

**FINDING OF NO SIGNIFICANT IMPACT  
ENVIRONMENTAL ASSESSMENT  
U.S. ARMY INTELLIGENCE AND SECURITY COMMAND RELOCATABLE  
SENSITIVE COMPARTMENTED INFORMATION FACILITY  
Fort George G. Meade, Anne Arundel County, Maryland**

1. Name of Action: U.S. Army Intelligence and Security Command (INSCOM) relocatable Sensitive Compartmented Information Facility at Fort George G. Meade, Maryland.
2. Description of Proposed Action: Site preparation work, supporting construction, and assembly of relocatable buildings for the Army Cyber Command Sensitive Compartmented Information Facility (SCIF) and associated infrastructure and parking on a 15 acre parcel at Fort Meade to accommodate approximately 342 workers in support of the Army Cyber Brigade. The SCIF relocatable building will be approximately 57,000 square feet (sf) in size. The temporary facilities will house the administrative and operational functions of INSCOM Cyber Brigade. The Proposed Action would ensure a working environment that satisfies current standards and safety requirements and would enhance the security. Of the 342 workers, 125 are already at Fort Meade with an additional 217 expected to report in October 2011.
3. Alternatives Evaluated: An environmental assessment (EA) was prepared to evaluate the potential environmental, cultural, transportation, and socioeconomic effects associated with the Proposed Action. A No-Action Alternative was also included in the EA which reflects the status quo and serves as a benchmark against which federal actions can be evaluated. For this analysis, no relocatable building would be constructed in the foreseeable future. Selection of the No-Action Alternative would result in unsuitable facilities and inadequate space for the Cyber Brigade to support their missions. Additional alternatives to the Proposed Action included utilizing other Federal facilities located on Fort Meade, leasing commercial facilities located off of Fort Meade, and renovation of current facilities on Fort Meade. Additionally, two other sites at Fort Meade were considered for placement for the Cyber Brigade relocatable SCIF. None of these alternatives were considered feasible and all were dismissed from further evaluation.
4. Anticipated Impacts: The Proposed Action is expected to disturb approximately 15 acres of previously disturbed land, which is now composed of mature trees, street landscape trees, open grass, and shrubs. Short-term impacts to air, and noise could be expected during construction of the projects. Short-term and long-term impacts to land use, soils, vegetation, wildlife habitat, aesthetics, and traffic would be expected. Minor short-term and long-term beneficial impacts to socioeconomics are expected from this work. All existing trees that are structurally sound will be preserved to the maximum extent practical. Project development will incorporate and comply with the requirements of the Forest Conservation Act. Landscape plantings will be made contiguous to groups of existing trees, to include street trees, where possible. Stormwater will be treated on site and will discharge in a manner to retain hydrologic regime for downstream tributary. An Erosion and Sediment Control Plan and a Stormwater Management Plan will be designed and approved by MDE prior to construction, which would include measures to protect surface water resources.
5. I have reviewed the EA, and find that there will be no significant impacts to the natural

environment, to cultural resources, or to the human environment resulting from the Proposed Action to construct a relocatable Sensitive Compartmented Information Facility with associated infrastructure and parking. A public review and comment period for the EA and draft Finding of No Significant Impact was conducted 17 August 2011 to 31 August 2011. No comments or adverse responses were received. Based upon the aforementioned, an Environmental Impact Statement (EIS) is not required.

Date: 1 Sep 11

  
EDWARD C. ROTHSTEIN  
Colonel, Military Intelligence  
Commanding

# FINAL ENVIRONMENTAL ASSESSMENT

## FORT GEORGE G. MEADE U.S. ARMY INTELLIGENCE AND SECURITY COMMAND TEMPORARY SENSITIVE COMPARTMENTED INFORMATION FACILITY

Fort George G. Meade  
Anne Arundel County, Maryland

September 2011





**FINAL ENVIRONMENTAL ASSESSMENT**  
**U.S. ARMY INTELLIGENCE AND SECURITY COMMAND**  
**TEMPORARY SENSITIVE COMPARTMENTED**  
**INFORMATION FACILITY**  
**FORT GEORGE G. MEADE**



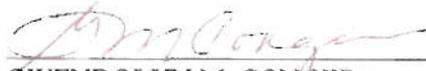
Fort George Meade  
Anne Arundel County, Maryland  
20755-5155

**September 2011**



FINAL ENVIRONMENTAL ASSESSMENT  
U.S. ARMY INTELLIGENCE AND SECURITY COMMAND TEMPORARY  
SENSITIVE COMPARTMENTED INFORMATION FACILITY  
FORT GEORGE G. MEADE, MARYLAND

Reviewed and  
Recommended for Approval by:



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GWENDOLYN M. CONGER  
Chief, Engineering Division  
G4 Headquarters, U.S. Army Intelligence and Security Command

Approved by:



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MICHAEL P. BUTLER  
Chief, Environmental Division  
Directorate of Public Works

Approved by:



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EDWARD C. ROTHSTEIN  
Colonel, Military Intelligence  
Commanding



## EXECUTIVE SUMMARY

### INTRODUCTION

Pursuant to the National Environmental Policy Act (NEPA) of 1969, as amended, an Environmental Assessment (EA) has been prepared to evaluate potential environmental, cultural, transportation, and socioeconomic effects associated with the proposed construction of relocatable buildings at Fort George G. Meade (hereinafter “Fort Meade”).

The Proposed Action includes the construction of two relocatable buildings and associated parking for the U.S. Army Intelligence and Security Command (INSCOM) Cyber Brigade and 902<sup>nd</sup> Military Intelligence Group. The Proposed Action would meet the immediate needs to provide space for the Cyber Brigade scheduled for October 2011.

### BACKGROUND AND SETTING

Fort Meade, Maryland is a permanent U.S. Army installation located about midway between Baltimore, Maryland, and Washington, DC, encompassing about 5,067 acres in Anne Arundel County, Maryland. Fort Meade supports over 80 tenant organizations from all military services, and several federal agencies.

The new force structure INSCOM Cyber Brigade results in the reorganization of existing and new Computer Network Operations/Network Warfare (CNO/NW) resources under a single structure. The 704<sup>th</sup> Military Intelligence Brigade located at Fort Meade conducts Army CNO/NW and is the primary recipient of growth. The 902<sup>nd</sup> Military Intelligence Group will become subordinate to the brigade and currently operates from several small operational and administrative suites (Buildings 4452, 4555, 4587, 8551, 8543, 8544 and 4230). Consolidating the operational and management functions of the Cyber Brigade and the 902<sup>nd</sup> in one primary location would make use of existing network capabilities and capacities as well as take into consideration security and force protection concerns. With the activation of the INSCOM Subordinate Command, Cyber Brigade scheduled to occur in the fall of 2011, personnel assignments will begin after the force structure approval even in the absence of adequate facilities. Personnel will transfer to the newly activated unit from existing units and additional personnel will report to the Cyber Brigade starting in FY 2012.

### PROPOSED ACTION/PREFERED ALTERNATIVE

INSCOM proposes to construct two relocatable Sensitive Compartmented Information Facilities (SCIF), parking, and associated infrastructure at Fort Meade to house administrative functions of Cyber Brigade and the 902<sup>nd</sup> Military Intelligence Group until permanent facilities are constructed in FY 2014 pending funding. The Proposed Action includes the construction of two relocatable buildings approximately 60,000 square feet (sf) and 80,000 sf in size and associated parking for the INSCOM Cyber Brigade and 902<sup>nd</sup> Military Intelligence Group. The proposed site is an open area of approximately 15 acres in the Southeastern portion of Fort Meade. The majority of this was previously disturbed.

The Proposed Action would provide the Cyber Brigade and 902<sup>nd</sup> with space to support combined staff of approximately 668 personnel. Approximately 326 staff members of the 902<sup>nd</sup> and 125 staff members of the INSCOM Cyber Brigade are already stationed at Fort Meade. The number of new staff reporting to Fort Meade is 217. The Proposed Action would ensure a working environment that satisfies current standards and safety requirements and would enhance the security for these agencies.

## **NO-ACTION ALTERNATIVE**

The No-Action alternative would be to forego the proposed construction of the temporary facilities and continue to house the Cyber Brigade and the 902<sup>nd</sup> in their current facilities. The current facilities do not contain adequate space or meet the robust infrastructure and communication needs of the units.

## **OTHER ALTERNATIVES**

Several other alternatives were considered for providing adequate facilities for the Cyber Brigade. These alternatives included using other Federal facilities located on Fort Meade, leasing commercial facilities located off of Fort Meade, and renovation of current facilities on Fort Meade. Additionally, two other sites at Fort Meade were considered for placement for the Cyber Brigade relocatable SCIFs. All these alternatives were dismissed from further evaluation.

## **SUMMARY**

The Proposed Action is expected to disturb approximately 15 acres of previously disturbed land, which is now composed of mature trees, street landscape trees, open grass, and shrubs. Short-term impacts to air, and noise could be expected during construction of the projects. Short-term and long-term impacts to land use, soils, vegetation, wildlife habitat, aesthetics, and traffic would be expected. Minor short-term and long-term beneficial impacts to socioeconomics are expected from this work.

Tables ES-1 and ES-2 summarize the analysis performed in the EA. Table ES-1 presents a list of Federal environmental statutes and executive orders that are applicable to the proposed project, as well as the status of compliance to each. Table ES-2 summarizes the potential consequences that the Proposed Action and No Action Alternative would have on environmental resources.

## **CONCLUSION**

Based on the evaluation of environmental consequences accomplished by this EA, a Finding of No Significant Impacts (FNSI) has been prepared.

**TABLE ES-1: COMPLIANCE WITH FEDERAL ENVIRONMENTAL STATUTES AND EXECUTIVE ORDERS**

Acts	Compliance
Clean Air Act, as amended (Public Law 88-206)	FULL
Clean Water Act, as amended (Public Law 95-217)	FULL
Coastal Zone Management Act (Public Law 92-583)	FULL
Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended by the Superfund Amendments and Reauthorization Act of 1986 (42 U.S.C. §9601 et seq.)	FULL
Endangered Species Act of 1973, as amended (Public Law 93-205)	FULL
Farmland Protection Policy Act (Public Law 97-98)	FULL
Fish and Wildlife Coordination Act, as amended (16 United States Code [U.S.C.] 661, et seq.)	FULL
National Environmental Policy Act of 1969 (Public Law 91-190)	FULL
National Historic Preservation Act of 1966, as amended (Public Law 89-665)	FULL
Noise Control Act of 1972, as amended (Public Law 92-574)	FULL
Resource Conservation and Recovery Act (Public Law 94-580)	FULL
Safe Drinking Water Act, as amended (Public Law 93-523)	FULL
Solid Waste Disposal Act of 1965, as amended (Public Law 89-272, Title II)	FULL
Toxic Substances Control Act of 1976 (Public Law 94-469)	FULL
Watershed Protection and Flood Prevention Act of 1954 (16 U.S.C. §1101, et seq.)	FULL
Wetlands Conservation Act (Public Law 101-233)	FULL
Wild and Scenic Rivers Act (Public Law 90-542, as amended)	FULL
Sikes Act, Energy Policy Act of 2005,	FULL
Archaeological Resources Protection Act	FULL
<b>Executive Orders</b>	
Floodplain Management (Executive Order 11988)	FULL
Protection of Wetlands (Executive Order 11990)	FULL
Environmental Justice in Minority Populations and Low-Income Populations (Executive Order 12898)	FULL
Federal Compliance with Pollution Control Standards (Executive Order 12088)	FULL
Protection of Children from Environmental Health Risks and Safety Risks (Executive Order 13045)	FULL

Consultation and Coordination with Indian Tribal Governments (Executive Order 13175)	FULL
Responsibilities of Federal Agencies to Protect Migratory Birds	FULL
Strengthening Federal Environmental, Energy, and Transportation Management	FULL

<b>TABLE ES-2 SUMMARY OF POTENTIAL INDIVIDUAL AND CUMULATIVE EFFECTS ON ENVIRONMENTAL RESOURCES</b>		
	<b>Environmental Consequences</b>	
<b>Resource Area</b>	<b>Proposed Action</b>	<b>No-Action</b>
Land Use	Short-term and Long-term Minor Adverse Impacts	No Impacts
Soils	Short-term and Long-term Minor Adverse Impacts	No Impacts
Prime and Unique Farmland	No Impacts	No Impacts
Topography and Geology	No Impacts	No Impacts
Air Quality	Short-term and Long-term Minor Adverse Impacts	No Impacts
<b>Water Resources</b>		
Surface Water	No Impacts	No Impacts
Floodplains	No Impacts	No Impacts
Groundwater	No Impacts	No Impacts
Coastal Zone	No Impacts	No Impacts
<b>Biological Resources</b>		
Wetlands	No Impacts	No Impacts
Vegetation	Short-term and Long-term Minor Adverse Impacts	No Impacts
Wildlife Resources	Short-term and Long-term Minor Adverse Impacts	No Impacts
Rare, Threatened, or Endangered Species	No Impacts	No Impacts
Aquatic Habitat	No Impacts	No Impacts
Wild and Scenic Rivers	No Impacts	No Impacts
Cultural Resources	No Impacts	No Impacts
Hazardous, Toxic, and Radioactive Substances	No Impacts	No Impacts
<b>Infrastructure and Utilities</b>		
Traffic, Roadways, and Transportation Systems	Short Term and Long-Term Minor Adverse Impacts	No Impacts
Potable Water	No Impacts	No Impacts
Sanitary Sewer/Wastewater	No Impacts	No Impacts
Power	No Impacts	No Impacts
Socioeconomic	Short Term and Long-Term Minor Beneficial Impacts	No Impacts
Noise	Short-term Minor Adverse Impacts	No Impacts
Visual and Aesthetic Value	Short Term and Long-Term Minor Adverse Impacts	No Impacts
Environmental Justice/Protection of Children	No Impacts	No Impacts
Cumulative Impacts	No Impacts	No Impacts

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## **1.0 PURPOSE, NEED, AND SCOPE**

### **1.1 INTRODUCTION**

The United States (U.S.) Army Intelligence and Security Command (INSCOM) proposes to construct temporary Sensitive Compartmented Information Facilities (SCIF) at Fort George G. Meade to provide operational and administrative space for the INSCOM Cyber Brigade and the 902<sup>nd</sup> Military Intelligence Group. The INSCOM Cyber Brigade concept plan was developed in the Force Management Review (FMR) process and approved on 9 December 2010. The FMR Process is the Army level review of concept plans and AR5-10 submittals that determines force requirements and alternative means of resourcing requirements. It allocates resources and assesses their utilization to accomplish Army Unit functions and missions. To accomplish Army missions and functions within resource constraints, force management encompasses all processes associated with the progression from requirements determination through execution of time-phased programs and structures. It involves rank ordering of requirements and application of resources. The INSCOM Cyber Brigade Force Management Review was approved on 16 December 2010, the Review that impacted the Computer Network Operations/Network Warfare (CNO/NW) resources was approved in 2009.

The purpose of the Cyber Brigade is to effectively combine the Department of the Army's capability to meet Cyber Attack, Cyber Exploitation, and Dynamic Cyber Defense mission requirements under a single structure. In order to meet current and projected mission requirements, INSCOM Cyber Brigade has an effective activation date of 1 October 2011.

Fort George G. Meade, Maryland (hereinafter "Fort Meade") is a permanent U.S. Army installation located about midway between Baltimore, Maryland, and Washington, District of Columbia (DC), encompassing about 5,067 acres in Anne Arundel County, Maryland (Figure A-1 in Appendix A). Fort Meade supports over 80 tenant organizations from all military services, and several federal agencies. The major tenants include the National Security Agency (NSA), the Defense Information School (DINFOS), the 704<sup>th</sup> Military Intelligence Brigade, 902<sup>nd</sup> Military Intelligence Group, the U.S. Environmental Protection Agency (EPA) Science Center, Asymmetric Warfare Group (AWG), Defense Medial Agency, Department Adjudication Activities, Defense Information System Agency (DISA), and 1<sup>st</sup> Army Division East.

### **1.2 BACKGROUND**

The new force structure for INSCOM's Cyber Brigade results in the reorganization of existing and new Computer Network Operations/Network Warfare (CNO/NW) resources under a single structure. The 704<sup>th</sup> Military Intelligence Brigade located at Fort Meade conducts Army CNO/NW and is the primary recipient of growth. The 902<sup>nd</sup> Military Intelligence Group will become subordinate to the brigade and currently operates from several small operational and administrative suites in Buildings 4452, 4555, 4587, 8551, 8543, 8544 and 4230). Consolidating the operational and management functions of the Cyber Brigade and the 902<sup>nd</sup> in one primary location would make use of existing network capabilities and capacities as well as take into consideration security and force protection concerns. Personnel assignments began after the force structure approval, even in the absence of adequate facilities, and Cyber Brigade activation is scheduled for the fall of 2011. Also, the Cyber Brigade has robust infrastructure and

communications requirements in order to carry out their mission. These include up to three times the power and cooling requirements to fully support the required information systems, communication infrastructure, and security systems. These requirements are not being met in the current facilities.

The combination of significant personnel growth, increased operational requirements, and lack of available facilities in the near term will result in a critical need for a brigade facility in order to meet mission objectives. Permanent facilities are planned for construction in 2014, but are currently unfunded. In order to provide adequate facilities by the fall of 2011, two relocatable buildings are proposed to house the Cyber Brigade and the 902<sup>nd</sup> personnel.

### **1.3 PURPOSE AND NEED FOR THE PROPOSED ACTION**

The 451 INSCOM Cyber Brigade and 902<sup>nd</sup> personnel already located at Fort Meade are located in several facilities. The units have compressed work stations and perform shift work to make use of existing space. Life, health, and safety violations are an issue due to exceeding ideal occupancy standards.

The current facilities are unsuitable for the accomplishment of the existing mission. The unit suffers from inefficient space utilization caused by existing building configuration. Existing facilities are in poor condition, creating additional cost associated with communications infrastructure, security systems, command and control duplications, and low morale. Existing building utilities do not meet current standards and safety requirements. Current facilities do not meet building construction, fire protection or electrical code requirements. Age of the existing facilities and systems make maintenance costly. Capacity of existing heating, ventilation, and air conditioning system and utility systems has been exceeded. Over 50 percent of its operational cyber warfare forces will be without adequate mission space upon unit activation in October 2011. These conditions result in an immediate need for additional facilities.

### **1.4 SCOPE OF THE ENVIRONMENTAL ASSESSMENT**

This Environmental Assessment (EA) was prepared in accordance with the National Environmental Policy Act (NEPA), the Council on Environmental Quality (CEQ) regulations (40 Code of Federal Regulations [CFR] Parts 1500 – 1508), Army Regulation (AR) 200-1 (*Environmental Protection and Enhancement*), AR 200-2, *Environmental Analysis of Army Actions* and 32 CFR Part 651 (*Environmental Analysis of Army Actions*) to assess the environmental consequences of the construction of two temporary facilities at Fort Meade.

This EA identifies, documents, and evaluates environmental effects of the proposed construction of temporary SCIF at Fort Meade, Maryland. Environmental effects would include those related to construction and operation of the Proposed Action. The Proposed Action is described in Section 2.0, and alternatives, including the no action alternative, are described in Section 3.0. Conditions existing as of 2011, considered to be the “baseline” conditions, are described in Section 4.0, Affected Environment and Environmental Consequences. The expected effects of the Proposed Action are described in Section 5.0. Section 5.0 also addresses the potential for cumulative effects, and mitigation measures are identified where appropriate. Findings and conclusions are presented in Section 6.0.

The EA focuses on impacts likely to occur within the areas of potential effect. The document analyzes direct effects (those resulting from the alternatives and occurring at the same time and place) and indirect effects (those distant or occurring at a future date). The potential for cumulative impacts as defined by 40 CFR 1508.7 is also addressed. In addressing environmental considerations, Fort Meade is guided by relevant statutes (and their implementing state and federal regulations) and Executive Orders (EOs) that establish standards and provide guidance on environmental and natural resources management and planning.

## **1.5 OTHER RELATED NEPA DOCUMENTATION**

It is anticipated that the permanent facilities to be used by the Cyber Brigade will be located within Site M at Fort Meade. An Environmental Impact Statement (EIS) for Addressing Campus Development at Fort George G. Meade, Maryland covers the environmental impacts associated with the construction of Site M. This document was made available for public comment in August 2010. The permanent facilities are proposed for construction in Fiscal Year 2014 (FY14).

An EIS addressing the impacts of the Base Realignment and Closure (BRAC) at Fort Meade was finalized in 2007.

## **1.6 PUBLIC INVOLVEMENT**

Coordination with the U.S. Fish and Wildlife Service (USFWS) and the Maryland Department of Natural Resources (MDNR) was initiated for the Proposed Action in May 2011. In addition, Public Notice was released in May 2011 to appropriate local, state, and federal agencies. Copies of coordination letters, the Public Notice and mailing list, as well as public/agency responses are located in Appendix B – Agency Coordination.

Public participation opportunities with respect to this EA and decision making on the Proposed Action are guided by 32 CFR Part 651. The EA was made available to the public for 15 days, from 17 August 2011 to 31 August 2011, along with a draft Finding of No Significant Impact (FNSI). At the end of the 15-day public review period, no comments or adverse responses were received on the Proposed Action, the EA, or draft FNSI. As such, the Army will execute the FNSI and proceed with implementation of the Proposed Action. The proposed action is not expected to result in any significant impacts, therefore an environmental impact statement will not be prepared for the proposed action.

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## 2.0 PROPOSED ACTION

The Proposed Action is the construction of two relocatable buildings and associated infrastructure and parking to accommodate approximately 668 workers within an area generally bounded by 6<sup>th</sup> Street to the north, 4<sup>th</sup> Street to the south, Chamberlin Avenue to the east and Chisholm Avenue to the west. The location is shown in Figure A-3. Most of these workers, approximately 451, are already located at Fort Meade as a result of the approved action to develop the new force structure, INSCOM Cyber Brigade. The proposed action for permanently stationing these personnel at Fort Meade is going to be addressed under separate NEPA documentation. This EA will address the immediate need to construct temporary facilities to house administrative and operational functions of INSCOM Cyber Brigade and the 902<sup>nd</sup>. As stated in Chapter 1.0, the existing personnel at Fort Meade are located in several facilities which results in decreased operational efficiency. In addition, the existing facilities do not meet the robust infrastructure and communication requirements of the Cyber Brigade functions. Table 2-1 shows the existing and incoming personnel that would be assigned to the new temporary SCIF facilities by the fall of 2011.

<b>Table 2-1: SCIF Staff Assignments</b>			
<b>Unit</b>	<b>Number of Staff to be Assigned to SCIF</b>	<b>Number of Staff Already Stationed at Fort Meade</b>	<b>Number of Incoming Staff (net change)</b>
902 <sup>nd</sup>	326	326	0
INSCOM Cyber Brigade	342	125	+217
<b>Total</b>	<b>668</b>	<b>451</b>	<b>+217</b>

Construction would be accomplished in two phases. Phase I would consist of the construction of a 57,120 square feet (sf) two-story INSCOM Cyber Brigade relocatable SCIF. Parking spaces would be provided contiguous with the INSCOM Cyber SCIF during Phase 1. The parking areas would be constructed of pervious pavement (turf pavers). No asphalt would be used. If feasible, the use of structural soil that can be compacted for pavement while permitting root growth would be incorporated into the design. The Phase I building would include office space for 342 personnel, computer space, and restrooms. Utilities support for the facility would include natural gas, electric, water, and sanitary sewer service. The footprint for the structure would be approximately 30,000 sf.

Phase II would consist of the construction of a 80,000 SF two-story 902<sup>nd</sup> relocatable SCIF. The temporary structure would include office space for 326 personnel, computer space, and restrooms. Utilities support for the facility would include natural gas, electric, water, and sanitary sewer service. The footprint for this structure would be approximately 40,000 sf. An additional approximate 1.5-acre parking area located across Chamberlin Avenue would also be provided in Phase II. Again, only pervious pavement or similar would be used.

All utility systems and services would be laid out and designed in accordance with applicable codes, requirements, and guidelines. Utility lines in the areas are expected to be adequate to serve the facility.

The relocatable structures would have an anticipated life cycle of five years. These structures would be developed offsite and arrive at the construction area as individual wrapped units, ready for installation. Prior to their arrival, cement footings would be placed in the ground to provide structural support to the facility. Once the permanent facilities are constructed (anticipated in FY14 or later) the temporary SCIF would be disassembled and disposed of through proper Army disposition channels.

The proposed site for the two facilities and parking areas is an open parcel bounded by Chisholm Avenue, 6<sup>th</sup> Street, Chamberlin Avenue, and 4<sup>th</sup> Street and directly across Chamberlin Ave (Figure A-2 in Appendix A). The parcels consist of minor shrubs and grasses. The proposed general layout of the two structures and the parking areas are shown in Figure A-3 of Appendix A. The facilities and parking would be constructed within approximately 11 acres of the southern half of the parcel. Constructing in this location would avoid the wetland and small watercourse that transects the northern half of the parcel. An additional four acres may be disturbed during construction for the staging of equipment. The staging area would be graded and seeded at the completion of construction activity.

### **3.0 ALTERNATIVES CONSIDERED**

#### **3.1 INTRODUCTION**

This chapter describes the alternatives and summarizes the environmental impacts. In accordance with CEQ guidance in 40 CFR 1502.14, the purpose of this chapter is to sharply define the differences between the alternatives.

#### **3.2 NO-ACTION ALTERNATIVE**

NEPA documents refer to the continuation of the present course of action without the implementation of or in the absence of the proposed action, as the “No Action Alternative.” Inclusion of the No-Action alternative is the baseline against which Federal actions are evaluated, and is prescribed by the CEQ regulations and AR 200-2.

Under the No-Action alternative, no new facilities would be constructed for the Cyber Brigade and current facilities would continue to be utilized. The current facilities are unsuitable for accomplishing the current mission and do not have adequate space to support all of the incoming personnel (anticipated to arrive by 1 October 2011). The unit suffers from inefficient space utilization caused by the existing building configuration. The existing facilities are in poor condition and do not meet current standards and safety requirements, including building construction, fire protection, and electrical codes.

Implementing the No-Action alternative would not satisfy the purpose and need and would also result in violation of Occupational Safety and Health Administration, National Fire Protection Association, and other building codes.

#### **3.3 OTHER ALTERNATIVES CONSIDERED**

Several other alternatives were considered for providing adequate facilities for the Cyber Brigade, including using other Federal facilities on Fort Meade, leasing commercial facilities off Fort Meade, and renovation of current facilities on Fort Meade. Additionally, two other sites at Fort Meade were considered for placement for the Cyber Brigade relocatable SCIFs. All these were dismissed from further evaluation as discussed below.

Currently, no Federal facilities exist at Fort Meade or nearby installations to meet the objective of providing adequate contiguous working space for the Cyber Brigade and subordinate units. Due to the nature of the brigade’s mission, the mission space must be contiguous and cannot be separated among other buildings or other installations.

Due to security requirements and the highly classified nature of the mission, commercial facilities are not an option nor are they available. No commercial facility can support the unique SCIF requirements, extensive secure communications infrastructure, and special operational requirements. Off-post leasing is not a viable alternative.

Renovation of the current facilities is not viable, as the space would remain inadequate to meet the mission requirements.

Additionally, two other sites at Fort Meade were considered for placement for the Cyber Brigade relocatable SCIFs. The 57,000sf INSCOM Cyber relocatable was considered for placement along Griffin Avenue and Simonds Street. Additional parking would have been located South of Simonds Street. The 80,000sf 902<sup>nd</sup> relocatable was considered for placement in the parcel bordered by Mapes Road, Cooper, Avenue, Bundy Street and Griffin Avenue. Additional parking would have been located west of Griffin Avenue. These parcels were eliminated from consideration mainly due to higher existing traffic density than the preferred alternative site, competition for limited parking within the area, and potential impacts to the viewshed of the historic district. Other considerations were unknown environmental and utility challenges.

No other open land sites at Fort Meade were identified by INSCOM or by Fort Meade that could be used for the placement of the relocatable SCIF facilities proposed.

### **3.4 PREFERRED ALTERNATIVE**

The preferred alternative is the Proposed Action as described in Section 2.0 of this document. This alternative would construct two new temporary buildings in two phases. Phase I would see the construction of an approximately 57,000 sf two-story building and associated parking and site infrastructure to provide adequate space, building services, and utilities to support the intelligence operations Phase II would add an approximately 80,000 sf two-story facility and additional parking and site infrastructure to provide adequate space, building services, and utilities to support the intelligence operations. The number of staff occupying these facilities is 668 and of that number, 451 will have already been stationed at Fort Meade.

## 4.0 AFFECTED ENVIRONMENT

This section describes the affected environment or existing conditions of the natural, infrastructure, and community resources potentially impacted by the Proposed Action. The project area is defined as Fort Meade and the immediately surrounding jurisdictions. These descriptions serve as the baseline against which the potential effects of the Proposed Action and the No-Action Alternative are evaluated.

Each environmental, cultural, and social resource category typically considered in an EA was reviewed for its applicability to the project to be funded under the Proposed Action. Through this analysis, which is summarized in Table 4-1, resource categories clearly not applicable to the alternatives were screened from further evaluation. Only those resources potentially affected by the Proposed Action are discussed further in this section and in Section 5.0, Environmental Effects.

<b>Table 4-1: Baseline Conditions Screening Matrix</b>		
<b>Resource Category</b>	<b>Potentially Affected by Proposed Project?</b>	<b>Reason for Non-Applicability Determination</b>
Land Use	Yes	
Soils	Yes	
Prime and Unique Farmlands	No	Prime and Unique Farmland soils exist within Fort Meade, but not within the project area (NRCS, 2005). There would be no impact to this resource.
Geology and Topography	No	Fort Meade is in the Atlantic Coastal Plain Physiographic Province. Topography at the site is gently sloping. Proposed construction would not alter topography or geology at the site.
Air Quality	Yes	
Surface Water Resources (surface water, aquatic life)	No	Stormwater will be treated on site and will discharge in a manner to retain hydrologic regime for downstream tributary.
Floodplains	No	The Proposed Action is not located within a floodplain according to existing floodplain maps (USACE, 2008a).
Groundwater	No	Proposed construction would not occur at a depth to impact groundwater sources. The site is not a significant groundwater recharge area.
Wetlands	No	Wetlands delineations have been made near the proposed project area. Two potential wetlands were identified and shown in Figure A-5 (USACE, 2011). Wetlands are located approximately 350 feet away from the construction location, no work is proposed near this resource. No impacts expected to wetlands.
Coastal Zone	No	No impacts anticipated. However, this resource is discussed in Section 4.4 and 5.4.
Threatened and endangered species	No	There are no known occurrences of rare, threatened, or endangered species at the proposed site. Correspondence with USFWS concurred with this conclusion (Appendix C).

<b>Table 4-1: Baseline Conditions Screening Matrix</b>		
<b>Resource Category</b>	<b>Potentially Affected by Proposed Project?</b>	<b>Reason for Non-Applicability Determination</b>
Wild and Scenic Rivers	No	There are no wild and scenic rivers in or near Fort Meade (NPS, 2009)
Cultural Resources	No	The proposed location was investigated and documented in <i>Archeological Study of Fort Meade</i> (Goodwin, et al 1995: 239-252). The study determined that the area was the former location of temporary barracks constructed during World War I, which remained until the late 1990's. Ground disturbance was clearly observable in a majority of shovel tests excavated on this parcel, and the study concluded that there were no significant archeological remains in this portion of Fort Meade. Additionally, in a response dated 12 July 2011 to the Public Notice, the Maryland Historic Trust determined that this undertaking will have no adverse effect on historic properties.
Hazardous, Toxic, and Radioactive Substances	Yes	
Traffic and Roadways	Yes	
Infrastructure and Utilities	Yes	
Socioeconomics	Yes	
Noise	Yes	
Visual and Aesthetic Value	Yes	
Environmental Justice	No	While there are no impacts to Environmental Justice from this project, this topic is discussed in Sections 4.11 and 5.11.
Child Health and Safety	No	All construction would occur in areas where few or no children live or visit. Standard safety measures and precautions to protect all civilians at the site would be implemented during construction.

## 4.1 LAND USE

### 4.1.1 Regional Land Use

Fort Meade encompasses approximately 5,067 acres and is a permanent U.S. Army installation located in the northwest corner of Anne Arundel County, Maryland. The installation is located 17 miles southwest of downtown Baltimore, Maryland, and 24 miles northeast of Washington, DC. The city of Annapolis, which is both the Anne Arundel county seat and the Maryland state capital, is 14 miles southeast of the installation. The southeastern part of Howard County extends within two miles of Fort Meade. Figure A-1 in Appendix A depicts the regional location of Fort Meade.

The installation is predominately surrounded to the north, west, and east by residential areas, commercial centers, a mix of light industrial uses, and open space and undeveloped areas. Directly to the south of Fort Meade are the Tipton Airport and 12,750-acre Patuxent Research Refuge, part of USFWS's National Wildlife Refuge System. To the southwest of Fort Meade is the 800-acre parcel that houses the District of Columbia's New Beginnings Youth Development Center.

#### 4.1.2 Installation Land

Fort Meade is home to over 80 partner organizations from the Army, Navy, Air Force, Marines and Coast Guard, as well as several federal agencies such as the National Security Agency, the Department of Defense Information School, the US Environmental Protection Agency, the Defense Courier Service, and the Office of Personnel Management. The Post has administrative buildings, industrial areas in the form of motor pools and warehouses, and a significant number of family housing units which are currently being upgraded under the Residential Communities Initiative (RCI). The post has new modern unaccompanied personnel housing, recreational areas and a shopping complex with a main Post Exchange, commissary, bank, gas station, post office, golf course and bowling alley.

##### **Professional/Institutional**

This land use provides for non-tactical organizations including military schools, headquarters, major commands, and non-industrial Research, Development, Test & Evaluation. Currently, Fort Meade's administrative facilities are spread throughout a large part of the installation. These facilities can be grouped and analyzed in three separate zones. The first zone encompasses the existing 27-hole golf course and the troop barracks within the NSA. The second zone, south of Mapes Road along Highway 32, consists of several high profile administrative facilities. The third and final zone is located on the eastern edge of the installation along highway 175.

##### **Community**

The community land use encompasses a mix of facilities including religious, family support, personnel services, professional services, medical, community, housing, commercial and recreational services. This zone can be divided into two general areas, as well as several other small pockets spread throughout the installation. The first area is a mix of community buildings and services south of Mapes road, roughly between Zimborski and Griffin Avenue down to Rock Avenue. This includes facilities such as the DINFOS, the Department of Emergency Services, Club Meade, ITR/Arts and Crafts Center, Rock Avenue Pool, and the Gaffney Fitness Center. The second area includes the main commercial hub, located centrally within the installation, and several other community facilities spread out north and south along Ernie Pyle Street. The majority of commercial-base activities are concentrated between Mapes and Reece Road. This includes the PX, Commissary, PNC Bank, Child Care Center, Burger King, Service Station and Shoppette, Post Office, and Bowling Center.

##### **Residential**

This land use designates family housing and senior unaccompanied personnel housing. It may also include family services and other neighborhood services.

## **Industrial**

This land use is designated for production, maintenance, depot and other storage. Industrial land uses are located in the southern half of the Installation. Recently, a trend has evolved to consolidate the industrial functions along Rock Avenue corridor in the southernmost part of the Installation. Although this idea of consolidation was ideal, the location along Rock Avenue is highly visible due to the lack of buffering along Highway 32, which traverses the southern boundary of the installation. The Architect of the Capitol possesses a significant parcel along Rock Avenue. This zone is made up primarily of areas that support maintenance, storage and services. The site of the Proposed Action has been designated as industrial land since the 1920's.

## **Troop**

This land use is designated for operational facilities for Table of Organization and Equipment (TOE) units, Basic Combat Training (BCT) and One Station Unit Training (OSUT) complexes and for selected Initial Entry Training (IET) complexes.

## **Ranges and Training**

Currently, there are 126 acres of land designated for training on the southern-most tip of the installation across Route 32. This site, commonly referred to as Site S, serves as an area for detonation of suspicious packages and functions as a mission training area for bivouac operations and physical training for loaded backpacks. Also located on this parcel of land is the DINFOS Field Training Exercise Facility (FTX) on approximately 1.2 acres.

## **Natural Resource Land**

Although Natural Resource Land is not its own land use category, impacts to these lands should be taken into consideration in land use analysis and planning. Open space and land managed for natural resources is primarily located along the corridors of Franklin Branch and Midway Branch with several undeveloped parcels scattered across the installation, including wetlands, tributaries, old fields and successional growth areas. The site of the Proposed Action was previously developed and is currently managed as a reforestation and no-mow site where successional growth occurs. Invasive species have spread throughout the site of the Proposed Action.

## **Outdoor Recreation**

Like natural resource land, outdoor recreation is not its own land use category, it's location and impact should be taken into consideration in land use analysis and planning. There are several outdoor recreation options on Fort Meade. Burba Park is a beautiful park area centrally located on the southern half of the installation between Roberts and Llewellyn Avenue and Wilson Street. Picnics and other events are often held here. The park offers amenities such as picnic pavilions, a cottage, playground, walking paths, and the serene Burba Lake. The lake runs through Burba Park and offers opportunities for fishing. Camp Meade RV Park offers RV/Camper space, Camper cabins, and group tent camping. The RV Park is conveniently located just east of Burba Park, off Wilson Street. Beyond the RV Park, along Rock Avenue, is the Rock Avenue Pool. Several multi-use sports fields are located throughout the installation. The Courses Fort Meade Golf Course features 27 holes, practice facilities that include a spacious putting green and chipping area. Although the course is currently undergoing construction and development due to added BRAC facilities, it is planned to be relocated as two 18-hole courses.

The parcel proposed for construction of the Cyber Brigade and 902<sup>nd</sup> SCIF was the former location of temporary barracks constructed during World War I (Goodwin, 1995). The barracks remained until the late 1990's, however, and the area is currently designated as open space.

The land use in the surrounding area is primarily community, bordered by areas of professional/institutional uses (Fort Meade, 2010). The community land use encompasses a mix of facilities including religious, family support, personnel services, professional services, medical, community, housing, commercial, and recreational services. The professional/institutional land use provides for non-tactical organizations including military schools, headquarters, major commands, and non-industrial research, development, test, and evaluation.

## 4.2 SOILS

At Fort Meade there are 39 distinct soil mapping units (USACE, 2007). Most of the soils are part of the Evesboro complex. However, within the project area, the soil is mapped mainly as the Patapsco-Fort Mott-Urban land complex (PgB and PgD) with a small area of Russett-Christiana-Urban land complex (RkB) at the southeastern portion of the site (NRCS, 2011) (Figure A-4 in Appendix A).

The Patapsco-Fort Mott-Urban land complex is a somewhat excessively drained sandy coastal soil with depth to groundwater of 40 to 72 below the surface. The shrink-swell potential is low to moderately low making it suitable for urban and suburban development.

The Russett-Christiana-Urban land complex series is a moderately well drained sandy loam soil found usually associated with broad interstream divides, drainhead complexes, and swales. The seasonal high water can be found 20 to 40 below the surface. The series has a low to moderately low shrink-swell potential, making it suitable for development.

Given the drainage characteristics of both soil complexes and relatively flat terrain, erosion is of low probability. Both soils series make good building sites, but could be unstable on steep cuts or slopes where the material is not confined.

## 4.3 AIR QUALITY

Air quality in a given location is described by the concentration of various pollutants in the atmosphere. A region's air quality is influenced by many factors including the type and amount of pollutants emitted into the atmosphere, the size and topography of the air basin, and the prevailing meteorological conditions. The significance of the pollutant concentration is determined by comparing it to the federal and state ambient air quality standards. The Clean Air Act and its subsequent amendments (CAAA) established the National Ambient Air Quality Standards (NAAQS) for what are commonly referred to as "criteria" pollutants:

- ozone (O<sub>3</sub>);
- carbon monoxide (CO);
- nitrogen dioxide (NO<sub>2</sub>);
- sulfur dioxide (SO<sub>2</sub>);

- particulate matter (PM) less than 10 microns (PM<sub>10</sub>);
- PM less than 2.5 microns (PM<sub>2.5</sub>); and
- lead (Pb).

These standards represent the maximum allowable atmospheric concentrations that may occur while ensuring protection of public health and welfare, with a reasonable margin of safety. Short-term standards (1-, 8-, and 24-hour periods) are established for pollutants contributing to acute health effects. Long-term standards (quarterly and annual averages) are established for pollutants contributing to chronic health effects.

Areas that comply with NAAQS are designated as attainment areas. Areas that violate ambient air quality standards are designated as non-attainment areas. Areas that have improved air quality from non-attainment to attainment are designated as attainment/maintenance areas. Areas that lack monitoring data to demonstrate attainment or non-attainment status are designated as unclassified and are treated as attainment areas for regulatory purposes.

Fort Meade is located in the Metropolitan Baltimore Intrastate Air Quality Control Region (AQCR), which is defined in 40 CFR Part 81.28. This AQCR includes Anne Arundel County, Baltimore City, Baltimore County, Carroll County, Harford County, Howard County. The Proposed Action would specifically be located in the Anne Arundel County.

The Metropolitan Baltimore Intrastate AQCR is classified (40 CFR 81.321) as

- nonattainment for PM<sub>2.5</sub> (annual NAAQS);
- unclassifiable/attainment for PM<sub>2.5</sub> (24-hour NAAQS)
- better than national standards for SO<sub>2</sub>;
- unclassifiable/attainment for CO;
- Subpart2/moderate nonattainment for 8-hour O<sub>3</sub>;
- not designated for Pb or PM<sub>10</sub>; and
- cannot be classified or better than national standards for NO<sub>2</sub>.

The Maryland Department of the Environment (MDE) published the Baltimore Nonattainment Area PM<sub>2.5</sub> State Implementation Plan (SIP) and Base Year Inventory on March 24, 2008. This plan is currently awaiting approval by the EPA.

The Maryland Department of Environment published the Baltimore Nonattainment Area 8-hour Ozone SIP and Base Year Inventory on June 15, 2007. The complete Plan is currently awaiting approval of the EPA. An earlier SIP to address the now-revoked 1-hour O<sub>3</sub> standard was published in 1998 and subsequently approved by EPA.

#### 4.3.1 Regulatory Requirements – Hazardous Air Pollutants

In addition to the ambient air quality standards for criteria pollutants, national standards exist for hazardous air pollutants (HAPs). The National Emission Standards for Hazardous Air Pollutants regulates 188 HAPs based on available control technologies. Examples of HAPs include benzene, which is found in gasoline, and methylene chloride, which is used as a solvent and

paint stripper. Examples of other listed air toxics include dioxin, asbestos, toluene, and metals such as cadmium, mercury, chromium, and lead compounds. The majority of HAPs are Volatile Organic Compounds (VOCs).

#### 4.3.2 Regulatory Requirements – New Source Review and Prevention of Significant Deterioration

As part of the CAAA of 1977, Congress established the New Source Review (NSR) program. This program is designed to ensure that air quality is not significantly degraded from the addition of new and modified factories, industrial boilers, and power plants. In areas with unhealthy air, NSR assures that new emissions do not slow progress toward cleaner air. In areas with clean air, especially pristine areas like designated Class I areas, NSR assures that new emissions do not significantly worsen air quality.

The construction activities associated with the proposed action are temporary and would not be an issue with regard to Class I Prevention of Significant Deterioration (PSD) areas, nor would any new major sources (greater than 250 tons per year of any pollutant) be constructed as a result of the proposed action. Therefore, NSR and PSD requirements are not carried forward in the air quality analysis.

#### 4.3.3 General Conformity Rule

Federal actions proposed to occur in areas that are classified as nonattainment or maintenance by the EPA must demonstrate that emissions from the action will not exceed emission budgets established in a state's plan to attain or maintain the NAAQS. The General Conformity Rule establishes *de minimis* thresholds (*de minimis*) rates of emissions for federal actions with the potential to have significant air quality impacts. If a project/action located in an area designated as non-attainment or maintenance exceeds these *de minimis* levels thresholds, a general conformity analysis determination is required. Fort Meade is in an area designated as a moderate ozone (8-hour) non-attainment area and a nonattainment area for the annual PM<sub>2.5</sub> standard. Because ozone forms from other emissions, the analysis focuses on ozone precursors, which include volatile organic compounds (VOCs) and nitrogen oxides (NOX), as well as PM<sub>2.5</sub>. The region is in attainment for other criteria pollutants. Fort Meade is in an area that has been classified as nonattainment for ozone and for the annual PM<sub>2.5</sub> NAAQS.

### 4.4 SURFACE WATER RESOURCES

The most significant water resources on Fort Meade are Franklin Branch and Midway Branch as well as Burba Lake. Midway Branch flows for the entire length of Fort Meade from the northern end to the southern end, then confluences with the Little Patuxent River off-site. Franklin Branch also flows on base from the northern end, flows to Burba Lake and confluences with Midway Branch just downstream of Burba Lake. There are several unnamed tributaries to both Midway and Franklin Branch, as well as tributaries in the northwestern portion of Fort Meade that flow to the Little Patuxent River.

Fort Meade has several acres of wetland resources across the base, the majority of which are concentrated around Midway Branch, Franklin Branch and the unnamed tributaries. There are also several stormwater management features, particularly ponds, spread across Fort Meade.

There are no surface water features located on the site of the Proposed Action, but there are two potential wetlands located approximately 350 feet north of the proposed construction. These wetlands have been delineated but have not had a jurisdictional determination performed by the U.S. Army Corps of Engineers.

Stormwater that currently runs off the site of the Proposed Action, either drains to the northern end of the site and flows through the drainageway to a pipe that connects to an unnamed tributary to Franklin Branch or flows south through a pipe south to an unnamed tributary that flows into Burba Lake. From Burba Lake, Franklin Branch flows southwest to confluence with Midway Branch which flows off-site to the Little Patuxent River.

#### **4.5 COASTAL ZONE**

All of Fort Meade is located within the Maryland Coastal Zone Management (CZM) Program. Established by an Executive Order and approved in 1978, the CZM Program is a network of state laws and policies designated to protect coastal and marine resources. This includes the Chesapeake Bay, into which water from streams and their tributaries on Fort Meade flow. MDE regulates activities that are proposed within the CZM Program through federal consistency requirements. Under these requirements, applicants for federal and state licenses or permits (including Section 404 permits) to conduct an activity in the Coastal Management Zone must certify that their proposed activity will be conducted in a manner consistent with the State's CZM Program. For activities impacting wetlands, the Coastal Zone Consistency determination is issued as part of the State's wetland authorization. Anyone wishing to engage in an activity that would result in discharge of material into a protected water body must obtain a Section 404 permit. Additionally, under Section 401 of the Clean Water Act, an applicant for a permit to discharge dredged or fill material into wetlands is also required to obtain a certification from the State where the activity is located that the proposed discharge will not result in the violation of the state's water quality standards. If a state permit is not required for a project, MDE has the authority to "concur" or "object" to the federal consistency determination. The state's consistency decision is required prior to the federal consistency determination being issued. If the state objects, the federal agency may only proceed if federal law prohibits the agency from being fully consistent. Two small potential wetlands are located on the north end of the site (Figure A-5). However, these potential wetlands are approximately 350 feet away from any proposed activity.

#### **4.6 BIOLOGICAL RESOURCES**

##### **4.6.1 Vegetation**

Extensive development at Fort Meade has resulted in few areas retaining their native vegetation. Most areas with existing native vegetation are associated with stream corridors. Vegetative cover at Fort Meade consists of forest land, open land/meadow, and developed areas with mowed lawn. Fort Meade has inventoried much of the forested lands on post. Prior to BRAC and EUL actions

approximately 1,795 of Fort Meade's 5,067 acres were forest lands. The anticipated project sites for BRAC and EUL actions contained 529 acres (30%) of existing forestland (USACE, 2007).

Fort Meade complies with the Maryland Forest Conservation Act to the maximum extent practicable and manages its Forest Conservation Program in agreement with MDNR. Forested areas on the installation are designated as Forest Conservation Areas; however, no Forest Conservation areas are located near the proposed site.

Vegetation at the proposed site consists mainly of grass and shrubs characteristic of open disturbed areas. Street trees, mature trees left from previous developments and early successional trees also grow at this site in a designated reforestation/no mow zone. Common trees include Sycamore (*Platanus occidentalis*), Red Maple (*Acer rubrum*), and Sweet Gum (*Liquidambar styraciflua*). This site provides wildlife habitat. The site also has invasive species such as Callery pear and mile a minute weed.

#### 4.6.2 Wildlife Resources

Wildlife species found on Fort Meade are characteristic of those found in urban-suburban areas. White-tail deer and groundhogs occur on the installation. Other mammals include, gray squirrel (*Sciurus carolinensis*), raccoon (*Procyon lotor*), opossum (*Didelphis virginiana*), eastern chipmunk (*Tamias striatus*), field mouse and vole (*Microtus* sp.), mole (*Scalopus aquaticus*), and fox (*Vulpes vulpes*). Birds common to the installation are limited to those species that have adapted to an urban-suburban habitat, such as American robin (*Turdus migratorius*), catbird (*Dumetella carolinensis*), mockingbird (*Mimus polyglottos*), Carolina chickadee (*Poecile carolinensis*), Carolina wren (*Thryothorus ludovicianus*), house wren (*Troglodytes aedon*), downy woodpecker (*Picoides pubescens*), common flicker (*Colaptes auratus*), European starling (*Sturnus vulgaris*), house sparrow (*Passer domesticus*), rock dove (*Columba livia*), mourning dove (*Zenaida macroura*), and song sparrow (*Melospiza melodia*) (USACE, 2007).

The purple finch (*Carpodacus purpureus*) and hermit thrush (*Catharus guttatus*) are listed as Maryland State Species of Concern. However, both of these bird species prefer open coniferous and mixed forest habitat, which are not present on the site of the Proposed Action. There is minimal potential that they may feed at the site (NatureServe, 2011).

## 4.7 HAZARDOUS, TOXIC, AND RADIOACTIVE SUBSTANCES

Hazardous materials are used at Fort Meade. This includes small quantities of cleaners and printing supplies to larger quantities of fuels, oils, and chemicals. The hazardous waste generated is identified and classified, and handled in accordance with all applicable Federal and State hazardous waste regulations. Pesticides are stored at the golf course and at the entomology building, and used on Fort Meade in accordance with all applicable Federal, State, and Installation guidelines.

Asbestos may be found on buried steam lines at Fort Meade. Some of these lines may be present within the project area.

## 4.8 TRAFFIC AND ROADWAYS

The Fort Meade Base Realignment and Closure (BRAC) EIS (USACE, 2007) reviewed the impacts of the proposed additional personnel associated with the implementation of BRAC recommendations and Enhanced Use Lease (EUL) actions on the transportation systems in and around the entire Fort Meade facility. In depth analysis, including 24-hour volume, vehicle classification counts, and turning movement counts, were performed for the surrounding roadways, on-base roadways, and 13 intersections within the Fort Meade installation. The analysis was performed for the existing conditions, the effects associated with the No-Action Alternative, and with implementing the Preferred Alternative (BRAC plus EUL), and the BRAC-only alternative. The conclusion was that Fort Meade's BRAC-related growth was anticipated to have some impact on traffic beyond the immediate confines of the study area and direct region of influence.

Fort Meade is located in Anne Arundel County and is served by the surrounding roadway network:

- Baltimore-Washington Parkway (Maryland [MD] Route 295).
- MD Route 175 (Annapolis Road).
- MD Route 32.

The Fort Meade installation is accessible from the following five access gates:

- Gate 1: Mapes Road and MD Route 32
- Gate 2: Mapes Road and MD Route 175
- Gate 3: Rockenbach Road and MD Route 175
- Gate 6: Llewellyn Avenue and MD Route 175
- Gate 7: Reece Road and MD Route 175 (Demps Visitor Control Center)

According to the Fort Meade website (<http://www.ftmeade.army.mil>), only Gate 7 is open 24-hours, Gates 1 and 3 are open 5 am to 9 pm, 7 days a week, Gate 2 from 5 am to 7 pm, Monday through Friday, and Gate 6 is open 6-8 am and 4-6 pm, Monday through Friday.

According to the INSCOM U.S. Army Installation and Security command website ([www.inscom.army.mil](http://www.inscom.army.mil)), the 902<sup>nd</sup> Military Intelligence Group is currently located at 4553 Cooper Avenue on Fort Meade, between Mapes Road and Llewellyn Avenue. The proposed site is located approximately 950-feet south of Llewellyn Avenue, south of 6<sup>th</sup> Street and bordered by Chisholm Avenue on the west, 4<sup>th</sup> Street on the south, and Chamberlin Avenue on the east. An additional parking lot for the facility would be located across Chamberlin Avenue after construction of the 80,000 square foot SCIF.

The site of the Proposed Action is approximately 1-mile from the existing location and located centrally between Gate 1, Gate 2, and Gate 6. When the EIS was performed, Gate 6 was not active and therefore not included in the study. As per the Fort Meade website, the gate is only open during peak morning and afternoon hours to assist with the additional traffic, but since there is no supporting data for traffic flows entering or exiting the base, it is assumed that the

traffic generated by the Proposed Action would access the base via Gates 1, and Gate 2 with most access via Gate 6 during hours of peak traffic flow.

#### 4.8.1 Existing Traffic and Roadway Volumes

Existing traffic counts and Level of Service (LOS) designations were performed during the BRAC EIS for intersections along MD 175 and at 13 major intersections on the installation itself. Most of the internal roadways are two-lane roads, one lane in each direction, with signals or stop signs (two-way, three-way or four-way stops) at most intersections. The main on post roadways include Rockenbach Road, Mapes Road, Ernie Pyle Street, MacArthur Road, Cooper Avenue and Reece Road, among others (Figure A-6). The intersections (external and internal) studied during the BRAC EIS that are relevant to the facilities where Cyber Brigade and 902<sup>nd</sup> personnel currently exist and the site of the Proposed Action are:

- Gate 1 – Mapes Road and MD Route 32
- Gate 2 – Mapes Road and MD 175
- Mapes Road and Cooper Road (signalized)
- Mapes Road and Ernie Pyle Road (signalized)
- Llewellyn Avenue and Ernie Pyle Road (unsignalized)
- Llewellyn Avenue and Cooper Road (unsignalized)

Traffic conditions are typically evaluated using capacity and LOS as a method of evaluation. Six levels of service are defined for each type of facility for which analysis procedures are available. They are given letter designations, from A to F, with LOS-A representing the best operating conditions and LOS-F the worst. For most analysis purposes, LOS-D is usually considered to be the lowest level of service considered acceptable to the facility users. The AM and PM intersection LOS designations for the six relevant intersections are shown in Table 4-2.

<b>Table 4-2: 2006 Level of Service Intersection Criteria</b>		
<b>Intersection</b>	<b>LOS Rating</b>	
	<b>AM</b>	<b>PM</b>
Gate 1 – MD Route 32 and Mapes Road	A	A
Gate 2 – Mapes Road and MD 175	C	B
Mapes Road and Cooper Road (signalized)	A	A
Mapes Road and Ernie Pyle Road (signalized)	A	B
Llewellyn Avenue and Ernie Pyle Road (unsignalized)	C	C
Llewellyn Avenue and Cooper Road (unsignalized)	A	B

Currently 451 personnel commute to Fort Meade in support of the two units (INSCOM Cyber Brigade and the 902<sup>nd</sup>). The existing location is centrally located between Gate 1, Gate 2, and Gate 6. Traffic flow to the existing location is estimated to be primarily via Gate 6 during the peak rush hours, and then split evenly between Gates 1 and 2 when Gate 6 is non-operational, with on-base travel via Mapes Road to the Cooper Road intersection. From Gate 6, access would

be via Llewellyn Avenue and Chisholm Avenue. The BRAC EIS provides a breakdown of the Existing Traffic Characteristics Into and Out of the Installation without accounting for the addition of Gate 6. This table is shown in Table 4-3.

**Table 4-3: 2004 Existing Traffic Characteristics Into and Out of the Installation**

Fort Meade Cordon Count at all Gates								
Code Location	Inbound				Outbound			
	WAT (1)	DAT (2)	AM Peak	PM Peak	AWDT	AADT	AM Peak	PM Peak
1 BW Parkway- NSA	8,459	6,046	1,398	297	6,393	4,567	140	1,085
2 Canine Road- NSA	4,401	3,593	793	107	4,533	3,604	97	671
3 Samford Road- NSA	6,246	3,467	1,565	71	5,749	4,112	73	1,155
4 Mapes Rd/ MD 32	4,609	4,322	558	304	5,882	5,173	296	824
5 MD 32 Truck Gate	1,359	1,040	139	38	-	-	-	-
6 Rockenbach Road	4,722	4,181	601	261	5,647	4,821	259	816
7 Reece Road	3,430	3,023	489	195	3,105	2,773	102	465
8 Mapes Rd/ MD175	4,345	3,754	692	188	5,573	4,731	165	879
	37,571	29,426	6,235	1,461	36,882	29,781	1,132	5,895
Cordon Count Analysis								
	Peak Hour Recorded		Peak Intensity "K Factor" (3)		Directional Flow "D Factor" (4)		Peak Traffic Percent by Gate	
	AM Peak	PM Peak	AM Peak	PM Peak	AM Peak	PM Peak	AM Peak	PM Peak
BW Parkway- NSA	0800 h	1700 h	23%	24%	82%	89%	22%	18%
Canine Road- NSA	0800 h	1700 h	22%	19%	88%	87%	13%	11%
Samford Road- NSA	0800 h	1700 h	45%	28%	96%	94%	25%	20%
Mapes Rd/ MD 32	0800 h	1700 h	13%	16%	65%	74%	9%	14%
MD 32 Truck Gate	0800 h	1700 h	13%	N/A	79%	N/A	2%	0%
Rockenbach Road	0800 h	1700 h	14%	17%	70%	76%	10%	14%
Reece Road	0800 h	1700 h	16%	17%	71%	82%	8%	8%
Mapes Rd/ MD175	0800 h	1700 h	18%	19%	79%	84%	11%	15%
	0800 h	1700 h	21%	20%	81%	84%	100%	100%
(1) Weekday Average Traffic								
(2) Daily Average Traffic								
(3) Proportion of Daily Average Traffic Occurring in the Peak Hour								
(4) Proportion of Peak Traffic in the Peak Direction								
Source: Ft. Meade Cordon Count, November 2004, conducted by Anne Arundel County Department of Public Works								

The annual rate of growth at Fort Meade is approximately 2.9% and can be applied to the above volumes to estimate the current traffic volumes and impact on the analyzed intersections. The estimated current traffic volumes at the intersections likely to be impacted from the Proposed Action are shown in Table 4-4: 2011 Estimated Current Traffic Characteristics.

**Table 4-4: 2011 Estimated Current Traffic Characteristics**

Code Location	Inbound				Outbound			
	WAT	DAT	AM Peak	PM Peak	AWDT	AADT	AM Peak	PM Peak
4. Mapes Rd / MD 32	9218	4949	639	348	6735	5293	339	944
8. Mapes Rd / MD 175	4975	4299	792	215	6381	5417	192	1006
9. Gate 6 – Llewellyn/MD 175	830	-	540	-	1971	-	-	1281

Access to the Proposed Site from the Llewellyn Avenue and Ernie Pyle intersection is via Llewellyn Avenue to Chisholm Avenue. Since the parking lot for the facility is located at the rear of the facility with primary access from Chamberlin Ave. or 4<sup>th</sup> Street, an alternative access route for the personnel from the Llewellyn / Ernie Pyle intersection would be via Ernie Pyle Road to 4<sup>th</sup> Street. Currently the streets surrounding the site consist of 2-lane undivided roadways, with parking proposed for the southeast corner of the area near the 4<sup>th</sup> Street and Chamberlin Avenue intersection. All intersections immediately surrounding the site are unsignalized and do not have dedicated turning lanes. The nearest signalized intersection is at Ernie Pyle Road and Mapes Road, with a dedicated left turn lane for west bound traffic on Mapes Road and a dedicated right turn lane for eastbound traffic on Mapes Road. The nearest entrance and exit point for the proposed location is Gate 6 located at Llewellyn Ave and MD 175. It is anticipated that the personnel would utilize this gate as their first option for access or departing the facility.

## 4.9 INFRASTRUCTURE AND UTILITIES

### 4.9.1 Potable Water

The primary sources of potable water at Fort Meade are five groundwater wells located on the south side of the installation. There is a sixth well that is inactive, however, a replacement well is under construction. Individual wells range in capacity from 720 gallons per minute (gpm) to 1,000 gpm (BRAC EIS, 2007). Water is pumped from the wells to Fort Meade's water treatment plant, which is located in the southwest quadrant of the cantonment area near the intersection of Mapes and O'Brien Roads. The present day design capacity is 6.6 million gallons per day (mgd). The average daily consumption rate prior to BRAC was 3.4 mgd. The BRAC EIS estimated that the increase of over 15,000 BRAC and EUL personnel would increase the average daily demand by 0.31 mgd. Therefore, post BRAC average daily consumption is approximately 3.71 mgd and the current capacity can support the demand. The operation and maintenance of the water system is provided through a contract with American Water.

### 4.9.2 Domestic and Industrial Wastewater

Sanitary sewer collection and pumping system at Fort Meade is comprised of 58 miles of piping on and around the installation, 55 miles of gravity sewers, three miles of force mains, and nine pumping stations. The pipe diameter of the gravity sewers, installed between 1941 and 1987, range from four inches to 30 inches. The force mains have pipe diameters that range from three inches to 24 inches. Wastewater from the gravity sewers and force mains flow to two major pump stations, the Leonard Wood and the East Side pump stations. Each station has three pumps, each rated at approximately 1500 gpm, at average operating head, thereby providing total station capacity of 4500 gpm (9000 gpm between the two stations). American Water is responsible for the operation and maintenance of the wastewater system at Fort Meade.

### 4.9.3 Electric and Gas

Electrical power is supplied to the installation by Baltimore Gas and Electric (BG&E) through four distribution substations. The primary source for Fort Meade (non-NSA) is a 110 kilovolt (kV) redundant feeder pair from the BG&E Waugh Chapel Power Station along the south and

east sides of the installation (along MD Route 32) on steel towers and terminate at substation #3. A second pair of 110 kV feeders originates in the BG&E High Ridge Power Station west of the installation and back feeds the substation utilizing the Waugh Chapel distribution line. Several secondary sources of electrical power consisting of 18 engine-driven emergency standby generators at 15 locations exist on Fort Meade.

Natural gas is supplied by BG&E to the Defense Energy Support Center, a Department of Defense agency, which in turn provides it to Fort Meade. Natural gas is supplied via high pressure (100 pound force per square inch guage) mains owned by BG&E, which form a loop on the installation. The extensive natural gas distribution system includes BG&E and government owned systems loop the entire installation. Most buildings are within a few hundred feet of an active supply line (BRAC EIS, 2007).

#### **4.10 SOCIOECONOMICS**

The socioeconomic region of influence (ROI) for Fort Meade consists of Anne Arundel County, Howard County, Montgomery County, and Prince George's County in Maryland. These counties comprise the area in which the predominant socioeconomic effects of the Proposed Action would take place. This is based on residential distribution of the installation's military, civilian, and contracting personnel, and the location of businesses that provide goods and services to the installation and its employees.

Fort Meade employs over 40,000 personnel (estimated 42,431 after BRAC). The average annual salary for civilian workers at Fort Meade is \$80,425. Salaries for permanent military personnel at Fort Meade averaged \$66,000 in 2007. Relative to the size of the ROI, Fort Meade's overall contribution to the regional economy is modest. Fort Meade provides only 2 percent of the ROI total employment, although the Fort's activities likely generate a substantial number of additional indirect and induced jobs. Given the large size and stability of Fort Meade's workforce over time, the installation is well-integrated into the local economy.

Within the ROI, the 2009 median household income was \$81,824 for Anne Arundel County residents compared to \$71,696 for Prince George's County, \$93,895 for Montgomery County and \$101,867 for Howard County (U.S. Census 2011).

#### **4.11 NOISE**

Noise is traditionally defined as unwanted sound that interferes with normal activities in a way that reduces the quality of the environment. Magnitudes of sound, whether wanted or unwanted, are usually described by sound pressure. The two primary types of sources of sound that generate noise are: stationary and transient. Sounds produced by these sources can be intermittent or continuous. A stationary source is usually associated with specific land use or site, such as construction activities or the operation of generators. Transient sound sources, such as vehicles and aircraft, move through the area. The human auditory system is sensitive to fluctuations in air pressure above and below the barometric static pressure. The loudness of sound as heard by the human ear is measure on the A-weighted decibel (dBA) scale. Examples can be found in Table 4-4.

<b>Table 4-5: Common Noise Levels</b>		
<b>Source</b>	<b>Decibel Level</b>	<b>Exposure Concern</b>
Soft Whisper	30	Normal safe levels.
Quiet Office	40	
Average Home	50	
Conversational Speech	65	
Highway Traffic	75	May affect hearing in some individuals
Noisy Restaurant	80	
Average Factory	80-90	
Pneumatic Drill	100	
Automobile Horn	120	
Jet Plane	140	Noises at or over 140 decibels may cause pain.
Gunshot Blast	140	

#### 4.12 AESTHETICS

The project site lies within the administrative visual zone. However, the site is a vegetated area with open grass, mature trees and street trees.

#### 4.13 ENVIRONMENTAL JUSTICE

In February, 1994 President Clinton signed EO 12898, entitled “Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations.” This EO directs Federal agencies “to make achieving environmental justice part of its mission by identifying and addressing, as appropriate disproportionately high and adverse human health or environmental effects of programs, policies, and activities on minority populations and low income populations in the U.S....” The purpose of this order is to avoid the disproportionate placement of adverse environmental economic, social, or health impacts from Federal actions and policies on minority and low-income populations. In order to prevent the potential for discrimination and disproportionately high and adverse effects on specific populations, a process must identify minority and low-income populations that might be affected by the implementation of a Proposed Action or alternatives.

As defined by the “Environmental Justice Guidance Under NEPA” (CEQ, 1997), “minority populations” includes persons who identify themselves as Asian or Pacific Islander, Native American or Alaskan Native, black (not of Hispanic origin), or Hispanic. Race refers to Census respondents’ self-identification of racial background. Hispanic origin refers to ethnicity and language, not race, and may include persons whose heritage is Puerto Rican, Cuban, Mexican, Central or South American.

A minority population exists where the percentage of minorities in an affected area either exceeds 50 percent or is meaningfully greater than in the general population. Low-income populations are identified using the Census Bureau's statistical poverty threshold, which is based on income and family size. The Census Bureau defines a "poverty area" as a census tract with 20 percent or more of its residents below the poverty threshold and an "extreme poverty area" as one with 40 percent or more below the poverty level.

The 2011 Census poverty thresholds defines the poverty level as \$11,136 of annual income, or less, for an individual, and \$22,314 of annual income, or less, for a family of four. In 2009, the median household income was \$81,824 for Anne Arundel County residents compared to \$71,696 for Prince George's County, \$93,895 for Montgomery County and \$101,867 for Howard County (U.S. Census 2011).

The average individual poverty rate for the ROI in 2009 was 5.2 percent and 3.3 percent for families. These figures are below the national poverty rate of 13.5 percent for individuals and 9.9 percent for families (U.S. Census 2011).

The ROI's population is very diverse, and there are significant differences in the ethnic makeup among the four counties. According to 2009 population figures, the ROI's population was approximately comprised of the following ethnic groups: 57 percent white, 22 percent black, 12 percent Hispanic and 9 percent Asian (Stats Indiana 2011). Anne Arundel, Howard, and Montgomery Counties' populations are primarily non-minority, while Prince George's County's population is majority minority.

According to the American Community Survey (ACS) 5-year estimates in 2005-2009 approximately 3.7% of families lived below the poverty level in Fort Meade, MD. Approximately 3.9% of individuals were below the poverty level. These figures are well below the National poverty rate of 9.9% for families and 13.5% for individuals.

The Fort Meade population is very diverse, and there are significant differences in the ethnic makeup. According to the 5-year estimates from the ACS approximately 66.8% of the population in Fort Meade is white, 24% black or African American, 0.2% American Indian and Alaska Native, 3.3% Asian, 1.2% some other race, and 9.5% Hispanic or Latino (of any race). The results include those individuals who checked 'two or more races', which can explain the total percentage exceeding 100%. (U.S. Census Bureau, 2005-2009 ACS).

## 5.0 ENVIRONMENTAL CONSEQUENCES

This section of the EA identifies and evaluates the anticipated environmental consequences/impacts associated with the Proposed Action and the No-Action Alternative. The terms impact and effect are used interchangeably in this section. Impacts may be discussed as positive, negative, significant, and insignificant as appropriate to the resource area. Positive impacts result when an action results in a beneficial change to the resource. A negative impact results when an action results in a detrimental change to the resource. Significant impacts occur when an action substantially or permanently changes or affects the resource. An insignificant impact occurs when an action causes impact, but the resource is not permanently or substantially changed. Impacts are also discussed as short- and long-term impacts, and are not associated with rigid time frames but relative time frames. Short-term impacts are typically short in duration and long-term impacts are usually more permanent in nature and occur as the direct result of the action. This section is organized by resource area following the same sequence as in the preceding Section 4.0. However, this section includes discussions on cumulative impacts, irretrievable commitment of resources, and summary of environmental consequences.

### 5.1 LAND USE

#### Proposed Action

Implementation of the Proposed Action is not expected to impact land use around Fort Meade. All projects would occur within the Fort Meade boundary.

Within Fort Meade, no significant changes to the current land use zones within Fort Meade are expected from the Proposed Action. Constructing the two administrative facilities within 15 acres of open space would create a change in land use. The change in land use would be short-term since the relocatable facilities would be removed from the site after permanent facilities are constructed elsewhere on the installation. The land use in this area is primarily community, bordered by areas of professional/institutional uses (Fort Meade Installation Design Guide, 2010). The Proposed Action would be consistent with the surrounding land use.

#### No-Action Alternative

Implementation of the No-Action alternative would not alter the existing land use on the installation.

### 5.2 SOILS

#### Proposed Action

The implementation of the Proposed Action is expected to have short-term and long-term minor adverse impacts on approximately 15 acres of previously disturbed soils within the 30-acre parcel at Fort Meade. Soil disturbance in the form of excavation, grading, earthmoving, and compaction would result from new construction activities. As a result, soils would be compacted, soil layer structure would be disturbed and modified, and soils would be exposed, increasing the overall potential for erosion at the site. Soil productivity, (i.e., the capacity of the soil to produce vegetative biomass), would decline in disturbed areas and be completely eliminated for those areas within the footprint of building structures, and parking facilities.

Adverse impacts to soils from the proposed construction activities would be minimized by proper construction management and planning, and the use of appropriate site-specific Best Management Practices (BMPs) for controlling runoff, erosion, and sedimentation during construction activities. A Stormwater Management (SWM) Plan and Erosion and Sediment (E&S) plan are required for any project that exceeds 1 acre in size. The SWM and E&S plans must be reviewed and approved by Maryland Department of the Environment (MDE), Water Management Administration. Areas disturbed within the equipment staging area would be reseeded, replanted, and/or re-sodded following construction activities, which would decrease the overall erosion potential of the site and improve soil productivity.

It is estimated that the total project area of approximately 15 acres could be temporarily disturbed by the Proposed Action. Up to two acres of this would be permanently impacted by the construction of the two buildings and up to six acres would be removed for parking. The remaining area would be and reseeded at the end of construction.

#### No-Action Alternative

Implementation of the No-Action alternative would not be expected to have an impact on soils in the area. There would be no new construction, and as a result, there would be no impacts to soils.

### **5.3 AIR QUALITY**

#### Proposed Action

##### *Construction-Related Activities*

Pollutant emissions resulting from proposed construction and operation activities have been evaluated for the proposed action. Air quality impacts would be significant if emissions associated with the proposed action would: 1) increase ambient air pollution concentrations above the NAAQS, 2) contribute to an existing violation of the NAAQS, 3) interfere with, or delay timely attainment of the NAAQS, or 4) for mobile source emissions, result in an increase in emissions to exceed 250 tons per year for any pollutant. Pollutants considered in this air quality analysis include the criteria pollutants and HAPs measured by federal standards.

The proposed action involves the construction and subsequent operation of temporary facilities at Fort Meade. In order to assess the air quality impacts of the proposed action, emissions for the construction and operation segments of the action were compared to the General Conformity Rule *de Minimis* thresholds for the ozone precursors VOC and NO<sub>2</sub>, as well as PM<sub>2.5</sub> and its precursor SO<sub>2</sub>. For the criteria pollutants that the Metropolitan Baltimore Intrastate AQCR is designated as unclassifiable/better than national standards, the calculated emissions are compared to the 250-ton threshold. Appendix D contains the detailed emission calculations prepared to assess the air quality impacts of the proposed action.

Air quality impacts from construction would occur from (1) combustion emissions due to the use of fossil fuel-powered equipment and (2) fugitive dust emissions (PM<sub>10</sub> and PM<sub>2.5</sub>) during demolition activities, earth-moving activities, and the operation of equipment on bare soil.

Fugitive dust emissions were calculated based on the total site disturbance projected for each construction project for all construction years. Equipment usage was based on similar construction projects to estimate project combustion and fugitive dust emissions.

The emissions associated with the proposed construction of the two temporary facilities and associated parking are summarized in Table 5-1. The calculations indicate that annual emissions for proposed construction activities would not exceed the *de Minimis* thresholds or the 250 tons per year for any criteria pollutant. Air quality impacts associated with the construction activities at either location would not be significant. Detailed calculations can be found in Appendix D.

<b>Table 5-1: Estimated Emissions for Construction of Temporary Facilities at Fort Meade</b>						
<b>Construction Activity</b>	<b>Air Pollutant Emissions (tons)</b>					
	<i>CO</i>	<sup>1</sup> <i>NO<sub>x</sub></i>	<sup>2</sup> <i>VOCs</i>	<i>SO<sub>x</sub></i>	<i>PM<sub>10</sub></i>	<i>PM<sub>2.5</sub></i>
Construction	0.39	1.07	0.10	0.14	2.17	0.28
<b>Major Source Threshold</b>	<b>250</b>	-	-	-	<b>250</b>	-
<b><i>de Minimis</i> Thresholds</b>	-	<b>100</b>	<b>150</b>	<b>100</b>	-	<b>100</b>

<sup>1</sup> NO<sub>x</sub> = Nitrogen oxides

<sup>2</sup> VOC *de Minimis* established for nonattainment areas located in O<sub>3</sub> transport region

Project construction equipment would emit minor amounts of HAPs that could potentially impact public health. The main source of HAPs would occur in the form of diesel exhaust organic gases and particulates from the combustion of diesel fuel. The operation of proposed diesel-powered construction equipment would be mobile and intermittent over the course of the construction period, and would produce minimal ambient impacts of HAPs in a localized area. However, the operation of the diesel-powered equipment should include some BMPs, to include a restriction on excessive idling, adherence to equipment maintenance programs to ensure excessive emissions are generated as a result of poor maintenance, and the use of particulate filters and ultra low sulfur diesel fuel for applicable equipment. As a result, HAP emissions from construction equipment would produce insignificant impacts to public health.

### *Operations*

Operations would likely include three boilers, each rated at approximately 4 million British thermal units per hour that would provide heat for the facility. The boiler systems would operate using natural gas. Because of the likely size of the boilers, they would be categorized as “small boilers” by MDE, and therefore qualify for a General Permit to Construct. An application, MDE Form MDE/ARMA/PER.004, would be required to obtain this permit.

A MDE Form MDE/ARMA/PER.044 would be needed if the fire protection system uses a fire protection pump, or there is any other power equipment using internal combustion engines planned for use.

The estimated emissions associated with operation of the temporary buildings are summarized in Table 5-2. The operational emissions for both locations are identical, and the calculations indicate that annual emissions for proposed operation activities would not exceed the *de Minimis*

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thresholds or the 250 tons per year for any criteria pollutant. Because the General Conformity Rule applicability analysis demonstrates that the emissions of VOCs, NO<sub>x</sub>, PM<sub>2.5</sub> and SO<sub>2</sub> would be below the *de Minimis* thresholds, the actions is exempt from General Conformity requirements. The carbon dioxide equivalent (CO<sub>2e</sub>) Greenhouse Gas emissions are well below the 25,000 metric tons per year threshold established by the Mandatory Greenhouse Gas Reporting Rule. Thus, air quality impacts associated with the operation activities would not be significant. Detailed calculations and the Record of Non-Applicability (RONA) can be found in Appendix D.

<b>Table 5-2: Estimated Annual Operational Emissions</b>							
<b><i>Operational Emissions Source</i></b>	<b><i>CO</i></b>	<b><i>NO<sub>x</sub></i></b>	<b><i>VOCs</i></b>	<b><i>SO<sub>x</sub></i></b>	<b><i>PM<sub>10</sub></i></b>	<b><i>PM<sub>2.5</sub></i></b>	<b><i>CO<sub>2e</sub></i></b>
Boilers	3.32	3.95	0.22	0.02	0.30	<0.30	4,310
Commuters	85.53	3.91	4.15	0.04	0.12	<0.12	2,106
<b><i>Total in Tons per Year</i></b>	<b>88.85</b>	<b>7.86</b>	<b>4.37</b>	<b>0.06</b>	<b>0.42</b>	<b>≤0.42</b>	-
<b><i>Total in Metric Tons per Year</i></b>	-	-	-	-	-	-	<b>6,848</b>
<b>Major Source Threshold</b>	<b>250</b>	-	-	-	<b>250</b>	-	<b>25,000</b>
<b><i>de Minimis Thresholds</i></b>	-	<b>100</b>	<sup>1</sup> <b>50</b>	<b>100</b>	-	<b>100</b>	<b>NA</b>

<sup>1</sup>VOC *de Minimis* established for nonattainment areas located in ozone transport region.

Other operational issues include indoor air quality. A reduction in HAPs commonly associated with indoor environments is expected as new vertical construction is required to meet Leadership in Energy and Environmental Design (LEED) guidelines (minimum LEED silver rating required). LEED certified projects provide specific air quality benefits through the use of optimized energy performance and conservation features, increased ventilation, low pollutant emitting materials in construction (such as adhesives and sealants, carpeting, etc.), and indoor chemical and pollutant source controls.

#### No-Action Alternative

Under the No-Action alternative the temporary facilities would not be built. There would be no changes to the air emissions that occur at present. In addition, the No Action alternative in conjunction with past, present, or reasonably foreseeable future actions, would not cause cumulative air quality impacts.

## 5.4 SURFACE WATER RESOURCES

### Proposed Action

Implementation for the proposed action may have minimal to no impacts on downstream surface water resources.

There are no surface water features located on the site of the Proposed Action, but there are two potential wetlands located approximately 350 feet north of the proposed construction. These wetlands have been delineated but have not had a jurisdictional determination performed by the U.S. Army Corps of Engineers.

While the Proposed Action will increase the amount of impervious surface located on this site, resulting in increased stormwater runoff, there will be low impact development best management practices employed to treat the stormwater on site and maintain the pre-project hydrologic regime. The use of pervious pavement and similar materials for the parking lot area is planned will allow for stormwater infiltration on site. The use of structural soils is also a possibility, which will allow for increase infiltration of stormwater and reduce the impacts to surface water from increased impervious surface. The use of these best management practices will result in minimal to no impacts to downstream surface waters.

An Erosion and Sediment Control Plan and a Stormwater Management Plan would be designed and approved by MDE prior to construction, which would include measures to protect surface water resources. Fort Meade will coordinate with the state and the U.S. Army Corps of Engineers to obtain any necessary permits.

#### No-Action Alternative

Implementation of the No-Action alternative would have no impacts on this resource.

### **5.5 COASTAL ZONE**

#### Proposed Action

No impacts are anticipated. An Erosion and Sediment Control Plan and a Stormwater Management Plan would be designed and approved by MDE prior to construction which would include measures to protect this resource.

#### No-Action Alternative

Implementation of the No-Action alternative would have no impacts on this resource.

### **5.6 BIOLOGICAL RESOURCES**

#### **5.6.1 Vegetation**

#### Proposed Action

Minor short-term and long-term adverse impacts would be anticipated as a result of the Proposed Action. Removal of grasses, landscaping, brush, and trees would be expected. Construction would disturb the plant ecology, particularly grasses and herbaceous areas, in the immediate vicinity of project sites. Temporary impacts to approximately seven acres of vegetation would not be significant. Permanent removal of vegetative habitat would have a long-term minor adverse impact to vegetation and wildlife at the site.

Under the Forest Conservation Act, Fort Meade will preserve existing, structurally sound trees to the maximum extent practical, including street trees. Landscape plantings will be made contiguous to groups of existing trees, to include street trees, where possible. Native species will be used in the landscaping plans; invasive species currently on the site will be removed or control as appropriate.

### No-Action Alternative

Implementation of the No-Action alternative would not be expected to have any impact on vegetation as no construction or demolition would occur.

#### 5.6.2 Wildlife Resources

### Proposed Action

Implementation of the Proposed Action would have a short-term and long-term minor adverse impact by displacing wildlife. In the short-term, construction would disturb wildlife on, and in the immediate area of the project location. Some species, particularly birds, would be temporarily discouraged from the area through destruction of habitat, noise, and/or dust. Wildlife would scatter to adjacent wooded areas and open fields and some wildlife may gradually return to the area of the proposed project once construction is complete. Permanent removal of vegetative habitat would have a long-term minor adverse impact to vegetation and wildlife at the site, resulting in loss of wildlife habitat.

### No-Action Alternative

The No-Action alternative would not be expected to have an impact on local wildlife species inhabiting the project areas. Trees and other vegetation would be undisturbed and would continue to provide cover and food for wildlife.

## 5.7 HAZARDOUS, TOXIC, AND RADIOACTIVE SUBSTANCES

### 5.7.1 Hazardous Materials, Hazardous Substances, and Toxic Chemicals

### Proposed Action

Hazardous, toxic and radioactive substances are not currently stored at the project location. These substances would not be used during the construction of proposed projects. No impact on hazardous, toxic, or radioactive substances is expected as a result of the implementation of the Proposed Action.

Construction activities would include the use of hazardous materials and hazardous waste generation (i.e., solvents, hydraulic fluid, oil, and antifreeze) and therefore have a potential to result in adverse impacts on the environment. The intensity and duration of the impacts on the environment would vary greatly depending upon the type of accident and the substances involved. With implementation of safety measures and proper procedures for the handling, storage, and disposal of hazardous materials and wastes, no adverse impacts are anticipated during construction.

Should asbestos be found on steam lines in the construction area, the material would be removed and disposed of by approved asbestos abatement personnel. The Owner shall be notified when the disposal manifest is sent to the destination facility and be provided a copy of the manifests with all signatures.

### No-Action Alternative

The No-Action alternative would not be expected to have any impacts on the handling and disposal of hazardous materials/wastes.

## 5.8 TRAFFIC AND ROADWAYS

### Proposed Action

The Proposed Action construction may have short term minor impacts on the traffic at Fort Meade. There would be a slight increase in traffic during construction with the temporary influx of construction vehicles and personnel. This increased traffic would be associated with construction workers and trucks hauling debris off post and construction materials on post. Possible localized road closures and detours are also possible during construction.

The existing personnel already onsite will likely alter their base access with the location of the proposed facility closer to Gate 6 and Gate 2. Previously it was assumed that with the existing location, the personnel accessing the base would be split evenly between Gate 1 (50%) and Gates 2/6 (50%). With the relocation of the facility, it is estimated that the split will shift to favor the Gates 2 and 6 access point at an estimated rate of 80% of the traffic for the proposed action. The logic behind the slight shift is the reliance of people on their known routines. Currently it is assumed that 50% of personnel access the Fort Meade base through Gate 1 and a portion will continue to rely on that known process and access the base in the future, only to travel a slightly longer distance using base roadways. Additionally, the “*Environmental Assessment for Roadway Improvements*” recommended a proposed project to widen Mapes Road to a four lane roadway, decreasing on-base travel times.

The Gate 2 complex consists of 2 inbound traffic lanes and the Gate 6 complex consists of 2 inbound traffic lanes merging into 1 lane after the gate. In addition to the inbound traffic lanes, a controlling factor to the use of the gates is the signalized intersection along MD 175. In the 2006 EIS, the intersection adjacent to Gate 2 had a LOS C in the AM and a LOS B in the PM, while the intersection adjacent to Gate 6 had a LOS B/A for the morning and afternoon peaks. The LOS for the Gate 6 intersection (Llewellyn / MD 175) is skewed due to Gate 6 being non-operational at the time of the study. For the proposed location, it can be anticipated that the majority of the traffic accessing the base that utilize the Gate 2 and 6 entry points will prefer to use Gate 6. The backup and congestion which may occur at the Llewellyn /MD 175 signalized intersection due to the increased traffic at Gate 6 could shift more traffic to Gate 2.

The addition of the 217 employees not already working on Fort Meade, the relocation of the existing facility closer to Gates 2 and 6, and the corresponding anticipated shift in traffic patterns for both base access and on-base traffic would have an impact on turning movements. For this traffic analysis, there are two distinct areas of concern, the impact to base access (gate) traffic, and the impact to on-base traffic patterns which utilize the existing roadway network on-base. With the access provided by Gate 6 for the morning and afternoon peaks, the primary route for the proposed location would be via the Llewellyn Ave / Chisholm Ave intersection. This shift in traffic patterns would improve the traffic flow at Gate 2, lessen the impact at certain on-base intersections, particularly at the Mapes Road / Ernie Pyle Road intersection, and intersection performance, specifically at the Ernie Pyle Road / Llewellyn Avenue unsignalized intersection which is currently at LOS C.

Access to the site is expected to be via Gate 1 (20%) and Gates 2 and 6 (80%), with a further breakdown of traffic at Gate 2 (25%) and Gate 6 (75%). The breakdown of employee traffic impacting each gate is shown in Table 5-3.

<b>Table 5-3: Anticipated Gate Traffic</b>		
Current Employees	451	Change
Gate 1 (50%)	225	-
Gate 2 (25%)	113	-
Gate 6 (25%)	113	-
Proposed Action	668	+217
Gate 1 (20%)	133	-92
Gate 2 (20%)	134	+21
Gate 6 (60%)	401	+288

According to base personnel, the proposed arrival times of employees are split: 25% from 0700-0800 and 75% from 0800 to 0900. Applying these factors to the figures from Table 5-3, the anticipated peak hourly impact to Gate 6 is 301 additional trips. A two day count was provided by Fort Meade for inbound and outbound traffic. The results are shown in Table 5-4.

<b>Table 5-4: Gate 6 Traffic</b>			
Inbound	AM	0700-0800	0800-0900
7/7/2011	818	204	614
7/8/2011	842	210	632
Outbound	PM	1600-1700	1700-1800
7/7/2011	2222	555	1667
7/8/2011	1720	430	1290

Rounding the 632 trips to 650 for simplicity, the average gate encounter time is 5.5 seconds per vehicle. The additional 301 peak morning trips (951 total peak hour trips) changes the average gate encounter time to 3.8 seconds. The approach to the inbound gate consists of approximately 400-ft of queue space, approximately 20 vehicles worth. The 951 peak hour trips equates to an average of 16 vehicles per minute, less than the queue's capacity. Depending on the access requirements and policies associated with Gate 6, it is not anticipated that modifications to the Gate will be necessary, although signal and intersection upgrades to the Llewellyn Ave and MD 175 intersection may be required.

From Gate 2, it is anticipated that traffic would travel Mapes Road to the Ernie Pyle intersection and turn left at the intersection, and travel south on Ernie Pyle Road to the unsignalized intersection at Llewellyn Avenue. As described earlier in Section 4.8.1, the traffic would either turn left on Llewellyn to Chisolm Ave or continue straight through and make a left hand turn onto 4<sup>th</sup> Street, and ending at the parking facilities at 4<sup>th</sup> Street and Chamberlin Avenue. The impacts would be the left turn movement at Ernie Pyle Road /Mapes Road intersection,

especially since the previous traffic pattern continued straight through this intersection, and the unsignalized intersection of Ernie Pyle Road and Llewellyn Avenue.

The “*Environmental Assessment for Roadway Improvements*” identified improvements to Mapes Road in the form of widening Mapes Road to a 4-lane roadway with center left turn lanes, and intersection upgrades (dedicated right turn lanes) at the Mapes / Ernie Pyle intersection. The widening project would assist in the increased traffic from Gate 2 and the intersection upgrades would assist with the inbound traffic from Gate 1 as well as the outbound traffic from the proposed location to Gate 2.

It is anticipated that the traffic from Gate 6 would turn left at the Llewellyn Ave / Chisholm Ave intersection. With Gate 6 only open for one directional traffic (inbound) at the AM peak, it is not anticipated that there would be turning conflicts associated with the Llewellyn / Chisholm traffic movement. Outbound traffic for Gate 6 (right turn movements at Llewellyn / Chishol) may experience some additional delays with the increased traffic.

Level of Service for unsignalized intersections is based on the average total delay, defined as the total elapsed time from when a vehicle stops at the end of the queue until the vehicle departs from the stop line. Table 5-5 presents the criteria.

<b>Table 5-5: LOS Criteria for Unsignalized Intersections</b>	
Stopped Delay per Vehicle (seconds)	LOS
<10.0	A
10.1-15.0	B
15.1-25.0	C
25.1-35.0	D
35.1-50.0	E
>50.0	F

The additional traffic for the proposed action from Gates 1/2 (267 AM Trips) may have an impact on the Ernie Pyle / Llewellyn unsignalized intersection. Utilizing the same AM/PM traffic split of 25/75 for the two hours results in an additional peak hour volume of 200 vehicles, an additional 3.3 vehicles per minute. With the additional peak hour trips, it is assumed that an additional 10-second delay per vehicle is not unreasonable. This additional delay would reduce the LOS at the Ernie Pyle Road / Llewellyn Avenue intersection to a minimum LOS D as shown in Table 5-6. Therefore, minor long-term impacts would be expected.

<b>Table 5-6: Updated LOS Intersection Levels</b>		
<b>Intersection</b>	<b>Current LOS</b>	<b>Updated LOS</b>
Ernie Pyle / Mapes	A/B	B/C
Ernie Pyle / Llewellyn	C	D
* Please refer to Table 5-5 above for key.		

No-Action Alternative

The No-Action Alternative would be expected to contribute to a long-term adverse impact on the existing traffic and roadway systems. If the traffic controls remain “as-is”, the projected traffic for the proposed project site along with the future BRAC initiatives would result in continued deterioration of the intersections and increased traffic delays. When the additional projects for Fort Meade are considered, the proposed project would contribute to the traffic flow conflicts and delays.

**5.9 INFRASTRUCTURE AND UTILITIES**

5.9.1 Potable Water

Proposed Action

With an average load of approximately 16 gallons per day (gpd) per person (AAWA, 2004), it is estimated that the addition of approximately 217 workers to Fort Meade for the Proposed Action would create a demand for approximately 3500 gpd. An adequate supply of water currently exists at Fort Meade (BRAC EIS 2007). Possible localized short-term disruptions to water service could result from construction activities as existing buried water lines are accessed for connecting new water service lines to the Proposed Action. No other effects are anticipated with the implementation of the Proposed Action.

No-Action Alternative

No impacts are expected as a result of implementing the No-Action alternative. Existing conditions would remain the same with the No-Action alternative.

5.9.2 Domestic and Industrial Wastewater

Proposed Action

The Proposed Action would have no long-term impact on the sanitary sewer/wastewater facilities at Fort Meade. Additional restroom facilities would be constructed as needed at the project area. This would result in a negligible increase in sewage loads to the sewage treatment system at Fort Meade. With an average load of approximately 13 gallons per day (gpd) (USEPA, 2010), it is estimated that the addition of approximately 217 workers to Fort Meade for the Proposed Action would create a increase of approximately 2800 gpd. The capacity of the existing system at Fort Meade is adequate (BRAC EIS 2007). Possible localized short-term disruptions to service could result from construction activities due to access the existing underground sanitary sewer lines for connecting new lines.

### No-Action Alternative

No impacts are expected as a result of implementing the No-Action alternative. Existing conditions would remain the same with the No-Action alternative.

### 5.9.3 Electric and Gas

#### Proposed Action

The new facility would require electric service for high density use for the complex needs of communication and security. The UMMCA site work will cover all requirements to meet the utilities needs. The Proposed Action is not anticipated to have long-term impacts on the electrical system at Fort Meade. The distribution system is currently operating below capacity and the new demand would not exceed this capacity. Possible short-term impacts associated with construction and the relocation of electrical lines could occur. These would cease with the completion of construction activities.

#### No-Action Alternative

The No-Action alternative would not be expected to impact the existing electrical distribution systems.

### 5.10 SOCIOECONOMIC

#### Proposed Action

Implementation of the Proposed Action would be expected to result in a minor short term positive impact on socioeconomic benefits. Local construction workers would likely be hired for construction activities. This would have a short-term minor beneficial impact on the regional economy.

The Proposed Action would consolidate existing INSCOM personnel and allow for the increase of the INSCOM work force by approximately 217 workers. This minor increase in the overall Fort Meade workforce would result in minor long-term socioeconomic benefits. In addition, the ROI may see a minor long-term increase in housing requirements along with an associated need for community support in terms of schools and emergency services.

#### No-Action Alternative

The No-Action alternative would not be expected to impact the socioeconomics of the region.

### 5.11 NOISE

#### Proposed Action

Minor short term adverse impacts would be expected. The various construction activities that would take place include trucks delivering building supplies and construction equipment, and heavy equipment needed for construction. Table 5-7 provides a representation of construction noise levels associated new construction. Confining construction activities to normal working hours and employing noise-controlled construction equipment to the extent possible would mitigate noise impacts during the construction phase.

With the exception of possible occasional emergency generator usage, there would not be any operational noise associated with the new facilities. The SCIF would house administrative services.

No-Action Alternative

The No-Action alternative would not be expected to change the noise levels that are generated at Fort Meade.

<b>Table 5-7: Typical Noise levels of Construction Equipment</b> (noise Level in dBA at 50 Feet)	
Construction Vehicle Type	dBA
Bulldozers	80
Backhoe	72-93
Bobcat	72-93
Jack Hammer	81-98
Crane	75-77
Pick-Up Truck	83-94
Dump Truck	83-94

**5.12 AESTHETICS**

Proposed Action

The proposed project would alter the visual and aesthetic environment of the site both in the short-term and long-term. Short-term disruptions to the area’s aesthetics would result from the presence of construction traffic and the associated activities of demolition, site clearing, and construction.

Long-term impacts to the visual environment would include the changes in site access, landscaping, demolition, and construction. While not all of the impacts would be considered to be adverse, they all would alter the visual presence of the site. To minimize long term impacts, designs would incorporate existing trees and include vegetated areas where feasible.

No-Action Alternative

Implementation of the No-Action alternative would not alter the existing aesthetics on the installation.

**5.13 ENVIRONMENTAL JUSTICE**

Proposed Action

Implementation of the Proposed Action would be expected to result in minor short term impacts, primarily associated with construction activities. As indicated in Chapter 4, there are no minority or impoverished areas near the Proposed Action site, therefore, there are no environmental justice concerns.

### No-Action Alternative

The No-Action alternative would not be expected to create disproportionately high and adverse human health or environmental effects to minority or low-income populations at Fort Meade or in the surrounding area.

### 5.14 CUMULATIVE IMPACTS

A cumulative impact is defined as “the impact on the environment which results from the incremental impact of the action when added to other past, present, or reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions” (40 CFR 1508.7). The CFR goes on to note that “such impacts can result from individually minor but collectively significant actions taking place over a period of time.”

Evaluations of cumulative impacts include consideration of the Proposed Action with past and present actions, as well as reasonably foreseeable future actions. Compliance with all applicable Federal, state, local, and Army regulations would assist in ensuring that implementation of these actions would minimize the incremental impacts of past, present, and future actions. Those actions occurring or planned to occur near the area of potential effect that could impact traffic conditions (i.e., increase personnel) at Fort Meade and near the proposed SCIF site in particular are considered potential cumulative actions for this project. Those projects are listed in Table 5-8.

<b>Table 5-8: Cumulative Actions at Fort Meade</b>		
<b>Project</b>	<b>Description</b>	<b>NEPA Documentation</b>
Community Based Outpatient Clinic (CBOC)	The U.S. Department of Veteran Affairs plans to construct a 13,200 SF, single-story, CBOC on approximately 2.75 acres of land behind Kimbrough Army Clinic (Building 2480) located on Llewellyn Avenue. The CBOC will be an independent building from the existing clinic, but an enclosed 1,244 feet walkway will be installed to connect the two facilities. In addition to the clinic two parking lots would be constructed, a 34-space lot and a 66-space lot. The main entrance to the new clinic will be from 5 <sup>th</sup> Street, near the proposed parking area for the SCIF.	CE/REC (11/06)
Mini Child Development Center	A 4,460 SF child development center has been proposed for construction at Fort Meade near the proposed SCIF. This facility would provide 24-hour, care for up to 20 children at a time. The facility would support extended hours care for shift workers, respite, crisis, and overnight care for children of wounded soldiers.	CE/REC (12/08)
Base Realignment and Closure (BRAC) 2005 and Enhanced Use Lease (EUL) Actions	The proposal involved the arrival of about 5,695 workforce personnel at Fort Meade and the construction of new facilities to support these personnel. The EUL action involved leasing two parcels of land to a private developer to construct administrative buildings for an estimated 10,000 personnel.	EIS/ROD (11/07)
Campus Development	A portion of Fort Meade, known as Site M, would be developed as an operational complex for Intelligence	EIS/ROD (09/10)

	Community use. The EIS addressed Phase I of this proposal which included 1.8 million square feet of facilities for a data center and associated administrative space for up to 6,500 personnel.	
SCIF for Army Operations Activity (AOG)	A 50,000 SF administrative and SCIF for AOG is proposed for construction in 2017 at Mapes Road and Ernie Pyle Road. The current mission is located in the Building 8544 complex in an old barracks facility that was converted to administrative office space in the 1980s. The current facilities do meet building construction, fire protection or electrical code requirements. The current building is also located in the Fort Meade barracks future development site. Project will provide space for 308 personnel	EA (FY17)
ARCYBER	TBD	EA/FNSI (underway)
Widening of MD 175	Maryland Department of Transportation has allocated funding for several BRAC actions in MD to include widening MD175 from MD 295 to MD170. Bicycles and pedestrian accommodations will be provided where appropriate. The project would address current and future congestion along MD 175 and improve access to Fort Meade.	TBD
<i>Notes:</i> CE/REC = Categorical Exclusion/Record of Environmental Consideration EIS/ROD = Environmental Impact Statement/Record of Decision		

### Proposed Action

The environmental and socioeconomic impacts of the Proposed Action in general are anticipated to be minor and short term, however, the addition of 217 incoming personnel and changing the current traffic pattern for the 451 existing employees would contribute to the impacted transportation system and increase traffic concerns, specifically at Gate 6 and the Ernie Pyle Road/Llewellyn Avenue intersection.

Fort Meade has recently experienced significant growth from the implementation of BRAC recommendations and as such, traffic is a concern in and around the installation. The BRAC EIS identified these concerns and developed mitigation measures to minimize the potential strain on the transportation system in the area. Likewise, the Maryland Department of Transportation has initiated several roadway improvement projects near the installation to help alleviate the traffic congestion at the gates and major roadways leading to Fort Meade. The Proposed Action isn't anticipated to significantly change the current condition of the traffic or transportation outside the installation since most of the personnel commuting to the new facilities are already commuting to Fort Meade.

The traffic analysis provided in Section 5.8 used the BRAC EIS analysis as the baseline/affected environment and therefore accounts for the major increases in personnel at Fort Meade. Besides the BRAC EIS and the Campus Development EIS, most of the other past, present, and reasonably foreseeable projects listed in Table 5.8 would not result in significant increases in personnel assigned to the installation or affect traffic near the Proposed Action, however, the proposed SCIF for AOG and the CBOC may contribute to the cumulative traffic impacts along the immediate roads associated with the Proposed Action. Table 5-5 provides the LOS criteria definition used in Table 5-9. It is likely that the Proposed Action in combination with these other

proposed facilities in the same area would further degrade the LOS at the Ernie Pyle Road/Mapes Road intersection (Table 5-6).The SCIF for AOG isn't proposed for construction until 2017 which is after the date that the INSCOM Cyber Brigade and 902<sup>nd</sup> should be moved into their permanent facilities. Given this current construction plan, it is anticipated that the degradation of service of the Ernie Pyle/Mapes intersection would be short-term.

<b>Table 5-9. Cumulative Traffic Impacts</b>			
<b>Intersection</b>	<b>Current LOS</b>	<b>Proposed Action Impacts</b>	<b>Cumulative Impacts</b>
Ernie Pyle / Mapes	A/B	B/C	C/D
Ernie Pyle / Llewellyn	C	D	D
* Please refer to Table 5-5 above for key.			

No-Action Alternative

Implementation of the No-Action alternative would not result in any cumulative environmental impacts.

**5.15 IRRETRIEVABLE COMMITMENT OF RESOURCES**

Proposed Action

Regulations for the preparation of EA's require that they address irreversible and irretrievable commitments of resources associated with the Proposed Action. In this instance, it should be noted that the implementation of the Proposed Action would result in both direct and indirect commitments of resources.

The proposed project would require the use of an amount of fossil fuel, electrical energy, and other energy sources during the renovation/demolition and new construction at the project areas. These resources would be irretrievably committed to the projects.

No-Action Alternative

With the implementation of the No-Action alternative, Fort Meade would continue to operate with substandard facilities that do not meet many of the modern safety and security requirements. The No-Action alternative would not result in any commitment of resources other than those currently used in day to day activities at Fort Meade.

**5.16 SUMMARY OF ENVIRONMENTAL CONSEQUENCES**

Table 5-10 provides a summary of the potential environmental and cumulative impacts associated with the implementation of the Proposed Action. Short-term minor adverse impacts to air quality, noise, surface waters, wildlife resources, traffic, would be expected from the construction of the projects. Short-term and long-term minor impacts could occur to land use,

soils, topography, aesthetics, traffic, and vegetation. Short-term and long-term minor beneficial impacts to socioeconomics are expected.

<b>Table 5-10: SUMMARY OF POTENTIAL ENVIRONMENTAL AND CUMULATIVE EFFECTS ON RESOURCE AREAS</b>		
	<b>Environmental Consequences</b>	
<b>Resource Area</b>	<b>Proposed Action</b>	<b>No-Action</b>
Land Use	Short-term and Long-term Minor Adverse Impacts	No Impacts
Soils	Short-term and Long-term Minor Adverse Impacts	No Impacts
Prime and Unique Farmland	No Impacts	No Impacts
Topography and Geology	No Impacts	No Impacts
Air Quality	Short-term and Long-term Minor Adverse Impacts	No Impacts
<b>Water Resources</b>		
Surface Water	No Impacts	No Impacts
Floodplains	No Impacts	No Impacts
Groundwater	No Impacts	No Impacts
Coastal Zone	No Impacts	No Impacts
<b>Biological Resources</b>		
Wetlands	No Impacts	No Impacts
Vegetation	Short-term and Long-term Minor Adverse Impacts	No Impacts
Wildlife Resources	Short-term and Long-term Minor Adverse Impacts	No Impacts
Rare, Threatened, or Endangered Species	No Impacts	No Impacts
Aquatic Habitat	No Impacts	No Impacts
Wild and Scenic Rivers	No Impacts	No Impacts
Cultural Resources	No Impacts	No Impacts
Hazardous, Toxic, and Radioactive Substances	No Impacts	No Impacts
<b>Infrastructure and Utilities</b>		
Traffic, Roadways, and Transportation Systems	Short-term and Long-term Minor Adverse Impacts	No Impacts
Potable Water	No Impacts	No Impacts
Sanitary Sewer/Wastewater	No Impacts	No Impacts
Power	No Impacts	No Impacts
Socioeconomic	Short-term and Long-term Minor Beneficial Impacts	No Impacts
Noise	Short-term Minor Adverse Impacts	No Impacts
Visual and Aesthetic Value	Short Term and Long-Term Minor Adverse Impacts	No Impacts
Environmental Justice/Protection of Children	No Impacts	No Impacts
Cumulative Impacts	No Impacts	No Impacts

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## 6.0 CONCLUSION

The Proposed Action is expected to disturb approximately 15 acres of previously disturbed land, which is now composed of mature trees, street landscape trees, open grass, and shrubs. Short-term impacts to air, and noise could be expected during construction of the projects. Short-term and long-term impacts to land use, soils, vegetation, wildlife habitat, aesthetics, and traffic would be expected. Minor short-term and long-term beneficial impacts to socioeconomics are expected from this work.

The Proposed Action is not expected to have any significant adverse effects on environmental resources or socioeconomic conditions at Fort Meade. All agency coordination and permitting requirements for the Proposed Action would be completed prior to construction of the projects.

Fort Meade will preserve existing trees where possible and plant native vegetation as part of the Proposed Action. Stormwater Management Plans and Erosion and Sediment Control plans will mitigate impacts to surface waters, and the use of permeable pavers and potentially structural soils will mitigate long-term impacts to surface waters from increased stormwater runoff.

Based on the evaluation of the environmental consequences accomplished by this EA a FNSI shall be issued.

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## 7.0 REFERENCES

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# **APPENDIX A**

## **MAPS**

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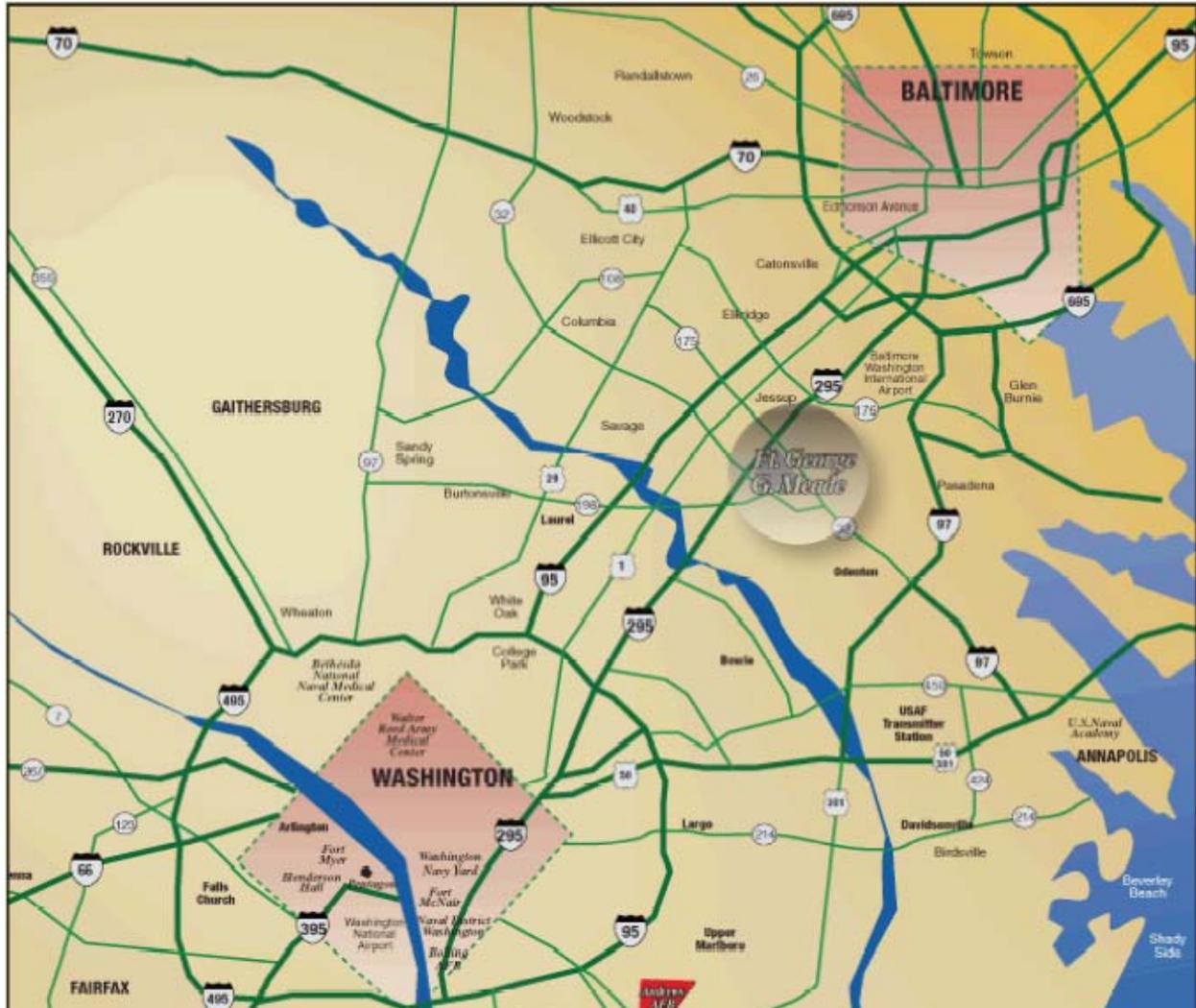
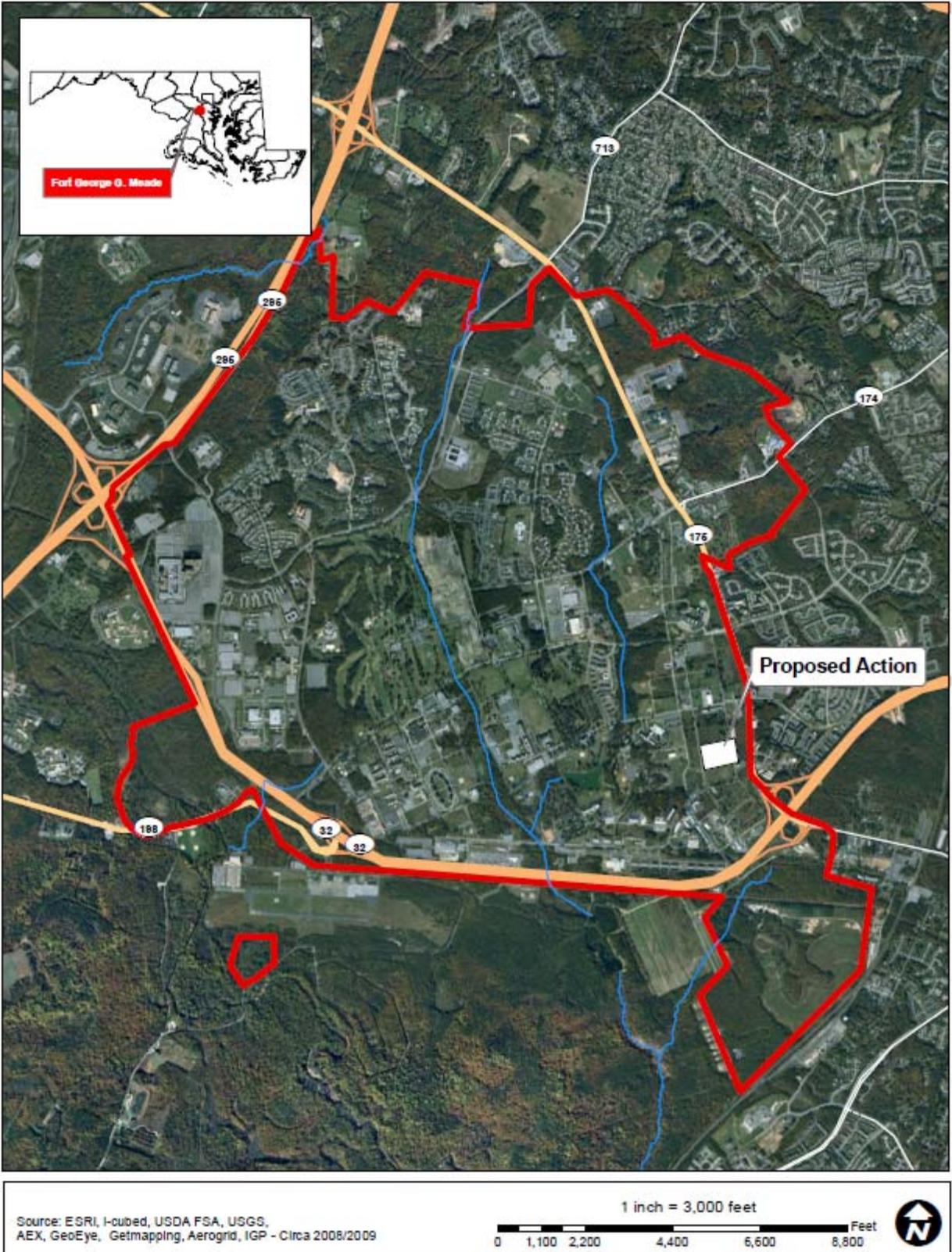


Figure A-1: Regional Site Map, Ft. Meade, Maryland

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**Figure A-2: Fort Meade Installation Site Map**

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RE-LOCATABLE SCIF SITE 1, PHASE I & II

Site Area

ATFP Usable Area



Figure A-3: Site Layout

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PgB Patapsco-Fort Mott-Urban land complex, 0 to 5 percent slope  
PgD Patapsco-Fort Mott-Urban land complex 5 to 15 percent slope  
RkB Russett-Christiana-Urban land complex 0 to 5 percent slope

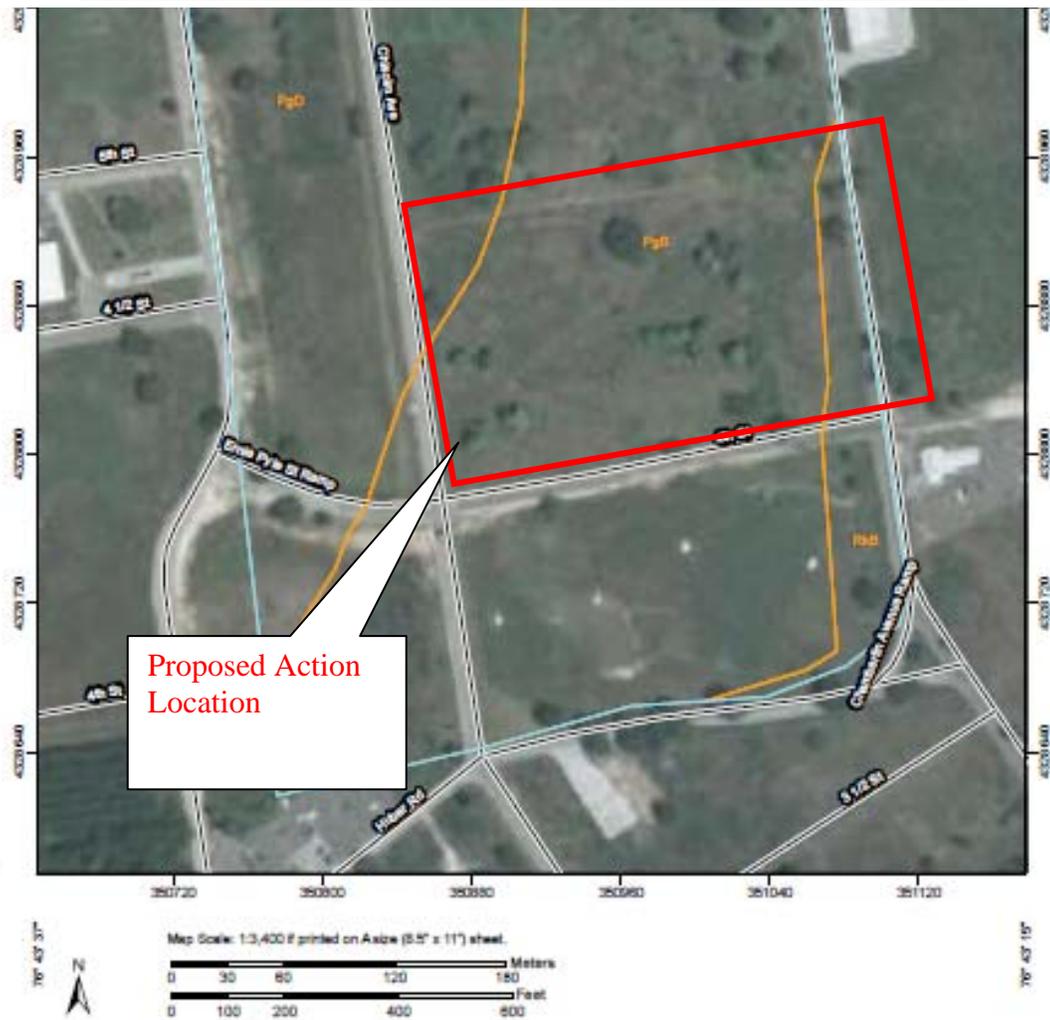
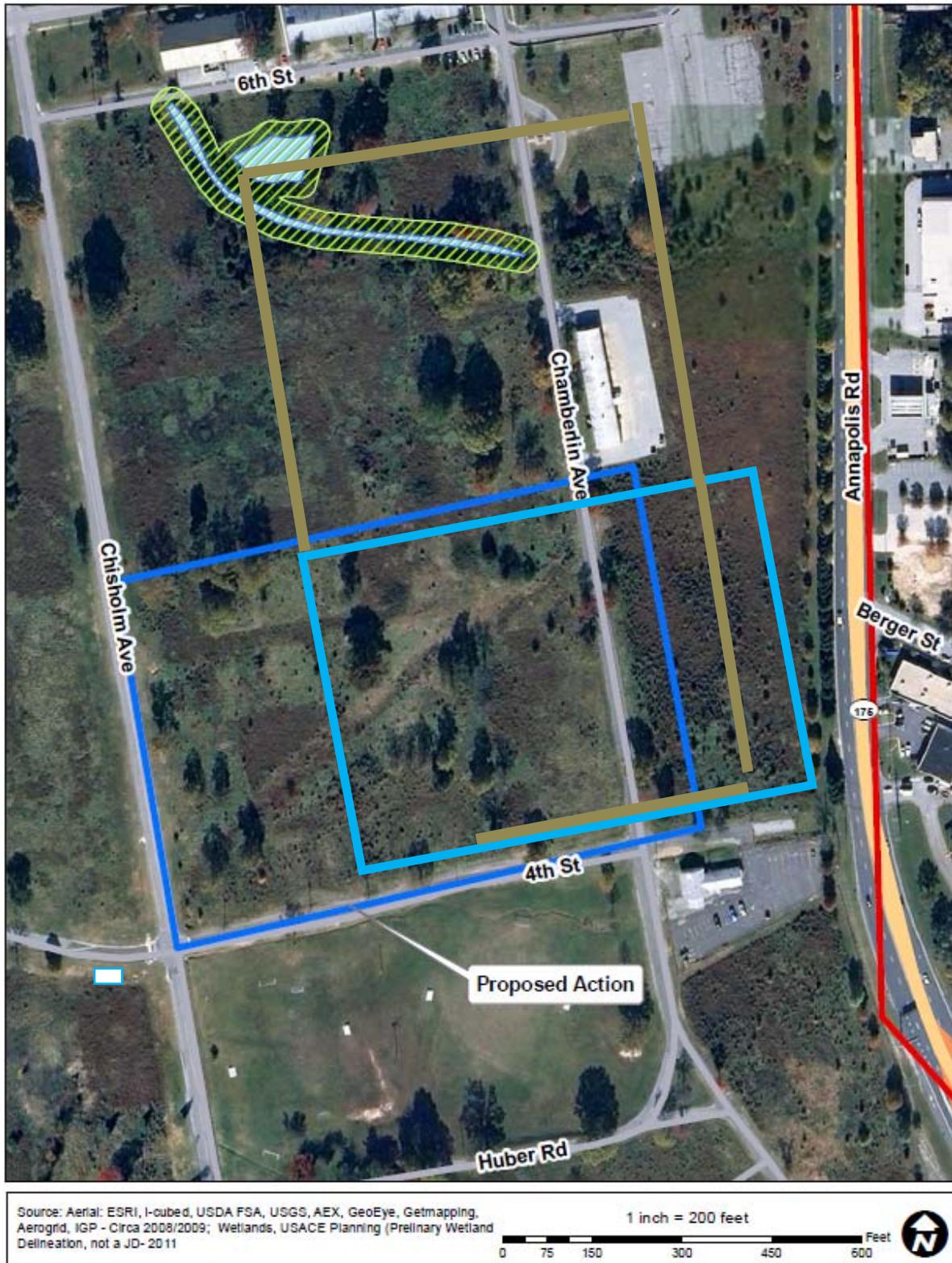


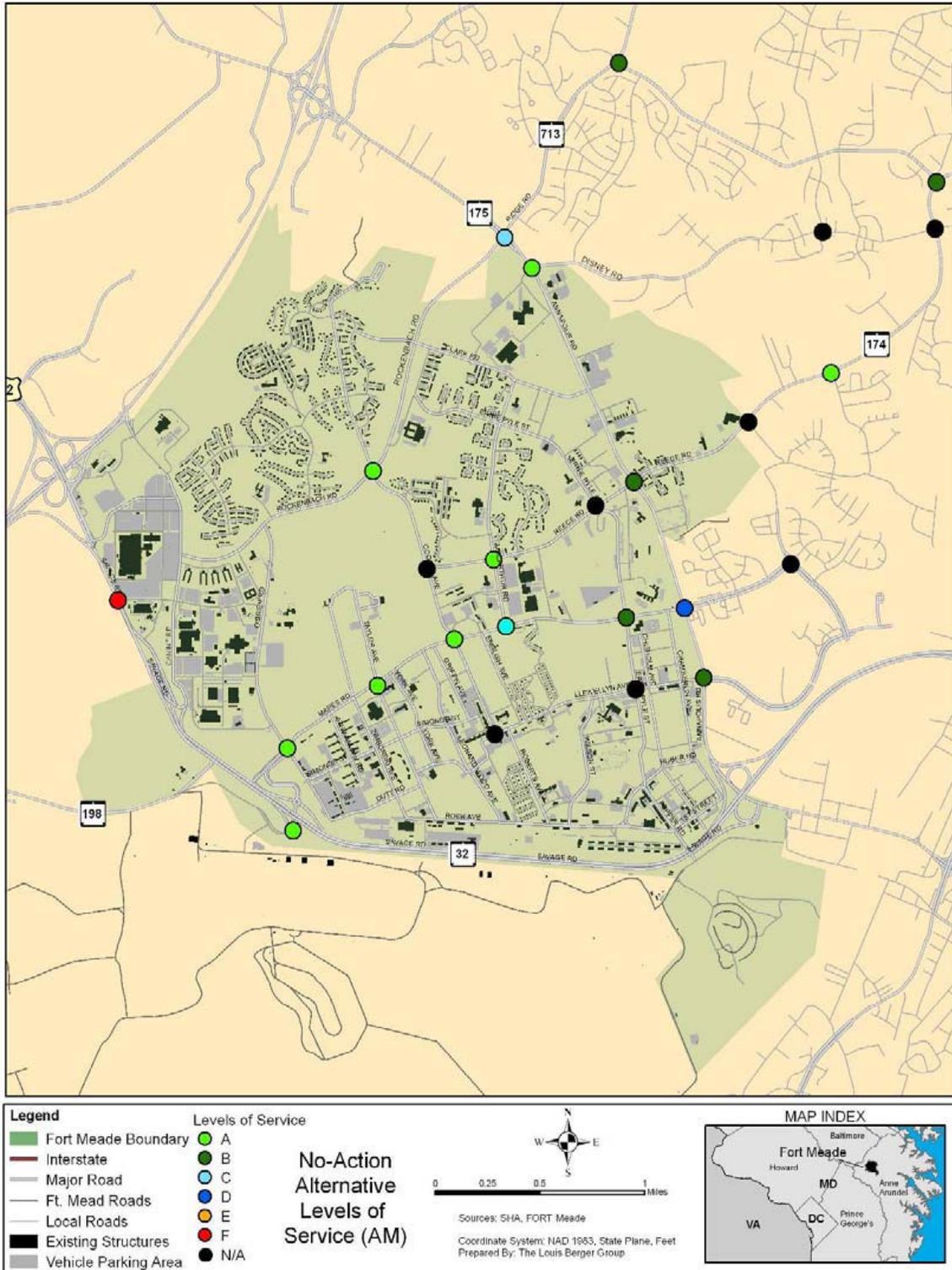
Figure A-4: Soil Map

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**Figure A-5: Preliminary Wetland Identification Near Proposed Action**

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**Figure A-6: Fort Meade Existing Traffic**

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**APPENDIX B**

**COORDINATION**

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**DEPARTMENT OF THE ARMY**  
BALTIMORE DISTRICT, CORPS OF ENGINEERS  
P. O. BOX 1715  
BALTIMORE, MARYLAND 21203-1715

REPLY TO  
ATTENTION OF

May 26, 2011

Planning Division

Mr. Bill Arguto  
U.S. Environmental Protection Agency  
Region 3  
1650 Arch Street  
Philadelphia, PA 19106

Dear Mr. Arguto:

On behalf of the U.S. Army Intelligence and Security Command (INSCOM), the U.S. Army Corps of Engineers, Baltimore District is preparing an Environmental Assessment (EA) for the proposed construction of a temporary modular Sensitive Compartmented Information Facility (SCIF) to be located at Fort George G. Meade, Maryland. Fort Meade is located in northern Anne Arundel County, Maryland, southeast of the Baltimore-Washington Parkway and west of I-97 (Enclosure 1). The EA will be prepared in accordance with the National Environmental Policy Act of 1969, as amended.

The proposed action to be evaluated in the EA includes the construction of two modular buildings approximately 60,000 square feet (sf) and 80,000 sf in size and associated parking for the INSCOM Cyber Brigade and 902<sup>nd</sup> Military Intelligence Group. The proposed location consists of approximately 15 acres of previously disturbed land in the southeastern portion of Fort Meade (Enclosure 2).

To assist us in identifying environmental issues that may affect the implementation of this project, please provide written comments within 15 days of receipt of this letter to: Ms. TJ Flanagan, U.S. Army Corps of Engineers, Baltimore District, ATTN: CENAB-PL-E (Fort George G. Meade INSCOM EA), 10 S Howard Street, Baltimore, Maryland 21201. You may contact Ms. Flanagan at (410) 962-3314 if you have any comments or questions regarding this matter.

Sincerely,

*Maria Franks*

Enclosures

*for*

Lawrence D. Eastman  
Chief, Planning and Environmental  
Services Branch



**DEPARTMENT OF THE ARMY**  
BALTIMORE DISTRICT, CORPS OF ENGINEERS  
P. O. BOX 1715  
BALTIMORE, MARYLAND 21203-1715

REPLY TO  
ATTENTION OF

May 24, 2011

Planning Division

Ms. Linda C. Janey  
Maryland State Clearinghouse  
Maryland Office of Planning, Room 1104  
301 West Preston Street  
Baltimore, MD 21201-2365

Dear Ms. Janey:

On behalf of the U.S. Army Intelligence and Security Command (INSCOM), the U.S. Army Corps of Engineers, Baltimore District is preparing an Environmental Assessment (EA) for the proposed construction of a temporary modular Sensitive Compartmented Information Facility (SCIF) to be located at Fort George G. Meade, Maryland. Fort Meade is located in northern Anne Arundel County, Maryland, southeast of the Baltimore-Washington Parkway and west of I-97 (Enclosure 1). The EA will be prepared in accordance with the National Environmental Policy Act of 1969, as amended.

The proposed action to be evaluated in the EA includes the construction of two modular buildings approximately 60,000 square feet (sf) and 80,000 sf in size and associated parking for the INSCOM Cyber Brigade and 902<sup>nd</sup> Military Intelligence Group. The proposed location consists of approximately 15 acres of previously disturbed land in the southeastern portion of Fort Meade (Enclosure 2).

To assist us in identifying environmental issues that may affect the implementation of this project, please provide written comments to: Ms. TJ Flanagan, U.S. Army Corps of Engineers, Baltimore District, ATTN: CENAB-PL-E (Fort George G. Meade INSCOM EA), 10 S Howard Street, Baltimore, Maryland 21201. Due to project time constraints, we are requesting an expedited 15-day review. You may contact Ms. Flanagan at (410) 962-3314 if you have any comments or questions regarding this matter.

Sincerely,

*Mania Franka*

Enclosures

*for* Lawrence D. Eastman  
Chief, Planning and Environmental  
Services Branch



**DEPARTMENT OF THE ARMY**  
BALTIMORE DISTRICT, CORPS OF ENGINEERS  
P. O. BOX 1715  
BALTIMORE, MARYLAND 21203-1715

REPLY TO  
ATTENTION OF

May 26, 2011

Planning Division

Ms. Lori Byrne  
Maryland Dept. of Natural Resources  
Tawes State Office Building  
580 Taylor Avenue  
Annapolis, MD 21401

Dear Ms. Byrne:

On behalf of the U.S. Army Intelligence and Security Command (INSCOM), the U.S. Army Corps of Engineers, Baltimore District is preparing an Environmental Assessment (EA) for the proposed construction of a temporary modular Sensitive Compartmented Information Facility (SCIF) to be located at Fort George G. Meade, Maryland. Fort Meade is located in northern Anne Arundel County, Maryland, southeast of the Baltimore-Washington Parkway and west of I-97 (Enclosure 1). The EA will be prepared in accordance with the National Environmental Policy Act of 1969, as amended.

The proposed action to be evaluated in the EA includes the construction of two modular buildings approximately 60,000 square feet (sf) and 80,000 sf in size and associated parking for the INSCOM Cyber Brigade and 902<sup>nd</sup> Military Intelligence Group. The proposed location consists of approximately 15 acres of previously disturbed land in the southeastern portion of Fort Meade (Enclosure 2).

To assist us in identifying environmental issues that may affect the implementation of this project, please provide written comments within 15 days of receipt of this letter to: Ms. TJ Flanagan, U.S. Army Corps of Engineers, Baltimore District, ATTN: CENAB-PL-E (Fort George G. Meade INSCOM EA), 10 S Howard Street, Baltimore, Maryland 21201. You may contact Ms. Flanagan at (410) 962-3314 if you have any comments or questions regarding this matter.

Sincerely,

*Maria Franks*

Enclosures

*for* Lawrence D. Eastman  
Chief, Planning and Environmental  
Services Branch



**DEPARTMENT OF THE ARMY**  
BALTIMORE DISTRICT, CORPS OF ENGINEERS  
P. O. BOX 1715  
BALTIMORE, MARYLAND 21203-1715

REPLY TO  
ATTENTION OF

May 26, 2011

Planning Division

Ms. Brigid E. Kenney  
Office of the Secretary  
Maryland Department of Environment  
1800 Washington Blvd.  
Baltimore, MD 21230

Dear Ms. Kenney:

On behalf of the U.S. Army Intelligence and Security Command (INSCOM), the U.S. Army Corps of Engineers, Baltimore District is preparing an Environmental Assessment (EA) for the proposed construction of a temporary modular Sensitive Compartmented Information Facility (SCIF) to be located at Fort George G. Meade, Maryland. Fort Meade is located in northern Anne Arundel County, Maryland, southeast of the Baltimore-Washington Parkway and west of I-97 (Enclosure 1). The EA will be prepared in accordance with the National Environmental Policy Act of 1969, as amended.

The proposed action to be evaluated in the EA includes the construction of two modular buildings approximately 60,000 square feet (sf) and 80,000 sf in size and associated parking for the INSCOM Cyber Brigade and 902<sup>nd</sup> Military Intelligence Group. The proposed location consists of approximately 15 acres of previously disturbed land in the southeastern portion of Fort Meade (Enclosure 2).

To assist us in identifying environmental issues that may affect the implementation of this project, please provide written comments within 15 days of receipt of this letter to: Ms. TJ Flanagan, U.S. Army Corps of Engineers, Baltimore District, ATTN: CENAB-PL-E (Fort George G. Meade INSCOM EA), 10 S Howard Street, Baltimore, Maryland 21201. You may contact Ms. Flanagan at (410) 962-3314 if you have any comments or questions regarding this matter.

Sincerely,

*Maia Frankel*

Enclosures

*for* Lawrence D. Eastman  
Chief, Planning and Environmental  
Services Branch



**DEPARTMENT OF THE ARMY**  
BALTIMORE DISTRICT, CORPS OF ENGINEERS  
P. O. BOX 1715  
BALTIMORE, MARYLAND 21203-1715

REPLY TO  
ATTENTION OF

May 26, 2011

Planning Division

Mr. Leopoldo Miranda  
Chesapeake Bay Field Office  
U.S. Department of the Interior Fish and Wildlife Service  
177 Admiral Cochrane Drive  
Annapolis, MD 21401

Dear Mr. Miranda:

On behalf of the U.S. Army Intelligence and Security Command (INSCOM), the U.S. Army Corps of Engineers, Baltimore District is preparing an Environmental Assessment (EA) for the proposed construction of a temporary modular Sensitive Compartmented Information Facility (SCIF) to be located at Fort George G. Meade, Maryland. Fort Meade is located in northern Anne Arundel County, Maryland, southeast of the Baltimore-Washington Parkway and west of I-97 (Enclosure 1). The EA will be prepared in accordance with the National Environmental Policy Act of 1969, as amended.

The proposed action to be evaluated in the EA includes the construction of two modular buildings approximately 60,000 square feet (sf) and 80,000 sf in size and associated parking for the INSCOM Cyber Brigade and 902<sup>nd</sup> Military Intelligence Group. The proposed location consists of approximately 15 acres of previously disturbed land in the southeastern portion of Fort Meade (Enclosure 2).

The purpose of this letter is to request a review of the project area and to solicit comments from your agency regarding impacts, if any, to threatened and endangered species in accordance with the Fish and Wildlife Coordination Act (16 U.S.C. 661 et seq.) and Section 7 of the Endangered Species Act of 1973 (ESA) (87 Stat.884, as amended; 16 U.S.C. 1531 et seq).

To assist us in identifying environmental issues that may affect the implementation of this project, please provide written comments within 15 days of receipt of this letter to: Ms. TJ Flanagan, U.S. Army Corps of Engineers, Baltimore District, ATTN: CENAB-PL-E (Fort George G. Meade INSCOM EA), 10 S Howard Street, Baltimore, Maryland 21201. You may contact Ms. Flanagan at (410) 962-3314 if you have any comments or questions regarding this matter.

Sincerely,

*Maria Franko*

Enclosures

*for* Lawrence D. Eastman  
Chief, Planning and Environmental  
Services Branch



US Army Corps  
of Engineers  
Baltimore District

# Public Notice

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**Environmental Assessment  
Temporary Modular Sensitive Compartmented Information Facility  
Fort George G. Meade  
Anne Arundel County, Maryland**

**All Interested Parties:** On behalf of the U.S. Army Intelligence and Security Command (INSCOM), the U.S. Army Corps of Engineers, Baltimore District is preparing an Environmental Assessment (EA) for the proposed construction of a temporary modular Sensitive Compartmented Information Facility (SCIF) to be located at Fort George G. Meade, Maryland. The base, which encompasses 5,506 acres, is located in northern Anne Arundel County, Maryland, southeast of the Baltimore-Washington Parkway and west of I-97 (Enclosure 1).

The proposed action to be evaluated in the EA includes the construction of two modular buildings of approximately 60,000 square feet (sf) and 80,000 sf in size and associated parking for the INSCOM Cyber Brigade and 902<sup>nd</sup> Military Intelligence Group. The proposed location consists of approximately 15 acres in the southeastern portion of Fort Meade (Enclosure 2). This site consists mainly of previously disturbed soils.

This EA will evaluate the potential environmental effects that may occur as a result of the Proposed Action and will be prepared in accordance with the National Environmental Policy Act (NEPA) of 1969, as amended.

Interested parties are invited to submit written comments for consideration within 15 days of this notice. Any comments received will be considered in the preparation of the EA. This Public Notice is being distributed to organizations and individuals that are known to have an interest in this project (Enclosure 3). Please bring this matter to the attention of any other organizations or individuals with an interest in this matter. Comments must be submitted within 15 days of the date of this notice to: U.S. Army Corps of Engineers, Baltimore District, ATTN: CENAB-PL-E (Fort George G. Meade Road Improvement EA), P.O. Box 1715, Baltimore, Maryland 21203-1715.

*Maia Franks*

*for*

Lawrence D. Eastman  
Chief, Planning and Environmental  
Services Branch

Date: 26 May 2011

Enclosures



US Army Corps  
of Engineers  
Baltimore District

201102161

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BY: \_\_\_\_\_

# Public Notice

## Environmental Assessment Temporary Modular Sensitive Compartmented Information Facility Fort George G. Meade Anne Arundel County, Maryland

**All Interested Parties:** On behalf of the U.S. Army Intelligence and Security Command (INSCOM), the U.S. Army Corps of Engineers, Baltimore District is preparing an Environmental Assessment (EA) for the proposed construction of a temporary modular Sensitive Compartmented Information Facility (SCIF) to be located at Fort George G. Meade, Maryland. The base, which encompasses 5,506 acres, is located in northern Anne Arundel County, Maryland, southeast of the Baltimore-Washington Parkway and west of I-97 (Enclosure 1).

The proposed action to be evaluated in the EA includes the construction of two modular buildings of approximately 60,000 square feet (sf) and 80,000 sf in size and associated parking for the INSCOM Cyber Brigade and 902<sup>nd</sup> Military Intelligence Group. The proposed location consists of approximately 15 acres in the southeastern portion of Fort Meade (Enclosure 2). This site consists mainly of previously disturbed soils.

*Johnston*

This EA will evaluate the potential environmental effects that may occur as a result of the Proposed Action and will be prepared in accordance with the National Environmental Policy Act (NEPA) of 1969, as amended.

Interested parties are invited to submit written comments for consideration within 15 days of this notice. Any comments received will be considered in the preparation of the EA. This Public Notice is being distributed to organizations and individuals that are known to have an interest in this project (Enclosure 3). Please bring this matter to the attention of any other organizations or individuals with an interest in this matter. Comments must be submitted within 15 days of the date of this notice to: U.S. Army Corps of Engineers, Baltimore District, ATTN: CENAB-PL-E (Fort George G. Meade Road Improvement EA), P.O. Box 1715, Baltimore, Maryland 21203-1715.

*Arched  
DLH  
7/11/11  
(1a)*

The Maryland Historical Trust has determined that this undertaking will have no adverse effect on historic properties.  
*for*  
*[Signature]*  
Date *7/12/11*

*Maia Franke*  
Lawrence D. Eastman  
Chief, Planning and Environmental  
Services Branch

*Prior review - 201102276  
MB 20110607 0385*

Date: 26 May 2011

*Prior review  
201102276  
AA-34 Fort Meade  
Znc  
7/12/11  
AR2*

Enclosures



*Martin O'Malley, Governor*  
*Anthony G. Brown, Lt. Governor*  
*John R. Griffin, Secretary*  
*Joseph P. Gill, Deputy Secretary*

August 1, 2011

Mr. Lawrence D. Eastman  
Dept. of the Army Corps of Engineers  
P.O. Box 1715  
Baltimore, MD 21203-1715

**RE: Environmental Review for Construction of Temporary Modular Sensitive Compartmented Information Facility (SCIF) at Fort George G. Meade, Anne Arundel County, Maryland.**

Dear Mr. Eastman:

The Wildlife and Heritage Service has determined that there are no State or Federal records for rare, threatened or endangered species within the boundaries of the project site as delineated. As a result, we have no specific comments or requirements pertaining to protection measures at this time. Please note however that the utilization of state funds, the need to obtain a state-authorized permit, or changes to the plan might warrant additional evaluations that could lead to protection or survey recommendations by the Wildlife and Heritage Service. Please contact us again for further coordination if this project falls into one of those categories.

We would also like to point out that our initial evaluation of this project should not be interpreted as meaning that it is not possible for rare, threatened or endangered species to be present. Certain species could be present without documentation because adequate surveys may not have been conducted in the past. We would like to bring to your attention that our Natural Heritage database records do indicate that there are records for Roughish Panicgrass (*Dichanthelium leucothrix*) known to occur within close proximity to the project site. Roughish Panicgrass is a species with Uncertain state status, although it is thought to be possibly rare in Maryland. This species could potentially occur on the project site itself, especially if the appropriate habitat is present. Habitat for this species is described as: Pinelands, savannahs and low woods (Radford et al 1968); damp sandy pine-barrens (Fernald 1950). Since the population of this native plant has declined historically we would encourage efforts to help conserve it across the state. Feel free to contact us if you would like technical assistance regarding the conservation of these important species.

Thank you for allowing us the opportunity to review this project. If you should have any further questions regarding this information, please contact me at (410) 260-8573.

Sincerely,

Lori A. Byrne  
Environmental Review Coordinator  
Wildlife and Heritage Service  
MD Dept. of Natural Resources

ER # 2011.0745.aa  
Cc: K. McCarthy, DNR



**United States Department of the Interior**

U.S. Fish & Wildlife Service  
Chesapeake Bay Field Office  
177 Admiral Cochrane Drive  
Annapolis, MD 21401  
410/573 4575



**Online Certification Letter**

Today's date:

Project:

Dear Applicant for online certification:

Thank you for choosing to use the U.S. Fish and Wildlife Service Chesapeake Bay Field Office online list request certification resource. This letter confirms that you have reviewed the conditions in which this online service can be used. On our website ([www.fws.gov/chesapeakebay](http://www.fws.gov/chesapeakebay)) are the USGS topographic map areas where **no** federally proposed or listed endangered or threatened species are known to occur in Maryland, Washington D.C. and Delaware.

You have indicated that your project is located on the following USGS topographic map

Based on this information and in accordance with section 7 of the Endangered Species Act (87 Stat. 884, as amended; 16 U.S.C. 1531 *et seq.*), we certify that except for occasional transient individuals, no federally proposed or listed endangered or threatened species are known to exist within the project area. Therefore, no Biological Assessment or further section 7 consultation with the U.S. Fish and Wildlife Service is required. Should project plans change, or if additional information on the distribution of listed or proposed species becomes available, this determination may be reconsidered.

This response relates only to federally protected threatened or endangered species under our jurisdiction. For additional information on threatened or endangered species in Maryland, you should contact the Maryland Wildlife and Heritage Division at (410) 260-8540. For information in Delaware you should contact the Delaware Natural Heritage and Endangered Species Program, at (302) 653-2880. For information in the District of Columbia, you should contact the National Park Service at (202) 535-1739.

The U.S. Fish and Wildlife Service also works with other Federal agencies and states to minimize loss of wetlands, reduce impacts to fish and migratory birds, including bald eagles, and restore habitat for wildlife. Information on these conservation issues and how development projects can avoid affecting these resources can be found on our website ([www.fws.gov/chesapeakebay](http://www.fws.gov/chesapeakebay)).

We appreciate the opportunity to provide information relative to fish and wildlife issues, and thank you for your interest in these resources. If you have any questions or need further assistance, please contact Chesapeake Bay Field Office Threatened and Endangered Species

program at (410) 573-4531.

Sincerely,

Leopoldo Miranda  
Field Supervisor



# Maryland Department of Agriculture

Agriculture | Maryland's Leading Industry

Office of the Secretary

**Martin O'Malley**, Governor  
**Anthony G. Brown**, Lt. Governor  
**Earl F. Hance**, Secretary  
**Mary Ellen Setting**, Deputy Secretary

The Wayne A. Cawley, Jr. Building  
50 Harry S. Truman Parkway  
Annapolis, Maryland 21401

Internet: [www.mda.state.md.us](http://www.mda.state.md.us)

410.841.5700 Baltimore/Washington  
301.261.8106 Washington, D.C.  
410.841.5914 Fax  
800.492.5590 Toll Free

June 22, 2011

U.S. Army Corps of Engineers  
ATTN: Lawrence D. Eastman-CENAB-PL-E  
P.O. Box 1715  
Baltimore, MD 21203-1715

Dear Sir:

This letter serves as a response to the Public Notice for the Environmental Assessment of the Temporary Modular Sensitive Compartmented Information Facility at Fort George G. Meade. Generally, this project does not appear to impact agricultural land. Therefore, the Maryland Department of Agriculture does not have any comment on the proposed project.

Also, please note, future Public Notices should be addressed to the following individual:

Ms. Gloria Chambers  
Executive Associate  
Maryland Department of Agriculture  
50 Harry S. Truman Parkway, Room 301  
Annapolis, MD 21401

Sincerely,

A handwritten signature in black ink, appearing to read "Julianne A. Oberg".

Julianne A. Oberg  
Communications Director



Maryland Department of Planning

Martin O'Malley
Governor
Anthony G. Brown
Lt. Governor

Richard Eberhart Hall
Secretary
Matthew J. Power
Deputy Secretary

June 7, 2011

Ms. T.J. Flanagan
Project Manager
U.S. Army Corps of Engineers, Baltimore District
Attn: CENAB-PL-E (Fort George G. Meade INSCOM EA)
10 S. Howard Street
Baltimore, MD 21203-1715

STATE CLEARINGHOUSE REVIEW PROCESS

State Application Identifier: MD20110607-0385

Reviewer Comments Due By: June 11, 2011

Project Description: Scoping prior to Environmental Assessment: Proposed Construction of a Temporary Modular Sensitive Compartmented Information Facility: 2 modular buildings and associated parking

Project Address: Fort George G. Meade

Project Location: County of Anne Arundel

Clearinghouse Contact: Bob Rosenbush

Dear Ms. Flanagan:

Thank you for submitting your project for intergovernmental review. Participation in the Maryland Intergovernmental Review and Coordination (MIRC) process helps ensure project consistency with plans, programs, and objectives of State agencies and local governments. MIRC enhances opportunities for approval and/or funding and minimizes delays by resolving issues before project implementation.

The following agencies and/or jurisdictions have been forwarded a copy of your project for their review: the Maryland Department(s) of Natural Resources, the Environment, Transportation, Agriculture; the Maryland Military Department; the County of Anne Arundel; and the Maryland Department of Planning; including the Maryland Historical Trust. They have been requested to contact your agency directly by June 14, 2011 with any comments or concerns and to provide a copy of those comments to the State Clearinghouse for Intergovernmental Assistance. Please be assured that after June 14, 2011 all MIRC requirements will have been met in accordance with Code of Maryland Regulations (COMAR 34.02.01.04 - .06). The project has been assigned a unique State Application Identifier that should be used on all documents and correspondence.

If you need assistance or have questions, contact the State Clearinghouse staff noted above at 410-767-4490 or through e-mail at brosenbush@mdp.state.md.us. Thank you for your cooperation with the MIRC process.

Sincerely,

[Handwritten signature of Linda C. Janey]

Linda C. Janey, J.D., Assistant Secretary
for Clearinghouse and Communications

LCJ:BR

cc: Beth Cole - MHT\*
Joe Abe - DNR\*
Joane Mueller - MDE\*

Nichol Conley - MDOT\*
Gloria Chambers - MDA\*

Lawrence Leone - MILT\*
John Dodds - ANARP\*

Mike Paone-MDPL\*

11-0385\_NDC.NEW.doc



REPLY TO  
ATTENTION OF:

201102276  
DEPARTMENT OF THE ARMY  
HQ US ARMY INSTALLATION MANAGEMENT COMMAND  
HEADQUARTERS, UNITED STATES ARMY GARRISON  
4551 LLEWELLYN AVENUE, STE 5000  
FORT GEORGE G. MEADE, MARYLAND 20755-5000

FILE COPY  
RECEIVED  
JUN 09 2011

BY: \_\_\_\_\_

JUN 06 2011

Directorate of Public Works

F  
Army  
DLH/ARA

Mr. J. Rodney Little  
State Historic Preservation Officer  
Maryland Historical Trust  
100 Community Place  
Crownsville, Maryland 21032-2023

Dear Mr. Little:

The purpose of this letter is to consult with your office as required by Section 106 of the National Historic Preservation Act regarding the proposed construction of a temporary modular Sensitive Compartmented Information Facility at Fort George G. Meade in Anne Arundel County, Maryland (Enclosure 1). The proposed undertaking includes the construction of two modular trailers of approximately 60,000 and 80,000 square feet, respectively, with associated parking. The trailers will be used by the U.S. Army Intelligence and Security Command Cyber Brigade and 902<sup>nd</sup> Military Intelligence Group. The proposed trailers and parking lot will be constructed on an approximately 15 acre parcel in the southeastern portion of Fort Meade, bounded by Chisholm and Chamberlin Avenues to the west and east, and 4<sup>th</sup> and 6<sup>th</sup> streets to the north and south (Enclosure 2).

Odenton

The proposed location of this undertaking was investigated for its potential to contain archeological resources in the 1995 *Archeological Study of Fort Meade* (Goodwin, et al 1995: 239-252). The study determined that the area was the former location of temporary barracks constructed during World War I, as are shown on the United States Geological Survey (USGS), Odenton 7.5 minute topographic quadrangle which was photo revised in 1979 (Enclosure 3). The barracks had been demolished by the time of the 1995 archaeological survey. Ground disturbance was clearly observable in a majority of shovel tests excavated on this parcel, and the study concluded that there were no significant archeological remains in this portion of Fort Meade. There are no architectural resources in the project area and it is not in the view shed of Fort Meade's National Register Historic District.

Fort Meade has determined that the proposed work will have no effect on historic properties, and no further work is recommended. Should we become aware, from any source, that historic properties are located at or near the property, we will notify your office immediately. Questions regarding this matter should be directed to Mr. Jerald Glodek, at (301) 677-9179.

Archeo  
DLH  
7/6/11  
1a

AA-34

Sincerely,

*Michael P. Butler*  
Michael P. Butler  
Chief, Environmental Division  
Directorate of Public Works

The Maryland Historical Trust has determined that this undertaking will have no adverse effect on historic properties.  
*[Signature]*  
Date 7/8/2011

DLH  
ARA  
7/8/2011



**APPENDIX C**

**ACRONYMS AND ABBREVIATIONS**

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## ACRONYMS AND ABBREVIATIONS

ACS	American Community Survey
AOG	Army Operations Activity
AQCR	Air Quality Control Region
AR	Army Regulation
AWG	Asymmetric Warfare Group
BCT	Basic Combat Training
BG&E	Baltimore Gas and Electric
BMP	Best Management Practice
BRAC	Base Realignment and Closure
CAA(A)	Clean Air Act (Amendments)
CBOC	Community Based Outpatient Clinic
CE	Categorical Exclusion
CEQ	Council of Environmental Quality
CFR	Code of Federal Regulations
CNO/NW	Computer Network Operations/Network Warfare
CO	Carbon Monoxide
CO <sub>2</sub> e	Carbon Dioxide Equivalent
CONPLANS	Concept Plans
CZM	Coastal Zone Management
dBA	A-Weighted Decibel
DC	District of Columbia
DINFOS	Defense Information School
DISA	Defense Information System Agency
DMA	DoD Media Activity
E&S	Erosion and Sedimentation
EA	Environmental Assessment
EIS	Environmental Impact Statement
EO	Executive Order
EPA	U.S. Environmental Protection Agency
EUL	Enhanced Use Lease
FNSI	Finding of No Significant Impact
FMR	Force Management Review
FY	Fiscal Year
FTX	Field Training Exercise
gpm	Gallons Per Minute
HAP	Hazardous Air Pollutant
IET	Initial Entry Training
INSCOM	Intelligence and Security Command
kV	Kilovolt

LEED	Leadership in Energy and Environmental Design
LOS	Level of Service
MD	Maryland
MDE	Maryland Department of the Environment
MDNR	Maryland Department of Natural Resources
mgd	Million gallons per day
NAAQS	National Ambient Air Quality Standards
NEPA	National Environmental Protection Act
NO <sub>2</sub>	Nitrogen Dioxide
NO <sub>x</sub>	Nitrogen Oxides
NOX	nitrogen oxides
NPS	National Park Service
NRCS	Natural Resource Conservation Service
NSA	National Security Agency
NSR	New Source Review
O <sub>3</sub>	Ozone
OSUT	One Station Unit Training
Pb	Lead
PM	Particulate Matter
PM <sub>10</sub>	PM less than 10 microns in diameter
PM <sub>2.5</sub>	PM less than 2.5 microns in diameter
PSD	Prevention of Significant Deterioration
RCI	Residential Communities Initiative
REC	Record of Environmental Consideration
ROD	Record of Decision
ROI	Region of Influence
RONA	Record of Non-Applicability
SCIF	Sensitive Compartmented Information Facility
sf	Square Foot (Feet)
SIP	State Implementation Plan
SO <sub>2</sub>	Sulfur Dioxide
SWM	Stormwater Management
TOE	Table of Organization and Equipment
U.S.	United States
USACE	U.S. Army Corps of Engineers
USFWS	U.S. Fish and Wildlife Service
VOC	Volatile Organic Compound

**APPENDIX D**

**AIR QUALITY CALCULATIONS**  
**AND**  
**RECORD OF NON-APPLICABILITY (RONA)**

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**Construction of Temporary Facilities at Fort Meade**

15-acre parcel

57,120 square feet (SF) 80,000 SF .

Total construction area 10 acre

**Building Construction**

70000 SF footprints

<i>Equipment</i>	<i>Number</i>	<i>Hr/day</i>	<i># days</i>	<i>Hp</i>	<i>LF</i>	<b>VOC</b> g/hp-hr	<b>CO</b> g/hp-hr	<b>NOx</b> g/hp-hr	<b>SO2</b> g/hp-hr	<b>PM</b> g/hp-hr	<b>VOC</b> lb	<b>CO</b> lb	<b>NOx</b> lb	<b>SO2</b> lb	<b>PM</b> lb
Skid steer loader	3	8	24	67	0.23	0.5213	2.3655	5.5988	0.93	0.473	10	46	110	18	9
Concrete truck	6	1	32	250	0.21	0.68	2.7	8.38	0.89	0.402	15	60	186	20	9
Dump truck	2	2	8	275	0.21	0.68	2.7	8.38	0.89	0.402	3	11	34	4	2
Delivery truck	2	1	83	180	0.21	0.68	2.7	8.38	0.89	0.402	9	37	116	12	6
Backhoe/loader	2	4	36	98	0.21	0.99	3.49	6.9	0.85	0.722	13	46	90	11	9
Small diesel engines	4	4	52	10	0.43	0.7628	4.1127	5.2298	0.93	0.4474	6	32	41	7	4
<b>Subtotal</b>											56	233	577	72	38

<i>Equipment</i>	<i>Number</i>	<i>Hr/day</i>	<i># days</i>	<i>Hp</i>	<i>LF</i>	<b>VOC</b> g/hp-hr	<b>CO</b> g/hp-hr	<b>NOx</b> g/hp-hr	<b>SO2</b> g/hp-hr	<b>PM</b> g/hp-hr	<b>VOC</b> lb	<b>CO</b> lb	<b>NOx</b> lb	<b>SO2</b> lb	<b>PM</b> lb
Small diesel engines	3	4	67	10	0.43	0.7628	4.1127	5.2298	0.93	0.4474	6	31	40	7	3
Delivery truck	1	2	61	180	0.21	0.68	2.7	8.38	0.89	0.402	7	27	85	9	4
Skid steer loader	3	8	64	67	0.23	0.5213	2.3655	5.5988	0.93	0.473	27	123	292	49	25
Concrete truck	4	4	38	250	0.21	0.68	2.7	8.38	0.89	0.402	48	190	590	63	28
Crane	1	8	49	120	0.43	0.3384	0.8667	5.6523	0.93	0.2799	15	39	252	41	12
<b>Subtotal</b>											103	411	1259	169	73

**Grading**

48,400 SY

<i>Equipment</i>	<i>Number</i>	<i>Hr/day</i>	<i># days</i>	<i>Hp</i>	<i>LF</i>	<b>VOC</b> g/hp-hr	<b>CO</b> g/hp-hr	<b>NOx</b> g/hp-hr	<b>SO2</b> g/hp-hr	<b>PM</b> g/hp-hr	<b>VOC</b> lb	<b>CO</b> lb	<b>NOx</b> lb	<b>SO2</b> lb	<b>PM</b> lb
Dozer	1	6	8	90	0.59	0.99	3.49	6.9	0.93	0.722	6	20	40	5	4
Skid steer loader	4	4	12	67	0.23	0.5213	2.3655	5.5988	0.93	0.473	3	16	37	6	3
Backhoe/loader	2	6	16	98	0.21	0.99	3.49	6.9	0.85	0.722	9	30	60	7	6
Small diesel engines	2	4	12	10	0.43	0.7628	4.1127	5.2298	0.93	0.4474	1	4	5	1	0
Dump truck	6	1	12	275	0.21	0.68	2.7	8.38	0.89	0.402	6	25	78	8	4
<b>Subtotal</b>											25	95	219	28	18

**Gravel Work**

863 CY

Equipment	Number	Hr/day	# days	Hp	LF	VOC	CO	NOx	SO2	PM	VOC	CO	NOx	SO2	PM
						g/hp-hr	g/hp-hr	g/hp-hr	g/hp-hr	g/hp-hr	lb	lb	lb	lb	lb
Grader	1	4	4	135	0.58	0.68	2.7	8.38	0.93	0.402	2	7	23	3	1
Skid steer loader	4	4	4	67	0.23	0.5213	2.3655	5.5988	0.93	0.473	1	5	11	2	1
Backhoe/loader	2	8	4	98	0.21	0.990	3.49	6.9	0.85	0.722	3	9	18	2	2
Small diesel engines	3	4	4	10	0.43	0.7628	4.1127	5.2298	0.93	0.4474	0	2	2	0	0
Dump truck	20	0.5	4	275	0.21	0.68	2.7	8.38	0.89	0.402	3	12	38	4	2
<b>Subtotal</b>											9	35	93	11	6

**Fugitive Dust Emissions:**

PM <sub>10</sub>	days of	PM <sub>10</sub>	PM <sub>2.5</sub> /PM <sub>10</sub>	PM <sub>2.5</sub>	
tons/acre/mo	acres	disturbanc	Total	Ratio	Total
0.42	5.0	30	2	0.1	0.2

**Total Annual Emissions in tons**

VOC	CO	NOx	SO2	PM <sub>10</sub>	PM <sub>2.5</sub>
0.10	0.39	1.07	0.14	2.17	0.28

Operational Emissions - Boilers

1-03-006-03 Commercial/Institutional Boiler, Natural Gas, < 10 MMBtu/hr

Example boiler that is < 10 MM Btu:

Heat Input (MMBtu/hr) <sup>a</sup>	Fuel Type	Annual Fuel Usage in MMBtu
3.99	N.G.	8957

Estimated quantity of natural gas consumed annually ##### ft3

Pollutant	Emission Factor (lb/10 <sup>6</sup> ft3) <sup>a,b</sup>
	0.3 to 100 MMBtu/hr
CO	84
NO <sub>x</sub>	100
PM <sup>c</sup>	7.6
SO <sub>2</sub>	0.6
VOC	5.5
CO <sub>2</sub>	120,000
N <sub>2</sub> O	0.64
CH <sub>4</sub>	2

<sup>a</sup> Emission factors from U.S. Environmental Protection Agency. Compilation of Air Pollutant Emission Factors - Volume I (AP-42), Section 1.4, 5th Edition.

<sup>b</sup> Emission factors based on burning natural gas with a heating value of 1,020 Btu/ft<sup>3</sup>

<sup>c</sup>PM is less than 1 micrometer in size.

Annual Emissions for Example Boiler (lb/yr):

	VOC	CO	NOx	SO <sub>2</sub>	PM	CO <sub>2</sub>	N <sub>2</sub> O	CH <sub>4</sub>
3 boilers total	145	2213	2634	16	200	3161160	16.8595	60.5889
Total in Tons/yr	0.22	3.32	3.95	0.02	0.30	4741.74	0.03	0.09

**CO<sub>2</sub>e = 4310.48 metric tons/yr**

668 workers commuting per day Assume each worker drives separately.

# vehicles	# days	mi/day	VOC lb/mi	CO lb/mi	NOx lb/mi	SOx lb/mi	PM lb/mi	CO2 lb/mi	VOC lb	CO lb	NOx lb	SOx lb	PM lb	CO2 lb
668	220	30	0.0019	0.0388	0.0018	1.806E-05	0.000055	1.05326	8303	171059	7822	80	244	4643630
								<b>Tons/yr</b>	4.15	85.53	3.91	0.04	0.12	2106
														<b>metric tons/yr</b>



**Total Operational Emissions**

	Total Annual Emissions in tons					metric tons
	VOC	CO	NOx	SO2	PM	CO <sub>2</sub> e
Boilers	0.22	3.32	3.95	0.02	0.30	4742
Commuters	4.15	85.53	3.91	0.04	0.12	2106
<b>Total</b>	<b>4.37</b>	<b>88.85</b>	<b>7.86</b>	<b>0.06</b>	<b>0.42</b>	<b>6848.06</b>

**RECORD OF NON-APPLICABILITY (RONA)  
FOR CLEAN AIR ACT CONFORMITY  
Fort George G. Meade, Anne Arundel County, MD**

The proposed action falls under the Record of Non-Applicability (RONA) category and is documented with this RONA.

**Project/Action Name:** Fort George G. Meade U.S. Army Intelligence and Security Command Temporary Sensitive Compartmented Information Facility

**Project/Action Point of Contact:** Michael P. Butler  
Chief, Environmental Division  
Fort George G. Meade

**Begin Date:** June 2011

**End Date:** September 2011

General Conformity under the Clean Air Act, Section 176 has been evaluated for the project described above according to the requirements of 40 CFR 93, Subpart B. The General Conformity Rule applies to federal actions occurring in regions designated as being in nonattainment for the NAAQS or attainment areas subject to maintenance plans (maintenance areas). Threshold (*de minimis*) rates of emissions have been established for federal actions with the potential to have significant air quality impacts. If a project/action located in an area designated as non-attainment or maintenance exceeds these *de minimis* levels, a general conformity determination is required. Anne Arundel County is designated as a moderate ozone (8- hour) non-attainment area and a nonattainment area for the annual PM<sub>2.5</sub> standard. Because ozone forms from other emissions, the analysis focuses on ozone precursors, volatile organic compounds (VOCs) and nitrogen oxides (NO<sub>x</sub>), as well as PM<sub>2.5</sub>. The region is in attainment for other criteria pollutants.

A General Conformity applicability analysis of this project/action was performed to assess the air emissions associated with the proposed action to determine if maximum annual direct and indirect emissions from this project/action would exceed *de Minimis thresholds*. Table 1 identifies the calculated emissions and compares them to the thresholds.

Table 1. Comparison of Construction and Operation Emissions to General Conformity Rule *de Minimis Thresholds in Tons per Year*.

Activity	Emissions in Tons/Year			
	NO <sub>x</sub>	VOCs	PM <sub>2.5</sub>	SO <sub>2</sub>
2011 Construction Emissions	1.07	0.10	0.28	0.14
Annual Operation Emissions	7.86	4.37	0.42	0.06
<b><i>de Minimis</i> Thresholds</b>	<b>100</b>	<b>150</b>	<b>100</b>	<b>100</b>

<sup>1</sup>VOC *de Minimis* established for nonattainment areas located in ozone transport region.

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The result of the applicability analysis concludes that the proposed action is exempt from General Conformity requirements.

Anne Arundel County is in attainment for all other criteria pollutants (carbon monoxide, lead, PM10, PM2.5 (24-hour), and sulfur dioxide) and, therefore, these pollutants are not subject to conformity review. Supporting documentation and emission estimates can be found in section 5.3 and Appendix D of the Environmental Assessment document.

*Michael P. Butler*

MICHAEL P. BUTLER  
Chief, Environmental Division  
Directorate of Public Works

*26 AUG 2011*

Date