
4.6 - Hazards and Hazardous Materials

4.6.1 - Introduction

This section describes the existing setting regarding hazards and hazardous materials and potential effects from project implementation on the site and its surrounding area. Descriptions and analysis in this section are based in part on information contained in the Preliminary Environmental Site Assessment, prepared in November 7, 1989 by C.H.J. Environmental Incorporated, and an Environmental FirstSearch Report, prepared by Michael Brandman Associates (MBA) in November 27, 2007. Both are included in this EIR as Appendix F.

As explained in Section 1, Introduction, where applicable, this project-level DEIR incorporates by reference information and analysis contained in the City of San Bernardino General Plan EIR and the Paradise Hills Specific Plan EIR, certified by the San Bernardino City Mayor and Common Council in 2005 and 1993, respectively. The General Plan EIR contemplated buildout of the General Plan at a programmatic level and concluded that all impacts related to hazards and hazardous materials were less than significant after mitigation. The Paradise Hills provided project-level analysis of the smaller Paradise Hills project and determined that hazards and hazardous materials were not significant.

This DEIR accounts for modifications to the baseline conditions that have occurred since certification of the previous EIRs and changes that have increased the size and intensity of the proposed project. Accordingly, not all of the conclusions in the previous EIRs are applicable to the proposed project, and new analysis is provided for potential impacts not previously considered in those documents.

4.6.2 - Environmental Setting

Hazardous Materials

Hazardous materials, as defined by the California Code of Regulations, are substances with certain physical properties that could pose a substantial present or future hazard to human health or the environment when improperly handled, disposed, or otherwise managed. Hazardous materials are grouped into the following four categories, based on their properties:

- Toxic (causes human health effects);
- Ignitable (has the ability to burn);
- Corrosive (causes severed burns or damage to materials); and
- Reactive (causes explosions or generates toxic gases).

A hazardous waste is any hazardous material that is discarded, abandoned, or slated to be recycled. If improperly handled, hazardous materials and hazardous waste can result in public health hazards if released into the soil or groundwater or through airborne releases in vapors, fumes, or dust. Soil and groundwater having concentrations of hazardous constituents higher than specific regulatory levels must be handled and disposed of as hazardous waste when excavated or pumped from an aquifer.

The California Code of Regulations, Title 22, Sections 66261.20-24 contains technical descriptions of toxic characteristics that could cause soil or groundwater to be classified as hazardous waste.

Record Search

A search of federal, State, and local databases by Track Info Services (TIS) that lists contaminated sites, Brownfield sites, underground storage tank (UST) sites, waste storage sites, toxic chemical sites, contaminated well sites, clandestine drug lab sites, and other sites containing hazardous materials yielded multiple sites within 1 mile of the project. The project site was not listed on any databases. There were several areas identified in the surrounding area. The sites or areas within one mile of the project site are summarized in Table 4.6-1.

Table 4.6-1: Recorded Sites Near the Project Site

Name	Location	Database(s)
Newmark Groundwater Contamination	Bunker Hill Groundwater Basin, approx. 0.4 mile south of project site	Brownfield NPL, CERCLIS, FED IC/EC, PRP, State Annual Workplan, PERMITS, UST
California State University San Bernardino	Various facilities around the campus, from 0.3 to 0.8 mile south of project site	SCHOOL, PERMITS, UST, FINDS, LUST, NCDB, PADS
Cajon High School	Various facilities (e.g., pool, science labs, vehicle maintenance) approx. 0.6 mile southeast of project site	SCHOOL, FINDS, PERMITS,
Northpark Elementary School	Fuel storage tank approx. 0.5 mile south of project site	SCHOOL, UST
<p>RCRAInfo: United States Environmental Protection Agency (EPA) comprehensive database for data supporting the Resource Conservation and Recovery Act (RCRA) and the Hazardous and Solid Waste Amendments. Includes sites that generate, transport, store, treat, and/or dispose of hazardous waste. Conditionally exempt small quantity generators (CESQGs) that generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.</p> <p>CORTESE: Database identifies public drinking water wells with detectable levels of contamination, hazardous substance sites selected for remedial action, sites with known toxic material identified through the abandoned site assessment program, sites with underground storage tanks (USTs) having a reportable release, and all solid waste disposal facilities from which there is known migration.</p> <p>LUST: The Leaking Underground Storage Tank Incident Reports contain an inventory of reported leaking underground storage tank incidents.</p> <p>UST: The Underground Storage Tank database contains registered USTs, regulated under Subtitle I of RCRA.</p> <p>HIST UST: Historical UST Registered Database.</p> <p>SL: Lists includes sites from the Underground Tank Program, Hazardous Waste Generator Program & Business Plan 12185 Program.</p> <p>SWEEPS: Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the State Water Resources Control Board in the early 1980s but is no longer updated or maintained. Local agencies serve as contacts for SWEEPS.</p> <p>DRYCLEANERS: List of dry cleaner-related facilities that have EPA ID numbers, includes facilities with certain SIC codes: power laundries, family and commercial; garment pressing and cleaners' agents; linen supply; coin-operated laundries and cleaning; dry cleaning; industrial launderers; and laundry and garment services.</p> <p>Source: Michael Brandman Associates. 2007.</p>		

Aerial Photographs

Aerial photographs of the project area dating to 1939 were obtained as part of the Phase I ESA process. The changes that occur to the project site and surroundings are summarized in Table 4.6-2.

Table 4.6-2: Aerial Photograph Summary

Year	Description
1930	The project site is vacant with a small agricultural farm to the northwest. The project area is mainly vacant land with a paved road south of the project site.
1953	The project site is vacant with a small agricultural farm to the northwest. The project area is mainly vacant land with a paved road south of the project site.
1966	The project site is vacant with a small agricultural farm to the northwest. The project area is mainly vacant land with residential tract housing south of the project site, while scattered industrial structures are to the southwest of the project site.
1980	The project site is vacant with a small agricultural farm to the northwest. The project area is mainly vacant land with residential tract housing and agriculture farms south of the project site, while scattered industrial structures are to the southwest of the project site.
1995	The project site is vacant with a small agricultural farm to the northwest. The project area is mainly vacant land with increased residential tract housing south of the project site, while scattered industrial structures are to the southwest of the project site. A dirt and paved road system is more apparent southwest of the project site.
2002	The project site is vacant with a small agricultural farm to the northwest. The project area is mainly vacant land with medium to high-density residential tract housing south of the project site, while scattered industrial and commercial structures are to the southwest of the project site.
Source: Michael Brandman Associates. 2007.	

Hazardous Building Materials

The following hazardous building materials may be present on the project site:

Asbestos

Asbestos is the name given to a number of naturally occurring, fibrous silicate minerals mined for their useful properties, such as thermal insulation, chemical and thermal stability, and high tensile strength. Asbestos is commonly used as an acoustic insulator, thermal insulation, fireproofing, and in other building materials. Asbestos is made up of microscopic bundles of fibers that may become airborne when asbestos-containing materials are damaged or disturbed. When these fibers get into the air they may be inhaled into the lungs, where they can cause significant health problems. The California Occupational Health and Safety Administration (Cal OSHA) defines asbestos-containing materials as any material that contains 0.1 percent asbestos by weight.

The remnants of one residence and the Circle K Camp do not appear to contain asbestos materials, but it remains a possibility due to their age and type of construction.

Lead

Lead is a highly toxic metal that was used until the late 1970s in a number of products, most notably paint. Lead may cause a range of health effects, from behavioral problems and learning disabilities to seizures and death. Primary sources of lead exposure are deteriorating lead-based paint, lead-contaminated dust, and lead-contaminated soil.

Although the remnants of the one residence and the Circle K Camp do not appear to contain lead-based paint, it remains a possibility because they were constructed prior to the federal ban on lead-based paint and other lead-based building materials.

Polychlorinated Biphenyls

Polychlorinated biphenyls (PCBs) are mixtures of man-made chemicals with similar chemical structures. PCBs can range from oily liquids to waxy solids. Because of their non-flammability, chemical stability, high boiling point, and electrical insulating properties, PCBs were used in hundreds of industrial and commercial applications, including electrical, heat transfer, and hydraulic equipment; as plasticizers in paints, plastics, and rubber products; in pigments, dyes, and carbonless copy paper; and many other applications. More than 1.5 billion pounds of PCBs were manufactured in the United States prior to cessation of production in 1977. Oil is typically not highly toxic or mobile in the environment, but transformer oil may contain PCBs.

Although there are local overhead service lines and poles onsite, there were no electrical transformers observed on the project site.

Pesticides

A pesticide is any substance or mixture of substances intended for preventing, destroying, repelling, or mitigating any pest. The term pesticide applies to insecticides, herbicides, fungicides, and various other substances used to control pests. The health effects of pesticides depend on the type of pesticide. Examples of health risks posed by pesticides include cancer, nervous system damage, hormone or endocrine disruption, and eye or skin irritation.

The project site has not been farmed or ranched in recorded history, as evidenced by historical aerial photographs (see Table 4.6.2). Therefore, there is no potential for contamination by pesticides or other chemicals applied for agricultural purposes, including dry farming.

Radon

Radon is a carcinogenic, radioactive gas resulting from the natural breakdown of uranium in soil, rock, and water. Radon gas enters a building through cracks in foundations and walls. Once inside the building, radon decay products may become attached to dust particles and inhaled, or the decayed radioactive particles alone may be inhaled and cause damage to lung tissue. The U.S. EPA has established a safe radon exposure threshold of 4 picocuries per liter of air (pCi/l).

The project site contains no structures that would contain radon to a substantial degree.

High-Voltage Power Lines

High-voltage power lines emit electromagnetic fields (EMFs), which have been alleged to be a cause of cancer. However, scientific research has never conclusively established a link between EMFs and cancer.

A local service electrical line crosses the site, but otherwise there are no electrical facilities on the project site. Therefore, there is no potential for exposure to electromagnetic fields.

Hydrocarbons/Aboveground and Underground Storage Tanks

Petroleum hydrocarbons are derived from crude oil, which is refined into various petroleum products such as diesel, gasoline, kerosene, lubricants, and heavy fuel oils. Hydrocarbons constituents include benzene, N-heptane, and toluene, and generate health effects such as cancer, leukemia, asthmatic bronchitis, kidney damage, and eye irritation. Hydrocarbons are stored in aboveground storage tanks (ASTs) and underground storage tanks (USTs). Leaking ASTs and USTs can result in contamination of groundwater sources or fire and explosion.

Onsite reconnaissance and the TIS environmental database search indicate there are no ASTs or USTs on the project site. However, there are several facilities in the surrounding area that do have USTs including the CSUSB campus and the Cajon High School, both south of the project site.

Wind Hazards

According to the General Plan, the City is subject to extremely high winds, which have resulted in significant property damage. The most significant wind problems are observed to occur at the canyon mouths and valleys extending downslope out of the San Bernardino Mountains. In addition, the highest velocities are associated with downslope canyon and Santa Ana winds (90-100 mph) which reverse the prevailing southwesterly winds and usually occur on a region-wide basis during late summer and early fall. Santa Ana winds are dry and warm and flow from the higher desert elevations in the north through the mountain passes and canyons. As they converge through the canyons, their velocities increase as a result of “adiabatic cooling.”

High winds exacerbate brush fire conditions. Of the major fires in the San Bernardino Mountains, all have occurred during periods of high winds. New development in the foothill areas and valleys will expose buildings and population to significant wind hazards. The high wind velocity and property damage potential have resulted in the northern half of the City adjacent to the mountains being classified by the City as a “High Wind Area” (Figure S-8, CSB General Plan). In this area of the City, stringent conditions for the construction of buildings and public facilities must be applied.

Federal Regulatory Framework

Resource Conservation and Recovery Act

The 1976 Federal Resource Conservation and Recovery Act (RCRA) and the 1984 RCRA Amendments regulate the treatment, storage, and disposal of hazardous and non-hazardous wastes. The legislation mandated that hazardous wastes be tracked from the point of generation to their

ultimate fate in the environment. This includes detailed tracking of hazardous materials during transport and permitting of hazardous material handling facilities.

The 1984 RCRA amendments provided the framework for a regulatory program designed to prevent releases from USTs. The program establishes tank and leak detection standards, including spill and overflow protection devices for new tanks. The tanks must also meet performance standards to ensure that the stored material will not corrode the tanks. Owners and operators of USTs had until December 1998 to meet the new tank standards. As of 2001, an estimated 85 percent of USTs were in compliance with the required standards.

Comprehensive Environmental Response, Compensation, and Liability Act

The Comprehensive Environmental Response, Compensation, and Liability Act of 1980 introduced active federal involvement to emergency response, site remediation, and spill prevention, most notably the Superfund program. The act was intended to be comprehensive in encompassing both the prevention of, and response to, uncontrolled hazardous substances releases. The act deals with environmental response, providing mechanisms for reacting to emergencies and to chronic hazardous material releases. In addition to establishing procedures to prevent and remedy problems, it establishes a system for compensating appropriate individuals and assigning appropriate liability. It is designed to plan for and respond to failure in other regulatory programs and to remedy problems resulting from action taken before the era of comprehensive regulatory protection.

State Regulatory Framework

California Health and Safety Code

The California EPA has established rules governing the use of hazardous materials and the management of hazardous wastes. California Health and Safety Code Section 25531, et seq. incorporates the requirements of Superfund Amendments and Reauthorization Act and the Clean Air Act as they pertain to hazardous materials. Health and Safety Code Section 25534 directs facility owners storing or handling acutely hazardous materials in reportable quantities to develop a Risk Management Plan. The Risk Management Plan must be submitted to the appropriate local authorities, the designated local administering agency, and the EPA for review and approval.

Local Regulatory Framework

City of San Bernardino General Plan

The Safety Element of the City's General Plan establishes the following relevant policies related to hazards and hazardous materials:

Goal 10.1: "Protect the environment, public health, safety, and welfare from hazardous wastes."

- **Policy 10.1.1** Employ effective emergency preparedness and emergency response strategies to minimize the impacts from hazardous materials emergencies, such as spills or contamination.

- **Policy 10.1.2** Ensure the protection of surface and groundwater quality, land resources, air quality, and environmentally sensitive areas through safe transportation of waste through the City and comprehensive planning of hazardous materials, wastes, and sites.
- **Policy 10.1.3** Execute long-range planning programs to protect resources and the public from the potential impacts that could be created by the use, storage, transport, and disposal of hazardous waste and materials.
- **Policy 10.1.4** Continue to support the role that the Fire and the Police Departments play in the on-site identification of hazardous wastes and emergency response to hazardous waste accidents in cooperation with the County Department of Environmental Health Services.

Analysis: The project will not interfere with emergency access, and in fact will create a loop road through the project north of the CSUSB campus that will improve emergency access to this area (i.e., the eastern extension of Campus Parkway and the northern extension of Little Mountain Drive).

Goal 10.3: “Protect the environment, public health, safety, and welfare from hazardous wastes.”

- **Policy 10.3.1** Conduct educational program to educate the public about the proper handling and disposal of household hazardous wastes.
- **Policy 10.3.2** Enforce the proper disposal of Household Hazardous Wastes.

Analysis: The project will distribute, as appropriate, publications and materials provided by the City regarding the disposal of hazardous wastes. The clubhouse will be a recycling center and can host monthly “household waste disposal days” for the convenience of its residents.

NOTE: Goal 10.2 deals with commercial hazmat facilities and transport, Goals 10.4 and 10.5 deal with groundwater contamination, and Goals 10.6 through 10.13 deal with other safety concerns (geology, fires, etc.) not applicable to hazardous materials.

In addition, the Safety Element of the City’s General Plan contains the following goal and policies regarding hazards related to high winds:

Goal 10.1: “Protect people and property from the adverse impacts of winds.”

- **Policy 10.10.1:** Ensure that buildings are constructed and sited to withstand wind hazards.
(LU-1)

- **Policy 10.10.2:** Require that development in the High Wind Hazard Area, as designated on Figure S-8, be designed and constructed to withstand extreme wind velocities. (LU-1)
- **Policy 10.10.3:** Periodically review the structural design requirements for wind in the Building Code to reflect wind conditions and property damage experienced as well as advances to current construction technology.
- **Policy 10.10.4:** Require that structures be sited to prevent adverse funneling of wind on-site and on adjacent properties.
- **Policy 10.10.5:** Require that multi-story residential, commercial, and industrial buildings be designed to prevent wind tunnel effects around their base and in passageways. (LU-1)
- **Policy 10.10.6:** Construct public infrastructure (lighting poles, street lights, bridges, etc.) to withstand extreme wind velocities in High Wind Hazard areas.
- **Policy 10.10.7:** Maintain police, fire, medical, and other pertinent programs to respond to wind-caused emergencies.
- **Policy 10.10.8:** Initiate a review of the wind hazard potential as it applies to various parts of the City and, if merited, tailor the design standards accordingly.

Analysis: The UHSP document is sensitive to wind corridors and the potential for high wind velocities on the project. It will be important for future builders on this project site to include wind parameters in their construction specifications to make sure future residents are not exposed to wind hazards. Compliance with the City Development Code standards is considered to be sufficient in this regard.

City Fire Hazard Zones

The General Plan Land Use Map indicates the northern portions of the site are in a Foothill Fire Zone Overlay (Zones “B” and “C”) which requires projects to “mitigate the spread of wildfires, help to minimize property damage, and reduce the risk to the public health and safety” (General Plan Table LU-2). Refer to Section 4.8 (Land Use) for a further analysis on the Foothill Fire Zone Overlay.

San Bernardino County Hazardous Materials Program

San Bernardino County’s Hazardous Materials program serves area residents by responding to emergencies and monitoring hazardous materials. The 2005 San Bernardino County Hazardous Materials Area Plan is a comprehensive document that includes the identification of hazardous materials incident planning, operations, organization, and responsibilities for handling a hazardous materials incident that may impact San Bernardino County. It also provides support for hazardous materials management in San Bernardino County, including the coordination of data management, business plans, and facility inspections. The Plan is a dynamic document designed to protect human

health and the environment through hazardous materials emergency planning and community right-to-know programs within the County.

The San Bernardino Health Services - Hazardous Materials Programs (CCHS-HazMat) is authorized by the California Environmental Protection Agency to be the Certified Unified Program Agency (CUPA) for all cities and unincorporated areas within San Bernardino County. As the CUPA, CCHS-HazMat is the local agency responsible for administering the six elements of the Unified Hazardous Waste and Hazardous Materials Management Regulatory Program (Unified Program).

San Bernardino Emergency Response Plan

The City of San Bernardino has adopted an Emergency Response Plan to address potential impacts from a major earthquake, hazardous materials incident, flood, national security emergency, wildfire, landslide, and dam failure. The objectives of the plan are to reduce injury and loss of life and property through effective management of emergency forces. The plan identifies the City's emergency planning, organizational, and response policies and procedures, integrating and coordinating these with other governmental levels when required.

NOP Comments

At the second scoping meeting, Dr. Norman Meeks from CSUSB commented that placing new houses, structures, and residents in this alluvial fan area which is subject to flooding and periodic wildfires, was inherently dangerous, even if the development complies with applicable flooding, fire, and other hazard abatement regulations. In addition, two comment letters received from the Department of Water Resources and the Crestline Soaring Society Inc. commented on the hazards of placing the proposed project near the existing Andy Jackson Airpark.

Methodology

MBA conducted research equivalent to that necessary to prepare a Phase I ESA to document potential hazardous conditions on the project site and surrounding land uses. However, it did not prepare the actual Phase I ESA document for this process. The information included a review of local, State, and federal regulatory agency lists as compiled by TIS; a review of historic aerial photographs and topographic maps; a City and County Agency review; discussion with the current landowner; and site reconnaissance.

4.6.3 - Thresholds of Significance

According to the CEQA Guidelines' Appendix G, Environmental Checklist, to determine whether hazards and hazardous materials are significant environmental effects, the following questions are analyzed and evaluated. Would the project:

- a.) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

- b.) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment?
- c.) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?
- d.) 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?
- e.) 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 for people residing or working the project area?
- f.) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?
- g.) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?
- h.) 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?

4.6.4 - Project Impacts and Mitigation Measures

This section discusses potential impacts associated with the development of the project and provides mitigation measures where appropriate.

Routine Transport, Use, or Disposal of Hazardous Materials/Risk of Upset

Impact HAZ-1: **The proposed project may create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials or through the reasonably foreseeable upset and accident conditions.**

Impact Analysis

This impact is associated with hazards caused by the routine transport, use, or disposal of hazardous materials or through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.

Project construction activities may involve the use and transport of hazardous materials. These materials may include fuels, oils, mechanical fluids, and other chemicals used during construction. Transportation, storage, use, and disposal of hazardous materials during construction activities would be required to comply with applicable federal, State, and local statutes and regulations. Compliance

would ensure that human health and the environment are not exposed to hazardous materials. No significant impacts would occur during construction activities. For information on the requirements of the National Pollution Discharge Elimination System (NPDES) requirements for construction activities, see Section 4.7.2, *Hydrology and Water Quality, Regulatory Framework*.

The Cajon High School and Northpark Elementary School are located a half mile south of the eastern portion of the project site. In addition, the CSUSB campus is located a half mile south of the central and western portions of the site. The school's physical education classes use their onsite athletic fields. The primary hazardous material issue of concern is diesel particulate matter from heavy equipment and trucks, which would be emitted during construction and operational activities. However as will be discussed in HAZ-3, State law and standard practice reduce potential impacts to less than significant levels.

The clubhouse or the parks included in the proposed project would not be large-quantity users of hazardous materials. Small quantities of hazardous materials would be used onsite, including cleaning solvents (e.g., degreasers, paint thinners, and aerosol propellants), paints (both latex- and oil-based), acids and bases (such as many cleaners), disinfectants, and fertilizers. These substances would be stored in maintenance areas and would comply with all applicable storage, handling, usage, and disposal requirements. The potential risks posed by the use and storage of these hazardous materials are primarily limited to the immediate vicinity of the materials. Transport of these materials would be performed by commercial vendors who would be required to comply with various federal and State laws regarding hazardous materials transportation. As such, they are not expected to expose human health or the environment to undue risks associated with their use.

The clubhouse may have tenants or small businesses that use hazardous materials. Any such uses onsite would be required to submit a Hazardous Materials Business Plan to the San Bernardino Health Services Hazardous Materials Program if they were to store 55 gallons of hazardous materials as a liquid, 500 pounds of hazardous materials as a solid, or 200 cubic feet of hazardous materials as a gas onsite. However, as a standard requirement, property management will include language in all contracts related to the clubhouse, or contractors hired by the property management association, requiring that any tenant who would store 55 gallons or more of hazardous liquid, 500 pounds of hazardous solids, or 200 cubic feet of hazardous gas onsite, will need to prepare and submit a Hazardous Materials Business Plan to the San Bernardino Health Services Hazardous Materials Program. The plan will identify emergency response procedures in the event of an accident or spill and would include an initial inventory of hazardous materials, including new or waste materials that are toxic, reactive, ignitable, or corrosive. The contractual language shall provide property management with the ability to enforce the conditions through measures such as fines or other penalties.

In addition, as early phases of the UHSP project are developed and occupied, future residents of those early phases will be exposed to elevated levels of diesel particulates, classified as a toxic air

contaminant, during construction of later phases of the UHSP project. However, the duration of construction during the initial first stages of development are considered “short-term” and impacts to personal health are considered less than significant (MBA, Air Quality Analysis Report).

With the implementation of the following standard practices, the proposed project’s potential to create a significant hazard to the public or the environment from routine transport, use, or disposal of hazardous materials or through the reasonably foreseeable upset and accident conditions would be reduced to a less than significant level.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

Less than significant impact.

Prior Contamination

Impact HAZ-2:	The proposed project is not located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, therefore, would not create a potential hazard to the public and the environment.
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Impact Analysis

This impact assesses the proposed project’s potential to expose human health or the environment to contamination, both onsite and on nearby land uses.

Project Site

The TIS database search indicated the project site is not listed on any federal, State, or local databases of hazardous materials sites. Site reconnaissance found that there was no evidence of contamination or potential sources of contamination (e.g., soil staining, illegal dumping, USTs, ASTs, electrical transformers), however, it is possible that the existing residence building near Planning Area 16 may contain remnants of hazardous building materials (i.e., asbestos and/or lead-based paint). However, there will be there no disturbance of the existing residential building, and impacts from contaminants will therefore be less than significant.

Surrounding Land Uses

Several sites adjacent to or close to the project site are listed on federal, State, or local databases of hazardous materials sites. This includes the CSUSB campus, Cajon High School, Northpark Elementary School, and the Newmark Groundwater Contamination project involving the Bunker Hill groundwater basin. Of these sites, only the physical plant at the CSUSB campus had documented contamination that involved a leaking UST (gasoline in 1997). This site has been remediated and does not pose a threat to human health or the environment. The remaining sites are listed on

databases of hazardous materials users, which only indicates that such materials are currently or may have been previously used onsite; there are no records indicating that contamination has occurred. Site reconnaissance also found that there was no evidence of contamination or potential sources of contamination (e.g., soil staining, illegal dumping, USTs, ASTs, electrical transformers). It should also be noted that the project site is “up gradient” from these potential sources of contamination, so there is little likelihood of any contamination, were it to occur on any of these sites, to adversely affect the proposed project site. Therefore, surrounding land uses would not pose a contamination hazard to the proposed project, and impacts from development would be less than significant.

Because the project site is largely vacant, it does not face any significant hazard from hazardous building materials (radon, asbestos, lead, PCBs, etc.), pesticides, or EMF exposure from high voltage power lines. The only demolition onsite involves the removal of remnant walls and the foundation of one former residence near the south-central portion of the site. No hazards are expected to be involved in this demolition.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

Less than significant impact.

Exposure of Schools to Hazardous Materials

Impact HAZ-3: **The proposed project would not expose schools or parks to hazardous emissions, materials, substances, or waste.**

Impact Analysis

The Cajon High School and Northpark Elementary School are located a half mile south of the eastern portion of the project site. In addition, the CSUSB campus is located a half mile south of the central and western portions of the site. The school’s physical education classes use their onsite athletic fields. The primary hazardous material issue of concern is diesel particulate matter from heavy equipment and trucks, which would be emitted during construction and operational activities.

Construction Emissions

Project construction activities in Planning Areas 19 and 20 would occur within 2,400 feet of the nearest athletic field on the CSUSB campus, within 2,600 feet of the Cajon High School fields, and within 1,850 feet of the Northpark Elementary School fields. Construction activities would include the use of heavy diesel-power equipment (such as scrapers, graders, tractors, front-end loaders, off-road trucks) that would emit diesel particulate matter, a known carcinogen. As discussed in Section 4.2, *Air Quality* (Local Significance Thresholds), adverse health effects from diesel particulate matter requires regular exposure to concentrated emissions over a sustained period.

Construction activities would occur for a period of less than 18 months, with the nearest activities being 1,850 feet from the closest elementary field. Most of the construction activities would occur at distances greater than a half mile from the CSUSB and over a mile from the high school or elementary school's athletic fields. Given the temporary nature of construction activities and the distance from the source to the receptor, construction emissions of diesel particulate matter would not expose CSUSB, Cajon High School, or Northpark Elementary School students or staff to substantial emissions of hazardous materials. Impacts would be less than significant.

Operational Emissions

Operational activities associated with the proposed project would result in regular truck deliveries by light to medium duty delivery trucks. The only truck loading and unloading area on the project site would be at the clubhouse. At its closest point, the clubhouse would be approximately a half mile from occupied buildings of CSUSB, a mile from classroom buildings at Cajon High School, and 1.2 miles from classroom buildings at Northpark Elementary School.

In addition, State law prohibits the idling of diesel trucks for more than 5 minutes in loading areas. Because of the distribution of deliveries throughout the day, the distance between the nearest loading docks at the nearest school-related receptor, and the prohibition on extended idling, operational emissions of diesel particulate matter would not expose substantial emissions of hazardous materials. Impacts would be less than significant.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

Less than significant impact.

Conflicts with Emergency Response or Evacuation Plans

Impact HAZ-4: **The proposed project would not impair implementation of or physically interfere with an adopted emergency response or evacuation plan.**

Impact Analysis

The proposed project consists of a large-scale suburban residential development located outside of the existing urbanized part of the City of San Bernardino. The project site is located in an area where existing emergency response times for police and fire do not meet adopted standards; this issue is addressed in Section 4.12, *Public Services*. However, the provision of police and fire services is a separate issue from access for emergency vehicles. The proposed project does not contain any characteristics (e.g., permanent road closures) that would impair or otherwise interfere with

emergency response, evacuation, or the policies of the San Bernardino Emergency Response Plan. In fact, the project will complete a loop road involving the extension of Campus Parkway east and the extension of Little Mountain Drive to the north. With completion of the backbone loop road through the project, there will be no significant impacts regarding emergency access.

It is possible that in a major regional emergency, residents evacuating from the UHSP project may temporarily conflict with students, faculty and staff evacuating from the CSUSB campus (i.e., increased traffic on Campus Parkway, Northpark Boulevard, and Little Mountain Drive. However, project residents have several points of egress, including both east and west on Northpark Boulevard, while most of the CSUSB personnel would likely travel south on University Parkway to the freeway. It is possible that the timing of evacuation from the project site could cause temporary impacts relative to evacuation and/or safety on the CSUSB campus, but the timing of such interaction would be extremely speculative and beyond the scope of analysis for this EIR. In any case, the potential impacts on evacuation from the CSUSB campus is considered to be minimal due to the limited number of units and residents expected in this area, however, with the implementation of development fees to the City of San Bernardino for capital improvements to Police and Fire Dept. facilities, new facilities can be funded for construction and reduce impacts to emergency response or evacuation plans to less than significant levels.

Furthermore, there is potential for seismically induced flooding of the southwest portion of the site, should the San Bernardino Valley Municipal Water District pipeline rupture during a large earthquake. This has the potential to damage structures in Planning Areas 5-10 in the West Village area, including the clubhouse, however, such an event is considered extremely unlikely. The backbone road system forms a loop through the project site – this would allow for emergency access and evacuation of homes if the pipeline were to rupture during a seismic event.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

Less than significant impact.

Conflicts With Public Airports

Impact HAZ-5: The proposed project is 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 for people residing or working the project area.

Impact Analysis

The proposed project site is not within two miles of a public airport and is not within the land use plan of any public airports. The closest public airport is the San Bernardino International Airport (SBIA), which is over 7 miles southeast of the project site and will have **no impact**. However the western boundary of the proposed project site abuts the Andy Jackson Airpark, which is a facility used for hang gliding. Exhibit 4.6-1 shows the Andy Jackson Airpark hang gliding final approach line in comparison to the UHSP. Although the proposed UHSP is adjacent to the Andy Jackson Airpark, the final approach line will be over 200 feet of open space (from the project boundary line to proposed residential units) and will therefore not affect residences of the UHSP or users of the airpark. Therefore, impacts will be **less than significant** in this regard.

Level of Significance Before Mitigation

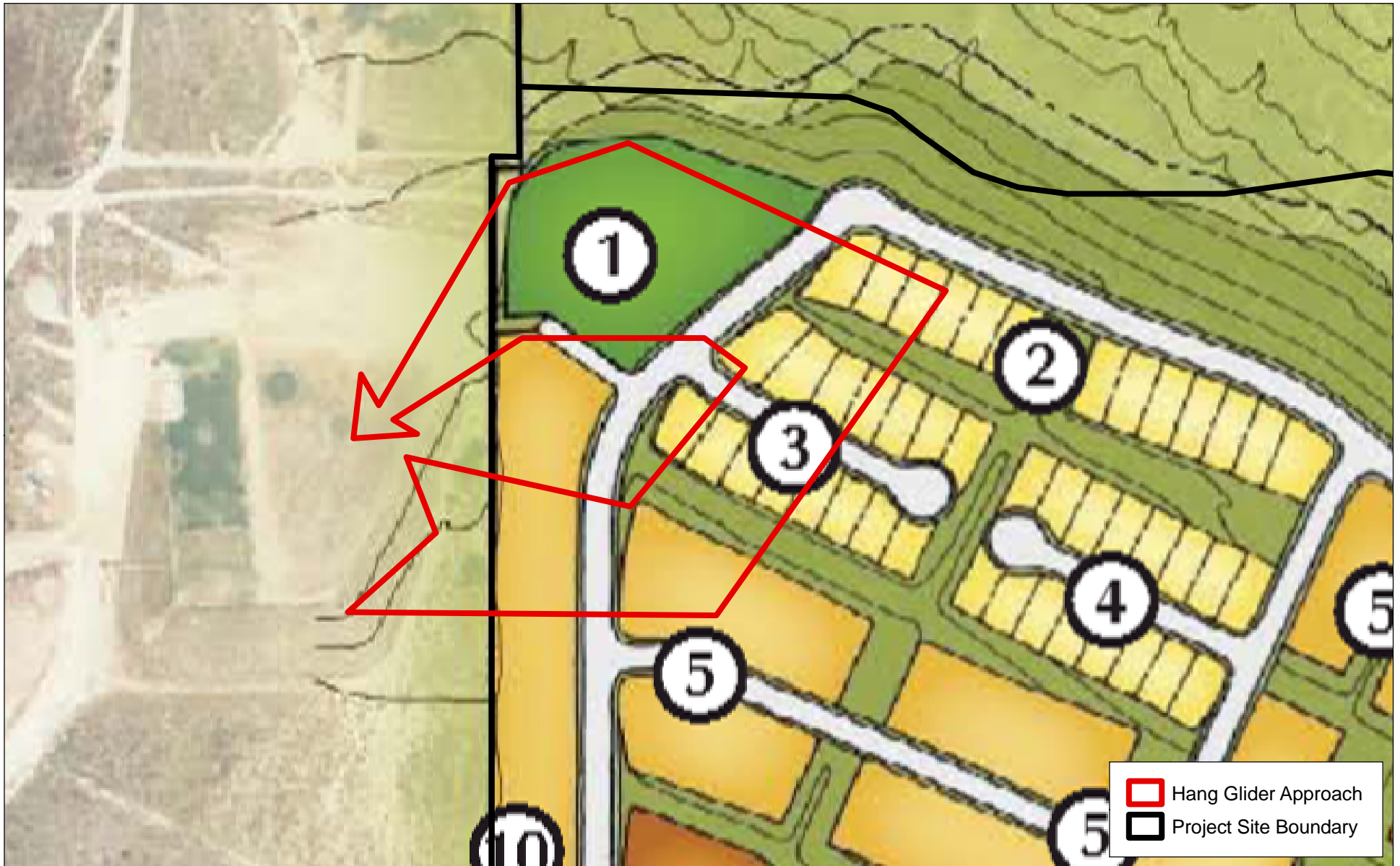
Less than significant impact.

Mitigation Measures

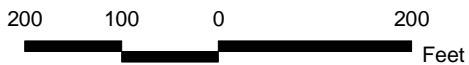
No mitigation is necessary.

Level of Significance After Mitigation

Less than significant impact.



Source: The Planning Center and KTG Group, 2008.



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Exhibit 4.6-1 Hang Gliding Final Approach

UNIVERSITY HILLS SPECIFIC PLAN EIR

Conflicts with Private Airstrips

Impact HAZ-6: The proposed project is located within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area.

Impact Analysis

The proposed project site is adjacent to the Andy Jackson Airpark. This facility accommodates non-motorized aircraft (e.g., hang gliders, parasailing, etc.) but requires a clear zone over the northwest portion of other UHSP project site to allow for continued safe landing operations. The developer worked with the San Bernardino Valley Soaring Association, the group that operates the airpark, and the location, size, and design of the “skypark” in Planning Area 1 is based on their requirements. With the proposed land use plan and project design (i.e., Planning Area 1 park), the project will have a **less than significant impact** in this regard.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

Less than significant impact.

Creates Fire Hazards

Impact HAZ-7: The proposed project 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.

Impact Analysis

The entire proposed project site is located within a City designated high wind area (Figure S-8, CSB General Plan). In addition, the project is located in two of the City’s Foothill Fire Hazard Zones. For those reasons, the developer retained FirePlanning Solutions, a fire management firm, to prepare a Fuel Modification Plan (FMP) for the UHSP project. The FMP identifies appropriate building setbacks and buffer areas to separate homes from the adjacent wildland areas. With the approval of the City Fire Department, the FMP will implement standard requirements during construction of the project to protect future homes and residents from existing fire hazards. In addition, the homeowners associations within the project will be set up as “fire safe councils” which will help residents better protect their homes and families from the threat of fire over the long-term. With the proposed project design (i.e., Fuel Modification Plan and fire safe councils), the project will have a **less than significant impact** in this regard. For additional discussion, see Section 4.8, *Land Use* (discussion on Foothill Fire Hazard Zones), and Section 4.11, *Public Services*, regarding fire hazards and fire protection services.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

Less than significant impact.