

FINAL ENVIRONMENTAL ASSESSMENT NEW VETERINARY CLINIC

MARCH 2013



ELLSWORTH AIR FORCE BASE
SOUTH DAKOTA



**FINDING OF NO SIGNIFICANT IMPACT (FONSI)
NEW VETERINARY CLINIC
ELLSWORTH AIR FORCE BASE, SOUTH DAKOTA**

The attached environmental assessment (EA) analyzes the potential for impacts to the environment as a result of the construction and operation of a new veterinary clinic at Ellsworth Air Force Base (AFB), South Dakota. A No-Action Alternative was also considered. The EA was prepared in accordance with the National Environmental Policy Act (NEPA) of 1969, as amended (42 U.S. Code [U.S.C.] 4321 et seq.), the Council on Environmental Quality regulations implementing the procedural provisions of NEPA, 40 Code of Federal Regulations (CFR) Parts 1500-1580, and Air Force policy and procedures (32 CFR Part 989).

This FONSI summarizes the results of the evaluation of construction and operation activities. The discussion focuses on activities that have the potential to change both the natural and human environments.

Summary of Environmental Consequences

Socioeconomics, utilities, transportation, airspace, hazardous materials management, hazardous waste management, pesticide management, storage tanks, radon, ordnance, radioactive materials, noise, and biological resources would not be affected.

Because there would be no change in population, and only a temporary increase in employment that would result from the construction of the new facility and no new personnel would be required, significant impacts to socioeconomics are not expected. No change in use of utilities would occur and no impacts are expected. No increase in traffic is expected to occur, except from that of short-term construction crews. No impacts to the use, control, or management of airspace are anticipated as a result of the construction project. Hazardous materials, hazardous waste, and pesticide management practices are not expected to change as a result of the construction project or implementation of the Proposed Action. There are no structures or facilities within the project area that contain storage tanks, ordnance, or radioactive materials; therefore, impacts are not expected. The project does not include any type of facility for which radon would be a concern. Noise generated from construction activities is expected to be temporary; no permanent or long-term impacts for noise are expected. The project area is within a developed portion of the base, and the immediate area is disturbed; therefore, significant impacts to biological resources are not expected.

Because the new veterinary clinic would not change the visual character or sensitivity of the site, no impacts to aesthetics are expected. The project would be consistent with the proposed land use designation for the project site in the base general plan. Long-term adverse impacts are not expected.

The construction of the new facility would not change the manner in which medical/biohazardous materials are generated, stored, distributed, or disposed of. Construction of the new facility would not increase the relative amount of medical/biohazardous materials stored on base because the facility would be replacing the existing veterinary clinic. After the Proposed Action is implemented, medical/biohazardous waste generation would move from the existing facility to the new veterinary clinic. No significant impacts from generation, storage, or disposal of medical/biohazardous waste are anticipated.

Construction activities do not involve large-scale cutting, filling, or grading of the area, so geology and soils are not expected to be significantly altered. Standard construction practices would be implemented to control potential soil erosion and water runoff. No surface water resources are near the project area and construction is not expected to have a significant impact on surface or groundwater resources.

During construction, the potential exists for short-term impacts to local air quality from fugitive dust or emissions from construction vehicles. However, standard management practices would be used to control fugitive dust, and emissions from construction activities would be temporary. Impacts to air quality are expected to be temporary and less than significant.

The project area has been heavily disturbed; no historic properties are expected to be encountered during project activities. No significant impacts to cultural resources are expected.

Cumulative Impacts


The EA reviewed cumulative impacts that could result from the incremental impact of proposed activities when added to other past, present, or reasonably foreseeable future actions. No significant cumulative impacts would be expected.

Mitigations

The EA concluded that no significant impacts to the environment would result from the construction and operation of the new veterinary clinic. Therefore, no mitigation measures would be required.

Decision

As a result of the analysis of impacts in the EA, it was concluded that the proposed activity would not have a significant effect on human health or the natural environment; therefore, an environmental impact statement will not be prepared.



MARK E. WEATHERINGTON, Colonel, USAF
Commander, 28th Bomb Wing
Ellsworth Air Force Base, South Dakota

19 MAR 13
Date

Attachment:
Environmental Assessment

**FINAL
ENVIRONMENTAL ASSESSMENT**

**NEW VETERINARY CLINIC
ELLSWORTH AIR FORCE BASE,
SOUTH DAKOTA**

MARCH 2013

**COVER SHEET
ENVIRONMENTAL ASSESSMENT
FOR NEW VETERINARY CLINIC
AT ELLSWORTH AIR FORCE BASE, SOUTH DAKOTA**

- a. Responsible Agency: U.S. Air Force
- b. Proposed Action: Construct a new veterinary clinic to replace the existing base veterinary clinic.
- c. Written comments and inquiries regarding this document should be directed to: Lt Kurt DeRussy, 28 CES/CEP, Ellsworth Air Force Base, 2125 Scott Drive, Ellsworth AFB, SD 57706.
- d. Designation: Environmental Assessment (EA)
- e. Abstract: The purpose of this action is to construct a new veterinary clinic. The facility would be sited and constructed to comply with U.S. Army provisions for location and operation of medical facilities. Veterinary clinic personnel and operations would relocate from the existing veterinary clinic. The existing veterinary clinic building would be used by another unit.

This EA has been prepared in accordance with the National Environmental Policy Act to analyze the potential environmental consequences of the Proposed Action. Two alternatives were examined: the Proposed Action and the No-Action Alternative. The Proposed Action is to construct the new veterinary clinic. The No-Action Alternative involves continuing to operate the veterinary clinic at its current location.

The environmental resources potentially affected by the Proposed Action are land use, aesthetics, medical/biohazardous waste, geology and soils, water resources, air quality, and cultural resources. Based on the nature of the activities that would occur under the Proposed Action and No-Action Alternative, the Air Force has determined that minimal or no adverse effects to the above resources are anticipated.

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ACRONYMS AND ABBREVIATIONS

AQCR	Air Quality Control Region
A.D.	Anno Domini
AFB	Air Force Base
BHRCI	Black Hills-Rapid City Intrastate
B.P.	Before Present
CAA	Clean Air Act
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
CO	carbon monoxide
CRM	Cultural Resources Manager
DENR	Department of Environmental and Natural Resources
DOD	Department of Defense
DRS	Dakota Research Services
EA	environmental assessment
EIS	environmental impact statement
EPA	Environmental Protection Agency
ERP	Environmental Restoration Program
FONSI	Finding of No Significant Impact
HAP	Hazardous Air Pollutant
$\mu\text{g}/\text{m}^3$	micrograms per cubic meter
MMRP	Military Munitions Response Program
NAAQS	National Ambient Air Quality Standards
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NO_2	nitrogen dioxide
NRHP	National Register of Historic Places
pCi/l	picoCuries per liter
$\text{PM}_{2.5}$	particulate matter equal to or less than 2.5 microns in diameter
PM_{10}	particulate matter equal to or less than 10 microns in diameter
POL	petroleum, oil, and lubricants
ppm	parts per million
PSD	Prevention of Significant Deterioration
ROI	Region of Influence
SF	square foot
SHPO	State Historic Preservation Officer
SO_2	sulfur dioxide
SWPPP	Storm Water Pollution Prevention Plan
tpy	tons per year
UFC	Unified Facilities Criteria
U.S.C.	U.S. Code
USFWS	U.S. Fish and Wildlife Service

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1.0 PURPOSE OF AND NEED FOR ACTION

This environmental assessment (EA) evaluates the potential environmental impacts of implementing the construction and operation of a new veterinary clinic on Ellsworth Air Force Base (AFB), South Dakota (Figure 1-1).

This document has been prepared in accordance with the National Environmental Policy Act (NEPA) of 1969, as amended (42 U.S. Code [U.S.C.] 4321 et seq.), the Council on Environmental Quality (CEQ) regulations implementing the procedural provisions of NEPA 40 Code of Federal Regulations (CFR) Parts 1500-1580, and Air Force policy and procedures (32 CFR Part 989).

1.1 PURPOSE AND NEED

Ellsworth AFB's existing veterinary clinic is located in an inadequate facility originally designed for an alternate purpose. The existing clinic's operations and care capabilities are inhibited due to the substandard facility. The building is not in compliance with the spaces and functionality required by Department of Defense (DOD) Medical Space Planning Criteria.

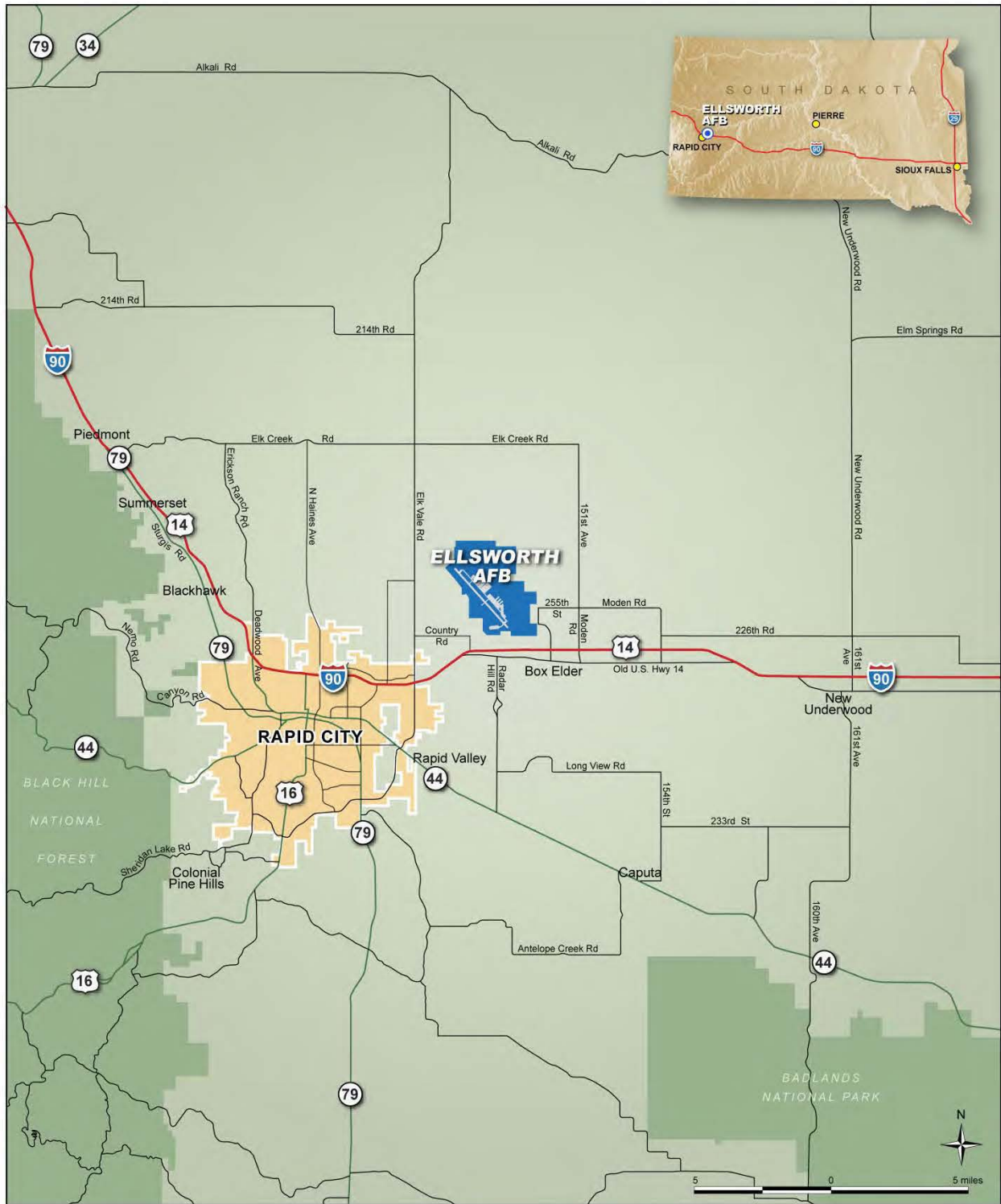
The purpose of the action is to allow Ellsworth AFB to provide adequate care to Military Working Dogs, as required, and to the base animal population. Military Working Dogs are a mission-essential component to base security. The dogs provide security forces units the capability to enforce military laws and regulations, suppress use of illegal drugs, detect explosives, and protect installation and resources. Sufficient care facilities, to include separate exam, surgery, x-ray, and prep spaces, are required to keep the working dog population healthy.

1.2 LOCATION OF THE PROPOSED ACTION

The proposed facility would be in the southeastern portion of Ellsworth AFB near the intersection of Eaker Drive and Chennault Street. The new facility would be constructed on the location of former Building 3401 (Figure 1-2), which was demolished in 2003. The location is north of and adjacent to the Black Hills Chapel, Building 3405.

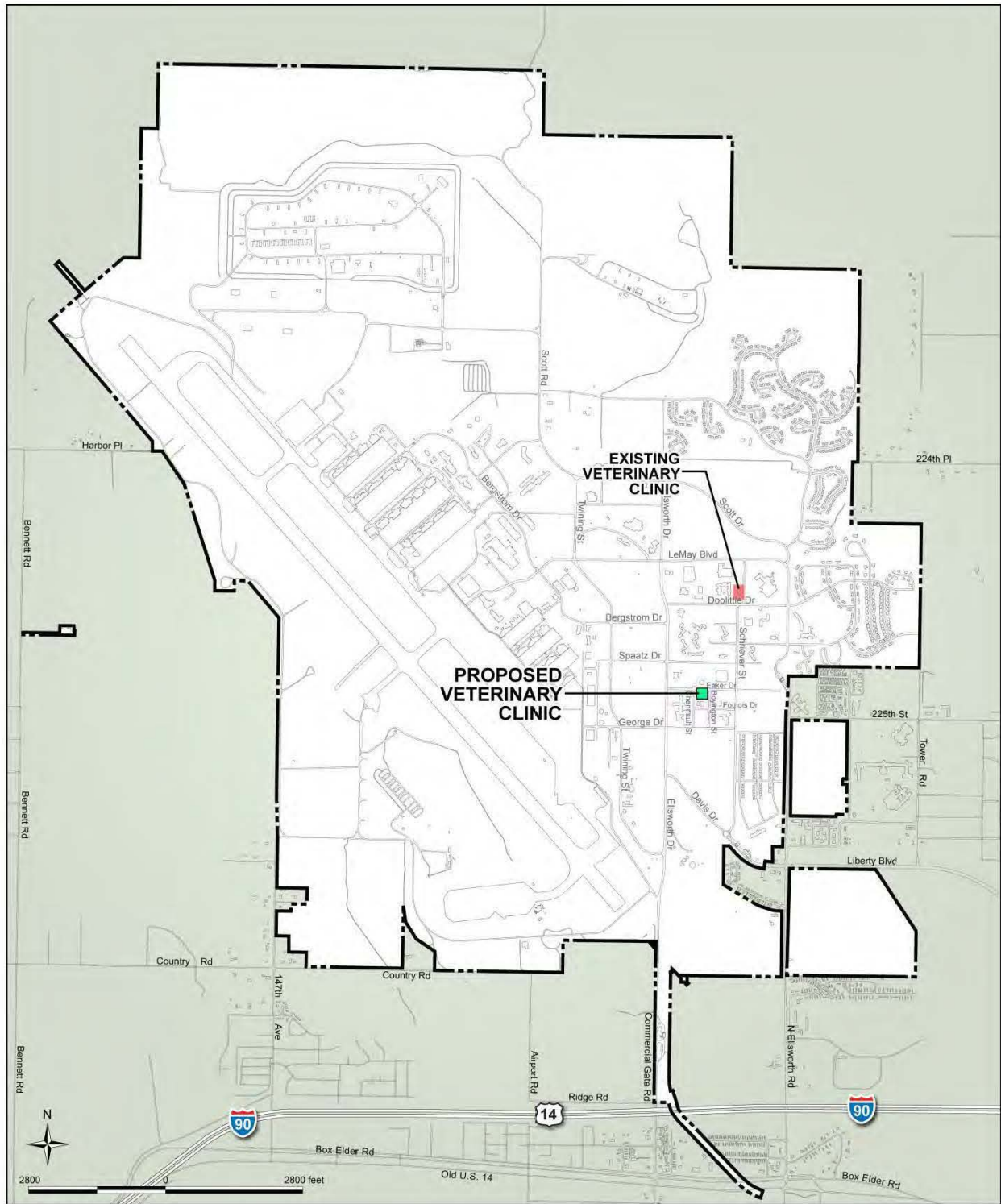
1.3 SCOPE OF ENVIRONMENTAL REVIEW

This document is "issue-driven," in that it concentrates only on those resources that may be affected by implementation of the Proposed Action or No-Action Alternative. The EA describes and addresses the potential environmental impacts of the activities associated with the construction and operation of the new veterinary clinic. The EA also evaluates the potential environmental impacts of the No-Action Alternative.



ELLSWORTH01

**Ellsworth AFB
Regional Map**
Figure 1-1



EXPLANATION

- Proposed Veterinary Clinic
- Base Boundary

**Proposed Veterinary Clinic
Site Location Map**

Figure 1-2

Consistent with 32 CFR 989 and the CEQ regulations, the scope of analysis presented in this EA is defined by the potential range of environmental impacts that would result from implementation of the Proposed Action and No-Action Alternative.

Resources that have a potential for impact were considered in more detail in order to provide the Air Force decision maker with sufficient evidence and analysis to determine whether or not additional analysis is required pursuant to 40 CFR Part 1508.9. The resources analyzed in more detail are land use, including aesthetics, medical/biohazardous waste, geology and soils, water resources, air quality, and cultural resources. The affected environment and the potential environmental consequences relative to these resources are described in Chapters 3.0 and 4.0, respectively.

Initial analysis indicated that the veterinary clinic construction project would not result in either short- or long-term impacts to socioeconomics, utilities, transportation, airspace, hazardous materials management, hazardous waste management, storage tanks, Environmental Restoration Program (ERP) sites, pesticide usage, ordnance, radon, radioactive materials, noise, biological resources, and environmental justice. The reasons for not addressing these resources are briefly discussed in the following paragraphs.

Socioeconomics. No changes would occur in population or employment associated with the Proposed Action or No-Action Alternative. Veterinary clinic personnel would relocate from the existing veterinary clinic (Building 6010). Employment associated with construction activities would be minimal and temporary. Because no increase in population or employment is expected, impacts to socioeconomics would not be expected and are not analyzed further in this EA.

Utilities. The electrical, natural gas, water, and sanitary sewer requirements of the new facility would be similar to those of the existing facility. No new personnel would be required for the Proposed Action or No-Action Alternative, so no increase in utility usage or sanitary and solid waste generation would occur. Utility connections to the former Building 3401 are already on site; therefore, no additional utility lines would be required. Impacts to base utility systems are not expected and are not analyzed further in this EA.

Transportation. Neither the Proposed Action nor the No-Action Alternative would entail any increase in traffic or require roadway improvements. Daily trips associated with construction employees would be minimal. Impacts to transportation are not expected and are not analyzed further in this EA.

Airspace. No aircraft operations are associated with the Proposed Action and No-Action Alternative, and the new veterinary clinic would not be situated in an area that would affect any airfield operations. Impacts to airspace are not expected and are not analyzed further in this EA.

Hazardous Material Management. During construction activities, small amounts of hazardous materials are expected to be utilized by the contractor;

therefore, the potential for spill would exist. Hazardous materials likely to be used during construction activities include adhesives, motor fuels, paints, thinners, solvents, and petroleum, oil, and lubricants (POL). Storage, handling, and transportation of hazardous materials would be conducted in accordance with applicable regulations and procedures. Any spills or releases of hazardous materials would be cleaned up by the contractor.

Only household cleaning supplies (e.g., window cleaners, floor wax, toilet bowl cleaners) are expected to be used at the proposed facility. Hazardous materials management procedures are not expected to be impacted and are not analyzed further in this EA.

Hazardous Waste Management. Small quantities of hazardous waste would be generated during construction activities. The construction contractor would be responsible for following applicable regulations for management of any hazardous waste generated. Any spills or releases of fuel or oil from construction equipment would be cleaned up by the contractor. The contractor would be responsible for the off-site disposal of any hazardous waste in accordance with applicable regulations.

Activities at the new veterinary clinic would generate hazardous waste similar to those generated at the existing veterinary clinic. Hazardous waste production would neither increase nor decrease. The proposed facility would continue to use only household cleaning supplies (e.g., window cleaners, floor wax, toilet bowl cleaners); only small quantities of household hazardous waste would be generated (i.e., residual household cleaning supplies within their containers). Because any hazardous waste generated during construction activities and during operation of the facility would be managed in accordance with applicable regulations, no impacts are anticipated; and hazardous waste management procedures are not analyzed further in this EA.

Storage Tanks. No storage tanks would be affected by the Proposed Action and No-Action Alternative, and no storage tanks are required for the Proposed Action and No-Action Alternative. Impacts to storage tanks are not expected and are not analyzed further in this EA.

ERP Sites. No ERP Sites are located near the proposed site. A groundwater contamination plume that reaches to within approximately ¼ mile to the west of the site is the nearest site. The proposed veterinary clinic is not expected to contribute to, disturb, or prevent remediation of any environmental contamination that may be present in the groundwater plume. Impacts to ERP sites are not expected and are not analyzed further in this EA.

Pesticide Usage. The Proposed Action and No-Action Alternative would not result in any change to existing pesticide usage on the base. Therefore, impacts from pesticide usage are not expected and are not analyzed further in this EA.

Ordinance. A Military Munitions Response Program (MMRP) records search was recently conducted for Ellsworth AFB. The work plan for site remediation does not identify any areas for further investigation near the proposed clinic site.

The Proposed Action and No-Action Alternative would not require the use of ordnance. Therefore, impacts from ordnance are not expected and are not analyzed further in this EA.

Radon. Pennington and Meade counties are within U.S. Environmental Protection Agency (EPA) radon zone 2, which indicates indoor average radon levels of between 2 and 4 picoCuries per liter (pCi/l) (U.S. Environmental Protection Agency, 1999). Because indoor average radon levels in the region are below U.S. EPA recommended mitigation level of 4.0 pCi/l, impacts from radon would not be expected and are not analyzed further in this EA.

Radioactive Materials. The Proposed Action and No-Action Alternative would not require the use of radioactive materials. Therefore, impacts from radioactive materials are not expected and are not analyzed further in this EA.

Noise. The Proposed Action and No-Action Alternative would not result in any changes to existing noise conditions. Noise associated with construction of the new facility would be temporary and intermittent. Impacts from noise are not expected and are not analyzed further in this EA.

Biological Resources. The project site is situated in a developed area. The new facility would be constructed on the site of a demolished facility (Building 3401). The footprint of this demolished facility is sparsely vegetated with grasses and weedy plants and is mowed. The only other biological resources present in the area are landscaping plants (e.g., lawn grasses, shade trees) and a limited number of common animal species typically found in such areas. The only sensitive species with habitat on the base is the burrowing owl, a sensitive bird species that nests in the prairie dog town in the northern portion of the base (U.S. Air Force, 2010). These species do not have habitat in the project site area. No wetlands are in the project site area. Impacts to biological resources are not anticipated and are not analyzed further in this EA. Consultation with the U.S. Fish and Wildlife Service (USFWS) has been completed and USFWS has indicated that the project would have no significant impact on fish or wildlife resources or any federally listed threatened or endangered species (see Appendix A).

Environmental Justice. Socioeconomic impacts are not expected under the Proposed Action. In addition, any potential environmental impacts identified for resource areas in this EA would occur on the base; off-base populations would not be affected. Based on these findings, disproportional impacts to low-income, minority, and child populations are not expected and are not analyzed further in this EA.

1.4 FEDERAL PERMITS, LICENSES, AND FEES

The construction contractor responsible for conducting construction activities would obtain any required permits. The developer would cooperate with the Air Force to ensure compliance with applicable Air Force, federal, State, and local regulations and/or requirements.

2.0 ALTERNATIVES INCLUDING THE PROPOSED ACTION

2.1 INTRODUCTION

This chapter provides a description of the Proposed Action and No-Action Alternative, discusses the alternatives considered but eliminated from further study, and provides a comparison of the potential environmental impacts of the Proposed Action and No-Action Alternative.

2.1.1 Background

The site of the proposed veterinary clinic was previously occupied by Building 3401, which was demolished in 2003. The site is surrounded by existing pavement that served as a parking lot for the demolished building. Water, sanitary sewer, natural gas, and electrical service are available nearby. Building 3401 was approximately 5,000 square feet (SF) larger than the proposed veterinary clinic.

The base veterinary clinic is currently in Building 6010, which also supports other users (see Figure 1-2). After completion of the new veterinary clinic, the portion of Building 6010 that is currently occupied by the clinic would be used by another unit.

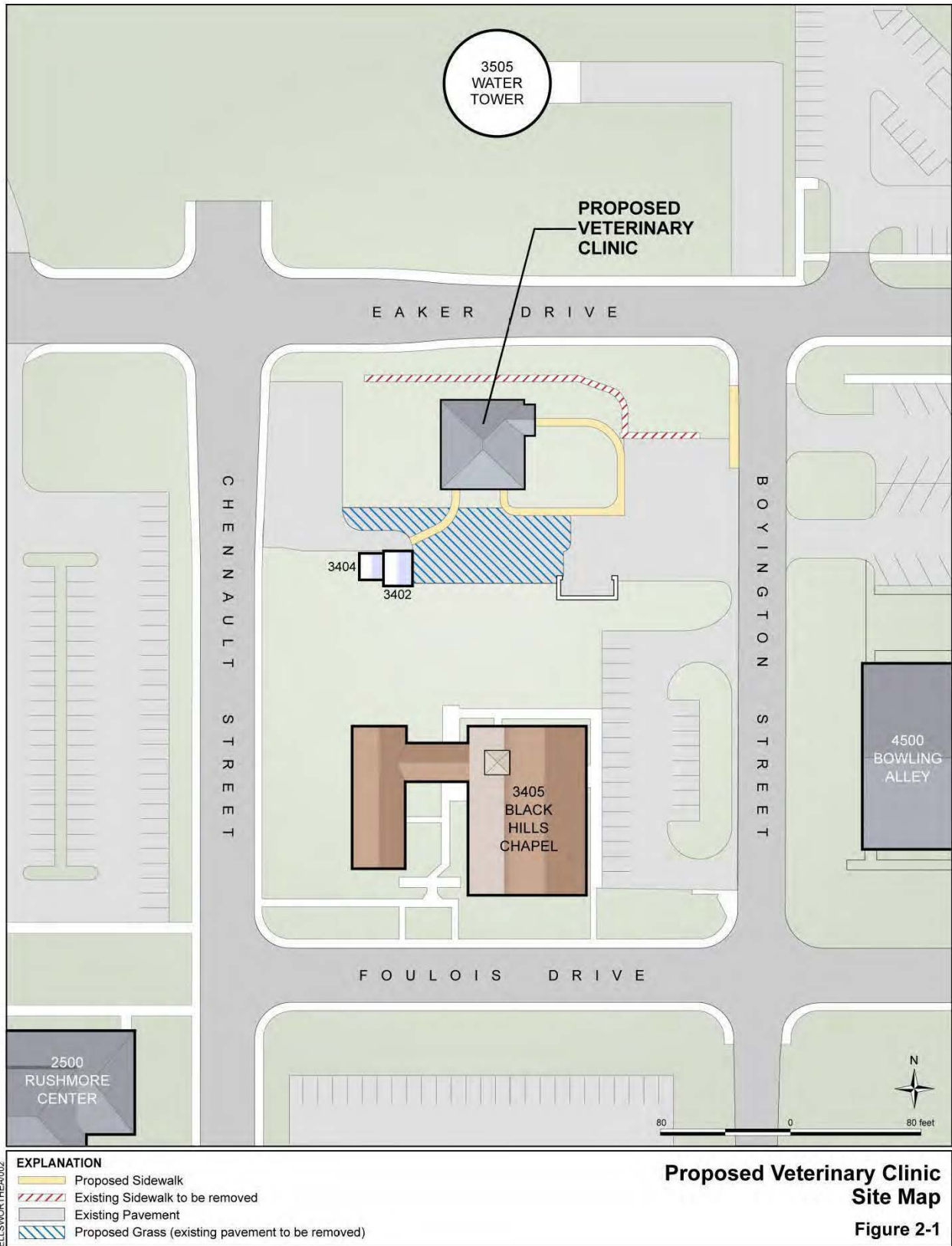
2.2 DESCRIPTION OF THE PROPOSED ACTION

The Proposed Action would involve the construction and operation of a new veterinary clinic on Ellsworth AFB (Figure 2-1). The proposed new veterinary clinic would be constructed to comply with U.S. Army provisions for location and operation of veterinary facilities. This facility would replace the existing veterinary clinic. Use of this new facility would bring Ellsworth AFB into compliance with U.S. Army policies for medical facilities. The project consists of the following:

- Construction of a veterinary clinic including offices, examination rooms, surgery rooms, and storage areas. The facility would be approximately 2,100 SF.
- Removal of approximately 4,750 SF of existing pavement.
- Removal of an existing sidewalk.
- Construction of new sidewalks.

The new building would be connected to existing electrical, natural gas, water, and sanitary sewer systems and lines on the project site.

The areas of existing pavement on the site that would not be removed would be reused in their present state.



Construction activities are anticipated to be completed within a 12-month time period.

The total area that would be disturbed by proposed construction activities is estimated to be less than 1 acre. Because the proposed project includes removal of an area of existing pavement, it would result in an estimated net loss of more than 2,000 SF of impermeable surfaces on the base.

2.3 ALTERNATIVES TO THE PROPOSED ACTION

2.3.1 No-Action Alternative

Under the No-Action Alternative, the Air Force would not construct a new veterinary clinic. The existing veterinary clinic (in Building 6010) would continue to provide veterinary services on base. The facility would continue to violate the provisions of U.S. Army MEDCOM requirements (Unified Facilities Criteria [UFC] 4-510-01, Design Medical Military Facilities), which address the design and operation of medical facilities.

2.3.2 Alternatives Eliminated from Further Consideration

Alternatives to the construction of a new veterinary clinic that were considered but eliminated include four different siting locations for the facility and upgrading the existing facility. These alternatives were eliminated from further consideration as discussed below.

Site A: This site was located near the existing working dog kennel. No utilities are currently available at the location, and construction at this location is not considered economically feasible.

Site B: This site is near the Hospital Boiler Plant (Building 5902) located across Doolittle Drive from the base hospital. Building 5902 is slated to be demolished. Once the facility is demolished, the site would be a large, undeveloped area; and the veterinary clinic would not be an appropriate use of this large, undeveloped land.

Site C: This site is on the current hospital property, near the entrance. Constructing a new veterinary clinic at this location would be an encumbrance to the hospital parking lot, and the available area in the hospital parking lot would not be large enough for the veterinary clinic.

Site D: This site is located northwest of the proposed location, near the Education Center. The Education Center area is proposed for redevelopment, and siting the new facility in this location would complicate the plans for redevelopment.

Upgrade Facility: Upgrading the existing facility would require extensive modifications to bring the building into compliance with regulations. The cost to modify the existing facility would exceed 75 percent of the value of the facility and

would be less economical than constructing a new facility specifically designed as a veterinary clinic.

2.4 COMPARISON OF ENVIRONMENTAL IMPACTS

Table 2-1 provides a comparative analysis of the potential environmental effects of implementing the Proposed Action and the No-Action Alternative. A detailed discussion is presented in Chapter 4.0, Environmental Consequences.

Table 2-1. Summary of Potential Environmental Impacts from the Proposed Action and No-Action Alternative
(Page 1 of 2)

Resource Category	Proposed Action	No-Action Alternative
Land Use	<p>Impacts: Construction of the new veterinary clinic would be consistent with the proposed land use designation for the area in the base general plan.</p> <p>Mitigation: No mitigation measures would be required.</p>	<p>Impacts: No changes to existing land use; no impacts would be expected.</p> <p>Mitigation: No mitigation measures would be required.</p>
Aesthetics	<p>Impacts: Construction of the new veterinary clinic would not result in a significant change to the low visual sensitivity of the area.</p> <p>Mitigation: No mitigation measures would be required.</p>	<p>Impacts: No changes to existing aesthetic quality; no impacts would be expected.</p> <p>Mitigation: No mitigation measures would be required.</p>
Medical/ Biohazardous Waste	<p>Impacts: Medical/biohazardous waste generated during normal veterinary activities would be managed in accordance with existing procedures. No significant impacts would be expected.</p> <p>Mitigation: No mitigation measures would be required.</p>	<p>Impacts: No changes to management of medical/biohazardous waste; no impacts would be expected.</p> <p>Mitigation: No mitigation measures would be required.</p>
Geology and Soils	<p>Impacts: Surface disturbance may cause soil erosion; however, standard construction practices would be implemented to control soil erosion.</p> <p>Mitigation: No mitigation measures would be required.</p>	<p>Impacts: Impacts to geology and soils would be similar to baseline conditions; no additional impacts would be anticipated.</p> <p>Mitigation: No mitigation measures would be required.</p>

Table 2-1. Summary of Potential Environmental Impacts from the Proposed Action and No-Action Alternative
(Page 2 of 2)

Resource Category	Proposed Action	No-Action Alternative
Water Resources	<p>Impacts: Soil disturbance could cause a decrease in water quality if erosion occurs; however, standard construction practices would be implemented to control soil erosion.</p> <p>Mitigation: No mitigation measures would be required.</p>	<p>Impacts: Impacts to water resources would be similar to baseline conditions; no additional impacts would be anticipated.</p> <p>Mitigation: No mitigation measures would be required.</p>
Air Quality	<p>Impacts: Temporary impacts to air emissions are expected from construction equipment and increased traffic from construction crews; however, standard management practices would be used to control fugitive dust, and emissions from construction activities would be temporary.</p> <p>Mitigation: No mitigation measures would be required.</p>	<p>Impacts: Impacts to air quality would be similar to baseline conditions; no additional impacts would be anticipated.</p> <p>Mitigation: No mitigation measures would be required.</p>
Cultural Resources	<p>Impacts: The project site has been heavily disturbed, and no historic properties would be expected to be encountered during project activities. No significant impacts would be expected.</p> <p>Mitigation: No mitigation measures would be required.</p>	<p>Impacts: Impacts to cultural resources would be similar to baseline conditions; no additional impacts would be anticipated.</p> <p>Mitigation: No mitigation measures would be required.</p>

3.0 AFFECTED ENVIRONMENT

This chapter describes the current environmental condition of the project area and its region of influence (ROI). It provides information to serve as a baseline from which to identify and evaluate environmental changes resulting from the Proposed Action. The baseline conditions assumed for the purposes of analysis are the existing conditions within the project area.

The ROI to be evaluated will be defined for each resource area potentially affected by the Proposed Action and No-Action Alternative. The ROI determines the geographical area to be addressed as the affected environment. Although the immediate project area may constitute the ROI limit for many resources, potential impacts associated with certain issues (e.g., water resources, air quality) may transcend these limits.

Based on the nature of the Proposed Action, it was determined that the potential exists for the following resources to be affected: land use, aesthetics, medical/biohazardous waste, geology and soils, water resources, air quality, and cultural resources.

3.1 LOCAL COMMUNITY

Ellsworth AFB is situated on approximately 5,416 acres in Pennington and Meade counties, South Dakota (see Figure 1-1). The base is surrounded by the community of Box Elder to the west, south, and east and is approximately 12 miles east of Rapid City, between the Great Plains and the Black Hills Region (U.S. Air Force, 2009b). This section describes the affected environment for land use and aesthetics.

3.1.1 Land Use

The ROI for land use includes the project area, which is currently vacant land with visible signs of prior disturbance. The former building on this site (Building 3401) was demolished in 2003, including the foundation, and only the parking areas and sidewalks remain. According to the 2009 Ellsworth Air Force Base General Plan, the area is currently designated as administration (U.S. Air Force, 2009b).

3.1.2 Aesthetics

The ROI for aesthetics includes the project area and adjacent areas.

Visual resources include natural and man-made features that give a particular environment its aesthetic qualities. Criteria used in analysis of these resources include visual sensitivity, which addresses the degree of public interest in a visual resource and concern over adverse changes in its quality. Visual sensitivity is categorized in terms of high, medium, or low levels.

High visual sensitivity exists in areas where views are rare, unique, or in other ways special, such as in remote or pristine environments. High-sensitivity views would include landscapes that have landforms, vegetative patterns, water bodies, or rock formations of unusual or outstanding quality. Areas of medium visual sensitivity, in which the presence of motorized vehicles and other evidence of modern civilization is commonplace, are more developed than areas of high visual sensitivity. Landscape features in areas of medium visual sensitivity are also more common than features in high visual sensitivity areas; and they generally contain varieties in form, color, line, and texture. Low visual sensitivity areas tend to have minimal landscape features, with little change in form, color, line, and texture.

The project area consists of a vacant lot surrounded by administration and recreation facilities and a water tower to the north. The project area includes parking areas, sidewalks, and a mowed area where the former building was situated. It is adjacent to Eaker Road to the north and Chennault Drive to the west. From the project area, numerous buildings and roads are visible. Views of the project area are considered to be of low visual sensitivity due to the nature and extent of development within proximity to the site.

3.2 HAZARDOUS MATERIALS AND WASTE MANAGEMENT

This section describes the existing conditions for medical/biohazardous waste.

3.2.1 Medical/Biohazardous Waste

Medical/biohazardous waste is considered a solid waste that is generated in the diagnosis, treatment, or immunization of humans or animals. OSHA regulations (29 CFR Part 1910) set forth requirements for the management of medical and biohazardous waste to ensure safe and healthy working conditions for workers. In following the regulations, contaminated reusable sharps and other regulated wastes are required to be placed in puncture-resistant, color-coded, leak-proof containers as soon as possible after use. Specimens of blood or other potentially infectious material are required to be placed in a container that prevents leakage during collection, handling, processing, storage, transport, and treatment.

The existing veterinary clinic at Ellsworth AFB generates medical and biohazardous waste. Medical wastes are shipped to the base medical clinic for proper disposal. Animal carcasses are frozen and shipped to a cremation service located in Nebraska for processing (AECOM, 2012).

3.3 NATURAL ENVIRONMENT

This section describes the natural resources within the affected environment of the project area: geology and soils, water resources, air quality, and cultural resources.

3.3.1 Geology and Soils

Geology and soils comprise those aspects of the natural environment that may be affected by the Proposed Action. These include physiography, geologic units and structure, the potential for natural hazards, and soil condition.

In general, the ROI for geology is the regional setting, including Ellsworth AFB, and specific localized features on or proximal to the project area. The ROI for soils encompasses the project area.

3.3.1.1 Geology.

Physiography

Ellsworth AFB is located in the Pierre Hills Division of the Missouri Plateau, in the Unglaciated Physiographic Section of the Great Plains Physiographic Region. The Great Plains Region in the western portion of the state is in a mature stage of erosion interrupted by nearly level areas called benches or tables and conspicuous buttes. Generally, the Great Plains slope gently to the east from the western border of the Black Hills towards the Missouri River (Visher, 1918). The Pierre Hills Division is typified by a series of smooth hills and ridges with rounded tops and is underlain by the Pierre shale formations and has lower elevations than the plateau country to the north and the south (Malo, 1997).

The topography of the installation is level to gently sloping, with the exception of the northernmost section of the base that descends abruptly northward to a valley floor. The remainder of the base slopes southward towards Box Elder Creek. Base surface elevations range from 3,380 to 3,080 feet above mean sea level (Ellsworth AFB, 2010).

Geology

Geologic units ranging in age from the Cretaceous to Quaternary have been identified in the Pierre Hills. The Great Plains flat-lying land is reflective of the mature stage of erosion of the province and more than 500 million years of tectonic stability. The plains are composed of marine and stream sediments deposited during the Mesozoic Era (60 to 255 million years before present [B.P.]) when a shallow sea covered the region. The flat plains are interrupted by conspicuous buttes, which are isolated flat-topped hills with steep slopes that are capped with erosion-resistant rock (USGS, 2002).

Ellsworth AFB is located in an area consisting of terrace gravel and alluvial fan deposits of the Pleistocene age and Pierre Shale of the Upper Cretaceous age (Redden and DeWitt, 2008). The area is characterized by a series of thick beds of sandstone, limestone, and shale, the oldest and deepest of which are crystalline basement rocks. A band over 1,000 feet thick of marine shale with intermittent sandstone and limestone beds extends to the surface at Ellsworth AFB. The uppermost of these deposits is the Pierre Shale, which forms the bedrock surface at the base and occurs from depths of 40 feet below ground surface-to-surface outcroppings. Thickness of the Pierre Shale is reported to be

approximately 860 feet at Ellsworth AFB, based on well logs for the base's Production Well Number 1 (U.S. Air Force, 2010). Unconsolidated materials including colluvial deposits, alluvial deposits, and residual material overlay the Pierre Shale at the base (U.S. Air Force, 2001).

3.3.1.2 Soils.

The soils mapped over the majority of the installation include loams and clay loams of the Nunn series. The Nunn series consists of very deep, well-drained soils that formed in loess and mixed alluvium. Runoff is negligible to low, and permeability is moderately slow to slow. Nunn soils are on terraces or alluvial fans and in drainage ways (NRCS, 2012).

The site of the Proposed Action is just north of the county line between Meade and Pennington counties; in Meade County, the soil is mapped as Nunn clay loam, 0 to 2 percent slopes, and in Pennington County as Nunn-Urban land complex, 0 to 3 percent slopes. Soils mapped as Nunn clay loam, 0 to 2 percent slopes are composed of 90 percent Nunn clay loam and 10 percent minor components, which include Altvan loam, Beckton clay loam, Hoven silt loam, Onita silt loam, and Satanta loam. Nunn-Urban land complex loam with 0 to 3 percent slopes are composed of 60 percent Nunn clay loams and similar soils, 30 percent Urban land, and 10 percent Beckton clay (NRCS, 2012).

Soils mapped at the site of the Proposed Action and soil limitations are shown in Table 3-1. Soil limitations were determined based on data available in the Natural Resource Conservation Service's web soil survey (NRCS, 2012). Engineering limitations were considered for building construction. Soils mapped at the site were rated as very limited for building construction due to shrink-swell potential and depth to saturation.

Table 3-1. Properties of Soils Mapped at the Site of the Proposed Action

Mapping Unit	Texture and Slope	Farmland Classification	Construction Limitations
Nunn	Clay loam, 0 to 2 percent slopes	Prime farmland soil if irrigated	Very limited for building construction due to shrink-swell potential and depth to saturation
Nunn-Urban land complex	Variable texture, 0 to 3 percent slopes	Not prime farmland soil	Very limited due to shrink-swell potential

Prime Farmland. The Nunn clay loam mapping units (with 0 to 2 percent slopes) are considered to be a prime farmland soil if irrigated; however, this land is not available for agriculture because it is currently developed or considered to be urban or built-up land, which by definition cannot be prime farmland. According to the U.S. Department of Agriculture, urban or built-up land consists of land cover or land uses including residential, public administrative sites, and small parks (less than 10 acres) within urban and built-up areas (NRCS, 1999).

Therefore, the prime farmland soils mapped at the site of the Proposed Action would not be considered prime farmland.

3.3.2 Water Resources

Water resources comprise those aspects of the hydrologic cycle that may be affected by the Proposed Action. These include surface water and groundwater. In general, the ROI for water resources includes the project area and those areas within the same watershed or groundwater aquifer that may be affected by changes in direction, quantity, or quality of water resources.

3.3.2.1 Surface Water.

Ellsworth AFB is located within the Missouri River Basin. Surface drainage from the southern portion of the base, which contains the proposed veterinary clinic site, flows generally south-southeast via retention ponds, ditches, storm sewers, and ephemeral streams, and discharges into Box Elder Creek approximately 1 mile south of the base boundary (U.S. Air Force, 2010). The main base drainage is an unnamed tributary of Box Elder Creek located west of the proposed veterinary clinic site. This drainage contains several impoundments, and floodplains occur along it (U.S. Air Force, 2010). The nearest surface water to the proposed veterinary clinic site is an impoundment located approximately 900 feet to the west. The proposed clinic site is not in or adjacent to a 100-year floodplain (U.S. Air Force, 2011).

Treated wastewater from the Ellsworth AFB wastewater treatment plant is discharged to an unnamed tributary of Box Elder Creek via an outfall located more than ½ mile south of the proposed clinic site (U.S. Air Force, 2010).

A storm water curb inlet is located on the south side of Eaker Drive, to the northwest of the proposed clinic facility.

3.3.2.2 Groundwater.

Ellsworth AFB is underlain by one shallow, unconfined aquifer and three confined aquifers. The Inyan Kara Aquifer is confined between beds of Upper Cretaceous strata above and Permian-Jurassic strata below and occurs in permeable sandstone of the Fall River and Lakota formations. The Minnelusa Aquifer lies below the Inyan Kara Aquifer and is confined between Permian-Jurassic strata above and Pennsylvanian strata below and occurs in limestone. Recharge occurs to the west of the base among the foothills between Rapid City and the Black Hills. The upper portion of this aquifer is the most heavily used in the communities near the base. The Madison Aquifer is deepest and occurs in limestone beneath Lower Pennsylvanian confining strata. This aquifer has the most dependable water quality of the regional confined aquifers. Ellsworth AFB used to have a production well in this aquifer, but it is no longer used. Drinking water for the base is obtained from Pactola Reservoir in the Black Hills (U.S. Air Force, 2010).

3.3.3 Air Quality

Air quality in any given location is defined by the concentration of various pollutants in the atmosphere, generally expressed in units of parts per million (ppm) or micrograms per cubic meter ($\mu\text{g}/\text{m}^3$). The significance of a pollutant concentration is determined by comparing it to federal and/or State ambient air quality standards. The federal Clean Air Act (CAA), 42 U.S.C. Sections 7401-7671(q) provides that emissions sources must comply with the air quality standards and regulations that have been established by federal, State, and county regulatory agencies. These standards and regulations focus on (1) the maximum allowable ambient pollutant concentrations, and (2) the maximum allowable emissions from individual sources.

The U.S. EPA has established federal standards for the permissible levels of certain pollutants in the atmosphere. The National Ambient Air Quality Standards (NAAQS) have been established for seven criteria pollutants: ozone, nitrogen dioxide (NO_2), particulate matter equal to or less than 10 microns in diameter (PM_{10}), particulate matter equal to or less than 2.5 microns in diameter ($\text{PM}_{2.5}$), carbon monoxide (CO), sulfur dioxide (SO_2), and lead (Table 3-2).

The State of South Dakota has also developed ambient air quality standards to regulate air pollution levels. Both federal and State air quality standards are shown in Table 3-2. Standards are not to be exceeded more than once per year, except for ozone and PM_{10} , which are not to be exceeded more than an average of 1 day per year.

The ROI consists of the air shed that Ellsworth AFB is within, for purposes of air quality analysis. Ellsworth AFB is situated in Meade and Pennington counties, which are designated as Black Hills-Rapid City Intrastate (BHRCI) Air Quality Control Region (AQCR). U.S. EPA has classified the BHRCI AQCR as in attainment for all NAAQS.

The South Dakota Department of Environmental and Natural Resources (DENR) regulates air quality for the State of South Dakota. Ellsworth AFB is classified as a synthetic minor with the DENR (SD DENR, 2007). As required by DENR, Ellsworth AFB calculates annual criteria pollutant emissions from stationary sources and provides this information to DENR. Various sources on-installation emit criteria pollutants and Hazardous Air Pollutants (HAPs), including generators, boilers, water heaters, fuel storage tanks, gasoline service stations, surface coating/paint booths, and miscellaneous chemical usage. The current veterinary clinic is not a source of criteria pollutants.

Title 40 CFR 51 Part 93, General Conformity, requires federal actions to conform to any State Implementation Plan approved or promulgated under Section 110 of the CAA. An air conformity applicability analysis and possibly a formal air conformity determination are required for federal actions in nonattainment or maintenance areas. The general conformity rule does not apply because Meade and Pennington counties are classified as an attainment area for NAAQS.

Table 3-2. Ambient Air Quality Standards Applicable in South Dakota

Pollutant	South Dakota Standards ^{(a),(b)}		Federal Standards		Standard Type ^{(c),(d)}
Carbon Monoxide (CO)					
8-hour Average	9 ppm	(10 mg/m ³)	9 ppm	(10 mg/m ³)	Primary
1-hour Average	35 ppm	(40 mg/m ³)	35 ppm	(40 mg/m ³)	Primary
Nitrogen Dioxide (NO₂)					
Annual Arithmetic Mean	0.05 ppm	(100 µg/m ³)	0.05 ppm	(100 µg/m ³)	Primary & Secondary
Ozone					
8-hour Average	0.08 ppm	(157 µg/m ³)	0.075 ppm	(157 µg/m ³)	Primary & Secondary
Lead					
3 Months	1.5 µg/m ³		1.5 µg/m ³		Primary & Secondary
Particulate ≤10 micrometers (PM₁₀)					
Annual Geometric Mean	NA		50 µg/m ³		Primary & Secondary
24-hour Average	150 µg/m ³		150 µg/m ³		Primary & Secondary
Particulate ≤2.5 micrometers (PM_{2.5})					
Annual Arithmetic Mean	15 µg/m ³		15 µg/m ³		Primary & Secondary
24-hour Average	24 µg/m ³		65 µg/m ³		Primary & Secondary
Sulfur Dioxide (SO₂)					
Annual Arithmetic Mean	0.03 ppm	(80 µg/m ³)	0.03 ppm	(80 µg/m ³)	Primary
24-hour Average	0.14 ppm	(365 µg/m ³)	0.14 ppm	(365 µg/m ³)	Primary
3-hour Average	0.5 ppm	(1,300 µg/m ³)	0.5 ppm	(1,300 µg/m ³)	Secondary
1-hour Average	0.075 ppm	(157 µg/m ³)			Primary

Notes:

- (a) Standards, other than for ozone and those based upon annual averages, are not to be exceeded more than once a year. The ozone standard is attained when the expected number of days per calendar year with maximum hourly average concentrations above the standard is equal to or less than one.
 - (b) Concentrations are expressed first in units in which they were promulgated. Equivalent units are provided in the second column.
 - (c) Primary Standards: The levels of air quality necessary, with an adequate margin of safety, to protect the public health. Each state must attain the primary standards no later than 3 years after that state's implementation plan is approved by EPA.
 - (d) Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant. Each state must attain the secondary standards within a "reasonable time" after EPA approves the implementation plan.
- µg/m³ = micrograms per cubic meter
mg/m³ = milligrams per cubic meter
PM_{2.5} = particulate matter equal to or less than 2.5 microns in diameter
PM₁₀ = particulate matter equal to or less than 10 microns in diameter
ppm = parts per million

As attainment areas, Meade and Pennington counties are regulated under the Prevention of Significant Deterioration (PSD) program authorized by the CAA Part C Sections 160-169. PSD areas require that owners and/or operators of new or modified stationary sources obtain a PSD permit prior to construction of a major source situated in attainment or unclassified areas. A major source is defined by PSD regulations as being a specific type of stationary source listed by

U.S. EPA that has a potential of emitting 100 tons per year (tpy) or more of a regulated pollutant. A source not listed by U.S. EPA may also be considered major if it has the potential to emit 250 tpy or more of a regulated pollutant. Because no new emission sources would be associated with the new facility, PSD permitting criteria would not be applicable to the Proposed Action.

3.3.4 Cultural Resources

Cultural resources are defined as prehistoric or historic archaeological sites, buildings, structures, districts, artifacts, or other physical evidence of human activity considered important to a culture, subculture, or community for scientific, traditional, religious, or other reasons. For this discussion, cultural resources have been divided into prehistoric and historic archaeological resources, historic buildings and structures, and traditional cultural resources (e.g., sacred or ceremonial sites).

For the purposes of this analysis, the term ROI is synonymous with the Area of Potential Effect as defined in 36 CFR Part 800.16 as the geographical area or areas within which an undertaking may directly or indirectly cause alteration in the character or use of historic properties. The APE may be different for different kinds of effects caused by the undertaking. The ROI for the analysis of cultural resources within this EA includes any areas where ground disturbance or modification to historical-era structures would occur as a result of the Proposed Action.

3.3.4.1 Prehistoric and Historic Archaeological Resources.

The following prehistory and history of Ellsworth AFB has been excerpted from the Ellsworth AFB Integrated Cultural Resource Management Plan (U.S. Air Force, 2011).

Prehistoric Period

Northern Plains prehistory has been the subject of several published studies and archaeological surveys as described in the Ellsworth AFB *Cultural Resources Survey Report* (Hufstetler et al., 1997), which was the first specific prehistoric overview of the installation area. Six prehistoric periods have been defined for the Ellsworth AFB region, including the adjacent Black Hills of South Dakota and Wyoming, and the White River Badlands of South Dakota. From earliest to latest, the periods are these: the Paleo-Indian period (11,500 to 7,500 B.P.), the Early Plains Archaic period (7,500 to 5,000 B.P.), the Middle Plains Archaic period (5,000 to 2,500 B.P.), the Late Plains Archaic/Plains Woodland period (3,000 to 1,500 B.P.), the Late Prehistoric/Plains Village period (2,000 to 300 B.P.), and the Protohistoric period (1700 Anno Domini [A.D.] to 1861 A.D.).

The region surrounding Ellsworth AFB exhibits some evidence of occupation during all of the prehistoric periods, but occupation in the immediate vicinity of Ellsworth AFB is not documented until the Late Prehistoric/Plains Village period. Plains Village period sites have been reported at several locations along the periphery of the Black Hills, including the excavation of a bison-processing

station and an associated ceramic assemblage along Box Elder Creek, just south of Ellsworth AFB. Overall, though, Plains Village period remains are relatively sparse; and the dynamics of the Late Prehistoric use of the region remains poorly understood.

During the subsequent Protohistoric period, a number of different tribal groups migrated in and moved through the Ellsworth AFB region. The late tribal diversity of the region is well documented in early written accounts, yet these populations are difficult to distinguish in the archaeological record. European trade goods help identify some later sites from this period, but only a few sites with such goods have been identified in the Ellsworth AFB vicinity. To date, the State Archeological Research Center has not developed specific contextual information or research questions related to the prehistory of the immediate Ellsworth AFB area.

Historical Period

The Black Hills mining boom began in 1874, marking the beginning of a permanent Euro-American presence in western South Dakota. Although it lay outside the gold-bearing zone, Rapid City was founded in 1876 in response to the dramatic influx of Euro-Americans attracted by the gold rush in the Black Hills. The next few years proved difficult for the pioneer village. Numerous attacks by Lakota Sioux, who were enraged by the massive encroachment of Euro-Americans into their territory, curtailed the mining rush to the area and hindered growth at Rapid City. However, after the U.S. Senate's February 1877 ratification of a treaty whereby the Lakotas ceded claim to the Black Hills and surrounding plains, the mining activities resumed; and development at Rapid City flourished once more.

Through the 1870s and 1880s, cattle ranchers moved into the area alongside the miners. By the mid-1880s, cattlemen occupied most of the available grazing ranges in western South Dakota. The first farmers in the West River country arrived simultaneously with the cattle ranchers in the mid-1870s, settling in the narrow creek valleys along the eastern fringe of the Black Hills.

Homesteading activities in western South Dakota during the early twentieth century were typical of settlement practices elsewhere across the northern Great Plains. The original Homestead Act of 1862 granted 160-acre parcels to new settlers who had five years to improve and invest in their new property, or "prove up" their claims, before being granted full title. Homesteaders typically planted the arid plains in wheat using newly introduced techniques for dry-land farming.

Most of the land in the Ellsworth AFB vicinity was settled during the mid to late 1880s. The flurry of local homesteading activities at this time can be attributed to the growing prosperity of the nearby community of Rapid City. From the 1910s until the late 1930s, the immediate Ellsworth AFB area was a rural, agriculturally based region. The transformation of the area to the site of a major military base was preceded in the late 1930s by the construction of a small municipal airport on a site on the western edge of what would become Ellsworth AFB.

Three days after the attack on Pearl Harbor, December 10, 1941, the announcement was made that the new Rapid City municipal airport had been selected as the site for a new air base. The mission of the new base was the training of bomber pilots and bombardiers. Today, 70 years later, Ellsworth AFB remains one of only two bases whose mission is flying the B-1 bomber.

Archaeological Studies

In South Dakota, files of known cultural resource site records are maintained by both the South Dakota State Historic Preservation Officer (SHPO) and the South Dakota State Archaeological Research Center. Prior to 1994, neither agency had records of any historic or prehistoric sites on base land. Jeff Buechler of Dakota Research Services (DRS) in Rapid City, conducted a comprehensive archaeological survey at Ellsworth AFB in 1994 (Hufstetler et al., 1997). The survey project was designed to cover significant tracts of undisturbed land within the base boundaries; both pedestrian survey and soil auger testing were conducted. The survey did not locate any significant archaeological sites on Ellsworth AFB. Within the current boundaries of the base, the only major parcels that have not been subjected to archaeological inventory are areas of steep, broken hillside at the far north end of the base. This land is outside the ROI for the proposed project and has a very low likelihood of significant archaeological resources.

It is likely that buried archaeological resources associated with the military use of the facility from the World War II era and later exist at the base. Such sites could include military trash dumps, building foundations, abandoned roads and taxiways, or the remains of temporary training facilities (Lewis et al., 1997). These have not been identified, to date, and are unlikely to be impacted by the proposed project.

The results of previous archaeological studies substantiate the Ellsworth AFB Cultural Resources Manager's (CRM) finding that the archaeological survey of the base is complete per Section 110 (a) (2) of the National Historic Preservation Act (NHPA). Since no significant archaeological properties exist on the base, further archaeological investigations are unwarranted. Informal Section 106 consultation with the South Dakota SHPO has been completed.

3.3.4.2 Historic Buildings and Structures.

Ellsworth AFB has completed its identification requirements under Section 110 of the NHPA for historic buildings and structures under its jurisdiction. Twenty-one buildings have been found eligible for inclusion in the National Register of Historic Places (NRHP) (Hufstetler and McCormick, 1998; Lewis et al., 1997; Prior and Peter, 2001; U.S. Air Force, 2009a, 2011). Of these, four are World War II-era structures; and the remainder are Cold War-era structures, including several hangars, aircraft maintenance docks, and storage magazines built in the 1950s. None of these is within the ROI for this EA (U.S. Air Force, 2011).

3.3.4.3 Traditional Cultural Resources.

The largest Native American tribe in western South Dakota is the Oglala Sioux. Eight other federally recognized tribes also reside within the state: the Standing Rock Sioux, the Rosebud Sioux, Crow Creek Sioux, Cheyenne River Sioux, Lower Brule Sioux, Yankton Sioux, Flandreau Santee Sioux, and Sisseton-Wahpeton Sioux. Lacking any significant issues at this time, the base has not actively solicited comment from Native Americans about any specific cultural resource issues on the base. The base has, however, established contact with Native American tribes, informing them of cultural resources survey activities and assuring them that the Air Force is aware of its responsibilities in this area.

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4.0 ENVIRONMENTAL CONSEQUENCES

This chapter presents the results of the analysis of potential environmental effects associated with the Proposed Action and No-Action Alternative. Changes to the natural and human environments that may result from the Proposed Action and No-Action Alternative were evaluated relative to the existing environment as described in Chapter 3.0. The potential for significant environmental consequences was evaluated using the context and intensity considerations as defined in CEQ regulations for implementing the procedural provisions of NEPA (40 CFR Part 1508.27).

4.1 LOCAL COMMUNITY

This section describes the potential effects of the Proposed Action and No-Action Alternative on land use and aesthetics.

4.1.1 Land Use

4.1.1.1 *Proposed Action.*

The Proposed Action would be consistent with the base's existing general plan. Therefore, no significant impacts to land use would be expected.

Mitigation Measures

The Proposed Action is not expected to have a significant impact on land use; therefore, no mitigation measures would be required.

4.1.1.2 *No-Action Alternative.*

Under the No-Action Alternative, a new veterinary clinic would not be constructed. No changes in existing land use would occur, and impacts to land use would not be expected.

Mitigation Measures

No mitigation measures would be required.

4.1.2 Aesthetics

4.1.2.1 *Proposed Action.*

The project area is currently developed land that contains a mowed area where a former building was situated and a paved parking area that was associated with the removed building. Although the construction of the new veterinary clinic would change the visual character of the immediate area, it would be visually consistent with surrounding adjacent areas. Existing buildings, structures, and roads within sight of the project area have created an urban setting in which the proposed construction project would be consistent. The area would continue to

be of low visual sensitivity. Therefore, no significant impacts to aesthetics are expected.

Mitigation Measures

The Proposed Action is not expected to have a significant impact on aesthetics; therefore, no mitigation measures would be required.

4.1.2.2 No-Action Alternative.

Under the No-Action Alternative, no construction would take place on the project area. The aesthetic quality of the site would remain unchanged, and no significant impacts to aesthetics would be expected.

Mitigation Measures

No mitigation measures would be required.

4.2 HAZARDOUS MATERIALS AND HAZARDOUS WASTE MANAGEMENT

This section describes the potential effects of the Proposed Action and No-Action Alternative on medical/biohazardous waste.

4.2.1 Medical/Biohazardous Waste

4.2.1.1 Proposed Action.

The construction of the new facility would not change the manner in which medical/biohazardous materials are generated, stored, distributed, or disposed of. Construction of the new facility would not increase the relative amount of medical/biohazardous materials stored on base because the facility would be replacing the existing veterinary clinic. After the Proposed Action is implemented, medical/biohazardous waste generation would move from the existing facility to the new veterinary clinic. No significant impacts from generation, storage, or disposal of medical/biohazardous waste are anticipated.

Mitigation Measures

The Proposed Action is not expected to have a significant impact on medical/biohazardous waste management; therefore, no mitigation measures would be required.

4.2.1.2 No-Action Alternative.

Under the No-Action Alternative, no change in the generation, storage, disposal, or management of medical/biohazardous waste would occur. No significant impacts to the management of medical/biohazardous would be expected.

Mitigation Measures

No mitigation measures would be required.

4.3 NATURAL ENVIRONMENT

This section describes the potential effects of the Proposed Action and No-Action Alternative on geology and soils, water resources, air quality, and cultural resources.

4.3.1 Geology and Soils

4.3.1.1 *Proposed Action.*

Geology

Construction of a new veterinary clinic would make no significant change to the terrain or topography of the site. The facility would be constructed entirely within the footprint of the former building, and no large-scale cut-and-fill activities would be conducted. Project activities would involve a small amount of ground-disturbing activities associated with the construction of the new facility and removal of some existing paved parking areas. These activities are not expected to significantly impact the geologic integrity of the area because they would not disturb the ground surface beyond those areas that have already been disturbed by past construction activities. Therefore, no significant impact to geology is expected.

Soils

Construction of the new facility would temporarily disturb the ground surface but would not result in the permanent displacement of large amounts of soil. Soils on site would be altered; however, the construction site is relatively small and changes to the soils are not expected to affect areas outside the project area boundary. In addition, soils on the site have been altered by previous development. Less than significant impacts could occur if soils in the disturbed area begin to erode; however, the topography of the site is relatively flat, making significant erosion unlikely. Standard construction practices would be used to control the loss of soil. Disturbed areas around the construction site would be landscaped or revegetated. No significant soil erosion would be expected; therefore, no significant impact to soils are anticipated.

Mitigation Measures

The Proposed Action is not expected to have a significant impact on geology or soils; therefore, no mitigation measures would be required.

4.3.1.2 *No-Action Alternative.*

Under the No-Action Alternative, no ground-disturbing activities would take place on the project area. The No-Action Alternative would result in no potential for impacts to geology on the site or increased soil erosion or changes in sedimentation patterns.

Mitigation Measures

No mitigation measures would be required.

4.3.2 Water Resources

4.3.2.1 Proposed Action.

Surface Water

The Proposed Action would have no significant impact on surface water. No surface water is present on or adjacent to the project area. The construction site is relatively small, and changes in surface water drainage patterns are not expected to affect areas outside the project boundary. Because the Proposed Action includes removal of an area of existing pavement, it would result in an estimated net loss of more than 2,000 SF of impermeable surfaces. Surface runoff generated on the site should decrease. Therefore, existing drainage patterns are not expected to be significantly affected. The project is not expected to release any pollutants into surface waters.

Ground disturbance during construction has the potential to increase soil erosion that could degrade water quality. Because the total area of disturbance would be less than 1 acre, and the Proposed Action is not part of a larger common plan of development, it does not require permitting under the South Dakota General Permit for Storm Water Discharges Associated with Construction Activities. However, Ellsworth AFB requires the development and implementation of a Storm Water Pollution Prevention Plan (SWPPP) for all ground-disturbing activities. The SWPPP would include standard practices to prevent excessive soil loss.

Groundwater

The Proposed Action would have no significant impact on groundwater within the project area. The creation of large, impervious surfaces can affect groundwater recharge by precipitation or surface water infiltration; however, the Proposed Action would result in a net reduction in the amount of impervious surfaces on base.

No proposed wastewater discharge is associated with the project, and pollutants that could potentially affect groundwater resources are not expected to be released.

Mitigation Measures

The Proposed Action is not expected to have a significant impact on surface water or groundwater; therefore, no mitigation measures would be required.

4.3.2.2 No-Action Alternative.

Under the No-Action Alternative, surface water and groundwater within the project area would remain unchanged.

Mitigation Measures

No mitigation measures would be required.

4.3.3 Air Quality

4.3.3.1 Proposed Action.

The Proposed Action is not expected to have a significant impact on air quality. Short-term impacts to air quality would occur primarily from emissions generated during construction of the new facility and removal of an area of existing paved parking lot. Impacts are expected to come primarily from fugitive dust associated with clearing and grading of the land and construction vehicles traveling on unpaved surfaces at the construction site. In addition, during construction, mobile emission sources, such as construction vehicles and equipment and privately owned automobiles used to access the work area, could contribute to air pollution; however, emissions from construction activities would be temporary. Fugitive dust emissions would be reduced through the use of standard management practices (e.g., routine sweeping and wetting). No new emission sources (e.g., back-up generators) would be associated with the new facility. Impacts to air quality are expected to be temporary and less than significant.

Mitigation Measures

The Proposed Action is not expected to have a significant impact on air quality; therefore, no mitigation measures would be required.

4.3.3.2 No-Action Alternative.

Under the No-Action Alternative, no change in air emissions would occur. Because existing conditions would not change, no impacts to air quality would be expected.

Mitigation Measures

No mitigation measures would be required.

4.3.4 Cultural Resources

The area of focus for this EA is the proposed project area. Section 106 of the NHPA of 1966, as amended, requires federal agencies to take into account the effects of their actions on historic properties. Federal agencies must allow the Advisory Council on Historic Preservation a reasonable opportunity to comment on any Federal undertakings affecting cultural resources, in accordance with

36 CFR Part 800. The Section 106 process is part of the Air Force's Environmental Impact Analysis Process, a program that implements NEPA.

Federal agencies are required by Section 110 of the NHPA to assume responsibility for identifying, evaluating, nominating, and protecting historic properties under their control. Historic properties are cultural resources that are listed in, or eligible for listing in, the NRHP. Impacts to cultural resources may be considered adverse if the resources have been determined eligible for listing in the NRHP or have significance for Native American groups. The proposed project site contains no known historic properties that are eligible for listing in the NRHP.

4.3.4.1 Proposed Action.

Prehistoric and Historic Archaeological Resources

No prehistoric or historic archaeological properties are known within the ROI. The entirety of the ROI lies within one of the identified Ellsworth AFB archaeologically sensitive areas; however, the project site is situated where a demolished facility previously stood. Because no cultural remains were uncovered during the demolition and because the surrounding area is heavily disturbed from previous construction and operational use, no prehistoric or historic archaeological resources are expected to be affected from construction of the new veterinary clinic. Consultation with the South Dakota SHPO has been completed, and the SHPO has concurred that no historic properties would be affected (see Appendix A).

In the unlikely event that archaeological resources are encountered during construction activities, the construction contractor would suspend work in the immediate area; and the Ellsworth AFB CRM and the South Dakota SHPO (as appropriate) would be notified. Subsequent actions will follow the guidance provided in 36 CFR Part 800.13 and Native American Graves Protection and Repatriation Act.

Historic Buildings and Structures

No historic buildings or structures are located within the ROI; therefore, no historic properties would be affected by construction of the new veterinary clinic.

Traditional Cultural Resources

No traditional cultural resources are known within the ROI; therefore, no effects to traditional cultural properties are expected.

Mitigation Measures

No mitigation measures would be required.

4.3.4.2 No-Action Alternative.

Under the No-Action Alternative, the new veterinary clinic would not be constructed. No impact to historic properties would be expected.

Mitigation Measures

No mitigation measures would be required.

4.4 UNAVOIDABLE AND ADVERSE ENVIRONMENTAL EFFECTS

No unavoidable adverse environmental effects would be produced by implementation of the Proposed Action or by the No-Action Alternative. As discussed in the analysis, implementation of the Proposed Action could result in impacts to some resource areas; however, impacts would not be significant because they would be short-term and minor in nature.

4.5 COMPATIBILITY OF THE PROPOSED ACTION WITH THE OBJECTIVES OF FEDERAL, STATE, REGIONAL, AND LOCAL LAND USE PLANS AND POLICIES

Neither the Proposed Action nor the No-Action Alternative would adversely affect federal, State, regional, or local land use plans and policies.

4.6 RELATIONSHIP BETWEEN SHORT-TERM USES OF THE ENVIRONMENT AND LONG-TERM PRODUCTIVITY

Neither the Proposed Action nor the No-Action Alternative would affect the long-term productivity of the environment because no significant environmental impacts are anticipated, and natural resources would not be depleted.

4.7 IRREVERSIBLE AND IRRETRIEVABLE COMMITMENT OF RESOURCES

The Proposed Action would require use of resources such as labor, fuel, and construction materials.

4.8 CUMULATIVE IMPACTS

Cumulative impacts result from “the incremental impact of actions when added to other past, present, and reasonable foreseeable future action regardless of what agency undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time” (Council on Environmental Quality, 1978).

No other projects that would occur adjacent to the proposed project site that would have with the potential to result in cumulative impacts with the Proposed Project have been identified. In addition, because the Proposed Action would not substantially change the basic, long-term integrity or character of the site, no cumulative impacts are expected.

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5.0 CONSULTATION AND COORDINATION

The federal and state agencies that were contacted during the preparation of this EA are listed below.

FEDERAL AGENCIES

U.S. Fish and Wildlife Service

STATE AGENCIES

State Historic Preservation Officer

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6.0 LIST OF PREPARERS AND CONTRIBUTORS

Nora Castellanos, Project Manager, AECOM

B.A., 2007, American Studies, Scripps College, Claremont

Years of Experience: 6

Jennifer Hendricks, EIT, Environmental Engineer, AECOM

M.C.E., 2008, Environmental Engineering, West Virginia University

B.S., 2003, Environmental Science, Washington State University

Years of Experience: 9

Dave Jury, Senior Project Manager, AECOM

B.A., 1988, Geography, California State University, Long Beach

Years of Experience: 24

Angela Keller, PhD, Senior Archaeologist, AECOM

Ph.D., 2006, Anthropology and Archaeology, University of Pennsylvania

B.A., 1989, Anthropology and Archaeology, University of California, Berkeley

Years of Experience: 23

Matthew Mallé, Senior Biologist, AECOM

B.S., 1999, Environmental Biology, California State University, Humboldt

A.A., 1996, Liberal Arts, Fullerton College

Years of Experience: 13

Carl Rykaczewski, Senior Project Manager, AECOM

B.S., 1981, Environmental Resource Management, Penn State University, University Park

Years of Experience: 24

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7.0 DISTRIBUTION LIST

Federal Officials

U.S. Senate

The Honorable John Thune, Senator
Rapid City Office
1313 West Main Street
Rapid City, SD 57701

The Honorable Tim Johnson, Senator
405 E Omaha St, Suite B
Rapid City, SD 57701

U.S. House of Representatives

The Honorable Kristi Noem, Representative
343 Quincy Street
Rapid City, SD 57701

State of South Dakota Officials

Governor

The Honorable Dennis Daugaard, Governor
Office of the Governor
500 E Capitol Avenue
Pierre, SD 57501

Federal Agencies

U.S. Fish and Wildlife Service
Mr. Terry Quesinberry
South Dakota Ecological Service Office
420 S. Garfield Ave, Suite 400
Pierre, SD 57501

U.S. Fish and Wildlife Service
Mr. Pete Gober
South Dakota Ecological Service Office
420 S. Garfield Ave, Suite 400
Pierre, SD 57501

State Agencies

Department of Tourism and State Development
Ms. Paige Olson, Review and Compliance Coordinator
711 E Wells Avenue
Pierre, SD 57501-3369

South Dakota Department of Environmental and Natural Resources
Mr. John Miller, Surface Water Quality Program
Joe Foss Building
523 E Capitol Ave
Pierre, SD 57501

South Dakota Department of Environmental and Natural Resources
Mr. Joe Nadenicek, Staff Attorney
Joe Foss Building
523 E Capitol Ave
Pierre, SD 57501

South Dakota Department of Military & Veterans Affairs
Major General Steven Doochen, Secretary
Soldiers & Sailors Memorial Building
425 East Capitol Avenue
Pierre, SD 57501-5070

South Dakota Department of Transportation
Mr. Bruce Lindholm, Director
Office of Aeronautics
700 E Broadway Avenue
Pierre, SD 57501-2586

South Dakota Game, Fish and Parks
Mr. Mike Kintigh, Regional Supervisor
4130 Adventure Trail
Rapid City, SD 57702

South Dakota State Historic Preservation Officer
Mr. Jay D. Vogt
900 Governors Dr.
Pierre, SD 57501

Local Agencies

City of Box Elder
The Honorable William Griffiths, Mayor
520 N Ellsworth Road, #9C
Box Elder, SD 57719

City of Box Elder
Mr. Michael McMahon, Planning & Zoning Coordinator
520 N Ellsworth Road, #9C
Box Elder, SD 57719

City of Rapid City
The Honorable Sam Kooiker, Mayor
300 Sixth Street
Rapid City, SD 57701

City of Rapid City
Ms. Monica Heller, Community Planning Coordinator
300 Sixth Street
Rapid City, SD 57701

Meade County
Mr. Bill Rich, Planning Director
1425 Sherman Street
Sturgis, SD 57785

Pennington County
Mr. Dan Jennissen, Planning Director
315 Saint Joseph Street, Ste. 118
Rapid City, SD 57701

Libraries

Rapid City Public Library
Ms. Greta Chapman, Director
610 Quincy Street
Rapid City, SD 57701

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8.0 REFERENCES

- AECOM, 2012. Ellsworth AFB Veterinary Clinic Environmental Assessment Site Visit Report, October 30.
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- Visher, S.S., 1918. *The Geography of South Dakota*, South Dakota State Geological and Natural History Survey. Pierre, South Dakota.

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APPENDIX A
AGENCY CONSULTATION



AECOM
901 Via Piemonte, 5th Floor
Ontario, CA 91764

909.579.3050 tel
909.579.3997 fax

12/20/2012

Mr. Terry Quesinberry
U.S. Fish and Wildlife Biologist
South Dakota Ecological Service Office
Pierre, SD 57501

Subject: Draft Environmental Assessment (EA) and Draft Finding of No Significant Impact for a New Veterinary Clinic, Ellsworth Air Force Base (AFB), South Dakota

Dear Mr. Quesinberry,

On behalf of the Air Force, AECOM is preparing an Environmental Assessment (EA) for a project at Ellsworth Air Force Base (AFB), South Dakota. The EA evaluates the potential impacts of implementing the construction and operation of a new veterinary clinic.

Ellsworth AFB's existing veterinary clinic is located in an inadequate facility originally designed for an alternate purpose. The existing clinic's operations and care capabilities are inhibited due to the substandard facility. The building is not in compliance with the spaces and functionality required by Department of Defense (DOD) Medical Space Planning Criteria. The purpose of the action is to allow Ellsworth AFB to provide adequate care to Military Working Dogs as required, and to the base animal population.

The proposed facility would be in the southeastern portion of Ellsworth AFB (Attachment 1), near the intersection of Eaker Drive and Chennault Street. The project site is situated in a developed area. The new facility would be constructed on the location of former Building 3401 (Attachment 2), which was demolished in 2003. The footprint of this demolished facility is sparsely vegetated with grasses and weedy plants and is mowed. The only other biological resources present in the area are landscaping plants (e.g., lawn grasses, shade trees) and a limited number of common animal species typically found in such areas (Attachment 3).

Pursuant to the Endangered Species Act (ESA) and the National Environmental Policy Act (NEPA), we are requesting your input into this planning process in the following areas:

- Federally listed threatened, endangered, candidate and proposed to be listed species potentially occurring in the vicinity of the project area at the base.
- State listed threatened, endangered, candidate, and species of special concern potentially occurring in the vicinity of the project area at the base.
- Sensitive habitats such as jurisdictional wetlands, nesting and breeding areas, and special communities/associations which may occur in the vicinity of the project area.

Your cooperation and assistance with the Air Force's efforts to identify important biological resources early in the EA planning process is greatly appreciated. Upon completion, a copy of the draft EA will be forwarded to your office for review.

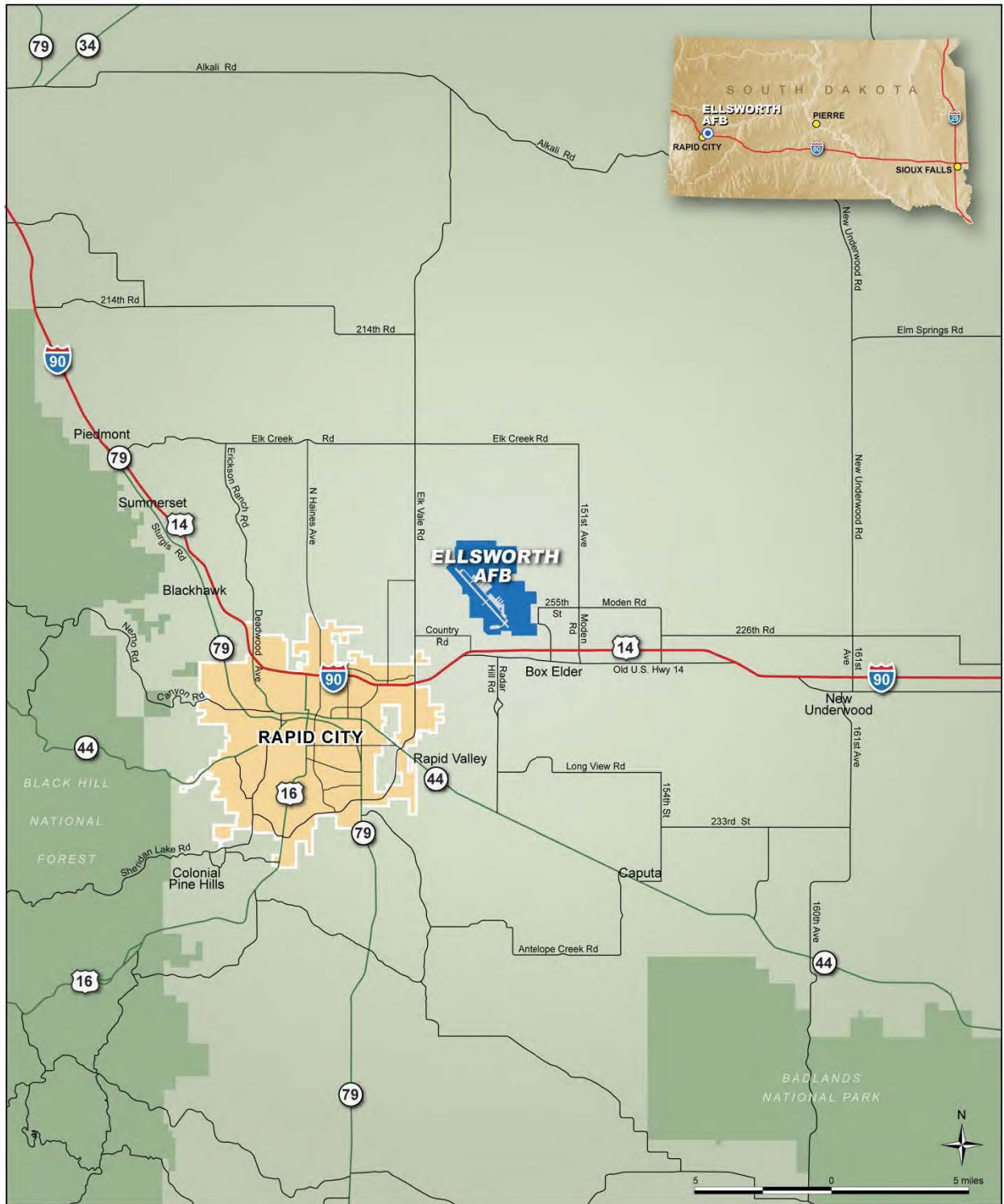
Please direct any questions to me at 909-579-3768 or by email at nora.castellanos@aecom.com.

Yours sincerely,

Nora Castellanos
Project Manager

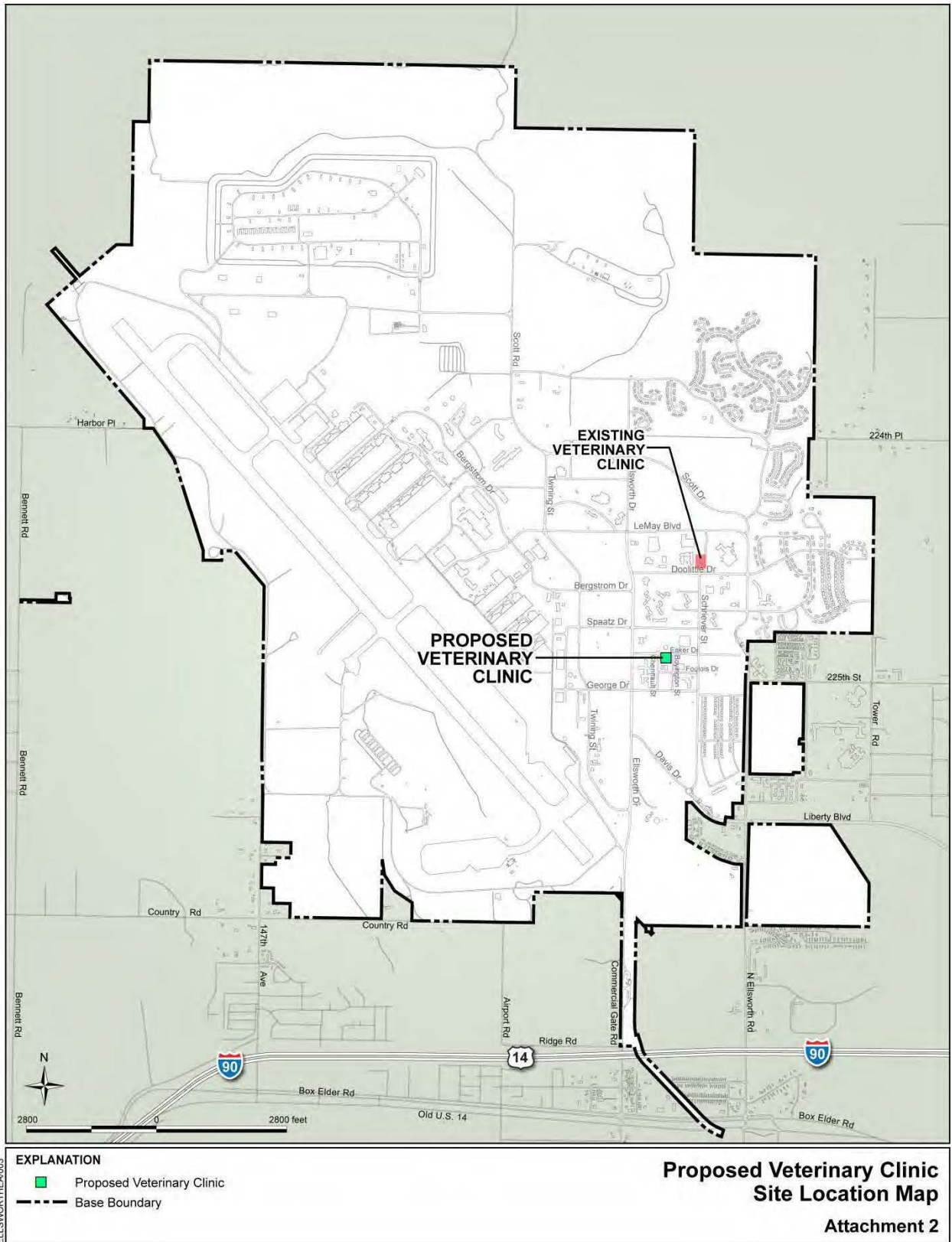
Attachments:

1. Ellsworth AFB Regional Map
2. Proposed Veterinary Clinic Site Location Map
3. Photographs of the Proposed Action Site



ELLSWORTH/EA/001

**Ellsworth AFB
Regional Map
Attachment 1**



Attachment 3: Photographs of the Proposed Action Site



Project site looking southeast.



Project site looking southwest.

U.S. Fish & Wildlife Service
SD ES Field Office

Project as described will have no significant impact on fish and wildlife resources. It does not involve any federally listed threatened or endangered species or their habitats. If project design changes, please submit plans for review.

1/24/13
Date
Field Supervisor

12/20/2012

Mr. Terry Quesinberry
U.S. Fish and Wildlife Biologist
South Dakota Ecological Service Office
Pierre, SD 57501

Subject: Draft Environmental Assessment (EA) and Draft Finding of No Significant Impact for a New Veterinary Clinic, Ellsworth Air Force Base (AFB), South Dakota

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Your cooperation and assistance with the Air Force's efforts to identify important biological resources early in the EA planning process is greatly appreciated. Upon completion, a copy of the draft EA will be forwarded to your office for review.

Please direct any questions to me at 909-579-3768 or by email at nora.castellanos@aecom.com.

Yours sincerely,

Nora Castellanos
Project Manager

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AECOM
901 Via Piemonte, 5th Floor
Ontario, CA 91764

909.579.3050 tel
909.579.3997 fax

12/20/2012

Mr. Jay D. Vogt
State Historic Preservation Office
900 Governors Dr.
Pierre, SD 57501

Subject: Draft Environmental Assessment (EA) and Draft Finding of No Significant Impact for a New Veterinary Clinic, Ellsworth Air Force Base (AFB), South Dakota

Dear Mr. Vogt,

On behalf of the Air Force, AECOM is preparing an Environmental Assessment (EA) for the proposed construction and operation of a new veterinary clinic on Ellsworth Air Force Base (AFB), South Dakota (Attachments 1 & 2). The purpose of this letter is to initiate consultation early in the EA planning process regarding any potential adverse effects the proposed action might have on historic properties.

The proposed facility would be in the southeastern portion of Ellsworth AFB near the intersection of Eaker Drive and Chennault Street. The new facility would be constructed on the location of former Building 3401, which was demolished in 2003. The project site is situated in a developed area (Attachment 3). The purpose of the action is to allow Ellsworth AFB to provide adequate care to Military Working Dogs as required, and to the base animal population. Military Working Dogs are a mission-essential component of base security. Sufficient care facilities will include separate exam, surgery, x-ray, and prep spaces. The planned clinic will be built in compliance with the spaces and functionality requirements specified in the Department of Defense (DOD) Medical Space Planning Criteria.

The Proposed Project area has previously been heavily disturbed, and no historic properties have been identified in the area, nor would any be expected to be encountered during construction. No significant impacts to cultural resources are expected. Upon completion, a copy of the draft EA will be forwarded to your office for review.

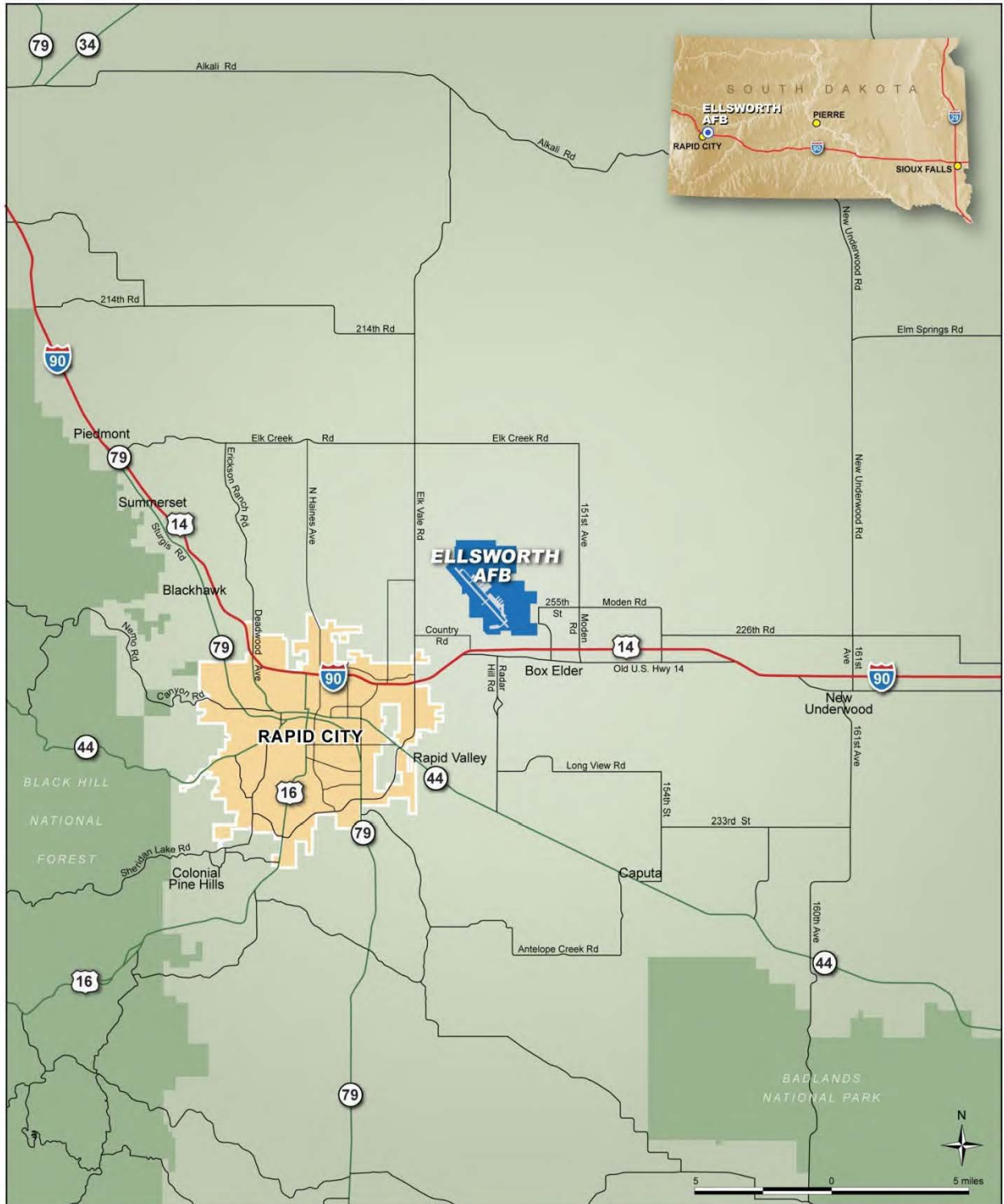
If you have any questions please feel free to contact me at 909-579-3768, or via e-mail: nora.castellanos@aecom.com.

Yours sincerely,

Nora Castellanos
Project Manager

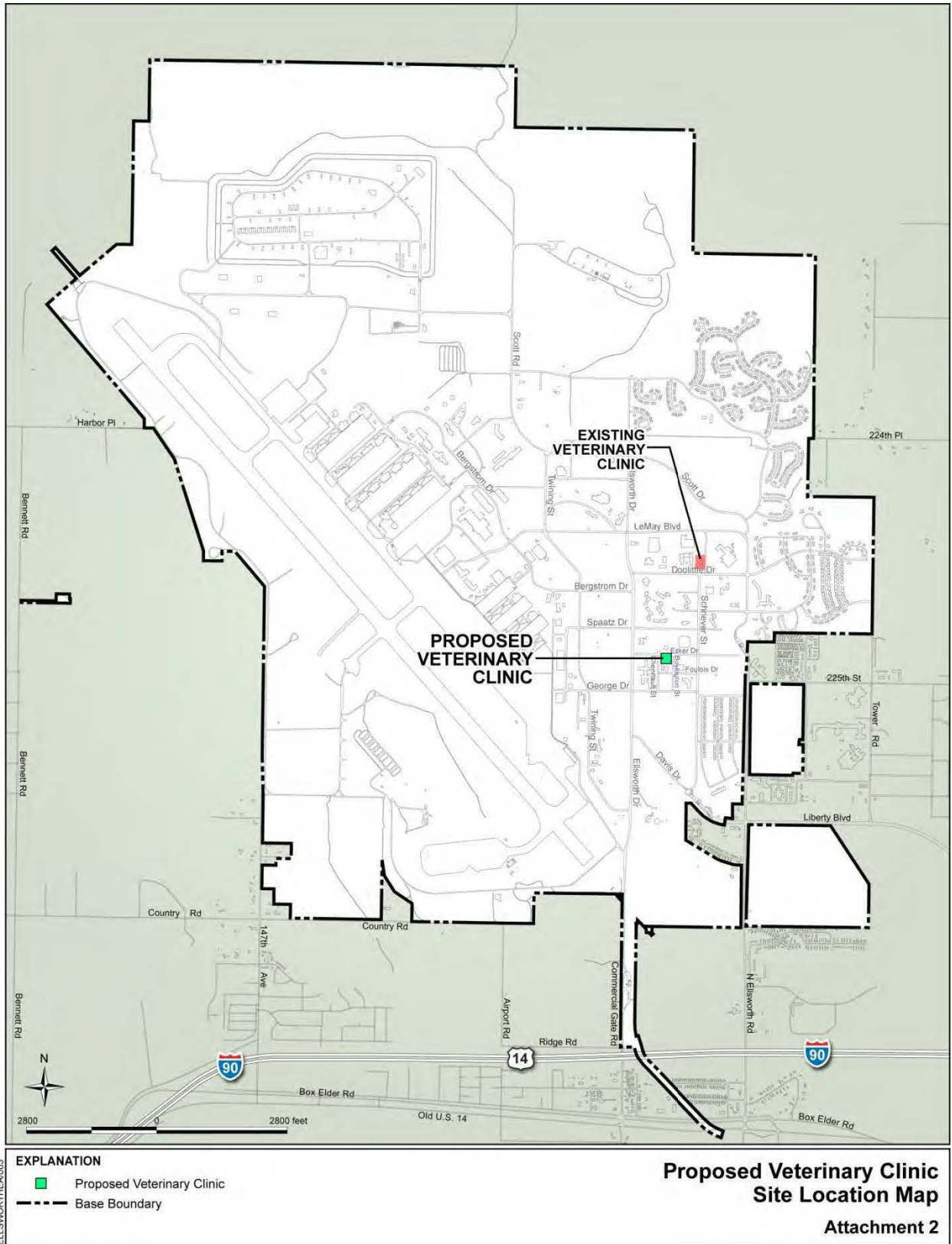
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ELLSWORTH001

**Ellsworth AFB
Regional Map
Attachment 1**



Attachment 3: Photographs of the Proposed Action Site



Project site looking southeast.



Project site looking southwest.



January 28, 2013

Lt. Kurt DeRussy
28 CES/CEP
2125 Scott Drive
Ellsworth AFB, SD 57706-4711

SECTION 106 PROJECT CONSULTATION

Project: 130107002F – Draft Environmental Assessment New Veterinary Clinic, Ellsworth Air Force Base, South Dakota

Location: Meade County
(DOD)

Dear Lt. DeRussy:

Thank you for the opportunity to comment on the above referenced undertaking pursuant to Section 106 of the National Historic Preservation Act (NHPA) of 1966 (as amended). The South Dakota Office of the State Historic Preservation Officer (SHPO) received the following information concerning the construction of a new veterinary clinic at Ellsworth Air Force Base:

1. January 7, 2013, letter from Ms. Nora Castellanos; and
2. January 14, 2013, letter from Mark A. Howard and the document entitled “Draft Environmental Assessment New Veterinary Clinic”; and
3. January 15, 2013, two e-mails containing additional photographs and a letter from Howard A. Aubertin; and
4. January 18, 2013, an e-mail containing a letter from John Morgenstern, requesting concurrence with a determination of eligibility for Building 6010.

Mr. Aubertin indicates in his letter that the Air Force intends to use the National Environmental Policy Act (NEPA) process to comply with Section 106 of NHPA pursuant to Title 36 of the Code of Federal Regulations (36 CFR) 800.8 (c). Therefore, based on the information provided, we concur that Building 6010 is not individually eligible for listing on the National Register of Historic Places for Criteria C. In addition, given that the proposed project will occur on previously disturbed lands, my office concurs with the determination of No Historic Properties Affected for this undertaking. Activities occurring in areas not identified in your request will require the submission of additional documentation pursuant to 36 CFR part 800.4.

However, I would also like to provide the following comments on the documentation submitted for compliance with Section 106 of NHPA.

1. There are nine tribal governments in South Dakota. The Draft EA does not include the Standing Rock Sioux Tribe located on the Standing Rock Indian Reservation in Corson County.

2. Despite the use of 36 CFR Part 800.8, your agency's efforts to identify historic properties and assess the effects of the undertaking on such properties must be in a manner consistent with the standards and criteria of 36 CFR Part 800.4 through 800.5. For your convenience I have enclosed the documentation standards for Section 106 of NHPA. The submission of documentation that fulfills the standards will help to ensure that your agency has supplied adequate information for the SHPO to concur with your agency's determination of effect.

3. The Region of Influence (ROI) must be consistent with the Area of Potential Effect (APE) which means "the geographic area or areas within which an undertaking may directly or indirectly cause alteration in the character or use of historic properties. The area of potential effects may be different for different kinds of effects caused by the undertaking".

If historic properties are discovered or unanticipated effects on historic properties are found after the agency official has completed the Section 106 process, the agency official shall avoid, minimize or mitigate the adverse effects to such properties and notify the SHPO and Indian tribes that might attach religious and cultural significance to the affected property within 48 hours of the discovery.

Concurrence of the SHPO does not relieve the federal agency official from consulting with other appropriate parties, as described in 36CFR Part 800.2(c).

Should you require additional information concerning Section 106 of NHPA, please contact Paige Olson at (605) 773-6004. Your concern for the non-renewable cultural heritage of our state is appreciated.

Sincerely,

Jay D. Vogt
State Historic Preservation Officer



Paige Olson
Review & Compliance Coordinator

Cc: John Morgenstern

Enclosure: Section 36 CFR Part 800.11 Documentation Standards

National Historic Preservation Act of 1966 (as amended) Sec. 800.11 Documentation standards.

(a) *Adequacy of documentation.* The agency official shall ensure that a determination, finding, or agreement under the procedures in this subpart is supported by sufficient documentation to enable any reviewing parties to understand its basis. The agency official shall provide such documentation to the extent permitted by law and within available funds. When an agency official is conducting phased identification or evaluation under this subpart, the documentation standards regarding description of historic properties may be applied flexibly. If the Council, or the SHPO/THPO when the Council is not involved, determines the applicable documentation standards are not met, the Council or the SHPO/THPO, as appropriate, shall notify the agency official and specify the information needed to meet the standard. At the request of the agency official or any of the consulting parties, the Council shall review any disputes over whether documentation standards are met and provide its views to the agency official and the consulting parties.

(b) *Format.* The agency official may use documentation prepared to comply with other laws to fulfill the requirements of the procedures in this subpart, if that documentation meets the standards of this section.

(c) *Confidentiality.*

(1) *Authority to withhold information.* Section 304 of the act provides that the head of a Federal agency or other public official receiving grant assistance pursuant to the act, after consultation with the Secretary, shall withhold from public disclosure information about the location, character, or ownership of a historic property when disclosure may cause a significant invasion of privacy; risk harm to the historic property; or impede the use of a traditional religious site by practitioners. When the head of a Federal agency or other public official has determined that information should be withheld from the public pursuant to these criteria, the Secretary, in consultation with such Federal agency head or official, shall determine who may have access to the information for the purposes of carrying out the act.

(2) *Consultation with the Council.* When the information in question has been developed in the course of an agency's compliance with this part, the Secretary shall consult with the Council in reaching determinations on the withholding and release of information. The Federal agency shall provide the Council with available information, including views of the SHPO/THPO, Indian tribes and Native Hawaiian organizations, related to the confidentiality concern. The Council shall advise the Secretary and the Federal agency within 30 days of receipt of adequate documentation.

(3) *Other authorities affecting confidentiality.* Other Federal laws and program requirements may limit public access to information concerning an undertaking and its effects on historic properties. Where applicable, those authorities shall govern public access to information developed in the section 106 process and may authorize the agency official to protect the privacy of non-governmental applicants.

(d) *Finding of no historic properties affected.* Documentation shall include:

- (1) A description of the undertaking, specifying the Federal involvement, and its area of potential effects, including photographs, maps, drawings, as necessary;
- (2) A description of the steps taken to identify historic properties, including, as appropriate, efforts to seek information pursuant to Sec. 800.4(b); and
- (3) The basis for determining that no historic properties are present or affected.

(e) *Finding of no adverse effect or adverse effect.* Documentation shall include:

- (1) A description of the undertaking, specifying the Federal involvement, and its area of potential effects, including photographs, maps, and drawings, as necessary;
- (2) A description of the steps taken to identify historic properties;
- (3) A description of the affected historic properties, including information on the characteristics that qualify them for the National Register;
- (4) A description of the undertaking's effects on historic properties;
- (5) An explanation of why the criteria of adverse effect were found applicable or inapplicable, including any conditions or future actions to avoid, minimize or mitigate adverse effects; and
- (6) Copies or summaries of any views provided by consulting parties and the public.

(f) *Memorandum of agreement.* When a memorandum of agreement is filed with the Council, the documentation shall include, any substantive revisions or additions to the documentation provided the Council pursuant to Sec. 800.6(a)(1), an evaluation of any measures considered to avoid or minimize the undertaking's adverse effects and a summary of the views of consulting parties and the public.

(g) *Requests for comment without a memorandum of agreement.* Documentation shall include:

- (1) A description and evaluation of any alternatives or mitigation measures that the agency official proposes to resolve the undertaking's adverse effects;
- (2) A description of any reasonable alternatives or mitigation measures that were considered but not chosen, and the reasons for their rejection;
- (3) Copies or summaries of any views submitted to the agency official concerning the adverse effects of the undertaking on historic properties and alternatives to reduce or avoid those effects; and
- (4) Any substantive revisions or additions to the documentation provided the Council pursuant to Sec. 800.6(a)(1).

Affidavit of Publication

STATE OF SOUTH DAKOTA

County of Pennington SS:

Laurie Doyle being first duly sworn, upon his/her oath says: That he/she is now and was at all time hereinafter mentioned, an employee of the RAPID CITY JOURNAL, a corporation of Rapid City, South Dakota, the owner and publisher of the RAPID CITY JOURNAL, a legal and daily newspaper printed and published in Rapid City, in said County of Pennington, and has full and personal knowledge of all the facts herein stated as follows: that said newspaper is and at all of the times herein mentioned has been a legal and daily newspaper with a bonafide paid circulation of at least Two Hundred copies daily, and has been printed and published in the English language, at and within an office maintained by the owner and publisher thereof, at Rapid City, in said Pennington County, and has been admitted to the United States mail under the second class mailing privilege for at least one year prior to the publication herein mentioned; that the advertisement, a printed copy of which, taken from said Rapid City Journal, the paper in which the same was published, is attached to this sheet and made a part of this affidavit, was published in said paper once each week for one successive day, the first publication there of being on the 12 day of Jan that the fees charged for the publication there of are 91 dollars and 65 cents.

Laurie Doyle

Subscribed and sworn to before me this 12 day of Feb, 2013.

Lorraine K. Cummings

Notary public Dec. 18, 2016

My commission expires





NOTICE OF AVAILABILITY DRAFT ENVIRONMENTAL ASSESSMENT

New Veterinary Clinic

U.S. AIR FORCE Ellsworth AFB, South Dakota

A draft Environmental Assessment (EA), dated January 2013 has been prepared in accordance with the National Environmental Policy Act (NEPA) of 1969 and the Council on Environmental Quality regulations implementing NEPA. The draft EA evaluates the potential environmental impacts associated with the proposed construction of a new veterinary clinic at Ellsworth Air Force Base (AFB), South Dakota.

The draft EA is available for review at the following locations:

Rapid City Public Library
610 Quincy Street
Rapid City, SD 57701

Online: <http://www.ellsworth.af.mil/library/environmental/index.asp>

Your comments on this draft EA are requested. Any personal information provided will be used only to identify your desire to make a statement during the public comment period or to fulfill requests for copies of the final EA. Personal home addresses and telephone numbers will not be published in the final EA.

Public comment on the draft EA must be received by February 13, 2013. Written comments and inquiries on the draft EA should be directed to:

Lt. Kurt DeRussy
28CES/CEP
2125 Scott Drive
Ellsworth AFB, SD 57706

IN THE _____
CO _____

Publisher's and Attorney's Affidavit

Filed in the office of _____ on _____

the _____ day of _____
20 _____

Attorney for _____





**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

PMB 2020
JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182

denr.sd.gov

February 14, 2013

Lt. Kurt DeRussy
Ellsworth AFB
28 CES/CEP
2125 Scott Drive
Ellsworth AFB, SD 57706-4711

Dear Lt. DeRussy:

The South Dakota Department of Environment and Natural Resources (DENR) reviewed the U.S. Ellsworth AFB's draft Environmental Assessment (EA). This EA dated January 2013 is for activities associated with the construction of a new veterinary clinic on the Ellsworth Air Force Base (AFB). The Department has the following comments:

1. Based on the information provided, the Air Quality Program does not anticipate any adverse impacts. The Air Quality Program has no objections to this project.
2. Based on the information provided, the department does not anticipate any adverse impacts to drinking waters of the state. The Drinking Water Program has no objections to this project.
3. Based on the information provided, the Surface Water Quality Program does not anticipate any adverse impacts. The Surface Water Quality Program has no objections to this project.
4. A Surface Water Discharge (SWD) permit may be required if any construction dewatering should occur. Please contact Al Spangler at (605) 773-3351 concerning this permit.
5. The Waste Management Program does not anticipate any adverse impacts. Any construction debris needs to be disposed of at a permitted solid waste facility. Please contact the Waste Management Program if you have any questions on solid waste disposal at (605) 773-3153.
6. Based on the information provided in the Air Force draft environmental assessment, the Ground Water Quality Program does not anticipate adverse impacts to ground water quality by this project. However, there have been petroleum and other chemical releases throughout the state. A number of release cases have been identified in the general vicinity of your project, but all of them have been closed. One case, Department File number 2000.102, was reported as a fuel oil release at the site of the former Building 3401, which is also the location of the proposed Veterinary Clinic. The locational information provided to us regarding releases is

sometimes inaccurate or incomplete. If you would like to do more research regarding releases in South Dakota, you may obtain information regarding them at <http://denr.sd.gov/des/gw/Spills/dbspillsearch.aspx>.

If contamination is encountered during construction or is caused by this project, Ellsworth Air Force Base or its designated representative must report the contamination to the Department at (605) 773-3296. Any contaminated soil encountered or created must be temporarily stockpiled and sampled to determine disposal requirements, and the materials of construction through the contaminated area should be evaluated for chemical compatibility and adjusted accordingly.

If you have any questions concerning these comments, please contact me at (605) 773-3351.

Sincerely,



John Miller
Surface Water Quality Program

cc: Brad Schultz, Air Quality Program
Mark Mayer, Drinking Water Program
Vonni Kallemeyn, Waste Management Program
Tom Brandner, Ground Water Quality Program