

### 3.8 Cultural Resources

The study area for direct and indirect impacts to cultural resources includes the proposed POO expansion areas. The CESA encompasses the approximate area from the Town of Battle Mountain, northwest along I-80 (approximately 20 miles), south along the western boundary of the Buffalo Valley Hydrographic Basin to Antelope Valley Road, east to SH 305, and north along SH 305 to the Town of Battle Mountain (**Figure 3.8-1**).

#### 3.8.1 Affected Environment

##### Regulatory Framework

Federal historic preservation laws provide a legal environment for documentation, evaluation, and protection of cultural resources that may be affected by federal undertakings, or by private undertakings operating under federal license or on federally managed lands. NEPA states that federal agencies shall take into consideration impacts to the natural environment with respect to an array of resources, and that alternatives must be considered. The courts have made clear that cultural resources are regarded as part of the natural environment. The National Historic Preservation Act (NHPA) mandates that federal agencies consider an undertaking's effects on cultural resources that are listed on or eligible for listing on the NRHP, and Section 106 of the NHPA establishes a review process by which these resources are given consideration during the conduct of federal undertakings. Cultural resources listed on, or eligible for listing on the NRHP are referred to as historic properties. Unevaluated sites are considered in the same manner as eligible resources until an eligibility recommendation has been determined.

##### Area of Potential Effects

Under Section 106 of the NHPA, the area of potential effects (APE) is defined as “those areas in which impacts are planned or are likely to occur. Specifically, the APE is defined as the geographic area or areas within which an undertaking may directly or indirectly cause changes in the character or use of historic properties. Additionally, the APE is influenced by the scale and nature of an undertaking and may be different for different kinds of effects caused by the undertaking (36 CFR 800.16[d]).”

Only those cultural resources located in the APE were reviewed to determine if they would be subject to impacts that could affect their eligibility for the NRHP based on NRHP criteria for evaluation. Since the existing POO boundary previously was surveyed for cultural resources and authorized for surface disturbance under the Phoenix Project Final EIS (BLM 2002a), the APE for the Proposed Action is limited to the proposed Section 5 OUA, Section 15/16 Borrow Area, Reona POO boundary fence line and the haul road and utility corridor.

##### Cultural Resources Investigations

Cultural resources inventories were conducted within the APE for the Proposed Action. As a result of the inventories, a total of 17 archaeological sites, 10 isolated artifacts, and 1 isolated feature were documented in the Section 5 OUA; 4 isolated artifacts were documented in the Section 15/16 Borrow Area; and, 5 archaeological sites were documented and 3 loci of a previously recorded site were updated along the POO boundary fence line (Kautz 2008; Summit Envirosolutions, Inc. 2011; Simons and Kautz 2007). No sites or isolated finds were documented along the haul road and utility corridor.

Of the 22 archaeological sites, 2 are prehistoric, 19 are historic, and 1 is a multi-component site consisting of both prehistoric and historic components. The 3 loci are components of a previously recorded NRHP-eligible historic site. The 14 isolates include 6 cans, 3 glass bottle fragments, 2 claim posts, 1 metal corrugated barrel, 1 metal pipe, and 1 prehistoric flake. The single isolated feature is identified as a U.S. Coast and Geodetic Survey benchmark. At the time of the inventories, all of the 22 archaeological sites were recommended as ineligible for nomination to the NRHP by the archaeological contractor. Of the 3 loci, only 1 was recommended as contributing to the previously recorded site's overall eligibility. Isolated finds by definition are not eligible for the NRHP.

### 3.8.2 Environmental Consequences

Primary issues pertaining to historic properties located in the study area include ground-disturbing activities associated with construction and operation of the proposed facilities; illegal collecting of artifacts and inadvertent damage to historic properties due to the increased numbers of people in the project area during construction activities; and, effects to unknown historic properties that may be discovered during project construction.

Environmental impacts to historic properties would be significant if the Proposed Action or alternatives to the Proposed Action result in the following:

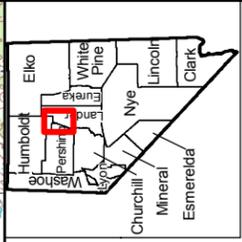
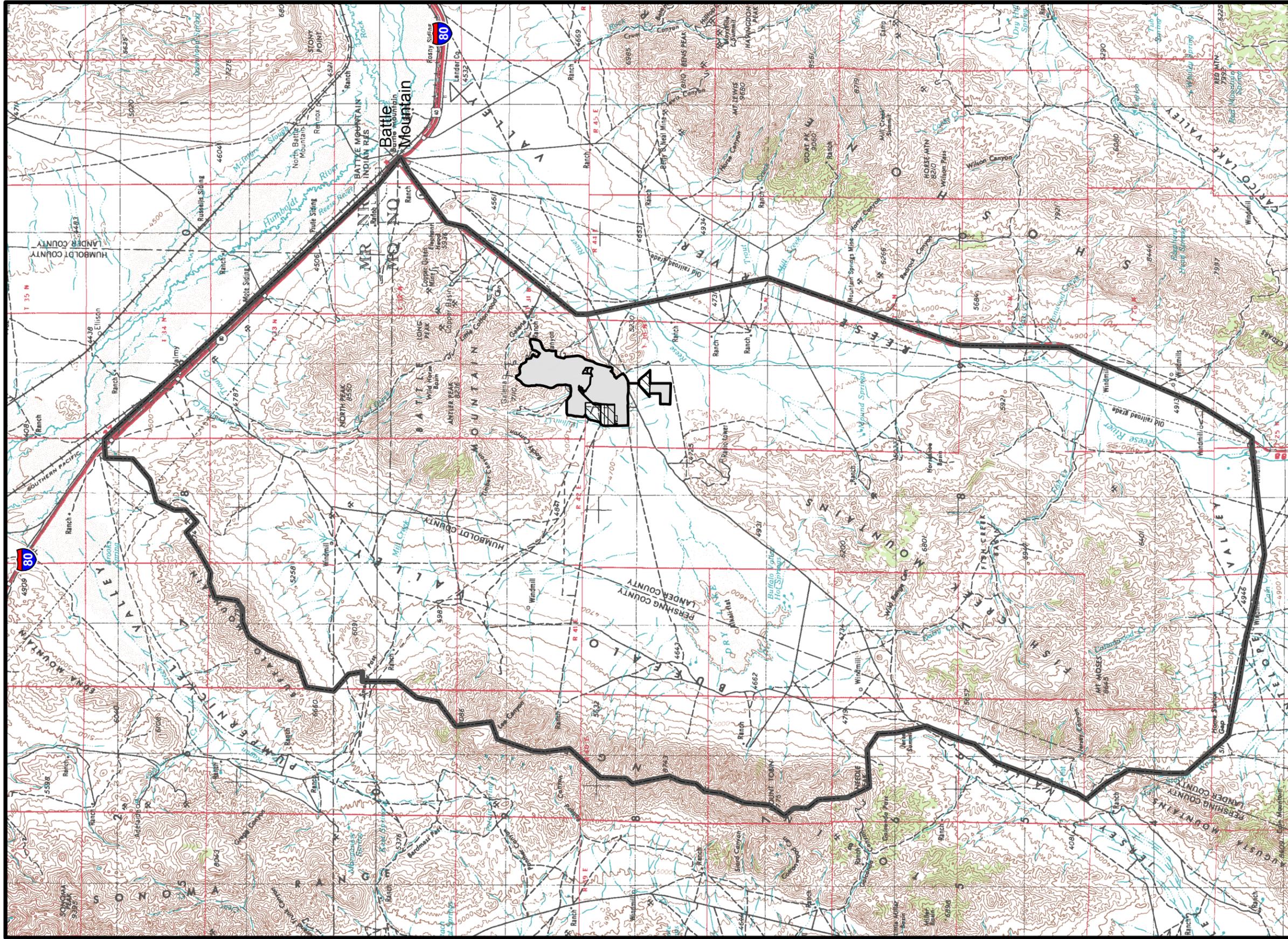
- Alteration, directly or indirectly, of any of the characteristics of a historic property that qualify the property for inclusion in the NRHP, in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association.

The NHPA requires that federal agencies take into account the effect of a proposed undertaking on historic properties. Historic property, as defined by the regulations implementing Section 106, means "any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion in, the NRHP maintained by the Secretary of the Interior" (36 CFR 800.16[1]). Potential effects to historic properties are assessed using the "criteria of adverse effect" (36 CFR 800.5[a][1]), as defined in the implementing regulations for the NHPA. "An adverse effect is found when an undertaking may alter, directly or indirectly, any of the characteristics of a historic property that qualify the property for inclusion in the National Register in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association." The analysis of effects using these criteria is limited to those resources that are listed on the NRHP or have been recommended as eligible. Unevaluated sites are considered in the same manner as eligible resources until an eligibility recommendation has been determined. No further work generally is recommended for sites determined as not eligible for the NRHP.

In 1994, a PA among the BLM Battle Mountain Field Office, Nevada SHPO, Advisory Council on Historic Preservation (ACHP), and BMG was developed to address the treatment of historic properties during development of mining operations in the Battle Mountain Mining District. This cooperative agreement established the methodology for development and finalization of data recovery and treatment plans for historic properties associated with the BMG Reona Project and Phoenix Project. The PA and data recovery and treatment plans defined general and specific obligations that would be undertaken to ensure that the objectives and requirements of the NHPA would be fulfilled. Additionally, the PA assigned roles and responsibilities for implementation of the PA, which ensures that all interested parties are given an opportunity to comment on the effects of an undertaking to historic properties and any mitigation for such effects. The terms of the 1994 PA apply to the proposed Phoenix Copper Leach Project for the protection of historic properties that may be affected by the proposed project.

#### 3.8.2.1 Proposed Action

Under the Proposed Action, direct effects to historic properties could occur as a result of ground-disturbing activities associated with development of the Section 5 OUA, Section 15/16 Borrow Area, fence line, and haul road and utility corridor. None of the archaeological sites or isolated finds are recommended as eligible for the NRHP; 1 of the 3 loci is recommended as a contributing component of the previously recorded NRHP-eligible site. Final determination of eligibility will be decided by the BLM. In accordance with the PA, unavoidable adverse effects to historic properties would be mitigated through implementation of a treatment plan. For historic properties eligible under criteria A through D, other forms of mitigation (e.g., oral history, historic markers, exhibits, interpretive brochures, or publications) may be considered in lieu of, or in addition to, data recovery. If data recovery is the preferred treatment option for



- Legend**
- Cultural Resources and Native American Traditional Values CESA
  - Proposed POO Boundary
  - Proposed Action
  - Proposed Action Linear Feature
  - Permitted Disturbance

**Phoenix Copper  
Leach Project**

Figure 3.8-1  
Cultural Resources and Native American  
Traditional Values  
CESA

Source: BLM 2008e.

a historic property, then the BLM would ensure that the developed treatment is based on an appropriate research design and is reviewed and approved by the BLM, ACHP, SHPO, Newmont, and interested persons. Following review and consultation, the BLM would ensure that the treatment plan is implemented within the timelines set forth in the plan.

Indirect effects, such as illegal collecting of artifacts and inadvertent damage to archaeological sites, could occur in the study area due to an increase in the number of workers during construction. In accordance with the 1994 PA, Newmont would ensure that all of its personnel, and the personnel of its contractor, are directed not to engage in the illegal collection of historic and prehistoric materials. This protection measure would reduce, but not completely eliminate, the potential for illegal collecting of artifacts and inadvertent damage to archaeological sites.

The potential for the discovery of previously unidentified cultural resources during construction activities exists within proposed disturbance areas and could result in direct effects to these unanticipated discoveries. If previously unknown cultural resources are discovered during construction, all construction activities would cease within 300 feet of the discovery and the BLM AO would be notified of the find. Steps would be taken to protect the resource from vandalism or further damage until the BLM AO can evaluate the nature of the discovery. If the previously unidentified cultural resource is determined eligible to the NRHP or unevaluated, adverse effects would be mitigated as outlined in the PA. Construction would not resume in the area of the discovery until the BLM AO has issued a NTP.

If construction or other project personnel discover what may be human remains, funerary objects, or items of cultural patrimony on BLM-administered land, construction would cease within the vicinity of the discovery, and the BLM AO would be notified of the find. The location of the find would not be publically disclosed, and the remains would be secured and preserved in place. Any discovered Native American human remains, funerary objects, or items of cultural patrimony found on federal land would be handled in accordance with the Native American Graves Protection and Repatriation Act (NAGPRA). Non-Native American human remains would be handled in accordance with Nevada state law. Construction would not resume in the area of the discovery until the BLM AO has issued a NTP.

If human remains and associated funerary objects are discovered on private land during construction activities, construction would cease within the vicinity of the discovery and the county coroner or sheriff would be notified of the find. Treatment of any discovered non-Native American human remains found on private land would be handled in accordance with Nevada Revised Statute 440.025; Native American human remains found on private land would be handled in accordance with Nevada Revised Statute 383.150.

### **3.8.2.2 Reona Copper Heap Leach Facility Elimination Alternative**

The Reona Copper HLF Alternative would be similar to the Proposed Action, except that the Reona Copper HLF and associated infrastructure (i.e., solution pipelines) would not be developed. The Reona HLF (Gold) would continue to be developed under the current permitted authorizations. Effects on cultural resources under this alternative would be the same as the Proposed Action.

### **3.8.2.3 No Action Alternative**

Under the No Action Alternative, the proposed Phoenix Copper Leach Project would not be developed and associated impacts to cultural resources would not occur. Under this alternative, the mining activities associated with the existing Phoenix Project would continue under the terms of current permits and approvals as authorized by the BLM and State of Nevada. Potential impacts to cultural resources previously were discussed and analyzed in the Phoenix Project Final EIS (BLM 2002a). Prior to construction of the authorized facilities, adverse effects to historic properties located in the area of the facilities were, or would be, fully mitigated in accordance with the 1994 PA.

### 3.8.3 Cumulative Impacts

The CESA for cultural resources is shown in **Figure 3.8-1**. Past and present actions and RFFAs are identified in **Table 2.8-1**; their locations are shown in **Figure 2.8-1**.

As directed by law, cultural resources inventories are conducted for any actions involving federal lands, and adverse effects to historic properties avoided or mitigated as appropriate. Avoidance through project redesign is the preferred method of mitigation; however, when avoidance is not feasible, data recovery or other forms of mitigation are implemented prior to ground-disturbing activities. Historic properties located in the project APE would be mitigated in accordance with the PA. In addition, any previously unknown NRHP-eligible sites discovered during construction activities would be treated as outlined in the PA. Therefore, the proposed project is not expected to cumulatively contribute to direct effects to historic properties.

It should be noted that compliance with Section 106 of the NHPA has minimized impacts to historic properties; however, past and present mining and mining exploration within the CESA have resulted in cumulative effects to these properties. Although cultural resource inventories are completed in advance of mining exploration and development with the intent of avoiding historic properties, impacts to these properties have occurred. Indirect effects, such as illegal collecting of artifacts, have occurred and most likely would continue to occur within the CESA through increased access, development, and increased human presence as a result of past, present, and RFFAs. The development and implementation of treatment plans for historic properties that cannot be avoided or protected typically involves archaeological excavation or other forms of data recovery. Although data recovery mitigates adverse effects to historic properties under Section 106, the property itself ultimately is lost. Over time, this represents a cumulative loss.

### 3.8.4 Monitoring and Mitigation Measures

Unavoidable adverse effects to historic properties identified within the project APE would be mitigated in accordance with the PA. Any previously unknown historic properties that may be discovered during construction activities would be treated as described in Section 3.8.2.1 (Proposed Action); therefore, no additional monitoring and mitigation measures are recommended.

### 3.8.5 Residual Adverse Effects

The Proposed Action would result in the loss of cultural resources that are not eligible for the NRHP. Although these sites would be recorded to BLM standards and the information integrated into local and statewide databases, the sites ultimately would be destroyed by project construction. Historic properties identified within the project APE would be avoided, or if avoidance is not feasible, mitigated in accordance with the PA. Although historic properties sites would be mitigated through implementation of data recovery or other forms of mitigation, some of the cultural values associated with these sites cannot be fully mitigated; therefore, it is anticipated that residual impacts to these resources would occur.