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MINERAL RESOURCES

The Mineral Resources chapter of the EIR describes the mineral characteristics of the project site and evaluates the extent to which implementation of the proposed project could affect the availability of locally and regionally valuable mineral resources. Information sources for this evaluation include the *Environmental Site Assessment* by Wallace Kuhl and Associates, Inc. (See Appendix Z),¹ the *Preliminary Characterization of Abandoned Mine Features at Timberline @ Auburn* by Holdrege & Kull (See Appendix AA),² the *Placer County General Plan*,³ the *Placer County General Plan EIR*,⁴ and the *Auburn/Bowman Community Plan*.⁵

14.1 ENVIRONMENTAL SETTING

The following section presents a description of any known regional and local mineral resources located on or near the project site.

Regional Mineral Resources

The project site is located in the Sierra Nevada foothills physiographic province, which lies east of the Sacramento Valley. Regional physiographic conditions generally consist of gently to moderately rolling terrain. The subject property is underlain by a mixture of rock fragments originating from volcanic eruptions and volcanic flows that occurred during the origination of the Sierra Nevada. The soils are formed from basic schist and slate, with outcroppings of hard metamorphic rock.

Mineral resources including sand, gravel, clay, stone, and gold, are found throughout Placer County. Sand and gravel are the primary mineral resources currently being extracted to satisfy the high demand linked to construction activity. However, extensive gold deposits have been identified near Auburn, Ophir, and Gold Hill.

Local Mineral Resources

Holdrege & Kuhl reviewed the *Mineral Land Classification of Placer County, California* prepared by the California Department of Conservation, Division of Mines and Geology (CDMG) in 1995 to identify potential mineral resources in the project area. Plates 3 and 7 of the publication depict the Green Emigrant Mine in the southwestern quarter of Section 29, Township 13 North, Range 8 East. The location depicted on the plates corresponds with a topographical irregularity near the center of the project site, as shown on a preliminary grading plan prepared by Morton & Pitalo, Inc.

The United State Geologic Survey maintains summary information on mines located in California, and across the United States. Within the project area, the United States Geologic Survey's Mineral Resources Data System⁶ lists locations for the Green Emigrant (Record 10237224), Black Ledge (Record 10139944) and Black Lead (Record 10188687) mine sites (See

Figure 14-1, Potential Mine Locations). However, the data sheets indicated that coordinates were expected to have a location precision of within 1,640 feet.

As discussed by Holdrege and Kuhl, the *Resources of the Pacific Slope, A Statistical and Descriptive Summary*, published in 1896 by J. Ross Browne, contains a brief description of the Green Emigrant Mine. According to the text, the Green Emigrant mine was located three miles northwest of Auburn, and was characterized by a 1,000-foot vein trending north, 65 degrees west, and dipping 45 degrees to the east, along with other veins concentrated “at the top of the hill.” The mine was reportedly discovered in 1864, and yielded \$20,000 in the first two years of operation. At that time, the mine was being worked through a 225-foot tunnel.

The *State Mineralogist’s Report XXXII* (California State Division of Mines and Geology, 1936) states that the Green Emigrant Mine was located four and a half miles north of Auburn and one-half mile west of the Grass Valley Highway, and was discovered in 1864. Additionally, the report states that a length of over 1,500 feet along the vein was mined through shallow cuts and shafts (none of which reportedly exceeded 30 feet in depth). In addition, area geology maps depict the Black Ledge vein in the vicinity of the Timberline at Auburn site.

14.2 REGULATORY SETTING

The following section is a brief summary of the regulatory context under which mineral resources are managed.

State Regulations

The primary State law concerning conservation and development of mineral resources is the California Surface Mining and Reclamation Act (SMARA) of 1975, as amended. The SMARA is found in the California Public Resources Code (PRC), Division 2, Chapter 9, Section 2710, et. seq. The SMARA was enacted in 1975 to limit new development in areas with significant mineral deposits and to prevent or minimize the negative impacts of surface mining to public health, property, and the environment. In addition, the SMARA calls for the State Geologist to classify the lands within California based on mineral resource availability.

Local Regulations

Auburn/Bowman Community Plan

The following goals and polices from the Geology subsection of the Environmental Resources Management Element of the Auburn/Bowman Community Plan are applicable to the proposed project.

- Goal (2) Identify and protect important geologic and mineral resources in the Plan area.
- Policy (5) The goals and policies of the Placer County Mineral Resources Conservation Element are included by reference as part of the A/BCP.

Figure 14-1
 Potential Mine Locations



Source: Holdredge & Kuhl, 2008.

14.3 IMPACTS AND MITIGATION MEASURES

This section presents the standards of significance for any potential impacts regarding mineral resources, the methods by which the potential project impacts are assessed, and identifies impacts associated with implementation of the proposed project as well as mitigation to reduce these impacts.

Standards of Significance

The following thresholds of significance related to Mineral Resources are derived from the criteria listed in Appendix G of the State CEQA Guidelines.

Impacts resulting from the project would be considered significant if the project would:

- Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the State; or
- Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan.

Method of Analysis

The analysis in this section uses information obtained from the sources listed in the Introduction of this chapter and compares the existing mineral resources and the effects of the proposed project on the resources. Conclusions are drawn using the significance criteria listed above and, if applicable, mitigation measures are prescribed.

Project-Specific Impacts and Mitigation Measures

The following discussion of impacts is based on the development of the proposed project.

14-1 Loss of availability of a known State, regional, and/or locally valuable mineral resource.

As stated above, numerous mines have been identified in the project area. The mines include the Green Immigrant Mine, Black Lead Mine, and the Black Ledge Vein. The former Green Immigrant Mine has been identified as being on the project site. Project site surveys and a review of topographic maps conducted by Wallace Kuhl & Associates, Inc. did not produce any evidence that the project site has been disturbed by human activities, including subsurface or surface mining. In addition, a field survey conducted by Holdrege & Kull, to identify potential mine locations, did not encounter evidence of past mining activity. However, small stockpiles of excavated soil and rock were observed at areas identified as PP1, PP2, PP3 and PP5, and a shallow excavation without stockpiles was observed at area PP-4.

Location PP1 is located near the northeastern boundary of the 24-acre Auburn Recreation Park District parcel. The site consists of an approximate ten cubic yard stockpile of excavation spoils adjacent to an apparent former mining excavation. The location is depicted as PP1 on Figure 14-1 and a picture is presented in Figure 13-1.

Two additional excavations were identified approximately 50 feet east of PP1, depicted as PP2 and PP3 on Figure 14-1. Location PP2 is characterized by an approximately five to ten cubic yard stockpile of excavation spoils and a shallow excavation measuring approximately ten feet in diameter (See Figure 13-2). Location PP3 is characterized by an approximately five to ten cubic yard stockpile of excavation spoils and a possible collapsed mine shaft measuring approximately 12 feet in diameter (See Figure 13-2).

Approximately 80 feet south-southwest of PP3, a shallow excavation was observed. The site is identified as PP4 on Figure 14-1. Excavation spoils were not observed adjacent to the shallow excavation at PP4. Another excavation was identified approximately 250 feet south of location PP4, which is identified as PP5 on Figure 14-1 (See also Figure 13-3). Location PP5 is characterized by a minor cut/depression and an elongated stockpile (approximately five cubic yards) of excavation spoils.

The excavations may be associated with past mining or prospecting activities. Although the locations of the identified features were not determined by survey, the locations generally appear to be located near and east of the Auburn Recreation and Park District owned property boundary.

Other than the stockpiles and excavations described above, evidence of past mining activity was not observed during the surface reconnaissances performed by Wallace Kuhl and Associates, Inc. and Holdrege & Kull. Development is not planned in the vicinity of the identified mine features; therefore, further action is not required regarding characterization or mitigation of the identified mine features with respect to the proposed development. Potential hazards associated with the potential presence of mines are addressed in Chapter 13, *Hazards and Hazardous Materials*, of this Draft EIR.

The project site is located in an area likely to contain naturally occurring asbestos. However, asbestiform minerals or serpentine were not observed during site visits conducted by Wallace Kuhl and Associates, Inc. Further information on naturally occurring asbestos is located in Chapter 13, *Hazards and Hazardous Materials*, of this Draft EIR.

Any areas in which mining excavations may have occurred would present physical hazards and may not be suitable for support of structural improvements. Such excavations, if encountered on or near the property, should be addressed by a qualified geotechnical engineer. Physical closure of mine excavations, if determined appropriate, should be performed in accordance with recommendations from a qualified geotechnical engineer and with the approval of the County of Placer. Potential risks associated with soil stability and geotechnical concerns are addressed in Chapter 10, *Soils, Geology, and Seismicity*.

As outlined above, the proposed project may have been a past site of mining activities. Mining activities have been discontinued in the project area, and the proposed project would not locate buildings in the vicinity of the identified mine features. Adjacent areas have been developed; therefore, returning the site to active mining would adversely affect the residential neighborhoods surrounding the site. In addition, the Placer County General Plan and Auburn/Bowman Community Plan have designated the site for urbanization. Therefore, implementation of the proposed project would result in a ***less-than-significant*** impact to known State, regional, or locally valuable resources as identified in the Placer County General.

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 Placer County. *Placer County General Plan Update*. August 16, 1994.

⁴ Placer County. *Placer County General Plan EIR*. July 26, 1994.

⁵ Placer County. *Auburn/Bowman Community Plan*. June 1994.

⁶ United States Geological Survey. <http://tin.er.usgs.gov/mrds/>. Accessed January 2010.