Figure 3-4. Floodways and Floodplains at the Proposed Project Site

- Site Boundary
- Floodway Area in Zone AE
- Floodplain Area in Zone AE
- Road
- Elevation Contour

January 2016

Source: Department of Veterans Affairs, FEMA, Balance Environmental, ESRI Basemap 2015

0 500 1,000 Feet
0 100 200 Meters

Dreman Road
Modifications to on site tributaries of Jimmy Camp Creek would require a FEMA MT-2 permit. Under this permit, the depth of the channel would be reduced to minimize the width portion of the cross section. As a result, issuance of a CLOMR would update FEMA's flood maps to show the reduced floodplain area, creating additional developable land on the site.

### 3.6.3 Effects of the No Action Alternative

Under the No Action Alternative, no construction would occur and there would be no effects on floodplains or wetlands. The minor, long-term, beneficial impacts to floodplains anticipated from the Preferred Alternative would not be realized. Future development of the site could result in adverse impacts to floodplains and wetlands that would not occur under the Preferred Alternative.

### 3.6.4 Minimization/Management Measures

Since the Preferred Alternative would not present any significant adverse effects on floodplains and wetlands, specific minimization measures would not be required. However, implementing BMPs and watershed-sensitive site design techniques would help minimize the adverse effects of the Preferred Alternative on wetlands and floodplains. The following construction and design techniques would be employed:

- Modify floodplains and contributing channels to enhance predictability of flooding scenarios and reduce vulnerability of wetlands and VA assets to flood events.
- Implement channel stabilization/restoration projects along Corral Tributary to prevent further channel erosion and sedimentation of waterways and wetlands.
- Avoid development to the extent practicable of on-site wetlands, floodplains, and Section 404 jurisdictional waters.
- Address permits from FEMA, USACE, El Paso County, Pikes Peak Regional Building Department, and other regulatory agencies to minimize adverse impacts on jurisdictional wetlands and/or floodplains.
- Maintain a buffer or undisturbed land around identified wetlands and floodplains.
- Utilize site designs that account for pre/post 100-year flood volume drainage, at a minimum.
- Implement pre/post 100-year stormwater volume retention, at a minimum.
- Implement stormwater management facilities and related infrastructure on site.

### 3.7 Wildlife and Habitat

#### 3.7.1 Existing Conditions

#### 3.7.1.1 Habitat

The vegetation in the majority of the project area is composed of grasslands, with riparian areas consisting of scattered shrubs and canopy cover. Riparian habitats can support a high diversity of wildlife and many species that occur exclusively in wetland environments. As described in Section 3.6.1, two separate wetland areas exist on the site within the riparian zone. Riparian corridors also provide links to wildlife movement between habitat areas. General wildlife likely to occur in this area includes mammal species such as red fox (Vulpes vulpes), coyote (Canis latrans), mule deer (Odocoileus hemionus), raccoon (Procyon lotor), and striped skunk (Mephitis mephitis).
3.7.1.2 Threatened and Endangered Species

The Endangered Species Act (ESA) of 1973 provides a program for the protection and conservation of threatened and endangered (T&E) plants and animals, and their habitat. The lead agency for implementing the ESA is the U.S. Fish and Wildlife Service (USFWS). The law requires federal agencies, in consultation with the USFWS, to ensure that actions they authorize, fund, or carry out are not likely to jeopardize the continued existence of any listed species or result in the destruction or adverse modification of critical habitat.

The Colorado Nongame, Endangered, and Threatened Species Conservation Act of 1973 establishes the Colorado threatened and endangered species list for the purpose of identifying species in need of conservation and protection. Colorado Parks and Wildlife (CPW) is responsible for listing and managing state species. The Environmental Conservation Online Service (ECOS) analysis identified T&E species that are specifically known to occur within the region of the project site to the extent possible. Table 3-1 provides a list of federally and state-listed species that have the potential to occur within the area. Of the species identified, only the black-tailed prairie dog (*Cynomys ludovicianus*) has been observed on the site.

The Colorado Natural Heritage Program (CNHP) element occurrences database was referenced to determine state listed threatened or species of concern that may potentially occur within the project area (CNHP 2014). These lists included several plant, terrestrial, and aquatic species; however, the majority of species do not have potential habitat in the project area. There are two federal species with potential habitat; one includes the Preble’s meadow jumping mouse (*Zapus hudsonius preblei*). However, the site is within a USFWS Block Clearance Zone (USFWS 2012), which means there is sufficient information to indicate the Preble’s meadow jumping mouse is not present.

The other federal species that has potential habitat in the vicinity of the site is the Arkansas darter (*Etheostoma cragini*). This small fish is listed as a candidate species for listing, and is found in shallow, clear, cool water, sand or silt bottom streams with spring-fed pools and abundant rooted aquatic vegetation. During late summer low-water periods, when streams may become intermittent, Arkansas darter populations in Colorado persist in large, deep pools. This species is also a state threatened species and is known to occur in downstream receiving waters of Jimmy Camp Creek (El Paso County 2011). Although the species has not been observed on-site or in the direct vicinity of the property, development plans for the Proposed Action are designed to minimize impacts to potentially suitable stream habitats on and adjacent to the site.
Table 3-1. Federally and State-Listed Species that have the Potential to Occur within the Project Area

<table>
<thead>
<tr>
<th>Common Name</th>
<th>Scientific Name</th>
<th>Federal Status</th>
<th>State Status</th>
<th>Habitat</th>
<th>Potential for Occurrence in the Project Area</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Plants</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Western Prairie Fringed Orchid*</td>
<td><em>Platanthera praeclara</em></td>
<td>FT</td>
<td>--</td>
<td>Found most often on unplowed, calcareous prairies and sedge meadows</td>
<td>None; suitable habitat does not occur within the project study area.</td>
</tr>
<tr>
<td>Ute Ladies’-Tresses</td>
<td><em>Spiranthes diluvialis</em></td>
<td>FT</td>
<td>--</td>
<td>Moist meadows associated with perennial stream terraces, floodplains, and oxbows at elevations below 6,500 feet</td>
<td>None; suitable habitat does not occur within the project study area and the species is likely extirpated from El Paso County (El Paso County 2011).</td>
</tr>
<tr>
<td><strong>Fish</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pallid Sturgeon*</td>
<td><em>Scaphirhynchus albus</em></td>
<td>FE</td>
<td>--</td>
<td>Large river systems with firm sandy bottoms (i.e., Missouri River)</td>
<td>None; suitable habitat does not occur within the project study area.</td>
</tr>
<tr>
<td>Arkansas Darter</td>
<td><em>Etheostoma cragini</em></td>
<td>C</td>
<td>ST</td>
<td>Shallow, clear, cool water, sand or silt bottom streams with spring-fed pools and abundant rooted aquatic vegetation; during late summer low-water periods when streams may become intermittent, Arkansas darter populations in Colorado persist in large, deep pools</td>
<td>None; suitable habitat exists in the project area but is avoided by the project. Species is known to occur in downstream receiving waters of Jimmy Camp Creek (El Paso County 2011).</td>
</tr>
<tr>
<td>Greenback Cutthroat Trout</td>
<td><em>Oncorhynchus clarki stomias</em></td>
<td>FT</td>
<td>--</td>
<td>Cold, clear, gravel bed headwater streams in the Arkansas and South Platte River drainages</td>
<td>None; suitable habitat does not occur within the project study area.</td>
</tr>
</tbody>
</table>
### Affected Environment and Environmental Consequences

#### Page 42 Site-Specific Environmental Assessment

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<table>
<thead>
<tr>
<th>Common Name</th>
<th>Scientific Name</th>
<th>Federal Status</th>
<th>State Status</th>
<th>Habitat</th>
<th>Potential for Occurrence in the Project Area</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Birds</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Piping Plover*</td>
<td>Charadrius melodus</td>
<td>FT</td>
<td>--</td>
<td>Reservoirs, lakes, and rivers with sand and gravel areas and sparse vegetation</td>
<td>None; suitable habitat does not occur within the project study area.</td>
</tr>
<tr>
<td>Whooping Crane*</td>
<td>Grus americana</td>
<td>FE</td>
<td>--</td>
<td>Freshwater marshes, wet prairies, shallow lakes, lagoons, and riverine habitats</td>
<td>None; suitable habitat is not located within the project area.</td>
</tr>
<tr>
<td>Interior Least Tern*</td>
<td>Sterna antillarum</td>
<td>FE</td>
<td>--</td>
<td>Sandbars and shoreline of reservoirs, lakes, and rivers</td>
<td>None; suitable habitat does not occur within the project study area.</td>
</tr>
<tr>
<td>Mexican Spotted Owl</td>
<td>Strix occidentalis lucida</td>
<td>FT</td>
<td>--</td>
<td>Old-growth or mature forests with complex structural components and high tree density</td>
<td>None; suitable habitat does not occur within the project area.</td>
</tr>
<tr>
<td>Mountain Plover</td>
<td>Charadrius montanus</td>
<td>--</td>
<td>SC</td>
<td>Breeding habitat includes short grass prairie, shrub steppe, dryland, and prairie dog towns; nest sites usually occur where vegetation is sparse or absent</td>
<td>Potentially present; habitat overlaps with prairie dog habitat.</td>
</tr>
<tr>
<td>Bald Eagle</td>
<td>Haliaeetus leucocephalus</td>
<td>--</td>
<td>ST</td>
<td>Near estuaries, rivers, lakes, and marshes</td>
<td>Unlikely; habitat potentially occurs near the project study area, but will not be directly affected.</td>
</tr>
<tr>
<td><strong>Mammals</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Preble’s Meadow Jumping Mouse</td>
<td>Zapus hudsonius preblei</td>
<td>FT</td>
<td>--</td>
<td>Riparian vegetation with adjacent, preferably undisturbed grassland and nearby water sources</td>
<td>None; project area is located within a USFWS Block Clearance Zone (USFWS 2012) based on the likely absence of Preble’s.</td>
</tr>
<tr>
<td>Black-Tailed Prairie Dog</td>
<td>Cynomys ludovicianus</td>
<td>--</td>
<td>SC</td>
<td>Short, mixed, and tall grasslands; occurs in central and south-central Colorado</td>
<td>Present; numerous prairie dog burrows were observed in the project study area.</td>
</tr>
<tr>
<td>Swift Fox</td>
<td>Vulpes velox</td>
<td>--</td>
<td>SC</td>
<td>Short and mixed-grass prairie with flat to gently rolling terrain and sparse vegetation</td>
<td>Potentially present; habitat exists within the project study area.</td>
</tr>
</tbody>
</table>

**Notes:**

- Platte River Species = Water-related activities or uses in the South Platte River Basin, where the project is located, may affect these species in downstream reaches.
- FT = federally threatened; FE = federally endangered; C = candidate species; ST = state threatened species; SC = state species of concern
- Source: USFWS 2015 and Colorado Natural Heritage Program element occurrences database (CNHP 2014).
3.7.1.3 Migratory Birds

The Migratory Bird Treaty Act (MBTA) of 1918 prohibits destruction or disturbance of nesting activities or nests that results in loss of eggs or young. All wild birds are protected under the MBTA, except nonnative, human-introduced species and a few families not mentioned in the underlying treaties. The USFWS implements the requirements of the MBTA.

The project area includes various nesting habitat, including trees of various sizes within Corral and Franceville Tributaries, cavities and ledges on the vertical cut banks of Corral Tributary, and expansive upland grasslands. Numerous birds were observed at the site, including red-tailed hawk (*Buteo jamaicensis*), great-horned owl (*Bubo virginianus*), black-billed magpie (*Pica hudsonia*), American robin (*Turdus migratorius*), western meadowlark (*Sturnella neglecta*), tree swallow (*Tachycineta bicolor*), common raven (*Corvus corax*), turkey vulture (*Cathartes aura*), and mourning dove (*Zenaida macroura*). Other species not observed but likely to occur on the site include Swainson’s hawk (*Buteo swainsoni*), American kestrel (*Falco sparverius*), western kingbird (*Tyrannus verticalis*), lark sparrow (*Chondestes grammacus*), lark bunting (*Calamospiza melanocorys*), horned lark (*Eremophila alpestris*), American crow (*Corvus brachyrhynchos*), loggerhead shrike (*Lanius ludovicianus*), mountain bluebird (*Sialia currucoides*), and bank swallow (*Riparia riparia*) (Atkins 2015b).

Bald eagles (*Haliaeetus leucocephalus*) and golden eagles (*Aquila chrysaetos*) receive additional protection under the Bald and Golden Eagle Protection Act (BGEPA), which prohibits the taking, possession, or commerce of these birds. Potential foraging habitat exists within the project area for bald and golden eagles, and eagles are known to prey on prairie dogs, which occupy the area. No known occurrences of bald eagle nests or roost sites occur within 10 miles of the project area (CNHP 2014). The nearest golden eagle nest is located approximately 6 miles from the project area.

3.7.1.4 Vegetation and Noxious Weeds

The majority of the site is dominated by a short grass prairie, with the exception of the western edge and southwest corner, which are located along the Corral and Franceville Tributaries. These areas are dominated by cottonwood riparian woodlands and riparian scrub-shrub habitats.

The short grass species found within the project site include buffalo grass (*Bouteloua dactyloides*), blue grama (*Bouteloua gracilis*), western wheatgrass (*Pascopyrum smithii*), galleta grass (*Hilaria jamesii*), broom snakeweed (*Gutierrezia sarothrae*), red three awn (*Aristida purpurea*), alkali sacaton (*Sporobolus airoides*), sand dropseed (*Sporobolus cryptandrus*), sideoats grama (*Bouteloua curtipendula*), and yucca (*Yucca sp.*) (Terracon Consultants, Inc. 2012a).

Located along the western boundary and southwestern corner of the site, the riparian woodland community is dominated by plains cottonwood (*Populus deltoides*), with an understory of grasses including western wheatgrass, buffalograss, and blue grama. Located along the northern and central portion of the site along the Franceville Tributary, the riparian scrub shrub community is dominated by willows (*Salix sp.*) and rabbitbrush (*Ericameria nauseosa*), with an understory of mountain snowberry (*Symphoricarpos oreophilus*), blue grama, western wheatgrass, and buffalograss. These plants are common to the native plains of eastern Colorado and are not classified as threatened, endangered, or rare (Terracon Consultants, Inc. 2012a).
Given the adverse environmental effects of weeds, federal, state, and local governments have issued various orders and regulations regarding noxious weeds. The Colorado Noxious Weed Act establishes a prioritized list of alien plant species that requires designated levels of management (eradication, suppression or containment). Currently, 67 plant species are included on this list. Many of these species are confined to highly disturbed sites or areas that are farmed such as the project area (CDA 2000).

A formal noxious weed survey has not been performed on the site, but noxious weeds are known to occur in the vicinity of the project, including, but not limited to, spotted knapweed (*Centaurea maculosa*), hoary cress (*Cardaria draba*), leafy spurge (*Euphorbia esula*), diffuse knapweed (*Centaurea diffusa*), common teasel (*Dipsacus sylvestris*), Russian olive, yellow toadflax (*Linaria vulgaris*), and Scotch thistle (*Onopordum acanthium*) (CDA 2003). These plant species are on Colorado’s Noxious Weed Species List B, which defines the species for which the commissioner, in consultation with the state noxious weed advisory committee, local governments, and other interested parties, develops and implements state noxious weed management plans designed to stop the continued spread of these species (CDA 2016). In addition to these species, the common burdock (*Arctium minus*) was found on the site in May 2015. This species is on Colorado’s Noxious Weed Species List C, which defined the species for which the commissioner, in consultation with the state noxious weed advisory committee, local governments, and other interested parties, will develop and implement state noxious weed management plans designed to support the efforts of local governing bodies to facilitate more effective integrated weed management on private and public lands.

El Paso County has a Noxious Weed Plan that provides guidelines for managing noxious weeds, including preventative measures and control techniques. Noxious weeds are often spread through activities such as construction, spreading gravel, or applying topsoil. Preventing the spread of weeds can be accomplished by identifying and eradicating small infestations early on (El Paso County 2014).

### 3.7.2 Effects of the Preferred Alternative

Minor short-term adverse impacts and minor long-term beneficial impacts on wildlife and habitat would be expected. No significant changes to topography or drainage that could affect habitat and wildlife would be expected from the Preferred Alternative. The proposed cemetery would include site development that would complement the area’s natural state, to be designed in concert with the natural topography, drainage patterns, native species, and supporting habitat.

Although the Arkansas darter has not been observed on the site, it has been found in a branch of Jimmy Camp Creek within 1 mile of the site boundary. Corral Creek, a tributary to Jimmy Camp Creek, passes through the project area upstream of known Arkansas darter habitat. Furthermore, the entire project site is within the watershed of these water bodies, including the proposed relocation of the Franceville floodway channel. Although there are no direct effects associated with the Preferred Alternative that would affect the darter, there is the potential for indirect effects given the location of these activities within the watershed. Specifically, soil disturbance associated with site preparation, construction, and the relocation of the Franceville floodway channel may in the potential for short-term increases in sedimentation to onsite wetlands and tributaries to Jimmy Camp Creek. These impacts would be minimized through the use of erosion and sediment control BMPs, as described in Section 3.4.4, as well as design features that reduce the potential for sedimentation. Contractors would maintain a minimum 200-foot buffer between the wetlands identified on site and any construction activities or ground disturbance associated with the Preferred Alternative. The channelization of the Franceville floodway and associated construction
of a stormwater retention pond would enhance the predictability of flooding scenarios and increase water retention, protecting existing wetlands from future scour or rapid flooding common with this region of the country. In the long-term, this would improve the quality of the wetlands on-site, resulting in minor long-term beneficial impacts to the wetland habitat and actually improving water quality further downstream during storm events relative to current conditions. As such, the Preferred Alternative would result in long-term minor beneficial effects to the Arkansas darter and other aquatic life and their habitat further downstream.

Of the state listed species, only the bald eagle (Haliaeetus leucocephalus) is listed as a threatened species. Known to occur near estuaries, rivers, lakes, and marshes, it is unlikely that bald eagles would be affected by the project due to the lack of large open water areas in the vicinity of the site; however, potential habitat occurs near the project study area (Atkins 2015a). However, to comply with the BGEPA, consultation with the USFWS would occur should any nests be identified prior to or during construction.

Three state listed species are Species of Special Concern, including the mountain plover (Charadrius montanus), black-tailed prairie dog (Cynomys ludovicianus), and the swift fox (Vulpes velox). All of these species’ habitat exist within the project study area, but neither the mountain plover nor the swift fox have been identified on site. Black-tailed prairie dogs are the only state-listed species known to occur on site. To reduce future impacts to black-tailed prairie dogs, the site would be surveyed for recent activity and adjustments would be made to the final design where practical to avoid adverse impacts to their habitat and the existing population. Physical and visual barriers could be used to discourage expansion of black-tailed prairie dog dwellings onto the project site. For existing dwellings that cannot be avoided, individuals directly affected by near-term construction activities may be relocated to reduce harm to the population. The architecture and engineering contractor is currently working with the CPW to develop management plans related to potential impacts on prairie dog habitat.

3.7.3 Effects of the No Action Alternative

Under the No Action Alternative, there would be no construction or operation of a National Cemetery on the site and, therefore, no effect on existing habitat and wildlife.

3.7.4 Minimization/Management Measures

Since the Proposed Action would not present any significant adverse effects on wildlife and habitat, specific minimization measures would not be required. However, a number of BMPs would be employed to minimize the potential adverse impacts associated with the Preferred Alternative.

Habitat

Management measures associated with protecting, maintaining, and enhancing habitat on-site and in the vicinity of the Proposed Action include the following:

- Avoid to the greatest extent practicable any ground disturbing activities within 200 feet of identified wetlands and surface waters.
- Utilize erosion and sediment control BMPs to minimize short-term sedimentation of downstream wetlands and water bodies.
• Consult with the USFWS and CPW to minimize adverse effects to wildlife resources and habitat prior to construction.
• Implement flood control measures that enhance the predictability of local flood regimes and reduce impacts to wetlands and water bodies associated with scour and other flood effects.

Vegetation and Noxious Weeds
Management practices associated with eliminating noxious vegetation and preventing the proliferation of weeds include the following:

• Utilize native species for landscaping and when revegetating land disturbed by construction to avoid the potential introduction of non-native or invasive species.
• Implement preventative efforts to prevent the establishment of noxious weeds.
• Prioritize control and elimination of weeds that are already established, and taking prompt action to eradicate the species.
• Integrate specific site BMPs such as erosion control measures for spoils areas, which include actions such as soil reinforcement BMPs (i.e., grass stabilization, soil reinforced geotextiles) and straw wattles around the downslope of the pile, would also contribute to measures toward preventing noxious weed establishment.

3.8 Cultural Resources
Section 106 and Section 110 of the National Historic Preservation Act (NHPA) (Public Law 89-655, 54 U.S.C. § 300101 et seq.), ensures that all federal agencies take into account the effects of their undertakings (proposed programs, projects, and actions) on cultural resources, defined as any prehistoric or historic district, site, building, structure, or object eligible for inclusion on the National Register of Historic Places (NRHP), and to afford the ACHP a reasonable opportunity to review and comment on any action that may affect properties that are listed, or are eligible for listing, in the NRHP. Eligibility for the NRHP is based on the following (36 CFR 60.4):

“The quality of significance in American History, architecture, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, workmanship, feeling, and association and:

a. that are associated with events that have made a significant contribution to the broad patterns of our history; or,
b. that are associated with the lives of persons significant in our past; or,
c. that embody distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or

d. that has yielded, or may be likely to yield, information important in prehistory or history.”

3.8.1 Existing Conditions
The Area of Potential Effect (APE) for cultural resources includes the Phase 1 construction footprint at the Drennan Road property described in the Proposed Action. Specific areas of interest may include facilities of historic interest, historic districts outside of the project boundaries, as well as Native American tribal entities that are federally recognized as having historic interests in the area. An alternative would have a significant effect on cultural resources if it resulted in
damage, destruction, or demolition of an archaeological site or building that is eligible or listed on the NRHP; promoted neglect of such a resource, resulting in resource deterioration or destruction; introduced audio or visual intrusion to such a resource; or decreased access to resources of value to federally recognized Native American tribes. Coordination with Native American tribes is included in Appendix C.

The entire Rolling Hills Ranch property, including the Phase 1 project area, was surveyed in 2006 by RMC Consultants, Inc. for the Rolling Hills Ranch developer. Additional surveys were also completed, including an access road survey, a block survey of private land along Jimmy Camp Creek, an oil and gas pipeline survey, and a water pipeline survey (Bugg 2012). Findings from these surveys were an historic farm (5EP5121), the Franceville Spur of the Denver and New Orleans Railroad (5EP2174.1), both assessed as not eligible for listing on the National Register of Historic Places (NRHP); and one historic (5EP5114) and 12 prehistoric isolated finds (5EP2583, 5EP2584, 5EP5100–5EP5106, and 5EP5111–5EP5113), all assessed as not eligible for listing on the NRHP. Site 5EP5099 is a prehistoric open camp, and four prehistoric open lithic scatters (5EP5107–5EP5110) were recorded and assessed as not eligible (Bugg 2012). Jimmy Camp Creek, which runs along the western boundary of the proposed site location, marks an important travel corridor for both prehistoric and historic peoples.

3.8.1.1 Archaeological Resources

Two archaeological surveys were completed in the APE specifically for the proposed new cemetery. The first survey, reported in Initial Cultural Resource Impact Prediction for the New Southern Colorado National Cemetery in El Paso County Colorado (Bugg 2012) identified six archaeological sites within the APE. These sites are summarized in Table 3-2 and shown on Figure 3-5.

A Class III intensive inventory of the area was not recommended because surveys had already been completed. However, the consultant (Bugg 2012) did recommend that the previously recorded archaeological sites be revisited and evaluated for changes in condition. As a result of that recommendation, a follow-up pedestrian survey was conducted by Marstel-Day in 2015 (Appendix A). That survey relocated all six archaeological sites and confirmed the recommendation of “not eligible” for the NRHP for all of the finds, with the exception of Site 5EP5103, where additional work was recommended based on additional finds during that survey.

<table>
<thead>
<tr>
<th>Site</th>
<th>Description</th>
<th>Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>5EP5103</td>
<td>Isolated find, prehistoric scatter</td>
<td>Redraw site boundary and conduct sub-surface test excavations</td>
</tr>
<tr>
<td>5EP5104</td>
<td>Isolated find, prehistoric scatter</td>
<td>Ineligible; no further work</td>
</tr>
<tr>
<td>5EP5107</td>
<td>Open lithic scatter</td>
<td>Ineligible; no further work</td>
</tr>
<tr>
<td>5EP5108</td>
<td>Open lithic scatter</td>
<td>Ineligible; no further work</td>
</tr>
<tr>
<td>5EP5109</td>
<td>Open lithic scatter</td>
<td>Ineligible; no further work</td>
</tr>
<tr>
<td>5EP5121</td>
<td>Historic ranch/farm</td>
<td>Ineligible; no further work</td>
</tr>
</tbody>
</table>
Figure 3-5. Identified Archaeological Sites within the Area of Potential Effect
Site 5EP5103 is recorded as an isolated find consisting of three flakes. This site is classified as a prehistoric lithic reduction site of unknown cultural affiliation and ineligible for listing on NRHP. Present conditions include a moderate ground cover of grasses, small bushes, and some cactus; and evidence of cattle grazing. Evidence of slight disturbance from animal burrows is present. The site is in good condition. A large prehistoric ceramic sherd, two smaller sherds, and a flake were observed within 15 meters east of the site, in the backdirt piles of two animal burrows.

For Site 5EP5103, it was recommend that the site boundary be redrawn to include these artifacts, the designation as an isolated find be reconsidered, the large ceramic sherd be analyzed for its potential to provide a date range, and consideration be given to subsurface testing, as the observed artifacts were found in backdirt piles. It was recommended that subsurface testing take place according to a systematic grid, and that the soil matrix be screened. If new data are recovered, reconsideration of NRHP eligibility would be warranted.

The VA related the recommendation for further subsurface testing at Site 5EP5103 to the Colorado SHPO in February 2016 pursuant to Section 106 of the NHPA. The Colorado SHPO further recommended phased subsurface identification and evaluation of the APE to gather further information regarding the site’s significance and integrity as they relate to the NRHP. The VA is currently in coordination with the Colorado SHPO to determine the extent and process of further cultural resources investigation at the site.

3.8.2 Effects of the Preferred Alternative

The Preferred Alternative may result in minor-to-moderate short- or long-term adverse impacts on cultural resources. Based on a thorough cultural resource overview and previous cultural resource investigations of the project site, recorded archaeological and historical sites were found to exist within VA property. The investigation revealed that historic features may remain in the project area, including past travel routes. For site 5EP5103, evaluators recommended that the site boundary be recalculated, the isolated find designation be reconsidered, and that analysis of the larger ceramic sherd and subsurface testing be considered. Site 5EP5103 is located on the southern periphery of Preferred Alternative development footprint, adjacent to the planned relocated floodway channel. The VA is currently conducting Section 106 cultural resources consultation with the Colorado SHPO to develop an investigatory strategy for archaeological resources on the property. Pending the results of this work, the VA would further consult with the Colorado SHPO to identify avoidance or minimization stipulations for the site, as necessary. Due to its location, management measures would be required if NRHP listing of the site were determined to be warranted per Section 106 of the NHPA and its implementing regulations (36 CFR Part 800).

3.8.3 Effects of the No Action Alternative

Under the No Action Alternative, existing conditions would remain unchanged and there would be no impacts on cultural resources. None of the proposed facilities associated with the Proposed Action would be constructed, and the undeveloped land would remain as open space. However, should the site be developed for another use, impacts on cultural resources could result from that changed land use. Potential alternative uses of the property could irrevocably destroy any unfound historic or prehistoric resources, or the potential to document and preserve any findings.
3.8.4 Minimization/Management Measures

Because the construction of the proposed cemetery could affect cultural resources at the site, the VA continues its consultation with the Colorado SHPO in order to discuss the recommended fieldwork at site SEP5103. Under the Preferred Alternative, additional measures would be taken to manage potential adverse effects associated with the site’s development as follows:

- If any archaeological resources were unearthed during construction or during excavation associated with burials, work would immediately cease and procedures for inadvertent discovery, as outlined by SHPO recommendations, would be followed. In addition, appropriate SHPO and Native American tribal councils would be advised and appropriate conservation measures would be implemented.
- In the event of discoveries of ancestral remains during construction activities, recognized cultural and lineal descendants would be notified and consulted on matters of burial treatment.
- Recognized cultural and lineal descendants would be granted access rights to conduct traditional and customary burial practices on-site if as-yet undiscovered ancestral remains are discovered during the construction phase.

It is not anticipated that the Preferred Alternative would present any significant adverse effects on cultural resources. However, the VA would develop specific minimization measures in consultation with the Colorado SHPO according to the results of ongoing consultation and field investigation at the site.

3.9 Noise

3.9.1 Existing Conditions

The site is located in a quiet rural area surrounded by agricultural land uses, with some proximate low- to medium-density residential uses. The area is relatively quiet and the sounds are largely typical of agricultural and low-density residential land uses. The principal sources of noise in the area are associated with traffic along nearby roads (Drennan Road, Marksheffel Boulevard, and Bradley Road). Occasional but more intense noise is associated with air traffic from Peterson Air Force Base and Colorado Springs Airport, which are co-located approximately 2.5 miles west-northwest of the site.

Sensitive noise receptors include a medium-density housing development located approximately 0.5 miles west of the site and a low-density housing development located 0.5 miles east-northeast of the site.

3.9.2 Effects of the Preferred Alternative

The Preferred Alternative would result in minor, short-term adverse noise impacts, concurrent with the PEA (VA 2012). The area around the cemetery site would experience a slight, temporary, and intermittent increase in noise levels during construction. This would include noise from construction vehicles entering and exiting the cemetery and land preparation, grading, and other construction work.
Following construction, the site would generate intermittent noise levels associated with a cemetery, at a level similar to historic ranching operations. Normal cemetery operations, which include noises associated with the operation and maintenance of the cemetery and regular committal services and other ceremonial activities, would result in minor, long-term, adverse impacts. This is consistent with the impacts anticipated in the PEA, although the original study does not address noise associated with rifle salutes. The M-16 (5.56 caliber) blank round rifle salutes used during committal services are the most substantial long-term source of noise at national cemeteries. Salutes range in number from three to five at a target distance of 50 meters, and last less than 10 seconds. Services would take place at two committal service shelters on the site. Up to 12 ceremonies would occur per day on weekdays between the hours of 8:00 a.m. and 4:30 p.m., with occasional services on weekends.

The sensitive land use closest to the proposed committal service shelters is medium-density residential housing west of the site, along Horizon View Drive. The closest residence is located approximately 2,830 feet (863 meters) from Committal Service Shelter 2. For sensitive land uses, it is the consensus among federal agencies that average noise levels below 65 decibels (dB) over a 24-hour period (day-night average sound level [DNL]) are compatible with noise-sensitive land uses such as homes, schools, medical facilities, and churches (USEPA 1973, 1974).

Based on U.S. Army estimates for A-weighted sound exposure levels (ASEL) for M-16 rifle blanks at 800 to 1,600 meters away, these residents could experience single event level intermittent noise between 41 dB and 31 dB (VA 2013). As a point of reference, 60 dB is the measured loudness of normal conversation, and a standard telephone dial tone is measured at approximately 80 dB. These sound levels do not account for the noise-baffling effects of tree lines and vegetation. Therefore, anticipated sound levels would likely be lower. Furthermore, the estimated noise from M-16 rifle blanks would be well below the generally accepted threshold of 65 dB DNL for the average noise level in a 24-hour period for sensitive land uses, since the highest peak noise during the 10-second gun salute event is still below the threshold, at 200 meters. Figure 3-6 provides a visual representation of the noise levels associated to the Preferred Alternative.

3.9.3 Effects of the No Action Alternative

The No Action Alternative would result in no impact on noise relative to current conditions at the site.

3.9.4 Minimization/Management Measures

Implementing BMPs to reduce noise generated during construction would further minimize the potential effects on the local noise environment. Though no project-specific minimization measures would be required, the construction contractor would implement the following typical noise-control BMPs, as applicable, to minimize the potential for adverse noise impacts.

- Limit construction activity to daylight hours.
- Use properly maintained and muffled vehicles and equipment.
- Observe local noise ordinances at all times.
- Locate stationary operating equipment as far away from surrounding residents as possible. Shut down heavy equipment and other noise emitters when they are not in use.