ENVIRONMENTAL ASSESSMENT OF OPERATIONS AND MAINTENANCE FUNDED CONSTRUCTION ACTIVITIES AT SCOTT AIR FORCE BASE, ILLINOIS

NOVEMBER 2004

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FINDING OF NO SIGNIFICANT IMPACT (FONSI)

OPERATIONS AND MAINTENANCE FUNDED CONSTRUCTION ACTIVITIES AT SCOTT AIR FORCE BASE, ILLINOIS

INTRODUCTION

The 375th Airlift Wing (375 AW) of the United States Air Force (USAF) has identified the need to complete two operations and maintenance (O&M) funded construction projects at Scott Air Force Base (AFB), Illinois. Scott AFB proposes to repair drainage deficiencies south of West Martin Street; and construct temporary, modular Education Center facilities, relocate the existing Education Center and personnel, and renovate and modify Buildings 3189 and 3190. These Proposed Actions and the No Action Alternative were assessed in the attached Environmental Assessment (EA). Scott AFB is a USAF base under the Air Mobility Command (AMC) and is home of the 375 AW. The 375 AW supports two major headquarters: the U.S. Transportation Command and Headquarters AMC. The 375 AW supports Scott AFB by providing a responsive aeromedical airlift system to move eligible patients and operational support airlift for priority passengers and cargo, conducting all USAF C-9A qualification and instructor training, and providing all base support services to multiple tenant units on base.

PURPOSE OF AND NEED FOR THE PROPOSED ACTION

The purpose of the Proposed Action is to replace inadequate existing facilities or construct new facilities to perform activities necessary to meet USAF mission, emergency response, and force protection concerns at Scott AFB. The Proposed Action is required to maintain morale, productivity, and to provide 375 AW and civilian employees with adequate facilities and infrastructure. The overall objective of the O&M program is to support the USAF mission by providing USAF personnel and other authorized patrons quality facilities.

Project No. 1 – Repair Drainage Deficiencies on Scott Drive. The purpose of this project is to correct inadequate storm water runoff along and around Scott Drive and to decrease hazards when heavy rain events occur. Currently when a heavy rain event occurs, water accumulates on the road surface and does not drain properly. This causes traffic to slow considerably during peak hours, creates a safety hazard for motor vehicles because of the increased risk of hydroplaning, and decreases the serviceable lifespan of the pavement.

Project No. 2 – Construct Temporary, Modular Education Center Facilities, Relocate Existing Education Center and Personnel, and Renovate and Modify Buildings 3189 and 3190. The purpose of this project is to provide adequate working space for Education Center and Defense Information Systems Agency (DISA) personnel. Due to DISA's increasing mission and manpower needs, DISA requires additional space in the vicinity of Building 3189. Currently, the existing Education Center (Building 3189) does not meet the minimum space standards for the additional DISA personnel, their related equipment, and mission needs. DISA currently shares space with the Education Center in Building 3189 and has 420 personnel. In 2005, 301 additional DISA personnel would be stationed at Scott AFB. These additions have created a 30,000 square foot (sf) deficiency for DISA mission operations

DESCRIPTION OF THE PROPOSED ACTION

Project No. 1 – Repair Drainage Deficiencies on Scott Drive. To reduce the storm sewer system flow problem and potential safety hazards, and to increase serviceable lifespan of the pavements around and along Scott Drive, 375 AW proposes to repair storm sewer system pipe network 6 and a small portion of pipe network 7 south of West Martin Street. This would include replacing culverts and piping, resloping road shoulders, and replacing outdated lift and pump stations. The minimal size of the storm sewer piping to be installed would be 12 inches in diameter and all of the pipes installed would have positive slopes. This project is scheduled to start in calendar year (CY) 2004 and would last for approximately 6 months.

Project No. 2 – Construct Temporary, Modular Education Center Facilities, Relocate Existing Education Center and Personnel, and Renovate and Modify Buildings 3189 and 3190. 375 AW proposes to construct concrete foundations (61,600 sf) for 22 temporary trailers. The trailers would be modular and would hold Education Center personnel, furniture, and equipment. The trailers would be in the parking lot adjacent to Building 1650. This project would involve installing utilities to each trailer. After these temporary trailers are constructed, the furniture, equipment, and personnel from the existing Education Center (Building 3189) would be relocated to these trailers. Once Building 3189 is vacated, DISA would need to renovate this facility to allow for appropriate mission operations. DISA also desires to occupy three rooms in Building 3190, which is currently condemned. Occupying rooms in Building 3190 would require repairing electrical, roof, and other systems and installing transformers. Constructing the trailer area near Building 1650 would occur in early CY 2004 and would last for approximately one month. Renovation of Building 3189 and 3190 would occur in mid to late CY 2004 and would last for approximately three months. The Education Center would be located within these temporary trailers for approximately three years until Building 1650 is renovated. Once Building 1650 is renovated, the Education Center, furniture, and equipment would be permanently located in this facility.

NO ACTION ALTERNATIVE

Under the No Action Alternative, existing conditions would remain as is and none of the proposed projects would occur. If the No Action Alternative were carried forward there would be no change in or effects on air quality, geological resources, water resources, hazardous materials and waste management, and infrastructure and utilities at Scott AFB. However, storm water drainage around and along Scott Drive would continue to be inadequate, water would continue to accumulate to unsafe conditions on road surfaces, and traffic would continue to be congested during heavy rain events; and DISA would not have sufficient space to meet its mission requirements if the No Action Alternative were implemented.

ENVIRONMENTAL IMPACTS OF THE PROPOSED ACTION

Analysis of the Proposed Action indicates that the affected environment would not be significantly impacted by proceeding with the proposed O&M-funded construction activities.

PUBLIC REVIEW AND INTERAGENCY COORDINATION

Federal, state, and local agencies listed in Appendix A of the EA were contacted for comment on the Proposed Action. No agency comments were received during the Interagency and Intergovernmental Coordination for Environmental Planning period. Based on the provisions set forth in the Proposed Action, all activities were found to comply with the criteria or standards of environmental quality and coordinated with the appropriate Federal, state, and local agencies. The EA and Draft Finding of No Significant Impact (FONSI) were made available to the public for a 30-day review period. Additionally, copies of the EA and Draft FONSI were forwarded to Federal, state, and local agencies for review and comment. No agency or public comments were received on the EA and Draft FONSI.

FINDING OF NO SIGNIFICANT IMPACT

After review of the EA prepared in accordance with the requirements of the National Environmental Policy Act (NEPA); the Council on Environmental Quality (CEQ) regulations; and Environmental Impact Analysis Process (EIAP), 32 Code of Federal Regulations (CFR) Part 989, as amended, I have determined that the Proposed Action would not have a significant impact on the quality of the human or natural environment and, therefore, an Environmental Impact Statement (EIS) does not need to be prepared. This decision has been made after taking into account all submitted information, and considering a full range of practical alternatives that would meet project requirements and are within the legal authority of the USAF.

ROBERT W. BARRIER, Colonel, USAF
EPC Chairperson

29 Nov 04
Date

ABBREVIATIONS AND ACRONYMS

°F	degrees Fahrenheit
375 AW	375th Airlift Wing
375 CES/CEV	375th Environmental Flight
ACM	asbestos-containing material
AFB	Air Force Base
AFI	Air Force Instruction
AFOSH	Air Force Occupational and Environmental Safety, Fire Protection, and Health
AFPD	Air Force Policy Directive
AMC	Air Mobility Command
ANG	Air National Guard
AQCR	air quality control region
C&D	construction and demolition
CAA	Clean Air Act
CEQ	Council on Environmental Quality
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFR	Code of Federal Regulations
cfs	cubic feet per second
CO	carbon monoxide
CWA	Clean Water Act
CY	Calendar Year
DISA	Defense Information Systems Agency
DOD	U.S. Department of Defense
EA	Environmental Assessment
EIAP	Environmental Impact Analysis Process
EIS	Environmental Impact Statement
EO	Executive Order
ERP	Environmental Restoration Program
FESOP	Federally Enforceable State Operating Permit
FIP	Federal Implementation Plan
FONSI	Finding of No Significant Impact
HAP	hazardous air pollutant
HAZMAT	hazardous material
HMMP	Hazardous Materials Management Plan
HSWA	Hazardous and Solid Waste Amendments
IICEP	Interagency and Intergovernmental Coordination for Environmental Planning
kV	kilovolt
LBP	lead-based paint
mg/m^3	milligrams per cubic meter
mgd	million gallons per day
MSL	mean sea level
MSW	municipal solid waste
NAAQS	National Ambient Air Quality Standards
NEPA	National Environmental Policy Act
NO_2	nitrogen dioxide
NO_x	nitrogen oxide(s)
NPDES	National Pollutant Discharge Elimination System
NSR	New Source Review
O&M	operations and maintenance
O_3	ozone
Pb	lead
PM_{10}	particulate matter ≤ 10 microns in diameter
$PM_{2.5}$	particulate matter ≤ 2.5 microns in diameter
POL	Petroleum, Oil, and Lubricants
ppm	parts per million
QD	quantity distance
RCRA	Resource Conservation and Recovery Act
SARA	Superfund Amendments and Reauthorization Act
sf	square foot
SIP	State Implementation Plan
SO_2	sulfur dioxide
tpy	tons per year
TSCA	Toxic Substances Control Act
TSP	total suspended particulate
U.S.	United States
U.S.C.	United States Code
USACE	U.S. Army Corps of Engineers
USAF	U.S. Air Force
USEPA	U.S. Environmental Protection Agency
VOC	volatile organic compound
WWTP	wastewater treatment plant
$\mu g/m^3$	micrograms per cubic meter

COVER SHEET

ENVIRONMENTAL ASSESSMENT OF OPERATIONS AND MAINTENANCE FUNDED CONSTRUCTION ACTIVITIES AT SCOTT AIR FORCE BASE, ILLINOIS

Responsible Agencies: U.S. Air Force (USAF), Air Mobility Command (AMC), and 375th Airlift Wing (375 AW), Scott Air Force Base (AFB), Illinois.

Affected Location: Scott AFB, Illinois

Report Designation: Environmental Assessment (EA)

Proposed Action: The purpose of the Proposed Action is to replace inadequate existing facilities and construct new facilities to perform activities necessary to meet USAF mission, and traffic safety concerns at Scott AFB. The 375 AW has identified the need to complete two operations and maintenance (O&M) funded construction projects to implement the Scott AFB General Plan and support various base organizations. These projects include

- Repair drainage deficiencies.
- Construct temporary, modular Education Center facilities on the parking lot adjacent to Building 1650 (Old Base Exchange) and then relocate the existing Scott Education Center and its personnel from Building 3189 to these new modular facilities. Buildings 3189 and 3190 would also require renovation and modification of electrical, roof, and other systems; and installation of transformers so the Defense Information Systems Agency (DISA) can occupy these facilities.

An EA has been prepared to evaluate the Proposed Action and the No Action Alternative. Resources that will be considered in the impact analysis are air quality, geological resources, water resources, hazardous materials and wastes, infrastructure and utilities, and safety.

Written comments and inquiries regarding this document should be directed to Mr. Paul Schmidt, 375 CES/CEV, 701 Hangar Road, Building 56, Scott AFB, Illinois 62225.

ENVIRONMENTAL ASSESSMENT OF OPERATIONS AND MAINTENANCE FUNDED CONSTRUCTION ACTIVITIES AT SCOTT AIR FORCE BASE, ILLINOIS

AIR MOBILITY COMMAND
Environmental Planning Branch
507 Symington Drive
Scott Air Force Base, IL 62225-5022

NOVEMBER 2004

ENVIRONMENTAL ASSESSMENT OF OPERATIONS AND MAINTENANCE FUNDED CONSTRUCTION ACTIVITIES AT SCOTT AIR FORCE BASE, ILLINOIS

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1. Purpose of and Need for the Proposed Action

1.1 Background

Scott Air Force Base (AFB) is a United States (U.S.) Air Force (USAF) base under the Air Mobility Command (AMC). Scott AFB is headquarters to the 375th Airlift Wing (375 AW). The 375 AW supports two major headquarters: the U.S. Transportation Command and Headquarters AMC. It also provides support for the Air Force Communications Agency, the Defense Information Technology Contracting Office, the 932nd Airlift Wing (Reserve), the Illinois Air National Guard's (ANG) 126th Air Refueling Wing, and 30 other tenants. The 375 AW supports Scott AFB by providing a responsive aeromedical airlift system to move eligible patients and operational support airlift for priority passengers and cargo; conducting all USAF C-9A qualification and instructor training; and providing all base support services to multiple tenant units on base.

This 375 AW proposes the following two operations and maintenance (O&M) funded construction activities on Scott AFB:

- Repair drainage deficiencies.
- Construct temporary, modular Education Center facilities on the parking lot adjacent to Building 1650 (Old Base Exchange), and then relocate the existing Scott Education Center and its personnel from Building 3189 to these new modular facilities. Buildings 3189 and 3190 would also require renovation and modification of electrical, roof, and other systems; and installation of transformers so the Defense Information Systems Agency (DISA) can occupy these facilities.

This Environmental Assessment (EA) analyzes the 375 AW's Proposed Action and the No Action Alternative. If the analyses presented in the EA indicate that implementation of the Proposed Action would not result in significant environmental impacts, a Finding of No Significant Impact (FONSI) would be prepared. A FONSI briefly presents why a Proposed Action would not have a significant effect on the human environment and why an Environmental Impact Statement (EIS) is unnecessary. If significant environmental issues result that cannot be mitigated to insignificance, an EIS will be required, or the Proposed Action would be abandoned and no action would be taken.

Based on the analysis in the EA, the USAF, as the decision-maker, will decide whether there are significant adverse environmental impacts associated with the O&M funded construction activities on Scott AFB. Based on the review of the analysis, the USAF will either prepare a FONSI or recommend the analysis proceed to an EIS.

1.2 Purpose and Need of the Proposed Action

The 375 AW has identified the need to complete two O&M funded construction projects to implement elements of the Scott AFB General Plan and support various base organizations. The purpose and need for each of these projects are further discussed below.

The purpose of the Proposed Action is to replace inadequate existing facilities or construct new facilities to perform activities necessary to meet USAF mission concerns at Scott AFB. The Proposed Action is required to maintain morale, productivity, and provide 375 AW and civilian employees with adequate facilities and infrastructure. The USAF is committed to providing its people with an appropriate quality of life, while simultaneously reducing costs and increasing mission effectiveness. The overall objective of the O&M program is to support the USAF mission by providing USAF personnel and other authorized patrons adequate quality facilities.

Project No. 1 – Repair Drainage Deficiencies. The purpose of this project is to correct inadequate storm water drainage along and around Scott Drive and decrease potential risks when heavy rain events occur. The existing storm sewer system no longer has the capacity to handle the existing inflows without discharging. Currently when a heavy rain event occurs, water accumulates on road surfaces along Scott Drive and does not drain properly. This water build-up causes traffic to slow considerably during peak hours, creates a safety hazard for motor vehicles because of the increased risk of hydroplaning, and decreases the serviceable lifespan of the pavement.

Project No. 2 – Construct Temporary, Modular Education Center Facilities, Relocate Existing Education Center and Personnel, and Renovate and Modify Buildings 3189 and 3190. The purpose of this project is to provide adequate working space for Education Center and DISA personnel. Due to DISA's increasing mission and manpower needs, DISA requires additional space in the vicinity of Building 3189. Currently, the existing Education Center (Building 3189) does not meet the minimum space standards for the additional DISA personnel, their related equipment, and mission needs. DISA currently shares space with the Education Center in Building 3189 and has 420 personnel. In 2005, 301 additional DISA personnel would

be stationed at Scott AFB. These additions have created a 30,000 square foot (sf) deficiency for DISA mission operations (Lewis 2003).

1.3 Location

Scott AFB is in Saint Clair County in the southwestern portion of Illinois, 6.5 miles south of the City of Shiloh, and approximately 25 miles east of the Mississippi River (see Figure 1-1). The areas adjacent to the airfield consist of farmland to the north, west, and south of the base, and wooded areas along the eastern edge of the base.

1.4 Summary of Key Environmental Compliance Requirements

1.4.1 National Environmental Policy Act

The National Environmental Policy Act, commonly known as NEPA, is a Federal statute requiring the identification and analysis of potential environmental impacts of proposed Federal actions before those actions are taken. NEPA established the Council on Environmental Quality (CEQ) that is charged with the development of implementing regulations and ensuring agency compliance with NEPA. CEQ regulations mandate that all Federal agencies use a systematic interdisciplinary approach to environmental planning and the evaluation of actions that might affect the environment. This process evaluates potential environmental consequences associated with a proposed action and considers alternative courses of action. The intent of NEPA is to protect, restore, or enhance the environment through well-informed Federal decisions.

The process for implementing NEPA is codified in Title 40 Code of Federal Regulations (CFR) Part 1500–1508, *Regulations for Implementing the Procedural Provisions of the National Environmental Policy Act.* The CEQ was established under NEPA to implement and oversee Federal policy in this process. CEQ regulations specify the following must be accomplished when preparing an EA.

- Briefly provide evidence and analysis for determining whether to prepare an EIS or a FONSI.
- Aid in an agency's compliance with NEPA when an EIS is unnecessary.
- Facilitate preparation of an EIS when one is necessary.

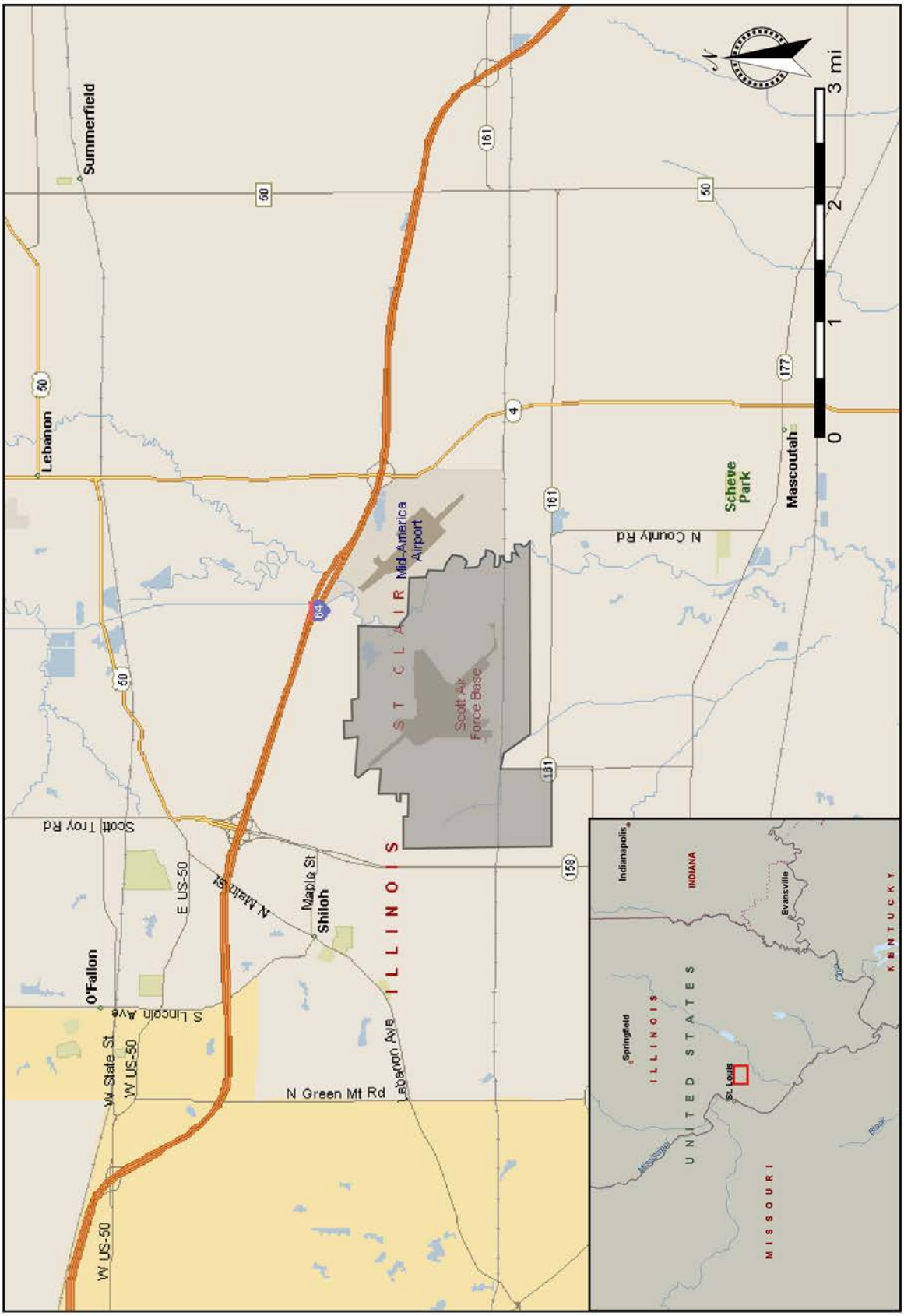

Figure 1-1. Scott AFB and Surrounding Area

Air Force Policy Directive (AFPD) 32-70, *Environmental Quality*, states that the USAF will comply with applicable Federal, state, and local environmental laws and regulations, including NEPA. The USAF's implementing regulation for NEPA is *Environmental Impact Analysis Process (EIAP)*, 32 CFR Part 989, as amended.

1.4.2 Integration of Other Environmental Statutes and Regulations

To comply with NEPA, the planning and decision-making process for actions proposed by Federal agencies involves a study of other relevant environmental statutes and regulations. The NEPA process, however, does not replace procedural or substantive requirements of other environmental statutes and regulations. It addresses them collectively in the form of an EA or EIS, which enables the decision-maker to have a comprehensive view of major environmental issues and requirements associated with the Proposed Action. According to CEQ regulations, the requirements of NEPA must be integrated "with other planning and environmental review procedures required by law or by agency so that all such procedures run concurrently rather than consecutively."

This EA examined potential effects of the Proposed Action and alternatives on six resource areas: air quality, geological resources, water resources, hazardous materials and wastes, infrastructure and utilities, and safety. The following paragraphs present examples of relevant laws, regulations, and other requirements that are often considered as part of the analysis.

Air Quality

The Clean Air Act (CAA) establishes Federal policy to protect and enhance the quality of the nation's air resources to protect human health and the environment. The CAA requires that adequate steps be implemented to control the release of air pollutants and prevent significant deterioration in air quality. The 1990 amendments to the CAA require Federal agencies to determine the conformity of proposed actions with respect to State Implementation Plans (SIPs) for attainment of air quality goals.

Water Resources

The Clean Water Act (CWA) of 1977 (33 United States Code [U.S.C.] 1344) and the Water Quality Act of 1987, 33 U.S.C. 1251, et seq., as amended) establish Federal policy to restore and maintain the chemical, physical, and biological integrity of the nation's waters, and where

attainable, to achieve a level of water quality that provides for the protection and propagation of fish, shellfish, and wildlife, and recreation in and on the water.

Executive Order (EO) 11988, *Floodplain Management*, requires Federal agencies to take action to reduce the risk of flood damage; minimize the impacts of floods on human safety, health, and welfare; and restore and preserve the natural and beneficial values served by floodplains. Federal agencies are directed to consider the proximity of their actions to or within floodplains. Where information is unavailable, agencies are encouraged to delineate the extent of floodplains at their site.

Infrastructure and Utilities

Infrastructure consists of the systems and physical structures that enable a population in a given area to sustain itself. Consideration of infrastructure is applicable to a proposed action or alternative where there might be an issue with respect to local capacities (e.g., utilities, transportation networks, energy) to provide the required support.

Safety

Air Force Instruction (AFI) 91-301, *Air Force Occupational and Environmental Safety, Fire Protection, and Health (AFOSH) Program*, implements AFPD 91-3, *Occupational Safety and Health*, by outlining the AFOSH Program. The purpose of the AFOSH Program is to minimize loss of USAF resources and to protect USAF personnel from occupational deaths, injuries, or illnesses by managing risks. In conjunction with the USAF Mishap Prevention Program (AFI 91-202), these standards ensure all USAF workplaces meet Federal safety and health requirements. This instruction applies to all USAF activities, including those of the AMC.

1.4.3 Interagency and Intergovernmental Coordination for Environmental Planning

NEPA requirements help ensure that environmental information is made available to the public during the decision-making process and prior to actions being taken. A premise of NEPA is that the quality of Federal decisions will be enhanced if proponents provide information to the public and involve the public in the planning process. The Intergovernmental Coordination Act and EO 12372, *Intergovernmental Review of Federal Programs*, require Federal agencies to cooperate with and consider state and local views in implementing a Federal proposal. AFI 32-7060 requires the USAF to implement a process known as Interagency and Intergovernmental

Coordination for Environmental Planning (IICEP), which is used for the purpose of agency coordination and implements scoping requirements.

Through the IICEP process, Scott AFB notified relevant Federal, state, and local agencies of the action proposed and provided them sufficient time to make known their environmental concerns specific to the action. The IICEP process provided Scott AFB the opportunity to cooperate with and consider state and local views in implementing the Federal proposal. No agency responses were received during the IICEP process. A Notice of Availability for the EA and the Draft FONSI was published in the Belleville, Illinois, *News Democrat*, on September 1, 2004. This was done to solicit comments on the Proposed Action and involve the local community in the decision-making process. No public comments were received on the EA and Draft FONSI. Appendix A includes a copy of the IICEP letter mailed to the agencies for this action, the IICEP distribution list, and the Notice of Availability.

1.5 Introduction to the Organization of this Document

The affected environment analyzed in this EA includes air quality, geological resources, water resources, hazardous materials and wastes, infrastructure and utilities, and safety. This EA describes the Proposed Action and No Action Alternative (Section 2.0), the affected environment as it currently exists (Section 3.0), and identifies probable environmental consequences and other impacts that might result from construction and operation of the proposed upgraded storm water drainages, modular education center facilities, and renovation of Building 3189 and 3190 (Sections 4.0 and 5.0). Within Sections 4.0 and 5.0 of this EA, several aspects of the expected impacts are estimated in order to better describe them.

The following characterizes the types of impacts that might occur:

- ***Short-term or long-term.*** These characteristics are determined on a case-by-case basis and do not refer to any rigid time period. In general, short-term impacts are those that would occur only with respect to a particular activity or for a finite period. Long-term impacts are those that are more likely to be persistent and chronic.
- ***Direct, indirect, or cumulative.*** A direct impact is caused by a proposed action and occurs at the same time at or near the location of the action. An indirect impact is caused by a proposed action and might occur later in time or farther removed in distance but still be a reasonably foreseeable outcome of the action. Indirect impacts might include induced changes in existing conditions, or might be related to multiple resources (e.g.,

air, water, or other natural and social systems). Cumulative impacts result from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions.

- ***Negligible, minor, moderate, or significant.*** These relative terms are used to characterize the magnitude of an impact. Negligible impacts are generally those that might be perceptible but, in their context, are difficult to quantify or measure because of their relatively minor character. Minor or moderate impacts are those that are more perceptible and, typically, can be quantified or measured. Significant impacts are those that, in their context and due to their intensity (severity), have the potential to meet the thresholds for significance set forth in CEQ regulations (40 CFR 1508.27), and, thus, warrant heightened attention and examination for potential means for mitigation in order to fulfill the policies set forth under NEPA.
- ***Adverse or beneficial.*** An adverse impact is one having negative, unfavorable, or undesirable outcomes on the man-made or natural environment. A beneficial impact is one having positive outcomes on the man-made or natural environment. A single act might result in adverse impacts on one environmental resource and beneficial impacts on another resource.

2. Description of Proposed Action and Alternatives

2.1 Introduction

This section describes the Proposed Action and the No Action Alternative.

2.2 Detailed Description of the Proposed Action

The Proposed Action would be completed in Calendar Year (CY) 2004, with construction and renovation scheduled in a logical sequence to allow the projects to be constructed in a timely fashion without interruption to installation services. The proposed construction projects would take place in areas of the installation previously disturbed (see Figure 2-1). Table 2-1 provides a summary of the proposed O&M funded construction projects. All new facilities would be designed to comply with the current architectural standards at Scott AFB and would incorporate the current exterior features of existing facilities near the proposed project site. All landscaping would be completed in accordance with Scott AFB standards and all construction would comply with all applicable fire and safety codes.

Utilities are present at or near the proposed project sites including water, sanitary sewer, storm sewer, electric, and natural gas. Some of the existing utilities would require relocation, while others would need to be abandoned, removed, or capped.

Table 2-1. Summary of the Proposed O&M Funded Construction Projects

Proposed O&M Funded Project		Construction Area	Proposed Start Date (CY)	Project Duration (months)
No.	Description			
1.	Repair Drainage Deficiencies	719,928 sf [a] (16.5 acres)	2004	6 months
2.	Construct Temporary, Modular Education Center Facilities, Relocate Existing Education Personnel, and Renovate and Modify Buildings 3189 and 3190	61,600 sf [b] (1.41 acres)	2004	1 month for trailers 3 months for renovation of 3189 and 3190

Note:

[a] A 30-foot buffer was used to determine the construction impact area for pipe networks 6 and 7.

[b] Each trailer was assumed to be 2,800 sf (70 feet by 40 feet) to determine the construction impact area for the Education Center trailers.

CY Calendar Year

sf square feet

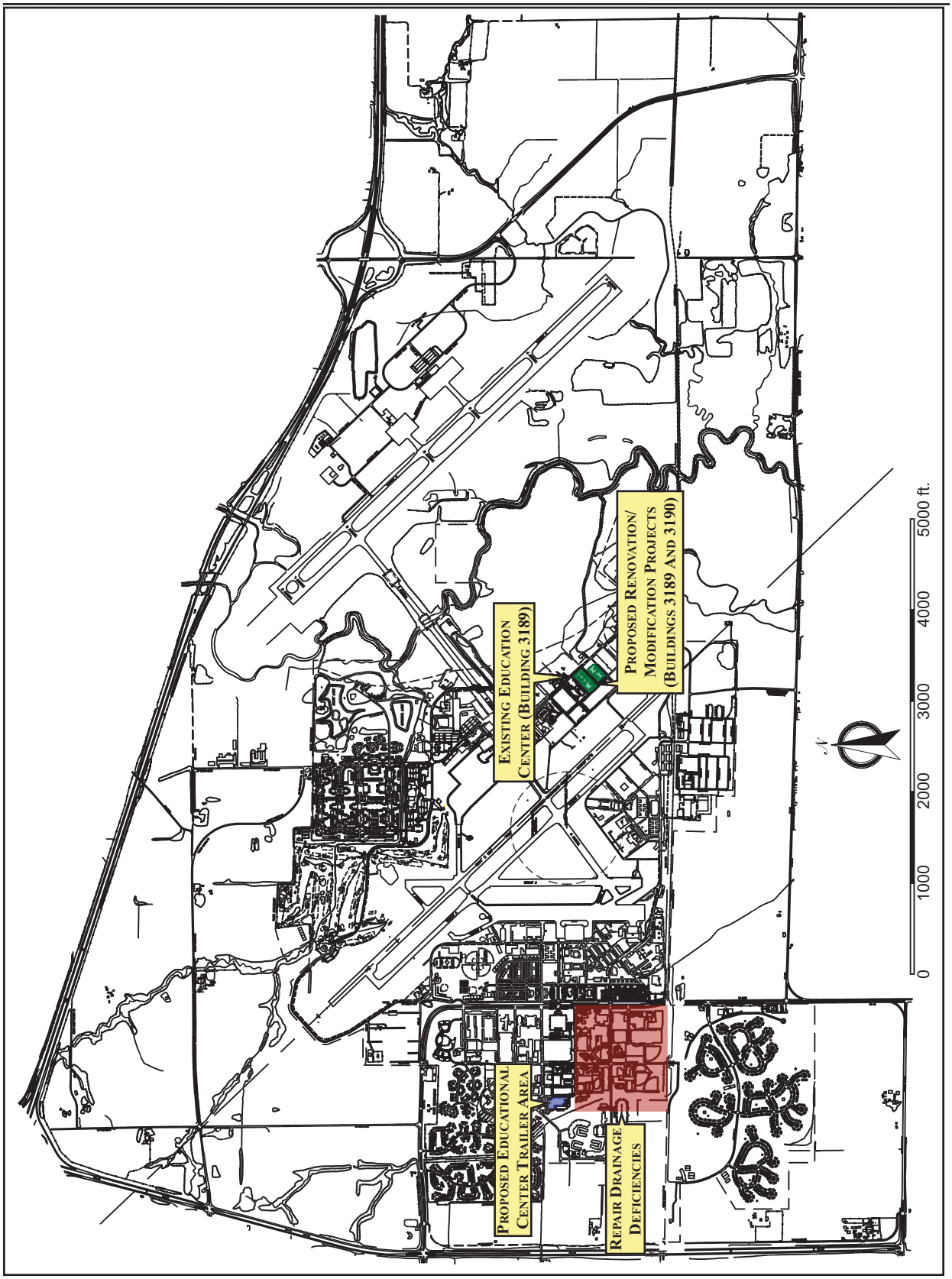

Figure 2-1. Location of Proposed O&M Funded Construction Activities on Scott AFB

Trenching of utility lines would be minimized to the greatest extent possible. All current utilities are adequate to meet the Proposed Action's utility demands. Construction activities might require other environmental permits (e.g., digging permit, storm water permit).

Disposal of construction and demolition (C&D) waste would be the responsibility of the contractor. All C&D waste generated as part of the Proposed Action would be recycled to the greatest extent practicable. The contractor would transport the remaining C&D waste to an approved landfill.

The following sections describe details of the Proposed Action.

2.2.1 Repair Drainage Deficiencies

Scott Drive is the main thoroughfare for Scott AFB. The daily traffic load on Scott Drive routinely exceeds 15,000 motor vehicles. During periods of heavy rain, even for only short periods of time, water accumulates on the road surface and does not drain properly. When heavy rainfall occurs, traffic along Scott Drive becomes congested, especially during peak hours. The excess water that is created on and along Scott Drive during these rainfall events poses a serious safety hazard to motor vehicles because of the increased risk of hydroplaning. In addition, standing water reduces the serviceable lifespan of the pavement and causes premature cracking and pot holes.

The existing base storm sewer system is divided into 12 pipe networks, which are all in serious need of repair. The U.S. Army Corps of Engineers (USACE), St. Louis District conducted a study of Scott AFB's storm sewer network and proposed redirecting flow for the upper portions of pipe networks 6 and 7 and pumping the storm water into Ash Creek in addition to changing pipe sizes and slopes in various other networks. The USACE also proposed the use of numerous detention basins to reduce the flow in the storm sewer system.

Currently, there is not enough funding to complete repairs to all the storm sewer system pipe networks on base. Therefore, to reduce the storm sewer system flow problem and potential safety hazards, and to increase serviceable lifespan of the pavements around and along Scott Drive, 375 AW proposes to repair storm sewer system pipe network 6 and a small portion of pipe network 7 south of West Martin Street (see Figure 2-1). This would be done by increasing the diameter of culverts and piping, resloping road shoulders, and replacing outdated lift and pump stations. The minimal size of the storm sewer piping to be installed would be 12 inches in diameter and all of the pipes installed would have positive slopes. No additional storm detention basins would be

constructed at this time. Storm sewer flows would be redirected in the upper portions of the storm sewer pipe networks and directed to two pump stations, each with 100 cubic feet per second (cfs) pumping capacity. In addition to repairing the storm sewer system pipe networks 6 and 7; repairs would be made to all damaged roadways, sidewalks, curbs, and utilities that have been disturbed. All areas that would be disturbed from these construction activities would be reseeded and mulched.

If additional funding becomes available, 375 AW would enlarge pump station 6-2, install piping to connect manholes 6-17 and 6-25N, and increase the storage area of pump station 6-2 and its pumping capacity accordingly.

This project is scheduled to start in CY 2004 and would last for approximately 6 months.

2.2.2 Construct Temporary, Modular Education Facilities, Relocate Existing Education Center and Personnel, and Renovate and Modify Buildings 3189 and 3190

The Education Center and DISA currently occupy Building 3189. In 2005, 301 additional DISA personnel are scheduled to be stationed at Scott AFB, which has caused the space available to DISA personnel to be inadequate to meet their mission requirements. 375 AW evaluated the current and future mission needs for both the Education Center and DISA and determined that DISA should occupy Building 3189 and a portion of 3190 and that the Education Center should be relocated.

375 AW proposes to construct concrete foundations (61,600 sf) for 22 temporary trailers. The trailers would be modular and would hold Education Center personnel, furniture, and equipment. The trailers would be located in the parking lot adjacent to Building 1650 (Old Base Exchange). This project would involve installing electrical, water, sewer, and communication utilities to each trailer. After these temporary trailers are constructed, the furniture, equipment, and personnel from the existing Education Center (Building 3189) would be relocated to these trailers. Once Building 3189 is vacated, DISA would need to renovate this facility to allow for appropriate mission operations. DISA also desires to occupy three rooms in Building 3190, which is currently condemned. Occupying rooms in Building 3190 would require repairing electrical, roof, and other systems and installing transformers. Constructing the trailer area near Building 1650 would occur in early CY 2004 and would last for approximately 1 month. Renovation of Building 3189 and 3190 would occur in mid to late CY 2004 and would last for approximately 3 months.

The Education Center would be within these temporary trailers for approximately 3 years until Building 1650 is renovated. Once Building 1650 is renovated, the Education Center, furniture, and equipment would be permanently in this facility.

2.3 No Action Alternative

Under the No Action Alternative, Scott AFB would continue to use the facilities and infrastructure for project location in their current condition and configuration. There would be no change from the existing conditions at the installation. The No Action Alternative would not address USAF mission needs nor correct safety issues associated with inadequate storm water drainage concerns at Scott AFB. However, inclusion of the No Action Alternative is prescribed by CEQ regulations and, therefore, will be carried forward for further analysis in the EA.

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3. Affected Environment

Section 3.0 describes the environmental resources and conditions most likely to be affected by the proposed O&M-funded construction projects. This section provides information to serve as a baseline from which to evaluate environmental changes likely to result from implementation of the Proposed Action. Baseline conditions represent current conditions. The potential environmental impacts of the Proposed Action and No Action Alternative on the baseline conditions are described in Section 4.0.

In compliance with NEPA, CEQ guidelines, and 32 CFR Part 989, as amended, the description of the affected environment focuses on those resources and conditions potentially affected by the Proposed Action. Some aspects of the affected environment (land use, biological resources, cultural resources, noise, socioeconomics, and environmental justice) are not present in the area, would not be affected by the Proposed Action, were not identified during scoping as a resource of concern. Therefore, they were not analyzed here. The cumulative impact analysis is provided in Section 5.0 of this EA.

- **Land Use.** All activities associated with the Proposed Action would be consistent with present and foreseeable land use patterns at Scott AFB. Implementation of the Proposed Action would not significantly alter the existing land use at Scott AFB. Accordingly, the USAF has omitted detailed examination of land use in this EA.
- **Biological Resources.** Implementation of the Proposed Action does not involve permanent alterations to biological resources. Threatened or endangered species or their habitat have not been observed in the location of the Proposed Action. No activity included in the Proposed Action would result in any damage to biological resources; therefore, there would be no impact on biological resources at Scott AFB. Accordingly, the USAF has omitted detailed examination of biological resources in this EA.
- **Cultural Resources.** No cultural historic or potentially historic resources or artifacts have been identified in the area of the Proposed Action and activities would occur only on previously disturbed areas; therefore, there would be no impact on cultural resources at Scott AFB. Accordingly, the USAF has omitted detailed examination of cultural resources. If an unexpected archaeological discovery occurs during construction, the unanticipated archaeological discoveries as defined in the Scott AFB Integrated Cultural Resource Management Plan would be followed. If archaeological properties are discovered, excavation and disturbance of the site would cease. The Cultural Resource

Manager would be notified immediately. The Cultural Resource Manager would take actions to evaluate the discovery and, provide guidance to the project engineer on any actions that should be taken to provide appropriate management treatment of the resource in this EA.

- **Noise.** Implementation of the Proposed Action does not involve permanent alterations to aircraft inventories, operations, or missions. No new permanent ground-based heavy equipment operations are included in the Proposed Action. No activity included in the Proposed Action would result in a situation where residences would be impacted by an increase in present ambient noise levels. Furthermore, noise produced by C&D activities associated with the Proposed Action would not significantly affect sensitive receptors. Accordingly, the USAF has omitted detailed examination of noise in this EA.
- **Socioeconomics.** The Proposed Action does not involve any activities that would contribute to changes in socioeconomic resources. There would be no change in the number of Education Center personnel assigned to Scott AFB. Therefore, there would be no changes in area population or associated changes in demand for housing and services. Accordingly, the USAF has omitted detailed examination of socioeconomics in this EA.
- **Environmental Justice.** The Proposed Action does not involve any activities that would contribute to changes in low-income or minority populations. Accordingly, the USAF has omitted detailed examination of environmental justice in this EA.

3.1 Air Quality

3.1.1 Definition of Resource

Air quality in a given location is determined by the concentration of various pollutants in the atmosphere. National Ambient Air Quality Standards (NAAQS) are established by the U.S. Environmental Protection Agency (USEPA) for "criteria pollutants," including ozone (O_3), carbon monoxide (CO), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), particulate matter equal to or less than 10 microns in diameter (PM_{10}), particulate matter equal to or less than 2.5 microns in diameter ($PM_{2.5}$), and lead (Pb). NAAQS represent maximum levels of background pollution in the ambient air that are considered safe, with an adequate margin of safety to protect public health and welfare (see Table 3-1).

Table 3-1. National Ambient Air Quality Standards

Pollutant	Standard Value [b]		Standard Type
Carbon Monoxide (CO)			
8-hour Average	9 ppm	(10 mg/m^3)	Primary
1-hour Average	35 ppm	(40 mg/m^3)	Primary
Nitrogen Dioxide (NO_2)			
Annual Arithmetic Mean	0.053 ppm	(100 µg/m^3)	Primary & Secondary
Ozone (O_3)			
1-hour Average [a]	0.12 ppm	(235 µg/m^3)	Primary & Secondary
8-hour Average	0.08 ppm	(157 µg/m^3)	Primary & Secondary
Lead (Pb)			
Quarterly Average		1.5 µg/m^3	Primary & Secondary
Particulate ≤ 10 micrometers (PM_{10})			
Annual Arithmetic Mean		50 µg/m^3	Primary & Secondary
24-hour Average		150 µg/m^3	Primary & Secondary
Particulate ≤ 2.5 micrometers ($PM_{2.5}$)			
Annual Arithmetic Mean		15 µg/m^3	Primary & Secondary
24-hour Average		65 µg/m^3	Primary & Secondary
Sulfur Dioxide (SO_2)			
Annual Arithmetic Mean	0.03 ppm	(80 µg/m^3)	Primary
24-hour Average	0.14 ppm	(365 µg/m^3)	Primary
3-hour Average	0.50 ppm	(1300 µg/m^3)	Secondary

Notes:

[a] The ozone 1-hour standard applies only to areas that were designated nonattainment when the ozone 8-hour standard was adopted in July 1997. The new 8-hour ozone standard is currently being contested in Federal court. No areas have been deemed nonattainment with the new 8-hour standard pending resolution of this case.

[b] Parenthetical value is an approximately equivalent concentration.

ppm parts per million
mg/m^3 milligrams per cubic meter
µg/m^3 micrograms per cubic meter

The CAA places most of the responsibility to achieve compliance with the NAAQS on the individual states or local agencies that have been delegated CAA authority by USEPA. This is achieved through a SIP, which is required under the CAA. The SIP is a compilation of goals, strategies, schedules, permitting programs, and enforcement actions that lead the state into compliance with all NAAQS. Any changes to the compliance schedule or plan must be incorporated into the SIP and approved by USEPA. Areas not in compliance with a standard can be declared "nonattainment areas" by USEPA or the appropriate state or local agency. Based on the severity of an area's nonattainment (i.e., number of times that ambient air quality exceeds the NAAQS), USEPA also categorizes nonattainment areas (e.g., marginal, serious, severe, extreme). Areas designated by USEPA as being in nonattainment for one or more of the seven NAAQS

may petition USEPA for redesignation as a maintenance area if they are able to demonstrate they have met the national standard for the 3 years preceding the redesignation request. At the time the state petitions USEPA for redesignation, it must also submit a revision of its SIP to provide for the maintenance of the applicable NAAQS for at least 10 years after redesignation ("maintenance plan") pursuant to CAA §175(A).

Under the General Conformity Rule, the CAA prohibits Federal agencies from performing projects that do not conform to a USEPA-approved SIP. In 1993, USEPA developed final rules for how Federal agencies must determine air quality conformity prior to implementing a proposed Federal action. Under these rules, certain actions are exempted from conformity determinations, while others are assumed to be in conformity if total project emissions are below *de minimis* levels established under 40 CFR 93.153. Total project emissions include both direct and indirect emissions caused by the Federal action.

The CAA and the CAA Amendments of 1990 also require states to permit "major" stationary sources. A major stationary source is a facility (i.e., plant, base, or activity) that emits more than 100 tons annually of any one criteria air pollutant, 10 tons per year (tpy) of a single hazardous air pollutant (HAP), or 25 tpy of any combination of HAPs. There are 188 listed HAPs regulated under the CAA. The purpose of the permitting rule is to establish regulatory control over large facilities or processes that routinely emit significant amounts of pollutants and to assess and monitor their impact upon local and regional air quality.

3.1.2 Existing Conditions

Climate. Southwestern Illinois has a continental climate with relatively hot, humid summers and moderately cold winters. The temperature extremes for this area can range from over 100 degrees Fahrenheit (^{o}F) to -10 ^{o}F. Precipitation is usually heavier during spring and summer months than in fall and winter months. The mean annual snowfall is approximately 17 inches.

Regional Air Quality. USEPA classifies the air quality in an air quality control region (AQCR) or in subareas of an AQCR according to whether the concentration of criteria pollutants in ambient air exceeds the primary or secondary NAAQS. All areas within each AQCR are therefore designated as either "attainment," "nonattainment," or "unclassified" for each of the six criteria pollutants. Attainment means that the air quality within an AQCR is better than the NAAQS, nonattainment indicates that criteria pollutants exceed NAAQS, and an unclassifiable

air quality designation by USEPA means that there is not enough information to appropriately classify an AQCR, so the area is considered attainment.

The General Conformity Rule requires that any Federal action meet the requirements of a SIP or Federal Implementation Plan (FIP). More specifically, CAA Conformity is assured when a Federal action *does not*

- Cause a new violation of a NAAQS.
- Contribute to an increase in the frequency or severity of violations of NAAQS.
- Delay the timely attainment of any NAAQS, interim progress milestones, or other milestones toward achieving compliance with the NAAQS.

The conformity rule applies only to actions in nonattainment or maintenance areas and considers both direct and indirect emissions. The rule applies only to Federal actions that are considered "regionally significant" or where the total emissions from the action meet or exceed the *de minimis* thresholds. An action is regionally significant when the total nonattainment pollutant emissions exceed 10 percent of the AQCR's total emissions inventory for that nonattainment pollutant. If a Federal action meets the *de minimis* threshold requirements and is not considered regionally significant, then a full Conformity Determination is not required.

Scott AFB. Scott AFB is in Saint Clair County, which is part of the Metropolitan St. Louis Interstate AQCR (IEPA 2003). This AQCR is currently designated as a moderate nonattainment area for O_3 and is in attainment for all other NAAQS. The closest Metro East air-monitoring site to Scott AFB is in East St. Louis. The St. Louis Clean Air Coalition, of which Scott AFB is a member, monitors O_3 levels and encourages actions to reduce emissions resulting in O_3 formation.

Scott AFB is not required to operate under a Title V permit of the CAA Amendments since it has shut down its central heat plant and has installed individual facility boilers (SAFB 2003). Scott AFB is currently operating under a Federally Enforceable State Operating Permit (FESOP). Under this new FESOP, Scott AFB would keep emissions from certain sources such as diesel storage facilities, jet fuel storage facilities, and emergency generators under levels established by USEPA. If levels were exceeded, then the base would need to apply for a Title V permit.

According to Title I of the CAA Amendments, Scott AFB is required to conform to the provisions of the SIP. Conformity essentially means that Federal agencies will not take actions

that further contribute to the degradation of regional air quality. This includes significant changes in stationary and mobile sources of air pollutants.

3.2 Geological Resources

3.2.1 Definition of Resource

An area's geological resources typically consist of surface and subsurface materials and their inherent properties. Principal factors influencing the ability of geological resources to support structural development are seismic properties (i.e., potential for subsurface shifting, faulting, or crustal disturbance), soil stability, and topography.

The term soil generally refers to unconsolidated materials overlying bedrock, or other parent material. Soils play a critical role in both the natural and human environment. Soil depth, structure, elasticity, strength, shrink-swell potential, and erodibility determine a soil's ability to support man-made structures and facilities. Soils typically are described in terms of their series or association, slope, physical characteristics, and relative compatibility or constraints with respect to particular construction activities and types of land use.

Topography is defined as the relative position and elevations of the natural or man-made features of an area that describe the configuration of its surface. An area's topography is influenced by many factors, including human activity, seismic activity of the underlying geological material, climatic conditions, and erosion. Information about an area's topography typically encompasses surface elevations, slope, physiographic features (i.e., mountains, ravines, or depressions), and their influence on human activities.

3.2.2 Existing Conditions

Physiography. Scott AFB lies on the Springfield Plain subdivision of the Till Plains section of the Central Lowlands Physiographic Province. The base is on the west end of the Silver Creek Valley basin that is characterized by generally flat to gently rolling hills. Scott AFB is in a closed basin of the Kaskaskia River.

Topography. The base land surface is generally level. The maximum surface elevation at Scott AFB is approximately 420 feet above mean sea level (MSL) along the eastern boundary of the base within the Silver Creek floodplain. The elevation of Silver Creek east of the base is about 405 feet above MSL.

The base lies within Seismic Zone IX, which contains the New Madrid Fault Zone. This fault zone extends from Cairo, Illinois, on the Ohio River southward through New Madrid, Missouri. It is the most active seismic area east of the Rocky Mountains. The last major earthquake along this fault was in 1812 and measured more than 8.0 on the Richter scale. However, tremors are common, and on rare occasions, small quakes measuring 3.0 to 4.0 or more on the Richter scale occur along the New Madrid Fault (SAFB 2003).

Geology. Saint Clair County rests primarily on Paleozoic sedimentary rocks and Cenozoic unconsolidated materials. Pennsylvanian Age bedrock lies approximately 85 feet below the surface and includes layers of shale, siltstone, sandstone, limestone, claystone, and coal. The Pennsylvanian strata are approximately 265 feet thick. Beneath the Pennsylvanian strata is the water-yielding Chesterian Series sandstone, which has wells that yield 20 to 25 gallons per minute (SAFB 2003). Glacial and alluvial deposits ranging in thickness from 50 feet to 125 feet dominate the surficial geology in this area.

Soils. The predominant soil types on Scott AFB are silt loams and silty clay loams, which occur to a depth of 16 inches. They have a moderately high water-holding capacity, moderate to high shrink-swell ratios, and moderate to high corrosive potentials. These soils are developed from tall grass prairie and mixed hardwood forest, and as a result, are quite fertile. The two primary soil associations on Scott AFB are the Herrick-Virden Association in upland areas and the Wakeland-Bonnie Association in bottomland forests along Silver Creek. A soil association is a landscape that has a distinctive pattern of soils in defined proportions. Soil erosion at Scott AFB is not a widespread problem because the topography of the base is relatively flat.

3.3 Water Resources

3.3.1 Definition of Resource

Water resources include surface water, groundwater, and floodplains. Evaluation identifies the quantity and quality of the resource and its demand for potable, irrigation, and industrial purposes.

Surface water resources consist of lakes, rivers, and streams. Surface water is important for its contributions to the economic, ecological, recreational, and human health of a community or locale. Storm water flows, which can be exacerbated by high proportions of impervious surfaces associated with buildings, roads, and parking lots, are important to management of surface water.

Storm water also is important to surface water quality because of its potential to introduce sediments and other contaminants into lakes, rivers, and streams.

Groundwater consists of subsurface hydrologic resources. It is an essential resource often used for potable water consumption, agricultural irrigation, and industrial applications. Groundwater typically can be described in terms of its depth from the surface, aquifer or well capacity, water quality, surrounding geologic composition, and recharge rate.

Floodplains are areas of low-level ground present along a river or stream channel. Such lands might be subject to periodic or infrequent inundation due to rain or melting snow. Risk of flooding typically hinges on local topography, the frequency of precipitation events, and the size of the watershed above the floodplain. Flood potential is evaluated by the Federal Emergency Management Agency, which evaluates the floodplain for 100- and 500-year flood events. EO 11988 (*Floodplain Management*) and state and local regulations often limit floodplain development to passive uses such as recreational and preservation activities in order to reduce the risks to human health and safety.

3.3.2 Existing Conditions

Surface Water. The eastern boundary of Scott AFB is bounded by Silver Creek. Silver Creek is a tributary of the Kaskaskia River, which is a tributary to the Mississippi River. Ash Creek is on the west side of the base and is a tributary to Loop Creek, which joins Silver Creek approximately 2.5 miles south of the base. North Ditch, South Ditch, and Mosquito Creek are on-base tributaries to Silver Creek. Storm water flows from seven drainage outfalls on base (SAFB 2004).

Groundwater. The groundwater system at Scott AFB generally flows from west to east. The groundwater levels range from 20 feet on the western side of the base to less than 1 foot on the eastern side of the base. Groundwater yields are generally too low to be a significant source of potable or irrigation water in the vicinity of Scott AFB (SAFB 2003).

Floodplains. There are approximately 390 acres of floodplains along the Silver Creek drainage through Scott AFB. However, no new hydrologic studies have been conducted since various modifications and structures have been built in the floodplain as a result of the Mid-America Airport Construction (SAFB 2002).

3.4 Hazardous Materials and Wastes

3.4.1 Definition of Resource

Hazardous material is defined by the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), as amended by the Superfund Amendments and Reauthorization Act (SARA), and the Toxic Substances Control Act (TSCA), as any substance with physical properties of ignitability, corrosivity, reactivity, or toxicity that might cause an increase in mortality, a serious irreversible illness, incapacitating reversible illness, or pose a substantial threat to human health or the environment. Hazardous waste is defined by the Resource Conservation and Recovery Act (RCRA), which was further amended by the Hazardous and Solid Waste Amendments (HSWA), as any solid, liquid, contained gaseous, or semisolid waste, or any combination of wastes that poses a substantial present or potential hazard to human health or the environment.

Evaluation of hazardous materials and wastes focuses on underground storage tanks and aboveground storage tanks and the storage, transport, and use of pesticides and herbicides, fuels, and Petroleum, Oil, and Lubricants (POL). Evaluation might also extend to generation, storage, transportation, and disposal of hazardous wastes when such activity occurs at or near the project site of a proposed action. In addition to being a threat to humans, the improper release of hazardous materials and wastes can threaten the health and well being of wildlife species, botanical habitats, soil systems, and water resources. In the event of release of hazardous materials or wastes, the extent of contamination varies based on the type of soil, topography, and water resources.

Special hazards are those substances that might pose a risk to human health but are not regulated as contaminants under the hazardous waste statutes. Hazards of significance associated with the Proposed Action are asbestos and lead-based paint. The presence of special hazards or controls over them might affect, or be affected by, a proposed action. Information on special hazards describing their locations, quantities, and condition assists in determining the significance of a proposed action.

To protect habitats and people from inadvertent and potentially harmful releases of hazardous substances, the U.S. Department of Defense (DOD) has dictated that all facilities develop and implement Hazardous Material Emergency Planning and Response Plans or Spill Prevention, Control, and Countermeasure Plans. Also, DOD developed the Environmental Restoration Program (ERP) intended to facilitate thorough investigation and cleanup of contaminated sites on

military installations. These plans and programs, in addition to established legislation (i.e., CERCLA and RCRA) effectively form the "safety net" intended to protect the ecosystems on which most living organisms depend.

AFPD 32-70, Environmental Quality, establishes the policy that the USAF is committed to environmentally sound practices:

- Cleaning up environmental damage resulting from its past activities.
- Meeting all environmental standards applicable to its present operations.
- Planning its future activities to minimize environmental impacts.
- Managing responsibly the irreplaceable natural and cultural resources it holds in public trust.
- Eliminating pollution from its activities wherever possible.

AFPD 32-70 and the AFI 32-7000 series incorporates the requirements of all Federal regulations, other AFIs, and DOD Directives for the management of hazardous materials, hazardous wastes, and special hazards.

3.4.2 Existing Conditions

375th Environmental Flight (375 CES/CEV) at Scott AFB is responsible for hazardous material and waste plans for the installation. In conformance with the policies established by AFPD 32-70, the 375 CES/CEV has developed plans and procedures to manage hazardous materials, hazardous wastes, and special hazards on the base.

Hazardous Materials. AFI 32-7086, *Hazardous Materials Management*, establishes procedures and standards that govern management of hazardous materials throughout the USAF. It applies to all USAF personnel who authorize, procure, issue, use, or dispose of hazardous materials, and to those who manage, monitor, or track any of those activities. The 375 AW manages hazardous materials in accordance with AFI 32-7086.

Hazardous materials are managed through a centralized base hazardous material (HAZMAT) Pharmacy using an Environmental Management Information System, which tracks acquisition and inventory control of hazardous materials as well as hazardous waste disposal and health and safety information (SAFB 2002). This system complements existing regulations, instructions, supplements, and higher headquarters policies and procedures.

Hazardous Wastes. The 375 AW is currently revising the *Hazardous Waste Management Plan* (SAFB 2002) as directed by AFI 32-7042, *Solid and Hazardous Waste Compliance*. The *Hazardous Waste Management Plan* provides guidance to Scott AFB personnel on handling, storage, and disposal of hazardous materials and implements the USEPA "cradle-to-grave" management control of hazardous waste.

Hazardous wastes generated at Scott AFB include spent solvents, photofixer, waste POL, waste cleaning compounds, and various forms of waste paint. The Scott AFB Hazardous Waste Management Program also handles universal waste, including batteries, pesticides, mercury thermostats, and mercury-containing lamps. Special wastes include potentially infectious medical wastes, industrial process wastes, and pollution control wastes. There are approximately 23 satellite accumulation points where hazardous wastes are generated. There are an additional 23 satellite accumulation points on Scott AFB managed by the 126th Air Refueling Wing. Furthermore, the plan defines the waste accumulated and instructs base personnel on management procedures for the waste.

The Toxic Substances Control Act. The TSCA was enacted by Congress in 1976 to give USEPA the ability to track the 75,000 industrial chemicals being produced or imported into the United States and to control the production of new chemicals that might present an unreasonable risk of injury to health or the environment. TSCA also authorizes USEPA to track thousands of new chemicals that industry develops each year. TSCA supplements other Federal statutes, including the CAA and Emergency Planning, and Community Right-To-Know Act. Because TSCA gives USEPA broad powers, the law covers virtually all manufactured and natural chemicals such as asbestos-containing material (ACM) and lead-based paint (LBP). The following paragraphs describe ACM and LBP in more detail:

Asbestos-Containing Materials. AFI 32-1052, *Facilities Asbestos Management,* provides direction for asbestos management at USAF installations. AFI 32-1052 requires installations to develop an asbestos management plan for the purpose of maintaining a permanent record of the status and condition of ACM in installation facilities, as well as documenting asbestos management efforts. In addition, the instruction requires installations to develop an asbestos-operating plan detailing how the installation accomplishes asbestos-related projects. Asbestos is regulated by USEPA with the authority promulgated under the Occupational Safety and Health Act. Section 112 of the CAA regulates emissions of asbestos fibers to ambient air. USEPA policy is to leave asbestos in place if disturbance or removal could pose a health threat.

375 AW fulfills the requirements of AFI 32-1052 with the *Scott AFB Asbestos Management Plan* (SAFB 2000a) and the *Asbestos Operations Plan* (SAFB 2000b). This plan specifies procedures for the removal, encapsulation, enclosure, and repair activities associated with ACM abatement projects. The objective of the plan is to reduce the potential of personnel exposure to potentially hazardous levels of airborne asbestos fibers and assist in maintaining compliance with all Federal, state, and local asbestos regulations. According to the *Scott Air Force Base General Plan* (SAFB 2002), when ACM is removed as a result of renovations or building demolitions, the costs of ACM abatement are incorporated into the overall project costs.

Lead-Based Paint. The Residential Lead-Based Paint Hazard Reduction Act of 1992, Subtitle B, Section 408 (commonly called Title X), passed by Congress on October 28, 1992, regulates the use and disposal of LBP on Federal facilities. Federal agencies are required to comply with applicable Federal, state, and local laws and regulations relating to LBP activities and hazards.

USAF policy and guidance establishes LBP management at USAF facilities (USAF 1993). Additionally, the policy requires each installation to develop and implement a facility management plan for identifying, evaluating, managing, and abating LBP hazards. The *Lead Based Paint Management Plan* (SAFB 1996) provides an understandable and easy-to-follow approach to LBP management. It covers designation of duties, identification of hazards, testing procedures, abatement methods, training requirements, and protection of families and workers. In addition to addressing LBP concerns, the *Lead Based Paint Management Plan* also addresses lead exposure from other sources such as lead joints used in the potable water system and occupational exposure to lead through corrosion control, welding, and cable maintenance operations. Mitigation of LBP and other hazards, monitoring, and lead waste disposal are also discussed.

Pollution Prevention. AFI 32-7080, *Pollution Prevention Program*, implements the regulatory mandates in the Emergency Planning and Community Right-to-Know Act; Pollution Prevention Act of 1990; EO 12856, *Federal Compliance with Right-to-Know Laws and Pollution Prevention Requirements*; EO 12873, *Federal Acquisition, Recycling, and Waste Prevention*; and EO 12902, *Energy Efficiency and Water Conservation at Federal Facilities.* AFI 32-7080 prescribes the establishment of Pollution Prevention Management Plans. 375 AW fulfills this requirement with the *Pollution Prevention Plan* (SAFB 2000c) and the *Hazardous Materials Management Plan (HMMP)*. These plans ensure that Scott AFB maintains a waste reduction program and meets the requirements of the CWA; the National Pollutant Discharge Elimination System (NPDES) permit

program; and Federal, state, and local laws and regulations for spill prevention, control, and countermeasures.

3.5 Infrastructure and Utilities

3.5.1 Definition of the Resource

Infrastructure consists of the systems and physical structures that enable a population in a specified area to function. Infrastructure is wholly human-made, with a high correlation between the type and extent of infrastructure and the degree to which an area is characterized as "urban" or developed. The availability of infrastructure and its capacity to support growth are generally regarded as essential to economic growth of an area. The infrastructure information provided below was obtained from the *Scott Air Force Base General Plan* (SAFB 2002) and provides a brief overview of each infrastructure component and comments on its existing general condition. The infrastructure components to be discussed in this section include transportation systems, utilities (electrical power, natural gas, and water supply), solid waste, and sanitary systems.

Municipal solid waste (MSW) management primarily concerns itself with the availability of landfills to support a population's residential, commercial, and industrial needs. Alternative means of waste disposal might involve waste-to-energy programs or incineration. In some localities, landfills are designed specifically for, and limited to, disposal of C&D debris. Recycling programs for various waste categories (e.g., glass, metals, and papers) reduce reliance on landfills for disposal.

3.5.2 Existing Conditions

Electrical. Scott AFB is fed by Illinois Power (Dynegy Energy Partners) through three feeds at 34.5 kilovolts (kV). In addition, there are seven major substations, six minor substations, and one housing substation, located throughout the base.

Potable Water. The Scott AFB water distribution system serves approximately 15,000 personnel by supplying water to more than 2,000 facilities and housing units. The water system was originally constructed in the 1930s and has been updated as the base has grown. There are approximately 65 miles of distribution piping ranging in size from 3 to 16 inches in diameter, and the total water storage capacity is 5.2 million gallons.

Scott AFB purchases all of its potable water from the Illinois American Water Company. Average water demand is approximately 1.5 million gallons per day (mgd) with a peak summer

hour demand of approximately 4.15 mgd. The existing water distribution is sized to handle the current demand and it is assumed that the system would meet future demands.

Wastewater Treatment and Collection. Scott AFB has a wastewater treatment plant (WWTP) with a design capacity of 3 mgd and an average daily use of less than 2 mgd. The WWTP is permitted to discharge treated effluent to the Cardinal Creek Golf Course Lake, Cardinal Lake, and Mosquito Creek. There are also 13 wastewater lift stations, 20 oil/water separators, and 8 aerated septic systems located throughout the base that are part of the wastewater collection system.

Transportation. Scott AFB is a few miles east of the convergence of several Interstate Highways (Highways 44, 55, 64, and 70). Interstate 64, north of the base, provides east-west access to Scott AFB and interconnects the base with the interstate, state, and local road network. Illinois 161 and Illinois 177, south of the base, also provide east-west access to the state and local system. Air Mobility Drive (Illinois 158), west of Scott AFB; and Illinois 4, east of the base, provide north-south mobility.

Scott Drive is a four-lane divided boulevard connecting the Shiloh Gate on the north with the Belleville Gate on the south. This roadway bisects the main core of the base into the contemporary administrative, community service, and residential areas to the west, and the historic district, industrial, and flightline activities to the east.

The region's light rail mass transit system, MetroLink, was recently extended to Southwestern Illinois College. The extension of the MetroLink from Southwestern Illinois College to the Mid-America Airport terminal at Interstate 64 and Illinois 4 was completed in 2003. This extension includes park-and-ride stations on the east side of Air Mobility Drive (Illinois 158).

Solid Waste. Wastes disposed of in the MSW stream at Scott AFB are expected to consist only of those materials that cannot be effectively recycled. This commonly includes paper towels and other sanitary wastes, food-soiled wrapping and packaging, most food wastes, plastic bags and wrappings, nonrecyclable C&D wastes, and other miscellaneous nonrecyclable materials from administrative, industrial, food-service, and retail operations.

C&D waste and nonrecurring MSW generated under contract are the responsibility of the contractor. C&D waste and nonrecurring MSW generated under contract or by base personnel are recycled to the greatest extent possible. Contractors are required to report the quantities of

recycled C&D waste. Specifications in these contracts require contractors to provide information regarding the disposition of the waste they generate.

3.6 Safety

3.6.1 Definition of Resource

A safe environment is one in which there is no, or an optimally reduced, potential for death, serious bodily injury or illness, or property damage. Human health and safety addresses workers' health and safety during C&D activities and facilities construction; and public safety during C&D activities and during subsequent operations of those facilities.

Construction worksite safety is largely a matter of adherence to regulatory requirements imposed for the benefit of employees and implementation of operational practices that reduce risks of illness, injury, death, and property damage. The health and safety of onsite military and civilian workers are safeguarded by numerous DOD and USAF regulations designed to comply with standards issued by the Occupational Safety and Health Administration and USEPA. These standards specify the amount and type of training required for industrial workers, the use of protective equipment and clothing, engineering controls, and maximum exposure limits for workplace stressors.

Scott AFB has areas on base that are constrained by quantity distance (QD) safety zones. These explosive clear zones are established to minimize risk and exposure to individuals from explosives and explosive storage facilities. There are three QD safety zones on Scott AFB (SAFB 2002).

3.6.2 Existing Conditions

All contractors performing construction activities at Scott AFB are responsible for following ground safety regulations and worker compensation programs and are required to conduct construction activities in a manner that does not pose any risk to its workers or base personnel. An industrial hygiene program addresses exposure to hazardous materials, use of personal protective equipment, and availability of Material Safety Data Sheets. Industrial hygiene is the responsibility of contractors, as applicable.

Contractor responsibilities are to review potentially hazardous workplace operations; to monitor exposure to workplace chemical (e.g., asbestos, lead, hazardous material), physical (e.g., noise propagation), and biological (e.g., infectious waste) agents; to recommend and evaluate controls

(e.g., ventilation, respirators) to ensure personnel are properly protected or unexposed; and to ensure a medical surveillance program is in place to perform occupational health physicals for those workers subject to any accidental chemical exposures.

4. Environmental Consequences

This section of the EA assesses potential environmental consequences associated with the Proposed Action. Environmental consequences are addressed in the context of the scope of the Proposed Action as described in Section 2.0 and in consideration of the potentially affected environment as characterized in Section 3.0. The EA analysis includes direct, indirect, and cumulative impacts. Direct effects are caused by the action and occur at the same time and place. Indirect effects are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable. Cumulative effects are impacts that result from incremental impacts of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time (40 CFR 1508.7). The cumulative impact analysis is provided in Section 5.0 of this EA.

4.1 Air Quality

4.1.1 Evaluation Criteria

The environmental consequences on local and regional air quality conditions near a proposed Federal action are determined based upon the increases in regulated pollutant emissions relative to existing conditions and ambient air quality. Specifically, the impact in NAAQS "attainment" areas would be considered significant if the net increases in pollutant emissions from the Federal action would result in any one of the following scenarios:

- Cause or contribute to a violation of any national or state ambient air quality standard
- Expose sensitive receptors to substantially increased pollutant concentrations
- Represent an increase of 10 percent or more in an affected AQCR emissions inventory
- Exceed any Evaluation Criteria established in a SIP

The area including Scott AFB is designated as a moderate nonattainment for O_3 and is in attainment with current ambient air quality standards for all other criteria pollutants. Standard norms for nonattainment areas are described below.

Impacts on air quality in NAAQS "nonattainment" areas are considered significant if the net

changes in project-related pollutant emissions result in any of the following scenarios:

- Cause or contribute to a violation of any national or state ambient air quality standard
- Increase the frequency or severity of a violation of any ambient air quality standard
- Delay the attainment of any standard or other milestone contained in the SIP

With respect to the General Conformity Rule, impacts on air quality would be considered significant if the proposed Federal action would result in an increase of a nonattainment or maintenance area's emissions inventory by 10 percent or more for one or more nonattainment pollutants, or if such emissions exceed *de minimis* threshold levels established in 40 CFR Part 93.153(b) for individual nonattainment pollutants or for pollutants for which the area has been redesignated as a maintenance area.

The *de minimis* threshold emissions rates were established by USEPA in the General Conformity Rule in order to focus analysis requirements on those Federal actions with the potential to have "significant" air quality impacts. Table 4-1 presents these thresholds, by regulated pollutant.

Table 4-1. Conformity *de minimis* Emission Thresholds

Pollutant	Status	Classification	*de minimis* Limit (tpy)
Ozone (measured as Nitrogen Oxides [NO_x] or Volatile Organic Compounds [VOCs])	Nonattainment	Extreme	10
		Severe	25
		Serious	50
		Moderate/marginal (inside ozone transport region)	50 (VOCs)/100 (NO_x)
		All others	100
	Maintenance	Inside ozone transport region	50 (VOCs)/100 (NO_x)
		Outside ozone transport region	100
Carbon Monoxide (CO)	Nonattainment/ maintenance	All	100
Particulate Matter (PM_{10})	Nonattainment/ maintenance	Serious	70
		Moderate	100
		Not Applicable	100
Sulfur Dioxide (SO_2)	Nonattainment/ maintenance	Not Applicable	100
Nitrogen Oxides (NO_x)	Nonattainment/ maintenance	Not Applicable	100

Source: 40 CFR 93.153

These *de minimis* thresholds are similar, in most cases, to the definitions for major stationary sources of criteria and precursors to criteria pollutants under the CAA's New Source Review (NSR) Program (CAA Title I). As shown in Table 4-1, *de minimis* thresholds vary depending upon the severity of the nonattainment area classification.

4.1.2 Potential Impacts

No long-term air quality impacts are expected from the Proposed Action. Regulated pollutant emissions from the Proposed Action would not contribute to or affect local or regional attainment status with NAAQS. The Proposed Action would generate air pollutant emissions as a result of grading, filling, compacting, and paving operations, but these emissions would be temporary and would not be expected to generate any off-site impacts.

The Proposed Action would not cause or contribute to any violation of any ambient air quality standard. Construction activities would generate total suspended particulate (TSP) and PM_{10} emissions as fugitive dust from ground-disturbing activities (e.g., grading, demolition, soil piles, unpaved roads) and combustion of fuels in construction equipment. Fugitive dust emissions would be greatest during the initial site preparation activities and would vary from day to day depending on the construction phase, level of activity, and prevailing weather conditions. The quantity of uncontrolled fugitive dust emissions from a construction site is proportional to the area of land being worked and the level of construction activity.

Construction activities would result in emissions of criteria pollutants as combustion products from construction equipment as well as evaporative emissions from architectural coatings and asphalt paving operations and would be of a temporary nature.

During construction, emissions from the Proposed Action would produce slightly elevated short-term PM_{10} ambient air concentrations. However, the effects would be temporary and would fall off rapidly with distance from the proposed construction site.

Conformity. A screening level significance evaluation indicates that the Proposed Action would generate emissions below conformity *de minimis* limits. Because the emissions generated would be below *de minimis* levels, it is reasonable to assume that the temporary construction emissions caused by the Proposed Action would not cause a violation of the NAAQS. Total Proposed Action emissions are such that a full Conformity Determination would not be necessary.

Other Analyses: NAAQS and Prevention of Significant Deterioration Standards. Through comparison with other similar projects, best engineering judgment indicates that the Proposed Action would have a negligible effect on the ambient air quality in Saint Clair County. There are no Prevention of Significant Deterioration Class I areas within 10 kilometers (6.2 miles) of the Proposed Action. Therefore, no impacts on Class I areas are expected.

4.2 Geological Resources

4.2.1 Evaluation Criteria

Protection of unique geological features, minimization of soil erosion, and the siting of facilities in relation to potential geologic hazards are considered when evaluating environmental consequences of a proposed action on geological resources. Generally, impacts can be avoided or minimized if proper construction techniques, erosion control measures, and structural engineering design are incorporated into project development.

Analysis of environmental consequences on geological resources typically includes the following evaluation tools:

- Identification and description of resources that could potentially be affected.
- Examination of a proposed action and the potential effects this action might have on the resource.
- Assessment of the significance of environmental consequences.
- Provision of mitigation measures in the event that potentially significant impacts are identified.

4.2.2 Potential Impacts

Under the Proposed Action, construction activities, such as grading, excavation, and re-contouring of the soil, would result in soil disturbance. Implementation of best management practices during construction would limit environmental consequences resulting from construction activities. Fugitive dust from construction activities would be minimized by watering and soil stockpiling, thereby reducing to negligible levels the total amount of soil exposed. Standard erosion control means (silt fencing, sediment traps, application of water sprays, and revegetation of disturbed areas) would also reduce environmental consequences from construction activities. Therefore, impacts on soils at the installation would not be significant.

The Proposed Action would not cause or create significant changes to the topography of the Scott AFB area. Therefore, no significant impact on regional or local topography or physiographic features would result from implementation of the Proposed Action.

4.3 Water Resources

4.3.1 Evaluation Criteria

Evaluation criteria for water resources impacts are based on water availability, quality, and use; existence of floodplains; and associated regulations. A potential impact on water resources would be significant if it were to reduce water availability to existing users or interfere with the supply; create or contribute to overdraft of groundwater basins or exceed safe annual yield of water supply sources; adversely affect water quality or endanger public health by creating or worsening adverse health hazard conditions; threaten or damage unique hydrologic characteristics; or violate established laws or regulations that have been adopted to protect or manage water resources of an area. The impact of flood hazards on a proposed action is significant if such an action is proposed in an area with a high probability of flooding.

4.3.2 Potential Impacts

Surface Water. Implementation of the Proposed Action is expected to have no adverse effects on surface water and water quality. The Proposed Action would not increase the impervious surface area and runoff on the installation. Adherence to proper engineering practices and applicable codes and ordinances would reduce storm water runoff-related impacts to a level of insignificance. Erosion and sediment controls would be in place during construction to reduce and control siltation or erosion impacts to areas outside of the construction site.

Repairing the drainage system within storm sewer system pipe networks 6 and 7 and increasing the capacity of its pump and lift stations would have a positive impact on surface drainage at Scott AFB.

Groundwater. None of the activities associated with the Proposed Action would affect groundwater quality. The proposed facilities are designed to be slab-on-grade construction and intrusion into the subgrade would be minimal.

Floodplains. The Proposed Action does not involve construction activities in a floodplain, would not induce development in a floodplain, and construction impacts would be kept as minimal as

possible. Therefore, the Proposed Action would not have an adverse impact on floodplains on Scott AFB.

4.4 Hazardous Materials and Wastes

4.4.1 Evaluation Criteria

Numerous local, state, and Federal laws regulate the storage, handling, disposal, and transportation of hazardous material and waste. The primary purpose of these laws is to protect public health and the environment. Environmental consequences associated with hazardous material and waste would be significant if the storage, use, transportation, or disposal of these substances were to substantially increase the risk to human health or exposure to the environment.

4.4.2 Potential Impacts

Hazardous Materials. Construction activities associated with the Proposed Action would require the use of certain hazardous materials such as paints, welding gases, solvents, preservatives, and sealants. Construction equipment that would be used in the Proposed Action contains fuel, lubricating oils, hydraulic fluid, and coolants that could be regulated hazardous substances if they spilled or leaked on the construction site. During project activities, contractors would be required to minimize the potential for a release of hazardous substances from all construction equipment, include daily inspection of equipment to ensure that there are no discharges, maintain appropriate spill containment material onsite, and store all fuels and other materials in appropriate containers. Equipment maintenance activities would not be conducted on the construction site.

It is anticipated that the quantity of products containing hazardous materials used during the O&M-funded construction activities would be minimal and their use would be of short duration. Contractors would be responsible for the management of hazardous materials, which would be handled in accordance with Federal and state regulations. Therefore, hazardous materials management at Scott AFB would not be impacted by the proposed construction activities.

Hazardous Wastes. It is anticipated that the quantity of hazardous wastes generated from proposed construction activities would be negligible. Contractors would be responsible for the disposal of hazardous wastes in accordance with Federal and state laws and regulations. Construction of the proposed facilities would not impact the Scott AFB hazardous waste management program.

Asbestos-Containing Materials and Lead-Based Paint. Any ACM or LBP encountered during renovation of existing buildings would be handled in accordance with established USAF policy and the *Asbestos Management Plan* (SAFB 2000a) or *Lead Based Paint Management Plan* (SAFB 1996). It is anticipated that Buildings 3189 and 3190 contain ACM and LBP. USAF regulations prohibit the use of ACM and LBP for new construction. Specifications for new facilities would be in accordance with USAF policies and regulations.

Pollution Prevention. It is anticipated that the Proposed Action would not impact the pollution prevention program at Scott AFB. Quantities of hazardous material and chemical purchases, off-base transport of hazardous waste, disposal of MSW, and energy consumption would remain unchanged with implementation of the Proposed Action. The Pollution Prevention Program at Scott AFB would accommodate the Proposed Action.

4.5 Infrastructure and Utilities

4.5.1 Evaluation Criteria

Impacts on infrastructure are evaluated for their potential for disruption or improvement of existing levels of service and additional needs for energy and water consumption, wastewater systems, and transportation patterns and circulation. Impacts could arise from physical changes to circulation, construction activities, introduction of construction-related traffic on local roads, changes in daily or peak-hour traffic volumes, and energy needs created by either direct or indirect workforce and population changes related to base activities.

In considering the basis for evaluating the significance of impacts on solid waste, several items are considered. These items include evaluating the degree to which the proposed construction projects could affect the existing solid waste management program and capacity of the area landfill.

4.5.2 Potential Impacts

Electrical. The Proposed Action would result in a decrease in electrical power usage because of the higher efficiencies of new equipment. Therefore, no adverse impacts on electrical power would result from the Proposed Action.

Potable Water. The Proposed Action would not result in a net change in water usage. Therefore, no adverse impacts on water supply systems would result from the Proposed Action.

Wastewater Treatment and Collection. The Proposed Action would not result in a net change in wastewater treatment or collection. Therefore, no adverse impacts on water supply systems would result from the Proposed Action.

Transportation. The construction phase of the Proposed Action would require delivery of materials to and removal of debris from construction sites. Construction traffic would comprise a small percentage of the total existing traffic and many of the vehicles would be driven to and kept onsite for the duration of construction activities, resulting in relatively few additional trips. Furthermore, potential increases in traffic volume associated with proposed construction activities would be temporary. Heavy vehicles are frequently on base roads. Therefore the construction vehicles necessary for construction are not expected to have a heavy impact on base roads. No adverse impacts on transportation systems would be expected. All road and lane closures would be coordinated with 375 Transportation Squadron prior to commencing construction activities and would be temporary in nature; therefore, no adverse impacts on transportation systems would be expected.

Solid Waste. Solid waste generated from the proposed construction activities would consist of a nominal amount of building materials such as solid pieces of concrete, metals (conduit, piping, and wiring), and lumber. Therefore, implementation of the Proposed Action at Scott AFB would not impact the solid waste management program at the base or the capacity of the area landfill.

4.6 Safety

4.6.1 Evaluation Criteria

If implementation of the Proposed Action were to substantially increase risks associated with the safety of Scott AFB personnel, contractors, or the local community, or substantially hinder the ability to respond to an emergency, it would represent a significant impact. Furthermore, if implementation of the Proposed Action would result in incompatible land use with respect to safety criteria (e.g., height restrictions), impacts on safety would be significant. Impacts were assessed based on the potential effects of construction and demolition activities.

4.6.2 Potential Impacts

Short-term, minor adverse effects would be expected. Implementation of the Proposed Action would slightly increase the short-term risk associated with construction contractors performing work at Scott AFB during the normal workday because the level of such activity would increase;

however, the Proposed Action is not considered to be unusually risky or hazardous. Contractors would be required to establish and maintain safety programs. Projects associated with the Proposed Action would not pose a safety risk to base personnel or activities at the base. The proposed O&M-funded construction projects would enable 375 AW to meet future mission objectives at the base and conduct or meet mission requirements in a safe operating environment. In addition, the repair of the drainage area around and along Scott Drive would create a safer driving environment during heavy rainfall events.

4.7 No Action Alternative

Under the No Action Alternative, existing conditions would remain as is and none of the proposed projects would occur. If the No Action Alternative were carried forward there would be no change in or effects on air quality, geological resources, water resources, hazardous materials and waste management, and infrastructure and utilities at Scott AFB. However, storm water drainage around and along Scott Drive would continue to be inadequate, water would continue to accumulate to unsafe conditions on road surfaces, and traffic would continue to be congested during heavy rain events; and DISA would not have sufficient space to meet its mission requirements if the No Action Alternative were implemented.

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5. Cumulative and Adverse Impacts

Cumulative impacts on environmental resources result from incremental effects of proposed actions, when combined with other past, present, and reasonably foreseeable future projects in the area. Cumulative impacts can result from individually minor, but collectively substantial, actions undertaken over a period of time by various agencies (Federal, state, and local) or individuals. Informed decision-making is served by consideration of cumulative impacts resulting from projects that are proposed, under construction, recently completed, or anticipated to be implemented in the reasonably foreseeable future.

Other projects to evaluate in the cumulative impact analysis were identified through review of public documents, information gained from the IICEP, and coordination with multiple agencies. During the timeframe of the Proposed Action, 375 AW would be modifying three of its entry control points (Shiloh Gate, Belleville Gate, and Mascoutah Gate) to improve safety and security on base. No significant impacts on the environment are anticipated from the Proposed Action in conjunction with these three projects.

5.1 Unavoidable Adverse Impacts

Unavoidable adverse impacts would result from implementation of the Proposed Action. None of these impacts would be significant.

Geological Resources. Under the Proposed Action, construction activities, such as grading, excavating, and recontouring of the soil, would result in soil disturbance. Implementation of best management practices during construction would limit environmental consequences resulting from construction activities. Standard erosion control means would also reduce environmental consequences related to these characteristics. Although unavoidable, impacts on soils at the base are not considered significant.

Hazardous Materials and Wastes. The generation of hazardous materials and wastes are unavoidable conditions associated with the Proposed Action. However, the potential for these unavoidable situations would not significantly increase over baseline conditions and, therefore, are not considered significant.

Energy. The use of nonrenewable resources is an unavoidable occurrence, although not considered significant. The Proposed Action would require the use of fossil fuels, a

nonrenewable natural resource. Energy supplies, although relatively small, would be committed to the Proposed Action or No Action Alternative.

5.2 Compatibility of the Proposed Action and Alternatives with the Objectives of Federal, Regional, State, and Local Land Use Plans, Policies, and Controls

Impacts on the ground surface as a result of the Proposed Action would occur entirely within the boundaries of Scott AFB. The Proposed O&M construction activities would not result in any significant or incompatible land use changes on or off base. The proposed projects have been sited according to existing land use zones. Consequently, construction activities would not be in conflict with base land use policies or objectives. The Proposed Action would not conflict with any applicable off-base land use ordinances or designated clear zones.

5.3 Relationship Between Short-term Use and Long-term Productivity

Short-term uses of the biophysical components of man's environment include direct construction-related disturbances and direct impacts associated with an increase in population and activity that occurs over a period of less than 5 years. Long-term uses of man's environment include those impacts occurring over a period of more than 5 years, including permanent resource loss.

Several kinds of activities could result in short-term resource uses that compromise long-term productivity. Filling of wetlands or loss of other especially important habitats and consumptive use of high-quality water at nonrenewable rates are examples of actions that affect long-term productivity.

The Proposed Action would not result in an intensification of land use at Scott AFB or in the surrounding area. Development of the Proposed Action would not represent a significant loss of open space. Scott Drive bisects such land use categories as industrial, administrative, accompanied and unaccompanied housing, outdoor recreation, and open space; the current Education Center area is designated as community service land use, and the temporary Education Center location (near Building 1500) is designated as community commercial land use. These sites are not planned for use as open space. Therefore, it is anticipated that the Proposed Action would not result in any cumulative land use or aesthetic impacts. Long-term productivity of these sites would be increased by the development of the Proposed Action.

5.4 Irreversible and Irretrievable Commitments of Resources

The irreversible environmental changes that would result from implementation of the Proposed Action involve the consumption of material resources, energy resources, land, biological habitat, and human resources. The use of these resources is considered to be permanent.

Irreversible and irretrievable resource commitments are related to the use of nonrenewable resources and the effects that use of these resources will have on future generations. Irreversible effects primarily result from use or destruction of a specific resource that cannot be replaced within a reasonable time frame (e.g., energy and minerals).

Material Resources. Material resources utilized for the Proposed Action include building materials (for construction of facilities), concrete and asphalt (for roads), and various material supplies (for infrastructure). Most of the materials that would be consumed are not in short supply, would not limit other unrelated construction activities, and would not be considered significant.

Energy Resources. Energy resources utilized for the Proposed Action would be irretrievably lost. These include petroleum-based products (such as gasoline and diesel), natural gas, and electricity. During construction, gasoline and diesel would be used for the operation of construction vehicles. During operation, gasoline would be used for the operation of private and government-owned vehicles. Natural gas and electricity would be used by operational activities. Consumption of these energy resources would not place a significant demand on their availability in the region. Therefore, no significant impacts would be expected.

Biological Habitat. The Proposed Action would result in a minimal, temporary loss of vegetation and wildlife habitat on proposed construction sites. Proposed construction occurs entirely on already disturbed land.

Human Resources. The use of human resources for construction and operation is considered an irretrievable loss, only in that it would preclude such personnel from engaging in other work activities. However, the use of human resources for the Proposed Action represents employment opportunities, and is considered beneficial.

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6. List of Preparers

This EA has been prepared under the direction of Scott AFB. The individuals who contributed to the preparation of this document are listed below.

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7. References

IEPA 2003 Illinois Environmental Protection Agency (IEPA). 2003. "Designation of 8-Hour Ozone Non-attainment Areas." Available online <*http://www.epa.state.il.us/air/monitoring/8hr_naa.html*>. Site accessed July 2003.

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APPENDIX A

INTERAGENCY AND INTERGOVERNMENTAL COORDINATION FOR ENVIRONMENTAL PLANNING CORRESPONDENCE

APPENDIX A
INTERAGENCY AND INTERGOVERNMENTAL COORDINATION FOR ENVIRONMENTAL PLANNING CORRESPONDENCE LIST

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«Name»
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Dear «Name»

The Air Mobility Command is preparing an Environmental Assessment (EA) of Operations and Maintenance Funded Construction Activities at Scott Air Force Base, Illinois. The Description of Proposed Action and Alternatives (DOPAA) is included with this correspondence as Attachment 1.

The environmental impact analysis process for this proposal is being conducted by the Air Mobility Command in accordance with the Council on Environmental Quality guidelines pursuant to the requirements of the National Environmental Policy Act of 1969. In accordance with Executive Order 12372, *Intergovernmental Review of Federal Programs*, we request your participation by reviewing the attached DOPAA and solicit your comments concerning the proposal and any potential environmental consequences. Please provide written comments or information regarding the action at your earliest convenience but no later than <DATE>. Also enclosed is a listing of those Federal, state, and local agencies that have been contacted (see Attachment 2). If there are any additional agencies that you feel should review and comment on the proposal, please include them in your distribution of this letter and the attached materials.

Please address questions concerning or comments on the proposal to our consultant, engineering-environmental Management, Inc. (e^2M). The point-of-contact at e^2M is Ms. Suanne Collinsworth. She can be reached at (703) 263-3350. Please forward your written comments to Ms. Collinsworth, in care of e^2M, Inc., 4215 Walney Road, Suite 4, Chantilly, VA 20151. Thank you for your assistance.

Sincerely

<Signed>

BOBBIE L. GRIFFIN, Lt Col, USAF
Chief, Environmental Programs Division
Directorate of Civil Engineering

Attachments:
1. Description of Proposed Action and Alternatives
2. Distribution List

The Draft Finding of No Significant Impact (FONSI) and Environmental Assessment (EA) were made available to the public for review from September 1, 2004 to September 30, 2004. The below Notice of Availability was published in the Belleville, Illinois *News Democrat* on September 1, 2004. No public comments were received during the public comment period.

PUBLIC NOTICE
Public Notice of Availability
Department of the Air Force
Scott Air Force Base 375 CES/CEV
Notice of Availability of the Draft Finding of No Significant Impact for the Environmental Assessment of Operations and Maintenance Funded Construction Activities at Scott Air Force Base, Illinois

Pursuant to the National Environmental Policy Act (NEPA) of 1969 and the Council on Environmental Quality, a Draft EA has been prepared to repair drainage deficiencies on Scott Drive and Construct Temporary, Modular Education Center Facilities, Relocate Existing Education Center and Personnel, and Renovate and Modify Buildings 3189 and 3190. The Air Mobility Command is proposing to issue a Finding of No Significant Impact (FONSI) based on this EA. The analysis considered potential effects of the Proposed Action and the No Action Alternative on six resource areas: air quality, geological resources, water resources, hazardous materials and waste management, infrastructure and utilities, and safety. The results, as found in the EA, show that the Proposed Action would not have an adverse impact on the environment – indicating that a FONSI would be appropriate. An Environmental Impact Statement should not be necessary to implement the Proposed Action. The Draft EA is available for public review at the Belleville Public Library reference desk at 121 E. Washington Street, Belleville, Illinois.

Public comments on the EA will be accepted for 30 days from the date of this notice. Written comments and inquiries on the EA should be directed to: 375th Airlift Wing Public Affairs Office at Fax: 618-256-8837 or email: 375AW.PA@scott.af.mil.

In addition, the following Privacy Advisory was published as part of the Cover Sheet to the Draft EA:

Privacy Advisory

Your comments on this EA are requested. Letters or other written comments provided may be published in the EA. Comments will normally be addressed in the EA and made available to the public. Any personal information provided will be used only to identify your desire to make a statement during the public comment period or to fulfill requests for copies of the EA or associated documents. Private addresses will be compiled to develop a mailing list for those requesting copies of the EA. However, only the names of the individuals making comments and their specific comments will be disclosed; personal home addresses and phone numbers will not be published in the EA.

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