FINAL
ENVIRONMENTAL ASSESSMENT
AIR TRAFFIC CONTROL TOWER AND FIRE STATION
POPE AFB, NC

JUNE 2004

Report Documentation Page

Form Approved
OMB No. 0704-0188

1. REPORT DATE	2. REPORT TYPE	3. DATES COVERED
JUN 2004		**00-00-2004 to 00-00-2004**

4. TITLE AND SUBTITLE	5a. CONTRACT NUMBER
Final Environmental Assessment- Air Traffic Control Tower and Fire Station Pope AFB, NC	5b. GRANT NUMBER
	5c. PROGRAM ELEMENT NUMBER
6. AUTHOR(S)	5d. PROJECT NUMBER
	5e. TASK NUMBER
	5f. WORK UNIT NUMBER
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) **J. M. Waller Associates,11828 Canon Blvd Ste A,Newport News,VA,23606**	8. PERFORMING ORGANIZATION REPORT NUMBER
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)	10. SPONSOR/MONITOR'S ACRONYM(S)
	11. SPONSOR/MONITOR'S REPORT NUMBER(S)

12. DISTRIBUTION/AVAILABILITY STATEMENT
Approved for public release; distribution unlimited

13. SUPPLEMENTARY NOTES

14. ABSTRACT

15. SUBJECT TERMS

16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT	18. NUMBER OF PAGES	19a. NAME OF RESPONSIBLE PERSON
a. REPORT **unclassified**	b. ABSTRACT **unclassified**	c. THIS PAGE **unclassified**	**Same as Report (SAR)**	**98**	

FINDING OF NO SIGNIFICANT IMPACT
AIR TRAFFIC CONTROL TOWER AND FIRE STATION
POPE AFB, NC

DESCRIPTION OF THE PROPOSED ACTION. Pope AFB proposes to improve facilities and services by constructing and operating a new Air Traffic Control Tower and Fire Station. The new Air Traffic Control Tower would provide the abilities to modernize and upgrade air traffic control functions at Pope AFB. The new Fire Station is needed to meet Air Force safety and living standards. Construction would begin in 2006 and the new facilities would be operational by 2008. Under the preferred alternative, this construction will take place on previously developed sites, with the Fire Station being built on the site currently being used for the Air Traffic Control Tower and Fire Station, and the Air Traffic Control Tower being built in a Heavy Equipment Yard.

ALTERNATIVES TO THE PROPOSED ACTION. Several sites on Pope AFB were considered for the new facilities. Three Alternatives were analyzed in the environmental assessment (EA): Alternative A) Construct separate Air Traffic Control Tower and Fire Station facilities; Alternative B) Construct a new Air Traffic Control Tower and Fire Station – co-located near existing facilities; and Alternative C) No Action Alternative. Alternative A was identified as the preferred alternative.

SUMMARY OF ENVIRONMENTAL CONSEQUENCES. This EA provides an analysis of the potential environmental consequences to thirteen resource categories. These resource impacts are summarized below.

Implementation of the preferred alternative would have negligible to minor impacts on air quality. The annual rate of emissions in tons per year for both construction and operation is well below threshold levels established in the conformity regulations and is not expected to affect attainment of the North Carolina State Implementation Plan or regional air quality. Preparation of an air conformity determination is not required.

Construction would temporarily increase the ambient noise levels by approximately 5 decibels; however, there are no sensitive receptors in the immediate vicinity of the proposed site. This impact is considered temporary and negligible.

During construction there would be negligible to moderate risks to human health and exposure to the environment. A safety plan would be implemented as part of the proposed action.

There would be negligible impacts on water resources, floodplains, and wetlands. There is a potential for minimal impacts to surface water from storm water runoff that could contain contaminants from leaks or spills on pavement areas.

There would be little to negligible effects on existing vegetation and wildlife habitat. No impact to threatened/endangered species would occur.

No National Register of Historic Places eligible archaeological, architectural, or traditional resources have been identified at the proposed project site. Therefore, associated construction would have no adverse effect on significant cultural resources. Standard Operating Procedures are in place to protect cultural resources should they be found.

There would be a positive economic impact in the form of employment during construction and added long-term stability of the local economy from the operation of the facilities.

Construction and operation of the facilities would be compatible with the Pope AFB General Plan.

Implementation of the preferred alternative would result in temporary disruption of transportation patterns on Pope AFB during the construction and demolition phases. The potential impacts to transportation are considered negligible to minor.

Implementation of the preferred alternative would result in a positive safety impact because of modernized, updated equipment and implementation of current safety and anti-terrorism/force protection standards at the Air Traffic Control Tower and Fire Station.

Soils would be disturbed and soil stability problems associated with the porous soils would potentially cause some construction constraints. Incidental spillage of fuels, lubricants, hydraulic fluids and chemical substances could occur. Existing spill contingency plans and waste management practices would help protect soil resources. Pollution prevention practices would be implemented for the proposed project and its operation once it is constructed.

Implementation of the preferred alternative would have negligible impacts on low income or minority populations because the siting of the facilities would occur in a relatively isolated area and not likely to affect any civilian community or population center.

CONCLUSION

After careful review of the EA, I have concluded that the Proposed Action under Alternative A, construction and operation of a new Air Traffic Control Tower and Fire Station would not have a significant impact on the quality of the human environment. Therefore, issuance of a Finding of No Significant Impact is warranted, and an Environmental Impact Statement is not required. This analysis fulfills the requirements of the National Environmental Policy Act and the implementing regulations promulgated by the Council on Environmental Quality.

Frank Laras — 21 Jun 04

FRANK LARAS, Colonel, USAF
Vice Commander

DATE

EXECUTIVE SUMMARY

This Environmental Assessment (EA) describes the potential environmental consequences resulting from a proposal to construct and operate a new Air Traffic Control Tower and Fire Station at Pope Air Force Base (AFB), North Carolina.

ENVIRONMENTAL IMPACT ANALYSIS PROCESS

This EA has been prepared by the United States Air Force (Air Force), the 43 Air Wing (43 AW) in accordance with the requirements of the National Environmental Policy Act (NEPA) of 1969, the Council on Environmental Quality (CEQ) regulations implementing NEPA, and Air Force Instruction (AFI) 32-7061 *(The Environmental Impact Analysis Process*, 32 Code of Federal Regulations [CFR] 989).

PURPOSE AND NEED FOR ACTION

The purpose of the proposed action is to construct and operate a new Air Traffic Control Tower and Fire Station at Pope AFB. Pope AFB is home to the 43 Airlift Wing (AW). The 43 AW provides rapid global mobility and agile combat support to a joint team capable of global attack and precision engagement. The 43 AW is teamed with tenant Air Combat Command units, Air Force Special Operation Units, the Army's XVIII Airborne Corps, and elements of the US Special Operations Command.

The 43 Mission Support Group and 43 Operations Group need to continue to safely support Department of Defense (DoD) training, exercise, and contingency operations. In order to efficiently meet the increasing demands of an extremely active air base, the existing Air Traffic Control Tower and Fire Station need to be replaced with more efficient and modern facilities. The existing tower was built in 1975 to accommodate only limited air traffic control operations and has limited space for equipment and personnel. Currently, the Air Traffic Control Tower is less than half the square footage as required by current standards. The existing Fire Station was built in 1956, before the Air Force adopted the 1990 National Fire Protection Association Standards. Both facilities are undersized and out-dated. In order to meet current Air Force codes for safety and standards of living the facilities require modernization and expansion.

PROPOSED ACTION AND ALTERNATIVES

The proposed action consists of constructing and operating a new Air Traffic Control Tower and Fire Station at Pope AFB to replace the existing facilities. The new facilities would be operated by the 43 Mission Support Group and are expected to be operational in 2008. The designs would be compatible with Pope AFB architectural requirements. The proposed facilities and operations would include incorporation of Unified Facilities Criteria (UFC) 4-010-01 dated 31 July 2002, DoD Minimum Antiterrorism Standards for Buildings. The designs would also incorporate requirements specified in the Air Force's

Air Traffic Control Tower and Fire Station Facilities design guides. There would be no increase in required personnel needed to operate either of these facilities.

Three alternatives were carried forward for evaluation in the EA: Alternative A) Construct separate Air Traffic Control Tower and Fire Station; Alternative B) Construct a new Air Traffic Control Tower and Fire Station – co-located near existing facilities; and Alternative C) No Action. Alternative A was identified as the preferred alternative.

SUMMARY OF ENVIRONMENTAL CONSEQUENCES

This EA provides an analysis of the potential environmental consequences associated with constructing and operating a new Air Traffic Control Tower and Fire Station.

Air Quality

Air emissions during the construction activities for the preferred alternative (Alternative A) would be negligible to minor. Most construction would take place over a period of one to two years. The annual rate of emissions in tons per year for both construction and operation is well below threshold levels established in the conformity regulations and is not expected to affect attainment of the North Carolina State Implementation Plan or regional air quality. Preparation of an air conformity determination is not required.

Impacts under Alternative B would be similar to the preferred alternative. The No Action Alternative would not result in any increase in emissions.

Noise

Implementation of Alternative A would temporarily increase the ambient noise levels by approximately 5 decibels, however, there are no sensitive receptors in the immediate vicinity of the proposed site. This impact is considered temporary and negligible.

Under Alternative B, noise impacts would be similar to Alternative A. Under Alternative C, no new permanent noise sources would be created; current levels of noise would not be measurably increased.

Wastes, Hazardous Materials and Stored Fuels

Alternative A would include activities that would use hazardous materials and generate hazardous wastes. During the construction and demolition phases, there would be short-term spikes in the amount of hazardous materials used and hazardous waste generated; however, the preferred alternative would not cause significant impacts to the management, storage capacity, or handling procedures used at Pope AFB. Implementation of Alternative A would have negligible to moderate risks to human health and exposure to the environment, depending on the materials contained in structures to be demolished and pre-existing contamination levels in the soils, if present. Impacts under Alternative B would be similar to Alternative A. Impacts under Alternative C would result in no changes to hazardous materials, waste or stored fuels.

Water Resources

Alternative A would have negligible impacts on water resources, floodplains, or wetlands. There is a potential for minimal impacts to surface water from storm water runoff that could contain contaminants from leaks or spills on pavement areas. Potential impacts to wetlands and the areas that receive storm water runoff would be minimized by implementation of Best Management Practices (BMPs) during the construction and demolition processes.

Under Alternative B, impacts would be similar to those identified for Alternative A. Alternative C would not change any existing water resources, wetlands or floodplains at Pope AFB.

Biological Resources

Because there is little vegetation or wildlife habitat at the proposed construction site, Alternative A would have little to negligible effect on existing vegetation and wildlife habitat. No impact to threatened/endangered species would occur.

Alternative B impacts would be similar to Alternative A, with negligible impacts to vegetation, wildlife habitat and threatened/endangered species. Alternative C would not result in any impacts to vegetation, wildlife habitat and threatened and endangered species.

Socioeconomics

The preferred alternative construction and demolition activities would result in positive economic impacts to the existing resident populations in the form of employment. However, this positive impact is considered negligible to minor.

Alternative B would also bring positive economic impacts in the form of temporary employment to the area. Alternative C would have no change in the local economy.

Cultural Resources

The proposed site for the new facilities is not near any historic facilities or known archaeological sites. Potential impacts to historic and archaeological sites are possible due to unknown resources that could be found through the construction and demolition processes. Standard Operating Procedures such as notifying the Pope AFB environmental office are in place to protect cultural resources should they be found. If during the construction phase, any archeological remains are discovered, notification of and consultation with the State Historic Preservation Office is required.

Under Alternative B, impacts would be similar to Alternative A and proper procedures would be implemented should any historic or archaeological resources be found. Under Alternative C, there would be no construction and demolition activities and therefore no potential impact to unknown archaeological or historic resources.

Land Use

Alternative A proposal would be compatible with the existing land use patterns and local ordinances. No changes to current land use are proposed; therefore, no impacts are anticipated. Construction will take place on previously developed sites. The new fire station will be built on the existing site of the air traffic control tower and fire station, and the new air traffic control tower will be built on an existing heavy equipment yard.

Alternative B impacts would be similar to Alternative A. Alternative C would not result in any impacts to the existing land use plans.

Transportation

Under Alternative A, there would be temporary disruption of current transportation patterns on Pope AFB during the construction and demolition phases. The Pope AFB roadway system should safely handle and distribute vehicular movements with a minimum amount of congestion and delay. The potential impacts to transportation are considered negligible to minor.

Under Alternative B, there would be similar impacts as those identified in Alternative A. Alternative C, No Action, negative impacts to efficiency would continue, as the effectiveness of transportation activities would not be improved. This could cause increases in hazards and safety concerns.

Airspace/Airfield Management

Alternatives A, B and C would have no detrimental impacts to airspace and airfield operations at Pope AFB. Positive impacts would occur because of the modernization and upgrade of the Air Traffic Control Tower and Fire Station.

Safety and Occupational Health

Alternative A would increase the safety and efficiency of operations at Pope AFB because of the proposed modernization and upgrades. This Alternative would allow the facilities to meet the current anti-terrorism/force protection standards by allowing the prescribed standoff distances for both facilities and the fire trucks full access to the facility. This alternative would have overall positive impacts to safety and occupational health.

Alternative B impacts to safety and occupational health would also be positive. Under Alternative C, certain safety hazardous would continue to exist. Without the proposed improvements, operational standards would continue to be unacceptable and substandard.

Environmental Management (includes Pollution Prevention, Geology and Soils)

Alternative A would result in negligible to minor impacts to the geology of the area. Soils would be disturbed but erosion controls would be put in place before, during, and after construction. Incidental spillage of fuels, lubricants, hydraulic fluids and chemical substances could occur. Existing spill contingency plans and waste management

practices would help protect soil resources. Pollution prevention practices would be implemented for the proposed project and its operation once it is constructed.

Alternative B impacts would be similar to those identified for Alternative A. Alternative C would result in no changes to environmental management.

Environmental Justice

Alternative A would have negligible impacts on low income or minority populations because the siting of the facilities would occur in a relatively isolated area and not likely to affect any civilian community or population center.

Under Alternative B, the potential impacts would be similar to those identified in Alternative A. Under Alternative C, no impacts to low income and minority populations would occur.

TABLE OF CONTENTS
ENVIRONMENTAL ASSESSMENT
AIR TRAFFIC CONTROL TOWER AND FIRE STATION, POPE AFB

CHAPTER 1
PURPOSE AND NEED FOR THE PROPOSED ACTION

This chapter provides an overview of the purpose and need for the proposed action, the location of the proposed action, background information, as well as the decision to be made, the scope of the environmental review, and the organization of this environmental assessment (EA).

1.1 INTRODUCTION

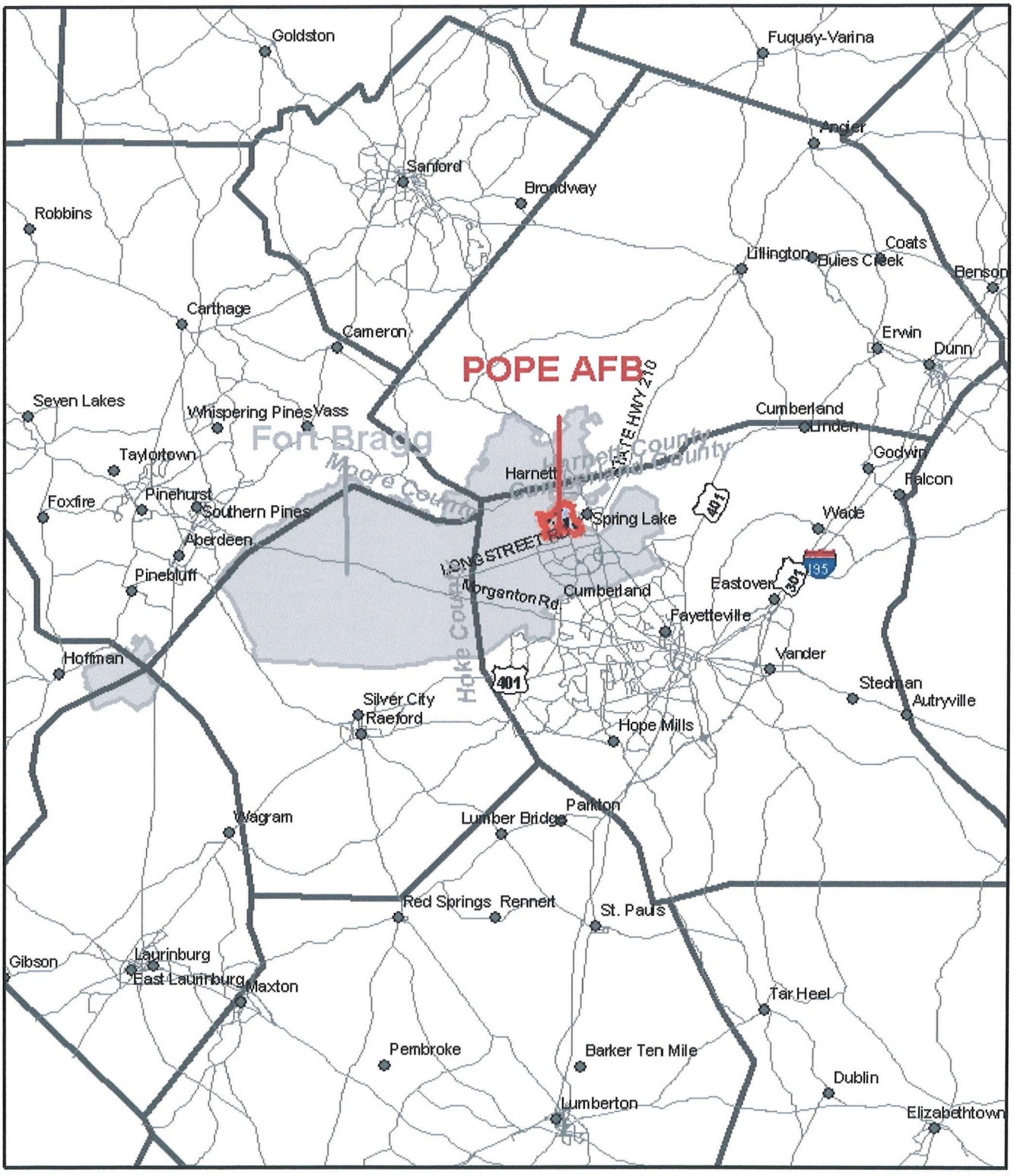
This EA evaluates potential environmental impacts associated with implementing the proposed action to construct and operate a new Air Traffic Control Tower and Fire Station at Pope Air Force Base (AFB). It provides a description of the proposed action and alternatives to the action. It also provides the public with an opportunity to provide input and decision-makers with the information required to understand and evaluate any potential environmental impacts.

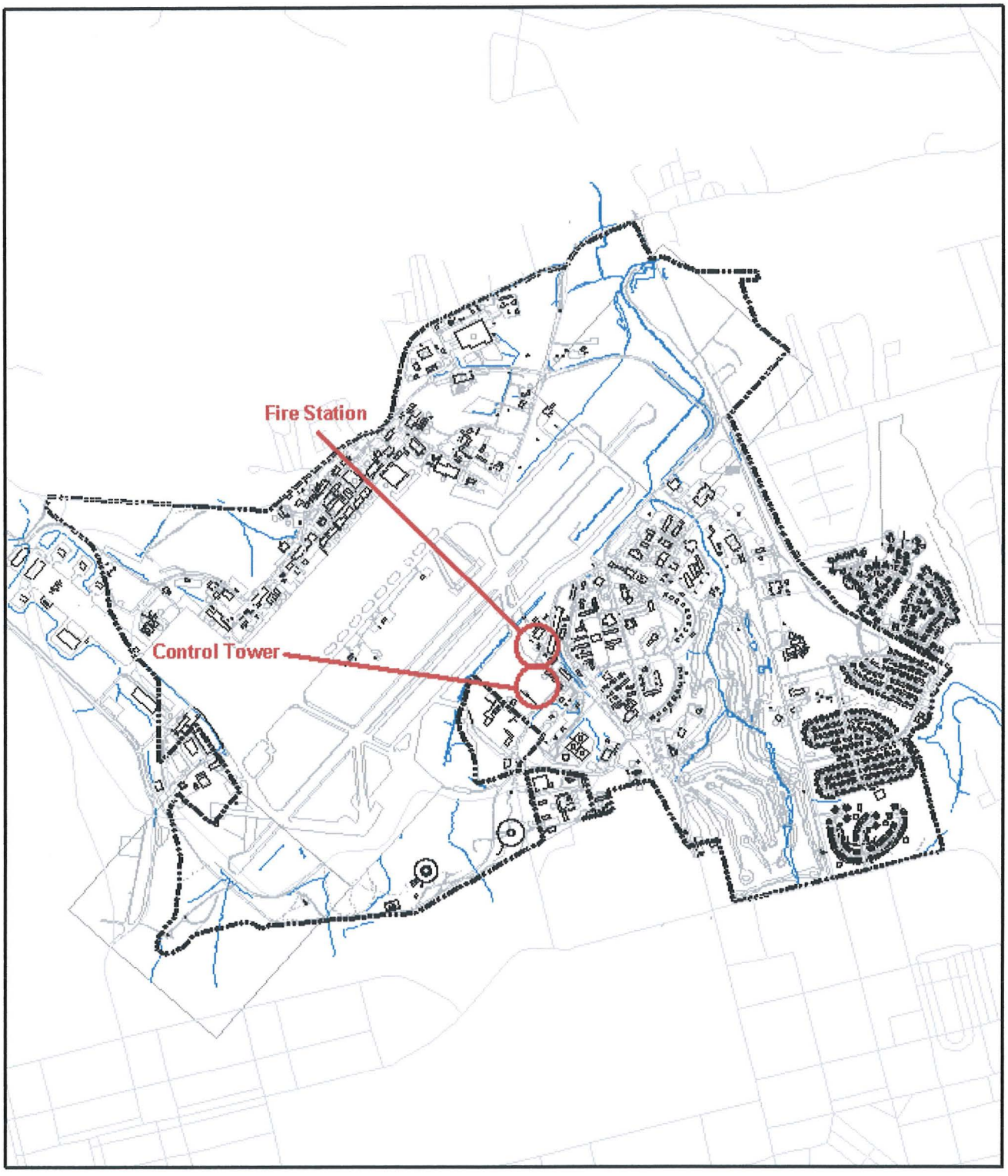
Pope AFB is located in Cumberland County in south-central North Carolina. The base is 12 miles northwest of the City of Fayetteville and approximately 80 miles inland from the Atlantic Ocean. Figure 1.1-1 shows the location of Pope AFB. The US Army's Fort Bragg Military Installation borders Pope AFB to the south, west, and north of the base. The community of Spring Lake and parcels of undeveloped land are located east of the base. Pope AFB covers approximately 2,140 acres, of which 151 acres are owned by the Air Force. The remaining acreage is leased from the Army on an indefinite permit for as long as the Air Force has a need for the land. Figure 1.1-2 shows the base map and proposed locations of the new facilities.

1.2 PURPOSE OF AND NEED FOR THE ACTION

The purpose of the proposed action is to construct and operate a new Air Traffic Control Tower and Fire Station at Pope AFB in order to meet Air Force safety, operational, and Force Protection requirements. Pope AFB is home to the 43 Airlift Wing (AW). The 43 AW provides rapid global mobility and agile combat support to a joint team capable of global attack and precision engagement. The 43 AW is teamed with tenant Air Combat Command units, Air Force Special Operation Units, the Army's XVIII Airborne Corps, and elements of the US Special Operations Command.

The 43 Mission Support Group and 43 Operations Group need to continue to safely support Department of Defense (DoD) training, exercise, and contingency operations. In order to efficiently meet the increasing demands of an extremely active air base, the existing Air Traffic Control Tower and Fire Station need to be replaced with more efficient and modern facilities. Currently, the Air Traffic Control Tower is less than half the square footage as required by current standards. The existing Fire Station was built in 1956, before the Air Force adopted the 1990 National Fire Protection Association Standards. Both facilities are undersized and out-dated. In order to meet current Air Force codes for safety and standards of living the facilities require modernization and expansion.


Goldston
Fuquay-Varina
Sanford
Broadway
Robbins
Lillington
Coats
Buies Creek
Benson
Carthage
Cameron
Erwin
Dunn
POPE AFB
Seven Lakes
Whispering Pines
Vass
Fort Bragg
Cumberland
Linden
Taylortown
Harnett
Godwin
Falcon
Foxfire
Pinehurst
Southern Pines
Spring Lake
Wade
Aberdeen
Pinebluff
Eastover
Cumberland
Fayetteville
Hoffman
Vander
Stedman
Autryville
Silver City
Raeford
Hope Mills
Wagram
Lumber Bridge
Parkton
Red Springs
Rennert
St. Pauls
Gibson
Laurinburg
East Laurinburg
Maxton
Tar Heel
Pembroke
Barker Ten Mile
Dublin
Lumberton
Elizabethtown
Legend
Roads
Pope AFB Installation Boundary
Fort Bragg Installation Boundary
N
POPE AFB, NC
Figure 1.1-1
General Vicinity Map
Pope AFB
0
5
10
Miles



Legend
- Installation Boundary
- Buildings/Structures
- Roads
- Water
- Project Location

N

POPE AFB, NC

Figure 1.1-2
Base Map
Pope AFB

0 0.25 0.5 Miles

The proposed Air Traffic Control Tower and Fire Station are necessary in order to accomplish the following requirements:

- to support safe air traffic control at Pope AFB;
- to support Air Mobility Command (AMC)'s most active fire station;
- to modernize outdated facilities and meet current codes for safety and standards of living;
- to maximize land use and facility efficiency; and
- to maintain mission readiness and support to the 43 AW and other elements of the DoD.

1.3 OBJECTIVE OF THE ACTION

The objective of the proposed action is to build and operate a new Air Traffic Control Tower and Fire Station at Pope AFB in order to improve the efficiency operations and comply with new standards.

1.4 SCOPE OF EA

The National Environmental Policy Act (NEPA) requires federal agencies to take into consideration potential environmental consequences of proposed actions in their decisionmaking process. The intent of NEPA is to protect, restore, or enhance the environment through well-informed federal decisions. The Council on Environmental Quality (CEQ) was established under NEPA to implement and oversee federal policy in this process. The CEQ subsequently issued the Regulations for Implementing the Procedural Provisions of the NEPA (40 Code of Federal Regulations [CFR] Sections 1500-1508). These regulations specify that an EA be prepared to:

- Briefly provide sufficient evidence and analysis for determining whether to prepare an EIS or a Finding of No Significant Impact (FONSI);
- Aid in an agency's compliance with NEPA when on EIS is necessary; and
- Facilitate preparation of an EIS when one is necessary.

The Air Force regulation, *Title 32 CFR Part 989, Environmental Impact Analysis Process,* provides the required procedures for implementing the Air Force's Environmental Impact Analysis Process (EIAP). This EA has been prepared to support the decision making process, and includes a description of the proposed action and alternatives, including the no action alternative. It also includes a characterization of the affected environment and potential impacts if the proposed action, or the no action alternative, is implemented. Alternatives to the proposed action are identified and their potential impacts are evaluated. Analysis in this EA is based on review of scientific literature, consultation with regulatory agencies, and interviews with Air Force personnel.

1.5 DECISION THAT MUST BE MADE

The decision to be made is whether or not to implement the proposed action to construct and operate a new Air Traffic Control Tower and Fire Station at Pope AFB.

1.6 APPLICABLE REGULATORY REQUIREMENTS AND REQUIRED COORDINATION

The following section provides a brief summary of laws, regulations, executive orders (EOs) and other types of requirements that may be applicable to implementation of the proposed action.

Both NEPA and CEQ regulations require intergovernmental notifications prior to making any detailed statement of environmental impacts. Through the process of interagency and intergovernmental coordination for environmental planning (IICEP), the Air Force notifies concerned federal, state, and local agencies and allows them sufficient time to evaluate any potential environmental impacts of the proposed action. Comments from these agencies and the public are considered and incorporated as applicable into the Air Force's environmental analysis. Public involvement is conducted in accordance with CEQ requirements (40 CFR Part 1506.6).

In addition to NEPA, there are numerous other environmental laws and EOs that are applicable to this analysis. A few of these laws are described below.

Federal agencies are required to determine the conformity of proposed actions with respect to State Implementation Plans (SIPs) for attainment of air quality goals. Under the Clean Air Act (CAA) of 1990, the U.S. Environmental Protection Agency (EPA) has promulgated regulations (40 CFR 51, Subpart W) that require the proponent of a proposed action to perform an analysis to determine if the proposed action conforms to the SIP. To comply with this requirement and to determine conformity, the decision-making process includes a study of potential air emissions associated with the proposal.

The North Carolina State Environmental Review Clearinghouse administers the state and local agency review and comment process for environmental documents prepared pursuant to NEPA.

The Endangered Species Act (ESA) of 1973 is the primary federal legislation regarding biological resources. The Act protects proposed and listed threatened and endangered species, as well as the habitats that support such species.

The Clean Water Act (CWA) of 1977 regulates pollutant discharges that could affect aquatic life forms or human health and safety. The CWA and EO 11990, on the Protection of Wetlands, regulate development activities near streams or wetlands.

The National Historic Preservation Act (NHPA) of 1966 established the National Register of Historic Places (NRHP) and the Advisory Council on Historic Preservation.

The NHPA requires federal agencies to consider potential impacts to "significant" cultural resources that are listed, nominated for, or eligible for listing on the NRHP, designated a National Historic Landmark, or valued by modern Native Americans for maintaining their traditional culture.

The proposed action and alternatives are also evaluated for compliance with other environmental legislation and regulations, including the Protection of Wetlands; EO 11988, Floodplains Management; 36 CFR 800, Protection of Historic and Cultural Properties; EO 13007, Indian Sacred Sites; EO 13084, Consultation and Coordination with Indian Tribal Government; EO 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations; and EO 13045, Protection of Children from Environmental Health Risks and Safety Risks.

The Native American Graves Protection and Repatriation Act (25 United States Code [USC] Subsection 3001-3013) requires museums and federal agencies to: 1) document certain Native American human remains and cultural items within their collections: 2) notify all Indian Tribes and Native organizations that are or are likely to be affiliated with these holdings; and 3) provide an opportunity for the repatriation of appropriate human remains or cultural items.

1.7 ORGANIZATION OF THIS ENVIRONMENTAL ASSESSMENT

This document is organized into six chapters and supporting appendices.

- Chapter 1 provides the purpose and need of the proposed action; identifies location of the proposed action; summarizes the NEPA process; lists the applicable regulatory requirements; and describes the organization of the EA;
- Chapter 2 provides a detailed description of the proposed actions and alternatives; the alternatives considered but not carried forward; and the No Action Alternative;
- Chapter 3 provides a general description of the biophysical resources that the proposed action and alternatives could potentially affect;
- Chapter 4 is an analysis of the environmental consequences of the proposed action and alternatives; describes cumulative impacts, irreversible and irretrievable commitments of resources, project considerations, and suggested mitigation;
- Chapter 5 lists preparers and contributors;
- Chapter 6 provides a list of references;
- Chapter 7 lists persons, and agencies consulted in developing this document; and;

Appendix A contains the Notice of Availability;

Appendix B contains correspondence.

CHAPTER 2
DESCRIPTION OF THE ALTERNATIVES INCLUDING THE PROPOSED ACTION

Pope AFB proposes to build a new Air Traffic Control Tower and Fire Station. The proposed action and alternatives to the proposed action including selection criteria are discussed in this Chapter.

2.1 INTRODUCTION

Pope AFB is the home of the 43 AW, which provides airlift services for all branches of the DoD and other governmental agencies. In support of the 43 AW, the mission of the 43 Mission Support Group and 43 Operations Group is to ensure a ready force and deliver safe and reliable air traffic control services and fire protection.

The 43 Mission Support Group and the 43 Operations Group propose to improve the services and facilities at Pope AFB by constructing and operating a new Air Traffic Control Tower and Fire Station. At the onset of this project, the 43 Civil Engineer Squadron (CES), together with representatives from Headquarters AMC, the Pope AFB Fire Department, and Air Field Operations staff, conducted site visits, interviews, and analysis to determine appropriate space requirements and locations for the new facilities. The engineers and planners considered the costs and benefits associated with Military Construction (MILCON) options proposed for Pope AFB. They also considered design options and compatibility of the project with the overall Pope AFB General Plan.

The proposed action and alternatives are listed below. These alternatives are evaluated in this EA along with the No Action Alternative as required by the NEPA and the CEQ implementing regulations.

- Alternative A - Construct separate Air Traffic Control Tower and Fire Station facilities
- Alternative B - Construct a new Air Traffic Control Tower and Fire Station – co-located near existing facilities
- Alternative C - No Action Alternative

2.2 SELECTION CRITERIA FOR ALTERNATIVES

Selection criteria are the items necessary to achieve a feasible and complete project. Meeting these criteria helps ensure that the requirements of the 43 AW are met. Several site selection surveys were conducted for both the Control Tower and the Fire Station. The site selection of the Control Tower considered air traffic patterns, visibility, airfield safety, tower height, cost, and site availability. The site selection criteria for the Fire Station considered safety, cost, site availability, and rapid access to the airfield for emergencies. Various potential locations were investigated. The two resulting action

alternatives included in this EA include co-locating the facilities near the existing structures, or alternately separating the facilities.

Some alternatives brought forward meet some, but not all, selection criteria. Selection criteria for reasonable alternatives to be considered include: 1) the new facilities should meet requirements specified in Air Force's Air Traffic Control Tower and Fire Station Facilities design guides, 2) the facilities should provide safe and efficient operations, 3) they should accommodate facility operations and new equipment space, and 4) they should be located in proximity to the air field and in sites that allow for consolidating common and compatible facilities to maximize land use, facility efficiency, and allow for future expansion.

Meeting these requirements would ensure that Pope AFB maximizes the efficiency of its resources, safely manages its airfield operations, meets Air Force standards, and provides a strong foundation for future needs.

2.3 ALTERNATIVES CONSIDERED BUT ELIMINATED FROM DETAILED STUDY

Alternatives to the proposed action were identified, evaluated, and not carried forward in the analysis process for the following reasons. The alternative of replacing only the Fire Station and not the Air Traffic Control Tower was considered and eliminated. This alternative was eliminated because both facilities are currently integrated and replacing the fire station alone would require removal of the existing Air Traffic Control Tower. Several other siting locations for the Air Traffic Control Tower and Fire Station were considered but eliminated because they did not optimize tower observation capabilities or had excessive costs.

2.4 DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES

The proposed action and alternatives for accomplishing the proposed action are described below:

2.4.1 The Proposed Action

The proposed action consists of constructing and operating a new Air Traffic Control Tower and Fire Station at Pope AFB to replace the existing facilities. The new facilities would be operated by the 43 Mission Support Group and are expected to be operational in 2006. Construction of both facilities would take place in a phased sequence so as to minimize any disruption of services. Temporary facilities would be utilized as necessary. A temporary mobile tower would be deployed during construction, if required. Permits would be acquired and all standard environmental mitigation measures, such as erosion controls would be implemented prior to any construction. The designs would be compatible with Pope AFB architectural requirements. The proposed facilities and operations would include incorporation of Unified Facilities Criteria (UFC) 4-010-01 dated 31 July 2002, DoD Minimum Antiterrorism Standards for Buildings. The designs would also incorporate requirements specified in the Air Force's Air Traffic Control

Tower and Fire Station Facilities design guides. There would be no increase in required personnel needed to operate either of these facilities.

Air Traffic Control Tower

The height of the new Air Traffic Control Tower would be approximately 110 ft above the ground. It would have a cab that would accommodate up to twelve people including trainees, controllers and one supervisory workstation. The present tower is 82 ft tall.

An adjoining base building would house administrative, training, and maintenance facilities. The location of the new tower would provide air traffic controllers more efficient viewing of the hundreds of aircraft that take off and land at Pope AFB each day. The new facility would feature state-of-the-art air traffic control equipment.

Construction materials would consist of concrete foundation and slab, steel frame, masonry walls, and a metal roof. The facility would include fire detection and suppression systems, heating and air conditioning, elevator, emergency power, utilities, parking, site improvements, and other required support infrastructure. There are no housing requirements for the tower. Its design includes a bathroom and shower, a break room, and a locker area.

Fire Station

According to Air Force design guides Pope AFB is authorized over 35,000 SF for a large fire station. The proposed new Fire Station would replace the existing substandard facility and would be approximately 38,739 SF. The new Fire Station would provide a safe and professional working, training, and living facility for Pope AFB's emergency responders. Pope AFB has the most active fire department in AMC, responding to an average of 1,950 incidents a year, compared to the other AMC bases that averaged 1,039 responses per year.

The new Fire Station requires ten drive-through stalls to house Pope's 18 authorized fire-fighting vehicles. Sleeping quarters would be increased from the substandard 60 SF to 110 SF and would be designed so as to not discharge directly into vehicle stalls. Storage space would be provided for the fire-fighting agent, alarm receiving equipment, bench stock, training aids, and personal belongings. The station would also contain administrative offices.

The current facility has two above ground storage tanks for diesel and gasoline. As part of the proposed action, these tanks would be relocated and placed outside of the new Fire Station. Vehicle maintenance would continue to be performed in the new Fire Station. All use of hazardous materials and disposal of hazardous wastes in the vehicle maintenance bays would be in accordance with procedures outlined in Pope AFB Hazardous Waste Management Plan. Indoor storage would be provided for cleaning supplies, 1,500 pounds of dry chemical fire retardant, 1,200 gallons of fire retardant foam stored in 55-gallon drums, batteries, and varying amounts of oil and other petroleum products.

The new Fire Station would be a two-story facility. Construction materials would consist of concrete foundation and slab, steel frame, masonry walls, and a metal roof. The facility would include fire detection and suppression systems, heating and air conditioning, emergency power, utilities, parking, site improvements, and other required support infrastructure. The new facility would replace the current facility that was built in 1956. The proposed location of the new facility is near the footprint of the existing fire station. It is located near the airfield in order to allow immediate access in case of aircraft emergencies or accidents.

The Pope Fire Department maintains 30 people per shift, plus four vehicle maintenance personnel. The department has approximately 80 personnel total. This includes 20 plus fire fighters on each shift plus administrative support. The station operates on two 24-hour work shifts. The Fire Station is staffed at all times.

Overall, approximately six acres of previously developed lands would be disturbed in the construction of both of the proposed facilities and parking areas. Security required setbacks for distances between the new facilities, roadways, and parking areas would increase the footprint of the building area. Site preparation would include the demolition and removal of the existing Fire Station. In addition, the existing Fire Station has an oil-water separator that would be removed and the new station would be designed with an alternative system to recycle water and capture contaminants. During construction the current oil water separator would be cleaned and contaminants would be disposed of in accordance with Pope AFB Hazardous Waste Management Plan.

In addition to building the facility, another component of the project would be the improvement of roads servicing the general vicinity. A new access way would need to be constructed to allow changes to the existing parking areas. Existing water service would be upgraded and connections to the new water supply system would provide adequate domestic and fire water systems. Wastewater would be discharged into the existing system. Electrical and natural gas connections to the existing system are available in the immediate vicinity of the project area.

Demolition and removal of debris would be required as part of the proposed action. All debris materials that cannot be reused or recycled would be disposed of offsite in permitted facilities. A health and safety plan would be required before demolition and construction begins. This plan would outline procedures for dealing with the safe removal of the oil-water separator, any contaminated soil, and disposal of any hazardous materials or waste, including lead based paint and/or asbestos containing materials. All hazardous waste and hazardous materials would be handled in accordance with procedures outlined in Pope AFB Hazardous Waste Management Plan. All waste handling and disposal activities would also conform to the requirements of the Occupational Safety and Health Act (OSHA), Resource Recovery Act (RCRA), and Air Force regulations. Materials that could be recycled in a cost-effective manner would be sorted from debris and packaged for recycling. Solid (non-hazardous) waste would also be disposed of offsite in permitted facilities.

Storm water runoff and soil erosion from the site would be controlled by filtration and by sodding bare earth areas. Prior to the start of construction, silt fences, storm drain inlet and outlet protection, tree protection, and other appropriate standard construction practices would be instituted in accordance with the Pope AFB Storm Water Pollution Prevention Plan (SWPPP). To control sediment and other pollutants that enter storm runoff from parking lots, proper grading and erosion control measures such as seeding and filter cloth would also be used. Erosion and Sedimentation Control Plans would be prepared by the designer and approved by North Carolina Department of Environment and Natural Resources (NCDENR) before construction could begin.

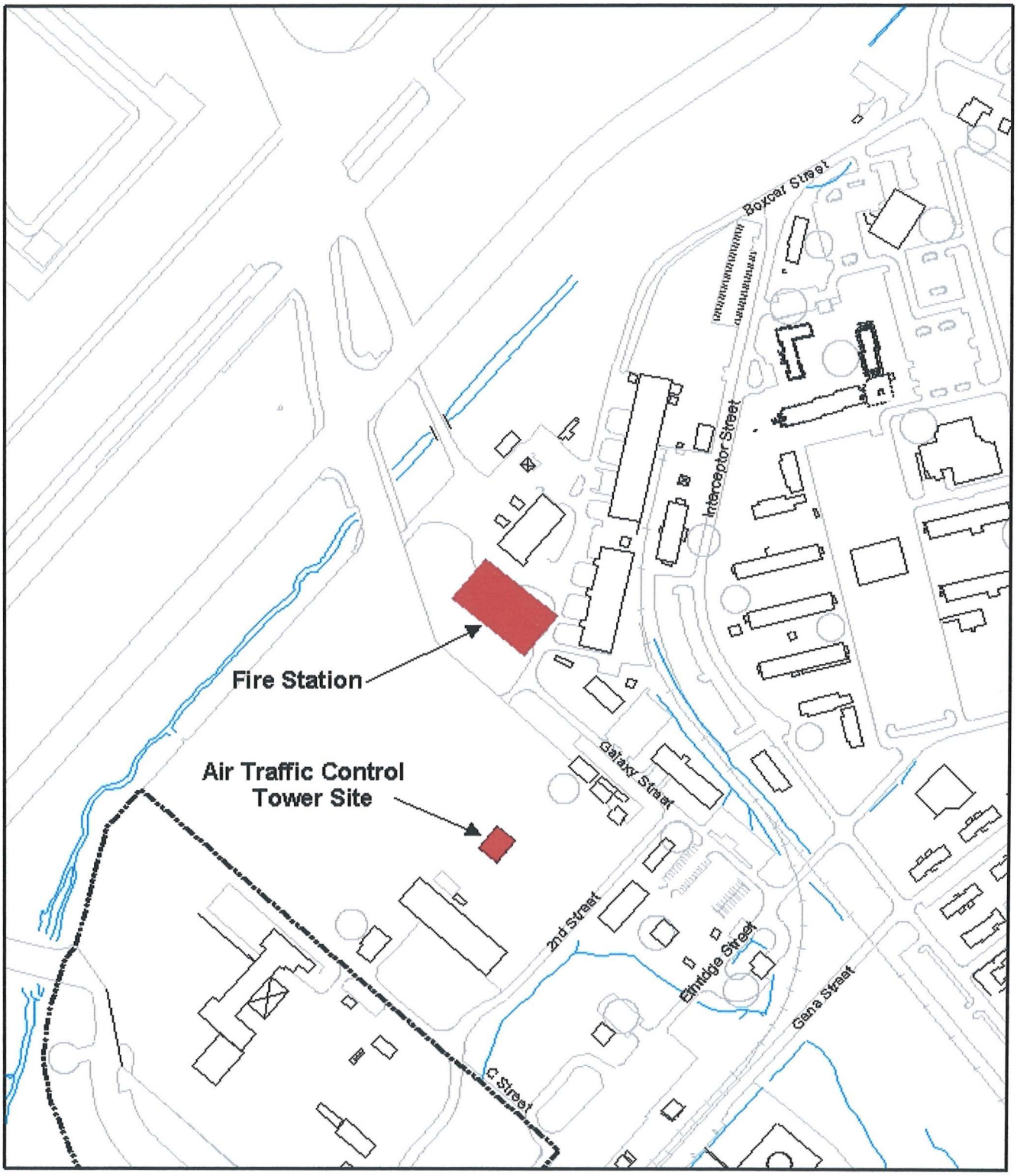
Landscaping on the site would be provided using vegetation found native in North Carolina or identified and recommended in the Pope AFB Architectural Design and Planning guide. A native landscaped buffer would be planted between the buildings and the roadways. The landscaped material would assist in acting as a storm water filter. In addition, Bermuda grass would be planted on any areas that are not sodded. No straw would be used on bare earth areas so as to minimize foreign object debris that could present a hazard to aircraft.

2.4.2 Alternative A - Construct separate Air Traffic Control Tower and Fire Station facilities

Under this alternative, the new Air Traffic Control Tower and Fire Station would be located at separate sites. The Fire Station would be located at the site of the existing Fire Station and Air Traffic Control Tower and the new Air Traffic Control Tower would be located approximately 500-feet to the south near Building 178 in an existing Heavy Equipment Yard. No facilities would be shared. The construction would take place in a phased approach to allow the current tower to remain in use until the new tower is ready to become operational. A phased construction sequence would also be followed for the Fire Station. As a result of this action, it is possible that some or all of the functions of the Heavy Equipment Yard will require relocation, if existing facilities at Pope AFB are not adequate to accommodate this activity. Alternative sites for the Heavy Equipment Yard are under consideration and any new site selection for the Heavy Equipment Yard will be done in compliance with all federal, state and Air Force requirements. Figure 2.4 -1 shows the location of proposed Air Traffic Control Tower and Fire Station.

2.4.3 Alternative B - Construct a new Air Traffic Control Tower and Fire Station near existing facilities

Under this alternative, the new Air Traffic Control Tower and Fire Station would be co-located at the site of the existing facilities. The construction would take place in a phased approach to allow the current tower to remain in use until the new tower is ready to become operational. A temporary mobile tower would be deployed, if necessary. A phased construction sequence would also be followed for the Fire Station. Under this alternative, the existing Heavy Equipment Yard across from Building 178 would not require relocation.



Legend
- Installation Boundary
- Buildings/Structures
- Roads
- Water
- Proposed Fire Station/Tower

N

POPE AFB, NC

Figure 2.4-1
Location of Proposed Air Traffic Control Tower/Fire Station

0 262.5 525 Feet

2.4.4 Alternative C - No Action Alternative

Under the No Action Alternative, proposed construction and operation of a new Air Traffic Control Tower and Fire Station would not take place. No demolition, construction, or renovation would be implemented. If the project were not implemented, the 43 AW's ability to accomplish its current and future missions, in an effective manner, would be limited. CEQ regulations stipulate that the No Action Alternative be analyzed to assess any environmental consequences that may occur if the proposed action is not implemented. Therefore, this alternative will be carried forward for analysis in the EA.

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

Existing and historical development patterns in and around Pope AFB have influenced the character of land use, the use and quality of environmental resources, and the potential for impacts to the physical, social, and biological environment.

Reasonably foreseeable future actions that may be relevant to cumulative impacts analysis include the potential relocation of the Heavy Equipment Yard across from Building 178, the beddown of the CC-130-J aircraft and associated construction projects, the ongoing construction of a Army and Air Force Exchange Service (AAFES) mini-mall, the planned construction of a Military Family Housing Area maintenance facility, the ongoing Red Ramp construction, the proposed construction of a new medical clinic, the proposed construction of a new educational center and library, and the proposed construction of new Air Support Operations Squadron and Combat Control School facilities. These Air Force actions have or will be analyzed in other NEPA documentation, as required. Additional factors that affect cumulative impacts include ongoing operations at Fort Bragg and the continued development of commercial and private real estate in the vicinity of Pope AFB.

2.6 IDENTIFICATION OF PREFERRED ATLERNATIVE

After evaluation of the proposed action and each alternative's potential effect on mission and force protection requirements, environmental resources, safety, efficiency and economic feasibility, the proposed construction and operation of a new Air Traffic Control Tower and Fire Station near the existing facilities, Alternative A, was identified as the preferred alternative.

COMPARISON OF ALTERNATIVES

Table 2.6-1 summarizes the potential environmental impacts of the proposed action and alternatives, based on the analysis presented in Chapter 4.0.

Table 2.6-1 Comparison of Alternatives

Resource Area	Alternative A	Alternative B	Alternative C No Action
Air Quality	Temporary emissions. Negligible impacts.	Temporary emissions. Negligible impacts.	No change from baseline.
Noise	Temporary impacts from construction.	Temporary impacts from construction.	No change from baseline.
Waste, Hazardous Materials and Fuels	Solid waste and hazardous waste would be generated. Impacts would be negligible.	Solid waste and hazardous waste would be generated. Impacts would be negligible.	No change from baseline.
Water Resources	Impacts would be negligible and would be minimized by proper site preparation and erosion control.	Impacts would be negligible and would be minimized by proper site preparation and erosion control.	No change from baseline.
Biological Resources	Impacts would be minimal because area is previously disturbed.	Impacts would be minimal because area is previously disturbed.	No change from baseline.
Socioeconomics	Positive impacts. Small increase in local spending.	Positive impacts. Small increase in local spending.	No change from baseline.
Cultural Resources	No impacts anticipated.	No impacts anticipated.	No change from baseline.
Land Use	Compatible with existing land use.	Compatible with existing land use.	No change from baseline.
Transportation	Temporary minor disruption in local traffic.	Temporary minor traffic.	No change from baseline.
Airspace and Airfield Management	Operations would improve because of modernized facilities.	Operations would improve because of modernized facilities.	Negative impacts. Operations would remain limited because of out of date facilities.
Safety and Occupational Health	Safety would improve because of modernized facilities.	Safety would improve because of modernized facilities.	Negative impacts. Operations would remain limited and fail to meet Air Force standards
Environmental Management	Negligible impacts.	Negligible impacts.	No change from baseline.
Environmental Justice	No impacts anticipated.	No impacts anticipated.	No change from baseline.

CHAPTER 3
AFFECTED ENVIRONMENT

3.1 INTRODUCTION

This chapter describes the existing environmental and human resources that would potentially be affected by the proposed action and alternatives. The area of analysis for most resources is the immediate area of Pope AFB and its surroundings. Most of the baseline information was taken from existing Pope AFB documentation.

3.2 AIR QUALITY

Understanding air quality for the affected area requires knowledge of: 1) applicable regulatory requirements; 2) types and sources of air quality pollutants; 3) location and context of the affected and 4) existing setting.

Air quality in a given location is described by the concentrations of various pollutants present in the atmosphere. National Ambient Air Quality Standards (NAAQS) have been established by the U.S. Environmental Protection Agency (EPA) for six criteria air pollutants: carbon monoxide (CO), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), particulate matter equal to or less than 10 micrometers in diameter (PM_{10}), ozone (O_3), and lead (Pb). NAAQS represent the maximum levels of background pollutants that are considered safe, with an adequate margin of safety to protect public health and welfare. Short-term standards (1-, 8-, and 24-hour periods) have been established for pollutants contributing to acute health effects, while long-term standards (annual averages) have been established for pollutants contributing to chronic health effects.

The CAA of 1990 places the responsibility on individual states to achieve and maintain the NAAQS. The primary mechanism for states to achieve and maintain the NAAQS is the EPA-required SIP. The SIP identifies goals, strategies, schedules, and enforcement actions that will lead each state into compliance with NAAQS. Each state has the authority to adopt standards stricter than those established under the federal program. North Carolina AAQS and the federal NAAQS are depicted in Table 3.2.1.

The EPA designates all areas of the U.S. as having air quality better than (attainment) or worse than (non-attainment) the NAAQS. When there is insufficient ambient air quality data for the EPA to form a basis for attainment status, the area is designated "unclassified". The criteria for non-attainment designation varies by pollutant: 1) an area is in non-attainment for O_3 if NAAQS have been exceeded more than three discontinuous times in 3 years, and 2) an area is in non-attainment for any other pollutant if NAAQS have been exceeded more than once per year.

As defined by the EPA in Title III of the CAA, chemical pollutants include hazardous air pollutants (HAPs) and toxic chemical air pollutants for which occupational exposure limits have been established. Included in this definition are volatile organic compounds (VOCs), which include any organic compound involved in atmospheric photochemical reactions. VOCs are considered to be precursors to O_3 formation. HAPs are not

subject to ambient air quality standards, but may present a threat of adverse human health effects or adverse environmental effects under certain conditions.

Table 3.2-1. National and State Ambient Air Quality Standards

		North Carolina Stds	Federal Stds (NAAQS)	
Air Pollutant	*Averaging Time*	*NC AAQS*[1]	*Primary*[2]	*Secondary*[3]
CO	1-hour 8-hour	35 ppm 9 ppm	35 ppm 9 ppm	35 ppm 9 ppm
NO_2	Annual	0.053 ppm	0.053 ppm	0.053 ppm
SO_2	3-hour 24-hour Annual	0.50 ppm 0.10 ppm 0.02 ppm	- 0.14 ppm 0.03 ppm	0.50 ppm - -
$PM_{2.5}$[4]	24-hour Annual		65 µg/m^3 15 µg/m^3	150 µg/m^3 50 µg/m^3
PM_{10}	24-hour Annual	150 µg/m^3 50 µg/m^3	150 µg/m^3 50 µg/m^3	150 µg/m^3 50 µg/m^3
O_3	1-hour[5] 8-hour	0.12 ppm 0.08 ppm	0.12 ppm 0.08 ppm	0.12 ppm 0.08 ppm
Pb	Quarterly average	1.5 µg/m^3	1.5 µg/m^3	1.5 µg/m^3

Notes: [1] North Carolina has adopted all NAAQS.
[2] Primary standards set limits to protect public health, including the health of "sensitive" populations such as asthmatics, children, and the elderly.
[3] Secondary standards set limits to protect public welfare, including protection against decreased visibility and damage to animals, crops, vegetation, and buildings.
[4] $PM_{2.5}$ = Particulate matter less than 2.5 microns in diameter. New standards for $PM_{2.5}$ and 8-hour ozone standards were established in 1997
[5] The ozone 1-hour standard applies only to designated nonattainment areas.
ppm = parts per million
µg/m^3 = micrograms per cubic meter.
Sources: EPA 1999

Pope AFB is located in Cumberland County, which due to elevated ozone levels has entered into an agreement with the EPA and the NC DENR to participate in the Early Action Compact. This participation in the Early Action Compact will defer the effective date of future EPA ozone nonattainment designations. In June 2003, the Fayetteville Area Metropolitan Planning Organization identified and provided to EPA a list of local control measures and strategies selected by the Cumberland County Air Quality Stakeholders and adopted by local jurisdictions to reduce emissions of ozone precursors and reduce vehicle miles traveled. An Early Action Plan, approved by the Stakeholders, was submitted to EPA and NC DENR in March 2004. This plan outlines the strategies that will be implemented by December 2005 to attain air quality standards for ozone and monitoring of implementations. The goal is to obtain attainment for the 8-hour ozone National Ambient Air Quality Standards by December 31, 2007.

The installation is currently permitted by the NCDENR as a small source emitter (Air Permit Number 04308R12). Pope AFB is not considered a major source of HAPs as defined in the CAA.

3.3 NOISE

The potential noise exposure to personnel and clients at the proposed Air Traffic Control Tower and Fire Station warrant inclusion of noise analysis. Localized construction noise is also given consideration.

Noise is defined as any sound that is undesirable because it interferes with communication, is intense enough to damage hearing, or is otherwise annoying. Human response to noise varies according to the type and characteristics of the noise sources, distance between source and receiver, receiver sensitivity, and time of day. Sound is measured with instruments that record instantaneous sound levels in decibels (dB). A-weighted sound level measurements, often denoted dB(A), are used to characterize the frequency response of the human ear. All sound levels analyzed in this EA are A-weighted; thus, the term dB implies dB(A) unless otherwise noted.

In this EA, the day-night average sound level (DNL) is one of several metrics used to describe noise. DNL is a cumulative metric that accounts for the total sound energy occurring over a 24-hour period, with nighttime noise weighted more heavily to reflect increased community sensitivity to noise during nighttime hours. Noise levels in excess of 65 dB DNL are normally considered unacceptable for noise-sensitive land uses such as residences, schools, and hospitals. If such facilities are built in these areas soundproofing and insulation is usually required to reduce noise levels.

This EA also considers potential noise effects from aircraft that could potentially interfere with air traffic control functions. This EA considers the effects of noise generated by the proposed construction and demolition activities and equipment. When assessing construction noise, continuous, intermittent and impulsive noises are addressed. Continuous noise is that produced by machinery or other equipment that operates without interruption. Intermittent noise, for example, is that associated with equipment that operates in cycles, and is characterized by levels that increase and decrease rapidly.

The primary existing source of noise at Pope AFB is from aircraft maintenance and operations at the airfield and from training ranges on adjacent Fort Bragg. Noise at Pope AFB is characteristic of that associated with flying at most Air Force installations and civilian airports. During periods of no aircraft activity at Pope AFB, noise from base activities results primarily from aircraft maintenance and shop operations, ground traffic movement, occasional construction, and similar sources. The noise is almost entirely restricted to the base and is comparable to sounds that occur in adjacent communities.

The majority of Pope AFB is subject to 65 dB DNL or higher; portions that experience less than 65 dB DNL are located in the southeast part of the base covering Military

Family Housing. The proposed project area is located between the existing 70-75 dB DNL contour lines (see Figure 3.3-1 Noise Contours).

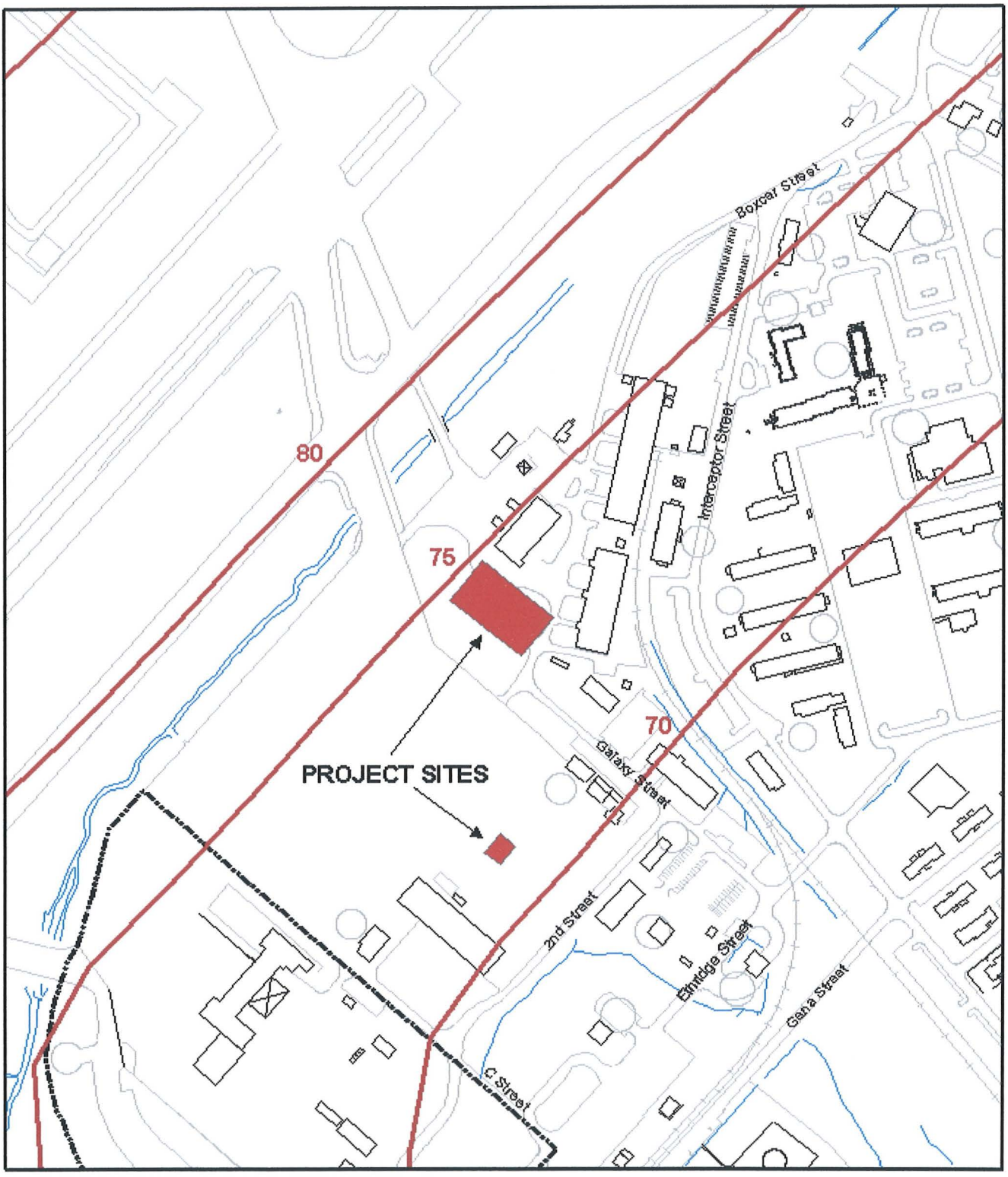
3.4 WASTES, HAZARDOUS MATERIALS, AND STORED FUELS

This section describes the hazardous waste, hazardous material, and fuels management programs at Pope AFB. Hazardous materials are substances that pose a potential hazard to human health or the environment if improperly used or managed. Hazardous wastes are hazardous materials defined by the RCRA. Hazardous wastes are defined in 40 CFR 261 as any solid, liquid, or contained gas that can no longer be used or is abandoned. Hazardous wastes, as defined in the RCRA, are substances with strong physical properties of ignitability, corrositivity, reactivity, or toxicity, which may cause an increase in mortality, a serious irreversible illness, an incapacitating reversible illness, or pose a substantial threat to human health or the environment. Although a waste can be classified as "non-hazardous," it may still have the potential to affect safety and the environment.

Hazardous materials and wastes are regulated by the EPA, in accordance with the Water Pollution Control Act; the Clean Water Act; the Solid Waste Disposal Act; the Toxic Substance Control Act; RCRA; the Comprehensive Environmental Response, Compensation, and Liability Act; and the CAA. The Federal government is required to comply with these acts and all applicable state regulations under EO 12088, Department of Defense Directive 4165.60, Air Force Instruction (AFI) 32-7042, AFI 32-7086, and Air Force Pamphlet 32-7043, the Hazardous Wastes Management Guide. The NCDENR, Division of Waste Management, enforces the North Carolina Hazardous Waste Management Rules that include state specific, as well as delegated Federal regulations related to hazardous waste management and disposal.

Pope AFB has specific plans that establish policies and procedures for dealing with wastes, hazardous materials, and stored fuels. These include the Pope AFB Instruction 32-113, Hazardous Materials Management Process; the Pope AFB Hazardous Waste Management Plan, and the Pope AFB Instruction 32-102, Management of Recoverable and Unusable Petroleum Products.

Pope AFB stores, transports, disposes of, and uses petroleum, oil, and lubricant (POL), including petroleum-based fuels. The base follows all procedures and organizational mechanisms designed to prevent or limit the accidental release of POL materials to surface water, groundwater, or soils. Specific Air Force guidance related to fuels management at Pope AFB includes: 1) AFI 23-201, *Fuels Management*, 28 July 1994, which provides managers at all Air Force activities with policy and procedures for fuels operations; 2) AFI 23-502, *Recoverable and Unusable Liquid Petroleum Products*, 6 April 1994, which sets goals, assigns responsibilities, and provides guidance for recovering usable and disposing of unusable liquid petroleum products; 3) Air Force Manual 85-16, *Maintenance of Petroleum Systems*, which governs the maintenance of permanently installed storage and dispensing systems for petroleum and unconventional fuels; and 4) Air Force Technical Order 42B-1-23, *Management of*



Legend
- Installation Boundary
- Buildings/Structures
- Roads
- Proposed Fire Station/Tower
- Noise Contours

N

POPE AFB, NC

Figure 3.3-1
Noise Contours at
Pope AFB

0 265 530
Feet

Recoverable and Waste Liquid Petroleum Products, which provides guidelines for collecting, segregating, and processing reclaimed, recoverable, and waste petroleum.

All chemicals, fuels, and wastes at Pope AFB are managed through a network of integrated programs specifically developed to minimize or eliminate adverse effects on the environment. These programs include chemical acquisition, hazardous material tracking, and disposal tracking. Hazardous materials and chemicals are tracked through Pope AFB inventory and the Hazardous Material Pharmacy. The inventory system tracks hazardous materials according to type, quantity, destination, and user. The system is supplemented by a separate waste management system that documents disposition of wastes. Hazardous waste management includes characterization, storage, transportation and disposal of wastes generated at Pope AFB.

Pope AFB is a large quantity generator, which means that the facility generates more than 1,000 kilograms (2,200 lbs.) of hazardous waste per month. The base is required to comply with all record-keeping requirements of 40 CFR Subpart D (Parts 262.4-262.42). All Pope AFB waste handling and disposal activities also conform to the requirements of the OSHA, RCRA, and Air Force regulations. Pope AFB hazardous waste is packaged and disposed through off-site commercial treatment and disposal firms. Some wastes are recycled such as batteries, used oil, and anti-freeze. Solid (non-hazardous waste) is disposed in a local landfill through contracts with solid waste handling companies.

3.5 WATER RESOURCES (including FLOODPLAINS and WETLANDS)

Water resources include surface and groundwater resources. Surface water includes lakes, rivers, canals, and streams and is important for economics, ecology, recreation, and human health considerations. Groundwater comprises the subsurface hydrogeologic resources of the physical environment and is an essential resource in many areas.

The CWA of 1972 is the primary Federal law that protects the nation's waters, including lakes, rivers, aquifers, wetlands, and coastal areas. The primary objective of the CWA is to restore and maintain the integrity of the nation's waters. Water resources include groundwater, surface water, wetlands, and floodplains located within the proposed project areas. Groundwater resources are located in underground aquifers. Surface water resources include lakes, ponds, rivers, and streams.

The term "floodplain" generally refers to the 100-year floodplain. The 100-year floodplain designates the area that would be subjected to inundation from a flood having a one percent chance of occurring in any given year based on historical records and calculated statistical probabilities. This flood event is referred to as the "100-year flood" or "base flood" and may occur more or less often than once every 100 years.

The NEPA compliance process requires federal agencies to consider direct and indirect impacts to floodplains that may result from federally funded actions. EO 11988 requires

federal agencies to take action to minimize occupancy and modification of floodplains. Furthermore, EO 11988 requires that federal agencies proposing to locate a project in the 100-year floodplain must consider alternatives to avoid adverse effects and incompatible development in the floodplain.

"Wetlands" is a collective term for marshes, swamps, bogs, and similar areas characterized by perennial water-saturated soils and vegetated with plants that have adapted to these conditions. Wetlands may exist in poorly drained areas, in depressions on the landscape, and between water and dry land along the edges of streams, rivers, lakes, and coastlines. Inland wetlands receive water from precipitation, ground water, and/or surface water. Coastal and estuarine wetlands receive water from precipitation, surface water, tides, and/or ground water. Surface water sources include storm water runoff.

The federal regulations implementing Section 404 of the CWA define wetlands as: "those areas that are inundated or saturated by surface or ground water (hydrology) at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation (hydrophytes) typically adapted for life in saturated soil conditions (hydric soils). Wetlands generally include swamps, marshes, bogs, and similar areas."

There are currently no known wetlands in the vicinity of the proposed project area. The project area is located on previously disturbed property. A site-wide delineation would determine exact wetland location and acreages. According to the Pope AFB Integrated Natural Resources Management Plan (INRMP), there are approximately 155 acres of wetland on Pope AFB (USAF 2001). The acreage of jurisdictional wetlands on base may change over time, if changes in hydrology occur. The Wilmington District of the U.S. Army Corps of Engineers determines the limits of jurisdictional wetlands, based on regulatory directives.

Pope AFB is located within the Cape Fear River Basin. Pope AFB's major surface water feature is Tank Creek, which runs through the center of the base from the southwest to the northeast. Tank Creek feeds into the Little River, which flows into the Cape Fear River before reaching the Atlantic Ocean.

Potable water is supplied by Fort Bragg, which treats water obtained from a surface water intake on Little River, upstream and to the northwest of Pope AFB. The Little River is designated as Use Classification C by the State of North Carolina. Pope AFB has a SWPPP and a National Pollutant Discharge Elimination System (NPDES) Stormwater Discharge permit. The base overlies two principal aquifer systems, which are the primary source of groundwater in the Fayetteville area. The depth to groundwater at Pope AFB ranges from surface level to approximately 30 feet below ground surface. There are no water rights issues associated with Pope AFB. The proposed project area drains to the north and northeast to ditches and storm drains flowing into Tank Creek.

3.6 BIOLOGICAL RESOURCES

Biological resources include living, native, or naturalized plant and animal species and the habitats within which they occur. These resources are divided into three major categories: 1) vegetation, 2) wildlife, and 3) threatened, endangered, or sensitive species. The current INRMP for Pope AFB (USAF 2001) provided most of the source material for this section of the EA.

Vegetation

Four upland and five wetland communities have been identified on Pope AFB. The area of the proposed construction is previously disturbed and is part of the developed area on Pope AFB. These areas are dominated by non-native grasses, such as rye, Bermuda, and bahia grass and are maintained by mowing.

Wildlife

The wildlife commonly associated with the vegetative cover types found on Pope AFB include the eastern cottontail rabbit (*Syhlvilagus floridanus*), gray squirrel (*Sciurus* spp.), raccoon (*Procyon lotor*), opossum (*Didelphis virginiana*), and non-game birds. Large mammals found in areas of Pope AFB include white tail deer (*Odocoileus virginianus*), bobcat (*Felis rufus*), and red fox (*Vulpes vulpes*).

Threatened, Endangered, or Sensitive Species

Threatened, endangered, or sensitive species are not likely to occur near the immediate airfield environment where the proposed Control Tower and Fire Station would be built. The area around the airfield is heavily developed and disturbed. However, federally listed species and state listed species of concern have been identified as having the potential to occur within Cumberland County. Portions of Pope AFB have also been identified as potential habitat for some of these species. Tables 3.6-1 and 3.6-2 list the threatened and endangered plant and animal species and species of concern that potentially occur on Pope AFB. Five of the plant species have been found on Pope AFB, however, not in the proposed construction areas. The five plant species known to be present on Pope AFB include: social sedge (Carex socialis), resinous or pine barrens boneset (Eupatorium resinosum), bog spicebush (Lindera subcoriacea), spring-flowering goldenrod (solidago verna), and Chapman's yellow-eyed grass (xyris chapmanii). The federally endangered red-cockaded woodpecker (*Picoides borealis*) historically inhabited the loblolly pines in northern areas of Pope AFB. Red-cockaded woodpeckers prefer older, living trees of open pine forest. The species in non-migratory and individual families or clans maintain year-round territories around their nesting and roost trees. The one known historic cluster on Pope AFB is currently inactive and classified as non-managed and tentatively abandoned by the Fort Bragg Endangered Species Management Plan. There are no red-cockaded woodpecker clusters or habitat in the vicinity of the proposed construction.

Table 3.6-1 Protected /Special Concern Animal Species that May Occur on Pope AFB			
Scientific Name	**Common Name**	**State Status**	**Federal Status**
Birds			
Aimophila aestivalis	Bachman's Sparrow	SC	FSC
Haliaeetus leucocephalus	Southern Bald Eagle	E	T*
Lanius ludovicianus	Loggerhead Shrike	SC	
Picoides borealis	Red-cockaded Woodpecker	E	E
Reptiles			
Pituophis melanoleucus	Northern pine snake	SC	FSC
Amphibians			
Hyla andersonii	Pine barrens tree frog	SR	
Insect			
Neonympha mitchellii francisci	St. Francis satyr	SR	E

Source: North Carolina Natural Heritage Program, 1993. Updated 2001.
* The bald eagle is proposed for delisting.
SC = Special Concern
SR = Significantly Rare
E = Endangered
T = Threatened
FSC = Federal Species of Concern

Table 3.6-2 Protected /Special Concern Plant Species That May Occur on Pope AFB				
Scientific Name	**Common name**	**State Status**	**Federal Status**	**Flowering Period**
Agalinis aphylla	Scale-leaf gerardia	SR		Sept-Oct
Amorpha Georgiana var. georgiana	Georgia indigo-bush	E	FSC	May-July
Astragalus michauxii	Sandhills milkvetch	T	FSC	June-Aug
Carex exilis	Coastal sedge	T		April-June
Carex socialis	Social sedge	SR		
Carex tenax	Wire sedge	C		April-June
Danthonia epilis	Bog oatgrass	SR		April-June
Dionaea muscipula	Venus flytrap	C-SC	FSC	June-July
Eleocharis robbinsii	Robbins's spikerush	C		July-August
Eupatorium resinosum	Resinous or pine barrens boneset	T-SC	FSC	Aug-Oct
Gaillardia aestivalis	Sandhills gaillardia	C		July-Oct
Galactia mollis	Soft milk-pea	C		June-July
Hex amelanchier	Sarvis holly	SR		April-May
Kalmia cuneata	White wicky	E-SC	FSC	April-June
Lindera subcoriacea	Bog spicebush	E	FSC	April-May
Lysimachia asperulifolia	Rough-leaved Loosestrife	E	E	April-June
Muhlenbergia torreyana	Pinebarren smokegrass	E		
Myriophyllum laxum	Loose watermilfoil	T	FSC	June-Oct
Nestronia umbellula	Nestronia	W1		April-May
Oxypolis ternate	Savanna cowbane	W1		Sept-Oct
Parnassia caroliniana	Carolina grass-of-Parnassus	E	FSC	Sept-Oct

Table 3.6-2 Protected /Special Concern Plant Species That May Occur on Pope AFB

Scientific Name	Common name	State Status	Federal Status	Flowering Period
Phaseolus sinuatus	Sandhills bean	C		July-Sept
Platanthera nivea	Snowy orchid	T		May-Sept
Potamogeton confervoides	Conferva pondweed	C	FSC	April-Sept
Pyxidanthera barbulata var. brevifolia	Sandhills pyxie-moss	E	FSC	April-June
Rhus michauxii	Michaux's sumac	E-SC	E	June
Rhynchospora alba	Northern white beaksedge	C		July-Sept
Rhynchospora crinipes	Alabama beaksedge	E	FSC	July-Sept
Rhynchospora oligantha	Feather-bristle beaksedge	C		July-August
Rhyncospora stenophylla	Snowy orchid	W1		July-Sept
Schwalbea Americana	American chaffseed	E	E	May-June
Solidago pulchra	Carolina goldenrod	E	FSC	Sept-Oct
Solidago verna	Spring-flowering goldenrod	T	FSC	April-June
Sporobolus teretifolius	Wireleaf dropseed	T	FSC	Sept-Oct
Stylisma pickeringii var. pickeringii	Pickering's dawnflower	E	FSC	June-Sept
Tofieldia glabra	Carolina asphodel	C	FSC	Aug-Oct
Tridens carolinianus	Carolina triodia	C		Aug-Oct
Utricularia geminiscapa	Two-flowered bladderwort	C		May-July
Vaccinium macrocarpon	Cranberry	C		April-June
Utricularia olivacea	Dwarf bladderwort	T		Sept-Oct
Warea cuneifolia	Carolina pineland-cress	C		July-Sept
Xyris scabrifolia	Rough-leaf yellow-eyed-grass	C	FSC	April-Sept
Xyris chapmanii	Chapman's yellow-eyed grass	C		April-Sept

3.7 SOCIOECONOMIC RESOURCES

Socioeconomics are defined as attributes and resources related to the interaction of the human environment, population, and economic activity. Regional socioeconomic resources include employment, personal income and earnings, population, housing, and community services. The proposed action lies within Cumberland County. Where appropriate, the US Census Bureau (USCB) tracts and block groups containing and immediately adjacent to Pope AFB are described. The area includes all or parts of the following counties: Chatham, Wake, Johnston, Sampson, Bladen, Robeson, Scotland, Richmond, Moore, Lee, Harnett, Cumberland, and Hoke.

Population

The July 2001 population of the region was 1,812,907 or 22.1 percent of the population of North Carolina (Table 3.7-1). Cumberland County had a July 2001 population of 299,203 or 17.8 percent of the region (USCB 2002). Pope AFB has a current population of approximately 5,000 people, including 811 officers and 4,206 enlisted personnel (43 AW Public Affairs 2003). Of these 5,000, approximately 2,583 individuals lived on base in 2000. No exact figures for the current population residing on Pope AFB are available for 2003, although the numbers are likely to be less because many of the housing units are under renovation (Edwards 2003).

Housing

Family housing is in short supply on Pope AFB. In 2000, approximately 3,270 enlisted and 630 officers lived off base (Pope 2003). There are approximately 627 housing units on base (Poor 2003). For junior enlisted personnel, the average wait to be accommodated on base housing is 14 months; for officers the average wait is two years (Edwards 2003). Dormitories are available for unaccompanied personnel who are training on Pope AFB and are not permanent residents. There are currently five dormitories with 325 bed spaces available.

The housing supply available in the communities surrounding Pope AFB is good. The average rental cost for a home in the local area is $535.00 per month for a 2-bedroom, $650.00 for a 3-bedroom, and $850.00 for a 4-bedroom. The availability of homes for sale in the community is also good. The average price for a home is $45,000-65,000.00 for a 2-bedroom, $65,000-200,000 for a 3 bedroom, and $85,000-250,000 for a 4 bedroom (Poor 2003). The total number of housing units within the region ranges from a high of 258,953 units in Wake County to a low of 12,518 in Hoke County, with an overall average vacancy rate of 10.7 percent. Rental units make up an average of 27.9 percent of the occupied housing units. The average homeowner vacancy rate is 1.9 percent, and the average rental vacancy rate is 10.4 percent. For Cumberland County, there are 118,425 total housing units with an overall vacancy rate of 9.3 percent. Rental units comprise 40.4 percent of the total occupied housing units. The homeowner vacancy rate is 2.7 percent, and the rental vacancy rate is 10.1 percent (USCB 2002).

Schools

Pope AFB has one elementary school (kindergarten through fourth grade) that is available to residents who have lived on base for a minimum of 5 months. For families that do not live in base housing, students are assigned a school usually nearest to their homes. Students in fifth through ninth grade attend school on Fort Bragg. High school students attend an off base school in Fayetteville. Many private schools are also available in the community.

Employment and Income

Pope AFB has a positive impact on the local economy. Pope AFB is estimated to have an economic impact on the local community of approximately 400 million dollars a year (Fayetteville Chamber of Commerce 2003). The estimated annual payroll for Military Personnel (excluding contractors and civilians) at Pope AFB was $169,900,000 in February 2000 (43 AW Public Affairs 2003). Employment in 1999 for the region was 970,321, a 33 percent increase over the employment level of 1990 (729,044). The four largest employment industries in 1990 within the region were services, manufacturing, retail trade, and local government with a combined employment of 452,284 or 62 percent of total employment. The largest percent increase in employment between 1990 and 1999 was the services industry with an increase of 68 percent. Within Cumberland County, employment between 1990 and 1999 increased 23 percent, approximately 10 percent below the general increase within the region. The four largest employment industries within Cumberland County during 1990 were the military, retail

trade, services, and local government. The services industry was the fastest growing employment sector between 1990 and 1999 in Cumberland County with an increase of 52 percent (USCB 2001b).

Table 3.7-1 Populations within the Pope AFB region 1990 and 2001

Area	2001	1990
Pope AFB CDP	2,583	1,751
Fayetteville	121,015	75,695
County		
Bladen	32,491	28,663
Chatham	51,645	38.759
Cumberland	299,203	274.655
Harnett	93,602	67,822
Hoke	34,906	22,856
Johnston	128,248	81,306
Lee	49,279	41,374
Moore	77,163	59,013
Richmond	46,667	44,518
Robeson	123,891	105,179
Sampson	60,683	47,297
Scotland	35,889	33,754
Wake	655,642	423,380
Total	1,812,907	1,345,933

Source: US Census Bureau 2002.

Total personal income within the region was $22.3 billion during 1990 and $43.1 billion in 1999, a 93 percent increase. The four largest earnings sectors during 1990 were services, manufacturing, retail trade, and the military with combined earnings of $8.8 billion or 39 percent of the total earnings within the region. In 1999, the four largest sectors were services, manufacturing, retail trade, and local government with combined earnings of $16.6 billion or 39 percent of the total earnings within the region. Earnings increased 72 percent in Cumberland County with the largest increase contributed by the local government sector. The industries with the four greatest earnings in 1990 within Cumberland County were the military, manufacturing, services, and the Federal government with combined earnings of $2.5 billion or 60 percent of total earnings. In 1999, the four largest earnings sectors were the military, services, local government, and manufacturing with combined earnings of $3.9 billion or 55 percent of total earnings (USCB 2001b).

3.8 CULTURAL RESOURCES

Cultural resources are any prehistoric or historic district, site, building, structure, or object considered important to a culture, subculture, or community for scientific, traditional, religious or other purposes. These resources include archaeological sites, historic structures, and traditional cultural places. Only significant cultural resources (as defined in 36 CFR 60.4) are considered for potential adverse impacts from an action.

Four archaeological surveys have been conducted on Pope AFB, resulting in survey of all but 39 acres. Three historic archeological sites and six prehistoric sites have been recorded on Pope AFB; none are eligible for listing in the National Register of Historic Places. There are no known traditional cultural properties. Pope AFB has established a historic district consisting of 33 buildings from the original 1933-1934 main base area. In addition to the District, two other buildings from the same period are listed in the National Register. Building 306 is eligible under the Cold War historic context. The proposed project area is located in on previously disturbed property.

3.9 LAND USE

Natural land uses and land uses that reflect human-caused modifications are considered in this section. Natural land use classifications include wildlife areas, forests, and other open or undeveloped areas. Human land uses include residential, commercial, industrial, utilities, agricultural, recreational and other developed uses. Management plans, policies, ordinances, and regulations determine the types of uses that are allowable, or protect specially designated or environmentally sensitive uses.

The attributes of land use addressed include general land use patterns, land ownership, and special use areas. General land use patterns characterize the types of uses within a particular area. Existing lands uses are identified that could potentially be affected by the proposed action.

Pope AFB is located seven miles northwest of Fayetteville, NC and is predominately surrounded by Fort Bragg, except for a very small portion to the north that is privately owned and a larger portion to the northeast that is part of the City of Spring Lake. Land surrounding Pope AFB can generally be defined as military, open space, residential and commercial. No encroachment issues are associated with the proposed location of the Air Traffic Control Tower and Fire Station. Land use nearby the project area includes administrative buildings and the airfield.

3.10 TRANSPORTATION SYSTEMS

For purposes of this EA, transportation refers to the movement of vehicles throughout a road and highway network. Primary roads are principal arterials, such as major interstates, designated to move traffic and not necessarily to provide access to all adjacent areas. Secondary roads are arterials such as rural routes and major surface streets that provide access to residential and commercial areas.

Access to and from the Fayetteville area is provided by Interstate 95, which runs north/south and lies east of Fort Bragg and Pope AFB. Other important highways providing access to the area are US 301, US 401, and North Carolina Routes 24, 53, 59, 82, 87, 210, and 211. From Interstate 95 Pope AFB is accessed via two main routes: west on North Carolina Route 24 which becomes North Carolina route 87 north/Bragg Boulevard north; and US 301 north or business I-95 south to Owen Drive to All American Freeway.

Access to Pope AFB is via gates at Reilly Street, Armistead Street, Manchester Road, and Rifle Range Road. Reilly Street is a two-lane undivided major collector running north to south from the Main Gate to the central base and continuing around the northwest end of the base runway to meet Manchester Road just south of the Manchester Road Gate. Armistead Street is a two-lane minor collector roadway extending north into the base to meet Reilly Street near the northwest end of Taxiway B. Manchester Road is a two-lane major collector entering the base at the northern-most corner and extending southward into the base only a short way. Rifle Range Road is a two-lane minor collector along the western perimeter road in the western and southern portions of the base. Surveyor Street is the main road along the northern edge of the base; and Reilly Road and Armistead Street complete the loop in the eastern and central portions of the base. The proposed project area for the Air Traffic Control Tower and Fire Station is located near Boxcar Street.

Access on and off Pope AFB is restricted since the terrorist events of September 11, 2001. Traffic frequently becomes congested during morning, noon, and evening rush hours.

3.11 AIRSPACE/ AIRFIELD OPERATIONS

Airspace management and airfield operations are addressed in this EA because the proposed Air Traffic Control Tower and Fire Station would be located in proximity to the Pope AFB airfield. The safe operations of these facilities are key to increase operational efficiencies and airfield safety.

The primary objective of airspace management is to ensure the best possible use of available airspace to meet user needs and to segregate any user needs that are incompatible with other airspace or land uses. Airspace management addresses the management of the volume of air that overlies the geopolitical borders of the United States and its territories and extends from the surface to infinity. The Federal Aviation Administration (FAA) has the overall responsibility for managing the nation's airspace and constantly reviews civil and military airspace needs to ensure that all interests are compatibly served to the greatest extent possible.

FAA implements a system of flight rules and regulations, airspace management actions, and air traffic control (ATC) procedures. The FAA accomplishes this through close coordination with state aviation and airport planners, military airspace managers, and other entities to determine how airspace can be used most effectively to serve all interests.

There are two categories of airspace or airspace areas: regulatory and non-regulatory. Within these two categories, further classifications include the FAA designation of four types of airspace above the U.S.: controlled, uncontrolled, special use, and other. The categories and types of airspace are dictated by the complexity or density of aircraft movements, the nature of the operations conducted within the airspace, the level of safety required, and national and public interest in the airspace. The affected

environment for the proposed action and alternatives includes controlled, uncontrolled and special use airspace. These form the region encompassing Pope AFB and its associated airspace in south-central North Carolina.

Controlled Airspace

Controlled airspace is a generic term that encompasses the different classifications of airspace (Class A, B, C, D, and E airspace) and defines dimensions within which ATC service is provided for both instrument flight rules (IFR) and visual flight rules (VFR) flights (FAA 1994). All military and civilian aircraft are subject to Federal Aviation Regulations (FARs).

Controlled airspace is also categorized by ATC service provided to aircraft operating VFR and IFR. VFR aircraft fly below 18,000 feet above mean sea level (MSL) using visual references such as towns, highways, and railroads as means of navigation. VFR pilots may also follow federal airways at altitudes not used by aircraft on instrument flight. VFR operations rely heavily on "see-and-avoid" flight that requires pilots to be visually alert for and maintain safe distances from other aircraft, populated areas, obstacles, or clouds. Most other air traffic, including air passenger carriers, business aircraft, and military aircraft, operate under IFR that require pilots to be trained and appropriately certified in instrument navigational procedures and ATC clearance requirements that provide separation between all aircraft operating under IFR. The respective procedures established under VFR and IFR for airspace use and flight operations help segregate aircraft operating under each set of rules. Military pilots train in both VFR and IFR conditions.

Class A Airspace

Class A airspace includes all flight levels or operating altitudes from 18,000 feet MSL up to and including 60,000 feet MSL. Commercial aircraft that use routes between 18,000 and 45,000 feet MSL dominate this airspace.

Class B Airspace

Class B airspace typically comprises layers of airspace, stacked one upon another, extending from the surface up to 10,000 feet MSL surrounding the nation's busiest airports. To operate in Class B airspace, pilots must contact appropriate controlling authorities and receive clearance to enter the airspace. Additionally, aircraft operating within Class B airspace must be equipped with specialized electronics that allows ATC to accurately track aircraft speed, altitude, and position. Class B airspace is typically associated with major metropolitan airports.

Class C Airspace

Airspace designated as Class C can generally be described as controlled airspace that extends from the surface up to 4,000 feet above ground level (AGL) above the airport elevation. Class C airspace is designated and implemented to provide additional control into and out of primary airports where aircraft operations are periodically at high-density levels such as Fayetteville Regional Airport and Pope AFB. All aircraft

operating within Class C airspace are required to maintain two-way radio communication with local ATC entities.

Class D Airspace

Class D airspace consists of airspace from the surface to 2,500 above ground level (AGL) around airports with an operational control tower. All aircraft operating within Class D airspace must be in two-way radio communications with the ATC facility.

Class E Airspace

Class E airspace can be described as general controlled airspace. If the airspace is not Class A, B, C, or D, and is controlled airspace, it is designated as Class E. Included in Class E airspace are Federal Airways (Victor Routes) that extend upward from 700 or 1,200 feet AGL to transition from the terminal or enroute environment. Class E airspace does not include airspace at or above 18,000 feet MSL. These airways frequently intersect approach and departure paths from both military and civilian airfields.

Special Use Airspace

Special use airspace consists of airspace within which specific activities must be confined, or where limitations are imposed on aircraft not participating in those activities. With the exception of Controlled Firing Areas, special use airspace is depicted on aeronautical charts. These charts include hours of operation, altitudes, and the agency controlling the airspace. All special use airspace descriptions are contained in FAA Order 7400.8E and published in the *Department of Defense Flight Information Publication AP/1A (Special Use Airspace North and South America)* and *AP/1B (Area Planning Military Training Routes North and South America).*

Uncontrolled Airspace

Uncontrolled airspace is not subject to the same restrictions that apply to controlled airspace. Limits of uncontrolled airspace typically extend from the ground surface to 700 feet AGL in urban areas and from the ground surface to 1,200 feet AGL in rural areas. Uncontrolled airspace can extend above these altitudes to as high as 14,500 MSL if no other types of controlled airspace have been assigned. ATC does not have the authority to exercise control over aircraft operations within uncontrolled airspace. Primary users of uncontrolled airspace are general aviation aircraft operating in accordance with VFR.

The proposed action involves aircraft operations in a Class C terminal airspace setting. The Fayetteville Class C airspace extends outward on a 10-mile radius from two primary airports, Pope AFB and Fayetteville Regional/Grannis Field. Therefore, the region for this action is the area that generally is within 20 miles of the Pope AFB airfield.

Pope AFB and the Fayetteville Regional/Grannis Field Airport are the primary airports for the Class C airspace, and other airports in the region are the satellite airports. The Fayetteville metropolitan area supports a commercial air carrier airport and two public-use general aviation airports. In addition, there are two military airfields and numerous private airfields with unpaved runways in the region (FAA 2000).

Underlying the Fayetteville Class C airspace between the two primary airports is Simmons AAF. This airfield is part of Fort Bragg and is principally used by rotary and smaller fixed-wing aircraft. The airspace associated with Simmons AAF is Class D. The Class D airspace generally extends outward from the airfield on a 4.3 NM (5 statute mile) radius except where it abuts the Pope Class C surface area. The Class D area extends from the surface to the floor of the overlying Fayetteville Class C shelf, which is 1400 feet MSL. To accommodate instrument approaches, a Class E surface area extension of the Class D area extends to the east of the airfield.

Table 3.11-1. Public Use and Military Airports in Fayetteville, NC Metropolitan Area

Name	ID	Surface Airspace	CY 1998 Operations Count	Distance from Pope AFB	IFR Approach	Longest Runway (feet)
Pope AFB	KPOB	Class C	47,839	N/A	Precision	7501
Fayetteville Regional/Grannis Field	KFAY	Class C	47,503	12 NM Southeast	Precision	7712
Simmons AAF	KFBG	Class D/E	162,786	4 NM East	Precision	4650
PK Airpark (Raeford)	5W4	Class D	13,250	13 NM Southwest	Non-Precision	3402
Gray's Creek	2GC	Class D	5,500	18 NM Southeast	Non-Precision	3500

Military Training Airspace

The training airspace generally used by the 43 AW includes a C130 Low-altitude Tactical Navigation (LATN) area, the R-5311 A/B/C Restricted Area and the Fort Bragg North and South Military Operations which can result in inefficient operations which can result in inefficient operations Areas (MOAs).

A LATN area is a large geographic area where random low altitude operations are conducted at airspeeds below 250 knots by military aircraft. They have an altitude structure between 300 feet AGL and 1500 feet MSL. The military designs them and discloses them to the FAA. They are not depicted on aeronautical charts because the flight activities that occur within a LATN are not distinguishable from those of other users. Military pilots operating within a LATN area are required to adhere to all operating rules in the Federal Aviation Regulations (FARs); unlike a MOA, a high-speed acrobatic flight is not authorized. The Pope AFB C-130 LATN area extends over an area of more than 12,807 square miles running from the Greensboro, NC metropolitan area southward Florence, SC. The C-130s that are based at Pope AFB use the LATN to practice airdrop operations.

Air Traffic Control Operations

Airfield operations controlled by ATC include approaches and departures, as well as aircraft passing through the controlled airspace. An airfield operation is different than a sortie in that one sortie consists of one aircraft flying an entire mission, from take-off to final landing. For example, an ATC count of one sortie may comprise two or more airfield operations, consisting of a departure, arrival, or several operations if the sortie returns and practices additional approaches in a closed pattern mode. All "tower" operations are limited to aircraft entering the Pope AFB Class C airspace; Radar Approach Control (RAPCON) operations include IFR activity at Pope AFB and other airfields in the local area.

Airfield operations will fluctuate on a daily basis. To account for this fluctuation, daily operations are based on an average busy day using 260 operational flying days per year. For Pope AFB, this equates to approximately 282 airfield operations per day. C130s and A10 aircraft account for most of the baseline airfield operations. Table 3.11.2 lists aircraft activity at Pope AFB. Aircraft operating at the base generally adhere to established flight paths and fly over the same areas surrounding the airfield on a consistent basis.

Table 3.11-2. Average Busy Day Aircraft Operations for 1998

	Daily Arrival/ Departure Operations	Daily Closed Pattern Operations	Total Daily Operations
Based:			
C-130	67.20	52.20	119.40
A-10	50.58	13.16	63.74
CASA	7.70	0.00	0.00
F-27	0.80	0.00	0.00
UV-18	1.60	0.00	0.00
U-20	1.60	0.00	0.00
Subtotal:	129.48	65.36	194.84
Transient:			
A-10	2.16	0.00	2.16
C-5	1.42	0.02	1.44
C-9	1.58	0.00	1.58
C-12	2.32	0.00	2.32
C-17	2.88	0.02	2.90
C-21	1.22	0.00	1.22
C-130	22.92	30.44	53.36
C-141	9.68	0.10	9.78
Cessna	2.76	0.00	2.76
Beech	1.00	0.00	1.00
UH-60	2.82	0.00	2.82
OH-58	2.22	0.00	2.22
Other	3.88	0.00	3.88
Transients **Subtotal:**	56.86	30.58	87.44
Total:	**186.34**	**95.94**	**282.28**

3.12 SAFETY AND OCCUPATIONAL HEALTH

Safety topics are frequently classified as ground, flight, or explosive safety associated with Air Force activities. The primary safety topics considered include safety risks associated with operating aircraft, potential fuel spills resulting from on ground or in-flight refueling operations, flight risks associated with military flight operations, and risks from materials expended during training operations. Flight safety risks apply to all aircraft; they are not limited to the military.

Other safety issues are assessed in terms of worker safety during construction and personnel and worker safety during operation of the proposed Air Traffic Control Tower and Fire Station.

Legal Requirements for health and safety are covered under the *Occupational Safety and Health Act of 1970 (OSHA),* which is administered and enforced by the US Department of Labor. OSHA establishes a national policy to provide safe and healthful working conditions for every working person. In addition, various Air Force Health and Safety Programs regulate the work environment and seek to minimize the likelihood of work-related exposures, illnesses and injuries.

3.13 ENVIRONMENTAL MANAGEMENT

For purposes of this EA, environmental management includes pollution prevention, geology and soils (based on HQ AMC EA format requirements).

Pollution Prevention

Various DoD and Air Force policies and directives provide guidance for the means by which Air Force bases can ensure compliance with the nation's environmental laws, reduce pollution, and minimize waste. Air Force Instruction 32-7080, Pollution Prevention Program, provides instructions that clearly state that all aspects of Air Force operations should where possible:

- Reduce the use of hazardous materials, find alternative materials/processes, and measure their life cycle costs;
- Find environmentally acceptable alternatives or processes (through research, development, testing, and evaluation) and integrate the alternatives into Air Force Technical Orders, Military Specifications, and Military Standards;
- Acquire, distribute, and apply state-of-the-art pollution prevention technologies throughout the Air Force. Where no alternative exists, conducts research and applies alternatives;
- Implement affirmative programs for purchasing recycled materials, pollution prevention programs at government owned-contractor operated facilities, and hazardous material management initiatives in Air Force contracts; and
- Minimize use of ozone depleting chemicals where possible.

Geology and Soils

The term soil, in general, refers to unconsolidated materials overlying bedrock or other parent material. Soils play a critical role in both the natural and human environment. Soil structure, elasticity, strength, shrink-swell potential, corrosivity, and erodibility all determine the ability for the ground to support man-made structures and facilities. Soils typically are described in terms of their complex type, slope, physical characteristics, and relative compatibility or constraining properties with regard to particular construction activities and types of land use. Soils are also categorized by particle size and fertility with regard to agricultural and horticultural characteristics.

The United States Department of Agriculture (USDA) Natural Resource and Conservation Service has grouped the soils at Pope AFB into categories according to topographic position and drainage characteristics. There are nineteen soil series mapped on Pope AFB that are grouped into five categories. A complete description of the soils identified on Pope AFB can be found in the Soil Survey of Cumberland and Hoke Counties, North Carolina (USDA 1984).

Pope AFB elevation ranges from 280 ft mean sea level (MSL) near the south installation boundary to 170 ft MSL near the northeast boundary. The topography can be divided into three areas. The area northwest of the runway and the area southeast of the runway is generally flat with rolling features and the runway is relatively flat. The runway portion slopes from the southwest downward to the northeast. The whole area gradually merges with the relatively level Little River alluvial valley. There are three areas on Pope AFB that lie within the 100-year floodplain. They are located along the base boundary in the northwest corner and in the south-central portion of the base. The proposed project area is not near these areas.

3.14 ENVIRONMENTAL JUSTICE

Environmental justice issues may arise at any step in the NEPA process. EO 12898 (*Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*, February 1994) requires Federal agencies to "make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high human health or environmental effects of its programs, policies, and activities on minority populations and low income populations." The purpose of EO 12898 is to ensure the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. Fair treatment means that no groups of people, including racial, ethnic, or socioeconomic groups, should bear a disproportionate share of negative environmental consequences resulting from industrial, municipal, and commercial operations or the execution of federal, state, tribal, and local programs and policies.

A memorandum from the President concerning EO 12898 stated that Federal agencies would collect and analyze information concerning a project's effects on minorities or

low-income groups when required by NEPA. If such investigations find that minority or low-income groups experience a disproportionate adverse effect, then avoidance or mitigation measures are to be taken.

There is not a standard formula for how environmental justice issues should be identified or addressed. However, the following principles provide general guidance:

- Agencies should consider the composition of the affected area to determine whether minority populations, low-income populations, or Indian tribes are present in the area affected by the proposed action, and if so whether there may be disproportionately high and adverse human health or effects on minority populations, low-income populations, or Indian tribes.

- Agencies should consider relevant public health data and industry data concerning the potential for multiple or cumulative exposure to human health or environmental hazards in the affected population and historical patterns of exposure to environmental hazards, to the extent such information is reasonably available.

- Agencies should recognize the interrelated cultural, social, occupational, historical, or economic factors that may amplify the natural and physical environmental effects of the proposed agency action. These factors should include the physical sensitivity of the community or population to particular impacts; the effect of any disruption on the community structure associated with the proposed action; and the nature and degree of impact on the physical and social structure of the community.

- Agencies should develop effective public participation strategies.

- Agencies should assure meaningful community representation in the process (CEQ 1997).

According to the CEQ, a minority population can be described as being composed of the following population groups: American Indian or Alaskan Native, Asian or Pacific Islander, Black, not of Hispanic origin, or Hispanic, and exceeding 50 percent of the population in an area or the minority population percentage of the affected area is meaningfully greater than the minority population percentage in the general population (CEQ 1997). Race and ethnicity are separate categories of minority populations. A minority population can be defined by race, by ethnicity, or by a combination of two distinct classifications.

Race as defined by the U.S. Census Bureau, includes: White, Black or African American, American Indian or Alaska Native, Asian; and Native Hawaiian and other Pacific Islanders. The U.S. Census Bureau defines ethnicity as either being of Hispanic origin or not being of Hispanic origin. Hispanic origin is defined as "a person of Cuban,

Mexican, Puerto Rican, South or Central America, or other Spanish culture or origin regardless of race" (USCB 1997).

The 2000 demographic makeup of the region shows an average of 62.5 percent White, 26.5 percent Black, 5.3 percent American Indian or Native Alaskan, 0.8 percent Asian, and the remaining 4.9 percent all other races or combination of races. Approximately 6.3 percent of the population within the region define themselves as being of Hispanic origin (ethnicity). The 2000 demographic composition of Cumberland County is 55.2 percent White, 34.9 percent Black, 1.5 percent American Indian or Native Alaskan, 1.9 percent Asian, and the remaining 6.5 percent all other races or combination of races in 2000. Approximately 7 percent of the population of Cumberland County identify themselves as being of Hispanic origin. The demographic composition of Pope AFB CDP in 2000 was 76.9 percent White, 14.1 percent Black, 2.6 percent Asian, and the remaining 6.4 percent comprised of all other races or combination of races. Approximately 6 percent of the population within the Pope AFB CDP identified themselves as being of Hispanic origin (USCB 2001a).

When the project area is analyzed at the finest detail using 1990 U.S. Census block groups, a total population of 41,651 individuals is identified. This population is demographically composed of 60.3 percent White, 30.0 percent Black, 2.8 percent Asian, and the remaining 6.9 percent all other races (USCB 2000). Approximately 10 percent of this population identified themselves as being of Hispanic origin (USCB 2000). No concentrated minority populations were identified at any level within the region.

Each year the U.S. Census Bureau (USCB) defines the national poverty thresholds, which are measured in terms of household income dependent upon the number of persons within the household. Individuals falling below the poverty threshold ($12,674 for a household of four in 1990) are considered low-income individuals. Census tracts, where at least 20 percent of the residents are considered poor, are known as *poverty areas* (USCB 1995b). When the percentage of residents considered poor is greater than 40 percent, the census tract becomes an extreme poverty area.

An analysis of the counties within the region indicates a wide range in the 1999 median household income, from a high of $54,988 in Wake County to a low of $26,877 in Bladen County (USCB 2001b). The median household income in Cumberland County was $37,466, approximately $1,700 less than the statewide median household income of $39,184. The 1999 poverty rate also varied widely among the counties within the REGION, from a high of 22.8 percent below poverty in Robeson County to a low of 7.8 percent in Wake County. In Cumberland County the poverty rate was 12.8 percent in 1999, approximately 0.5 percent higher than the statewide poverty rate of 12.3 percent (USCB 2002).

3.15 INDIRECT AND CUMULATIVE IMPACTS

CEQ regulations state that cumulative impacts result from the "incremental impact of actions when added to other past, present, and reasonably foreseeable future actions regardless of what agency undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time." Cumulative environmental impacts may arise when a relationship exists between a proposed action and other actions or existing conditions in a similar location and time period.

3.16 UNAVOIDABLE ADVERSE IMPACTS

Unavoidable adverse effects are those resulting in a permanent loss of some resource such as cultural resources, natural resources, or other types of resources including oil and natural gas.

3.17 RELATIONSHIP BETWEEN SHORT-TERM USES AND ENHANCEMENT OF LONG-TERM PRODUCTIVITY

Short-term use of a valuable resource may or may not lead to the long-term, sustainable productivity of that resource. Short-term use without planning may lead to permanent loss of productivity, or exploitation of that resource to the extent that it may never recover and become productive in the long-term again.

3.18 IRREVERSIBLE AND IRRETRIEVABLE COMMITMENT OF RESOURCES

NEPA requires that an environmental analysis include identification of "any irreversible and irretrievable commitments of resources that would be involved should the proposed action be implemented."

CHAPTER 4
ENVIRONMENTAL CONSEQUENCES

4.1 INTRODUCTION

This chapter provides an evaluation and comparison of potential environmental impacts that may result from implementation of the proposed action and the alternatives including the No Action Alternative.

Alternative A, construct and operate a new Air Traffic Control Tower and Fire Station at separate sites near the existing location, is the preferred alternative. This alternative includes pre-construction, mid-construction, post-construction, and operational components listed below:

- Acquire required permits
- Demolish existing structures in a phased approach to allow for safe air traffic control and fire protection services
- Prepare and grade the sites
- Upgrade associated sewer, water, electric, gas, and storm sewer systems
- Implement erosion controls
- Implement construction and paving
- Install lighting
- Monitor erosion and environmental control before during and after construction
- Landscape with native vegetation where practical
- Landscape in a manner that prevents foreign object debris
- Provide ongoing facility maintenance

A brief description of the significance criteria for evaluating degrees of impacts to each resource is provided and focuses on impacts of many components of the proposed action (Table 4.1-1).

Table 4.1-1
Criteria for Rating Severity of Impacts

Impact Severity	Natural Resources[1]	Threatened, Endangered, or Candidate Species	Cultural Resources	Visual and/or Aesthetics	Socioeconomic Resources
Short-term = Less than one year, normally during construction and recovery. ***Long-term*** = Longer than one year, normally from operations. ***Cumulative*** = Cumulative impacts to environmental resources result from incremental effects of proposed actions when combined with other past, present, and reasonably foreseeable future projects in the area.					
Negligible	Impact localized and not detectable, or at lowest levels of detection	Change in a population or individuals of a species; consequences to population not measurable or perceptible, or other changes not measurable or perceptible	Impact barely perceptible and not measurable; confined to small areas or affecting a single contributing element of a larger National Register District with low data potential	Impact not perceptible and not measurable; not affecting surroundings	Impact not detectable, no discernible effect on socioeconomic environment
Minor	Impact localized and slightly detectable but would not affect overall structure of any natural community	Change in a population or individuals of a species, if measurable, would be small and localized, or other changes would be slight but detectable	Impact perceptible and measurable, but would remain localized; affecting a single contributing element of a larger National Register District with low to moderate data potential, or would not affect character-defining features of a National Register eligible or listed property	Impact perceptible but not measurable; would remain localized.	Impact slightly detectable but would not affect overall socioeconomic environment
Moderate	Impact clearly detectable; could affect individual species, communities, or natural processes appreciably	Change in a population or individuals of a species measurable but localized	Impact sufficient to change a character-defining feature but would not diminish resource's integrity enough to jeopardize its National Register eligibility, or it generally would involve a single or small group of contributing elements with moderate to high data potential	Impact detectable and possibly affecting integrity of surroundings.	Impact clearly detectable and could have an appreciable effect on the socioeconomic environment
Major	Impact highly noticeable and would substantially influence natural resources, e.g. individuals or groups of species, communities, or natural processes	Change in a population or individuals of a species measurable and would result in permanent consequence to the population	Substantial, highly noticeable change in character-defining features would diminish resource's integrity so much that it would no longer be eligible for National Register listing, or it would involve a large group of contributing elements or individually significant properties with exceptional data potential	Impact would have a significant impact on surroundings.	Impact would have a substantial, highly noticeable, potentially permanent influence on socioeconomic environment

Table 4.1-1 (continued)
Criteria for Rating Severity of Impacts

Impact Severity	Environmental Justice	Floodplain	Wetlands	Air Quality	Water Quality
Short-term = Less than one year, normally during construction and recovery. ***Long-term*** = Longer than one year, normally from operations. ***Cumulative*** = Cumulative impacts to environmental resources result from incremental effects of proposed actions when combined with other past, present, and reasonably foreseeable future projects in the area.					
Negligible	Impact localized and not detectable, or at lowest levels of detection	Impact barely perceptible and not measurable. Crossing floodplains with overhead transmission lines is often unavoidable.	Impact barely perceptible and not measurable; confined to small areas and would not fill or destroy a wetland.	Impact not perceptible and not measurable; not affecting surroundings	Impact not detectable, no discernible effect on water quality.
Minor	Impact localized and slightly detectable but would not affect overall community of Pope AFB or outside Base	Impact perceptible and measurable, but would remain localized, affecting an area that is unavoidable, such as repairing a pipeline or burying an upgraded electrical line.	Impact perceptible and measurable, but would remain localized; affecting a wetland that is unavoidable, such as repairing a pipeline or burying an upgraded electrical line.	Impact perceptible but not measurable; would remain localized.	Impact slightly detectable but would not affect overall water quality.
Moderate	Impact clearly detectable; could affect Pope AFB community; implementable mitigation provided to avoid impacts	Impact sufficient to change a floodplain's features but with sufficient implementable mitigation that would not diminish the usefulness of the floodplain.	Impact sufficient to change a wetland but would not diminish resource's integrity enough to jeopardize its viability. A Section 404 from the Corps of Engineers would be required and implementable, appropriate mitigation would be required.	Impact detectable and possibly affecting integrity of surroundings. Air quality testing would be required.	Impact clearly detectable and could have an appreciable effect on the water quality of the environment.
Major	Impact highly noticeable and would substantially influence individuals communities.	Change in the floodplain that is measurable and would result in permanent consequence to the environment.	Substantial, highly noticeable change in the wetland, resulting in a significant impact to wetlands.	Impact would have a significant impact on surroundings.	Impact would have a substantial, highly noticeable, potentially permanent effect on the environment.

[1]Natural resources in this column include soils, vegetation and wildlife

4.2 AIR QUALITY

Significance Criteria

- Any impacts to air quality in attainment areas would be considered significant if pollutant emissions associated with the proposed action caused, or contributed to a violation of any national, state, or local ambient air quality standard, exposed sensitive receptors to substantially increased pollutant concentrations, represented an increase of ten percent or more in affected Air Quality Control Region's (AQCR) emissions inventory, or exceeded any significance criteria established by the North Carolina State Implementation Plan (SIP).
- Impacts to air quality in nonattainment areas would be considered significant if the net change in proposed pollutant emissions caused or contributed to a violation of any national, state, or local ambient air quality standard; increased the frequency or severity of a violation of any ambient air quality standard; or delayed the attainment of any standard or other milestone contained in the North Carolina SIP.
- With respect to the General Conformity Rule, impacts to air quality would be considered significant if emissions increased a nonattainment or maintenance area's emissions inventory by ten percent or more for individual nonattainment pollutants; or exceeded de minimis threshold levels established in 40 CFR 93.153(b) for individual nonattainment pollutants or pollutants for which an area has been redesignated as a maintenance area.

Impacts – Alternative A – Construct Separate Air Traffic Control Tower and Fire Station

Implementation of the Alternative A would cause short-term impacts to air quality as a result of dust and vehicle emissions. Long-term benefits would occur as a result of added efficiencies of renovations, new equipment, and new heating and cooling systems. Emissions from construction activities would result from the use of heavy equipment and delivery vehicles during site preparation and structure erection. Heavy equipment emissions were estimated using emission rates from the EPA's Compilation of Air Pollutant Emission Factors Volume II: Mobile Sources (AP-42). Emissions in pounds per hour of equipment use were averaged for construction diesel equipment and by estimated number of hours of operation.

A conservative estimate of air emissions was considered in this analysis (Table 4.2-1). Most construction would take place over a period of one to two years. For purposes of analysis, workdays were assumed to be 8 hours long, during which the equipment would operate continuously. Emissions from construction activities are primarily the result of mobile equipment and site preparation. Demolition or painting emissions are also included. Assumptions for the use of construction equipment are based on recently published guidance (El Dorado County Air Pollution Control District (El Dorado County), 2002, Guide to Air Quality Assessment).

Table 4-2-1 Projected Annual Emissions from Construction (tpy)					
Activity	**NO_x**	**VOC**	**CO**	**SO_2**	**Pm_{10}**
Mobile Vehicles	19.8	2.1	12.5	0.0	1.25
Demolition	0.0	0.0	0.0	0.0	0.72
Painting	0.0	0.34	0.0	0.0	0.0
Site Preparation	0.0	0.0	0.0	0.0	0.08
Total	19.8	2.44	12.5	0.0	2.05

The annual rate of emissions in tons per year (tpy) for both construction and operation is well below threshold levels established in the conformity regulations, and therefore, is not expected to affect attainment of the North Carolina SIP or regional air quality. Therefore, preparation of a conformity determination is not required.

During the construction process, air quality would be affected slightly because of the particulate matter created by construction activities and the operation of mobile internal combustion engines. Air emissions would be temporary and impacts would be minimal. Revegetation and paving of the disrupted areas would minimize dust and particulate generation. Dust control measures (repetitive site watering and equipment speed controls) would be used at the construction sites and would minimize airborne particulate matter. Pollutants resulting from combustion sources would be minimal, temporary, and would not exceed allowable concentrations.

Impacts – Alternative B - Construct a Co-Located New Air Traffic Control Tower and Fire Station Near Existing Facilities

Impacts under this Alternative would be similar to Alternative A. Similar precautions to minimize dust would be employed during demolition and construction.

Impacts – Alternative C – No Action Alternative

Under this Alternative, no change to air quality impacts would occur.

Conclusion: The proposed action would have negligible to minor impacts to air quality during the construction, repairs, paving, and demolition processes.

4.3 NOISE

Significance Criteria
Several items formed the basis for evaluating the significance of noise effects:

- The degree to which noise levels generated by construction were higher than the ambient noise levels;
- The degree to which there is annoyance and/or activity interference; and
- The exposure of noise-sensitive receptors to noise levels above 65 dB

Impacts – Alternative A – Construct Separate Air Traffic Control Tower and Fire Station

Temporary construction noise impacts would occur in areas surrounding the construction site. Construction activities would generate potential noise impacts related to the operation of equipment required for demolition and construction of various facilities. Noise generating sources would include the operation of heavy equipment such as bulldozers, graders, loaders, pavers, cranes, ventilation fans, and diesel generators. Noise impacts would depend on the distance of receptor (person or animal) from the construction area, type and number of pieces of equipment operating simultaneously, duration of equipment operation, and time of construction. Construction activities would temporarily increase the ambient noise levels by approximately 5 dB, however, the noise from aircraft on the airfield would continue to dominate the noise environment. Table 4.3-1 lists theoretical percentage of a population annoyed by noise increases. These noise impacts would be short term and minor. No sensitive receptors such as schools, hotels, health care facilities, residences, or other tenants exist in the immediate vicinity of the proposed sites. Any disturbance to wildlife from noise would also be temporary.

Table 4.3-1 Theoretical Percentage of Population Highly Annoyed by Noise

DNL Intervals in dB	Percentage of Persons Highly Annoyed
65-70	12-22
70-75	22-36
75-80	36-54

Source: FICUN 1992

Impacts – Alternative B - Construct a Co-Located New Air Traffic Control Tower and Fire Station Near Existing Facilities

Impacts under this Alternative would be similar to Alternative A.

Impacts – Alternative C – No Action Alternative

Under this Alternative, no new permanent noise sources would be created. The current levels of noise related to operations would not be measurably increased on Pope AFB.

Conclusion: The proposed action would result in temporary noise; however, the impact is considered negligible.

4.4 WASTES, HAZARDOUS MATERIALS and STORED FUELS

Significance 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. Potential impacts associated with hazardous material and waste would be significant if:

- The storage, use, transportation, or disposal of these substances was to substantially increase the risk to human health or exposure to the environment.
- The capacity of the base was unable to handle the volume of hazardous materials or waste.

Stored fuels and tanks would pose significant effects to the environment if there would be:

- Unsafe, inadequate storage of liquid fuels; or unreliable distribution of liquid fuels to meet the base mission and support requirements

Impacts - Alternative A – Construct Separate Air Traffic Control Tower and Fire Station

Alternative A would not generate excessive amounts of solid waste at any one time. Solid waste would be produced during the construction, repair, and demolition processes, but the existing waste disposal facilities would be adequate to accommodate the anticipated quantities. Alternative A would include activities that would use hazardous materials and generate hazardous wastes. During project construction and demolition there would be short-term spikes in the amount of hazardous materials used and hazardous waste generated. As mentioned in Chapter 3, Pope AFB is a permitted generator of hazardous waste. Alternative A would not cause significant impacts to the management, storage capacity, or handling procedures utilized at Pope AFB.

Construction, repair, and demolition activities have the potential to adversely affect human health and existing soil and groundwater at Pope AFB from the accidental release of hazardous substances. Grading in areas with pre-existing soil contamination, could expose construction workers to hazardous materials and redistribute contaminants in previously uncontaminated areas. Hazardous building materials, such as lead-based paint, asbestos and asbestos containing materials (ACM), and polychlorinated biphenyls (PCBs) may be present in existing structures that could be released if not properly managed and abated prior to implementation of the proposed action. All lead-based paint removal actions would be coordinated with the Pope AFB Environmental Division. All asbestos would be removed from buildings prior to demolition, so all suspect material would be sampled. Asbestos sampling and removal would be conducted by certified asbestos inspectors. The implementation of the proposed action would include strict compliance with federal, state, and local regulations regarding worker training, personal protective equipment, exposure control measures, and waste disposal. This enforcement of existing laws and standards would ensure that potential impacts are minimized.

Alternative A includes construction of new facilities. Several fuel tanks outside of the fire department would need to be relocated during construction. Safety precautions would be followed during the movement of the tanks to minimize accidents and harm to the environment. No significant changes or impacts in the management of the fuels are anticipated.

Impacts – Alternative B – Construct a Co-Located New Air Traffic Control Tower and Fire Station Near Existing Facilities

Impacts under this Alternative would be similar to Alternative A.

Impacts – Alternative C – No Action Alternative

Under this Alternative, no changes to hazardous materials, waste or stored fuels would occur.

Conclusion: The proposed action could have a negligible to moderate risk to human health and exposure to the environment, depending on the materials contained in structures to be demolished and pre-existing contamination levels in soils, if present. Abatement and appropriate containment of hazardous substances during construction and operation would be in accordance with existing hazardous waste management plans, and applicable local, state, and federal regulations.

4.5 WATER RESOURCES (INCLUDING FLOODPLAINS AND WETLANDS)

Significance Criteria
Impacts to water resources, wetlands, and floodplains would be considered significant if the proposed action would:

- Destroy, lose, or degrade wetlands (as defined by Section 404 of the CWA);
- Fill a wetland;
- Create potential damage to structures located in the floodplain;
- Cause changes to the extent, elevation, or other features of the floodplain as a result of flood protection measures or other structures being sited in or removed from the floodplain.
- Reduce water availability, quality, and use;
- Cause a reduction in water availability to existing users or interfere with the supply;
- Create or contribute to overdraft of groundwater basins or exceeding a safe annual yield of water supply sources;
- Create an adverse effect on water quality or an endangerment on public health by creating or worsening adverse health hazard conditions;
- Cause a threat or damage to unique hydrological characteristics; or cause a violation of an established law or regulation that has been adopted to protect or manage water resources of an area.

Impacts – Alternative A – Construct Separate Air Traffic Control Tower and Fire Station

Alternative A would have negligible impacts on water resources, floodplains, or wetlands. In order to minimize erosion disturbed areas would be planted with native species where practical. Vegetation development would improve the ability of the landscape to filter runoff. No projects would occur within any wetlands or water body. No wetlands would be lost. There is the potential for minimal impacts to surface water from storm water runoff that could contain contaminants from leaks or spills on pavement areas. These potential impacts to wetlands and the areas that receive storm water runoff would be minimized by implementation of best management practices, such as installing filter fences, during the construction and demolition activities. The long term control of contaminants would be accomplished by the requirements and practices incorporated in existing the *Storm Water Pollution Control Plan*, *Spill Countermeasure and Contingency Plan*, *Hazardous Waste Management Plan*, and other associated plans and procedures.

Impacts – Alternative B – Construct a Co-Located New Air Traffic Control Tower and Fire Station Near Existing Facilities

Impacts under this alternative would be similar to Alternative A.

Impacts – Alternative C - the No Action Alternative

The No Action Alternative would not change any existing water resources, wetlands or floodplains at Pope AFB.

Conclusion: No facilities would be built on or near wetlands, thus no impacts are anticipated. All construction projects would include soil erosion control measures before, during and after construction. No filling or dredging of wetlands would occur. No floodplains would be affected and water resources would be protected during construction and operation of the Air Traffic Control Tower and Fire Station.

4.6 BIOLOGICAL RESOURCES

Significance Criteria
Impacts to biological resources would be considered significant if the proposed action would:

- Affect a threatened or endangered species;
- Substantially diminish habitat for a plant or animal species;
- Substantially diminish a regionally or locally important plant or animal species;
- Interfere substantially with wildlife movement or reproductive behavior;
- Result in a substantial infusion of exotic plant or animal species.

Impacts – Alternative A – Construct Separate Air Traffic Control Tower and Fire Station
Most of the proposed construction site, with the exception of a small area, has little or no vegetation. It is not exceptionally valuable habitat for animal or plant species. The impact to vegetation by implementation of the proposed action would be none to negligible. The project would include vegetation restoration and removal of concrete debris. Construction sites would be landscaped in accordance with Pope AFB landscaping guidance. Native vegetation would be used wherever practicable.

Impacts - Alternative B – Construct a Co-Located New Air Traffic Control Tower and Fire Station Near Existing Facilities

Impacts under this alternative would be similar to Alternative A.

Impacts – Alternative C - the No Action Alternative

The No Action Alternative would not change any existing biological resources at Pope AFB.

Conclusion: Construction and related activities would have little to negligible effect on existing vegetated areas or wildlife habitat. Construction BMPs should include practices to avoid any potential for affecting the marine ecosystem in any way. Consultation with the USFWS is recommended should there be a potential for any type of impact to threatened or endangered species.

4.7 SOCIOECONOMICS

Significance Criteria
Socioeconomic effects are evaluated in terms of their direct effects on the local economy and related effects on other socioeconomic resources, such as housing and community services. The magnitude of potential impacts can vary greatly depending on the location and characteristics of the proposed activities.

Impacts – Alternative A – Construct Separate Air Traffic Control Tower and Fire Station

While general permanent employment at Pope AFB would not be affected by implementation of Alternative A, some local employment opportunities could potentially increase as a result of a need for labor during proposed project construction. Positive economic impacts to the existing resident populations within the project areas will likely be negligible to minor. No increase in housing demand would occur. Table 4.7-1 lists the potential economic effects.

Impacts – Alternative B – Construct a Co-Located New Air Traffic Control Tower and Fire Station Near Existing Facilities

Impacts under this Alternative would be similar to Alternative A.

Impacts – Alternative C - No Action Alternative

Under this Alternative, no impacts to the economy of the local area would occur.

Conclusion: The implementation of the proposed action would have negligible to minor positive impacts to the local economy.

Table 4.7-1 Economic Effects of Alternatives A and B

Economic Value	Potential Effect	Comments
Recreation Value	No	No Change
Ecological Value	Minor	Add native landscaping
Commercial Value	Minor	Added construction jobs
Affected Agencies:		
Local	Yes	During construction and operation of new facilities, there would be a temporary increase in spending and use of restaurants, hotels, and other businesses.
County	Yes	Same as above
State	Yes	Same as above
Federal	Yes	Same as above
Economic Impact Values:		
Employment	Yes	Positive effect in an increase in employment during construction phase
Consumer Income	Yes	Potential minor positive effect
Business Income/Costs	Yes	Increase in local purchase of construction supplies
Private Property Values	No	No change
Tax Revenue	Yes	Minor positive effect

4.8 CULTURAL RESOURCES

Significance Criteria

A proposed action is considered to have a potential effect on a historic property or archaeological resource when the action may alter characteristics of the property that could qualify the property for inclusion in the NRHP. An effect is considered adverse when it diminishes the integrity of the property's location, design, setting, materials, workmanship, feeling, or association. Adverse effects on historic properties/ archaeological resources include, but are not limited to:

- Physical destruction, damage, or alteration of all or part of the property;
- Isolation of the property from or alteration of the character of the property's setting when that character contributes to the property's qualification for the National Register;

- Introduction of visual, audible, or atmospheric elements that are out of character with the property or alter its setting;
- Neglect of a property resulting in its deterioration or destruction; and
- Transfer, lease, or sale of the property (36 CFR 800.9[b]).

Impacts – Alternative A – Construct Separate Air Traffic Control Tower and Fire Station

By law, any proposed changes to structures and their surroundings that have the potential to affect historic resources are subject to review by the State Historic Preservation Officer (SHPO) under the terms of 36 CFR Part 800. None of the facilities within or nearby the proposed construction are considered historic. Therefore, no significant impacts to cultural or historic resources are anticipated.

Alternative A involves construction activities that would involve grading, leveling, and excavation that may uncover or damage archaeological sites, if present. Furthermore, the placement of pavement renders any existing, intact cultural remains beneath it inaccessible to future archaeological investigations. The upgrade, repair, alterations, rehabilitation, replacement, expansion, and demolition of facilities and utilities could also damage archaeological sites, if present. If during the construction phase, any archeological remains are discovered, notification of and consultation with the SHPO is required.

Impacts – Alternative B – Construct a Co-Located New Air Traffic Control Tower and Fire Station Near Existing Facilities

Impacts under this Alternative would be similar to Alternative A.

Impacts – Alternative C – No Action Alternative

Under this Alternative, no new impacts to cultural resources would occur. The current conditions at Pope AFB would continue. All building rehabilitations, operations and maintenance, and construction projects would be reviewed for consistency with the ICRMP to ensure there is no adverse effect on archeological or historic properties.

Conclusion: The proposed action would have potential impacts to both historic and archaeological resources. However, Pope AFB would follow the ICRMP standard operating procedures (SOPs) to avoid negatively affecting any historic properties or archaeological resources identified at Pope AFB. Archaeological monitoring during ground disturbance is recommended.

4.9 LAND USE

Land use includes the land on and adjacent to each proposed project site, the physical features that influence current or proposed uses, pertinent land use plans and regulations, and land availability. The amount of land disturbed and conformity with existing land use, as identified in the Pope AFB General Plan, is considered in order to evaluate impacts.

Significance Criteria
An impact to land use would be considered significant if one or more of the following occur as a result of the proposed action:

- Conflict with applicable ordinances and/or permit requirements;
- Nonconformance with applicable land use plans, preclusion of adjacent or nearby properties being used for existing activities; or
- Conflict with established uses of an area

Impacts – Alternative A – Construct Separate Air Traffic Control Tower and Fire Station

Impacts to land use on Pope AFB would be minor and would be minimized by including considerations that new construction would be compatible with the existing character of the base in terms of density, building relationships, and open spaces. Construction will take place on previously developed sites. The new fire station will be built on the existing site of the air traffic control tower and fire station, and the new air traffic control tower will be built on an existing heavy equipment yard.

Off base land use is not a major consideration. All land uses under the proposed action are compatible with existing land use plans and with local ordinances. All of the components of the proposed action would be located on Pope AFB.

Impacts – Alternative B – Construct a Co-Located New Air Traffic Control Tower and Fire Station Near Existing Facilities

Impacts under this Alternative would be similar to Alternative A.

Impacts – Alternative C – the No Action Alternative

The No Action Alternative would not change current land uses at Pope AFB. However, the No Action Alternative could cause negative impacts to land use. Continuing the status quo would not allow for the new projects and the planned efficiencies included in Alternative A.

4.10 TRANSPORTATION

Significance Criteria
Impacts to transportation are evaluated with respect to the potential for:

- Disruption or improvement of current transportation patterns and systems;
- Deterioration or improvement of existing levels of service;
- Changes in existing levels of safety; and
- Disruption and deterioration of airfield activities.

Impacts – Alternative A – Construct Separate Air Traffic Control Tower and Fire Station

The implementation of Alternative A could temporarily disrupt current transportation patterns on Pope AFB during the construction, repair, and demolition phases. Areas

particularly impacted would be related to demolition and construction of the new facility. However, there would be a long-term improvement to existing levels of service through the upgrade, alteration, repair, and expansion of the facilities and infrastructure.

The Pope AFB roadway system should safely handle and distribute vehicular movements with a minimum amount of congestion and delay. This includes traffic movements on and off the base as well as movements within the base. Pavement conditions should not inhibit these movements.

Impacts – Alternative B – Construct a Co-Located New Air Traffic Control Tower and Fire Station Near Existing Facilities

Impacts under this Alternative would be similar to Alternative A.

Impacts – Alternative C – The No Action Alternative

Under this Alternative, negative impacts to efficiency would continue, as the effectiveness of transportation activities would not be improved. This could cause increases in hazards and safety concerns.

Conclusion: The implementation of the proposed action would have negligible to minor impacts during the construction, upgrade, repair, and alteration of facilities and utilities.

4.11 AIRSPACE/AIRFIELD MANAGEMENT

The following section presents environmental impacts of the proposed action and alternatives on the structure, management, and use of the affected airspace. This evaluation focuses on whether the proposed action or alternatives would require alteration of airspace management procedures and assesses the capability of the airspace to accommodate the proposed use.

Impacts could occur if the proposed action and alternatives affect: movement of other air traffic in the area; air traffic control systems or facilities; or accident potential for mid-air collisions between military and non-participating civilian operations. Potential impacts were assessed to determine the extent that the proposed airspace changes would change existing relationships with federal airways, uncharted visual flight routes, transition areas, and airport related air traffic operations. Effects to instrument flight rules (IFR) and visual flight rules (VFR) air traffic were also considered.

Significance Criteria
Numerous federal, civil, and military laws and regulations govern airspace and airfield operations at Pope AFB. Impacts to airspace and airfield safety would be considered significant if they violated any statute or caused unnecessary health and safety risks.

Impacts – Alternative A – Construct Separate Air Traffic Control Tower and Fire Station

There are no aspects of this alternative that would negatively affect airspace or airfield operations; therefore, no impacts are predicted. The Air Traffic Control Tower design has been coordinated with the Army Corps of Engineers and Headquarters Air Mobility Command to ensure that it can accommodate current and future uses of the Pope AFB airfield. A temporary mobile Control Tower would be utilized during phased construction of the new control tower to ensure uninterrupted air traffic control.

Impacts – Alternative B - Construct a Co-Located New Air Traffic Control Tower and Fire Station Near Existing Facilities

There are no aspects of this alternative that would affect airspace or airfield operations as with Alternative A; therefore, no impacts are predicted.

Impacts – Alternative C – The No Action Alternative

There would be no change to existing conditions under this alternative.

4.12 SAFETY AND OCCUPATIONAL HEALTH

Significance Criteria
Numerous federal, civil, and military laws and regulations govern operations at Pope AFB. Individually and collectively, they prescribe measures, processes, and procedures required to ensure safe operations and to protect the public, military, and property. These regulations govern all aspects of the daily activity of the base, and their applicability ranges from standard industrial ground safety requirements, such as wearing of hard hats and safety clothing, to complex procedures concerning helicopter landings and departures.

Additionally all U.S. Department of Defense (DOD) installations are required to seek effective ways to minimize the likelihood of mass casualties from terrorist attacks against DOD personnel. In order to meet current anti-terrorism/force protection standards the Air Traffic Control Tower should maintain certain standoff distances from roads, parking areas and other facilities; and the Fire Station should be located so that trucks have full access around the facility.

Impacts - Alternative A – *Construct Separate Air Traffic Control Tower and Fire Station*

Alternative A would provide the modernization and expansion of the facilities that are necessary to meet current Air Force codes for safety and standards of living. The consolidation and improvements to facilities, upgrades to equipment, and improvements to maintenance and storage facilities would improve the efficiency of operations and comply with new standards.

In order to meet current anti-terrorism/force protection standards, the Air Traffic Control Tower should be located in order to maintain prescribed standoff distances from roads, parking areas and other facilities; and the new Fire Station should be located so that the fire trucks have full access around the facility. This Alternative allows the prescribed standoff distances to be meet and allows for full access of the facility by the fire trucks.

Impacts – Alternative B - Construct a Co-Located New Air Traffic Control Tower and Fire Station Near Existing Facilities

Impacts under this Alternative would be similar to Alternative A.

Impacts – Alternative C – the No Action Alternative

Under this Alternative, certain safety hazards would continue to exist. Without the proposed improvements, operational standards would continue to be unacceptable and substandard.

Conclusion: One of the key purposes of implementing the proposed action at Pope AFB is to meet current safety and anti-terrorism/force protection standards. Long term results of implementation of Alternative A would provide a positive impact to safety and operational efficiency by modernizing the Air Traffic Control Tower and Fire Station. Use of any chemicals, products, or other substances during construction and operation would comply with U.S. Air Force and industry safety standards. This potential impact is considered negligible.

4.13 ENVIRONMENTAL MANAGEMENT (Including Pollution Prevention, Geology and Soils)

Significance Criteria
A soil or geological resources impact would be considered significant if it would result in one or more of the following:

- Occurrence of substantial erosion or siltation
- Occurrence of substantial land sliding
- Substantial damage to project structures/facilities

An impact to environmental management and pollution prevention would occur if:

- Opportunities to minimize waste, reduce pollution, or use safer substances are not utilized
- Issues arise that impact health and safety

Impacts – Alternative A – Construct Separate Air Traffic Control Tower and Fire Station

No negative impacts to geology would occur. Under this alternative, construction will take place on previously developed sites, with the Fire Station being built on the site currently being used for the Air Traffic Control Tower and Fire Station, and the Air Traffic Control Tower being built in a Heavy Equipment Yard. Construction activities

would involve the disturbance of soils predominantly in previously developed and backfilled areas. These areas are currently covered with grass, asphalt or concrete. The use of BMPs and erosion prevention techniques, such as a silt barrier (filter fabric) around the construction site would minimize erosion and also prevent sediment loading of storm water drainage systems. Soil stability would not be a problem.

Incidental spillage of fuels, lubricates, hydraulic fluids and chemical substances (such as protective coatings to concrete and steel and bituminous sprays) could occur, but would be managed under existing spill contingency plans and waste management practices to protect soil resources. Pollution prevention practices would be implemented and incorporated in the proposed construction and operation of the new facilities. Environmentally friendly substances would be used where practical. Materials would be reused and recycled where not cost prohibitive.

Impacts – Alternative B - Construct a Co-Located New Air Traffic Control Tower and Fire Station Near Existing Facilities

Impacts under this Alternative would be similar to Alternative A.

Impacts – Alternative C – The No Action Alternative

Under this Alternative, no impacts to environmental management would occur.

Conclusion: The proposed action would have negligible to minor impacts to environmental management. Implementation of Pope AFB's recycling and pollution prevention programs would reduce impacts. Soil disturbance from ongoing maintenance would be restricted to the minimum required for construction of new facilities and utilities and other related activities (such as, upgrading, alterations, expansions, and demolitions). Short-term impacts on soil erosion would be minor.

4.14 ENVIRONMENTAL JUSTICE

Significance Criteria
A significant impact would be one that would involve disproportionately high and negative human health or environmental effects on minority and low-income populations.

Impacts – Alternative A – Construct Separate Air Traffic Control Tower and Fire Station

The implementation of Alternative A would occur in a relatively isolated area within the boundaries of Pope AFB and is not likely to affect any civilian community or population center; no negative or positive impacts to low income and minority populations would occur.

Impacts – Alternative B - Construct a Co-Located New Air Traffic Control Tower and Fire Station Near Existing Facilities

Impacts under this Alternative would be similar to Alternative A.

Impacts – Alternative C - the No Action Alternative

Under this Alternative, no negative or positive impacts to low income and minority populations would occur.

Conclusion: The implementation of the proposed action would have negligible impacts to low income or minority populations.

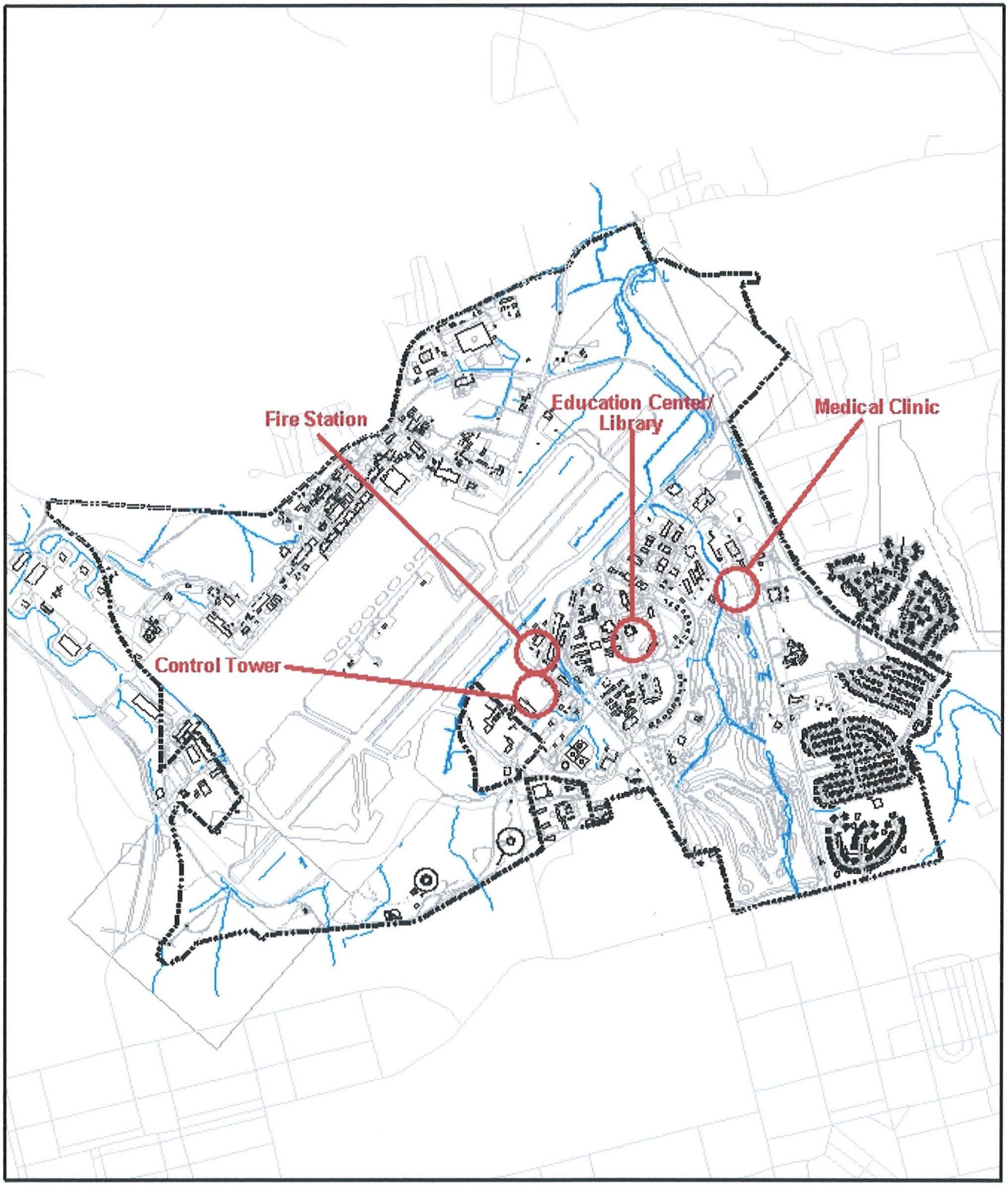
4.15 INDIRECT AND CUMULATIVE IMPACTS

The indirect and cumulative effects of incremental increases in development of an area that is already experiencing significant and rapid growth, such as Pope AFB and the surrounding community, has the potential to affect all aspects of the environment. Replacing vegetation with impervious surfaces can impact water quality by increasing the amount of precipitation leaving the site. To minimize these effects the Air Force requires contractors to implement measures to control the release of storm water from construction sites.

Implementation of the proposed action, which has been developed in a manner that considers an integrated planning process to avoid negative impacts, is not expected to contribute significantly to the cumulative effects to specific resources. However, the other projects mentioned in Section 2.5, as well as any other foreseeable projects, would need to be considered carefully to ensure compatibility of actions that may contribute cumulative effects to environmental resources. Figure 4.15-1 illustrates other projects that would likely occur at Pope AFB during the same time frame as the proposed construction of the Air Traffic Control Tower and Fire Station.

4.16 UNAVOIDABLE AND ADVERSE IMPACTS

Unavoidable short-term impacts associated with implementation of the proposed activities would include a localized increase in noise levels during construction activities, disturbance of upland soils, fugitive dust emissions, increased truck traffic, and a loss of several parking places. Each impact would be minor and localized to the immediate area.



Legend
- Installation Boundary
- Buildings/Structures
- Roads
- Water
- Project Locations

N

POPE AFB, NC

Figure 4.15-1
Proposed Construction Projects
Pope AFB

0 0.25 0.5 Miles

4.17 RELATIONSHIP BETWEEN SHORT-TERM USES AND ENHANCEMENT OF LONG-TERM PRODUCTIVITY

Short-term uses of resources include temporary impacts to the physical environment during site clearing, grading, and construction. Short-term socioeconomic impacts include maintenance and construction costs and expenditure of public funds. Short-term impacts would result from vehicular noise and emissions during construction. The short-term need for construction laborers and local materials to complete construction would provide an economic benefit. Implementation of the proposed action is expected to have a positive effect on long-term productivity and a beneficial impact on operations at Pope AFB.

4.18 IRREVERSIBLE AND IRRETRIEVABLE COMMITMENTS OF RESOURCES

Under the proposed action there would be an irreversible commitment of some resources. The proposed construction would require the consumption of fuels as well as building materials such as concrete, sand, bricks, steel, insulation, wiring, and paint. The proposed action would require the use of energy, both electric and fossil fuels, for ongoing operations. This would continue as long as the facilities remain in operation.

CHAPTER 5
LIST OF PREPARERS

Table 5-1 provides the names of those individuals that were responsible for the preparation of this EA. This list includes the key management personnel from the lead agency.

Table 5-1 List of Contributors and Preparers

Name	Degree	Contribution	Years of Experience
Charles Rimbach 43 CES/CEV (Atriax, Inc.)	M.S. Operations Management B.S. Civil Engineering	Environmental Project Manager Pope AFB	24
Gloria Hagge J.M. Waller Associates	M.S. Urban Planning B.S. Biology	QA/QC	19
Mary D. Hassell, CEP J. M. Waller Associates	M.S. Environmental Biology B.S. Forestry & Wildlife Mgt.	Project Manager / Principal Analyst	20
Mike Schneider J.M. Waller Associates	AAS GIS Technology	GIS/Graphics	5
Viola Walker Natural Resource Specialist 43 CES/CEV	B.A. Biology M.S. Forest Management	Manager Natural and Cultural Resources Pope AFB	16

CHAPTER 6
REFERENCES

CEQ 1997 — Council on Environmental Quality (CEQ), 1997, Environmental Justice Guidance under the *National Environmental Policy Act*. 10 December.

Edwards 2003 — Edwards, Teri, 43 CES Housing, 2003, Personal interview with Mary D. Hassell, J.M. Waller Associates, Inc., Newport News, Virginia

EDCAPCD 2002 — El Dorado County Air Pollution Control District (APCD) (El Dorado County), 2002, Guide to Air Quality Assessment: Determining Significance of Air Quality Impacts, - Construction Activities, El Dorado County, California.

FCOC 2003 — Fayetteville Chamber of Commerce (COC) 2003, http://www.fayettevillencchamber.org/mac_milinfo.htm.

FEMA 2003 — Federal Emergency Management Agency. 2003. Website: http://www.fema.gov/nfip/ask.htm

FICON 1992 — Federal Interagency Committee on Noise (FICON). 1992. Federal Agency Review of Selected Airport Noise Analysis Issues. August.

FICUN 1982 — Federal Interagency Committee on Urban Noise (FICUN). 1980 Guidelines for Considering Noise in Land-Use planning and Control. June.

US Army 2001 — Fort Bragg Integrated Natural Resources Management Plan. Prepared by Jones Technologies, Inc. and Gene Stout and Associates. 2001.

NPS 1984 — National Parks Service (NPS). 1984. *Preliminary Archaeological Reconnaissance of Pope Air Force Base, Cumberland County, North Carolina.* Report prepared by J. E. Ehrenhard.

NCDOC 2003 North Carolina Department of Commerce 2003. Draft Fort Bragg/ Pope Air Force Base Joint Land Use Study. January.

NCDENR 2003 North Carolina Department of Environment and Natural Resources (NCDENR) 2003. North Carolina Ambient Air Quality Standards. www.daq.state.nc.us/rules/rules/ accessed May, 2003.

NCDENR 2000 North Carolina Department of Environment and Natural Resources, Division of Water Quality 2000. Cape Fear River Basinwide Water Quality Plan. July.

NCDENR 1998 North Carolina Department of Environment and Natural Resources (NCDENR). 1998 http://h2o.ehnr.state.nc.us/strmclass/alpha/cpf.text

NCDPH 2002 North Carolina Department of Public Health (NCDPH), 2002. Website: http://www.epi.state.nc.us/epi/air.htm

NCDAQ 2002 North Carolina Division of Air Quality. 2002. http://daq.state.nc.us/rules/rules/

NCNHP 2001 North Carolina Natural Heritage Program. 1993. Updated 2001. http://ils.unc.edu/parkproject/publications/animals/animal01.pdf

Poor 2003 Poor, Linda, 43 CES Housing, 2003. Personal communication with Paul Gapcynski, J.M. Waller Associates, Inc., Newport News, Virginia.

Pope AFB 2003 Pope AFB 43 Air Wing Public Affairs, 2003, Fact Sheet, https://www.pope.af.mil/43AW/43aw_pa/demographics.htm.

Pope AFB 2002 Cultural *Resources Management Plan, Pope Air Force Base, North Carolina (Revision 3).* Prepared by Parsons, Inc.

Rimbach 2003 Rimbach, Charlie, 2003, Environmental Project Manager, Atriax: Architects & Engineers, Pope AFB CES/CEV, personal interview with Mary D. Hassell, J.M. Waller Associates, Inc., Newport News, Virginia.

USAF 1995 U.S. Air Force (USAF) Air Conformity Guide, 1995, Directorate of Environment

USAF 1996 U.S. Air Force (USAF), 1996. Environmental Assessment, Repair/Replacement of Perimeter Fence at Pope Air Force Base, Fayetteville, North Carolina, United States Air Force, Headquarters, Air Mobility Command.

USAF 2003 U.S. Air Force (USAF) 2003. Wetland Delineation on Pope AFB Report (draft) April 2003.

USAF 2001 U.S. Air Force (USAF), 2001. Integrated Natural Resources Management Plan. Pope AFB.

USAF 1999 U.S. Air Force, 1999. Unpublished Air Installation Compatible Use (AICUZ) Study for Pope Air Force Base, North Carolina, September.

USAF 1994 U.S. Air Force 1994. Basewide Wetland Delineation Pope Air Force Base, North Carolina. Prepared by Gulf Engineers and Consultants, Inc.

USAF 1994a U.S. Air Force 1994. Biological Management Plan for the Interpretive Natural Area. Pope Air Force Base. November.

USACE 1987 U.S. Army Corps of Engineers (USACE) 1987. Wetlands Delineation Manual, Wetlands Research Program Technical Report Y-81-1.

USCB 1995 U.S. Census Bureau. USCB 1995b, Poverty Areas. Statistical Brief. U.S. Census Bureau website: http://www.census.gov/population/socdemo/statbriefs/povarea.html. Accessed January 2003.

USCB 2000 U.S. Census Bureau. USCB 2000, LandView IV. The Federal Geographic Data Viewer. 14 November.

USCB 2001a U.S. Census Bureau. USCB 2001a, *Census 2000.* Table DP-1. Profile of General Demographic Characteristics.

USCB 2001b U.S. Census Bureau. USCB 2001b, Regional Economic Information System. 1969-1999. Table CA05.1: Personal Income by Major Source and Earnings by Major Industries. Table CA25: Full-Time and Part-Time Employment by Industry. May.

USCB 2001c U.S. Census Bureau. USCB 2001c, Overview of Race and Hispanic Origin. *Census 2000 Brief.* C2KBR/01-1. March.

USCB 2002 U.S. Census Bureau. USCB 2002, State and County Quick Facts. Data derived from Population Estimates, 2000 Census of Population and Housing, 1990 Census of Population and Housing, Small Area Income and Poverty Estimates, County Business Patterns, 1997 Economic Census, Minority – and Women – Owned Business, Building Permits, Consolidated Federal Funds Report, 1997, Census of Governments. http://www.census.gov. Accessed January 2003.

USDA 1984 U.S. Department of Agriculture (USDA), 1984. Soil Survey of Cumberland and Hoke Counties, North Carolina.

USEPA 2002a U.S. Environmental Protection Agency (EPA), 2002a, National Ambient Air Quality Standards. http://www.epa.gov.

USEPA 1982 U.S. Environmental Protection Agency (EPA). 1982. Guidelines For Noise Impact Analysis. Report No. 550/9-82-105. Washington, DC. April.

USEPA 1972 U.S. Environmental Protection Agency (EPA). 1972. Reports to the President and Congress on Noise. Senate Report No. 92-63. Washington, DC. February.

CHAPTER 7

LIST OF AGENCIES AND PERSONS CONSULTED

Pope Air Force Base:

Charles Rimbach, Environmental Project Manager
43 CES/CEV
560 Interceptor Road
Pope AFB, NC 28308

Omega Weeks, Chief, Environmental Analysis
43 CES/CEV

Viola Walker, Natural and Cultural Resources Manager
43 CES/CEV

Jerome Watson, Air Quality Program Manager
43 CES/CEV

Robert Byrd, Installation Restoration Program Manager
43 CES/CEV

Perry Benton, Base Planner
43 CES/CECP

Gray Linzel, Project Programming
43 CES/CECP

Jerome Bronson 43 MDG/SLF

Lt Col Susan Merrick USAF/SGMF

Lt Col Leslie Dixon 43MDSS/SGS

Lt Brain Hartsell 43 MDSS/SGS

Headquarters, Air Mobility Command (HQ/AMC)

HQ AMC/CEVP
Scott AFB, Illinois

Headquarters, Air Force Center for Environmental Excellence (AFCEE)

Charlie Brown, AFCEE

HQ AFCEE 3207 Sidney Brooks
Brooks AFB, TX 78235-5344

Fort Bragg - Environmental

Commander
XVIII Airborne Corps and Fort Bragg
AFZA-PAO (COL Roger King)
Fort Bragg, North Carolina 28310-5000

Fort Bragg, Directorate of Public Works, Environmental Branch

Local and Regional:

Cumberland County Public Library
300 Maiden Lane
Fayetteville, NC 28301

Mr. Joel Davis
City Manager
P.O. Box 617
300 Ruth Street
Spring Lake, NC 28390

Mr. James Martin
Cumberland County, County Manager
117 Dick Street, STE 512
Fayetteville, NC 28301

Mr. Roger Stancil
City of Fayetteville, City Manager
433 Hay Street
Fayetteville, NC 28301

State of North Carolina:

Ms. Chrys Baggett and Ms. Jeanette Furney
Environmental Policy Act Coordinator
North Carolina State Clearinghouse
1302 Mail Service Center
Raleigh, NC 27699-1302

Ms. Melba McGee
North Carolina Environmental Review Manager
1601 Mail Service Center, Raleigh, North Carolina 27699-1601

Federal:

Dr. Garland B. Pardue
Ecological Services Supervisor
U.S. Fish and Wildlife Service
Raleigh Field Office
Post Office Box 33726
Raleigh, North Carolina 27636-3726

Mr. John Hammond
U.S. Fish and Wildlife Service
North Carolina Ecological Service
P.O. Box 33726
Raleigh, NC 27626

Ms. Lillette Granade
US Army Corps of Engineers
Wilmington District, Wilmington, NC

Notices of Availability published in Fayetteville Observer on 12 November 2003.

Public comment period: Cumberland County Library; 12 November 2003 through 12 December 2003 – No public comments were received.

State Clearing House Review Period: 11 November through 18 December 2003 – No substantive comments from the State per letter from Chrys Baggett, Environmental Policy Act Coordinator.

Phone call between Chrys Baggett and Vickie G. Davis: May 13, 2004. Ms. Baggett confirmed that there were no substantive comments from the State.

APPENDIX A

NOTICE OF AVAILABILITY

AFFIDAVIT OF PUBLICATION

NOR

Cum

DRAFT FINDING OF NO SIGNIFICANT IMPACT AVAILABILITY OF DRAFT ENVIRONMENTAL ASSESSMENT

Pope AFB proposes to construct and operate a new Air Traffic Control Tower and Fire Station. The new facilities are needed to meet Air Force safety standards. Construction would begin in 2006 and the facilities would be operational by 2008.

Three alternatives were evaluated: A) construct new facilities near current location; B) Construct separate facilities; and C) No Action. Alternative A is the preferred alternative.

The preferred alternative would have negligible impacts on air quality. The annual rate of emissions is well below threshold levels established in the conformity regulations and is not expected to affect attainment of the North Carolina State Implementation Plan or regional air quality. Preparation of an air conformity determination is not required. Construction would temporarily increase noise levels; this impact is considered temporary and negligible.

Operation of the air traffic control tower and fire station would be in strict accordance with all federal and state regulations. There would be negligible impacts on water resources, floodplains, and wetlands. No impact to threatened / endangered species would occur. The proposed construction would have no adverse effect on significant cultural resources.

CONCLUSION

and The proposed new facilities would not have a significant impact on the quality of the human environment. Therefore, issuance of a Finding of No Significant Impact is warranted, and an Environmental Impact Statement is not required. This analysis fulfills the requirements of the National Environmental Policy Act.

qual

T The Draft EA is available for review and comment in the Cumberland County Library, 300 Maiden Lane, Fayetteville, NC. Questions about the EA may be directed to Ms. Viola Walker, 43 CES/CEV (910) 394-1633. Written comments will be received at J.M. Waller Associates, 11828 Canon Blvd. Suite A, Newport News, VA. 23606, through 12 Dec. 2003
11/12 456263

Before the undersigned, a Notary Public of said County and State, duly commissioned and authorized to administer oaths, affirmations, etc., personally appeared. CINDY L. OROZCO
who, being duly sworn or affirmed, according to law, doth depose and say that he/she is LEGAL SECRETARY
of THE FAYETTEVILLE PUBLISHING COMPANY, a corporation organized and doing business under the Laws of the State of North Carolina, and publishing a newspaper known as the THE FAYETTEVILLE OBSERVER, in the City of Fayetteville, County and State aforesaid, and that as such he/she makes this affidavit; that he/she is familiar with the books, files and business of said Corporation and by reference to the files of said publication the attached advertisement of LEGAL NOTICE
AIR TRAFFIC CONTROL TOWE

of J. M. WALLER, INC
was inserted in the aforesaid newspaper in space, and on dates as follows:

NOV12

publication The Fayetteville Observer was a newspaper meeting all the requirements and Sec. No. 1-597 G.S. of N. C.

pied from the books and files of the aforesaid corporation and publication.

Cindy L. Orozco
LEGAL SECRETARY

Title

Sworn or affirmed to, and subscribed before me, this 14TH day of NOVEMBER, A.D., 2003.

In Testimony Whereof, I have hereunto set my hand and affixed my official seal, the day and year aforesaid.

Pamela H Walters

Notary Public

My commission expires 05TH day of DECEMBER, 2005.

MAIL TO: J. M. WALLER, INC.

11828 CANON BLVD. SUITE A
NEWPORT NEWS, VA 23606

144598001

APPENDIX B

PUBLIC INVOLVEMENT

J.M. WALLER ASSOCIATES
11828 Canon Blvd., Suite A
Newport News, VA 23606

1 June 2003

Ms. Chrys Baggett
Environmental Policy Act Coordinator
North Carolina State Clearinghouse
1302 Mail Service Center
Raleigh, NC 27699-1302

Dear Ms. Baggett,

Pope AFB is in the process of conducting three environmental assessments for various proposed construction activities. J.M. Waller Associates, Inc. is conducting the environmental assessment. All of the proposed construction sites are located on previously disturbed areas of the base and will add short-term and long-term employment to the local community. The proposed construction projects will be conducted in accordance with applicable federal, state, and local regulations. The projects are as follows:

1. A new Medical Clinic to be located on Armistead Street at the north end of the Golf Course;
2. A new Air Traffic Control Tower and Fire Station to be located next to the existing Air Traffic Control Tower and Fire Station near Boxcar Street; and
3. A new Education Center and Library to be located on Reilly Street.

A brief description and location map for each project is attached to this letter. If you have any questions or comments on these projects – please contact me at:

Mary D. Hassell, CEP
11828 Canon Blvd., Suite A
Newport News, VA 23606-2554
Phone: 757-223-5840

Sincerely,

Mary D. Hassell

Mary D. Hassell, CEP
Senior Project Manager
J.M. Waller Associates, Inc.

Attachment

J.M. WALLER ASSOCIATES
11828 Canon Blvd., Suite A
Newport News, VA 23606

1 June 2003

City of Fayetteville
Mr. Roger Stancil
City Manager
433 Hay Street
Fayetteville, North Carolina 28301

Dear Mr. Stancil,

Pope AFB is in the process of conducting three environmental assessments for various proposed construction activities. J.M. Waller Associates, Inc. is conducting the environmental assessment. All of the proposed construction sites are located on previously disturbed areas of the base and will add short-term and long-term employment to the local community. The proposed construction projects will be conducted in accordance with applicable federal, state, and local regulations. The projects are as follows:

1. A new Medical Clinic to be located on Armistead Street at the north end of the Golf Course;
2. A new Air Traffic Control Tower and Fire Station to be located next to the existing Air Traffic Control Tower and Fire Station near Boxcar Street; and
3. A new Education Center and Library to be located on Reilly Street.

A brief description and location map for each project is attached to this letter. If you have any questions or comments on these projects – please contact me at:

Mary D. Hassell, CEP
11828 Canon Blvd., Suite A
Newport News, VA 23606-2554
Phone: 757-223-5840

Sincerely,

Mary D. Hassell

Mary D. Hassell, CEP
Senior Project Manager
J.M. Waller Associates, Inc.

Attachment

J.M. WALLER ASSOCIATES
11828 Canon Blvd., Suite A
Newport News, VA 23606

1 June 2003

Commander
XVIII Airborne Corps and Fort Bragg
AFZA-PAO (COL Roger King)
Fort Bragg, North Carolina 28310-5000

Dear COL King,

Pope AFB is in the process of conducting three environmental assessments for various proposed construction activities. J.M. Waller Associates, Inc. is conducting the environmental assessment. All of the proposed construction sites are located on previously disturbed areas of the base and will add short-term and long-term employment to the local community. The proposed construction projects will be conducted in accordance with applicable federal, state, and local regulations. The projects are as follows:

1. A new Medical Clinic to be located on Armistead Street at the north end of the Golf Course;
2. A new Air Traffic Control Tower and Fire Station to be located next to the existing Air Traffic Control Tower and Fire Station near Boxcar Street; and
3. A new Education Center and Library to be located on Reilly Street.

A brief description and location map for each project is attached to this letter. If you have any questions or comments on these projects – please contact me at:

Mary D. Hassell, CEP
11828 Canon Blvd., Suite A
Newport News, VA 23606-2554
Phone: 757-223-5840

Sincerely,

Mary D. Hassell

Mary D. Hassell, CEP
Senior Project Manager
J.M. Waller Associates, Inc.

Attachment

J.M. WALLER ASSOCIATES
11828 Canon Blvd., Suite A
Newport News, VA 23606

1 June 2003

Cumberland County North Carolina
Mr. James Martin, County Manager
117 Dick Street, STE 512
Fayetteville, North Carolina 28301

Dear Mr. Martin,

Pope AFB is in the process of conducting three environmental assessments for various proposed construction activities. J.M. Waller Associates, Inc. is conducting the environmental assessment. All of the proposed construction sites are located on previously disturbed areas of the base and will add short-term and long-term employment to the local community. The proposed construction projects will be conducted in accordance with applicable federal, state, and local regulations. The projects are as follows:

1. A new Medical Clinic to be located on Armistead Street at the north end of the Golf Course;
2. A new Air Traffic Control Tower and Fire Station to be located next to the existing Air Traffic Control Tower and Fire Station near Boxcar Street; and
3. A new Education Center and Library to be located on Reilly Street.

A brief description and location map for each project is attached to this letter. If you have any questions or comments on these projects – please contact me at:

Mary D. Hassell, CEP
11828 Canon Blvd., Suite A
Newport News, VA 23606-2554
Phone: 757-223-5840

Sincerely,

Mary D. Hassell

Mary D. Hassell, CEP
Senior Project Manager
J.M. Waller Associates, Inc.

Attachment

J.M. WALLER ASSOCIATES

11828 Canon Blvd., Suite A
Newport News, VA 23606

1 June 2003

Mr. Joel Davis
City Manager
P.O. Box 617
300 Ruth Street
Spring Lake, North Carolina 28390

Dear Mr. Davis,

Pope AFB is in the process of conducting three environmental assessments for various proposed construction activities. J.M. Waller Associates, Inc. is conducting the environmental assessment. All of the proposed construction sites are located on previously disturbed areas of the base and will add short-term and long-term employment to the local community. The proposed construction projects will be conducted in accordance with applicable federal, state, and local regulations. The projects are as follows:

1. A new Medical Clinic to be located on Armistead Street at the north end of the Golf Course;
2. A new Air Traffic Control Tower and Fire Station to be located next to the existing Air Traffic Control Tower and Fire Station near Boxcar Street; and
3. A new Education Center and Library to be located on Reilly Street.

A brief description and location map for each project is attached to this letter. If you have any questions or comments on these projects – please contact me at:

Mary D. Hassell, CEP
11828 Canon Blvd., Suite A
Newport News, VA 23606-2554
Phone: 757-223-5840

Sincerely,

Mary D. Hassell

Mary D. Hassell, CEP
Senior Project Manager
J.M. Waller Associates, Inc.

Attachment

J.M. WALLER ASSOCIATES
11828 Canon Blvd., Suite A
Newport News, VA 23606

1 June 2003

Mr. John Hammond
U.S. Fish and Wildlife Service
North Carolina Ecological Service
P.O. Box 33726
Raleigh, North Carolina 27636

Dear Mr. Hammond,

Pope AFB is in the process of conducting three environmental assessments for various proposed construction activities. J.M. Waller Associates, Inc. is conducting the environmental assessment. All of the proposed construction sites are located on previously disturbed areas of the base and will add short-term and long-term employment to the local community. The proposed construction projects will be conducted in accordance with applicable federal, state, and local regulations. The projects are as follows:

1. A new Medical Clinic to be located on Armistead Street at the north end of the Golf Course;
2. A new Air Traffic Control Tower and Fire Station to be located next to the existing Air Traffic Control Tower and Fire Station near Boxcar Street; and
3. A new Education Center and Library to be located on Reilly Street.

A brief description and location map for each project is attached to this letter. If you have any questions or comments on these projects – please contact me at:

Mary D. Hassell, CEP
11828 Canon Blvd., Suite A
Newport News, VA 23606-2554
Phone: 757-223-5840

Sincerely,

Mary D. Hassell

Mary D. Hassell, CEP
Senior Project Manager
J.M. Waller Associates, Inc.

Attachment

J.M. WALLER ASSOCIATES
11828 Canon Blvd., Suite A
Newport News, VA 23606

1 June 2003

Dr. Garland B. Pardue
Ecological Services Supervisor
U.S. Fish and Wildlife Service
Raleigh Field Office
P.O. Box 33726
Raleigh, North Carolina 27636-3726

Dear Mr.Pardue,

Pope AFB is in the process of conducting three environmental assessments for various proposed construction activities. J.M. Waller Associates, Inc. is conducting the environmental assessment. All of the proposed construction sites are located on previously disturbed areas of the base and will add short-term and long-term employment to the local community. The proposed construction projects will be conducted in accordance with applicable federal, state, and local regulations. The projects are as follows:

1. A new Medical Clinic to be located on Armistead Street at the north end of the Golf Course;
2. A new Air Traffic Control Tower and Fire Station to be located next to the existing Air Traffic Control Tower and Fire Station near Boxcar Street; and
3. A new Education Center and Library to be located on Reilly Street.

A brief description and location map for each project is attached to this letter. If you have any questions or comments on these projects – please contact me at:

Mary D. Hassell, CEP
11828 Canon Blvd., Suite A
Newport News, VA 23606-2554
Phone: 757-223-5840

Sincerely,

Mary D. Hassell

Mary D. Hassell, CEP
Senior Project Manager
J.M. Waller Associates, Inc.

Attachment

North Carolina
Department of Administration

Michael F. Easley, Governor

Gwynn T. Swinson, Secretary

June 6, 2003

Ms. Mary D. Hassell, CEP
Pope Air Force Base
c/o J. M. Waller Associates
11828 Canon Boulevard
Suite A
Newport News VA 23606-2554

Dear Ms. Hassell, CEP:

Subject: Scoping - Proposed construction of new Air Traffic Control Tower and Fire Station near Boxcar St.

The N. C. State Clearinghouse has received the above project for intergovernmental review. This project has been assigned State Application Number 03-E-0000-0359. Please use this number with all inquiries or correspondence with this office.

Review of this project should be completed on or before 07/06/2003 . Should you have any questions, please call (919)807-2425.

Sincerely,

Chrys Baggett

Ms. Chrys Baggett
Environmental Policy Act Coordinator

Mailing Address:
1302 Mail Service Center
Raleigh, NC 27699-1302

Telephone: (919)807-2425
Fax (919)733-9571
State Courier #51-01-00
e-mail: Chrys.Baggett@ncmail.net

Location Address:
116 West Jones Street
Raleigh, North Carolina

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Raleigh Field Office
Post Office Box 33726
Raleigh, North Carolina 27636-3726

Ms. Mary D. Hassell, CEP
Senior Project Manager
J. M. Waller Associates, Incorporated
11828 Canon Boulevard, Suite A
Newport News, Virginia 23606

Thank you for your letter requesting information or recommendations from the U.S. Fish and Wildlife Service. This form provides the Service's response pursuant to Section 7 of the Endangered Species Act, as amended (16 U.S.C. 1531-1543).

Re: Construction of New Medical Clinic to be located on Armistead Street
Construction of New Air Traffic Control Tower and Fire Station near Boxcar Street
Construction of New Education Center and Library to be located on Reilly Street, Pope Air Force Base, Cumberland County, North Carolina
Project Name/Location/County

June 01, 2003 — Date of Incoming Letter
03-S264 — Log Number

_X_ Based on the information provided, it appears that your project site does not contain suitable habitat for any federally-listed endangered or threatened species known to occur in the area.

___ If the proposed project will be removing pines greater than or equal to 30 years of age in pine or pine/hardwood habitat, surveys should be conducted for active red-cockaded woodpecker cavity trees in appropriate habitat within a ½ mile radius of project boundaries. If red-cockaded woodpeckers are observed within the project area or active cavity trees found, the project has the potential to affect the red-cockaded woodpecker.

___ Based on the description of tower design characteristics, we conclude that the design of the proposed communications tower would likely minimize the potential hazard to avian species protected by the Migratory Bird Treaty Act.

John D. Hammond 7-11-03
Endangered Species Coordinator Date

North Carolina
Department of Administration

Michael F. Easley, Governor

Gwynn T. Swinson, Secretary

July 16, 2003

Ms. Mary D. Hassell, CEP
Pope Air Force Base
c/o J. M. Waller Associates
11828 Canon Boulevard
Suite A
Newport News, VA 23606-2554

Dear Ms. Hassell, CEP:

Re: SCH File # 03-F-0000-0360: Scoping; Proposed construction of new Education Center and Library on Reilly St. and SCH File # 03-E-0000-0359 Air Traffic Control Tower

The above referenced environmental impact information has been submitted to the State Clearinghouse under the provisions of the National Environmental Policy Act. According to G.S. 113A-10, when a state agency is required to prepare an environmental document under the provisions of federal law, the environmental document meets the provisions of the State Environmental Policy Act.

No comments were made by any state/local agencies during the course of this review. This office just learned that these scoping projects failed to reach the Department of Environment and Natural Resources (DENR) for comment from my office due to a problem in our inter-office mail system. We will insure that DENR provide your office comments on the environmental assessments when received by my office. I am sorry for the mishap.

Should you have any questions, please do not hesitate to call.

Sincerely,

Chrys Baggett

Ms. Chrys Baggett
Environmental Policy Act Coordinator

cc: Region M

Mailing Address:
1302 Mail Service Center
Raleigh, NC 27699-1302

Telephone: (919)807-2425
Fax (919)733-9571
State Courier #51-01-00
e-mail Chrys.Baggett@ncmail.net

Location Address:
116 West Jones Street
Raleigh, North Carolina

North Carolina
Department of Administration

Michael F. Easley, Governor

Gwynn T. Swinson, Secretary

October 8, 2003

Ms Mary Hassell
J.M. Waller Assoc.
11828 Canon Blvd Suite A
Newport News VA 23606-2554

Dear Ms Hassell:

Subject: Environmental Assessment - Pope Air Force Base proposal to build a new education center and library

The N. C. State Clearinghouse has received the above project for intergovernmental review. This project has been assigned State Application Number 04-E-0000-0091. Please use this number with all inquiries or correspondence with this office.

Review of this project should be completed on or before 11/08/2003. Should you have any questions, please call (919)807-2425.

Sincerely,

Chrys Baggett

Ms. Chrys Baggett
Environmental Policy Act Coordinator

Mailing Address:
1301 Mail Service Center
Raleigh, NC 27699-1301

Telephone: (919)807-2425
Fax (919)733-9571
State Courier #51-01-00
e-mail: Chrys.Baggett@ncmail.net

Location Address:
116 West Jones Street
Raleigh, North Carolina

James M. Waller, Chairman
Howard L. Warren, Chief Executive Officer

J.M. WALLER ASSOCIATES
MANAGING THE VISION

Charles W. Scott, R.A., President
James W. Emery, Jr., Chief Financial Officer

11 NOVEMBER 2003

Ms. Chrys Baggett
N.C. Dept. of Administration
1301 Mail Service Center
Raleigh, NC 27699-1301

Dear Ms. Chrys Baggett:

Please find enclosed 20 copies of the draft Environmental Assessment for a new Air Traffic Control Tower and Fire Station for Pope AFB, North Carolina.

On behalf of Pope AFB, we are requesting that you make this EA available for review. Request responses by 18 DECEMBER 2003, if possible.

If you have any questions, please call me at 757-223-5840. Thank you very much.

Sincerely,

Mary D. Hassell

Mary D. Hassell, CEP

J.M. Waller Associates, Inc.

CC: Ms. Viola Walker, 43 CES/CEV

James M. Waller, Chairman
Howard L. Warren, Chief Executive Officer

J.M. WALLER ASSOCIATES
MANAGING THE VISION

Charles W. Scott, R.A., President
James W. Emery, Jr., Chief Financial Officer

11 NOVEMBER 2003

Cumberland County Public Library
300 Maiden Lane
Fayetteville, NC 28301

Dear Librarian:

Please find enclosed a copy of the draft Environmental Assessment for a new Air Traffic Control Tower and Fire Station for Pope AFB, North Carolina.

On behalf of Pope AFB, we are requesting that you make this EA available for public review until 12 DECEMBER 2003.

If you have any questions, please call me at 757-223-5840. Thank you very much.

Sincerely,

Mary D. Hassell

Mary D. Hassell, CEP

J.M. Waller Associates, Inc.

CC: Ms. Viola Walker, 43 CES/CEV

North Carolina
Department of Administration

Michael F. Easley, Governor

Gwynn T. Swinson, Secretary

November 13, 2003

Ms Mary Hassell
J.M. Waller Assoc.
11828 Canon Blvd Suite A
Newport News VA 23606-2554

Dear Ms Hassell:

Subject: Environmental Assessment - Pope Air Force Base proposal to build a new air traffic control tower and fire station. library

The N. C. State Clearinghouse has received the above project for intergovernmental review. This project has been assigned State Application Number 04-E-0000-0130. Please use this number with all inquiries or correspondence with this office.

Review of this project should be completed on or before 12/13/2003 . Should you have any questions, please call (919)807-2425.

Sincerely,

Chrys Baggett

Ms. Chrys Baggett
Environmental Policy Act Coordinator

Mailing Address:
1301 Mail Service Center
Raleigh, NC 27699-1301

Telephone: (919)807-2425
Fax (919)733-9571
State Courier #51-01-00
e-mail: Chrys.Baggett@ncmail.net

Location Address:
116 West Jones Street
Raleigh, North Carolina

North Carolina
Department of Administration

Michael F. Easley, Governor

Gwynn T. Swinson, Secretary

December 17, 2003

Ms Vickie Davis
Pope Air Force Base
43CEV-CEVP
560 Interceptor Rd.
Pope AFB, NC 28308-2314

Dear Ms Davis:

Re: SCH File # 04-E-0000-0130; Environmental Assessment; Pope Air Force Base proposal to build a new air traffic control tower and fire station. library

The above referenced environmental impact information has been submitted to the State Clearinghouse under the provisions of the National Environmental Policy Act. According to G.S. 113A-10, when a state agency is required to prepare an environmental document under the provisions of federal law, the environmental document meets the provisions of the State Environmental Policy Act. Attached to this letter for your consideration are the comments made by agencies in the course of this review.

If any further environmental review documents are prepared for this project, they should be forwarded to this office for intergovernmental review.

Should you have any questions, please do not hesitate to call.

Sincerely,

Ms. Chrys Baggett
Environmental Policy Act Coordinator

Attachments

cc: Region M

Mailing Address:
1301 Mail Service Center
Raleigh, NC 27699-1301

Telephone: (919)807-2425
Fax (919)733-9571
State Courier #51-01-00
e-mail Chrys.Baggett@nomail.net

Location Address:
116 West Jones Street
Raleigh, North Carolina

North Carolina Department of Environment and Natural Resources

Michael F. Easley, Governor

William G. Ross Jr., Secretary

MEMORANDUM

TO: Chrys Baggett
State Clearinghouse

From: Melba McGee
Environmental Review Manager

The Department of Environment and Natural Resources has completed its review. Our regional office within the geographic area of the proposed project has identified permits that may be required prior to project construction. For more information, the project applicant should notify the respective regional office marked on the back of the attached permit form.

Thank you for the opportunity to review.

Attachments

1601 Mail Service Center, Raleigh, North Carolina 27699-1601
Phone: 919-733-4984 \ FAX: 919-715-3060 \ Internet: www.enr.state.nc.us/ENR

State of North Carolina
NCDENR Department of Environment and Natural Resources

Reviewing Office: Fayetteville RO
Project Number: 04-0130 Due Date: 12/08/03

INTERGOVERNMENTAL REVIEW - PROJECT COMMENTS

After review of this project it has been determined that the DENR permit(s) and/or approvals indicated may need to be obtained in order for this project to comply with North Carolina Law. Questions regarding these permits should be addressed to the Regional Office indicated on the reverse of this form. All applications, information and guidelines relative to these plans and permits are available from the same Regional Office.

	PERMITS	SPECIAL APPLICATION PROCEDURES or REQUIREMENTS	Normal Process Time (Statutory Time Limit)
☐	Permit to construct & operate wastewater treatment facilities, sewer system extensions & sewer systems not discharging into state surface waters.	Application 90 days before begin construction or award of construction contracts. On-site inspection. Post-application technical conference usual.	30 days (90 days)
☐	NPDES-permit to discharge into surface water and/or permit to operate and construct wastewater facilities discharging into state surface waters.	Application 180 days before begin activity. On-site inspection preapplication conference usual. Additionally, obtain permit to construct wastewater treatment facility-granted after NPDES. Reply time, 30 days after receipt of plans or issue of NPDES permit-whichever is later.	90 - 120 days (N/A)
☐	Water Use Permit	Preapplication technical conference usually necessary	30 days (N/A)
☐	Well Construction Permit	Complete application must be received and permit issued prior to the installation of a well.	7 days (15 days)
☐	Dredge and Fill Permit	Application copy must be served on each adjacent riparian property owner. On-site inspection. Preapplication conference usual. Filling may require Easement to Fill from N.C. Department of Administration and Federal Dredge and Fill Permit.	55 days (90 days)
☐	Permit to construct & operate Air Pollution Abatement facilities and/or Emission Sources as per 15 A NCAC (2Q.0100, 2Q.0300, 2H.0600)	N/A	60 days
☒	Any open burning associated with subject proposal must be in compliance with 15 A NCAC 2D.1900	N/A	60 days (90 days)
☒	Demolition or renovations of structures containing asbestos material must be in compliance with 15 A NCAC 2D.1110 (a) (1) which requires notification and removal prior to demolition. Contact Asbestos Control Group 919-733-0820.		
☐	Complex Source Permit required under 15 A NCAC 2D.0800		
☒	The Sedimentation Pollution Control Act of 1973 must be properly addressed for any land disturbing activity. An erosion & sedimentation control plan will be required if one or more acres to be disturbed. Plan filed with proper Regional Office (Land Quality Section) at least 30 days before beginning activity. A fee of $40 for the first acre or any part of an acre.		20 days (30 days)
☐	The Sedimentation Pollution Control Act of 1973 must be addressed with respect to the referenced Local Ordinance.		30 days
☐	Mining Permit	On-site inspection usual. Surety bond filed with DENR. Bond amount varies with type mine and number of acres of affected land. Any one mined greater than one acre must be permitted. The appropriate bond must be received before the permit can be issued.	30 days (60 days)
☐	North Carolina Burning permit	On-site inspection by N.C. Division of Forest Resources if permit exceeds 4 days	1 day (N/A)
☐	Special Ground Clearance Burning Permit-22 counties in coastal N.C. with organic soils.	On-site inspection by N.C. Division of Forest Resources required "If more than five acres of ground clearing activities are involved. Inspections should be requested at least ten days before actual burn is planned."	1 day (N/A)
☐	Oil Refining Facilities	N/A	90 - 120 days (N/A)
☐	Dam Safety Permit	If permit required, application 60 days before begin construction. Applicant must hire N.C. qualified engineer to prepare plans, inspect construction, certify construction is according to DENR approved plans. May also require permit under mosquito control program, and a 404 permit from Corps of Engineers. An inspection of site is necessary to verify Hazard Classification. A minimum fee of $200.00 must accompany the application. An additional processing fee based on a percentage of the total project cost will be required upon completion.	30 days (60 days)

	PERMITS	SPECIAL APPLICATION PROCEDURES or REQUIREMENTS	Normal Process Time (Statutory Time Limit)
☐	Permit to drill exploratory oil or gas well	File surety bond of $5,000 with DENR running to State of N.C. conditional that any well opened by drill operator shall, upon abandonment, be plugged according to DENR rules and regulations.	10 days (N/A)
☐	Geophysical Exploration Permit	Application filed with DENR at least 10 days prior to issue of permit. Application by letter. No standard application form.	10 days (N/A)
☐	State Lakes Construction Permit	Application fees based on structure size is charged. Must include descriptions & drawings of structure & proof of ownership of riparian property.	15 - 20 days (N/A)
☐	401 Water Quality Certification	N/A	55 days (130 days)
☐	CAMA Permit for MAJOR development	$250.00 fee must accompany application	60 days (130 days)
☐	CAMA Permit for MINOR development	$50.00 fee must accompany application	22 days (25 days)
☐	Several geodetic monuments are located in or near the project area. If any monument needs to be moved or destroyed, please notify: N.C. Geodetic Survey, Box 27687 Raleigh, N.C. 27611		
☐	Abandonment of any wells, if required must be in accordance with Title 15A. Subchapter 2C.0100.		
☐	Notification of the proper regional office is requested if "orphan" underground storage tanks (USTS) are discovered during any excavation operation.		
☐	Compliance with 15A NCAC 2H 1000 (Coastal Stormwater Rules) is required.		45 days (N/A)
*	Other comments (attach additional pages as necessary, being certain to cite comment authority)		

REGIONAL OFFICES

Questions regarding these permits should be addressed to the Regional Office marked below.

☐ **Asheville Regional Office**
59 Woodfin Place
Asheville, N.C. 28801
(828) 251-6208

☐ **Mooresville Regional Office**
919 North Main Street
Mooresville, N.C. 28115
(704) 663-1699

☐ **Wilmington Regional Office**
127 Cardinal Drive Extension
Wilmington, N.C. 28405
(910) 395-3900

☒ **Fayetteville Regional Office**
225 Green Street, Suite 714
Fayetteville, N.C. 28301
(910) 486-1541

☐ **Raleigh Regional Office**
3800 Barrett Drive, P.O. Box 27687
Raleigh, N.C. 27611
(919) 571-4700

☐ **Winston-Salem Regional Office**
585 Waughtown Street
Winston-Salem, N.C. 27107
(336) 771-4600

☐ **Washington Regional Office**
943 Washington Square Mall
Washington, N.C. 27889
(252) 946-6481

James M. Waller, Chairman
Howard L. Warren, Chief Executive Officer

J.M. WALLER ASSOCIATES
MANAGING THE VISION

Charles W. Scott, R.A., President
James W. Emery, Jr., Chief Financial Officer

17 May 2004

Ms. Chrys Baggett
N.C. Dept. of Administration
1301 Mail Service Center
Raleigh, NC 27699-1301

Re: State Application Number: 04-E-0000-0130
Environmental Assessment, Proposed Construction of an Air Traffic Control Tower and Fire Station - Pope Air Force Base, North Carolina

Dear Ms. Chrys Baggett,

As per your conversation with Vickie G. Davis held on May 13, 2004, it was decided that Pope AFB will not be required to resend new copies of the Draft EA for a new Air Traffic Control Tower and Fire Station. Twenty original Drafts were sent to the State Clearing house for regulatory review on November 11, 2003, and were received on November 13, 2003. The State Clearing House was from November 11, 2003 through December 18, 2003 and no substantive comments were received.

Since then, the preferred alternative has been changed and the document modified to accommodate the change. Previously, the preferred alternative was as follows: Construct a new Air Traffic Control Tower and Fire Station near existing facilities. The updated preferred alternative is as follows: Construct separate Air Traffic Control Tower and Fire Station facilities. The new document calls for the Fire Station to be constructed in the location that was previously decided upon in the first Draft. The Air Traffic Control Tower location has been moved to a location near the proposed Fire Station location. The two facilities will be located within the same block and both will be constructed on already developed land. The new proposed location of the Air Traffic Control Tower has not resulted in any change in the environmental impacts associated with implementing the proposed action.

If you have any questions please call me at 757-223-5840 or e-mail thomas.stierhoff@jmwaller.com.

Sincerely,

Thomas Stierhoff

Tom Stierhoff
J.M. Waller Associates, Inc.

CC: Ms. Vickie Davis, 43d CES/CEVP