FINDING OF NO SIGNIFICANT IMPACT FOR CONSTRUCTION OF MEDICAL – DENTAL CLINIC, SCHRIEVER AIR FORCE BASE, COLORADO

An environmental assessment (EA) was prepared for a Proposed Action and two alternatives to construct a Medical-Dental Clinic (MDC) at Schriever Air Force Base (SAFB), Colorado. The EA for this proposed project is attached. Construction for the new facility is proposed for the year 2002.

The EA analyzed the environmental effects from the proposed action to construct the facility on the west side of the Operational Support Facility (Alternative 1), the alternative of constructing the MDC on the west side of the existing Security Forces Building 101 (Alternative 2), and the no action alternative (Alternative 3). The locations are presented on pages 2-3 and 2-4 of the attached EA.

ALTERNATIVE 1 – PROPOSED ACTION – CONSTRUCT THE MEDICAL – DENTAL CLINIC ON THE WEST SIDE OF THE OPERATIONAL SUPPORT FACILITY

The MDC would be constructed on the west side of the newly constructed Operational Support Facility (OSF). The MDC would be located close to the secure area of the base as well as the OSF, which would provide easy access by base personnel. There would be short-term air impacts during construction. There would be no detrimental long-term or cumulative effects due to the proposed action.

ALTERNATIVE 2 – CONSTRUCT THE MEDICAL – DENTAL CLINIC ON THE WEST SIDE OF THE SECURITY FORCES BUILDING 101

The MDC would be constructed on the west side of the security forces building 101. The MDC would be located close to the secure area of the base as well as the OSF, which would provide easy access by base personnel. There would be short-term air impacts during construction. There would be no detrimental long-term or cumulative effects due to the proposed action.

ALTERNATIVE 3 – NO ACTION

The MDC would not be constructed. Only emergency treatment and evacuation would continue to be provided at Schriever AFB. Personnel would need to travel to Peterson AFB to seek medical treatment and for routine medical appointments.

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CONCLUSION

No significant environmental effects were identified for construction of a Medical – Dental Clinic at SAFB. Implementation of the proposed action will not constitute a major federal action requiring the preparation of an environmental impact statement, pursuant to the National Environmental Policy Act of 1969. Therefore, a Finding of No Significant Impact is warranted.

John B. Perroni

JOHN B. PERRONI, JR.
Colonel, USAF
Chairperson, Environmental Protection Committee
Schriever Air Force Base, Colorado

8 Feb 01
Date

TABLE 1
SUMMARY OF ENVIRONMENTAL IMPACTS OF PROPOSED ACTION

Environmental Resource	Environmental Impact
Air Quality	Fugitive dust and CO emissions during construction are *de minimus*.
Biological Resources	Conversion of semi-improved land would not effect wildlife, threatened or endangered species.
Cultural Resources	No cultural resources are known to occur on SAFB.
Land Use	Slight increase in developed land. No prime farmland or state-important farmland is present.
Noise	Temporary local construction noise increases; no effect to noise sensitive receptors. Noise during construction would not exceed permissible levels at property boundary.
Occupational Safety and Health	No short-term or long-term adverse safety and health effects are expected.
Pollution Prevention	Negligible hazardous materials generated during construction.
Socioeconomic Conditions	Short term benefit from construction jobs. No significant long-term change in SAFB work force, utilities service, or transportation
Soils	Water is expected to infiltrate into soils.
Water Resources	No changes in current conditions.
Wetlands	No risk or threat to wetlands.
Cumulative Effects	Incremental increase in developed land, impervious surface and stormwater runoff.
Environmental Justice	This project would not have an adverse impact upon minority populations and/or low-income populations.
Irreversible and Irretrievable Commitment of Resources	Irretrievable commitment of materials, energy, fuel, and labor utilized during construction activities.

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ENVIRONMENTAL ASSESSMENT FOR MEDICAL – DENTAL CLINIC SCHRIEVER AIR FORCE BASE, COLORADO

Prepared by
50 CES/CEV

January 2001

Printed on Recycled Paper

TABLE OF CONTENTS

TABLE OF CONTENTS

TABLE OF CONTENTS

ACRONYMNS AND ABBREVIATIONS

50 CES/CEV	Civil Engineer Squadron/Environmental Flight
50 SW	50th Space Wing
AAFES	Army Air Force Exchange Service
ACHP	Advisory Council on Historic Preservation
ac.	acre(s)
ADT	Average daily traffic counts
AFB	Air Force Base
AFI	Air Force Instruction
AFSPC	Air Force Space Command
AWDT	Average weekday daily traffic volumes
BHPO	Base Historic Preservation Officer
CAA	Clean Air Act
CDOW	Colorado Division of Wildlife
CDPHE	Colorado Department of Public Health and Environment
CEQ	Council on Environmental Quality
CES	Civil Engineer Squadron
CFR	Code of Federal Regulations
CO	Carbon monoxide
CSR	Colorado State Regulations
dBA	A-weighted decibel to human hearing level
DoD	Department of Defense
EA	Environmental Assessment
EBS	Environmental Baseline Survey
EIAP	Environmental Impact Analysis Process
EO	Executive Order
EPA	Environmental Protection Agency
ESA	Endangered Species Act
FWPCA	Federal Water Pollution Control Act
HAZMAT	Hazardous Material
HAZMART	Hazardous Materials Pharmacy
IICEP	Interagency and Intergovernmental Coordination Act for Environmental Planning
LOS	Level of Service
MDC	Medical – Dental Clinic
NAAQS	National Ambient Air Quality Standards
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NO_2	Nitrogen dioxide
NPDES	National Pollutant Discharge Elimination System

NRHP	National Register of Historic Places
O_3	Ozone
OSHA	Occupational Safety and Health Administration
P_2MAP	Pollution Prevention Management Action Plan
Pb	Lead
PM_{1O}	Particulate matter 10 microns or less in diameter
PPACG	Pikes Peak Area Council of Government
RCRA	Resource Conservation and Recovery Act
SAFB	Schriever Air Force Base
SH	State Highway
SHPO	State Historic Preservation Officer
SIP	State Implementation Plan
SO_2	Sulfur dioxide
tpy	ton(s) per year
USAF	United States Air Force
U.S.C.	United States Code
USFWS	U.S. Fish and Wildlife Service

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SECTION 1
PURPOSE OF AND NEED FOR ACTION

This section describes the proposed action, need for the proposed action, related environmental documents, the decision to be made, scope of the environmental analysis process, and applicable regulatory requirements and required coordination.

1.1 Proposed Action

The 50th Space Wing (50 SW), Schriever Air Force Base (SAFB), CO, proposes to construct a Medical – Dental Clinic MDC on base to provide a location for medical and dental care for military members. The MDC would be located outside the secure area, which is where non-mission essential facilities are to be sited. The MDC is proposed to be constructed to the west of the newly constructed Operational Support Facility (OSF).

1.2 Need for the Proposed Action

Currently, there are a dental clinic and an ambulance located at SAFB. The dental clinic is undersized for the amount of active duty military assigned to SAFB. There is no medical clinic at SAFB. Personnel requiring routine medical care must travel to Peterson AFB or the USAF Academy hospital for appointments. The MDC would fulfill a need to provide medical care to active duty military personnel assigned to SAFB. The MDC would also replace the current undersized dental clinic at SAFB.

1.3 Related Environmental Documents

The effects of base development and operations on the existing environment have been evaluated in the following environmental assessments and natural resource and cultural resource management plans. These studies cover the developed portion of the base and its associated buffer and compatible-use zones. Analysis of the proposed action references these reports and they are available in the library of the Environmental Flight, 50 CES/CEV, Building 500.

- *Environmental Assessment for the Operational Support Facility* (International Technology Corp, 1993)
- *Environmental Assessment for Child Development Center* (USAF, 2000)
- *Environmental Assessment for the Physical Fitness Center* (Parsons ES, 1999)
- *Environmental Assessment for Fiscal Year 1998 Growth Plan* (Parsons ES, 1998)
- *Integrated Natural Resources Management Plan* (Parsons ES, 1997a)
- *Cultural Resources Management Plan* (Parsons ES, 1997b)

1.4 Decision to be Made

The chairperson of the SAFB Environmental Protection Committee (EPC) must decide whether this Environmental Assessment (EA) results in a Finding of No

Significant Impact (FONSI), or whether further study is necessary.

1.5 Scope of the Environmental Assessment

This EA was prepared in accordance with:

- The National Environmental Policy Act (NEPA);
- The Council on Environmental Quality (CEQ) regulations for implementing NEPA;
- 32 Code of Federal Regulations (CFR) Part 989, *Environmental Impact Analysis Process (EIAP)*;
- AFI 32-7060, *Interagency and Intergovernmental Coordination for Environmental Planning* (IICEP); and
- AFI 32-7061, *The Environmental Impact Analysis Process.*

1.6 Applicable Regulatory Requirements

A list of statutory and regulatory requirements applicable to this EA is provided here. Section 5 of this document more completely discusses the applicable laws that pertain to the proposed and alternative actions, and identifies potential permit requirements.

1.6.1 Federal Statutes

- Clean Air Act of 1970, 42 United States Code (U.S.C.) §7401 *et seq.*;
- Clean Water Act of 1987, 33 U.S.C. §1251 *et seq.;*
- Emergency Planning and Community Right-to-Know Act of 1986, 42 U.S.C. §11001-11050;
- Endangered Species Act of 1973, amended 1982 and 1987, 16 U.S.C. §1531-1542;
- Executive Order 12856, *Federal Compliance with Right-to-Know Laws and Pollution Prevention Requirements*, August 1993;
- Farmland Protection Policy Act of 1981, 7 U.S.C. §4201 *et seq.*;
- Greening the Government through Waste Prevention, Recycling, and Federal Acquisition, Part 4 §401-Part 5 §501, 502, 503, and Part 7 §701;
- National Environmental Policy Act of 1969, 42 U.S.C. §4321-4347;
- National Historic Preservation Act of 1966, 16 U.S.C. §470-470t;
- Noise Control Act of 1972, 42 U.S.C. §4901 *et seq.*;
- Occupational Safety and Health Act of 1970, 20 U.S.C. §333
- Pollution Prevention Act of 1990, 42 U.S.C. §13101(b);
- Resource Conservation and Recovery Act of 1976, 42 U.S.C. §6901 *et seq*.

1.6.2 State of Colorado Regulations

- Colorado dust-control regulations, Colorado State Regulation (CSR) No. 1, Section 3.D(2a) and CSR No. 3.

1.6.3 El Paso County Regulations

- Fugitive dust control regulations, El Paso County Regulation, Fugitive Particulates and Open Burning, Section 10.

SECTION 2
ALTERNATIVES INCLUDING THE PROPOSED ACTION

This section names the three alternatives, describes the process used to formulate the alternatives, identifies the site selection criteria, and provides detailed descriptions of the alternatives. The three alternatives evaluated in this EA are:

- Alternative 1: Proposed action to construct a medical – dental clinic west of the Operational Support Facility;
- Alternative 2: Construct a medical – dental clinic west of building 101; and,
- Alternative 3: No action alternative, personnel would be required to use the Peterson AFB medical clinic for care.

Throughout the remainder of this document, Alternative 1 is referred to as the "proposed action," and Alternative 3 is referred to as the "no action" alternative.

2.1 Alternative Selection and Site Selection Criteria

The *Schriever Air Force Base General Plan* and *Vision 2020* are the principal documents guiding assessment and planning future installation growth and development at SAFB. Current SAFB policy dictates that new mission facilities or mission support facilities will be constructed within the restricted area, and all non-mission functions will be sited outside of the restricted area. The restricted area is the central portion of the base enclosed by a security fence.

The following criteria were used to develop the alternatives.

- The location should be convenient to personnel working in the secure area and the non-secure area.
- The selected alternative must meet federal, state, and local environmental regulations. Siting should consider prevailing winds and avoid areas that would have environmental siting constraints.

2.2 Alternative 1 – Proposed Action

A medical – dental clinic (MDC) would be constructed on the land west of the Operational Support Facility (OSF). This location is outside the secure area of the base. This site would provide easy access for personnel working in both the secure and non-secure areas of the base. This siting would allow for convenient access to for personnel in facilities that may be planned in the area according to the 20 year long range plan.

The facility would be a single story structure with an 80-foot height restriction because of the look angle of a nearby antenna. The "look angle" consists of the range of motion of the antenna, since it can not see through objects, the height restriction will allow for full utilization of the antenna. The building would have a footprint of approximately 11,726 square feet. The location would also be convenient for access by fire protection equipment.

2.3 Alternative 2 – Construct the MDC West of Building 101

A medical – dental clinic (MDC) would be constructed on the land west of the existing security forces building (building

101). This site allows for adequate use of land for this and other proposed facilities.

Currently, the location for alternative 2 is a parking lot. This location is outside the secure area of the base. This site would provide easy access for personnel working in both the secure and non-secure areas of the base. This siting would allow for convenient access to for personnel in facilities that may be planned in the area according to the 20 year long range plan.

The facility would be a single story structure with an 80-foot height restriction because of the look angle of a nearby antenna. The "look angle" consists of the range of motion of the antenna, since it can not see through objects, the height restriction will allow for full utilization of the antenna. The building would have a footprint of approximately 11,726 square feet. The location would also be convenient for access by fire protection equipment.

2.4 Alternative 3 – No Action

The medical – dental clinic would not be constructed at Schriever AFB. Personnel would continue to have to travel to Peterson AFB for routine medical treatment and examinations.

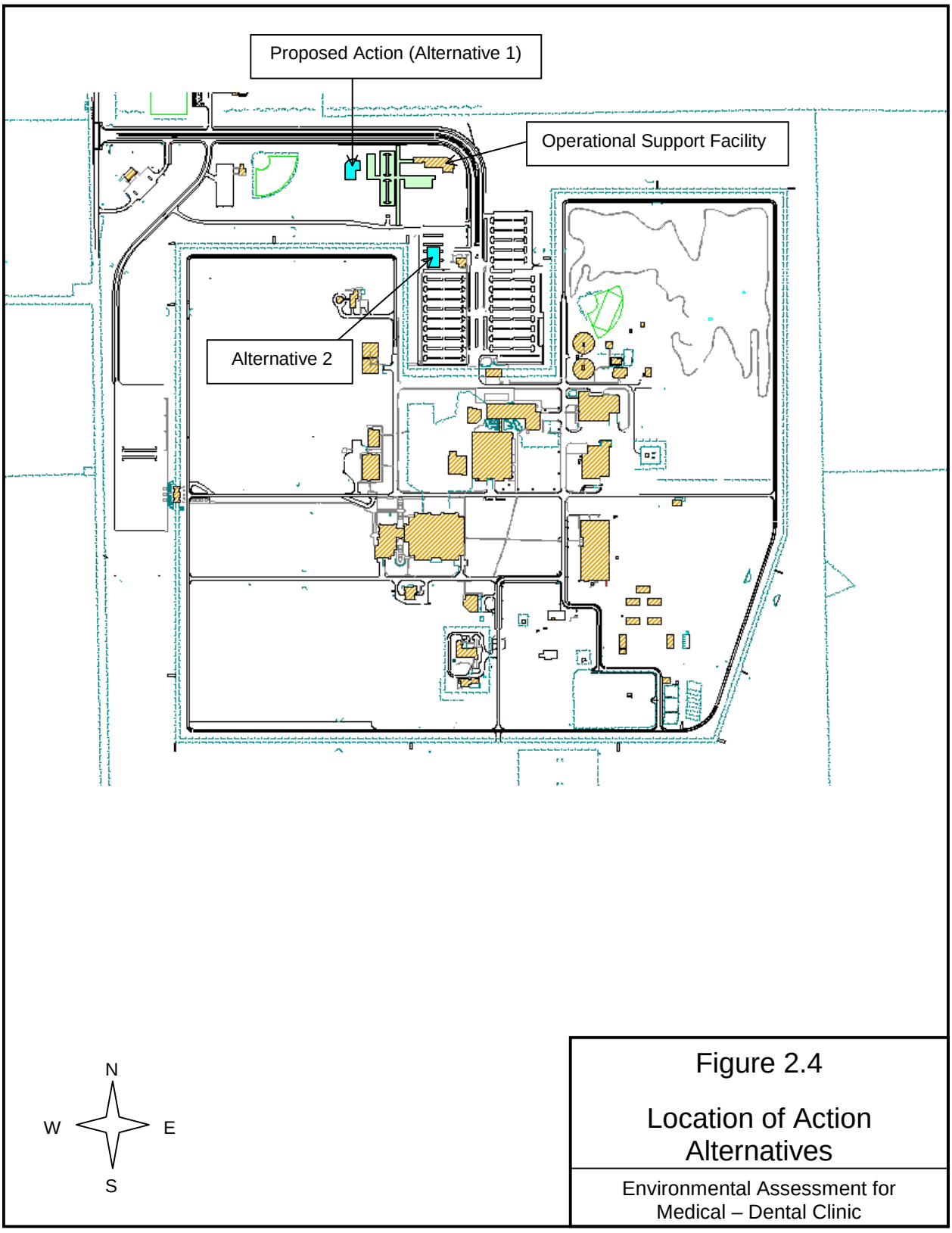


Figure 2.4

Location of Action Alternatives

Environmental Assessment for Medical – Dental Clinic

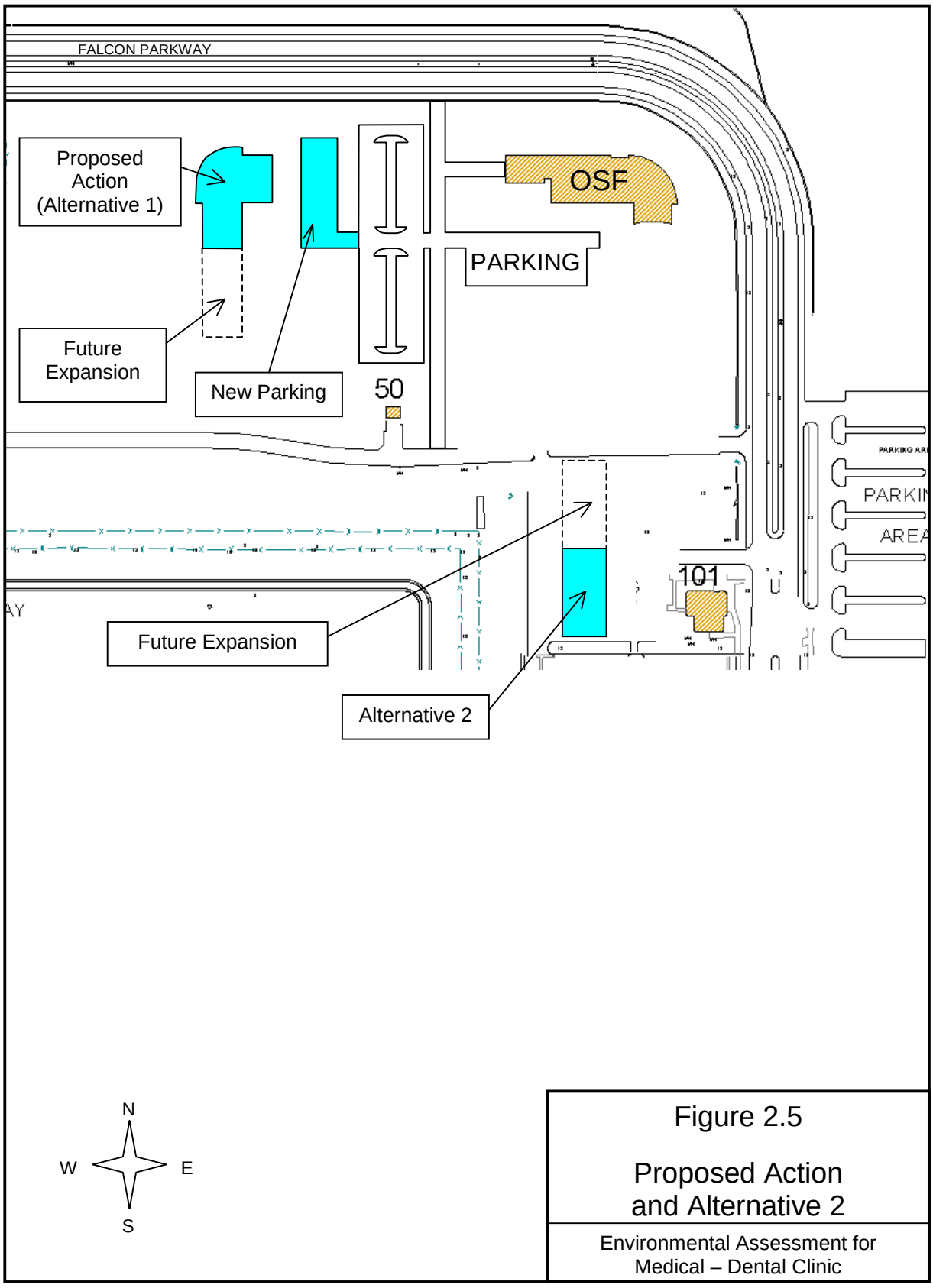


Figure 2.5

Proposed Action and Alternative 2

Environmental Assessment for Medical – Dental Clinic

SECTION 3
AFFECTED ENVIRONMENT

This section describes existing conditions of the environmental resources that may be affected by the alternatives. For this analysis, the affected area is the area surrounding the operational support facility and building 101. The area includes the proposed site location and the alternative site location.

During the field investigation conducted on April 20, 2000, it was determined that most of the potentially affected resources at the proposed sites were addressed in four previous documents.

- *Environmental Assessment for the Operational Support Facility* (International Technology Corp, 1993)
- *Environmental Assessment for Child Development Center* (USAF, 2000)
- *Environmental Assessment for the Physical Fitness Center* (Parsons ES, 1999)
- *Integrated Natural Resources Management Plan, Falcon Air Force Base* (Parsons ES, 1997a)

This EA summarizes the previous descriptions and updates specific resources as required to evaluate environmental effects. For a detailed description of the affected resources, the reader is referred to these documents which are on file in the library of the Environmental Flight, 50 CES/CEV, Building 500, Schriever AFB.

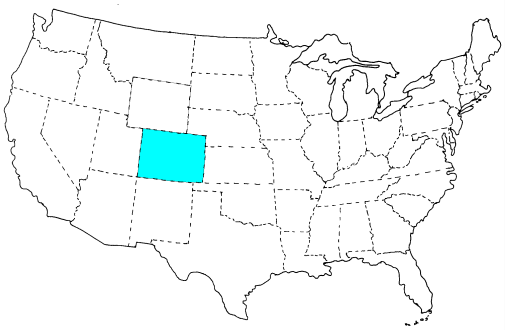
SAFB is located in El Paso County approximately 10 miles east of Peterson AFB and 16 miles east of downtown Colorado Springs (Figure 3.2). The base covers approximately 6 square miles (3,840 acres) in Sections 25 and 26 and portions of Sections 22, 23, 24, 27, 34, 35, and 36, all in Township 14 South, Range 64 West; and portions of Sections 19, 30, and 31 in Township 14 South, Range 63 West.

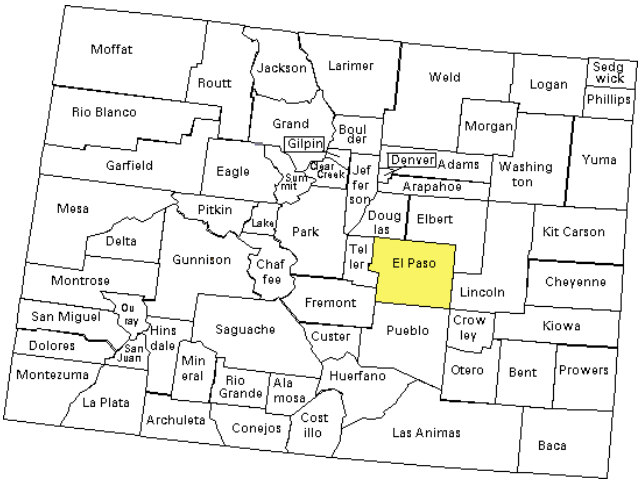
The developed areas of the base are located within 1 square mile. The developed portion of the base is surrounded by a 3,200-acre buffer zone, 0.5 miles wide on the north, west, and south sides, and 1.5 miles wide on the east side. The proposed MDC would be located outside the secured area of the base, near the operational support facility.

Figure 3.1 – OSF Construction

3.1 Air Quality

The air quality of the affected environment is determined by the types and amounts of pollutants emitted into the atmosphere, the size of the topography of the air basin, and the prevailing meteorological conditions. Activities with the potential to impact air quality at Schriever AFB include utilities or power generation (e.g., steam, hot water, natural gas, emergency electrical





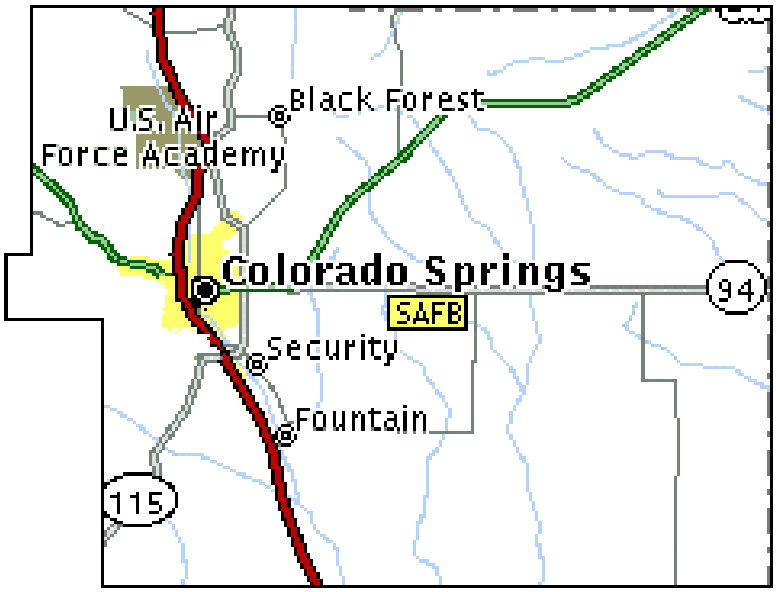


Figure 3.2

General Location Map

power), fuel handling, hazardous chemical usage, vehicle emissions, and fugitive dust from ground disturbances resulting from construction (URS Radian, 2000).

3.1.1 Meteorology

The climate of El Paso County is semi-arid and is influenced by the high elevations of the Front Range of the Rocky Mountains to the west, resulting in moderate conditions, with cool, sunny summers and dry, low-humidity winters. The average temperatures for winter and summer are 31.0 degrees Fahrenheit (ºF) and 68.4ºF, respectively. The prevailing wind is from the north-northeast at an average annual speed of 10.4 miles per hour. Average annual precipitation is 15.5 inches, with approximately 85 percent of the precipitation occurring between April and September, during the growing season (Larsen, 1981).

The ambient air quality of El Paso County varies with local meteorological conditions. During the winter months when temperature inversions and limited-dispersion conditions occur, county air quality can be poor because of the high carbon monoxide (CO) concentrations associated with roadway traffic in the Colorado Springs area. Particulate impacts also can be high in the winter, when soil moisture and ground cover are at a minimum, and high wind speeds generate windblown dust.

3.1.2 Air Pollutants and Regulations

The Clean Air Act (CAA) requires air pollutant emission sources to comply with National Ambient Air Quality Standards (NAAQS). Criteria pollutants are those for which NAAQS have been developed. Criteria pollutants of interest in this EA are CO, volatile organic compounds (VOCs), sulfur oxides (SO_x), nitrogen oxides (NO_x), and particulate matter less than or equal to 10 microns in diameter (PM_{10}).

The Air Pollution Control Division (APCD) of the Colorado Department of Public Health and Environment (CDPHE) has determined that Schriever AFB is not a major source of hazardous air pollutants or criteria pollutants, and that SAFB qualifies as a synthetic minor source exempt from Titles III and V of the federal CAA Amendments of 1990 (USAF, 1995). The sources of air emissions covered under the synthetic-source air emissions permit, all of which are considered stationary sources, includes the consumption of natural gas and diesel fuel in on-base boilers, consumption of diesel fuel in emergency generators, gasoline and diesel refueling of vehicles, and diesel fuel storage in tanks (URS Radian, 2000). The 1999 basewide emissions summary for criteria pollutants for Schriever AFB is provided in Table 3.1.

As indicated in the table, stationary source emissions are well below the limits set for these sources at Schriever AFB. The primary sources of air pollutants near the base are mobile exhaust sources (vehicular traffic) and fugitive dust (from agricultural and construction activities). There currently are no air permitting requirements for mobile sources at the base. The regulations applicable to mobile sources are primarily state regulations intended to reduce emissions from roadway vehicles. Mobile-source emissions at the base include on-highway vehicles (government-owned or personal vehicles) or off-highway vehicles (construction and landscaping equipment). All personal and government-owned vehicles must comply with El Paso County annual emission testing requirements. There are no aircraft or other types of mobile sources at the base (URS Radian, 2000).

TABLE 3.1
1999 BASEWIDE EMISSIONS SUMMARY FOR CRITERIA POLLUTANTS
MEDICAL – DENTAL CLINIC ENVIRONMENTAL ASSESSMENT
SCHRIEVER AIR FORCE BASE, COLORADO

	Emissions [a/]				
Emission Source	CO (tpy)[b/]	VOCs (tpy)	SO_x (tpy)	NO_x (tpy)	PM_{10} (tpy)
Stationary Sources [c/]	13.9 (30)	10.10 (20)	0.43 (30)	31.8 (90)	3.88 (5.5)

Sources: URS Radian, 2000; USAF, 1995.

[a/] CO = carbon monoxide; VOCs = volatile organic compounds; SO_x = sulfur oxides; NO_x = nitrogen oxides; PM_{10} = particulate matter less than 10 microns in diameter.

[b/] tpy = tons per year.

[c/] Values in parentheses are the basewide stationary-source emissions limits established in the draft air emissions permit

Air quality regulations apply to construction-related fugitive dust. Fugitive dust emissions from construction projects are considered to be *de minimus* (i.e., emissions that do not reach or exceed major-source thresholds) (Parsons ES, 1999). Contractors are required to obtain a dust-control permit from either El Paso County or the State of Colorado. El Paso County's 1987 air quality regulations require a permit for construction when earthwork disturbs more than 1 acre, but less than 25 acres. A state permit is required if the area of disturbance exceeds 25 acres.

3.1.3 Regional Air Quality

Colorado Springs is in Colorado Air Quality Control Region 4, which includes El Paso, Park, and Teller Counties. Colorado Springs has recently been designated by the Environmental Protection Agency (EPA) as "attainment" for meeting federal National Ambient Air Quality Standards (NAAQS).

The state Air Quality Division has determined that Schriever AFB is not a major source of hazardous air pollutants or criteria pollutants, and that the base qualifies as a synthetic minor source exempt from Title III and Title V of the federal Clean Air Act Amendments of 1990 (USAF, 1995). Fugitive dust emissions from construction projects are considered to be *de minimus* emission rates and would not trigger major source thresholds. The sources of air emissions covered under the synthetic air permit include:

- the consumption of natural gas in the four boilers;
- consumption of diesel fuel in the four boilers;
- consumption of diesel fuel in generators 1-7 in building 600 and generators 8-10 in building 700;
- gasoline refueling of vehicles; and
- diesel fuel storage in the two 700,000 gallon and two 40,000 gallon storage tanks.

Air quality regulations apply to construction-related fugitive dust. Contractors

are required to obtain a dust control permit from El Paso County if a project disturbs up to 25 acres, and from the state if the area of disturbance exceeds 25 acres. El Paso County's 1987 air quality regulations, *Regulations for Fugitive Particulates and Open Burning*, Section 10, requires a permit for construction when earthwork disturbances exceed 1 acre but less than 25 acres.

3.2 Biological Resources

Biological resources include vegetation, wildlife, fish, and threatened and endangered species. There are no aquatic life resources on SAFB because permanent water bodies are absent. The flora and fauna of the site are typical of the short-grass prairie ecosytem as modified by suburban or low-density development common in the eastern Colorado plains.

The land outside the technical and operations area is leased to local ranchers for domestic livestock grazing. Grazing parcels are fenced with three-strand barbed-wire fencing.

3.2.1 Vegetation

The area around Schriever AFB is sparsely vegetated. With a semi-arid climate, sandy soils, and a high wind erosion potential, vegetation is difficult to establish and slow to recover from disturbance. The dominant vegetation community in the undeveloped and semi-improved areas at and around the base is short-grass prairie (grassland), which provides habitat for a variety of insects, reptiles, mammals, and birds. The area being considered for the MDC alternatives consist of mowed grass and a parking lot.

Some of the plant species identified around the proposed sites include blue grama (*Bouteloua gracilis*), western wheatgrass (*Agropyron smithii*), slender wheatgrass (*Agropyron trachycaulum*), three-awn (*Aristida purpurea*), buckwheat (*Eriogonum* sp.), pepper grass (*Lepidium virginicum*), leadplant (*Amprpha canescens*), beardtongue (*Penstemon* sp.), woolly plantain (*Plantago patagonica*), and western ragweed (*Ambrosia psilostachya*).

3.2.2 Wildlife

A number of mammal species, a variety of songbirds and raptors, and several amphibian and reptile species are typical of this shortgrass prairie region of eastern Colorado (Parsons ES, 1997a). Numerous pronghorn antelope (*Antilocapra americana*), thirteen-lined ground squirrel (*Spermophilus tridecemlineatus*), and killdeer (*Charadrius vociferus*) have been observed on SAFB, although none have been observed on the proposed site or the alternative site.

The *Integrated Natural Resource Management Plan* (Parsons ES, 1997a) identifies additional wildlife species that may forage, hunt, or nest in the area at and near the base. These species include silky pocket mouse (*Perognathus flavus*), mourning dove (*Zenaida macroura*), horned lark (*Ermophila alpestris*), western meadowlark (*Sturnella neglecta*), American robin (*Turdus migratorius*), house sparrow (*Passer domesticus*), and bull snake (*Pituophis melanoleucus sayi*). Other species that potentially hunt at the alternative sites include coyote (*Canis latrans*), gray fox (*Urocyon cinereoargenteus*), great horned owl (*Bubo virginisnus*), American kestrel (*Falco sparverius*), prairie falcon (*Falco mexicanus*), northern harrier (*Circus cyaneus*), golden eagle (*Aquila chrysaetos*), and rough-legged hawk (*Buteo lagopus*).

3.2.3 Threatened and Endangered Species

Consultation with the United States Fish and Wildlife Service (USFWS), Colorado Division of Wildlife (CDOW), and Colorado Natural Heritage Program (CNHP) revealed that the base is within the potential distribution range of several threatened and endangered species (Table 3.2). However, there are no records of threatened or endangered species using the proposed or alternative sites, and a site visit did not reveal any evidence of threatened or endangered species using the proposed or alternative sites.

Previous studies and consultation with CDOW and USFWS identified the special-concern species listed in Table 3.2 as potentially occurring at or in the vicinity of Schriever AFB. Appendix A provides copies of the agency consultation letters regarding threatened, endangered, and special-concern species. No critical habitat for species listed as threatened or endangered has been designated at the proposed MDC sites by CDOW or USFWS.

Although the study area is within the historic range of the federally listed endangered black-footed ferret, this species has not been observed within base boundaries. Prairie dogs are the primary prey for the black-footed ferrets. There is no evidence of prairie dogs colonies at the base or in the area of the proposed action alternatives; therefore, ferrets are not expected to inhabit these areas.

The Preble's meadow jumping mouse recently was added to the federal threatened species list (USFWS, 1998). Habitat for the mouse usually is found in floodplains of intermittent streams with dense vegetation. It is unlikely the Preble's meadow jumping mouse would use upland areas such as the MDC alternative sites.

The swift fox is a secretive species that occurs in the general region. It may occasionally use the base and the action alternative sites for foraging. It is unlikely this species dens within 0.25-mile of the roadways. No swift fox dens have been observed on base. It is likely the swift fox would avoid developed areas such as the Falcon Parkway corridor, the area around the OSF construction, or near building 101.

Bald eagles (*Haliaeetus leucocephalus)* and other raptors do not reside in the area, but may be observed as rare, transient migrants. This area does not attract bald eagles permanently because of the lack of prairie dog colonies and bodies of water large enough to support water fowl or fish.

The Swainson's hawk is a prominent nester in the region. The ferruginous hawk also may nest, but is more often observed wintering in the region. Both of these hawks have been observed at the base, but no nests have been reported. The hawks could hunt at the site locations; however, suitable nest sites are not available due to the lack of prairie dog towns. The nearest concentration of a ferruginous hawk population occurs southeast of Pueblo (CDOT, 1998).

The mountain plover was recently proposed for federal listing as a threatened species (USFWS, 1999). This migratory bird prefers short-grass prairie that is heavily grazed by cattle or that supports prairie dog colonies. Short vegetation, bare ground (30 percent), and level topography (less than 5-percent slope) are recognized as habitat defining characteristics for the mountain plover at both breeding and wintering areas. Since the proposed site and alternative are semi-improved and

mowed, or asphalt, it is highly unlikely mountain plovers would nest in these areas. Mountain plovers are philopatric, tending to return each year to nest within several hundred meters of the previous year's nest site; chicks return as adults the following year to nest at their natal areas (USFWS, 1999).

TABLE 3.2
THREATENED, ENDANGERED, AND SPECIAL-CONCERN SPECIES THAT MAY OCCUR IN THE VICINITY OF SAFB [a/]

Common Name	Scientific Name	Federal Status/ State Status [b/]	Potential SAFB Occurrence
Black-footed ferret	*Mustela nigripes*	LE/E	Unlikely
Bald eagle	*Haliaeetus leucocephalus*	LT/T	Rare migrant
Preble's meadow jumping mouse	*Zapus hudsonius preblei*	LE/U	Possible resident
Swift fox	*Vulpes velox*	C/U	Possible resident
Ferruginous hawk	*Buteo regalis*	SC	Possible nesting/ wintering
Swainson's hawk	*Buteo swainsoni*	SC	Nesting
Burrowing owl	*Speotyto cunicularia*	SC	Unlikely
Mountain plover	*Charadrius montanus*	C/SC	Rare migrant/ possible nesting
Long-billed curlew	*Numenius americanus*	SC	Rare migrant
Cassin's sparrow	*Aimophila cassinii*	SC	Suitable habitat not present: presence unlikely
McCowen's longspur	*Calcarius mccownii*	SC	Suitable nesting habitat not present: presence unlikely
Chestnut-collared longspur	*Calcarius ornatus*	SC	Suitable nesting habitat not present: presence unlikely
Lark bunting	*Calamospiza melanocorys*	SC	Suitable habitat is present, species probably present
Colorado butterfly plant	*Gaura neomexicana* ssp. *coloradoensis*	C/U	Unlikely

a/ Sources: Parsons ES, 1997a; Essington, 1997; Gurzick, 1997; and US Fish and Wildlife Service, 1999.
b/ LE = Federal listed endangered: species that are in danger of extinction throughout all or a significant portion of their ranges.
LT = Federal listed threatened: species that are likely to become an endangered species within the foreseeable future throughout all or a significant portion of their range.
P = Proposed for federal listing as endangered
C = Federal candidate species: candidates for formal listing; do not have protected status.
E = State of Colorado listed endangered.
T = State of Colorado listed threatened.
U = Unknown - No state status.
SC = State of Colorado special concern, do not have protected status.

3.3 Cultural Resources

A cultural resource inventory was completed for the entire SAFB in 1992. There are no known archaeological or historical properties on the base eligible for listing on the National Register of Historic Places (NRHP) (Parsons ES, 1997b). All areas surveyed were recommended for cultural clearance (Roybal Corporation, 1992).

If subsurface cultural materials were found during future excavation on SAFB, the Base Historic Preservation Officer (BHPO) would be notified. If the BHPO determined that the materials might be significant, work in the area would be halted until cleared to resume by the State Historic Preservation Officer (SHPO).

3.4 Land Use

Land use on the base is designated as developed, semi-improved and undeveloped. The land within the restricted portion of the base is designated as semi-improved or improved (640 ac.). All of the 3200 acres in the buffer zone is designated as unimproved except for the 10 acres of improved land for warehouse buildings around the Community Activity Center (CAC) and Defense Reutilization and Marketing Office (DRMO). SAFB leases the undeveloped portion of the buffer zone for livestock grazing while conducting its primary military mission.

3.5 Noise

SAFB is located in a rural, sparsely populated setting in which there are few nearby sensitive noise receptors. Normal base operations involve communications and satellite tracking which are not noise generators. Sources of existing noise at SAFB include vehicle traffic, landscaping and lawn care equipment, and activities in the maintenance shops and central power plant. No aircraft operations or facilities are present on the base. All vehicle repair and maintenance is conducted at Peterson AFB.

Noise is most often defined as unwanted sound. The relative magnitude of sound can be measured and quantified in terms of a logarithmic scale in units of decibels (dB).

Human hearing is not equally sensitive to sound at all frequencies. Therefore, a frequency-dependent adjustment called A-weighting has been devised so that sound may be measured in a manner similar to the way human hearing responds. The unit of the A-weighted sound level is abbreviated "dBA." An increase in the noise level by 10 dBA is judged by most people to be approximately twice as loud as the former level. Most people are unable to detect a change in level of three dBA or less, which is equal to normal street traffic noise. A level of 70 dBA is equivalent to a gas lawnmower at 100 feet, and a level of 80 dBA is equivalent to a diesel truck at 50 feet. Levels above 105 are considered extremely loud, and the threshold of sense is generally considered to be above 120 dBA. A military jet aircraft with afterburners at 100 feet would be above 120 dBA. Noise from typical construction equipment varies from a maximum of 76 to 102 dBA at 25 feet (CERL, 1978; USEPA, 1971; and Beranek, 1992). Estimated ambient noise level at SAFB is 40 dBA.

The State of Colorado has established maximum permissible noise levels for construction activities (State of Colorado, 1996). These levels are:

- Not more than 90 dBA 25 feet from the property boundary for more than

15 minutes in any one-hour period, and

Not more than 80 dBA 25 feet from the property boundary for the period 7:00 p.m. and the next 7:00 a.m.

No noise issues would be anticipated from use of the MDC.

3.6 Occupational Safety and Health

Safety hazards associated with the proposed action are defined as those risks associated with construction. Construction safety practices are subject to requirements established by Occupational Safety and Health Administration (OSHA).

3.7 Pollution Prevention

SAFB is designated a small-quantity generator of hazardous waste. All toxic and hazardous wastes are stored at the Central Hazardous Waste Accumulation Facility for 270 days or less. Wastes are transported off base to licensed treatment, storage, and disposal facility. The Schriever Air Force Base HAZMAT emergency planning and response plan establishes procedures and guidance for SAFB personnel to handle hazardous materials, and petroleum products in the event of an accidental discharge, spill, or leak. The plan provides both hazardous materials emergency response information as well as spill prevention, control and countermeasures information (Parsons ES, 1997c).

Hazardous materials (HAZMAT) are also managed through the HAZMART "pharmacy" system which controls the ordering and distribution of HAZMAT. The operation of the HAZMART is a key component to the base having an effective pollution prevention program. Contractors must report HAZMAT usage on SAFB to the HAZMART (AFI 32-7086).

The SAFB fire department comprises the core of the initial response team for any HAZMAT release and they will isolate, evacuate, and deny entry to a hazardous material release. The fire department is equipped to contain and mitigate a spill which does not require the mobilization of more than one entry team or decontamination team and does not require the use of greater than Level B personal protection. In the event of a major accident, the fire department would seek the assistance of the Colorado Springs HAZMAT team. The SAFB fire department has a mutual aid agreement with the Colorado Springs fire department. SAFB personnel would augment the Colorado Springs team to provide fire fighting capabilities, primary and secondary entry teams, decontamination stations and emergency evacuation.

3.8 Socioeconomic Conditions

The work force at SAFB consists of about 4,000 military, US Department of Defense (DoD) civilian and contractor personnel. The population has increased by about 42 percent since 1992 (SAFB, 2000). There is no housing on the base, so all personnel commute. Most commute from Colorado Springs or Peterson AFB. General growth trends for the county reflect continued growth associated with the Colorado Springs area. Growth around the perimeter of the base has been limited and remains agriculture and rural housing. The potential future workforce expansion of the base is considered strong because the base's mission is considered strategically important.

The main access to the base is from the west and north by State Highway (SH) 94

and Enoch Road respectively. Average daily traffic (ADT) counts and level of service (LOS) data from the Colorado Department of Transportation for 1996 on SH-94, and average weekly daily traffic (AWDT) counts from El Paso County Department of Transportation for 1997 on Enoch Road show a traffic volume of 9,600 vehicles on SH 94 and 7,200 vehicles on Enoch Road. The ADT data was converted to AWDT values using a factor of 1.07 (Parsons Transportation Group Inc., 1998). The LOS was rated as E on SH 94 and D on Enoch Road. The LOS characterize a motorists description of such factors as speed and travel time, freedom to maneuver, traffic interruptions, and comfort and convenience. The LOS is given a letter designation from A (best) to F (worst). The road segments evaluated in the analysis were considered as rural two-lane highways, with rolling terrain and 10 percent of daily traffic occurring during the peak hour. Peak traffic volumes on both roads typically occur during the early morning and early evening rush hours as base personnel start and end their work days. The maximum AWDT for each LOS were 8,600 vehicles for level D, 15,800 vehicles for level E, and greater than 15,800 vehicles for level F.

3.9 Soils

The soil at the location of the proposed alternative site is classified as Ascalon sandy loam with slopes ranging from 1 to 3 percent. This soil is well drained with a permeability of 0.6 to 6.0 inches per hour (in/hr) in the top 8 inches, and 0.6 to 2.0 in/hr at a depth of 8 to 30 inches. The soil has moderate engineering limitations due to soil strength, but it is generally well suited for building construction (Larsen, 1981). The erosion and soil blowing hazards are rated as moderate. These soil characteristics require regular monitoring and maintenance to control erosion from stormwater runoff and from high winds that erode unvegetated areas.

3.10 Water Resources

There are no permanent surface water bodies or perennial streams present on SAFB. Several man-made livestock watering ponds and shallow depressions retain standing water on a seasonal or temporary basis. None of the man-made ponds occur at or in the vicinity of the proposed development site.

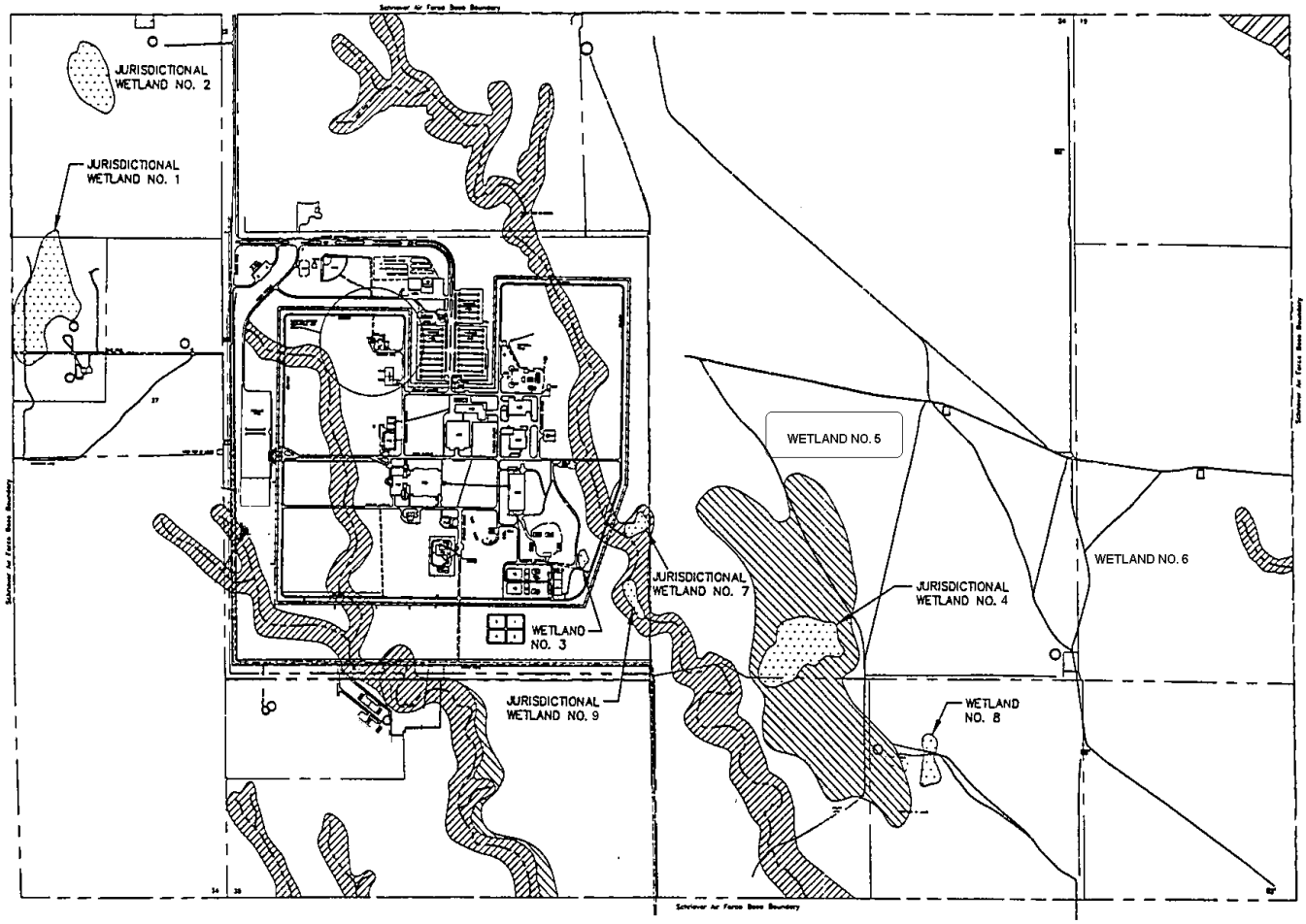
Stream channels on the base are all unnamed and support only intermittent or seasonal flow. Flow is generally from northwest to southeast. The stream channels convey water temporarily during periods of wet weather or after heavy, intense thunderstorms. Stormwater runoff is typically routed to these channels from buildings, roads, and other impermeable areas of the developed portion of the base. A 50-foot-wide buffer zone on each side of the drainage that would be protected from livestock use was identified in the natural resource management plan (Parsons ES, 1997a) as a soil conservation measure to help protect the stream channel and banks from water and wind erosion. This buffer zone would function as a constraint area to development as shown on Figure 3.3. Some of the stream channels in the undeveloped eastern portion of the base have been diked, dammed, or excavated to function as surface runoff collection ponds for watering livestock. Wetlands that have formed in these areas are discussed in Section 3.11.

The Upper Black Squirrel aquifer provides domestic and potable water to SAFB. This aquifer is the primary water supply source for agricultural and municipal users in unincorporated portions of El Paso

County. The shallow aquifer occurs from 25 to 100 feet below the ground surface. SAFB is currently using about 43 percent of its contracted annual amount (about 537 acre-feet per year) of groundwater from this source (Radian Corporation 1996). It was estimated there is adequate water supply available to the base from the Cherokee Metropolitan Water District to support a moderate growth rate. SAFB exceeds contracted daily flow rates approximately once each week during summer months. These exceedances are caused by irrigating landscaping.

3.11 Wetlands

A jurisdictional wetland determination was performed by the U.S. Army Corps of Engineers (1991) for SAFB. Five jurisdictional wetlands (totaling about 14 acres) and four nonjurisdictional wetlands (totaling about 5 acres) were identified by the survey (Figure 3.3). All the jurisdictional wetlands are small and have standing water present on a temporary or seasonal basis. Functions performed by these sites appear to include water quality improvement through sediment retention, groundwater recharge, and limited habitat for some wildlife species (Parsons ES, 1997a**)**. None of the jurisdictional wetlands are at or near the proposed MDC site or the alternative site.



LEGEND

- INSTALLATION BOUNDARY LINE
- OTHER FENCE
- CHAIN LINK FENCE
- GATE
- BUILDINGS AND STRUCTURES
- PROPOSED LOCATION FOR NEW STRUCTURES
- STREETS AND ROADS- UNPAVED
- STOCK TANK
- WATER WELL
- WETLAND
- STREAM BUFFER ZONE
- 100 YEAR FLOODPLAIN
- SOIL WITH MODERATE TO SEVERE BUILDING SITE CONSTRAINTS

Figure 3.3

Natural Resources Constraint Map

Environmental Assessment for Medical – Dental Clinic

SECTION 4
ENVIRONMENTAL CONSEQUENCES

Potential environmental consequences of the three alternatives are described in this section. Environmental consequences are analyzed for each relevant resource area described in Section 3. Short-term and long-term effects are described during and after construction, as well as cumulative effects of the proposed action and alternatives. For each resource, a definition is provided under no action for the type and magnitude of environmental change that would be considered a major impact. All alternatives were evaluated with the same evaluation criteria. Potential impacts are identified and mitigation measures are discussed as appropriate.

4.1 Proposed Action

The proposed action would entail constructing a medical – dental clinic (MDC) on semi-improved land west of the Operational Support Facility (OSF). The MDC would provide medical and dental care for active duty military personnel.

4.1.1 Air Quality

Local air quality conformance with national standards is overseen by the PPACG through the State Implementation Plan (SIP). Effects to air quality would be considered significant impacts if air emissions:

- Exceeded limitations established in the SIP; or
- Caused or contributed to any new violation of any standard.

Construction. Particulate matter, both in the form of visible dust and PM_{10}, would become entrained in the air during the construction phase of the project. In addition to particulates, other criteria pollutants would be emitted during construction due to construction vehicle operation and contractor work force commuting.

Fugitive dust would be expected for a short term from construction disturbance of the 5-acre site. The EPA estimated that uncontrolled fugitive dust from ground-disturbing activities would result in 55 pounds of PM_{10} per acre per day. Therefore, construction of the MDC could produce up to 275 pounds of PM_{10} from uncontrolled fugitive dust per day. Dust emissions would vary substantially from day to day, depending on the level of activity, the specific type of construction operations, and the prevailing weather.

An El Paso County dust-control permit would be required for construction of the proposed action and alternatives because ground disturbing activities would affect more than one acre. The county permit requires best management practices (e.g., application of water on disturbed ground surfaces, observation of restricted speed limits in disturbed areas, restriction of earthwork during high wind periods, and various other requirements) to mitigate generation of fugitive dust. Implementing the mitigating measures can reduce fugitive dust emission by 50 percent or more (United States Environmental Protection Agency, 1985). Fugitive dust emissions would be *de minimus* for PM_{10} under state air quality regulations.

Activities associated with the construction of the MDC would not have a significant impact on the area's air quality because of the short timeframe and relatively small project size. Therefore, there are no significant short or long-term air

quality impacts associated with the construction of the proposed action and an air conformity analysis would not be required.

Facility Operations. The users for the MDC will be active duty military assigned to SAFB. It is expected they will walk from their duty location to the MDC for appointments. There would be approximately 16 medical – dental personnel working at the facility. Currently, there are 7 personnel assigned to SAFB, therefor there will be 9 additional personnel requiring additional vehicle trips. Calculations from the additional trips indicated levels of CO generated from the trips would be well under *de minimus* thresholds. There would be fewer vehicle trips required to Peterson AFB and the USAF Academy hospital for routine medical appointments. No significant adverse effects on regional air quality are anticipated from this usage.

The operation of a natural gas heating system and an air conditioning unit at the MDC (a stationary emissions source) would not cause an exceedance of NAAQS. The HVAC systems will be designed to meet all state and federal emissions regulations. Because emissions of criteria pollutants are expected to be low, and because current stationary source emissions are well below limits established for the base (see Table 3.1), activities associated with the completed MDC will not have a significant impact on air quality. Therefore, there are no significant short- or long-term air quality impacts associated with the proposed alternative, and operation of the MDC would not require an air conformity analysis.

4.1.2 Biological Resources

An effect to biological resources would be considered an impact if one or more of the following conditions occurred.

- The project "may affect" federally-listed or proposed for listing as threatened or endangered plant or animal species or their designated critical habitat.
- The project would degrade the habitat or result in the loss of rare or special-interest plant or animal species; or
- The project would cause the loss of the only example of a biological community type present on base.

4.1.2.1 Vegetation

The site for the proposed action is sparsely vegetated. The dominant vegetation community in the action alternative locations is semi-improved land, which is mowed, and an asphalt parking lot. Construction of the proposed action would result in the conversion of 5-acres of grass to impervious surfaces and landscaped areas. The acres being converted are not considered of special interest to federal, state, or public resource protection and management organizations. There would be no significant impacts associated with the proposed action on local vegetation communities.

4.1.2.2 Wildlife

No significant impacts on wildlife would occur as a result of the proposed action or alternatives. The remaining buffer zone around the secure area of the base has more suitable habitat than the proposed action site, therefore, impacts on wildlife attributes would be minimal.

4.1.2.3 Threatened and Endangered Species

The project site does not occur in areas known or likely to be used by the currently protected threatened or endangered species listed in Table 3.2. There are no unique or special-interest biological communities present that could be affected. Therefore, it would be unlikely the proposed action would significantly affect current SAFB biodiversity conditions.

4.1.3 Cultural Resources

An effect to cultural resources would be considered an impact if one or more of the following conditions occurred:

- The project caused the loss of or substantial change in a cultural resource or site listed on the NRHP; or
- The project caused the loss of or substantial change in a cultural resource or site eligible for listing on the NRHP.

The proposed action would not produce direct or indirect impacts to cultural resources listed or eligible for listing on the NRHP because such resources are not present on SAFB.

4.1.4 Land Use

A change in land use would be considered an impact under any of the following conditions of change:

- Nonconformance with SAFB land use plans;
- Conversion of prime agriculture land or land of statewide importance to other uses; or
- Conflicts with environmental goals and USAF regulations.

The proposed action would result in the development of approximately 5-acres semi-improved land on SAFB. No prime agricultural land or land of statewide importance occurs on SAFB. Therefore, these resources would not be affected by construction of a MDC. There would be no significant impact on land use under the proposed action.

4.1.5 Noise

A noise effect would be considered an impact if it:

- Caused physical damage to a human ear, or permanent hearing loss;
- Exceeded the State of Colorado maximum permissible noise levels; or
- Substantially increased the ambient noise levels for adjoining areas with noise-sensitive receptors.

The proposed action would not increase long-term ambient noise levels above existing conditions, or effect noise sensitive receptors during sensitive time periods between 7:00 p.m. and 7:00 a.m. the next morning.

Short-term effects during the construction period may be caused by construction equipment. Typical construction equipment such as cranes, cement trucks, graders, and semi-trucks produce maximum noise levels of 73 to 102 dBA at a distance of 25 feet (CERL, 1978; USEPA, 1971; and Beranek, 1992). The proposed site is located in the developed area of the base. No residential or commercial activities are located near the site. Noise would not exceed state of Colorado maximum permissible levels beyond the property boundary.

4.1.6 Occupational Safety and Health

An action would be considered to have a significant impact if it:

- Created an unsafe working environment; or
- Violated NFPA Standard 1500.

No short-term or long-term adverse safety and health affects are expected from construction and operation of the MDC. OSHA regulations pertaining to construction and operations would be followed.

4.1.7 Pollution Prevention

The pollution-prevention effects of an alternative would be considered an impact if it resulted in:

- Release of a regulated waste;
- Noncompliance with applicable Pollution Prevention Management Action Plan (P_2MAP) and HAZMAT plan; or
- Amounts of generated waste that exceeded available waste management capacities.

Pollution generating activities associated with the proposed action would occur during facility construction and operation. These activities would not cause a release of a regulated waste, exceed available waste handling capacity or not conform with the P_2MAP. Construction debris would be considered solid waste and would be disposed in the county landfill.

Infectious waste may be generated during operation of the proposed facility. Infectious waste would be stored, packaged, contained in a manner that prevents release of waste material and in a manner such that nuisance conditions would not occur. Infectious wastes generated at Peterson AFB and the Air Force Academy are disposed of through a contract with their waste disposal contractor. Infectious wastes generated at Schriever AFB from the operation of the proposed action would, similarly, be disposed of through the waste disposal contractor. Any hazardous waste generated from the operation of the proposed facility would be managed through the hazardous waste program currently in existence at Schriever AFB.

4.1.8 Socioeconomic Conditions

A socioeconomic change would be considered an impact if it resulted in:

- Substantial changes in the local population or work force;
- The need for substantial increase in utilities or service; or
- An increase in transportation that would change the LOS or require extensive construction of road improvements.

The proposed action would have a very limited effect on socioeconomic conditions at SAFB. Constructing the proposed facility would result in a positive benefit from jobs and revenue generated during building construction. However the magnitude of effects would be localized and short-term because the complexity of the construction project is limited and would be completed in a year or less. Once constructed, the MDC would generate a nominal increase in the workforce and traffic because the MDC staffing requirements would require nine additional medical – dental personnel to be assigned to SAFB. Military personnel already assigned to the base would be personnel eligible to receive health care.

4.1.9 Soils

A change in soil conditions would be considered an impact if it:

- Causes sedimentation in wetlands and permanent surface waters;
- Results in loss of prime, unique, or state-important farmlands; or

- Results in the loss of land use due to soil erosion or steep slopes.

The proposed action would result in shallow soil alterations of approximately 5-acres. It is possible that pockets of unstable soil are present at the action alternative sites. If such soils are encountered during construction, the affected soil volume should be over-excavated and replaced with structural fill. After the revegetated areas in the proposed action became established, erosion and uncontrolled precipitation runoff would be minimal over a majority of the site, resulting in a beneficial long-term impact on soils through stabilization and a reduced potential for erosion.

Standard construction practices and El Paso County dust-control permits require implementation of short-term mitigation measures, such as application of water to disturbed surface areas, observation of restricted speed limits in disturbed areas, restricting earthwork during high-wind periods, and various other measures to minimize wind erosion and control runoff during construction. Implementation of these practices would ensure that soil erosion due to the proposed action is minimized.

4.1.10 Water Resources

Changes in either surface water or groundwater conditions would be considered an impact on water resources if they:

- Result in degradation of surface water or groundwater quality such that an existing use would be impaired, a designated use could not be achieved, or new or additional violations of water quality standards occurred; or
- Cause a shortage in the SAFB's or adjacent landowners water supply systems under existing water rights.

This alternative would not cause or create changes in the existing groundwater or surface water conditions or uses at SAFB. Currently, there are no surface bodies present that would be degraded by practices associated with this alternative. Stormwater runoff generated by increased impervious surfaces is expected to infiltrate into the soil and would not be received by permanent streams, ponds, or wetlands. Thus, there would be no impacts to existing water quality standards. Therefore, there would be no direct or indirect impacts to water resources from this alternative.

A Construction Storm Water Discharge Permit (NPDES permit) would be required for the construction of this alternative. A permit must be obtained from CDPHE, Water Quality Division, prior to the start of construction activities, if more than 1 acres of land are disturbed. Since construction of the MDC would result in the disturbance of more than 1 acres, a NPDES permit would be required. Standard construction practices, such as using silt fences, would be used to control the runoff from the site.

4.1.11 Wetlands

Changes in jurisdictional wetlands would be considered an impact if they:

- Result in the permanent loss of wetland areas because of filling or excavation activities or because of substantial and permanent change in surface water or groundwater hydrology; or
- Result in the loss or substantial change in existing functions being provided by the existing wetlands.

The proposed action would not result in any direct or indirect physical or hydrological changes to existing jurisdictional wetlands. This alternative would not produce changes in current wetland functions or hydrologic regimes. Thus, there would be no direct or indirect wetland impacts associated with this alternative.

4.1.12 Cumulative Effects

Cumulative effects associated with the proposed action include an incremental increase in impervious land and stormwater runoff from the impervious surface. These cumulative effects would not have a significant adverse impact on the environment.

4.1.13 Irreversible and Irretrievable Commitment of Resources

There would be an irretrievable commitment of materials, energy, fuel, and labor utilized during construction activities associated with this alternative. Building and construction equipment wear (i.e., depreciation) also would be irreversible. The irretrievable resources to be committed are typical for the scale of the proposed project. Implementation of best construction management practices, standard equipment maintenance schedules, and use of energy conservation and recycling measures during building operation would minimize the use of irretrievable resources. At the end of the useful life of the facility, it is expected that some building materials (e.g., asphalt and concrete, scrap metal, and fixtures) could be retrieved for recycling and reuse.

4.1.14 Environmental Justice

Executive Order (EO) 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*, was issued on 11 Feb 94. The EO requires federal agencies to identify and address, as appropriate, disproportionately high and adverse human health or environmental effects of their programs, policies, and activities on minority and low-income populations.

- An adverse impact would have a deleterious effect on human health or the environment that is significant, unacceptable, or above generally accepted norms.

No adverse impacts would be borne by human populations; therefore, this alternative would not have an adverse impact upon minority populations and/or low-income populations.

4.2 Alternative 2 – Construct the MDC West of Building 101

Alternative 2 would entail constructing a medical – dental clinic (MDC) on an existing parking lot west of the building 101, which is occupied by SAFB Security Forces. The MDC would provide medical and dental care for active duty military personnel.

4.2.1 Air Quality

Local air quality conformance with national standards is overseen by the PPACG through the State Implementation Plan (SIP). Effects to air quality would be considered significant impacts if air emissions:

- Exceeded limitations established in the SIP; or
- Caused or contributed to any new violation of any standard.

Construction. Particulate matter, both in the form of visible dust and PM_{10}, would become entrained in the air during the construction phase of the project. In addition to particulates, other criteria pollutants would be emitted during construction due

to construction vehicle operation and contractor work force commuting.

Fugitive dust would be expected for a short term from construction disturbance of the 5-acre site. The EPA estimated that uncontrolled fugitive dust from ground-disturbing activities would result in 55 pounds of PM_{10} per acre per day. Therefore, construction of the MDC could produce up to 275 pounds of PM_{10} from uncontrolled fugitive dust per day. Dust emissions would vary substantially from day to day, depending on the level of activity, the specific type of construction operations, and the prevailing weather.

An El Paso County dust-control permit would be required for construction of the proposed action and alternatives because ground disturbing activities would affect more than one acre. The county permit requires best management practices (e.g., application of water on disturbed ground surfaces, observation of restricted speed limits in disturbed areas, restriction of earthwork during high wind periods, and various other requirements) to mitigate generation of fugitive dust. Implementing the mitigating measures can reduce fugitive dust emission by 50 percent or more (USEPA, 1985). Fugitive dust emissions would be *de minimus* for PM_{10} under state air quality regulations.

Activities associated with the construction of the MDC would not have a significant impact on the area's air quality because of the short timeframe and relatively small project size. Therefore, there are no significant short- or long-term air quality impacts associated with the construction of the proposed action and an air conformity analysis would not be required.

Facility Operations. The users for the MDC will be active duty military assigned to SAFB. It is expected they will walk from their duty location to the MDC for appointments. There would be approximately 16 medical – dental personnel working at the facility. Currently, there are 7 personnel assigned to SAFB, therefor there will be 9 additional personnel requiring additional vehicle trips. Calculations from the additional trips indicated levels of CO generated from the trips would be well under *de minimus* thresholds. There would be fewer vehicle trips required to Peterson AFB and the USAF Academy hospital for routine medical appointments. No significant adverse effects on regional air quality are anticipated from this usage.

The operation of a natural gas heating system and an air conditioning unit at the MDC (a stationary emissions source) would not cause an exceedance of NAAQS. The HVAC systems will be designed to meet all state and federal emissions regulations. Because emissions of criteria pollutants are expected to be low, and because current stationary source emissions are well below limits established for the base (see Table 3.1), activities associated with the completed MDC will not have a significant impact on air quality. Therefore, there are no significant short- or long-term air quality impacts associated with the proposed alternative, and operation of the MDC would not require an air conformity analysis.

4.2.2 Biological Resources

An effect to biological resources would be considered an impact if one or more of the following conditions occurred.

- The project "may affect" federally-listed or proposed for listing as threatened or endangered plant or animal species or their designated critical habitat.

- The project would degrade the habitat or result in the loss of rare or special-interest plant or animal species; or
- The project would cause the loss of the only example of a biological community type present on base.

4.2.2.1 Vegetation

The site for alternative 2 is an asphalt parking lot. There would be no significant impacts associated with alternative 2 on local vegetation communities.

4.2.2.2 Wildlife

No significant impacts on wildlife would occur as a result of the alternative.

4.2.2.3 Threatened and Endangered Species

The project site does not occur in areas known or likely to be used by the currently protected threatened or endangered species listed in Table 3.2. There are no unique or special-interest biological communities present that could be affected. Therefore, it would be unlikely the proposed action would significantly affect current SAFB biodiversity conditions.

4.2.3 Cultural Resources

An effect to cultural resources would be considered an impact if one or more of the following conditions occurred:

- The project caused the loss of or substantial change in a cultural resource or site listed on the NRHP; or
- The project caused the loss of or substantial change in a cultural resource or site eligible for listing on the NRHP.

Alternative 2 would not produce direct or indirect impacts to cultural resources listed or eligible for listing on the NRHP because such resources are not present on SAFB.

4.2.4 Land Use

A change in land use would be considered an impact under any of the following conditions of change:

- Nonconformance with SAFB land use plans;
- Conversion of prime agriculture land or land of statewide importance to other uses; or
- Conflicts with environmental goals and USAF regulations.

Alternative 2 would result in the conversion of existing parking area to a building. No prime agricultural land or land of statewide importance occurs on SAFB. Therefore, these resources would not be affected by construction of a MDC. There would be a loss of available parking, however, there would be no significant impact on land use under this alternative.

4.2.5 Noise

A noise effect would be considered an impact if it:

- Caused physical damage to a human ear, or permanent hearing loss;
- Exceeded the State of Colorado maximum permissible noise levels; or
- Substantially increased the ambient noise levels for adjoining areas with noise-sensitive receptors.

Alternative 2 would not increase long-term ambient noise levels above existing conditions, or effect noise sensitive receptors during sensitive time periods between 7:00 p.m. and 7:00 a.m. the next morning.

Short-term effects during the construction period may be caused by construction equipment. Typical construction equipment such as cranes, cement trucks, graders, and semi-trucks produce maximum noise levels of 73 to 102 dBA at a distance of 25 feet (CERL, 1978; EPA, 1971; and Beranek, 1992). The alternative 2 site is located outside the secure area of the base in an existing asphalt parking area. No residential or commercial activities are located near the site. Noise would not exceed state of Colorado maximum permissible levels beyond the property boundary.

4.2.6 Occupational Safety and Health

An action would be considered to have a significant impact if it:

- Created an unsafe training environment; or
- Violated NFPA Standard 1500.

No short-term or long-term adverse safety and health affects are expected from construction and operation of the MDC. OSHA regulations pertaining to construction and operations would be followed.

4.2.7 Pollution Prevention

The pollution-prevention effects of an alternative would be considered an impact if it resulted in:

- Release of a regulated waste;
- Noncompliance with applicable Pollution Prevention Management Action Plan (P_2MAP) and HAZMAT plan; or
- Amounts of generated waste that exceeded available waste management capacities.

Pollution generating activities associated with alternative 2 would occur during facility construction and operation. These activities would not cause a release of a regulated waste, exceed available waste handling capacity or not conform with the P_2MAP. Construction debris would be considered solid waste and would be disposed in the county landfill.

Infectious waste may be generated during operation of alternative 2. Infectious waste would be stored, packaged, contained in a manner that prevents release of waste material and in a manner such that nuisance conditions would not occur. Infectious wastes generated at Peterson AFB and the Air Force Academy are disposed of through a contract with their waste disposal contractor. Infectious wastes generated at Schriever AFB from the operation of alternative 2 would, similarly, be disposed of through the waste disposal contractor. Any hazardous waste generated from the operation of alternative 2 would be managed through the hazardous waste program currently in existence at Schriever AFB.

4.2.8 Socioeconomic Conditions

A socioeconomic change would be considered an impact if it resulted in:

- Substantial changes in the local population or work force;
- The need for substantial increase in utilities or service; or
- An increase in transportation that would change the LOS or require extensive construction of road improvements.

The proposed action would have a very limited effect on socioeconomic conditions at SAFB. Constructing the proposed facility would result in a positive benefit from jobs and revenue generated during building construction. However the magnitude of effects would be localized and short-term

because the complexity of the construction project is limited and would be completed in a year or less. Once constructed, the MDC would generate a nominal increase in the workforce and traffic because the MDC staffing requirements would require nine additional medical – dental personnel to be assigned to SAFB. Military personnel already assigned to the base would be personnel eligible to receive health care.

4.2.9 Soils

A change in soil conditions would be considered an impact if it:

- Causes sedimentation in wetlands and permanent surface waters;
- Results in loss of prime, unique, or state-important farmlands; or
- Results in the loss of land use due to soil erosion or steep slopes.

Construction of this alternative would result in shallow soil alterations of approximately 5 acres. It is possible that pockets of unstable soil are present at the action alternative sites. If such soils are encountered during construction, the affected soil volume should be over-excavated and replaced with structural fill.

Standard construction practices and El Paso County dust-control permits require implementation of short-term mitigation measures, such as application of water to disturbed surface areas, observation of restricted speed limits in disturbed areas, restricting earthwork during high-wind periods, and various other measures to minimize wind erosion and control runoff during construction. Implementation of these practices would ensure that soil erosion due to the alternative is minimized.

4.2.10 Water Resources

Changes in either surface water or groundwater conditions would be considered an impact on water resources if they:

- Result in degradation of surface water or groundwater quality such that an existing use would be impaired, a designated use could not be achieved, or new or additional violations of water quality standards occurred; or
- Cause a shortage in the SAFB's or adjacent landowners water supply systems under existing water rights.

This alternative would not cause or create changes in the existing groundwater or surface water conditions or uses at SAFB. Currently, there are no surface bodies present that would be degraded by practices associated with this alternative. Stormwater runoff is expected to infiltrate into the soil and would not be received by permanent streams, ponds, or wetlands. Thus, there would be no impacts to existing water quality standards. Consequently, there would be no direct or indirect impacts to water resources from this alternative.

A Construction Storm Water Discharge Permit (NPDES permit) would be required for the construction of this alternative. A permit must be obtained from CDPHE, Water Quality Division, prior to the start of construction activities, if more than 1 acres of land are disturbed. Since construction of the MDC would result in the disturbance of more than 1 acres, a NPDES permit would be required. Standard construction practices, such as using silt fences, would be used to control the runoff from the site.

4.2.11 Wetlands

Changes in jurisdictional wetlands would be considered an impact if they:

- Result in the permanent loss of wetland areas because of filling or excavation activities or because of substantial and permanent change in surface water or groundwater hydrology; or
- Result in the loss or substantial change in existing functions being provided by the existing wetlands.

Alternative 2 would not result in any direct or indirect physical or hydrological changes to existing jurisdictional wetlands. This alternative would not produce changes in current wetland functions or hydrologic regimes. Thus, there would be no direct or indirect wetland impacts associated with this alternative.

4.2.12 Cumulative Effects

Cumulative effects associated with this alternative include a decrease in available parking at SAFB. These cumulative effects would not have a significant adverse impact on the environment.

4.2.13 Irreversible and Irretrievable Commitment of Resources

There would be an irretrievable commitment of materials, energy, fuel, and labor utilized during construction activities associated with this alternative. Building and construction equipment wear (i.e., depreciation) also would be irreversible. The irretrievable resources to be committed are typical for the scale of the proposed project. Implementation of best construction management practices, standard equipment maintenance schedules, and use of energy conservation and recycling measures during building operation would minimize the use of irretrievable resources. At the end of the useful life of the facility, it is expected that some building materials (e.g., asphalt and concrete, scrap metal, and fixtures) could be retrieved for recycling and reuse.

4.2.14 Environmental Justice

Executive Order (EO) 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*, was issued on 11 Feb 94. The EO requires federal agencies to identify and address, as appropriate, disproportionately high and adverse human health or environmental effects of their programs, policies, and activities on minority and low-income populations.

- An adverse impact would have a deleterious effect on human health or the environment that is significant, unacceptable, or above generally accepted norms.

No adverse impacts would be borne by human populations; therefore, this alternative would not have an adverse impact upon minority populations and/or low-income populations.

4.3 No Action

The medical – dental clinic (MDC) would not be constructed at Schriever AFB. Personnel would continue to be required to travel to Peterson AFB or the USAF Academy hospital for routine medical care. There would continue to be difficulties and hardships imposed on the military workforce at SAFB.

4.3.1 Air Quality

There would be no change in air quality under the no action alternative.

4.3.2 Biological Resources

There would be no adverse impacts on biological resources from this alternative.

4.3.3 Cultural Resources

Direct or indirect impacts to cultural resources would not occur because of the no action alternative.

4.3.4 Land Use

There would be no direct or indirect land use impacts associated with the no action alternative.

4.3.5 Noise

The no action alternative would not change existing noise conditions. New construction and associated equipment would not be required. Sources of loud or extreme noise would not be created. There would be no direct or indirect noise impacts caused by this alternative.

4.3.6 Occupational Safety and Health

The no action alternative would continue existing practices and safety measures required under OSHA and NFPA Standard 1500.

4.3.7 Pollution Prevention

SAFB has developed and implemented a comprehensive set of effective pollution prevention and control programs. These programs have contributed to the small quantities of wastes being generated by present practices.

4.3.8 Socioeconomic Conditions

The no action alternative would not result in any change in work force, utilities, or service.

4.3.9 Soils

The no action alternative would not create or produce changes in existing soil conditions. A new facility would not be constructed that would disturb the soil.

4.3.10 Water Resources

This alternative would not cause or create changes in the existing groundwater or surface water conditions or uses at SAFB. Currently, there are no surface water bodies present that are degraded by existing practices associated with this alternative. Groundwater consumption and use are currently well within legally authorized quantities. Thus, there would be no direct or indirect impacts to water resources with this alternative.

4.3.11 Wetlands

The no action alternative would not result in any changes to existing jurisdictional wetlands. This alternative would not produce changes in current functions being performed at existing wetlands. Thus, there would be no direct or indirect wetland impacts associated with this alternative.

4.3.12 Cumulative Effects

There would be no significant cumulative effects associated with the no action alternative.

4.3.13 Irreversible and Irretrievable Commitment of Resources

There would be an irretrievable commitment of materials, energy, fuel, and labor utilized to transport personnel to either Peterson AFB or the USAF Academy hospital for routine medical appointments.

4.3.14 Environmental Justice

This alternative would not have an adverse impact upon minority populations and/or low-income populations.

4.4 Summary

A summary of effects for each alternative is provided in Table 4.1. These de-

terminations support a FONSI for the proposed action (Alternative 1).

TABLE 4.1
ENVIRONMENTAL IMPACT SUMMARY

Resource	Alternative 1 Proposed Action	Alternative 2 Construct West of Building 101	Alternative 3 No Action
Air Quality	Fugitive dust and CO emissions during construction are *de minimus*.	Fugitive dust and CO emissions during construction are *de minimus*	No change in current conditions
Biological Resources	Conversion of semi-improved land would not effect wildlife, threatened or endangered species.	Conversion of asphalt parking area would not effect wildlife, threatened or endangered species.	No changes in onsite habitat and no effects to threatened or endangered species.
Cultural Resources	No cultural resources are known to occur on SAFB.	No cultural resources are known to occur on SAFB.	No cultural resources are known to occur on SAFB.
Land Use	Slight increase in developed land. No prime farmland or state-important farmland is present.	Slight change in developed land. No prime farmland or state-important farmland is present.	No change in current conditions.
Noise	Temporary local construction noise increases; no effect to noise sensitive receptors. Noise during construction would not exceed permissible levels at property boundary.	Temporary local construction noise increases; no effect to noise sensitive receptors. Noise during construction would not exceed permissible levels at property boundary.	No change in current conditions.
Occupational Safety and Health	No short-term or long-term adverse safety and health effects are expected.	No short-term or long-term adverse safety and health effects are expected.	No impact.
Pollution Prevention	Negligible hazardous materials generated during construction.	Negligible hazardous materials generated during construction.	No effect on pollution prevention opportunities.
Socioeconomic Conditions	Short term benefit from construction jobs. No significant long-term change in SAFB work force, utilities service, or transportation	Short term benefit from construction jobs. No significant long-term change in SAFB work force, utilities service, or transportation	No changes in current conditions.
Soils	Water is expected to infiltrate into soils.	Water is expected to infiltrate into soils.	No changes in current conditions.
Water Resources	No changes in current conditions.	No changes in current conditions.	No changes in current conditions.
Cumulative Effects	Incremental increase in developed land, impervious surface and stormwater runoff.	Incremental increase in developed land, impervious surface and stormwater runoff.	No changes in current conditions.
Irreversible and Irretrievable Commitment of Resources	Irretrievable commitment of materials, energy, fuel, and labor utilized during construction activities.	Irretrievable commitment of materials, energy, fuel, and labor utilized during construction activities.	No additional commitment of materials, energy, fuel, and labor utilized.

Resource	Alternative 1 Proposed Action	Alternative 2 Construct West of Building 101	Alternative 3 No Action
Wetlands	No risk or threat to wetlands.	No wetlands affected.	No wetlands affected.
Environmental Justice	This alternative would not have an adverse impact upon minority populations and/or low-income populations.	This alternative would not have an adverse impact upon minority populations and/or low-income populations.	This alternative would not have an adverse impact upon minority populations and/or low-income populations.

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SECTION 5
REGULATORY REVIEW AND PERMIT REQUIREMENTS

This section lists the relevant laws pertaining to the alternatives and addresses regulatory review and permit requirements.

5.1 Relevant Federal, State, and Local Statutes, Regulations, and Guidelines

5.1.1 Federal Regulations

Regulations implementing NEPA are detailed in 40 Code of Federal Regulations (CFR) Parts 1500-1508, 32 CFR Part 989, and AFI 32-7061. In addition to the requirements of NEPA, other federal requirements are considered in the preparation of an EA. These regulations comprise an important subset of the NEPA process. Environmental laws, with which the proposed action must comply, either directly or indirectly, are described below.

5.1.1.1 Clean Air Act of 1970, 42 U.S.C. §7401 *et seq*.

The Clean Air Act (CAA) of 1970 is a broad federal statute that established NAAQS and set emission limits for certain air pollutants from specific sources. Major provisions of the act are intended to set a goal for cleaner air by setting NAAQS.

A few pertinent sections of the CAA are Section 109 and Section 176 (c). Section 109 set standards for the following "criteria" pollutants: PM_{10}, sulfur dioxide (SO_2), CO, ozone (O_3), nitrogen dioxide (NO_2), and lead (Pb). Section 176(c) of the CAA established a conformity requirement for federal agencies in which all EIAP documents must address applicable conformity requirements and the status of compliance (40 CFR Part 93, Subpart B).

The CAA requires states to develop and submit a SIP for achieving NAAQS within each state. The SIP must establish state air quality control regions and specify emission limits, schedules, and timetables for compliance from both stationary and mobile sources. The CAA requires federal facilities to comply with state air pollution requirements. Executive Order (EO) 12088 directs federal agency compliance. DoD Instruction 4120.14 implements EO 12088 for the USAF.

The Colorado Springs area has recently been designated by the EPA as being in attainment for meeting federal NAAQS for CO.

5.1.1.2 Clean Water Act of 1987, 33 U.S.C. §1251 *et seq.*

The Federal Water Pollution Control Act (FWPCA) of 1972, as amended by the Clean Water Act of 1987 and the Water Quality Act of 1987, forms the legal framework to support maintenance and restoration of water quality, and also addresses wetlands. The FWPCA established the National Pollutant Discharge Elimination System (NPDES) as the regulatory mechanism to achieve water quality goals by regulating pollutant discharge to navigable streams, rivers, and lakes.

Implementing regulations are detailed in 40 CFR, Subchapters D and N. Executive Order 12088, Federal Compliance with Pollution Standards, directs federal facility compliance. The proposed site locations were evaluated for impacts to wetlands. No industrial activities are conducted at SAFB and they are therefore exempt from stormwater permit requirements. In a letter dated 28 March 1995

from the EPA, it was confirmed that no Federal Stormwater Permit was required.

5.1.1.3 Endangered Species Act of 1973, amended 1982 and 1987, 16 U.S.C. §1531-1542.

The Endangered Species Act (ESA) of 1973, as amended in 1982 and 1987, is intended to prevent the further decline of endangered and threatened plant and animal species and to help in the restoration of populations of these species and their habitats. The act, jointly administered by the Department of Commerce and the Department of the Interior, requires that each federal agency consult with the USFWS to determine whether endangered or threatened species are known to exist or have critical habitats on or in the vicinity of the site of a proposed action.

Sections relevant to this EA include Section 7(c) and Section 9(a). Section 7(c) of the ESA authorizes the USFWS to review proposed major federal actions to assess potential impacts on listed species. In accordance with Section 7(c) of the ESA, the USAF, in consultation with the USFWS, must identify potential species in areas of concern. Section 9(a) of the ESA prohibits "take" of individuals of endangered species. "Take," as defined by the act, means "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct." Habitat modification can be considered "take" if death or injury of a listed wildlife species occurs from removing essential habitat components or impairing behavior patterns, such as breeding, feeding, or sheltering. The absence of effects to endangered species and their habitats were verified through consultation with the USFWS and CDOW.

5.1.1.4 Farmland Protection Policy Act of 1981 7 U.S.C. §4201 *et seq*.

The Farmland Protection Policy Act of 1981 is intended "to minimize the extent to which federal programs contribute to the unnecessary and irreversible conversion of farmland to nonagricultural uses, and to assure that federal programs are administered in a manner that, to the extent practicable, will be compatible with state, units of local government, and private programs to protect farmland." Prime farmland and state important farmland were evaluated under land use in this EA.

5.1.1.5 National Historic Preservation Act of 1966, 16 U.S.C. §470-470t.

The National Historic Preservation Act (NHPA) of 1966, as amended, establishes historic preservation as a national policy and defines it as the protection, rehabilitation, restoration, and reconstruction of districts, sites, buildings, structures, and objects significant in American history, architecture, archaeology, or engineering. It also expands the National Register of Historic Places (NRHP) (36 CFR 60) to include resources of state and local significance and establishes the Advisory Council on Historic Preservation (ACHP).

NHPA Section 106, implemented by regulations issued by the ACHP (36 CFR 800), requires federal agencies to consult with the SHPO regarding impacts that a proposed action may have on cultural resources.

A cultural resource survey was conducted in 1992 at SAFB. None of the cultural resources evaluated were determined as significant, based on the eligibility criteria of the NRHP. A cultural clearance was approved by the SHPO.

5.1.1.6 Noise Control Act of 1972, 42 U.S.C. §4901 *et seq*.

The Noise Control Act of 1972 establishes that federal agencies, when engaged in an activity resulting in the emission of noise, should comply with federal, state, interstate, and local requirements respecting control and abatement of environmental noise to the same extent as private entities. The principles involved are applicable to activities that produce sufficient noise to result in incompatible land uses in the surrounding community (40 CFR 209). In 1978, the Noise Control Act was amended by the Quiet Communities Act. This amendment provides for greater involvement by state and local authorities in controlling noise and provides for the development and implementation of a national noise environmental assessment program. These regulations were considered in making the noise impact determination associated with the proposed action.

5.1.1.7 Occupational Safety and Health Act of 1970, 20 U.S.C. §333

The Occupational Safety and Health Act administered by OSHA forms the framework for a body of regulations (29 CFR 1910) which, among other things, are intended to ensure worker safety and health through regulation of work practices and work environments. The Act specifically addresses construction projects, hazardous waste operations, emergency responses, toxic and hazardous substance operations, and communication of information concerning occupational hazards, specifying appropriate protective measures for all employees. The proposed action was evaluated to determine if there was a change in work practices and the need for administrative actions other than normal compliance with OSHA's standards.

5.1.1.8 Pollution Prevention Act of 1990, 42 U.S.C. §13101(b).

The Pollution Prevention Act of 1990 presents congressional findings on the need for pollution prevention and source reduction programs. It states that "pollution should be prevented or reduced at the source whenever feasible; pollution that cannot be prevented should be recycled in an environmentally safe manner, whenever feasible."

The Air Force implements this program through AFI 32-7080. It focuses on source reduction as the primary and first step toward pollution prevention, followed by recycling/reuse and treatment/disposal, if necessary. AFI 32-7080 also implements requirements of the Superfund Amendment and Reauthorization Act of 1986, Toxics Substance Control Act of 1976, Clean Air Act Amendments of 1990, Clean Water Act of 1987, and Department of Defense Directive 4210.15, Hazardous Materials Pollution Prevention, dated 27 July 1989.

The proposed action and alternatives were evaluated for potential pollution. Measures to prevent pollution are incorporated wherever feasible.

5.1.1.9 Resource Conservation and Recovery Act of 1976, 42 U.S.C. §1901 *et seq*.

Regulations prescribed under Subtitle C of Resource Conservation and Recovery Act (RCRA) mandate that hazardous waste will be treated, stored, and disposed of so as to minimize the present and future threat to human health and the environment. These regulations established a cradle-to-grave system of identifying, testing, storing, transporting, recycling, and disposing of hazardous waste. RCRA was amended in 1984 to restrict the disposal of hazardous waste at landfill facilities and waste

minimization, and to require EPA to develop specific corrective action procedures for release of RCRA hazardous wastes.

Colorado has developed a program to implement hazardous waste management within the state, including RCRA corrective action. Colorado regulations are found in Section 6, 1007-3 of CSR. Colorado Department of Public Health and Environment (CDPHE) has the authority to determine whether SAFB is properly executing its RCRA responsibility as set forth by EPA. In addition, the Federal Facility Compliance Act of 1992 dissolves any sovereign immunity under RCRA, and allows the state and EPA to collect fines for violations.

Hazardous waste activities conducted at SAFB include generation, characterization, and manifesting to off site disposal. SAFB is a small-quantity hazardous waste generator that generates more than 100 kilograms (approximately 25 gallons or 200 pounds), but less than 1,000 kilograms (approximately 300 gallons or 2,500 pounds) of hazardous waste per month. SAFB has a current spill prevention and response plan that establishes procedures for emergency notification and communication, step-by-step initial action to be taken, and special precautionary measures to be taken regarding hazardous materials.

5.1.2 Relevant State of Colorado and Local Regulations

Relevant State of Colorado regulations and guidelines appropriate to this project are often the outcome of one of the aforementioned federal programs. Colorado agencies associated with the administration of federal regulations applicable to this project are listed below. Local agencies relevant to this project also are identified below.

5.1.2.1 Colorado Department of Public Health and Environment

The Air Quality Control Division of CDPHE administers the CAA. Colorado has adopted the federal air quality standards, and has promulgated dust-control regulations for construction projects disturbing 25 acres or more of ground (CSR No. 3), and for gravel-surfaced roads used by 200 or more vehicles per day (CSR No. 1, Section 3.D[2a]).

5.1.2.2 Colorado Division of Wildlife

The CDOW coordinates with the USFWS to manage protected species and habitat. It is responsible for maintaining state-specific protected and special-concern species and habitat classifications, and works with the Colorado Natural Heritage Program to maintain protected species and habitat listings for the state. The CDOW also implements Senate Bill 40 Wildlife Certification regarding construction within stream banks and tributaries.

5.1.2.3 Colorado Historical Society and State Historic Preservation Officer

The SHPO administers the NHPA and serves as liaison for the state with the ACHP. The Colorado Historical Society maintains site records for all documented cultural resources in the state. Regulations regarding historic, prehistoric, and archaeological resources of Colorado are included in the State Antiquities Act of 1966.

5.1.2.4 Pikes Peak Area Council of Governments

The PPACG is responsible for regional-level enforcement of CAA and compliance with the Colorado SIP. The PPACG is also responsible for regional-level population development and transportation plans.

Regulations relevant to construction-related fugitive dust control have been established by El Paso County and the State of Colorado.

5.1.2.5 El Paso County

El Paso County has local responsibility for land use and transportation planning, and maintenance responsibility for county roads. The county also regulates fugitive dust control through the 1987 air quality regulation, *Regulations for Fugitive Particulates and Open Burning, Section 10*, which requires a permit for construction when earth work disturbance exceeds 1 acre but is less than 25 acres.

The county also regulates erosion control standards required for construction activities. Depending on the activity, an erosion control plan may be required by the county as set forth in the El Paso County Drainage Criteria Manual (Watt, 1997). However, the county does not have jurisdiction over activities at SAFB unless the project drains toward a county property, a county road, or a private property in El Paso County (Williams, 1997).

5.2 Permit Requirements

Only permit requirements identified for resource categories evaluated as a part of this EA are identified here. Routine permits required for construction and/or maintenance of the project are not listed.

- NHPA, Section 106 Clearance - None required unless subsurface cultural resources are identified during construction.
- Construction Storm Water Discharge Permit (NPDES permit) - A permit must be obtained from CDPHE, Water Quality Division, prior to the start of construction activities, if more than 1 acres of land are disturbed. Since construction of the MDC would result in the disturbance of more than 1 acres, a NPDES permit would be required.
- El Paso County Dust Control Permit - This permit must be obtained from El Paso County prior to the start of construction activities that disturb more than 1 acre and less than 25 acres.

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SECTION 6
AGENCIES AND PERSONS CONTACTED

Individuals consulted during the preparation of this EA are listed by agency or organization in the following subsections. Copies of correspondence with agencies are provided in Appendix A.

6.1 Schriever Air Force Base

Mickey Weatherman (50 CES/CECC) - (719) 567-4787

Bruce Nyhuis (50 CES/CECC) – (719) 567-4017

Ralph Mitchell (50 CES/CECB) – (719) 567-2075

S. Scott Vincent (50 CES/CEV) – (719) 567-3360

Ken Nevling (50 CES/CEV) – (719) 567-4027

6.2 U.S. Fish and Wildlife Service

LeRoy W. Carlson – Colorado Field Supervisor – (303) 275-2343

6.3 Colorado Natural Heritage Program

Beth Van Dusen – Environmental Review Coordinator – (970) 491-7331

6.4 Colorado Division of Wildlife

Information requested 4/26/00

6.5 Colorado Historical Society

Georgianna Contiguglia – State Historic Preservation Officer – (303) 866-4674

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SECTION 7
LIST OF PREPARERS

Schriever Air Force Base

Richard Parkinson, P.E.

Environmental Impact Analysis Program Manager

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SECTION 8
REFERENCES

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APPENDIX A
AGENCY CONSULTATION CORRESPONDENCE

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Ecological Services
Colorado Field Office
755 Parfet Street, Suite 361
Lakewood, Colorado 80215

IN REPLY REFER TO:
ES/CO:USAF
Mail Stop 65412

JUN 2 9 2000

Mr. Richard Parkinson
50 CES/CEV
300 O'Malley Ave Ste 19
Schriever AFB CO 80912-5019

Dear Mr. Parkinson:

The U.S. Fish and Wildlife Service (Service) received your letter of April 27, 2000, regarding the proposed construction of a medical - dental clinic on Schriever Air Force Base. You requested concurrence that no threatened or endangered species would be adversely affected by the project.

Based on the information provided, the Service concurs that this project will have no affect on federally listed threatened or endangered species. These comments have been prepared under the provisions of the Endangered Species Act of 1973, as amended (16 U.S.C 1531 et. seq.).

If the Service can be of further assistance, please contact me at (303)275-2343.

Sincerely,

LeRoy W. Carlson
Colorado Field Supervisor

cc: Reading file
Project file

Reference: Coneur\Schriever

DEPARTMENT OF THE AIR FORCE

50TH SPACE WING (AFSPC)

APR 26 2000

Mr. Richard Parkinson
50 CES/CEV
300 O'Malley Ave Ste 19
Schriever AFB CO 80912-5019

Division of Wildlife
2126 N. Weber
Colorado Springs CO 80907

SUBJECT: Threatened and Endangered Species on Schriever Air Force Base

I am writing an Environmental Assessment (EA) for the proposed construction of a medical - dental clinic north of the secured area of Schriever AFB. I need to address the possibility of threatened and endangered species within the boundaries of Schriever AFB. I have attached a copy of the draft EA for your review to ensure I adequately addressed wildlife.

Your assistance will be greatly appreciated. Please call me at (719) 567-4792 if I can answer any questions for you.

Sincerely

Richard W. Parkinson

RICHARD W. PARKINSON, P.E
Environmental Planner

Attachment
Draft Environmental Assessment

COLORADO
HISTORICAL
SOCIETY

The Colorado History Museum 1300 Broadway Denver, Colorado 80203-2137

May 2, 2000

Richard W. Parkinson, P.E.
Environmental Planner
Department of the Air Force
50 CES/CEV
300 O'Malley Ave STE 19
Schriever AFB CO 80912-5019

Re: Medical - Dental Clinic Construction

Dear Mr. Parkinson:

This is to acknowledge receipt of your April 27, 2000 correspondence concerning the project listed above.

A search of our files indicates that the location of this project has been surveyed for cultural resources and that no significant sites are located within the area of potential effect. Therefore, we find that there will be no effect to cultural resources by this project.

If unidentified archaeological resources are discovered in the course of the project, work must be interrupted until the resources have been evaluated in terms of the National Register of Historic Places eligibility criteria (36 CFR 60.4) in consultation with this office.

Thank you for the opportunity to comment. If we may be of further assistance, please contact Jim Green at 866-4674

Sincerely,

Georgianna Contiguglia
State Historic Preservation Officer

GC/WJG

Colorado Natural Heritage Program Environmental Review
Locations and Status of Rare and / or Imperiled Species known from the Schriever AFB Medical-Dental Clinic Project Area

report generated: 17 May 2000

taxonomic group		scientific name	common name	prec	last obs	town/range	section	grank	srank	ESA	fed stat	st stat
Insects		AMBLYSCIRTES SIVUS	SIVIUS ROADSIDE SKIPPER	U	1986-07-16	014S066W		G4	S3			
Insects		CUPIDLOTES RITA COLORADENSIS	COLORADO BLUE	U	1994-07-19	014S066W		G4T2T3	S2			
Insects		EUPHILOTES RITA COLORADENSIS	COLORADO BLUE	G	1972-08-06	014S066W		G4T2T3	S2			
Pl	nonlists	ANDROPOGON GERARDII-CALAMOVILFA LONGIFOLIA	TALLGRASS PRAIRIES	S	1995-07-19	014S065W		G3	S2			
Plants		AMBROSIA LINEARIS	PLAINS RAGWEED	S	1953-07-09	014S063W		G2	S2		FS	

precision codes: S = "seconds", location known within 100m; M = "minutes", location known within 1 mile; G = "general", location known within 5 miles

May 17, 2000

Colorado State University

Richard Parkinson
50 CES/CEV
300 O'Malley Avenue, #19
Schriever AFB, CO 80912-5019

Colorado Natural Heritage Program
College of Natural Resources
254 General Services
Fort Collins, Colorado 80523-6021
(970) 491-1309
FAX: (970) 491-3349
www.cnhp.colostate.edu

Dear Mr. Parkinson:

The Colorado Natural Heritage Program (CNHP) is in receipt of your request for information regarding the Schriever AFB Medical/Dental Clinic construction project. In response, CNHP has searched its Biological and Conservation Datasystem (BCD) for natural heritage resources (occurrences of significant natural communities and rare, threatened or endangered plants and animals) documented from the immediate area of T14S R64W, Section 26, per your request.

The enclosed report describes natural heritage resources known from the area and gives location (by Township, Range, and Section), precision of the locational information, and the date of last observation at that location. Please note that "precision" reflects the resolution of original data. For example, an herbarium record from "4 miles east of Colorado Springs" provides much less spatial information than a topographic map showing the exact location of the occurrence. "Precision" codes of Seconds, Minutes, and General are defined in the report footer.

The report also outlines the status of the known elements. We have included status according to Natural Heritage Program methodology and legal status under state and federal statutes. Natural Heritage ranks are standardized across the Heritage Program network, and are assigned for global and state levels of rarity. They range from "1" for critically imperiled or extremely rare elements, to "5" for those that are demonstrably secure. I have included Characterization Abstracts for all species that are included in your report. The abstracts provide important habitat information. Please contact me if you have any questions regarding habitat of a particular species.

You may notice that some occurrences do not have sections listed. Those species have been designated as "sensitive" due to their rarity and threats by humans. Peregrine falcons, for example, are susceptible to human breeders removing falcon eggs from their nests. For these species, CNHP does not provide locational information beyond township and range. Please contact us should you require more detailed information for sensitive occurrences.

The information contained herein represents the results of a search of Colorado Natural Heritage Program's (CNHP) Biological and Conservation Data System (BCD). However, the absence of data for a particular area, species or habitat does not necessarily mean that these natural heritage resources do not occur on or adjacent to the project site, rather that our files do not currently contain information to document their presence.

The information provided can be used as a flag to anticipate possible impacts or to identify areas of interest. If impacts to wildlife habitat are possible, these data should not be considered a substitute for on-the-ground biological surveys

Natural Heritage Program COLORADO

Although every attempt is made to provide the most current and precise information possible, please be aware that some of our sources provide a higher level of accuracy than others, and some interpretation may be required. CNHP's data system is constantly updated and revised. Please contact CNHP for an update or assistance with interpretation of this natural heritage information.

Sincerely,

Beth Van Dusen
Environmental Review Coordinator

enc.

Invertebrate Characterization Abstract for Colorado

AMBLYSCIRTES SIMIUS
SIMIUS ROADSIDE SKIPPER

Taxonomy:

TAXCLASS: INSECTA
ORDER: LEPIDOPTERA
FAMILY: HESPERIIDAE
GENUS: AMBLYSCIRTES

GLOBAL TAXONOMIC COMMENTS:
Burns (1992) suspects that this species belongs to another genus.

Status:

GLOBAL RANK: G4
STATE RANK: S3
FED. LEGAL STATUS:
STATE LEGAL STATUS:
FED. AGENCY STATUS:

Habitat:

MINIMUM ELEV:
MAXIMUM ELEV: 9000

HABITAT COMMENTS:
Shortgrass and mixed-grass prairie and open pinyon-juniper woodland (Scott 1986).

REPRODUCTIVE HABITAT COMMENTS:

Distribution:

GLOBAL RANGE: Found on higher shortgrass prairies from Mexico, western Texas, New Mexico and Arizona northward to the Black Hills and Saskatchewan, absent from the Great Basin (Stanford, 1981; Stanford and Opler, 1993)

COUNTY NAME:	COUNTY STATUS	REFERENCE:
Larimer	Confirmed	Stanford and A 1993
Baca	Confirmed	
Rio Grande	Confirmed	
Saguache	Confirmed	
Custer	Confirmed	
Fremont	Confirmed	
Huerfano	Other	
Otero	Other	
Pueblo	Confirmed	
El Paso	Confirmed	

STATE RANGE:
Records up to 9000ft from El Paso Co. south, east to Baca Co., and west to Saguache Co., also in NE Colorado in Larimer and Weld Co.'s(Stanford 1981, Stanford and Opler 1993).

Phenology:

JANA: P	APRA: P	JULA: R	OCTA: P
JANB: P	APRB: P	JULB: P	OCTB: P
FEBA: P	MAYA: P	AUGA: P	NOVA: P
FEBB: P	MAYB: R	AUGB: P	NOVB: P
MARA: P	JUNA: R	SEPA: P	DECA: P
MARB: P	JUNB: R	SEPB: P	DECB: P

"P" = Adults or larvae present but mostly inactive (eg in diapause)
"A" = Adults present and active (eg. not in diapause), but not reproducing.
"R" = Adults present, active and reproducing.
"L" = Larvae present and active (eg. feeding and not in diapause).
"E" = Eggs present outside of the parent.
"U" = Pupae or prepupae present.

PHENOLOGY COMMENTS:
Males usually active very early and late in day (Ferris and M 1981).

GLOBAL PHENOLOGY COMMENTS:
Males usually active very early and late in day. In our [Rocky Mountain] region the short flight occurs from mid-May to July depending on elevation and latitude; more southern (south of Colorado) populations are probably bivoltine, flying in May and again in August (Ferris and Brown, 1981).

Selected Life History Traits:

FOOD COMMENTS:
Hostplant: bouteloua gracilis (Ferris and M 1981).

ECOLOGY COMMENTS:
Usually uncommon, but in some wet years swarm breifly over grasslands (Ferris and M 1981).

Known Threats and Management Issues::

References:

ABBREVIATED CITATION:	FULL CITATION:
Freeman 1973	Freeman, H. A. 1973. A Review of the Amblyscirtes description of a new species from Mexico (Hesperi Journal of the Lepidopterists' Society. Vol. 27,
Scott 1986	Scott, J. A. 1986. The Butterflies of North Ameri
Stanford 1981	Stanford, R. E. 1981. Hesperiodea. In: Ferris, C.
Stanford and A 1993	Stanford. Ray E. and Paul A. Opler. 1993. Atlas c

Plant Characterization Abstract for Colorado

AMBROSIA LINEARIS
PLAINS RAGWEED

Taxonomy:
TAXCLASS: DICOTYLEDONEAE ORDER: ASTERALES
FAMILY: ASTERACEAE GENUS: AMBROSIA

Status:
GLOBAL RANK: G2 STATE RANK: S2
FED. STATUS: AGENCY STATUS: FS

Habitat:
MINIMUM ELEV: 4300
MAXIMUM ELEV: 6700 (U89L

HABITAT COMMENTS:
A. linearis is a plant of seasonally moist habitats within the shortgrass prairie region of east-central Colorado. In natural settings it is frequently encountered in association with intermittent streams and about the margins of intermittent ponds or playas. When A. linearis occurs about the margins of playas it appears to occupy a zone between blue grama and buffalograss to the outside, and more mesic vegetation toward the center of the basin. This species has also taken to roadside ditches, where it may occur in large, vigorous stands (Locklear 1990). Apparently restricted to a few localities in the open high plains of eastern Colorado (Great Plains Flora Association 1986). It is found in road-side ditches and railroad embakements in sandy or gravelly, seasonally moist soils (Ryke and Vest 1994).

Distribution:
COUNTY NAME:
El Paso
Kiowa
Lincoln
Elbert
Pueblo
Crowley
Bent
Las Animas

RANGE: Elbert, El Paso, Kiowa and Lincoln Counties. Its area of distribution appears to be bounded by Black Squirrel Creek to the west, the Arkansas/South Platte river divide to the northwest, Rush Creek to the north, northeast and east and the Arkansas River Valley to the south (Locklear 1989). This plains species is known only north of the Arkansas River. It may possibly occur on Commanche National Grasslands. It has been recorded in Elbert, El Paso and Lincoln Counties (Ryke and Vest 1994).

Phenology:

JAN1:	MAR1:	MAY1:	JUL1: Flower	SEP1: Fruiting	NOV1:
JAN2:	MAR2:	MAY2	JUL2:	SEP2:	NOV2:

			Flower	Fruitin	
FEB1:	APR1:	JUN1:	AUG1: Flower Fruiting	OCT1:	DEC1:
FEB2:	APR2:	JUN2: Flower	AUG2: Flower Fruiting	OCT2:	DEC2:

PHENOLOGY COMMENTS:
Flowers appear from mid-June to August (Locklear 1989). June 10 is the earliest known flowering date for this species. The peak flowering month is July. Fruiting involucres were observed as early as August and on specimens collected as late as 28 September (Locklear 1989). It blooms in late July- early August (Ryke and Vest 1994).

LOOKALIKES: The only similar local species is Artemisia carruthii Wood ex Carruthi, which has similar growth habit, leaf shape and leaf coloration (Locklear 1989). Ambrosia linearis leaves are densely tomentose on the undersides, upper sides are glabrous. Artemesia carruthii leaves are tomentose on both sides (pers. comm. Minton November 1994)

REPRODUCTION COMMENTS:
A. linearis reproduces both sexually and asexually. Asexual reproduction by shoot proliferation from rhizomes appears to be important to this species (Locklear 1989). A. linearis is wind pollinated (Locklear 1989).

Management:
MANAGEMENT COMMENTS:
Excluding populations occuring along roadsides, A. linearis occurs on land that is managed as rangeland and is grazed by domestic livestock (Locklear 1989). A. linearis does not appear to face any serious threats to its survival. No grazing by either domestic livestock or wildlife has been observed. Conversion of native grasslands to cultivated crops would adversely affect natural populations, especially those associated with playas (Locklear 1990).

References:

ABBREVIATED CITATION:	FULL CITATION:
Great Plains Flora Association 1986	Great Plains Flora Association. 1986. Flora of the Great Plains. Univ. Press of Kansas, Lawrence, KS. 1392 pp.
Locklear 1989	Locklear, James H. 1989. Status of Ambrosia linearis in Colorado. Unpublished report prepared for the US Fish and Wildlife Service, Denver, CO.

Locklear 1990 — Locklear, J. 1990. A Colorado speciality Ambrosia linearis. Colorado Native Plant Society. Aquilegia 14(5):10.

Rydberg 1905 — Rydberg, P. A. 1905. Studies on the Rocky Mountain Flora XIV. Bullentin of the Torrey Botanical Club 32(3): 123-138.

Ryke and Vest 1994 — Ryke, N., D. Winters, L. McMartin and S. Vest. 1994. Threatened, Endangered and Sensitive Species of the Pike and San Isabel National Forests and Comanche and Cimarron National Grasslands. May 25, 1994

Invertebrate Characterization Abstract for Colorado

EUPHILOTES RITA COLORADENSIS
COLORADO BLUE

Taxonomy:

TAXCLASS: INSECTA
ORDER: LEPIDOPTERA
FAMILY: LYCAENIDAE
GENUS: EUPHILOTES

GLOBAL TAXONOMIC COMMENTS:
Described by Mattoni as PHILOTES RITA COLORADENSIS (J. Res. Lepid. 1966. 4:88-92)

Status:

GLOBAL RANK: G4T2T3
STATE RANK: S2
FED. LEGAL STATUS:
STATE LEGAL STATUS:
FED. AGENCY STATUS:

Habitat:

MINIMUM ELEV: 5000
MAXIMUM ELEV: 7000

HABITAT COMMENTS:
Transition Zone prairies (Scott 1986)

REPRODUCTIVE HABITAT COMMENTS:

Distribution:

GLOBAL RANGE: Eastern Colorado and southern Wyoming, generally between 5000 and 7000ft (Ferris and Brown, 1981). One record from extreme western Nebraska (Stanford and Opler, 1993).

COUNTY NAME:	COUNTY STATUS	REFERENCE:
Larimer	Confirmed	Stanford and A 1993
Weld	Confirmed	
Morgan	Confirmed	
Washington	Confirmed	
Adams	Confirmed	
Arapahoe	Confirmed	
Baca	Other	
Crowley	Other	
Douglas	Confirmed	
Elbert	Confirmed	
El Paso	Confirmed	
Lincoln	Confirmed	
Kit Carson	Confirmed	
Cheyenne	Confirmed	
Prowers	Confirmed	
Chaffee	Confirmed	
Fremont	Confirmed	
Pueblo	Other	
Saguache	Confirmed	

Custer	Confirmed
Rio Grande	Confirmed
Alamosa	Confirmed
Costilla	Confirmed
Denver	Confirmed

STATE RANGE:
Transition zone short-grass prairies in eastern half of state, 5000 to 7000 ft (Ferris and Brown 1981).

MOBILITY COMMENTS:
Males patrol all day about the host plant to seek females (Scott 1986).

Phenology:

JANA: P	APRA: P	JULA: P	OCTA: P
JANB: P	APRB: P	JULB: R	OCTB: P
FEBA: P	MAYA: P	AUGA: R	NOVA: P
FEBB: P	MAYB: P	AUGB: R	NOVB: P
MARA: P	JUNA: P	SEPA: R	DECA: P
MARB: P	JUNB: P	SEPB: P	DECB: P

"P" = Adults or larvae present but mostly inactive (eg in diapause)
"A" = Adults present and active (eg. not in diapause), but not reproducing.
"R" = Adults present, active and reproducing.
"L" = Larvae present and active (eg. feeding and not in diapause).
"E" = Eggs present outside of the parent.
"U" = Pupae or prepupae present.

PHENOLOGY COMMENTS:
One flight, mostly August (Scott 1986).

GLOBAL PHENOLOGY COMMENTS:
One flight, mostly August (Scott, 1986). Adults July to September (Ferris and Brown, 1981). Brood coinciding with blooming period of hostplant (Pyle, 1981). Larvae tended by ants, no nests. Pupa hibernate (Scott, 1986).

Selected Life History Traits:

FOOD COMMENTS:
Hostplant: Eriogonum effusum, E. flavum; adults feed on host flowers and mud (Scott 1986).

Known Threats and Management Issues::

References:
ABBREVIATED CITATION: FULL CITATION:

Ferris and M 1981	Ferris, Clifford and F. M. Brown. 1981. Butterflies of the Rocky Mountain States. University of Oklahoma Press, Norman. 442 pp.
Pyle 1981	Pyle, Robert Michael. 1981. The Audubon Society Field Guide to North American Butterflies. Alfred A. Knopf, Inc., New York. 915 pp.
Scott 1986	Scott, J. A. 1986. The Butterflies of North America: A Natural History and Field Guide. Stanford University Press, Stanford. California.
Stanford and A 1993	Stanford, Ray E. and Paul A. Opler. 1993. Atlas of Western USA Butterflies. Denver and Fort Collins, Colorado. 275 pp.

DATA PROVIDED BY THE COLORADO NATURAL HERITAGE PROGRAM;
CURRENT TO JAN 2000

APPENDIX B
PUBLIC COMMENTS

The request for public review and comment on the Finding of No Significant Impact and the Environmental Assessment for the Medical – Dental Clinic, was announced in *The Gazette Telegraph* on 30 Nov 00. The final draft EA and FONSI were placed in the Penrose General Library, Penrose local history desk and Colorado Springs main library for a period of 30 days. No public comments were received.

STATE OF COLORADO
COUNTY OF EL PASO

ss.

Pilar Smith, being first duly sworn, deposes and says that she is the Legal Sales Representative of FREEDOM NEWSPAPERS, INC., a corporation, the publishers of a daily public newspaper, which is printed and published daily in whole at the city of Colorado Springs in the County of El Paso, and the State of Colorado, and which is called The Gazette; that a notice of which the annexed is an exact printed copy, cut from said newspaper, was published in the regular and entire editions of said newspaper

1 times, to-wit, on

November 30, 2000.

That said newspaper has been published continuously and uninterruptedly in said County of El Paso for a period of at least six consecutive months next prior to the first issue thereof containing this notice; that said newspaper has a general circulation and that it has been admitted to the United States mails as second-class matter under the provisions of the Act of March 3, 1879 and any amendment thereof, and is a newspaper duly qualified for the printing of legal notices and advertisement within the meaning of the laws of the State of Colorado.

Pilar Smith

PILAR SMITH
Legal Sales Representative

The 50th Space Wing, Schriever Air Force Base, Colo., has prepared an Environmental Assessment for a proposed action and two alternatives to construct a medical/dental clinic at Schriever. Currently, the base does not have a medical clinic and only limited on-call facilities for the active duty personnel assigned there.

No significant environmental effects were identified for constructing a medical/dental clinic at the base. The result qualifies the actions for a "Finding of No Significant Impact," or FONSI.

"The 50th Space Wing invites public comment on the assessment, which will be available from Dec. 1 to Dec 31, 2000, at the reference desks of the East Library and Information Center, 5550 N. Union Blvd.; Penrose Library, 20 N. Cascade; the Penrose Public Library Local History Desk; or by calling 2nd Lt. Jeremy Rogers, 50th Space Wing Public Affairs office, at 567-2145."

Published in The Gazette: November 30, 2000

Subscribed and sworn to me this 30th day of November 2000, at said City of Colorado Springs.

My commission expires August 4, 2004

Deana K. Read

DEANA K. READ
Notary Public

The Gazette

DEANA K READ NOTARY PUBLIC STATE OF COLORADO

My Commission Expires 08-04-04