13 HAZARDOUS MATERIALS AND HAZARDS

The Hazardous Materials and Hazards chapter of the EIR describes existing and potentially occurring hazards and hazardous materials within the project area. The chapter discusses potential impacts posed by these hazards to the environment, as well as to workers, visitors, and residents within and adjacent to the project area. More specifically, the chapter describes potential effects on human health that could result from soil or groundwater contamination stemming from past uses, naturally occurring minerals, and abandoned mines. This chapter is based on information drawn from the *Environmental Site Assessment* by Wallace Kuhl and Associates, Inc. (See Appendix BB),[1] the *Preliminary Characterization of Abandoned Mine Features at Timberline @ Auburn* by Holdrege & Kull (See Appendix CC),[2] *Removal Action Completion Report and Site Closure Request* by Holdrege & Kull (See Appendix DD),[3] *Placer County Environmental Health Memorandum* regarding the site closure request (See Appendix EE),[4] the *Placer County General Plan*,[5] and the *Auburn/Bowman Community Plan*.[6]

13.1 ENVIRONMENTAL SETTING

The term hazardous substance refers to both hazardous materials and hazardous wastes. A material is defined as hazardous if the material appears on a list of hazardous materials prepared by a federal, State or local regulatory agency or if the material has characteristics defined as hazardous by such an agency.

The California Environmental Protection Agency, Department of Toxic Substances Control (CAL-EPA, DTSC) defines hazardous waste, as found in the California Health and Safety Code Section 25141(b), as follows:

> […] its quantity, concentration, or physical, chemical, or infections characteristics: (1) cause, or significantly contribute to an increase in mortality or an increase in serious irreversible, or incapacitating reversible illness; (2) pose a substantial present or potential hazard to human health or the environment, due to factors including, but not limited to, carcinogenicity, acute toxicity, chronic toxicity, bioaccumulative properties, or persistence in the environment, when improperly treated, stored, transported, or disposed of, or otherwise managed.

The proposed project site is primarily undeveloped, with extensive wooded and grassland areas. An existing residence located on the parcel located at 2342 Bell Road (APN 051-180-059). The site is bisected by an irrigation ditch. In addition, a natural swale flows from southeast to northwest on the site. The project site is surrounded by existing residential development. Commercial and public uses are located south and west of the southeastern tip of the project site. Odors, soil discoloration, or stressed vegetation was not observed at the time of site assessment.

Historic land uses within the proposed project area include agricultural (primarily grazing), rural community uses, and mining. Potential hazards associated with the historic mining land uses in the area include chemical contamination associated with the processing of mined ores, and hazards posed to buildings and persons by abandoned mine shafts.

Placer County Airport Land Use Compatibility Plan

A portion of proposed project site is located within the Placer County Airport Land Use Compatibility Plan (PCALUCP) area, which includes the Auburn Municipal Airport. A portion of the site is within the Compatibility Zone C1, and the remainder is within the Compatibility Zone C2 area. The zones are defines in the PCALUCP as follows:

Compatibility Zone C1 – *Zone C1* covers the extended approach/departure corridor for each airport and also includes land beneath the primary traffic patterns. This zone is affected by moderate degrees of both noise and risk. Cumulative noise levels exceed 55 dB CNEL in portions of *Zone C1* and noise from individual aircraft operations is disruptive to noise-sensitive land uses. Aircraft overfly this area at or below the traffic pattern altitude of 1,000 feet above the runway elevation. According to the date presented in the Caltrans *Handbook*, 40 percent to 50 percent of off-runway, airport-related, general aviation aircraft accidents occur within *Zones B* and *C1* for airports comparable to each of the Placer County airports. Portions of *Zone C1* lie beneath the Federal Aviation Regulations Part 77 transitional surface airspace – restrictions may be required on tall objects (ones greater than 100 feet high).

Compatibility Zone C2 – *Zone C2* encompasses areas routinely overflown by aircraft approaching and departing the airports, but less frequently or at higher altitudes than the areas within *Zone C1*. The zone includes locations along the pattern entry routes, within instrument approach corridors, and beneath wide patterns flown by large aircraft. Aircraft typically overfly these areas at an altitude of 1,000 to 1,500 feet above ground level on visual approaches. Annoyance associated with aircraft overflights is the major concern within *Zone C2*. Although the zone lies outside the 55-dB CNEL contour, noise from individual aircraft overflights may adversely affect certain land uses. Safety is a concern only with regard to uses involving high concentrations of people and to particularly risk-sensitive uses such as schools and hospitals.

The development of incompatible uses near within airport compatibility zones could result in hazards to both aircraft on the project site.

On-Site Hazards of Concern

This section describes the hazards of concern that exist within the proposed project area. These hazards may pose various threats to humans and resources should they come in contact with the materials or contaminated areas. A site survey performed as part of the Phase I Environmental Site Assessment did not observed areas of soil staining, or strong, pungent, or noxious odors.

Abandoned Mines

Historically one of the primary land uses in the project area was hard rock and placer mining. Historic records indicate that the Green Immigrant Mine may have been located on the project site. In addition, records also indicate that Black Ledge and Black Lead mines were located in the project area. During excavation south of the project site the County of Placer encountered a horizontal mine excavation in 1983 during trenching for a sewer line beneath Bell Road, south of the Timberline property. However, the exact location of the mine excavation was not recorded at that time. The mine shaft was approximately five feet in diameter, was located at an approximate depth of 12 to 15 feet below Bell Road, and appeared to have been backfilled prior to the County of Placer's sewer trenching. The mine excavation appeared to be oriented east-west, parallel to Bell Road. As discussed below in Impact 13-1, and as outlined in Chapter 14, *Mineral Resources*, mining activity has occurred in the project area. Documents indicate the presence of mines on the project site; however, investigations conducted onsite indicate that the former mine locations are not located on the Timberline at Auburn site. However, tentative mine locations have been identified on the ARD property. The tentative mine locations are not located in the area that would be developed with trails and mitigation wetlands. Therefore, known mine locations would not adversely affect the proposed project.

Structures

As discussed above, a structure currently exists on the project site. As determined by the project architectural consultant, the structure is in excess of 50 years old; therefore, the structure predates the bans on asbestos containing materials (ACMs) and lead-based paints. Asbestos was a material commonly used in heating and electrical insulation because of the material's resistance to fire and heat. However, later discoveries found that, when inhaled, the material caused serious illness. Lead is also a highly toxic material that may cause a range of serious illnesses, and in some cases death. Lead was most commonly used in paint and was banned in the 1970s.

Naturally Occurring Asbestos

The subject property is underlain by metamorphosed volcanic rock, and is located between the east and west branches of the Bear Mountain Fault Zone. Placer County has been identified by the California Department of Conservation, as an area where Naturally Occurring Asbestos (NOA) is located. Asbestos includes fibrous minerals found in certain types of rock formations. Natural weathering or human disturbance can break NOA down to microscopic fibers, which is easily suspended in air.

Off-Site Hazards Potentially Impacting the Project

The Phase I Environmental Site Assessment conducted a database search to identify sites listed on regulatory agency databases. The search did not identify any sites that are listed on the U.S. Environmental Protection Agencies National Priorities List, or the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS). Three sites which use and/or store county-registered hazardous materials are located within one-half

mile or the project site; however, these sites are not considered to adversely affect the subject property.

DeWitt General Hospital

The DeWitt General Hospital, located south of the project site, was identified as a site that has experienced an unauthorized hazardous material release. DeWitt General Hospital was built in 1943-44 to treat Army soldiers wounded in World War II. The 1,852-bed hospital specialized in general medicine, neurology, neurosurgery, vascular surgery, and psychiatry. After the war the hospital's patient population declined, and in December 1947 the DeWitt Center was turned over to the State of California. The hospital was converted by the State into a mental hospital. Placer County purchased the site in 1972, and the site now serves as an administrative center and county jail for Placer County.

In 1994, the U.S. Army Corps of Engineers (USACE) prepared a draft Environmental Assessment for the removal of underground fuel storage tanks at the former DeWitt General Hospital site. The report indicated that the DeWitt Center had twelve underground storage tank/vault site, and proceeded to remove the tanks. A storage vault at Building 8, located one-quarter of a mile south of the project site's southern boundary was found to have leaked heating oil.

The 1996 Closure Report presented the underground storage tank removal activities performed at the DeWitt Center. Building-8 was listed as having on 2,500-gallon underground, concrete heating oil storage vault. The vault was removed in September 1995 and confirmation samples were collected from the vault. The vault was removed in September 1995 and confirmation samples were collected from the vault excavation and soil stockpile. Total petroleum hydrocarbons extractable as diesel (TPH-d) were detected in the soil samples collected from the tank excavations and stockpile at 1,300 parts per million (ppm) and 1,500 ppm. TPH-d was detected in a water sample at 150 milligrams/liter. Benzene, toluene, ethyl benzene, and xylenes (BTEX) were not detected in the soil or water samples.

Tests conducted in December 2003 indicate that the TPH-d concentrations detected in the soil and groundwater are similar to the concentrations detected in 1995, with the highest concentrations located closest to the former vault locations. Although the later extent of the petroleum hydrocarbons in the soil and shallow groundwater has not been fully assed, they should attenuate with the passage of time. Furthermore, due to the location of the project site and the concentration/distribution of the contamination, the site is not considered to have adversely affected the subject property.

13.2 REGULATORY SETTING

Many agencies regulate hazardous substances. The following discussion contains a summary review of regulatory controls pertaining to hazardous substances, including federal, State, and local laws and ordinances.

Federal Regulations

Federal agencies that regulate hazardous materials include the Environmental Protection Agency (EPA), the Occupational Safety and Health Administration (OSHA), the Department of Transportation (DOT), and the National Institute of Health (NIH). The following federal laws and guidelines govern hazardous materials:

- Federal Water Pollution Control Act;
- Clean Air Act;
- Occupational Safety and Health Act;
- Federal Insecticide, Fungicide, and Rodenticide Act;
- Comprehensive Environmental Response, Compensation, and Liability Act;
- Guidelines for Carcinogens and Biohazards;
- Superfund Amendments and Reauthorization Act Title III;
- Resource Conservation and Recovery Act;
- Safe Drinking Water Act; and
- Toxic Substances Control Act.

Prior to August 1992, the principal agency at the federal level regulating the generation, transport and disposal of hazardous waste was the EPA under the authority of the Resource Conservation and Recovery Act (RCRA). As of August 1, 1992, however, the California Department of Toxic Substance Control (DTSC) was authorized to implement the State's hazardous waste management program for the EPA. The federal EPA continues to regulate hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA).

State Regulations

The California Environmental Protection Agency (Cal-EPA) and the State Water Resources Control Board establish rules governing the use of hazardous materials and the management of hazardous waste. Applicable State laws include the following:

- Public Safety/Fire Regulations/Building Codes;
- Hazardous Waste Control Law;
- Hazardous Substances Information and Training Act;
- Air Toxics Hot Spots and Emissions Inventory Law;
- Underground Storage of Hazardous Substances Act; and
- Porter-Cologne Water Quality Control Act.

Within Cal-EPA, DTSC has primary regulatory responsibility, with delegation of enforcement to local jurisdictions that enter into agreements with the State agency, for the management of hazardous materials and the generation, transport, and disposal of hazardous waste under the authority of the Hazardous Waste Control Law (HWCL).

Assembly Bill 387 and Senate Bill 162

On January 1, 2000, two laws affecting schools became effective: Assembly Bill (AB) 387 and Senate Bill (SB) 162. These bills require that the DTSC be involved in the environmental review process for the proposed acquisition and/or construction of school properties utilizing state funding. Assembly Bill 387 and SB 162 address concerns raised by parents, teachers, local communities, and the Legislature over school site properties that are or may be contaminated by hazardous materials and may pose a health threat to children and school faculty. The Department of Toxic Substance Control's (DTSC) role in the assessment, investigation, and cleanup of proposed school sites is to ensure that selected properties are free of contamination, or if the property is contaminated, that the site is cleaned up to a level that is protective of the students and faculty that will occupy the new school.

In conjunction, AB 387 and SB 162 provide a comprehensive program to ensure that hazardous material contamination issues are adequately addressed prior to school development. The program involves the preparation of a Phase I Environmental Site Assessment to determine whether a release of a hazardous material has occurred onsite in the past or if there may be a naturally occurring hazardous material present at the site. Based on the information gathered, the Phase I should conclude that either 1) recognized environmental conditions were not identified, or 2) a Preliminary Endangerment Assessment (PEA) is necessary.

Local Regulations

The ABCP does not include goals and policies that are applicable to hazardous materials and hazards.

13.3 IMPACTS AND MITIGATION MEASURES

Standards of Significance

In accordance with CEQA, the effects of a project are evaluated to determine if they would result in a significant adverse impact on the environment. For the purposes of this EIR, an impact is considered significant if the proposed project would:

- Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials;
- Create a significant hazard to the public or the environment through reasonably foreseeable upset and 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;
- 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 in the project area;

Method of Analysis

Site conditions and impacts for this chapter are based on the Placer County General Plan EIR, the Placer County General Plan and State, local, and federal database searches including: California Department of Toxic Substance Control; the California Environmental Protection Agency's Cortese List; California Regional Water Quality GeoTracker database; the United States Environmental Protection Agency; the California Department of Conservation's Division of Oil, Gas, and Geothermal Resources; and the Superfund Information System, CERCLIS Database.

No Further Action Letter

The Placer County Environmental Health Division (PCEH), reviewed the *Removal Action Completion Report and Closure Request Report* prepared by Holdrege and Kull, dated July 29, 2009, for the proposed project. Based on information provided in the report, the PCEH agreed with the conclusions and recommendations made in the report.

Project-Specific Impacts and Mitigation Measures

13-1 Impacts related to past mining activity in the project area.

As outlined in Chapter 14, Mineral Resources, mining activity has occurred in the project area. Documents indicate the presence of mines on the project site; however, investigations conducted onsite indicate that the former mine locations are not located on the Timberline at Auburn site. However, as shown in Figure 14-1, in Chapter 14 of this Draft EIR, tentative mine locations have been identified on the ARD property. The tentative mine locations are not located in the area that would be developed with trails and mitigation wetlands. Therefore, known mine locations would not adversely affect the proposed project. However, the possibility exists that additional excavations have previously occurred within the project site, or that mine shafts could extend into the project site. Mine entrances and shafts could result in geologic instability which could create hazards to buildings and persons.

Holdrege & Kull prepared a *Preliminary Characterization* of *Abandoned Mine Features* report that summarizes the results of a preliminary characterization of abandoned mine features located in the vicinity of the site. Based on a review of historical records and field exploration Holdrege & Kull identified small stockpiles of excavated soil and rock at areas PP1 through PP5 and further stated that the excavations may be associated with past mining activities or prospecting activities. Each of these identified features were located in the northern portion of the site on or near the eastern property boundary of the 24-acre parcel, assessor parcel number 051-210-099, owned by ARD.

To determine if the prospector pit excavation spoils contain elevated levels of metals, Placer County Environmental Health (PCEH) requested collection and analyses of soil samples. The eastern boundary of the ARD property was surveyed by a licensed surveyor. Features PP1 and PP4 are located on the ARD parcel and features PP2, PP3 and

PP5 are located offsite to the east of the ARD parcel (See Figures 13-1, 13-2, and 13-3). In March 2009, Holdrege & Kull collected soil samples from the prospector pit excavation spoils at the PP1 and PP4 locations, performed exploratory trenches (T1 and T2) at the base of the PP1 and PP4 pits, performed three test pits for the collection of background soil samples (T3 through T5) and analyzed each of the soil samples for Title 22 metals.

Total arsenic in two samples collected from the stockpile samples included concentrations of 31.4 and 55.8 milligrams per kilogram (mg/kg). Background samples included total arsenic concentrations ranging from less than one to 11.4 mg/kg. Exploratory trenches performed in PP1 and PP4 encountered undisturbed weathered bedrock at depths of 4 and 5 feet below ground surface.

Based on the initial sampling results, on June 3 and 25, 2009, approximately 29 cubic yards consisting of all loose prospector pit spoils were excavated and transported for disposal at a Class II solid waste facility (Ostrom Road Landfill). Four confirmation soil samples were collected and arsenic concentrations ranged from 4.2 to 11.4 mg/kg. While removal of the soil was performed without direct regulatory oversight, the soil removal activities were well documented. Photographs depicting the pre and post excavation conditions, soil sampling locations, and weight tickets and soil disposal manifests are included in the *Preliminary Characterization of Abandoned Mine Features* report, Appendix CC of this DEIR. The mine features report determined that the removal action successfully removed the arsenic-impacted prospector pit excavation spoils identified on the ARD property. Holdrege & Kull determined that because undisturbed weathered bedrock was encountered in PP1 and PP4, the pits are not associated with deeper mining activity. PCEH reviewed the *Preliminary Characterization of Abandoned Mine Features* report and agreed with the conclusions and recommendations made by Holdrege & Kull.

In addition, the PCEH memorandum states that if additional mining related features are encounter during construction activities, a qualified geotechnical engineer shall consult with the County to address potential impacts. As a result, the risk associated with past mining activity represents a ***potentially significant*** impact.

Mitigation Measure(s)

Implementation of the following mitigation measures would reduce the above impacts to a *less-than-significant* level.

13-1 *During site grading and excavation, discovery of substantial areas that have previously been excavated and filled, or of mining shafts, or of other unanticipated voids shall be reported to the Placer County Environmental Health Services Department. A qualified geotechnical engineer shall consult with the Placer County Environmental Health Services Department and determine whether additional geotechnical studies are required. If so, all recommendations of the geotechnical expert shall be implemented in the final project design and prior to Final Map approval.*

Figure 13-1
Site PP1

Photo 1. PP1 location, or "Prospect Pit."

Source: Holdredge & Kull, 2008.

Figure 13-2
Sites PP2 and PP3

Photo 2. PP2 location.

Photo 3. PP3 location.

Source: Holdredge & Kull, 2008.

Figure 13-3
Site PP5

Photo 4. PP5 Location.

Source: Holdredge & Kull, 2008.

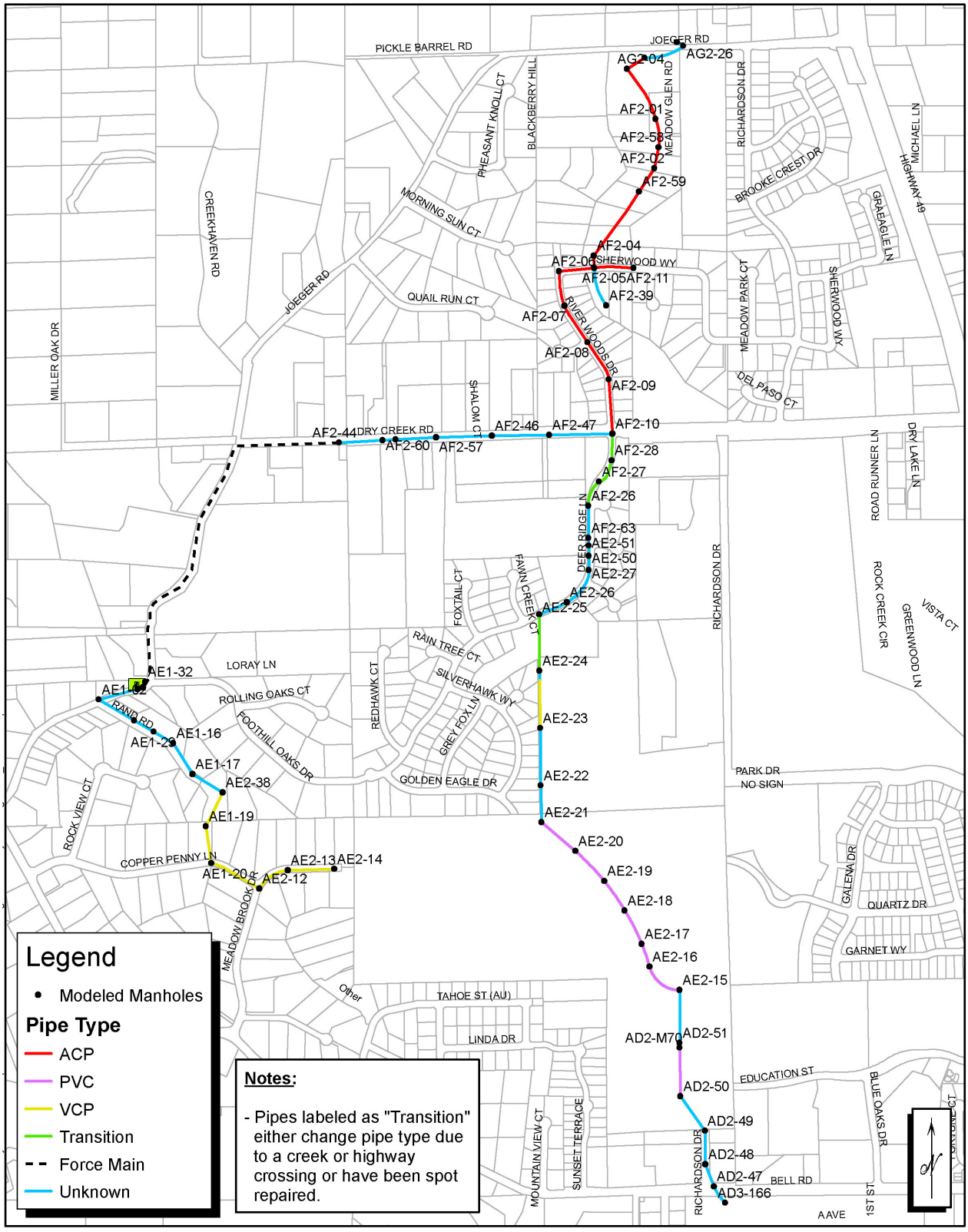
13-2 Impacts related to exposure of people to asbestos and lead-based paint.

Asbestos

The proposed project site contains a single residence located at the southeast corner of the site along Bell Road. The structure is in excess of 50 years old, and was constructed prior to the ban on asbestos-containing materials. Therefore, the potential exists for asbestos-containing materials to be present in the buildings. Asbestos was a material commonly used in heating and electrical insulation because of the material's resistance to fire and heat. However, later discoveries found that, when inhaled, the material caused serious illness and was banned from use in the early 1970s. Materials that may contain asbestos include, but are not limited to, resilient floor coverings, drywall joint compounds, acoustic ceiling tiles, piping insulation, electrical insulation, and fireproofing materials.

A large portion of the existing sewer pipe in the off-site sewer alignment is constructed of asbestos cement pipe (ACP) (See Figure 13-4 for off-site ACP locations). ACP is defined under NESHPS as a Category II, non-friable, non-regulated material in its intact state, but which may become friable upon removal, demolition and/or disposal. Consequently, if the removal/disposal process renders the ACP friable, it is regulated under the disposal requirements of 40 CFR 61.150. If more than 260 linear feet of ACP is removed, which on removal becomes friable, a National Emissions Standard for Hazardous Air Pollutants (NESHAPs) notification must be filed. If it remains in its non-friable state, as defined by the NESHAPs, it can be disposed of as a conventional construction waste. EPA defines friable as material, when dry, which may be crumbled, pulverized or reduced to powder by hand pressures. The project contractor shall retain the services of a qualified, licensed asbestos abatement consultant. All removal and disposal of ACP shall be under the supervision of the asbestos consultant. The contractor may assign a Certified Inspector in-lieu of an asbestos consultant. If assigned, the inspector shall have the same authorities, responsibilities, and limitations as an asbestos consultant. It is the intent of the County of Placer that all ACP shall be removed in such a careful and prudent manner that it remains intact and non-friable. The project contractor is responsible to employ those means, methods, techniques, including hand digging in close proximity to the pipe, and sequences to ensure this end-result. It should be noted that "pipe bursting," which is a trenchless method of replacing buried pipelines, would not be used on any ACP; the project would only utilize pipe bursting at manholes 24 and 25, and the pipe between those manholes is not ACP.

Figure 13-4
Modeled Pipe Materials



The project contractor shall take steps to minimize the amount of friable waste and comply with all asbestos regulatory requirements. The asbestos consultant or certified inspector would be available to provide recommendations or suggestions. If the existing ACP becomes friable during its replacement, the consultant/inspector shall conduct perimeter air monitoring upon request of the County. If sections of the ACP are to be left in the ground and abandoned in-place, the consultant/inspector shall inspect the visible sections that are to remain to ensure said sections are intact and non-friable. The ends of the ACP shall be encapsulated and any friable ACP shall be removed. In no circumstance shall the ACP be crushed and left in-place. If ACP is crushed or otherwise caused to become friable, it shall be removed. Compliance with all aspects of worker safety and health regulations, including but not limited to the OSHA Asbestos Standard, is the responsibility of the project contractor.

Lead-Based Paint

Lead-based paints could also be present in the structure. Typically, exposure to lead from older vintage paint is possible when the paint is in poor condition or is being removed. In construction settings, workers could be exposed to airborne lead during renovation, maintenance, or demolition work. Lead-based paints were phased out of production in the early 1970s; however, the onsite structure was constructed prior to the ban on lead-based paint and may contain these materials.

The potential presence of asbestos and/or lead-based paint within the on-site residence could result in potential hazards to humans during the demolition of the structure during development of the proposed project; therefore, a ***potentially significant*** impact would result.

Mitigation Measure(s)
Implementation of the following mitigation measures would reduce the above impacts to a *less-than-significant* level.

13-2(a) *Prior to the approval of a demolition permit, the project applicant shall provide the Planning Department and the Environmental Health Services Department with a detailed assessment pertaining to the potential presence of asbestos-containing materials in the on-site structure. If asbestos-containing materials are not detected, further mitigation shall not be required. If asbestos-containing materials are detected, the applicant shall prepare and implement an asbestos abatement plan consistent with federal, State, and local standards, subject to the review and approval of the Planning Department prior to the issuance of a demolition permit.*

13-2(b) *During removal of the existing asbestos cement pipe within the off-site sewer alignment, under the oversight of the County Environmental Health Services Department, a licensed asbestos abatement consultant or Certified Inspector shall be retained by the contractor during all asbestos*

cement pipe removal to provide recommendations or suggestions regarding maintaining the pipe in a non-friable state, and generally supervise the removal operation. If any pipe becomes friable, the licensed asbestos abatement consultant or Certified Inspector shall conduct perimeter air monitoring, and ensure proper disposal of the friable asbestos. In addition, if more than 260 linear feet of pipe is removed that becomes friable, a NESHAPs notification shall be filed.

13-2(c) *Prior to the approval of a demolition permit, the project applicant shall provide the Planning Department and the Environmental Health Services Department with a detailed assessment pertaining to the potential presence of lead-based paint in the on-site structure. If lead-based paint is not detected in the assessment, further mitigation shall not be required. If such paint is found, all loose and peeling paint shall be removed and disposed of by a licensed and certified lead paint removal contractor, in accordance federal, State, and local regulations. The demolition contractor shall be informed that all paint on the buildings shall be considered as containing lead. The contractor shall take appropriate precautions to protect his/her workers, the surrounding community, and to dispose of construction waste containing lead paint in accordance with federal, State, and local regulations subject to review approval of the Planning Department, prior to the issuance of a demolition permit.*

13-3 Impacts related to exposure of project residents or the surrounding population to chemical hazards or construction hazards.

Chemical Hazards

Potential chemical hazards include the routine transport, use, or upset of hazardous materials by the proposed project. In addition, the proposed project would result in a chemical hazard if implementation were to result in the exposure of residents to existing chemical contamination.

Hazardous materials associated with the proposed project would vary according to the final uses. For example, offices are much less likely to handle hazardous materials than is a medical office. As discussed below, as well as in the Land Use and Noise chapters of the DEIR, the proposed project would be in compliance with the PCALUCP. Furthermore, the use, handling, and disposal of hazardous materials are regulated by the County, State, and federal government.

As outlined above the Phase I Environmental Site Assessment did not indicate the presence of onsite chemical hazards. Nor is the project located in the vicinity of sites listed on the CERCLIS list. The project site is located north of the DeWitt Hospital, which is the site of groundwater contamination associated with the past storage of oil. However, the proposed project would not draw groundwater, nor would the groundwater contamination result in adverse impacts to project residents.

Construction Hazards

Development of the project site includes the removal of trees. In an effort to reduce construction waste, minimize truck trips and encourage reuse of on-site timber, oak trees removed to accommodate the proposed project would be milled on site and the resultant lumber utilized in project construction. It should be noted that the lumber would be milled and stored temporarily and would not be chemically treated. Development of the project also includes on-site rock crushing and separation for aggregate use. The mobile rock crushing equipment includes caging and other safety features to be self contained and not expose residents to additional hazards. In addition, the lumber milling and rock crushing operations would occur in a centrally located area on-site and away from existing residences.

Blasting

According to the *Geotechnical Feasibility Study*, and as discussed in Chapter 10, Soils, Geology, and Seismicity, of this EIR, data analyzed from the site reconnaissance and the test pits suggest that, during construction, ripping of the harder shallow rock areas on-site would probably require a D-10 size dozer, and the possibility exists that relatively localized blasting (the controlled use of explosives to excavate or remove rock) of hard outcrops could be required. The possible need for localized blasting is considered moderately high for utility trench excavations, especially those deeper than five feet or those through outcrop areas, which are located on top of the ridgelines in the northern section.

Conclusion

Because the project could include localized blasting for excavation of utility trenches, a ***potentially significant*** impact related to construction hazards would occur.

Mitigation Measure(s)
Implementation of the following mitigation measure would reduce the above impact to a *less-than-significant* level.

13-3 *If blasting is required for the installation of site improvements, the developer shall comply with applicable County Ordinances that relate to blasting and shall use only State-licensed contractors to conduct blasting operations.*

13-4 Impacts related to the construction of structures within the Placer County Airport Land Use Compatibility Plan.

The proposed project would construct residential and commercial uses within the PCALUCP for the Auburn Municipal Airport. Portions of the project site are located within Compatibility Zones C1 and C2. Initial compatibility is determined by ensuring that prohibited uses are not located in one of the PCALUCP compatibility zones. As discussed in Chapter 4, Land Use, the proposed project is in compliance with the land use

requirements of the PCALUCP. Safety compatibility with the Airport Land Use Plan is determined by assessing the noise compatibility, residential density, population intensity, open land requirement, airspace protection, and overflights. Noise is addressed in Chapter 9, Noise; and overflights are addressed in Chapter 4, Land Use.

Residential Density and Population Intensity

Within the PCALUCP, residential density is not allowed to exceed 0.5 dwelling units per acre in the C1 zone. A residential density limit has not been established for the C2 zone. Non-residential usage intensity is not allowed to exceed the following limits:

- Zone C1 – 75 people per acre average for a site and 150 people per single acre (195 with a bonus for risk reduction building features.
- Zone C2 – 100 people per acre average for site and 300 people per single acre (390 with a bonus for risk reduction building features).

The proposed project would not exceed an average usage intensity of 38 people per acre in the C1 area, with a 150 person maximum (See Appendix D, *Airport Land Use Compatibility Determination*, for calculations). Residential land use density would be 0.36 units per acre, which is less-than the 0.5 units per acre maximum. In the C2 zone usage intensity would not exceed an average of 44 people per acre, with a maximum intensity of 150 persons. Therefore, the proposed project would comply with the density and intensity requirements.

Open Space

The PCALUCP requires that 20 percent of the parcel remain in open space in the C1 zone and ten percent remain open space in the C2 zone. To qualify as open space, areas should be free of major obstacles, overhead wires, and have a minimum dimension of 75 feet by 300 feet. Of the 26.5 acres of the project site located in the C1 zone, approximately 6.2 acres or 23 percent is open land. In addition, the permanent open land features of the ARD Regional Park would augment the open land in the vicinity. Of the 67.5 acres of the project site located in the C2 zone, approximately 9.1 acres or 13 percent are open land. Therefore, the proposed project would comply with the open land requirements of the ALUCP.

Airspace Protection

Airspace review is required for structures that would exceed 70 feet in height in the C1 zone, and 150 feet in height in the C2 zone. The proposed project does not include buildings that would exceed the height limitations. Therefore, the proposed project would comply with the airspace protection requirements.

Conclusion

The proposed project would comply with the land use requirements of the PCALUCP, would remain below the maximum residential density and population intensity, would comply with the open space requirements, and would not exceed the building height limitations. As a result, implementation of the proposed project would have a ***less-than-significant*** impact on the safety of project residents and aircraft traffic.

Mitigation Measure(s)
None required.

Endnotes

[1] Wallace Kuhl and Associates, Inc. *Environmental Site Assessment: Harmon Park*. February 1, 2005.
[2] Holdrege & Kull. *Preliminary Characterization of Abandoned Mine Features at Timberline @ Auburn.* July 22, 2008.
[3] Holdrege & Kull. *Removal Action Completion Report and Site Closure Request for Timberline @ Auburn.* July 29, 2009.
[4] Placer County. *Timberline at Auburn, Auburn, CA Memorandum*, Health and Human Services Department: Environmental Health Division. September 22, 2009.
[5] Placer County. *Placer County General Plan.* August 16, 1994.
[6] Placer County. *Auburn/Bowman Community Plan*. June 1994.