

FINAL

Environmental Assessment

for the

**Construction of the Explosive Ordnance
Disposal Addition**

**St Clair County
Scott Air Force Base, Illinois**



Prepared By:
375th Civil Engineering Squadron
Environmental Management Flight
Scott Air Force Base, Illinois 62225-5035

June 14, 2005

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**FINDING OF NO SIGNIFICANT IMPACT TO
CONSTRUCT THE EOD ADDITION
SCOTT AIR FORCE BASE, ILLINOIS**

Agency: United States Air Force, Headquarters, Air Mobility Command

Background: Pursuant to the President's CEQ regulations, {Title 40 Code of Federal Regulations (CFR) Parts 1500-1508}, the National Environmental Policy Act of 1969 {42 USC §4321, et seq.}, Air Force Instruction (AFI) 32-7061, and the Environmental Impact Analysis Process, as promulgated at 32 CFR Part 989, the U.S. Air Force conducted an Environmental Assessment of the potential consequences associated with the construction of an Explosive Ordnance Disposal (EOD) addition to Building 504 at Scott AFB, IL. The EA considered all potential natural resources, environmental, and cultural impacts of the EOD addition to Building 504 (hereinafter, "Proposed Action") and listed alternatives, both as solitary actions and in conjunction with other proposed activities. This Finding of No Significant Impact (FONSI) summarizes the results of this EA and provides the U.S. Air Force's rationale for the Proposed Action and alternatives.

PROPOSED ACTION: The Proposed Action includes constructing a 6,405 square-foot addition adjacent to Building 504. The new addition would be located in an area that is currently mowed turf grass.

Alternatives: The alternatives to the Proposed Action are Alternative A and the No-Action. Implementation of the No-Action Alternative does not alleviate the spatial problems at the current EOD facility nor does it alleviate the issue of an adequate response time for EOD emergencies. Implementation of Alternative A would meet the requirements of the EOD but the location of this alternative was determined by the Air Mobility Command Design Center to be incompatible with the visual setting along Hangar Road and South Drive. In addition, Alternative A would place the EOD facility farther away from the flightline, creating logistical problems for Cargo Deployment personnel.

Cultural and Historical Resources: The Proposed Action site is located in an area where there are no existing facilities or structures. Historically, the site has been highly disturbed. No artifacts or historical objects are expected to be excavated during construction. In the unlikely event artifacts or historical objects are discovered, construction activities would cease until the Cultural Resources Specialist and Base Historian are notified and the appropriate action is accomplished.

Air Quality: Fugitive dust and construction vehicle exhaust would be generated during construction of the Proposed Action. However, these emissions would not constitute a major source of air pollutants based on quantitative analyses of particulate matter and vehicle emissions generated by projects of similar size and scope. The estimated values of direct and indirect emissions are below the *de minimus* thresholds specified at 40 CFR 93.153(b)(1). Therefore, the Proposed Action would not increase emissions over baseline emission levels. The Proposed Action would be in compliance with all relevant requirements and milestones contained in the Illinois State Implementation Plan; therefore, a conformity determination would not be necessary.

Hazardous Materials and Waste: The use of hazardous materials during construction activities would be limited and generation of hazardous waste would not be anticipated from the Proposed Action. There would be no anticipated impact to human health or the environment during construction activities or from activities associated with implementation of the Proposed Action.

Noise: Some noise impacts would occur during the construction of the Proposed Action. The amount of noise generated from operational activities would be temporary and negligible.

Geology and Soils: The surface area would be considerably disturbed by construction activities at the Proposed Action; however, construction would not negatively affect surface or geological resources. Necessary measures and best management practices would be utilized to prevent soil erosion during and after construction activities.

Water Resources: There would be no significant impacts to surface or ground water quality during construction of the Proposed Action. Necessary measures and best management practices would be utilized to prevent sedimentation of surface water resources.

Occupational Safety and Health: If the Proposed Action is implemented, no unfavorable impacts to occupational health and safety are projected. A positive impact to EOD personnel is expected.

Biological Resources: No biological resources, including endangered or threatened species, or rare fauna and flora inhabit the Proposed Action area. As such, no impacts are probable.

Ordinance: The EOD is required as part of their mission to use certain types of munitions and firearms. These munitions and firearms will be maintained in compliance with all applicable Air Force regulations and as such no impacts are anticipated.

Environmental Justice: There would be no disproportionately high or adverse impact on minority or low-income populations as a result of the Proposed Action.

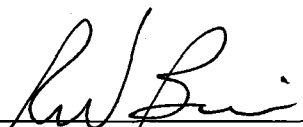
Indirect and Cumulative Impacts: No impacts are anticipated from site-specific, direct, indirect, or cumulative impacts associated with the Proposed Action.

Relationship Between Short-term Uses and Enhancement of Long-Term Productivity: Implementation of the Proposed Action could have a positive effect on long-term productivity by providing EOD personnel with a comfortable and efficient work environment.

Irreversible and Irretrievable Commitment of Resources: There would be minor irreversible and irretrievable commitment of resources if the Proposed Action were selected. Military funds would be permanently expended, building materials would be permanently committed for construction, and the area proposed for new construction would be a long-term commitment of resources. However, the overall impact would be considered inconsequential.

Unavoidable Adverse Impacts: There would be no major unavoidable adverse impacts associated with the Proposed Action.

FINDING OF NO SIGNIFICANT IMPACT: Based upon my review of the facts and analyses contained in the attached Environmental Assessment for the Construction of an Addition to Building 504 dated 14 June 2005, I conclude that implementation of the Proposed Action would not have a considerable impact, either by itself or cumulatively with other projects at Scott AFB. Accordingly, the requirements of NEPA, the CEQ regulations, and 32 CFR 989 are fulfilled and an Environmental Impact Statement is not required. The signing of this Finding of No Significant Impact completes the environmental impact analysis process under Air Force Regulations.



ROBERT W. BARRIER, Colonel, USAF
Acting EPC Chairperson

6 Jul 05

DATE

Attachment:
Environmental Assessment

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LIST OF ABBREVIATIONS AND ACRONYMS

ACM	asbestos-containing materials
AFB	Air Force Base
AFH	Air Force Handbook
AFI	Air Force Instruction
AFMAN	Air Force Manual
AICUZ	Air Installation Compatible Use Zone
AQCR	Air Quality Control Region
AOC	area of concern
AT/FP	anti-terrorism/force protection
BGP	Base General Plan
bgs	below ground surface
CAA	Clean Air Act
CEQ	Council on Environmental Quality
CES/CEV	Civil Engineering Squadron/Civil Environmental Flight
CFR	Code of Federal Regulation
dB	decibels
DESC	Defense Energy Support Center
DoDI	Department of Defense Instruction
EA	Environmental Assessment
EM	Engineer Manual
EMF	Environmental Management Flight
EO	Executive Order
EOD	Explosive Ordnance Disposal
EPA	Environmental Protection Agency
EPC	Environmental Protection Committee
EPCRA	Emergency Planning and Community Right to Know Act
FEMA	Federal Emergency Management Agency
FIP	Federal Implementation Plan
FONSI	Finding of No Significant Impact
gpm	gallons per minute
HWSAP	Hazardous Waste Satellite Accumulation Point
IEPA	Illinois Environmental Protection Agency
IESPB	Illinois Endangered Species Protection Board
INRMP	Integrated Natural Resource Management Plan
IRP	Installation Restoration Program
LBP	lead-based paint
mgd	million gallons per day
MSDS	Material Safety Data Sheet
NAAQS	National Ambient Air Quality Standard
NEPA	National Environmental Policy Act
NPDES	National Pollutant Discharge Elimination System
NRCS	Natural Resources Conservation Service
OSHA	Occupational Safety and Health Administration
P2	pollution prevention
ppm	parts per million

LIST OF ABBREVIATIONS AND ACRONYMS (Cont'd)

PCB	polychlorinated biphenyl
QD	quantity-distance
RCRA	Resource Conservation and Recovery Act
ROI	Region of Influence
SHPO	State Historic Preservation Office
SIP	State Implementation Plan
SMSA	Standard Metropolitan Statistical Area
TO	Technical Orders
UFC	Unified Facilities Criteria
USAF	United States Air Force
USC	United States Code

EXECUTIVE SUMMARY

The 375th Civil Engineer Squadron proposes to construct an addition to Building 504 located along Hangar Road, at Scott Air Force Base (AFB) in Illinois. The Explosive Ordnance Disposal (EOD) is undergoing a Proposed Action to construct a facility capable of consolidating and supporting the EOD mission and improving the efficiency and effectiveness of the operation.

This Environmental Assessment (EA) has been prepared in accordance with the *National Environmental Policy Act of 1969* (NEPA), the Council on Environmental Quality regulations [40 Code of Federal Regulations (CFR), sections 1500-1508], and Air Force Instruction 32-7061, the Environmental Impact Analysis Process, as promulgated at 32 CFR 989. This EA focuses on specific issues and concerns of the Proposed Action and the alternatives that could affect the environment of Scott AFB and the surrounding properties. The range of alternatives includes taking No-Action, implementing the Proposed Action, or implementing Alternative A.

The footprint of the new facility would be approximately 6,405 square feet of property that is currently serving as a mowed turf grass area. Situated in southwestern Illinois, Scott AFB is located approximately 20 miles east of St. Louis, Missouri.

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1.0 PURPOSE OF AND NEED FOR THE PROPOSED ACTION

1.1 INTRODUCTION

The Proposed Action is located at Scott Air Force Base in St. Clair County, Illinois, which is approximately 20 miles east of St. Louis, Missouri. The base comprises approximately 2,500 acres and is located in a predominantly agricultural area. The base is immediately south of Interstate Highway 64 (Figure 1-1), near the cities of O'Fallon and Belleville.

The Explosive Ordnance Disposal (EOD) mission is to protect people, facilities, and resources from the effects of unexploded ordnance, hazardous components, and devices. To do this, EOD personnel locate, identify, disarm, neutralize, recover, and dispose of hazardous explosives, chemical, biological, incendiary, and nuclear items. They also neutralize criminal and terrorist explosive devices and make the environment safe by clearing areas of explosives-related contamination and disposing of unserviceable and outdated munitions. EOD personnel train other agencies on military ordnance and improvised device recognition, hazards, and precautions and provide EOD support to the Global Reach mission. In addition, the EOD provides off-base municipalities the capability to make safe any explosives to prevent the loss of life or property. In order to provide these functions, EOD personnel must have continuous proficiency training and immediate access to all equipment. In order to provide an efficient and immediate response, the EOD needs to have ready access to the core command-and-control, administrative, and community support functions on the base.

Currently EOD personnel are housed in temporary facilities with the 932nd Airlift Wing (Building 3677). This facility lacks the necessary space for all of the equipment and personnel that are required for the EOD to implement its mission. The equipment used by the EOD is highly specialized and requires protection from the elements. Equipment that requires specialized storage includes a rescue vehicle, EOD robots, firearms, munitions, and classified materials. Due to the lack of adequate storage space at the EOD's current location, equipment is stacked in inaccessible locations that prevent immediate access.

Current cargo deployment operations at Scott AFB occur from a temporary construction trailer. The trailer lacks a heating or cooling system and does not provide adequate space for the deployment function. The lack of space severely hinders deployment personnel in their efforts to support the 375th Airlift Wings mobility mission.

Overall, the poor state of both facilities and the lack of necessary spatial requirements have resulted in workarounds that decreases the effectiveness of operations. To resolve these problems the EOD proposes to construct an addition to Building 504. Building 504 is located along Hangar Road between Building 502 and 505 (Figure 1-2).

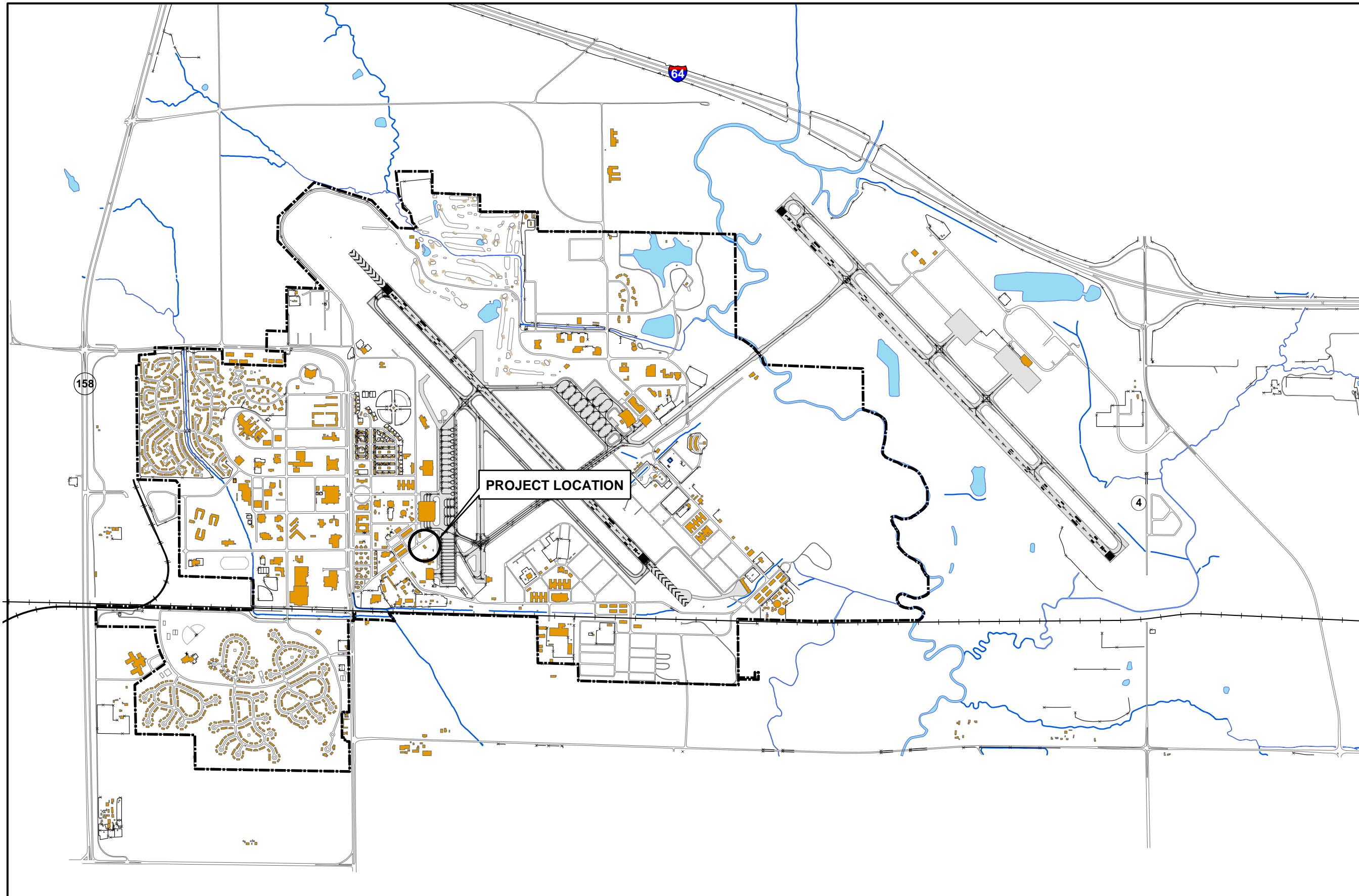
1.2 NEED FOR ACTION

Without the Proposed Action, daily operations of the EOD will continue to be hindered by the separation of EOD personnel and the lack of sufficient space within existing facilities. Additionally, the current facility for Deployment Personnel is located in an unheated/unair-

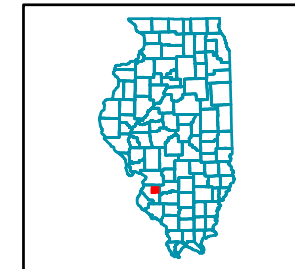
conditioned construction trailer within an open access portion of the base. The location of the trailer does not provide adequate security for deployment operations.

1.3 OBJECTIVE

The objective of this Environmental Assessment (EA) is to evaluate the potential impacts associated with the implementation of the Proposed Action, Alternative A, and the No-Action Alternative and to determine the significance of those impacts. If the potential impacts are not considered significant, a Finding of No Significant Impact (FONSI) will be prepared.



OVERVIEW MAP



LEGEND

- BASE BOUNDARY
- AIRFIELD SURFACE
- BUILDINGS
- SURFACE WATER
- STREAM
- FENCE LINES
- RAILROADS



1,000 500 0 1,000 Feet

1 inch equals 2,000 feet



EOD Addition
Scott Air Force Base

Figure 1-1. Project Location

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1.4 SCOPE OF THE EA

This EA identifies, describes, and evaluates the potential environmental impacts associated with implementation of the Proposed Action, Alternative A, and the No-Action Alternative. Furthermore, this document includes an analysis of the impacts of the Proposed Action, Alternative A, and the No-Action Alternative as they relate to the following environmental and socioeconomic programs:

- Air Quality
- Noise
- Wastes, Hazardous Materials/Stored Fuel
- Land Use
- Safety and Occupational Health
- Water Resources
- Floodplains and Wetlands
- Biological Resources
- Environmental Management
- Geology and Soils
- Socioeconomics
- Cultural Resources
- Transportation
- Airspace/Airfield Operations
- Pollution Prevention
- Environmental Justice

1.5 DECISION(S) THAT MUST BE MADE

The decision to be made will include selecting one of the alternatives described as follows:

Proposed Action: This alternative consists of the construction of a 6,405-square-foot addition to Building 504 and an associated paved driveway. The Proposed Action would be located to the south and east of Building 504. The addition will include a 705-square-foot area for processing personnel deploying overseas, a 3,100-square-foot vehicle storage and equipment repair facility, a 1,300-square-foot office area, and an additional 1,300-square-foot training area. This action also includes the addition of new personnel for the stand up of the EOD flight. The EOD is currently authorized and funded for seven positions; eventually this number may increase to twelve.

Alternative A: Alternative A would incorporate the same features as described in the Proposed Action. The only difference between the Proposed Action and Alternative A is their location in relation to Building 504. Alternative A would be located south and west of Building 504 and the Proposed Action would be located south and east of Building 504.

No-Action Alternative: The EOD would remain status quo with this alternative and would remain co-located with the 932nd Airlift Wing in Building 3677. The No-Action Alternative would not meet the needs of the current EOD personnel, nor would it provide space for any future EOD flights. The alternative would not allow EOD to operate in an efficient and secure manner.

Upon review of this document, the 375th Airlift Wing Environmental Protection Committee (EPC) Chairperson at Scott AFB will decide which alternative to implement.

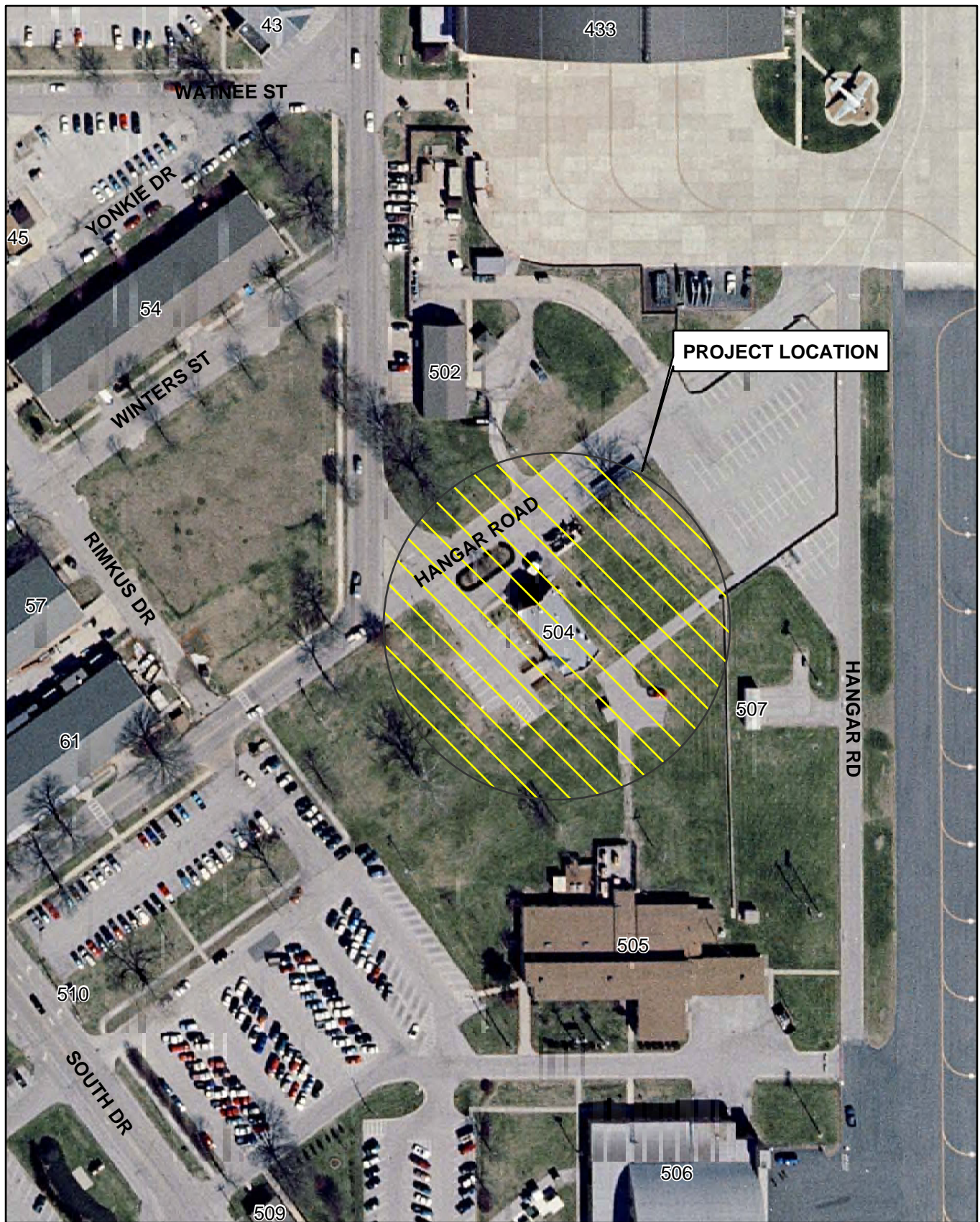
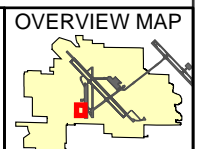


Figure 1-2.
Site Location

EOD Addition
Scott Air Force Base



0 25 50 100 Feet
1 inch equals 125 feet



1.6 APPLICABLE REGULATORY REQUIREMENTS AND REQUIRED COORDINATION

Following is a list of Air Force Instructions (AFI), Executive Orders (EO), Acts, Air Force Manuals (AFMAN), Engineer Manual (EM), Code of Federal Regulations (CFR), Department of Defense Instructions (DoDI), and Technical Orders (TO) that are applicable to the Proposed Action.

- *National Environmental Policy Act*, Public Law 91-190, 42 United States Code (USC) 4321-4347, January 1, 1970;
- Council on Environmental Quality (CEQ) regulations, 40 CFR parts 1500 through 1505;
- EO 11988 and 11990, Floodplain Management and Protection of Wetlands;
- EO 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations;
- *Clean Air Act* (1970, Amended 1990);
- Corps of Engineers Manual, EM 385-1-1, General Safety Requirements;
- 32 CFR, Part 989, Environmental Impact Analysis Process;
- AFI 32-7062, Air Force Comprehensive Planning;
- AFI 32-7064, Natural Resources Management;
- AFI 32-7065, Cultural Resources Management;
- DoDI 4165.57 and AFI 32-7063, Air Installation Compatible Use Zone (AICUZ) Programs;
- 29 CFR, Occupational Safety and Health Standards;
- AFMAN 32-1123, Unified Facilities Guide;
- AFH 32-1084 Civil Engineer Facility Requirements;
- 40 CFR 93.153, Air Conformity Determination;
- *Resource Conservation Recovery Act* (RCRA) 1970.

In addition to this list, coordination with regulatory agencies is discussed below.

The State Historic Preservation Office (SHPO) is not typically notified of new construction, unless the project involves the demolition or alteration of a historical building or structure. The existing Building 504 was constructed in 1990 and is not considered a potential historical structure.

Various permits will be required for activities such as construction or extensions of sanitary/storm sewers and water mains, and other related activities. In addition to the aforementioned requirements and prior to construction, a Digging Permit, Air Force Form 103, (Base Civil Engineering Work Clearance Request) is required under AFI 32-1031 and Illinois Underground Utility Facilities Damage Prevention Act, Public Act 86-0674, amended 88-0681 and AFI 32-1031. This section is not all-inclusive, as environmental regulations and standards are frequently modified.

During implementation of one of the construction alternatives, the 375th Civil Engineering Squadron/Civil Environmental Flight (CES/CEV) (Environmental Management Flight [EMF]) would be notified immediately if an action or activity were observed that could adversely affect human health and/or the environment. This organization would take immediate action to correct the condition or contact IEPA for further guidance, if necessary. Best management practices are encouraged throughout the construction process.

2.0 DESCRIPTION OF THE ALTERNATIVES INCLUDING THE PROPOSED ACTION

2.1 INTRODUCTION

This section describes the selection criteria for alternative sites, details of the Proposed Action, Alternative A, and No-Action, and past and reasonably foreseeable future actions relevant to cumulative impacts.

2.2 SELECTION CRITERIA FOR ALTERNATIVES

- 1) Minimum impact to the environment
- 2) Facility must be capable of supporting the consolidated EOD Personnel
- 3) Facility must meet requirements for equipment maintenance and storage
- 4) Facility must meet long-term development plans
- 5) Facility must meet the Base General Plan (BGP) provisions
- 6) Facility must meet spatial requirements and enhance safety
- 7) Facility should be located on the base in an area that allows the facilitation of the mission of the EOD

Alternatives considered for this EA include the Proposed Action, Alternative A, and No-Action. Additional alternative sites at Scott AFB were considered and eliminated due to the lack of facilities within the flight line support area with adequate spatial requirements (Section 2.3).

The Proposed Action was selected based upon the ability to meet the selection criteria listed above. The action is compatible with the October 2004 BGP for the Flightline Support Area Development Plan. The BGP provides an illustration of Scott AFB's present and future capability to support its mission. The BGP is a stand-alone document prepared to respond to the Air Force's commitments to planning for future development and protecting the environment, as prescribed in the AFI 32-7062, *Air Force Comprehensive Planning*. The alternative sites considered but eliminated did not meet the above criteria for this type of mission.

2.3 ALTERNATIVE SITES CONSIDERED BUT ELIMINATED FROM DETAILED STUDY

Alternatives to constructing an addition to Building 504 were considered in the early planning process. Due to the required mission of the EOD, the facility needed to be located in an area with ready access to the flightline and that was capable of housing EOD equipment. No existing facilities were identified that were capable of meeting these requirements.

2.4 DESCRIPTION OF PROPOSED ALTERNATIVES

Alternative A

This alternative consists of the construction of a 6,405-square-foot addition to Building 504. The addition will include a 705-square-foot area for processing personnel deploying overseas, a 3,100-square-foot vehicle storage and equipment repair facility, 1,300-square-feet of additional

offices, and an additional 1,300-square-foot training area. The addition would be located to the south and west of Building 504. This action also includes the addition of new personnel for the stand up of the EOD flight. The EOD is currently authorized and funded for seven positions; eventually this number may increase to twelve.

No-Action Alternative

The current EOD facility (Building 3677) would remain status quo with the No-Action Alternative.

2.5 DESCRIPTION OF PAST AND REASONABLY FORESEEABLE FUTURE ACTIONS RELEVANT TO CUMULATIVE IMPACTS

In the future, the EOD proposes to construct a drive through vehicle bay with a circle drive at the site of the Proposed Action or Alternative A. This construction is part of the long-term plan for the EOD facility and is anticipated to occur in five to ten years.

2.6 IDENTIFICATION OF PREFERRED ALTERNATIVE

The preferred alternative, referred to as the Proposed Action, includes constructing a 6,405-square-foot, one-story masonry facility with brick veneer, steel trusses, and sloped standing seam metal roof. Includes parking, landscaping, and all necessary support and associated work. The facility will have office space, storage space, and vehicle bays. Included are security and fire detection/suppression systems. Construction would occur at a mowed turf grass area located south and east of Building 504.

3.0 AFFECTED ENVIRONMENT

3.1 INTRODUCTION

This section describes the environmental components that could be affected by the construction and operation of the Proposed Action, Alternative A, and the No-Action Alternative. Section 3.0 serves as a baseline for evaluating the environmental status of the Proposed Action, Alternative A, and the No-Action Alternative. Additionally, this EA addresses the following environmental issues:

- Air Quality;
- Noise;
- Wastes, Hazardous Materials, and Stored Fuels;
- Water Resources, to include Floodplains and Wetlands;
- Biological Resources;
- Socioeconomic Resources;
- Cultural Resources;
- Land Use;
- Transportation Systems;
- Airspace/Airfield Operations;
- Safety and Occupational Health;
- Environmental Management, Pollution Prevention;
- Geology and Soils;
- Environmental Justice; and
- Indirect and Cumulative Impacts.

The aforementioned issues are not listed in order of significance.

3.2 AIR QUALITY

The Federal *Clean Air Act* (CAA) of 1970 required the adoption of air quality standards. These were established to protect public health, safety and welfare from known or anticipated effects of sulfur dioxide (SO₂), particulates (PM₁₀, 10 micron and smaller), carbon monoxide (CO), nitrogen dioxide (NO₂), ozone (O₃), and lead (Pb).

The CAA requires all states to submit to the United States Environmental Protection Agency (EPA) a list identifying those air quality control regions, or portions thereof, which meet or exceed the National Ambient Air Quality Standards (NAAQS) or cannot be classified because of insufficient data. Portions of air quality control regions that are shown, by monitored data or air quality modeling, to exceed the NAAQS for any criteria pollutant are designated "non-attainment" areas for that pollutant. Section 176(c) of the Clean Air Act Amendments of 1990, 42 USC, Section 7506(c), establishes a conformity requirement for federal agencies which has been implemented by regulation 40 CFR Part 93, Subpart B.

Scott AFB occurs within the Metropolitan St. Louis Interstate Air Quality Control Region (AQCR #070). The state air quality-monitoring site closest to Scott AFB is the East St. Louis

monitoring station, located in St. Clair County approximately 18 miles west of the base. Table 3-1 compares the applicable federal ambient air quality standards with the East St. Louis monitoring site maximum pollutant concentrations for the 3-year period 2001-2003 (U.S. EPA 2005).

Table 3-1. Comparison of Air Quality Measurements in St. Clair County (East St. Louis Station) with Federal Standards

		Federal Ambient Air Quality Standards (ppm)¹	Maximum Concentration (ppm)¹		
Pollutant	Averaging Period	Primary	2001	2002	2003
Carbon monoxide	1 hour	35	4.2	3.5	4.4
	8-hour	9	3.0	2.8	3.2
Nitrogen oxide	Annual	0.053	0.019	0.017	0.016
Particulate Matter (PM₁₀)	24-hour	150 μm^3	71 μm^3	107 μm^3	70 μm^3
	Annual	50 μm^3	30 μm^3	30 μm^3	34 μm^3
Lead	Quarterly mean	1.5 μm^3	0.065 μm^3	0.0325 μm^3	0.04 μm^3
Sulfur dioxide	3-hour	0.5	0.235	0.190	0.168
	24 hour	0.14	0.081	0.056	0.049
	Annual	0.030	0.008	0.006	0.005
Ozone²	1-hour	0.120	0.110	0.117	0.134
	8-hour	0.080	0.082	0.103	0.111

¹Unless otherwise stated

²For the 1-hour standard there were no exceedances in 2001 and 2002 and two exceedances in 2003 from this monitor. For the 8-hour standard, there were no exceedances in 2001, nine exceedances in 2002, and three exceedances in 2003 from this monitor.

This AQCR is designated as a moderate non-attainment area for ozone and PM_{2.5}, a limited maintenance area for CO, and either as attainment or no designation for the remaining pollutants.

3.2.1 Emissions Inventory

This section presents information on air pollutant emissions from activities at Scott AFB. The Scott AFB emissions are also compared with ozone-producing pollutant emissions from the Illinois portion of the St. Louis Standard Metropolitan Statistical Area (SMSA) of AQCR #070. The St. Louis SMSA emission inventory accounts for emission sources in St. Clair County, as well as emission sources from four other counties.

Table 3-2 summarizes annual emissions by source category for calendar year 1998. This table was developed from an emission inventory compiled by Scott AFB (Laura Dods, pers. comm., 2004). Emissions, reported in tons per year, are organized into 18 categories: external combustion services, stationary internal combustion engines, medical waste incineration, storage tanks, fuel transfers, equipment leaks, spray painting booths, solvent parts washers, miscellaneous product usage, fire fighter training, fuel cell maintenance, landfills, non-

destructive inspection, ordnance detonation, pesticide application, small arms range, wet cooling towers, and woodworking.

Table 3-2. Air Pollutant Emissions Inventory for Scott AFB in 1998 (tons/year)

Source Category	Carbon Monoxide	Nitrogen Oxides	Particulate Matter	Sulfur Oxides	Volatile Organic Compounds
External Combustion Sources	2.24	2.82	0.216	0.017	0.156
Stationary Internal Combustion Engines	1.12	4.98	0.186	0.154	0.210
Medical Waste Incineration	0.100	0.120	0.103	0.073	0.010
Storage Tanks	--	--	--	--	3.32
Fuel Transfers	--	--	--	--	6.52
Equipment Leaks	--	--	0.003	--	0.134
Spray Painting Booths	--	--	--	--	0.232
Solvent Parts Washers	--	--	--	--	0.262
Miscellaneous Product Usage	--	--	--	--	0.374
Fire Fighter Training	0.031	0.112	0.019	--	0.048
Fuel Cell Maintenance	--	--	--	--	0.013
Landfills	0.147	--	--	--	1.90
Non-Destructive Inspection	--	--	--	--	<0.001
Ordnance Detonation	<0.001	<0.001	<0.001	--	<0.001
Pesticide Application	--	--	--	--	0.116
Small Arms Range	0.010	--	--	--	--
Wet Cooling Towers	--	--	0.449	--	--
Woodworking	--	--	0.770	--	--

3.3 NOISE

Department of Defense Instruction 4165 establishes and requires military departments to develop, implement, and maintain an Air Installation Compatible Use Zone (AICUZ) program for installations with flying operations. AFI 32-7063, AICUZ Program sets forth the policy, responsibilities, and requirements of the program. Topics covered include program objectives, responsibilities, land use compatibility guidelines, and AICUZ studies and updating. This program is designed to provide information on flight operations and compatibility guidelines to local planners to help them mitigate the noise impacts of military aircraft operations. The AICUZ program uses information on aircraft types, flight patterns, power settings, numbers of operations, and time of day or night to estimate average busy-day noise levels. This estimation is accomplished by using the NOISEMAP computer model and the results are expressed in terms of the day-night average sound level. The latest AICUZ was completed in February 2001. Noise level contours based on the computer noise model NOISEMAP indicate the noise levels at the location of the proposed EOD addition to be between 65 and 70 decibels (dB) (Figure 3-1). Air Force AICUZ guidelines recommend restrictions for land use at varying noise levels. No restrictions exist for commercial or industrial buildings at noise level zones between 65 and 70 dB.

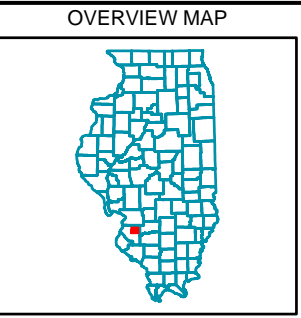
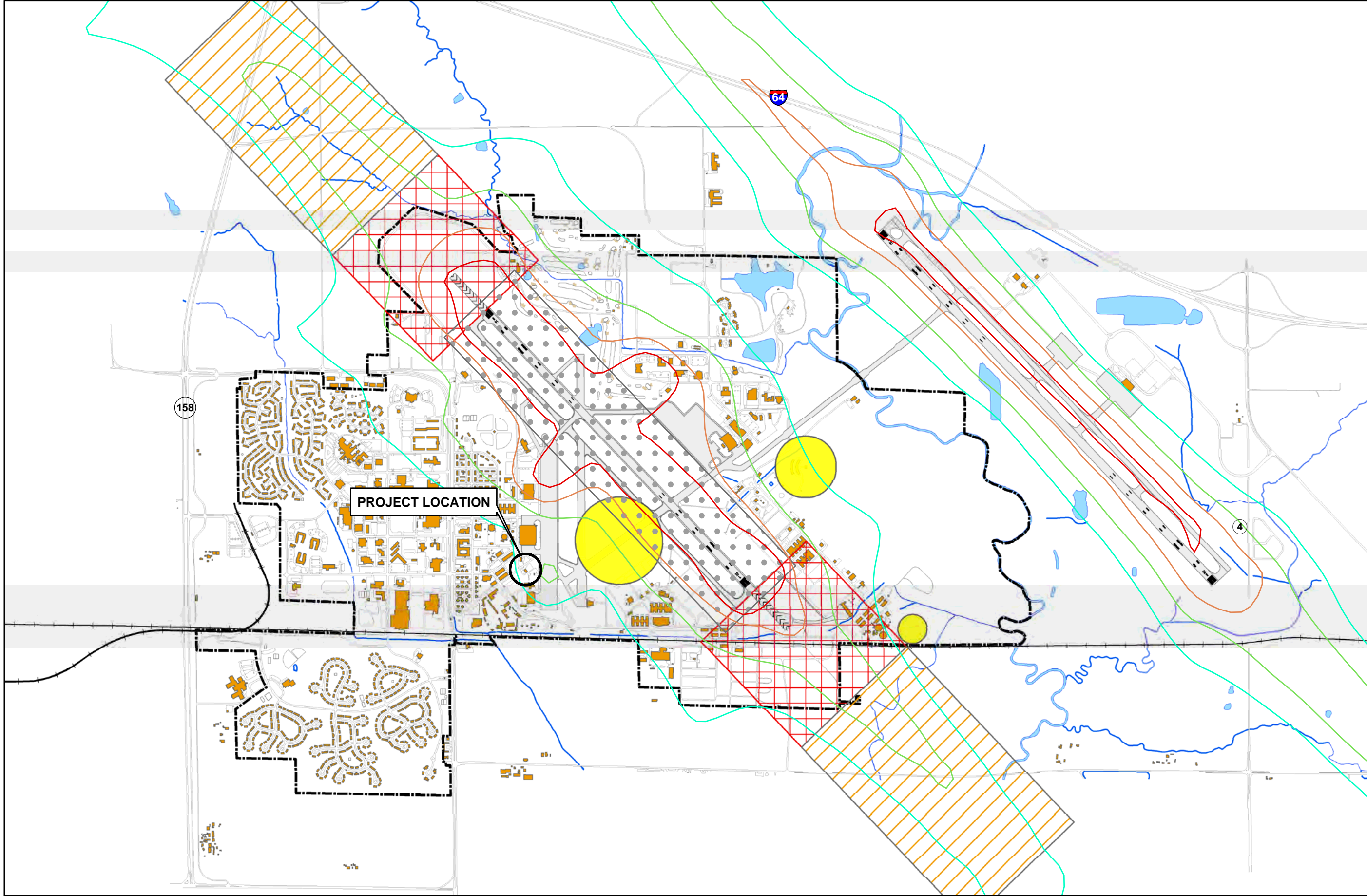
Noise standards are also addressed in Occupational Safety and Health Administration (OSHA) standards and implemented by regulation 29 CFR 1910.95. The Department of Labor administers these regulations, which are applicable at construction sites and buildings at Scott AFB. Ambient noise sources in the vicinity of the location of the Proposed Action and Alternative A include aircraft from the flightline and normal vehicular traffic on the streets surrounding the site of the Proposed Action and Alternative A.

3.4 WASTES, HAZARDOUS MATERIALS, AND STORED FUELS

The *Resource Conservation and Recovery Act* established statutory requirements that serve as the basis of the hazardous waste regulations. These regulations are found at 40 CFR 260-279. Corresponding state regulations identifying and listing hazardous wastes and standards applicable to generators of hazardous wastes are found at 35 IAC 721-722. Hazardous chemicals and materials are defined in 29 CFR 1900.1200. Legal requirements regarding emergency planning and reporting of hazardous and toxic chemicals are noted in the *Emergency Planning and Community Right to Know Act* (EPCRA).

Scott AFB has an active Installation Restoration Program (IRP). A review of IRP records indicated that no IRP sites or Areas of Concern (AOC) are known to exist at the location of the Proposed Action and Alternative A. Three IRP/AOC sites are listed as occurring within 500 feet of the location of the Proposed Action and Alternative A. These include the Former Aqua Yard (SS11), a Hazardous Waste Satellite Accumulation Point (HSWAP), and an oil/water separator (AOC #6). The Former Aqua Yard is located approximately 150 feet northwest of the existing Building 504. This site is a RCRA site and may have elevated levels of arsenic and manganese in the groundwater (T N & Associates, 2005). The HSWAP site is located in Building 506 and receives hazardous, non-hazardous, and universal wastes. Wastes that may be stored at this location include batteries, petroleum based products, adhesives, and solvents. The oil-waste separator is located approximately 400 feet north of Building 504 in the Consolidated Aircraft Maintenance Squadron Wash Rack Area south of Building 433. This AOC was evaluated as part of the *Final Multi-Site Preliminary Assessment/Site Investigation* (USACE, 1995). The report determined that the potential for groundwater or surface water contamination from the oil/water separator was low and recommended a No Further Response Action Planned decision.

Asbestos-containing materials (ACM) and lead-based paint (LBP) were prohibited from use as construction materials the 1970's. Building 504 was constructed in 1990 and it is not anticipated that any ACM or LBP would be present at the building.



LEGEND

- BASE BOUNDARY
- AIRFIELD SURFACE
- BUILDINGS
- QD AREA
- APZ 1
- CLEAR ZONE
- PRIMARY SURFACE
- SURFACE WATER
- STREAM
- RAILROADS

NOISE CONTOURS

- 65 dB
- 70 dB
- 75 dB
- 80 dB



1,000 500 0 1,000 Feet
1 inch equals 2,000 feet



EOD Addition
Scott Air Force Base

Figure 3-1.
Operational Constraints

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3.5 WATER RESOURCES

3.5.1 Surface Water Resources

Scott AFB is located within the Lower Kaskaskia Watershed in St. Clair County. Streams located within Scott AFB include Ash and Silver Creek. Ash Creek originates approximately one mile northwest of the base near Shiloh, Illinois. From its origin, Ash Creek flows through the base and abuts the rear of the existing commissary before discharging into Silver Creek. Silver Creek forms the western boundary of Scott AFB. The creek has steep mud banks, low stream gradient, and turbid water. The drainage area of Silver Creek, which encompasses approximately 395 square miles upstream of Scott AFB, consists primarily of farmland. Scott AFB is also drained by overland flow to diversion structures, field tiles, storm sewers, drainage ditches, and culverts. About 60 percent of the base is drained by Silver Creek and the remaining area is drained by Ash Creek (Woolpert, 2002).

3.5.2 Floodplains

Executive Order 11988 dated May 24, 1977; entitled "Floodplain Management" defines a floodplain and establishes a policy of avoiding impacts to floodplains when practicable. Facility design and construction, real property acquisition, maintenance activities, real property disposal, and natural resource program implementation actions must comply with EO 11988. The basis for this guidance includes the *Clean Water Act* of 1977, 33 USC 1251 et seq., *National Environmental Policy Act* of 1969, (NEPA), 42 USC 4321. et. seq., the *National Flood Insurance Act* of 1968, 42 USC 4001, et seq., the *Flood Disaster Protection Act* of 1973, and Public Law 93-235, 87 Statute 975. Floodplains at Scott AFB are located adjacent to Silver Creek near the eastern boundary of the base (Figure 3-2).

3.5.3 Groundwater Resources

Scott AFB is situated in an area of southwestern Illinois that lacks aquifers of regional significance.

The significant hydrogeologic units present in the area include alluvium containing sand and gravel lenses, sand and gravel layers within the glacial deposits, and sandstone or other permeable strata within the bedrock. Water quality varies greatly, with water from the surficial deposits usually of slightly better quality than water from the bedrock units. Precipitation is the primary source of groundwater recharge in the area.

A brief description of the principal water-bearing units, in order of increasing depth, follows. The information presented in this section is derived primarily from the *Final RI/RFI Work Plan for Site SS-14 (Consolidated Aircraft Maintenance Squadron) at the Scott Air Force Base* (Montgomery Watson, 2002).

Alluvium: The sand and gravel layers of the Cahokia alluvium include deposits of poorly sorted silt, clay, and silty sand with lenses of sand and gravel. Groundwater is present in these layers at shallow depths (1 to 3 foot below ground surface [bgs]). Its thickness varies, but it is commonly

less than 50 feet. Potentially large quantities of water can be pumped from the alluvium. However, it is not used widely in the vicinity of the base because its occurrence is limited to the flood-prone lowlands and municipal water supplies are readily available to most local consumers. The alluvium is found mainly on the eastern portions of the base along the lowlands of Silver Creek.

Glacial Aquifers: The sand and gravel layers in the glacial deposits are permeable unconsolidated units that are typically thin, discontinuous, and of limited extent in the vicinity of the base. The water-bearing zones include the sand and gravel layers within the Pearl Formation and within the Vandalia Till Member of the Glasford Formation. Data from test wells installed in 1942 by the Illinois State Water Survey indicated that the discontinuous sand and gravel zones ranged in thickness from 1 to 12 feet. Groundwater occurred at depths ranging from 10 to 35 feet bgs in these wells, as measured by Environmental Resources Management in 1991. East of Silver Creek, small industrial and municipal wells having yields of about 20 gallons per minute (gpm) may be possible in these glacial aquifers. Groundwater reportedly discharges to the underlying bedrock or to local surface water as base flow.

Bedrock Aquifers: Pennsylvanian age bedrock lies approximately 85 feet bgs in the vicinity of the base and is approximately 265 feet thick. The strata consist of low permeability shale with thin discontinuous beds of sandstone and limestone. The sandstone and limestone can yield small quantities of water to domestic supplies, with recharge occurring from the overlying unconsolidated materials. Groundwater flow through these strata is generally to the southeast towards deeper parts of the Illinois Basin. Water-bearing fractures are most likely to occur in the upper 50 feet of the bedrock. Underlying the Pennsylvanian strata is Chesterian Series (Mississippian Age) bedrock, which includes permeable sandstones. The reported yield of wells completed in these sandstones ranges from 20 to 50 gpm, with drawdowns varying from 175 to 300 feet.

3.5.4 Water Use and Treatment

The *Clean Water Act* regulates water quality. These regulations are found at 40 CFR, Subchapter D. Scott AFB is situated in an area of southwestern Illinois that lacks aquifers of regional significance. Precipitation is the primary source of groundwater recharge in the project area. Most communities in St. Clair County, including Scott AFB and several communities in the Granite City area in Madison County, obtain their water from the Mississippi River through the Illinois-American Water Company. No drinking water wells are known to be in use within the boundaries of Scott AFB. However, domestic and agricultural users within about 10 miles of the base obtain a limited amount of water from shallow aquifers.

An on-site sewage treatment plant serves Scott AFB with a capacity of two million gallons per day (mgd). The sewage flow averages about 1.45 mgd. The plant provides tertiary treatment, and the effluent is discharged to a tributary of Silver Creek at the southeast part of the base (Woolpert, 2002).

3.5.5 Wetlands

The *Clean Water Act*, noted earlier in this section, sets the basic structure that regulates discharges and dredged materials that could enter wetlands. There are many other laws and regulations, such as the *Federal Agriculture Improvement and Reform Act*, the *North American Wetlands Conservation Act*, and the *Endangered Species Act*, that are applicable to wetlands protection. By definition, wetlands are transitional lands between terrestrial and aquatic systems where the water table is usually at the surface or the land is covered by shallow water. Wetlands generally include swamps, marshes, bogs, and similar areas. Per the Federal Interagency Committee on Wetland Delineation (1989), jurisdictional wetlands are those that are found to contain:

- 1) Hydrophytes (plants that grow in water or on soils periodically deficient in oxygen due to inundation by water);
- 2) Hydric soils (soils that are saturated, ponded, or flooded long enough to produce anaerobic conditions);
- 3) Wetland hydrologic conditions (permanent or periodic inundation or soil saturation to the surface).

The largest area of wetlands at Scott AFB is located within the bottomland forest adjacent to Silver Creek (Figure 3-2). Other wetland resources located at Scott AFB include those located adjacent to Ash Creek and a number of ponds and depressional wetlands scattered throughout the base.

3.6 BIOLOGICAL RESOURCES

Air Force Instruction 32-7064, Integrated Natural Resources Management, and the *Endangered Species Act* address biological resources. No plants listed as endangered by the Illinois Endangered Species Protection Board (IESPB) were found within the study site during botanical surveys conducted on September 19, 2001. Although no botanical endangered species were discovered, suitable habitat does exist for both state and federally listed species within the Scott AFB boundaries.

A single federally endangered Indiana bat (*Myotis sadalis*) was captured during a study conducted by personnel from the U.S. Engineer Research and Development Center in July 2001. The Indiana bat was identified along Silver Creek near the confluence of Carolina Creek (USAERDC, 2002). Although suitable habitat for the Indiana bat is found at Scott AFB, none exists in the vicinity of the Proposed Action or Alternative A.

The only state endangered animal species identified at Scott AFB is the little blue heron. The presence of a little blue heron was incidentally noted during the 2001 bird survey. The little blue heron is not present at the site of the Proposed Action or Alternative A, nor does any suitable habitat for the little blue heron exist at the site.

3.7 SOCIOECONOMIC RESOURCES

Socioeconomic resources are described in this section using demographic and employment measures, which are key factors influencing housing demand, education needs, and infrastructure requirements. Implementation of the Proposed Action or Alternative A would affect a relatively small number of personnel, and the socioeconomic impacts of the action would be confined primarily to the employment and income generated from construction activities.

The Location and Region of Influence (ROI) for the Proposed Action and Alternative A is Scott AFB, located in St. Clair County, Illinois, approximately 20 miles east of the City of St. Louis, Missouri. The base covers approximately 2,500 acres and is located in a predominantly agricultural area. The base is immediately south of Interstate Highway 64 (Figure 1-1), near the cities of O'Fallon and Belleville. The socioeconomic ROI for an analysis of this type is generally defined by the residence patterns of current installation personnel, the number of personnel associated with the action under consideration, and the value of any construction associated with the action. The cost of the Proposed Action or Alternative A is projected at approximately \$1.5 million. Construction firms and workers are expected to originate from O'Fallon, Illinois or other regions surrounding Scott AFB.

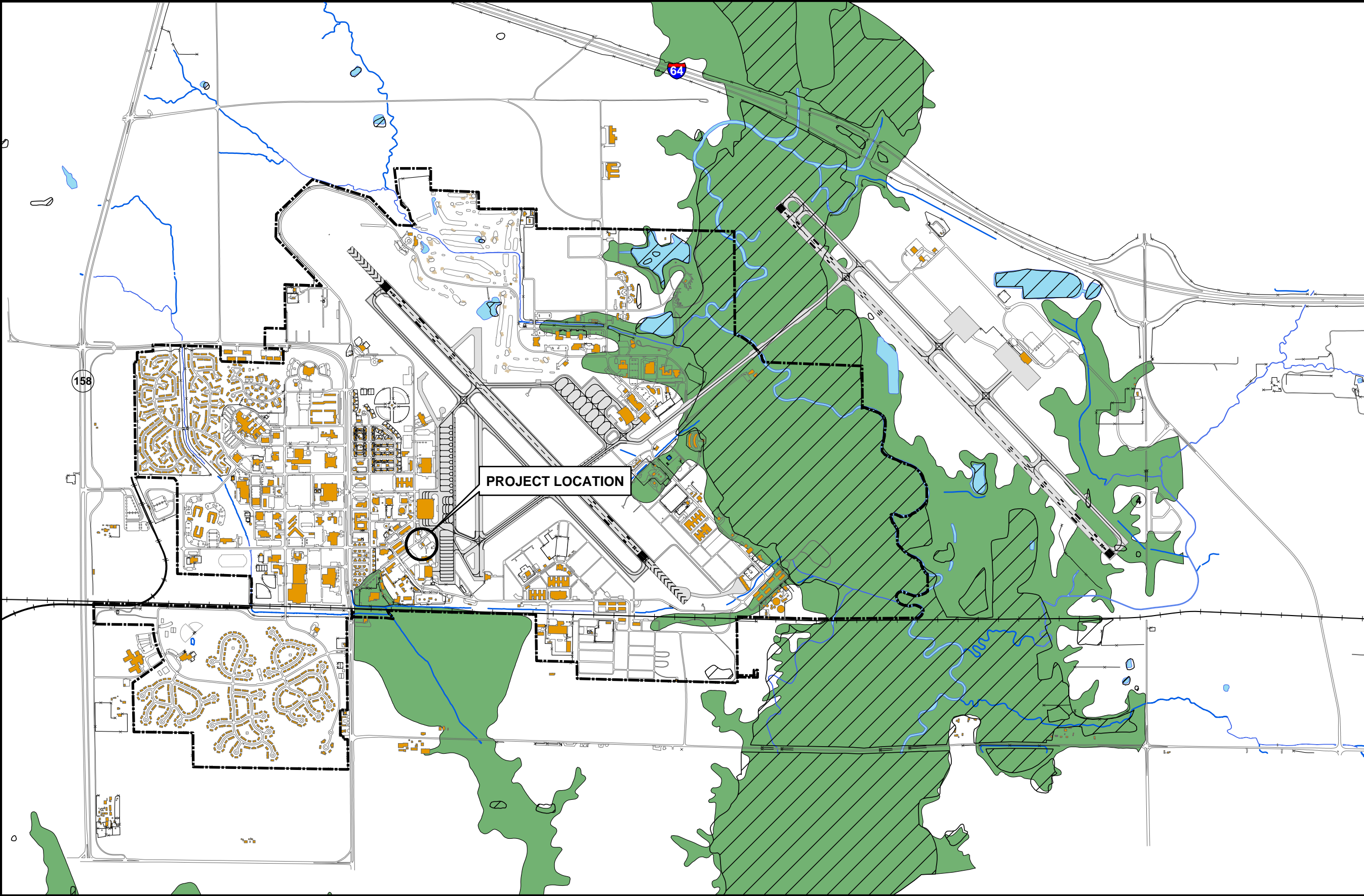
The population of St. Clair County in 2000 was 256,599 (U.S. Census Bureau, 2000). There are approximately 13,124 persons employed by Scott AFB (7,599 military, 5,525 civilians) (375 CES, 2004). In addition, the base supports approximately 21,819 active duty, Guard, Reserve, and retiree personnel (375 CES, 2004). The total Scott AFB community, on- and off-base, comprises approximately 34,100 military and civilian personnel and their families (375 CES, 2004).

3.8 CULTURAL RESOURCES

Historical and cultural resources are protected under the *National Historic Preservation Act* (16 USC 470a-470w), EO 11593, *Protection and Enhancement of the Cultural Environment*, the *Archaeological and Historic Preservation Act* (16 USC 469-469c), the *Historic Sites Act* (16 USC 461-467), and the *Illinois State Agency Historic Resources Preservation Act*. Federal agencies must provide an opportunity for comment and consultation with the Illinois Historic Preservation Agency and the Advisory Council on Historic Preservation when an action has the potential to affect historic or cultural sites. AFI 32-7065, Cultural Resources Management, must be complied with as well.

The National Park Service conducted an archeological assessment of Scott AFB in 1992. Archeological potential for the site of the Proposed Action and Alternative A is identified as being "highly disturbed" (Figure 3-3) and as having "an extremely low potential for the identification of additional cultural resources."

Previous archaeological and historical studies of Scott AFB did not identify any historical resources, e.g., historical buildings, archeological sites, or monuments, at the site of the Proposed Action or Alternative A (Thomason, 1992; National Park Service, 1992).



OVERVIEW MAP

LEGEND

- BASE BOUNDARY
- AIRFIELD SURFACE
- WETLAND
- BUILDINGS
- 100-YEAR FLOOD
- SURFACE WATER
- STREAM
- FENCE LINES
- RAILROADS

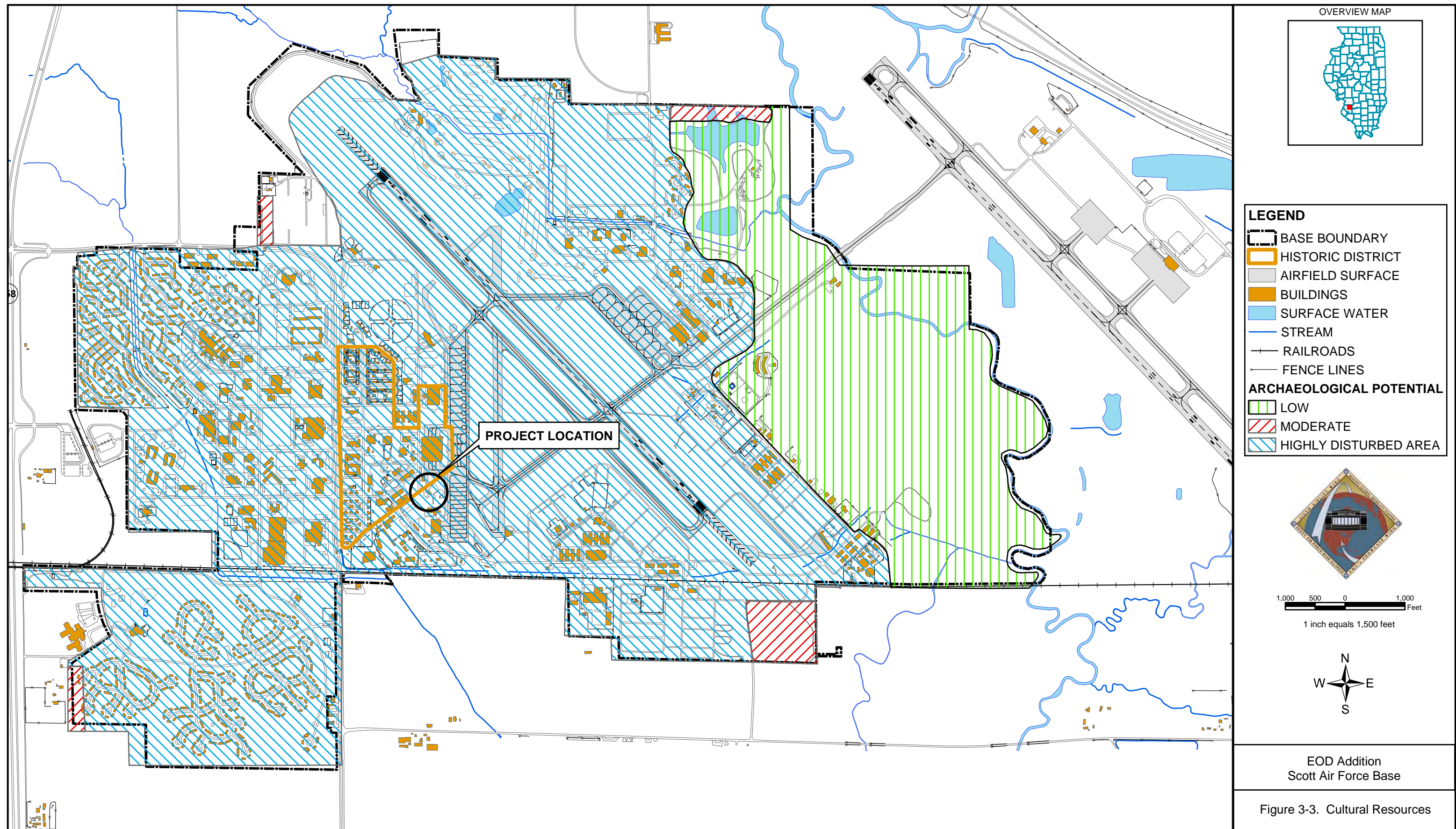
1,000 500 0 1,000 Feet

1 inch equals 2,000 feet

EOD Addition
Scott Air Force Base

Figure 3-2.
Wetlands and Floodplains

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3.9 LAND USE

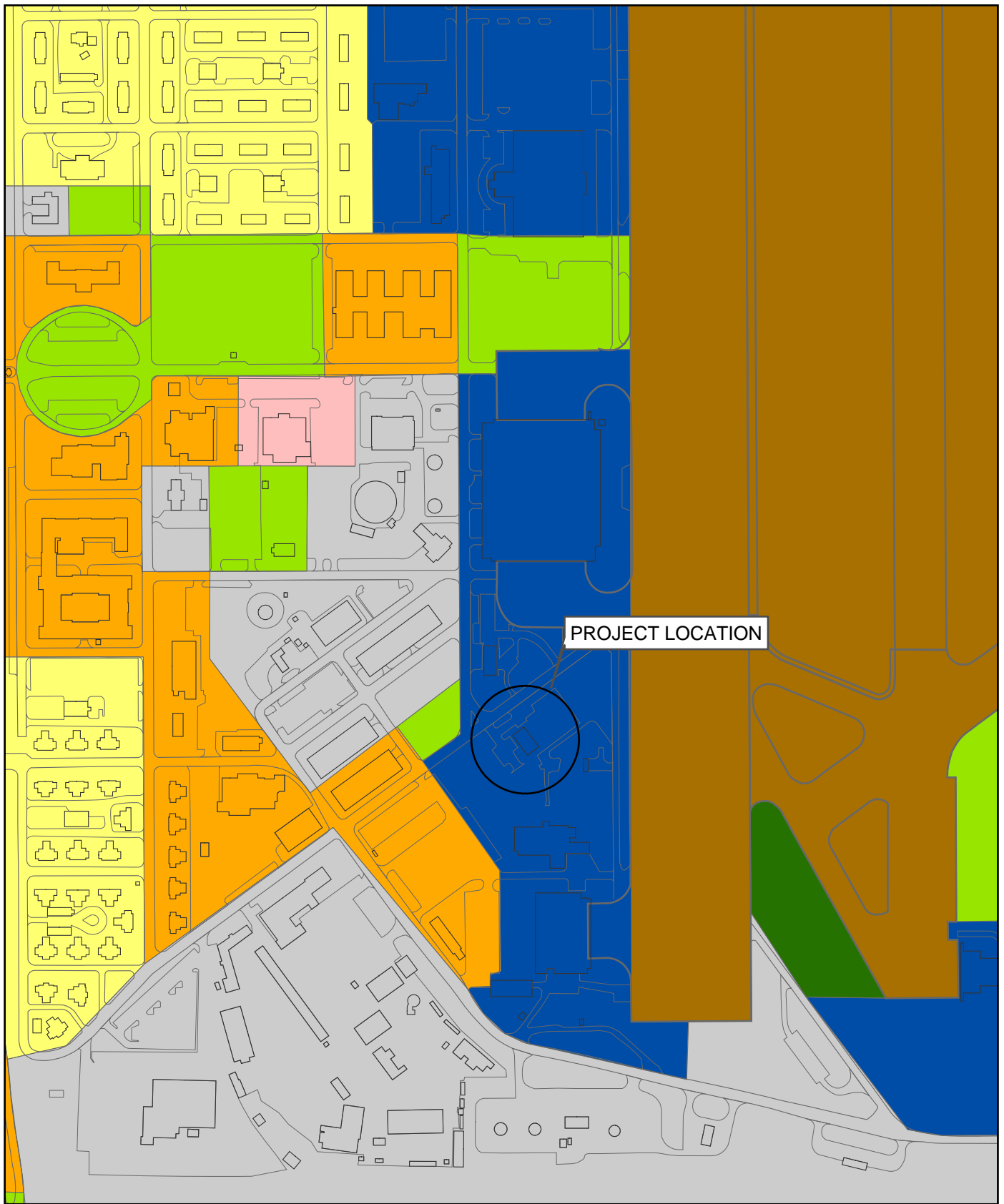
Originally, the land in the vicinity of Scott AFB was vegetated by tall grass prairie and mixed hardwood forest. Before the government acquired it, the primary land use was agriculture. Since that time, land management has included construction sites, residential and commercial use and permanent mowed turf grass (INRMP, 2002). Land cover at the site of the Proposed Action and Alternative A consists of mowed turf grass. The BGP classified land use in the vicinity of the Proposed Action and Alternative A as aircraft operations and maintenance (Figure 3-4). Land use immediately adjacent to the Proposed Action and Alternative A includes the following:

North - Hangar Road, Building 502
East - Building 507, Airfield Ramp, Cargo Deployment area
South - Building 505, greenspace
West - Buildings 57 and 61, former Aqua Yard

Building 504 is located adjacent to the site of the Proposed Action and Alternative A. This building was constructed in 1990 to replace Building 503 as the in-flight kitchen. Currently the building is undergoing renovations to convert the building from a kitchen facility to office space for the EOD.

3.10 TRANSPORTATION SYSTEMS

The Proposed Action and Alternative A are located at the end of Hangar Road. Hangar Road is a dead end street that ends at the airfield ramp. Vehicular traffic in the vicinity of the Proposed Action and Alternative A is limited to traffic going to and from the deployment trailer and Building 504. This traffic may include semi-trailer trucks, construction vehicles, and government and privately owned vehicles.



Legend

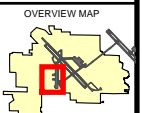
- | | | | |
|-------------------------------------|-------------------|-----------------------|--------------------|
| Administration | Airfield | Housing (Accompanied) | Open Space |
| Aircraft Operations and Maintenance | Community/Service | Industrial | Outdoor Recreation |

Figure 3-4.
Existing Land Use

EOD Addition
Scott Air Force Base



0 200 400
Feet
1 inch equals 400 feet



3.11 AIRSPACE/AIRFIELD OPERATIONS

Based upon the Operational Constraints map included in the BGP (Figure 3-1), the construction areas involved with the Proposed Action and Alternative A are not located in a clear zone or an accident potential zone. Unified Facilities Criteria (UFC) 3-260-01 (formerly AFI 32-1123) states that to meet specific airspace/airfield operations criteria, construction must be more than 1,000 feet from the runway centerline, and constructed structures should be under a 7:1 ratio from the 1,000-foot line. The UFC also states that new facilities must be constructed at least 125 feet from the edge of all existing aircraft parking aprons to meet the apron clearance criteria specified in UFC 3-260-01. The sites for both the Proposed Action and Alternative A comply with these standards.

3.12 SAFETY AND OCCUPATIONAL HEALTH

Factors involving primary occupational safety and health issues are addressed in 29 CFR Occupational Safety and Health Standards. The Department of Labor administers these regulations, which are applicable at construction sites and buildings at Scott AFB. If the Proposed Action or Alternative A is implemented, all applicable provisions of the Corps of Engineers Manual EM 385-1-1, "General Safety Requirements," must be followed. Additionally, OSHA's final steel erection standard went into effect January 18, 2002 (*Federal Register*, July 17, 2001).

Air Force Manual 91-201 *Explosive Safety Standards* represents the Air Force guidelines for complying with explosive safety. Explosives are defined as ammunition, propellants (solid and liquid), pyrotechnics, explosives, warheads, explosive devices, and chemical agents associated components presenting real or potential hazards to life, property, and the environment. Air Force Manual 91-201 defines quantity-distance (QD) arcs around certain types of explosives. These arcs represent the distance between a given quantity and type of explosive and other facilities. In addition, Air Force guidelines stipulate that explosive material storage and handling must be located in areas where the security of the munitions can be maintained at all times.

Unified Facilities Criteria 4-010-01 presents guidelines for anti-terrorism/force protection (AT/FP) at military installations. These guidelines include such topics as access to facilities, facility siting, exterior design, interior design, and landscaping. In the event of a terrorist attack, the intent of this guidance is to improve security, minimize fatalities, and limit damage to facilities.

3.13 ENVIRONMENTAL MANAGEMENT, POLLUTION PREVENTION

The United States Air Force (USAF) recognizes the importance of pollution prevention (P2) in protecting the environment, achieving compliance objectives, and reducing waste disposal costs. Such successful P2 programs as recycling, waste minimization, product substitution, and process changes, among others, are planned or underway at Air Force installations worldwide. The Air Force's environmental programs must do more today than ever before, and with increased cost-effectiveness.

Most tenant activities at Scott AFB participate in the recycling program. If the Proposed Action or Alternative A were implemented, the selected contractor would participate as well. All ferrous and non-ferrous metals from the project must be recycled. The contractor would also recycle general administrative refuse associated with this project. This refuse may include cardboard, mark 1 and 2 plastic bottles, metals, glass, aluminum and steel cans, and mixed paper. All recyclable material must be turned into the Base Recycling Center located at Building 3286. Hours of operation are 0730 to 1500 Monday through Friday and 0730 to 1100 on Saturdays.

3.14 GEOLOGY AND SOILS

Pennsylvanian bedrock underlies Scott AFB at a depth of approximately 85 feet. Underlying the Pennsylvanian bedrock is the Chesterian Series sandstone. There are no geologic outcrops at Scott AFB. Soils in the vicinity of the Proposed Action and Alternative A are described as Mascoutah silty clay loam with a 0-2 percent slope (USDA, 1978). Soils at the site of the Proposed Action and Alternative A have been highly disturbed by previous development.

3.15 ENVIRONMENTAL JUSTICE

St. Clair County is a large, demographically diverse county, with communities ranging from urban areas of East St. Louis and Belleville to small rural towns east and west of Scott AFB. The year 2000 population of St. Clair County was approximately 67.9 percent Caucasian and 34.3 percent minorities, with the predominant minority described as African-American; 2.2 percent of the county's population is considered Hispanic (U.S. Census Bureau, 2000). There are no low-income or minority disadvantaged populations in the area of the Proposed Action or Alternative A.

3.16 INDIRECT AND CUMULATIVE IMPACTS

The portion of Scott AFB in which the Proposed Action and Alternative A are located is considered to be an improved area that is highly disturbed. There are no known indirect impacts associated with the Proposed Action or Alternative A. The potential construction of the drive through vehicle bay (Section 2.5) is the only known potential cumulative impact at this time.

4.0 ENVIRONMENTAL CONSEQUENCES

4.1 INTRODUCTION

Environmental consequences of the Proposed Action, Alternative A, and the No-Action Alternative are addressed in this section. The Proposed Action would include the construction of an addition to Building 504. Alternative A would include a similar addition to Building 504 in a different location. The No-Action Alternative includes taking no action to improve the existing EOD facilities, thereby remaining status quo.

The analysis process determines the consequences of each action and the anticipated impact(s) that the action could have, if implemented. The Proposed Action, Alternative A, and the No-Action Alternative could generate no impact to environmental issues, or encompass environmental consequences that may fall into the categories described in Table 4-1.

Table 4-1. Description of Environmental Consequences

Word	Definition
Short-term	effects caused during the construction and/or initial operation of the action
Long-term	effects caused after the action has been completed and/or the action is in full and complete operation or effects of the action if not approved
Irreversible	those effects caused by the proposal that cannot be reversed
Irretrievable	effects caused by an alternative that change outputs or commodities (e.g. trees, cattle, hiking, fishing) of land's use <i>and</i> must be reversible
Positive	constructive, progressive effects
Negative	harmful, destructive, unsafe, risky
Minor	trivial, irrelevant, inconsequential
Major	vital, primary, important
Adverse	unfavorable, undesirable, harsh
Direct	caused by the action and occur at the same time and place
Indirect	caused by the action and effects occur later in time or farther removed in distance, but reasonably foreseeable
Cumulative	nonrelated actions that have, are, or probably would occur in the same locality

A **significant** impact, as it applies to NEPA, requires considerations of both context and intensity. The following descriptions are brief and do not cover all aspects of the terminology. Context means that the significance of an action must be analyzed in several arenas, such as society as a whole (human, national), the affected region, the affected interests, and the locality. Significance varies with the setting of the Proposed Action. Intensity refers to the severity of impact. Responsible officials must bear in mind that more than one agency may make decisions about partial aspects of a major action. Impacts may be both beneficial and adverse. Intensity also includes the degree to which the Proposed Action and alternatives affect public health or safety. A summary table of the environmental resources that are determined to be impacted by the Proposed Action, Alternative A, and the No-Action Alternative is provided in Section 4.18.

4.2 AIR QUALITY

4.2.1 Proposed Action and Alternative A

A conformity determination would not be required, as the total of direct and indirect emissions from construction activities at the site of the Proposed Action and Alternative A are below *de minimus* thresholds specified at 40 CFR 93.153(b)(1). Specifically stated, implementation of the Proposed Action or Alternative A would not increase emissions over baseline emission levels. The statutory requirements of conformity are included in the CAA, section 176(c) and require the EPA to publish regulations requiring federal actions to conform to applicable state or federal implementation plans (SIPs or FIPs) to ensure that the actions do not interfere with strategies employed to attain National Ambient Air Quality Standard. The EPA proposed conformity regulations entitled *Determining Conformity of General Federal Actions to State or Federal Implementation Plans*. These were brought into effect on January 31, 1994. The intent of the conformity ruling is to ensure that federal actions do not adversely affect the timely attainment and maintenance of air quality standards. Air Force personnel and installation planners are to analyze each Air Force action, in accordance with EPA regulation 40 CFR 93, to ensure conformity with the applicable SIP or FIP. The conformity analysis examines the impacts of the direct and indirect air emissions from a proposed Air Force action and determines whether the action conforms to the applicable SIP or FIP. The Proposed Action and Alternative A would be in compliance with, or consistent with, all relevant requirements and milestones contained in the Illinois SIP. Contractor(s) and subcontractor(s) of this project must comply with these regulations, including 42 USC 7418(a) (state and local requirements).

A **short-term minor** increase in emissions from equipment and vehicles would occur during the construction phase of the Proposed Action or Alternate A. Fugitive dust and particulate matter would be emitted into the air from access roads, stockpiles, and/or other work areas. These emissions would be temporary and would return to pre-construction levels once the EOD facility was completed. Water sprinkling would be the preferred method of controlling fugitive dust, especially if a nuisance or road hazard due to fugitive dust particulate arises, or is anticipated due to windy or dry weather conditions.

4.2.2 No-Action Alternative

There would be **no impact** to air quality issues if this alternative were selected.

4.3 NOISE

4.3.1 Proposed Action and Alternative A

Implementation of the Proposed Action or Alternate A would generate **short-term, minor adverse impacts** throughout the construction phase of the project. The amount of noise generated from construction and operational activities would be negligible and temporary. Post-construction noise levels surrounding Building 504 would remain at pre-construction levels.

4.3.2 No-Action Alternative

There would be **no impact** from noise-related issues if this alternative were selected.

4.4 WASTES, HAZARDOUS MATERIALS AND STORED FUELS

4.4.1 Proposed Action and Alternative A

Building 504 is located within 500 feet of three IRP sites. The oil-water separator located north of the site and the HWSAP site located to the south are not anticipated to present a significant risk of pollution to the site. The former Aqua Yard site may have slightly elevated levels of arsenic and manganese in the groundwater and the groundwater flow from the former Aqua Yard is in the general direction of Building 504; however, levels of arsenic and manganese are not at sufficient levels to pose a risk to either construction or EOD personnel (pers. comm., Mike Mackiewicz).

No impacts related to LBP or ACM are expected from implementation of the Proposed Action or Alternate A. Although **no impacts** associated with wastes, hazardous materials, or stored fuels are anticipated from the implementation of the Proposed Action or Alternative A, appropriate health and safety measures will be practiced to ensure that no impacts occur.

Asbestos-containing materials, LBP, paints containing chromate, and/or transformers containing polychlorinated biphenyl (PCB) fluid are prohibited from use during implementation of the Proposed Action or Alternate A. Noncompliance could generate Notices of Violation for Scott AFB and legal action could be implemented against the accountable contractor.

The Contracting Officer, through the EMF, must approve all pesticide/insecticide applications at the proposed facility. A label and Material Safety Data Sheet (MSDS) of the pesticide/insecticide must be available for review. After treatment (if approved), the amount (meaning insecticide + water), percentage used (0.05%, 1.0%, etc.) of the pesticide/insecticide, and total square footage of treatment must be submitted to the EMF.

Hazardous materials such as petroleum products used during construction activities would be restricted and the generation of hazardous waste is not anticipated. If a contractor cannot avoid generating hazardous waste, the waste must be disposed of according to contract specifications and environmental laws. Improper usage of hazardous materials or disposal of hazardous wastes during construction activities could result in Notices of Violation from the IEPA, leading to possible fines and litigation.

4.4.2 No-Action Alternative

There would be **no impact** to the environment from wastes or hazardous materials, if the No-Action Alternative were selected.

4.5 WATER RESOURCES

4.5.1 Proposed Action and Alternative A

No adverse impacts to surface water or groundwater quality are anticipated from the implementation of the Proposed Action or Alternative A. Review of Federal Emergency Management Agency (FEMA) flood maps, base wetland maps, and an on-site preliminary survey

indicated that no floodplains or wetlands were present at the sites of the Proposed Action or Alternative A. As a result, the action would have **no impact** to existing wetlands or floodplains. All appropriate measures and best management practices would be taken during construction activities to minimize erosion and control sedimentation.

4.5.2 No-Action Alternative

There would be **no impact** to surface water, groundwater, wetlands, or floodplains if this alternative were selected.

4.6 BIOLOGICAL RESOURCES

4.6.1 Proposed Action and Alternative A

There are no significant biological resources located at the site of the Proposed Action or Alternative A. Therefore, **no adverse impacts** to biological resources are anticipated from implementation of the Proposed Action or Alternative A.

4.6.2 No-Action Alternative

No impact to biological resources would result from the implementation of this alternative.

4.7 SOCIOECONOMICS

4.7.1 Proposed Action and Alternative A

Short-term positive impacts for the construction industry and local economy are anticipated from implementation of the Proposed Action or Alternative A. Construction of a new consolidated EOD facility will have a **long-term positive impact** on the efficiency with which the EOD will carry out its mission. The construction of an addition to EOD is not anticipated to significantly increase long-term employment at the base and as such there would be **no impact** to housing demands, populations, or educational needs, if the Proposed Action or Alternative A were implemented.

4.7.2 No-Action Alternative

There would be an unavoidable **short-term, adverse impact** associated with the loss of man-hours that have been applied for design and preparation of the Proposed Action and Alternative A. Monetary resources (Defense Energy Support Center [DESC] funds) could be reallocated for other DESC projects.

There would be a **long-term adverse impact** to socioeconomics if the No-Action Alternative were implemented. The existing conditions of the EOD facilities are below the standard required for the flight to efficiently carry out its required mission. The inefficiencies create workarounds that lower the overall productivity of EOD personnel and increase the overall costs of accomplishing daily tasks. In addition, the existing facility does not have adequate spacing to accommodate the EOD's required equipment. This lack of space may potentially result in the equipment being exposed to the elements, thereby reducing the useful life of the equipment.

4.8 CULTURAL RESOURCES

4.8.1 Proposed Action and Alternative A

No impacts are anticipated from implementation of the Proposed Action or Alternative A; however, the discovery of an artifact or historical object would require all construction activities to cease until the Cultural Resource Specialist and/or the Base Historian is notified. Construction activities must not proceed until the aforementioned personnel provide approval. Archeological resources on either public or Native American lands cannot be excavated, removed, damaged, or otherwise altered without a permit (32 CFR 229.4(a)(5)(b)) and approval from the Cultural Resources Specialist at Scott AFB.

4.8.2 No-Action Alternative

There would be **no impact** to cultural and/or historical resources if the No-Action Alternative were selected. If construction does not occur, there would be no possibility of excavating any type of cultural resource, i.e. artifact, as part of this project.

4.9 LAND USE

4.9.1 Proposed Action and Alternative A

Construction of the new facility would involve the conversion of the current land use from a mowed turf grass area to a developed lot. This conversion would cause **long and short-term minor impacts** to land use as the Proposed Action and Alternative A sites were previously developed. The current and future land use, as described in the BGP, is compatible with the construction of a new addition.

4.9.2 No-Action Alternative

There would be **no impacts** to land use if this alternative were selected.

4.10 TRANSPORTATION SYSTEMS

4.10.1 Proposed Action and Alternative A

Short-term minor increases in traffic are anticipated from construction vehicles, and could increase road hazards to the public during the construction phases of the Proposed Action or Alternative A. Construction traffic is anticipated to have a **short-term minor adverse impact** to the public, pending completion of the facility. Increases in traffic flow from daily activities at the sites of the Proposed Action or Alternative A would be negligible; **no long-term impacts** are anticipated.

4.10.2 No-Action Alternative

No impacts to transportation systems are anticipated if the No-Action Alternative were selected.

4.11 AIRSPACE/AIRFIELD OPERATIONS

4.11.1 Proposed Action and Alternative A

The Proposed Action and Alternative A are located outside of any clear zone or accident potential zone, and therefore **no adverse impacts** to airspace or airfield operations are anticipated. In the long-term the implementation of the Proposed Action or Alternative A would create a **long-term positive impact** on airfield operations. The construction of the EOD facility would allow EOD personnel to rapidly respond to any emergency situations in the airfield operations area.

4.11.2 No-Action Alternative

Implementation of the No-Action Alternative has the potential to create a long-term **adverse impact** to airfield operations. The existing conditions of the EOD facilities are below the standard required for EOD personnel to efficiently carry out their required mission. The lack of adequate spatial requirements creates the potential for impaired response times should the EOD need to respond to an emergency situation.

4.12 SAFETY AND OCCUPATIONAL HEALTH

4.12.1 Proposed Action and Alternative A

No impacts to the health of occupational and construction workers is anticipated to occur with implementation of the Proposed Action or Alternative A, provided they comply with OSHA regulations and standards during construction activities.

A **long-term positive impact** to safety and health at Scott AFB is expected if the Proposed Action or Alternative A is implemented. The creation of a new EOD facility with adequate spacing and a centralized location would alleviate potential safety issues described in Section 4.12.2.

EOD personnel require certain types of munitions in order to adequately perform their mission at Scott AFB. All the applicable requirements of AFMAN 91-201 would be complied with when handling and storing these types of munitions.

4.12.2 No-Action Alternative

There would be a **long-term adverse impact** to safety and health if the No-Action Alternative were implemented. The existing conditions of the EOD facilities are below the standard required for EOD personnel to efficiently carry out their required mission. The lack of adequate spatial requirements and the current location of the EOD create the potential for impaired response times should the EOD need to respond to an emergency situation. In addition, the lack of sufficient storage at the current EOD facility creates a potentially unsafe environment, as equipment must be stacked in large piles in order to fit into the limited space.

4.13 ENVIRONMENTAL MANAGEMENT – POLLUTION PREVENTION

4.13.1 Proposed Action and Alternative A

In support of national environmental efforts, the contractor would recycle all ferrous and non-ferrous metals from the project. The contractor would also recycle general administrative refuse associated with this project. This refuse includes cardboard, mark 1 and 2 plastic bottles, glass, aluminum and steel cans, and mixed paper. The Base Recycling Center, Building 3286, on South Drive will accept these items Monday through Friday between 0730 and 1500 and Saturdays between 0730 and 1100. The use of ‘green’ products, reuse/recycling, and minimization of solid or hazardous waste would be encouraged during new construction activities at the sites of the Proposed Action or Alternative A as part of the Affirmative Procurement Plan.

Implementation of the Proposed Action or Alternative A would have **no impacts** to pollution prevention or environmental management programs, provided the above guidelines are followed.

4.13.2 No-Action Alternative

If the No-Action Alternative were implemented, no construction activities would occur on site and **no impacts** to environmental management or pollution prevention programs would be anticipated.

4.14 GEOLOGY AND SOILS

4.14.1 Proposed Action and Alternative A

Construction contractors will use erosion control measures consistent with the Natural Resources Conservation Service (NRCS) Illinois Urban Manual. Necessary measures and best management practices will be implemented to reduce soil erosion and siltation during construction. Interim measures to prevent erosion during construction would be implemented and could include the installation of staked straw bales, sedimentation basins, and temporary mulching. Proper grading would be accomplished to allow water to flow from the roadway and into the drainage system, rather than standing and eroding the shoulder or pavement edge. All construction areas will be mulched and seeded immediately upon completion of construction.

Phase I of the National Pollutant Discharge Elimination System (NPDES) storm water program presently covers discharges from large construction activities disturbing five acres or more of land. Phase II of NPDES storm water program covers small construction activities disturbing between one and five acres. Phase II became final on December 8, 1999, with small construction permit applications due by March 10, 2003. “Disturbance” refers to exposed soil resulting from activities such as clearing, grading, and excavating. Construction activities can include road building, construction of residential houses, office buildings, and industrial sites, and demolition. Implementation of the Proposed Action or Alternative A would disturb less than one acre of land.

Implementation of the Proposed Action or Alternative A would have **no impact** to soils or geological resources, provided all of the aforementioned recommendations are applied.

4.14.2 No-Action Alternative

There would be **no impact** to geological resources or soils if the No-Action Alternative were selected since the proposed construction sites would remain undisturbed.

4.15 ENVIRONMENTAL JUSTICE

4.15.1 Proposed Action and Alternative A

There are no minority or low-income populations in the areas of the Proposed Action or Alternative A; therefore, EO 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*, is not applicable.

Implementation of the Proposed Action or Alternative A would have **no impact** to minority or low-income populations.

4.15.2 No-Action Alternative

The No-Action Alternative would have **no impact** to minority or low-income populations.

4.16 INDIRECT AND CUMULATIVE IMPACTS

4.16.1 Proposed Action and Alternative A

There are no known indirect impacts related to implementation of the Proposed Action or Alternative A. The only known potential cumulative impact is the construction of a drive through vehicle bay at the site of the Proposed Action and Alternative A. This construction is not anticipated to create a significant impact to resources at the site of the Proposed Action and Alternative A. Any new construction at the site of the Proposed Action and Alternative A would require additional NEPA review prior to the design and construction of additional facilities.

4.16.2 No-Action Alternative

An indirect and cumulative impact is not anticipated under the No-Action Alternative.

4.17 UNAVOIDABLE ADVERSE IMPACTS

4.17.1 Proposed Action and Alternative A

There are several short-term unavoidable minor adverse impacts summarized in Table 4-2 on the following page; however, there would be **no unavoidable significant adverse impacts** if the Proposed Action or Alternative A were implemented.

4.17.2 No-Action Alternative

There are several short-term and long-term **unavoidable adverse impacts** that would result if the No-Action Alternative were implemented. These impacts are summarized in Table 4-2 and include impacts to socioeconomics, airspace/airfield operations, and occupation safety and health.

4.18 SUMMARY TABLE OF ENVIRONMENTAL CONSEQUENCES

Table 4-2 provides a summary of the potential environmental impacts of the Proposed Action, Alternative A, and the No-Action Alternative.

Table 4-2. Comparison of Environmental Consequences*

Environmental Resources	Proposed Action	Alternative A	No-Action Alternative
Air Quality	Short-term – Minor Adverse Impact Long-term – No Impact	Short-term – Minor Adverse Impact Long-term – No Impact	Short-term – No Impact Long-term – No Impact
Noise	Short-term – Minor Adverse Impact Long-term – No Impact	Short-term – Minor Adverse Impact Long-term – No Impact	Short-term – No Impact Long-term – No Impact
Socioeconomics	Short-term – Positive Impact Long-term – Positive Impact	Short-term – Positive Impact Long-term – Positive Impact	Short-term – Adverse Impact Long-term – Adverse Impact
Land Use	Short-term – Minor Impact Long-term – Minor Impact	Short-term – Minor Impact Long-term – Minor Impact	Short-term – No Impact Long-term – No Impact
Transportation Systems	Short-term – Minor Adverse Impact Long-term – No Impact	Short-term – Minor Adverse Impact Long-term – No Impact	Short-term – No Impact Long-term – No Impact
Airspace/Airfield Operations	Short-term – No impact Long-term – Positive Impact	Short-term – No impact Long-term – Positive Impact	Short-term – Adverse Impact Long-term – Adverse Impact
Occupation Safety and Health	Short-term – No impact Long-term – Positive Impact	Short-term – No impact Long-term – Positive Impact	Short-term – Adverse Impact Long-term – Adverse Impact
Unavoidable Adverse Impacts	Short-term – Minor Adverse Impact Long-term – No Impact	Short-term – Minor Adverse Impact Long-term – No Impact	Short-term – Adverse Impact Long-term – Adverse Impact

*Environmental resources having **no impact** have been excluded from this matrix.

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5.0 REFERENCES

- 375 CES, *Scott Air Force Base General Plan*, Scott Air Force Base, Illinois. October 2004.
- Code of Federal Regulations, 14 CFR FAR, Part 150, Airport Noise Compatibility Planning.
- Department of the Air Force, Headquarters 375th Airlift Wing Air Mobility Command Scott AFB Illinois. *Integrated Natural Resources Management Plan for Scott AFB*. 2002.
- Engineering Science Inc., *Installation Restoration Program Phase I*, Atlanta. April 1985.
- ERM (Environmental Resources Management), *Installation Restoration Program Stage I Remedial Investigation/Feasibility Study, Vol. I*, draft report prepared by Headquarters Military Airlift Command, Scott Air Force Base, Illinois. 1989.
- Federal Emergency Management Agency. Flood Insurance Rate Map. St Clair County, Illinois. 1985.
- Federal Interagency Committee on Wetland Delineation. 1989.
- Montgomery Watson, *Final RI/RFI Work Plan for Site SS-14 (Consolidated Aircraft Maintenance Squadron)*, Scott Air Force Base, St. Clair County, Illinois. July 2002.
- National Park Service, Interagency Archeology Services, *Archeological Assessment of Scott Air Force Base, St. Clair County, Illinois*. 1992.
- Thomason and Associates, *Inventory and Evaluation of Historic Buildings and Structures on Scott Air Force Base, Illinois*. June 1992.
- T N and Associates, Inc. *Draft Phase II RCRA Facility Investigation Report Aqua Yard (Site SS-11)*. Project No. VDYD2003-7100. October 2004.
- USAF Headquarters Military Airlift Command, Scott AFB, Illinois. *Final Environmental Impact Statement for Joint Military-Civilian Use of Scott Air Force Base, Illinois, Vol. 1, Impacts Analysis*. July 1991.
- U.S. Army Corps of Engineers, Omaha District. *Final Multi-Site Preliminary Assessment/Site Investigation for Scott AFB, Illinois*. October 1995.
- U.S. Army Engineer Research and Development Center. Environmental Laboratory. *Draft Environmental Assessment of Selected Fauna and their Habitats at Scott AFB Illinois: Bat Surveys, Seasonal Avian Inventories, and Botanical Survey of Forested Areas*. Vicksburg, Mississippi. Dec. 2001.
- U.S. Census Bureau; St. Clair County QuickFacts
<http://quickfacts.census.gov/qfd/states/17/17163.html>, 2000.

U.S. Department of Agriculture, Soil Conservation Service. *Soil Survey of St. Clair County, Illinois*. Illinois. Oct 1978.

U.S. EPA; National Ambient Air Quality Standards.
<[http:// www.epa.gov/air/criteria.html](http://www.epa.gov/air/criteria.html)> 2005.

Woolpert LLP, *Scott Air Force Base General Plan*. Dayton, Ohio. May 2002.

6.0 LIST OF PREPARERS

Brian Tutterow
SAIC, 8 years experience

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APPENDIX A
AIR FORCE FORM 813

REQUEST FOR ENVIRONMENTAL IMPACT ANALYSIS

Report Control Symbol
RCS:

INSTRUCTIONS: Section I to be completed by Proponent. Sections II and III to be completed by Environmental Planning Function. Continue on separate sheets as necessary. Reference appropriate item number(s).

SECTION I - PROPONENT INFORMATION

1. TO (Environmental Planning Function)	2. FROM (Proponent Organization and functional address symbol)	2a. TELEPHONE NO.
375CES/CEV Bldg. 56 Scott AFB, IL 62225	Art Wiesen, Architect 375 CES/CECD 701 Hangar Rd. Scott AFB, IL 6222-5035	Art Wiesen 618 256-8880 Bill Micka 618 256-4764

3. TITLE OF PROPOSED ACTION

Construct an addition to existing building 504.

4. PURPOSE AND NEED FOR ACTION (Identify decision to be made and need date)

(see attached)

5. DESCRIPTION OF ACTION AND ALTERNATIVES (DOPAA) (Provide sufficient details for evaluation of the total action)

(see attached)

6. PROPONENT APPROVAL (Name and Grade)	6a. SIGNATURE	6b. DATE
ART WIESEN GS-11		25 Mar 04

SECTION II - PRELIMINARY ENVIRONMENTAL SURVEY (Check appropriate box and describe potential environmental effects including cumulative effects) (+ = positive effect; 0 = no effect; - = adverse effect; U = unknown effect)

	+	0	-	U
7. AIR INSTALLATION COMPATIBLE USE ZONE/LAND USE (Noise, accident potential, encroachment, etc.)				
8. AIR QUALITY (Emissions, attainment status, state implementation plan, etc.)		0		
9. WATER RESOURCES (Quality, quantity, source, etc.)		✓		
10. SAFETY AND OCCUPATIONAL HEALTH (Asbestos/radiation/chemical exposure, explosives safety quantity distance, bird/wildlife aircraft hazard, etc.)		✓	-	
11. HAZARDOUS MATERIALS/WASTE (Use/storage/generation, solid waste, etc.)		✓		
12. BIOLOGICAL RESOURCES (Wetlands/floodplains, threatened or endangered species, etc.)		✓		
13. CULTURAL RESOURCES (Native American burial sites, archaeological, historical, etc.)		✓		
14. GEOLOGY AND SOILS (Topography, minerals, geothermal, Installation Restoration Program, seismicity, etc.)		✓		
15. SOCIOECONOMIC (Employment/population projections, school and local fiscal impacts, etc.)				
16. OTHER (Potential impacts not addressed above.)				

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SECTION III - ENVIRONMENTAL ANALYSIS DETERMINATION

17.	PROPOSED ACTION QUALIFIES FOR CATEGORICAL EXCLUSION (CATEX) # _____; OR
X	PROPOSED ACTION DOES NOT QUALIFY FOR A CATEX; FURTHER ENVIRONMENTAL ANALYSIS IS REQUIRED.

18. REMARKS

EA Required

19. ENVIRONMENTAL PLANNING FUNCTION CERTIFICATION (Name and Grade)	19 a. SIGNATURE	19 b. DATE
SCOTT A. HUNDT PAUL / AS-G		11 MAY 04

AF FORM 813 19990901 (EF-V1)

THIS FORM CONSOLIDATES AF FORMS 813 AND 814.

PAGE OF PAGE(S)

4.0 PURPOSE AND NEED FOR ACTION

To provide for additional office/training space, vehicle storage and equipment repair facilities.

4.1 Purpose of the Action

Existing EOD personnel are scattered at varied locations on the base, the additional floor area will permit all EOD functions to be centrally located in one location as well as provide room for personnel and equipment being relocated to Scott AFB.

The addition will also provide for the Deployment Personnel, which is currently using a unheated/unair-conditioned construction trailer located in a free zone, to be located in a secure area on the flight line.

4.2 Need for the Action

Existing EOD personnel are scattered at varied locations on the base, the additional floor area will permit all EOD functions to be centrally located in one location as well as provide room for personnel and equipment being relocated to Scott AFB.

The addition will also provide for the Deployment Personnel, which is currently using a unheated/unair-conditioned construction trailer located in a free zone, to be located in a secure area on the flight line.

4.3 Related EISs/EAs and Other Documents

none

5.0 DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES

5.1 Description of the Proposed Action

The addition will permit EOD functions and expansion to be centrally located in one area. The addition will allow for Deployment personnel to process personnel and material in a secured area while maintaining visual oversight of the flight line area and remove the construction trailer they currently occupy for deployment operations. The proposed addition will be located between the existing building 504 and the flightline.

5.2 Anticipated Environmental Issues

None, at this time.

5.3 Design, Evaluation, and Selection Criteria

The proposed design provides Deployment personnel with approximately 705 s.f. of floor area for processing personnel deploying overseas. The design provides approximately 3100 s.f. of area for vehicle storage and equipment repair facilities. The design further provides approximately 1300 s.f. of area for offices with an additional 1300 s.f. of training area for EOD personnel. The building is being designed to meet the International Building Code, NEC and NFPA fire safety codes.

5.4 Description of Alternatives

5.4.1 No-Action Alternative

Existing EOD functions will remain scattered at location about the base and the relocation of other EOD flights will be jeopardized.

5.4.2 Proposed Action

The addition will permit EOD functions and expansion to be centrally located in one area. The addition will allow for Deployment personnel to process personnel and material in a secured area while maintaining visual oversight of the flight line area and remove the construction trailer they currently occupy for deployment operations. The proposed addition will be located between the existing building 504 and the flightline.

5.4.3 Other Reasonable Action Alternatives

None

5.5 List of Required Permits

Permitting processes have not begun and remain unidentified at this time.

5.6 Recommended Level of Documentation

No recommendations based upon current knowledge of project.

APPENDIX B
SITE PHOTOGRAPHS

Existing Building 504



View facing northeast at the front of Building 504.



View facing northeast at the southeast corner of Building 504.



View facing southwest at the back of Building 504.



View facing southeast at the side of Building 504 that faces Hangar Road.

Proposed Action Location



View facing south at the location of the Proposed Action.
Building 505 is in the background.



View facing south at the location of the Proposed Action.

Alternative A Location



View facing northeast at the proposed site for Alternative A.
Building 507 is in the right background.



View facing east at the proposed location for Alternative A.
Building 507 is in the background.

Cargo Deployment Trailer



View facing north at the Cargo Deployment trailer. Building 433 is in the background.



View from the site of the Proposed Action at Hangar Road and the Cargo Deployment trailer.

**FINDING OF NO SIGNIFICANT IMPACT TO
CONSTRUCT THE EOD ADDITION
SCOTT AIR FORCE BASE, ILLINOIS**

Agency: United States Air Force, Headquarters, Air Mobility Command

Background: Pursuant to the President's CEQ regulations, {Title 40 Code of Federal Regulations (CFR) Parts 1500-1508}, the National Environmental Policy Act of 1969 {42 USC §4321, et seq.}, Air Force Instruction (AFI) 32-7061, and the Environmental Impact Analysis Process, as promulgated at 32 CFR Part 989, the U.S. Air Force conducted an Environmental Assessment of the potential consequences associated with the construction of an Explosive Ordnance Disposal (EOD) addition to Building 504 at Scott AFB, IL. The EA considered all potential natural resources, environmental, and cultural impacts of the EOD addition to Building 504 (hereinafter, "Proposed Action") and listed alternatives, both as solitary actions and in conjunction with other proposed activities. This Finding of No Significant Impact (FONSI) summarizes the results of this EA and provides the U.S. Air Force's rationale for the Proposed Action and alternatives.

PROPOSED ACTION: The Proposed Action includes constructing a 6,405 square-foot addition adjacent to Building 504. The new addition would be located in an area that is currently mowed turf grass.

Alternatives: The alternatives to the Proposed Action are Alternative A and the No-Action. Implementation of the No-Action Alternative does not alleviate the spatial problems at the current EOD facility nor does it alleviate the issue of an adequate response time for EOD emergencies. Implementation of Alternative A would meet the requirements of the EOD but the location of this alternative was determined by the Air Mobility Command Design Center to be incompatible with the visual setting along Hangar Road and South Drive. In addition, Alternative A would place the EOD facility farther away from the flightline, creating logistical problems for Cargo Deployment personnel.

Cultural and Historical Resources: The Proposed Action site is located in an area where there are no existing facilities or structures. Historically, the site has been highly disturbed. No artifacts or historical objects are expected to be excavated during construction. In the unlikely event artifacts or historical objects are discovered, construction activities would cease until the Cultural Resources Specialist and Base Historian are notified and the appropriate action is accomplished.

Air Quality: Fugitive dust and construction vehicle exhaust would be generated during construction of the Proposed Action. However, these emissions would not constitute a major source of air pollutants based on quantitative analyses of particulate matter and vehicle emissions generated by projects of similar size and scope. The estimated values of direct and indirect emissions are below the *de minimus* thresholds specified at 40 CFR 93.153(b)(1). Therefore, the Proposed Action would not increase emissions over baseline emission levels. The Proposed Action would be in compliance with all relevant requirements and milestones contained in the Illinois State Implementation Plan; therefore, a conformity determination would not be necessary.

Hazardous Materials and Waste: The use of hazardous materials during construction activities would be limited and generation of hazardous waste would not be anticipated from the Proposed Action. There would be no anticipated impact to human health or the environment during construction activities or from activities associated with implementation of the Proposed Action.

Noise: Some noise impacts would occur during the construction of the Proposed Action. The amount of noise generated from operational activities would be temporary and negligible.

Geology and Soils: The surface area would be considerably disturbed by construction activities at the Proposed Action; however, construction would not negatively affect surface or geological resources. Necessary measures and best management practices would be utilized to prevent soil erosion during and after construction activities.

Water Resources: There would be no significant impacts to surface or ground water quality during construction of the Proposed Action. Necessary measures and best management practices would be utilized to prevent sedimentation of surface water resources.

Occupational Safety and Health: If the Proposed Action is implemented, no unfavorable impacts to occupational health and safety are projected. A positive impact to EOD personnel is expected.

Biological Resources: No biological resources, including endangered or threatened species, or rare fauna and flora inhabit the Proposed Action area. As such, no impacts are probable.

Ordinance: The EOD is required as part of their mission to use certain types of munitions and firearms. These munitions and firearms will be maintained in compliance with all applicable Air Force regulations and as such no impacts are anticipated.

Environmental Justice: There would be no disproportionately high or adverse impact on minority or low-income populations as a result of the Proposed Action.

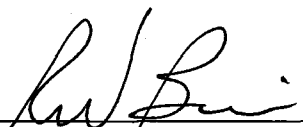
Indirect and Cumulative Impacts: No impacts are anticipated from site-specific, direct, indirect, or cumulative impacts associated with the Proposed Action.

Relationship Between Short-term Uses and Enhancement of Long-Term Productivity: Implementation of the Proposed Action could have a positive effect on long-term productivity by providing EOD personnel with a comfortable and efficient work environment.

Irreversible and Irretrievable Commitment of Resources: There would be minor irreversible and irretrievable commitment of resources if the Proposed Action were selected. Military funds would be permanently expended, building materials would be permanently committed for construction, and the area proposed for new construction would be a long-term commitment of resources. However, the overall impact would be considered inconsequential.

Unavoidable Adverse Impacts: There would be no major unavoidable adverse impacts associated with the Proposed Action.

FINDING OF NO SIGNIFICANT IMPACT: Based upon my review of the facts and analyses contained in the attached Environmental Assessment for the Construction of an Addition to Building 504 dated 14 June 2005, I conclude that implementation of the Proposed Action would not have a considerable impact, either by itself or cumulatively with other projects at Scott AFB. Accordingly, the requirements of NEPA, the CEQ regulations, and 32 CFR 989 are fulfilled and an Environmental Impact Statement is not required. The signing of this Finding of No Significant Impact completes the environmental impact analysis process under Air Force Regulations.



ROBERT W. BARRIER, Colonel, USAF
Acting EPC Chairperson



DATE

Attachment:
Environmental Assessment