project boundary, occur in a down-gradient location of groundwater flow, and are either listed as closed or are eligible for case closure.

The project site is listed in the California Hazardous Material Incident Report System database, which records data on reported hazardous materials incidents. The database lists a spill occurrence on the project site on October 31, 2004, when approximately 4,500 gallons of sewage was released from a broken pipe into Arcade Creek. Based on the material released, ADR does not suspect that the spill is an environmental concern to the project site (ADR 2016).

Based on the conclusions of the Phase I ESA (ADR 2016), the concentrations of identified contaminants in the native soil on the project site would not adversely affect construction or operation of the proposed project, and would not expose people at the project site to hazardous materials or conditions. However, it is possible that higher concentrations of soil contamination could be discovered during construction activities beyond the area that was sampled. Therefore, impacts related to exposure to hazardous conditions or materials on site would be ***potentially significant.*** Mitigation Measure 4.11a would provide that any hazardous materials uncovered during construction are remediated in accordance with state regulations for ensuring that the site is suitable for residential occupation. Thus, with implementation of Mitigation Measure 4.11a, this impact would be reduced to **less than significant**.

IMPACT 4.11-5:	Impair implementation of an adopted emergency response plan
SIGNIFICANCE:	Less Than Significant
MITIGATION:	None Required
RESIDUAL SIGNIFICANCE:	Less Than Significant

The Sacramento County OES has prepared several emergency response plans to aid coordination between local, state, and federal agencies during emergency situations such as human-caused disasters, natural disasters, and national security incidents. The Sacramento County Evacuation Plan establishes a strategy for evacuation of people within Sacramento County during the event of an emergency. The plan includes procedures for public alert and warning, transportation, and care and shelter of affected individuals. This evacuation plan is in addition to Sacramento County's Emergency Operations Plan, which sets forth a plan to address response to large-scale disasters before, during, and after an incident (Sacramento County 2017). The Sacramento Metropolitan Fire District has developed a Hazardous Materials Emergency Response Plan that specifies organization and operation responsibilities in the event of a hazardous materials emergency, including cleanup and decontamination procedures.

Development of the proposed project would increase the transport, handling, storage, and use of hazardous materials on the project site, primarily during construction. During project operation, use of hazardous materials would be limited to common household and landscaping products.

The project would include two southern vehicular access points from Arcadia Drive, and an eastern access point from Fair Oaks Boulevard. A roundabout is proposed along Arcadia Drive where the road bends to the south (toward Greenback Lane). An emergency vehicular access point is also proposed on Sunrise Boulevard via an existing easement located on the proposed project's northern boundary. The project proposes to construct 113 alley-loaded residences, 72 cluster residences, and 76 traditional single-family residences. Vehicular access to the alley-loaded residences would be provided from 22-foot-wide private roads at the rear of the units. Vehicular access to the 72 cluster residences, arranged in clusters of between two and eight units, would be provided from alleys that extend off of public streets within the neighborhood. Vehicular access to the 76 traditional single-family housing units would be provided from a mixture of public and private roadways at the front of each unit. The public roadways would be 32 or 34 feet wide, with many ending in 36-foot-radius cul-de-sacs.

Project design and layout has been reviewed by the City's law enforcement and fire personnel to ensure that adequate emergency ingress and egress is provided throughout the site. The project, as designed, would not interfere with or impair implementation of an adopted emergency response plan. Therefore, impacts related to the potential for the project to impair implementation of emergency response plans would be **less than significant**.

IMPACT 4.11-6:	Exposure to risks associated with wildland fires
SIGNIFICANCE:	Less than Significant
MITIGATION:	None Required
RESIDUAL SIGNIFICANCE:	Less than Significant

According to the Fire Hazard Severity Zone Maps developed by the California Department of Forestry and Fire Protection, the City is not located within a moderate, high, or very high fire hazard severity zone for a State Responsibility Area or Local Responsibility Area (CAL FIRE 2007). Developed areas surround most of the project site, with the exception of vacant land on the east side of Fair Oaks Boulevard, across from the southeastern corner of the project site. In the existing conditions, the project site contains 28.5 acres of valley oak woodland and 27.7 acres of urban/developed land. Under the proposed project, approximately 19.5 acres of the woodland vegetation would be converted to developed land. The project would reduce the total amount of vegetative fuels on the project site, but would increase human presence in proximity to the retained oak woodland, which could increase the risk of fire occurring at this site. All of the residences constructed on site would include interior fire suppression sprinklers and be constructed using noncombustible roofing and exterior materials. This would improve the fire resistance of the new buildings. There are no other large areas of vegetation near the project site that would pose a substantial risk of wildfire to the project site. Therefore, the project's impact associated with exposure to risks associated with wildland fires would be **less than significant**.

IMPACT 4.11-7:	Contribute to cumulative increases in exposure to hazards and hazardous materials
SIGNIFICANCE:	Less Than Significant
MITIGATION:	None Required
RESIDUAL SIGNIFICANCE:	Less Than Significant

The geographic scope for consideration of cumulative impacts related to hazards and hazardous materials is the City of Citrus Heights.

Exposure to Hazardous Environmental Conditions

For any projects in the City that would entail development of a site where past uses could have resulted in soil or groundwater contamination, the potential exists for release of hazardous substances during construction at those sites. For individuals not involved in construction activities, the greatest potential source of exposure to contaminants would be airborne emissions, primarily through dust from soil-disturbing activities during construction where previously unidentified contamination may exist. (Other potential pathways, such as direct contact with contaminated soils or groundwater, would not pose as great a risk to the public because such

exposure scenarios are site-specific and would typically be confined to the construction zones.) Potential hazardous materials impacts related to site-specific conditions (including exposure to potentially contaminated soils and exposure to potentially contaminated groundwater during construction dewatering) is generally not regional and would not combine with impacts from other projects in the City to create a cumulative impact. Thus, there would be no cumulative impact to which the project could contribute. Compliance with all applicable federal, state, and local regulations related to hazards and hazardous materials on a project-by-project basis would be required for all projects within the City, and would ensure that site-specific impacts are appropriately addressed and cannot combine with site-specific impacts from other project sites.

Use, Storage, and Transport of Hazardous Materials During Construction

During the construction process, hazardous materials spills or accidents would typically be site-specific and would not combine with other uses to create a cumulative effect. Associated health and safety risks generally would be limited to those individuals using the materials or to persons in the immediate vicinity of the materials. Thus, there would be no cumulative impact to which the project could contribute.

Use, Storage, and Transport of Hazardous Materials During Operation

The proposed project would not introduce any industrial land uses to the project site. During project operation, the use, storage, and transport of hazardous materials would be limited to household materials such as paints, solvents, cleaning supplies, pool chemicals, pesticides, and herbicides. The proposed project, in conjunction with other existing, planned, and probable future projects within the City, would result in an increase in the amount of hazardous materials used and stored within City limits and transported through the City. However, these projects would involve similar requirements for use, storage, and transport of hazardous materials as the proposed project. The quantities of hazardous materials that would be present during occupancy of the project are expected to be minimal and would consist of household and maintenance products. Implementation of applicable hazardous materials management laws and regulations adopted at the federal, state, and local levels would ensure that cumulative impacts related to hazardous materials use remain **less than significant.**

4.11.4 Mitigation Measures

Mitigation Measure 4.11a Prior to initiation of project demolition and/or grading, a Contingency Construction Management Plan shall be prepared to address potential soil contamination uncovered during demolition and/or grading activities. In the event that demolition or grading activities reveal evidence of possible soil contamination (i.e., based on soil staining or petroleum odors), underground storage

tanks, or other environmental concerns, the Contingency Construction Management Plan shall be implemented.

Personnel current with Occupational Safety and Health Administration (OSHA) Hazardous Waste Operations and Emergency Response (HAZWOPER) training (OSHA 29 CFR 1910.120) shall be present to observe demolition, excavations, and grading in the vicinity of the golf cart maintenance shed area, where petroleum hydrocarbons have been documented in surficial soils.

The Contingency Construction Management Plan shall be prepared by a qualified environmental professional registered in California. The plan shall identify specific measures to protect worker and public health and safety, and shall specify measures to identify, manage, and remediate wastes. The plan shall include the following:

- Accident prevention measures:
    - Summary of known site history and site concentrations.
    - Appropriate work practices necessary to effectively comply with the applicable environmental laws and regulations, including hazardous substance management, handling, storage, disposal, and emergency response. These work practices include the following: an on-site hazardous material spill kit shall be provided for small spills; totally enclosed containment shall be provided for all trash; and all construction waste, including trash, litter, garbage, other solid waste, petroleum products, and other potentially hazardous materials, shall be removed to an appropriate waste facility permitted or otherwise authorized to treat, store, or dispose of such materials.
- Contamination evaluation and management procedures:
    - Identification of physical observations (e.g., soil staining, odors, or buried material) to be used to identify potential contamination.
    - Procedures for cessation of construction activity within a 50-foot-radius of potentially contaminated soil, and evaluation of the level of environmental concern if potential contamination is encountered.

  - Procedures for limiting access to the contaminated area to properly trained personnel.
  - Procedures for notification and reporting, including internal management and local agencies (e.g., fire department, Sacrament County Environmental Management Department), as needed.
  - A worker health and safety plan for excavation of contaminated soil.
  - Procedures for characterizing and managing excavated soils in accordance with CCR Title 14 and Title 22.
- Procedures for certification of completion of remediation.

Mitigation Measure 4.11b The construction manager shall prepare a Site Mitigation Work Plan that includes the following requirements:

- Hazardous materials must be stored in locations that are removed from storm drain inlets, drainage ways, and canals, and that are surrounded by earthen berms to prevent materials from entering stormwater runoff or natural drainage features. The materials must also be covered with impervious tarps or stored inside buildings to ensure that materials are not released to the air during windy conditions or exposed to rain.
- All construction crew members must be trained regarding best practices for use, storage, and disposal of hazardous materials.
- All construction crew members must be instructed to immediately notify a construction foreperson of any spills of hazards materials, and the foreperson must take steps to contain the spilled materials.
- Any releases of hazardous materials must be immediately reported to the Sacramento County Environmental Compliance Division of Sacramento County's Environmental Management Department and remediated in accordance with Sacramento County's requirements. This may include excavating and disposing of contaminated soil. Typically, construction projects require on-site storage of relatively small amounts of hazardous materials, which would also limit the potential impacts from a release of these materials.

4.11.5 References

ADR (ADR Environmental Group Inc.). 2016. Phase I ESA for the Sunrise Golf Course and Former Sunrise Fun Center. April 22, 2016.

CAL FIRE (California Department of Forestry and Fire Protection). 2007. Fire Hazard Severity Zones in SRA. Adopted by CAL FIRE on November 7, 2007. Accessed July 31, 2017. http://frap.fire.ca.gov/webdata/maps/sacramento/fhszs_map.34.pdf.

CalEPA (California Environmental Protection Agency). 2005. Use of California Human Health Screening Levels (CHHSLs) in Evaluation of Contaminated Properties. Prepared January 2005. Accessed July 31, 2017. http://www.waterboards.ca.gov/losangeles/water_issues/programs/remediation/brownfields/fed_statelaws/chhslsguide.pdf.

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Sacramento County. 2017. "Emergency Plans." Accessed July 31, 2017. http://www.sacramentoready.org/Respond/Pages/Evacuation-Plans.aspx.

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