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ENVIRONMENTAL ASSESSMENT FOR THE PROPOSED NAVAL SPECIAL WARFARE EXPLOSIVE CENTER OF EXCELLENCE

U. S. Army, Fort A. P. Hill
Bowling Green, Virginia

January 2009

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Environmental Assessment
U.S. Army Garrison Fort A.P. Hill

Construction and Operation of

Naval Special Warfare Explosive Center of Excellence

January 2009

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Finding of No Significant Impact
Naval Special Warfare Explosive Center of Excellence
U. S. Army Garrison, Fort A.P. Hill, Virginia

The U. S. Army Garrison, Fort A. P. Hill in Caroline County, Virginia, proposes to construct and operate a Naval Special Warfare Explosive Center of Excellence (NSWECE). The purpose of the proposed action is to provide a safe and updated explosive training mock-up complex to support sustained specialized demolitions training and tactical methods-of entry training. This facility would provide training in unconventional warfare, direct action, counter-drug operations, personnel recovery and maritime visit-board-search and seizure activities.

The proposed action is construction and operation of a breacher facility to include an administrative area, training area and demolition area. The total land proposed for use for the NSWECE would be 20 acres divided into three separate areas. One site would be the administrative area consisting of classroom and office buildings and associated structures and parking lots. The second site is the training area consisting of a multi-story breach house, door and wall mock-up facades, a workshop, a saw and torch cut area, a student prep building, a ship façade trainer, an observation control tower and smaller supporting structures. Earthen berms would be used to separate each training element. The third smaller area would be for demolition training for explosive charges up to 35 pounds.

The Preferred Alternative and the No Action Alternative are the only alternatives to the proposed action described in detail within the Environmental Assessment (EA). The Preferred Alternative was the only one which met the screening criteria established by Naval Special Forces and Fort A. P. Hill.

Other alternatives considered included enhancing the interim NSWECE into a permanent site and upgrading the Naval Special Warfare Advanced Training Command (NSWATC) Breacher Training Facility previously used at Fort Pickett in Blackstone, Virginia. The interim site is not large enough to meet the training standards established by the NSWATC for Special Forces operations and training. Currently training is being limited on the interim site due to land size. This alternative did not meet minimum essential requirements and screening criteria established by the NSWATC. The site at Fort Pickett could not be exclusively used by the NSWATC once it was constructed. NSWATC personnel would need to schedule around other activities and organizations that would also be allowed to use the training site. This would not meet minimum essential requirements and screening criteria established by the NSWATC; therefore, this alternative was reviewed and rejected.

The No Action Alternative would mean continuation of existing conditions. Under the No Action Alternative, no new land use practices would be implemented and the proposed NSWECE site would continue to be used as a wildlife enhancement area (food plot), and the NSWECE would continue at the interim location. The No Action Alternative was not considered reasonable and viable.

Overall, implementation of the proposed action would have no significant impact on the resources evaluated. Insignificant impacts may be incurred temporarily on air and water quality during site grading and construction. Temporary air emissions would be controlled through the use of standard construction practices such as dust wetting and use of designated construction entrances. Some noise impacts would occur during training operations including breaching activities and demolition training. Noise modeling was conducted for proposed operations at the NSWECE. The results indicated that the Noise Zones would not extend beyond the Fort A. P. Hill boundary for 1 lb charges; however, there is some risk of noise complaints due to 35 lb. charges during adverse weather conditions. Noise complaints would be investigated and mitigated in accordance with the Fort A. P. Hill policy to promote an open dialogue with the local community. Most of the proposed site is cleared; however, some acres would be cleared and

grubbed to accommodate the NSWECE. Clearing would be done in accordance with forestry best management practices. Stormwater management practices required by the Virginia Stormwater Management Program (VSMP) would be implemented, and Fort A. P. Hill would apply for a general permit for storm water discharges prior to construction.

The EA concludes that, with the implementation of appropriate best management practices as mentioned above, the proposed action would have no significant impacts on the quality of the physical and human environment at Fort A. P. Hill. In accordance with the requirements of the National Environmental Policy Act (NEPA), Fort A. P. Hill therefore issues a Finding of No Significant Impact (FONSI) for this project, and an Environmental Impact Statement (EIS) will not be prepared. This Environmental Assessment is available for public review at the Environmental Office in the Directorate of Public Works, Fort A. P. Hill, Virginia. It is also available for viewing and download at the Fort A. P. Hill website http://www.aphill.army.mil/. Interested parties are invited to submit written comments for consideration on or before 30 days after publication of this notice to **Commander, U. S. Army Garrison Fort A. P. Hill, ATTN: Environmental Division, 19952 North Range Road, Fort A. P. Hill, VA 22427-3123.**

EXECUTIVE SUMMARY

INTRODUCTION

This Environmental Assessment (EA) is prepared in accordance with the National Environmental Policy Act (NEPA), its implementing regulations published by the Council on Environmental Quality (CEQ) (40 CFR 1500-1508), and 32 CFR Part 651 which implements NEPA for the Army. Under NEPA, federal agencies are required to consider the environmental consequences of proposed actions. The Army can consider environmental consequences of proposed actions through the use of a Record of Environmental Consideration (REC), an EA, or an Environmental Impact Statement (EIS) pursuant to 32 CFR Part 651, as appropriate, depending on the level of significance of the environmental impacts of the proposed actions.

This EA provides NEPA analysis and documentation for the proposed action, which is to construct and operate a Naval Special Warfare Explosive Center of Excellence (NSWECE) at Fort A. P. Hill.

PURPOSE AND NEED

The purpose of the proposed action is to provide a safe and updated explosive training mock-up complex to support sustained specialized demolitions training and tactical methods-of entry training for Naval Special Warfare Advanced Training Command (NSWATC) personnel. This facility would provide training in unconventional warfare, direct action, counter-drug operations, personnel recovery and maritime visit-board-search and seizure activities. Personnel would be trained to conduct immediate access under tactical threat into secured areas in multi-story buildings and aboard ships. Rapid technology growth increases the threat and demands in this specialized skill area. Currently the east coast NSWATC detachment (Det Little Creek) runs the only Special Warfare Breaching/Method of Entry course of instruction at Fort Pickett in Blackstone, Virginia. This facility has inadequate training facilities, range limitation and scheduling restrictions. A new facility is needed which would support state-of-the-art training facilities, teaching equipment and support infrastructure necessary to train SEALs (sea, air and land forces) and Naval Special Warfare Forces and meet training standards. If a new NSWECE is not made available, additional troop time as well as increased funds would be required at alternate facilities to meet minimum standards. Naval Special Forces deploying overseas would be less than fully prepared to conduct mission tactics and preparedness would be significantly degraded.

PROPOSED ACTION

The proposed action is construction and operation of a breacher facility to include an administrative area, training area and demolition area. The total area proposed for use for the NSWECE would be 20 acres divided into three separate areas. One site would be the administrative area consisting of classroom and office buildings and associated structures and parking lots. The second site is the training area consisting of a multi-story breach house, door and wall mock-up facades, a workshop, a saw and torch cut area, a charge prep building, a ship façade trainer, an observation control tower and smaller supporting structures. Earthen berms would be used to separate each training element. The third smaller area would be for demolition training for explosive charges up to 35 pounds.

Training activities would include explosive breaching to doors, windows, and steel plates and using torches to cut through steel, cinderblock, concrete and masonry panels. Breach house training would include the use of live ammunition using 12 gauge shot gun rounds and simunitions rounds which are similar to a paint ball wrapped in plastic. Firing would be at door and window facades. The anticipated average use of the NSWECE would be 100 days each year.

ALTERNATIVES CONSIDERED

The Preferred Alternative and the No Action Alternative are the only alternatives to the proposed action described in detail within this EA. The Preferred Alternative, which is the proposed action, is the only one that meets the screening criteria established by Fort A. P. Hill. The No Action Alternative serves as a benchmark against which the Preferred Alternative can be evaluated. For this analysis, the No Action Alternative is defined as continuing the current use of the training lands area without any changes.

ALTERNATIVES CONSIDERED AND REJECTED

Consideration was given to enhancing the interim NSWECE into a permanent site. The interim site is located on Fort A. P. Hill not far from the proposed permanent site. The interim site is not large enough to meet the training standards established by the NSWATC for Naval Special Forces operations and training. Currently training is being limited on the interim site due to land size. This alternative did not meet minimum essential requirements and screening criteria established by the NSWATC.

Consideration was also given to upgrading the NSWATC Breacher Training Facility previously used at Fort Pickett in Blackstone, Virginia. However the Navy would not have exclusive use or preferred scheduling of the training area once it was constructed. NSWATC personnel would need to schedule around other activities and organizations that would also be allowed to use the training site. This would not meet minimum essential requirements and screening criteria established by the NSWATC.

ENVIRONMENTAL IMPACTS AND BEST MANAGEMENT PRACTICES

The EA evaluates potential environmental consequences of implementing the proposed action and the No Action Alternative. Implementation of the proposed action, the installation's Preferred Alternative, would mean that facilities construction and training mission operations on the NSWECE would begin. Overall, implementation of the proposed action would have no significant impact on the resources evaluated including: land use, noise, soils, water resources including wetlands, biological resources including vegetation and threatened and endangered species, cultural resources, socioeconomics and environmental justice/protection of children, infrastructure and hazardous materials/wastes. Insignificant impacts may be incurred temporarily on air and water quality during site grading and construction. Temporary air emissions would be controlled through the use of standard construction practices such as dust wetting and use of designated construction entrances. Some noise impacts would occur during training operations; however, noise on the proposed site falls within noise levels currently experienced by training lands in this portion of Fort A. P. Hill. Most of the proposed site is cleared; however, some acres would be cleared and grubbed to accommodate the NSWECE.

Clearing would be done in accordance with forestry best management practices. Stormwater management practices required by the Virginia Stormwater Management Program (VSMP) would be implemented, and Fort A. P. Hill would apply for a general permit for storm water discharges prior to construction.

The No Action Alternative would mean continuation of existing conditions. Under the No Action Alternative, no new land use practices would be implemented and the proposed NSWECE site would continue to be used as a wildlife enhancement area (food plot), and the NSWECE would continue at the interim location. The No Action Alternative did not meet the purpose and need for the project and was not considered a viable alternative.

CONCLUSIONS

The EA concludes that, with the implementation of appropriate best management practices as mentioned above, the proposed action would have no significant impacts on the quality of the physical and human environment at Fort A. P. Hill. In accordance with the requirements of NEPA, Fort A. P. Hill therefore issues a Finding of No Significant Impact (FONSI) for this project, and an EIS will not be prepared.

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SECTION 1.0

1.0 PURPOSE AND NEED FOR ACTION

1.1 Introduction and Scope of the Document

Fort A. P. Hill is proposing construction and use of a NSWECE for mission essential training, particularly for Naval Special Warfare Forces. This EA identifies, reviews and evaluates the environmental impacts of construction and future training operations of the NSWECE site and of the No Action Alternative.

This EA is prepared in accordance with NEPA of 1969, its implementing regulations published by the CEQ (40 CFR 1500-1508), and 32 CFR Part 651 which implements NEPA for the Department of the Army. Pursuant to NEPA, federal agencies are required to consider the environmental consequences of their proposed actions. NEPA typically applies when the federal agency is the proponent of the action or where federal funds are involved in the action.

1.2 Purpose and Need for the Proposed Action

1.2.1 Background

Fort A. P. Hill is situated primarily within the boundaries of Caroline County, Virginia, along the I-95 corridor and astride U.S. Route 301. The post is 20 miles southeast of Fredericksburg and is situated roughly midway between Richmond, Virginia, and the Washington, D.C. metropolitan area. The installation rests on the upper Atlantic Coastal Plain and in the watersheds of the Rappahannock and Mattaponi Rivers. Fort A. P. Hill's terrain consists of rolling hills with some low areas and wetlands throughout post. Most of the installation is forested with wooded areas containing both hardwood and coniferous trees. U.S. Route 301 divides the post into northern and southern sections, allowing maneuver and range operations to occur simultaneously. The northwest portion of the post is dedicated to maneuver operations and the southeast portion contains a 27,000-acre modern range facility and impact area. To the south and west, the installation is bordered by forest, farmland, and the town of Bowling Green. Forests, farmland, and the town of Port Royal lie to the east and north.

The mission and vision of Fort A.P. Hill is to provide realistic joint and combined arms training, logistics and support, enabling America's Defense Forces to win in the 21st Century operational environment. Fort A. P. Hill maintains an all-purpose, year-round, training facility that serves Active, Reserve, and National Guard troops of the Army, Marine Corps, Navy, and Air Force, as well as personnel from other government agencies.

1.2.2 Purpose

NSWATC provides advanced special operation training and instruction to U.S. and allied Special Operation Forces. NSWATC requires adequate and modern facilities to properly train the

Special Operations Community for the 21st Century in support of the War on Terrorism as well as in preparation for emerging national security threats.

The purpose of the proposed action is to provide a safe and updated explosive training mock-up complex to support sustained specialized demolitions training and tactical methods-of entry training for NSWATC personnel. This facility would provide training in unconventional warfare, direct action, counter-drug operations, personnel recovery and maritime visit-board-search and seizure activities. Personnel would be trained to conduct immediate access under tactical threat into secured areas in multi-story buildings and aboard ships.

1.2.3 Need

Rapid technology growth increases the threat and demands in this specialized skill area. Currently the east coast NSWATC detachment (Det Little Creek) runs the only Special Warfare Breaching/Method of Entry course of instruction at Fort Pickett in Blackstone, Virginia. This facility has inadequate training facilities, range limitation and scheduling restrictions. A new facility is needed which would support state-of-the-art training facilities, teaching equipment and support infrastructure necessary to train SEALs and Naval Special Warfare Forces and meet training standards. If a new NSWECE is not made available, additional troop time as well as increased funds would be required to provide training at alternate facilities to meet minimum standards. If adequate training is not received, Naval Special Forces deploying overseas would be less than fully prepared to conduct mission tactics and preparedness would be significantly degraded.

1.3 Scope of the Document

This EA assesses the effects of construction and training operations of the NSWECE on the following environmental resources: land use, air quality, noise, geology and soils, water resources including wetlands, biological resources including on-site vegetation and threatened and endangered species, cultural resources, socioeconomics, environmental justice, infrastructure, and hazardous/regulated materials/wastes. Any potential cumulative and secondary impacts associated with this project are also analyzed. Proposed mitigation measures to minimize environmental impact are provided.

1.4 Interagency Coordination and Review and Public Comment Period

The preparation of this EA was coordinated with appropriate federal, state and local agencies. Copies of agency correspondence are provided in Appendix B. In addition, agency and public input will be obtained during a public comment period. The initial public comment period will be held following completion of the draft EA. Comments submitted by agencies, organizations and members of the public on the proposed action or EA will be considered. If the EA concludes that there are no significant impacts, a FONSI will be issued.

SECTION 2.0

2.0 PROPOSED ACTION

The overall proposed action for this EA is to construct and operate a NSWECE necessary to meet training requirements of the NSWATC. The proposed facility would provide a safe and updated training mock-up complex to support sustained specialized demolitions training and tactical methods of entry training. The proposed NSWECE would meet Department of the Navy standardized design and training requirements for facility and function layouts and locations.

The total area proposed for use for the NSWECE would be 20 acres divided into three separate areas. One site would be the administrative area consisting of classroom and office buildings and associated structures and parking lots. The second site is the training area consisting of a multi-story breach house, door and wall mock-up facades, a workshop, a saw and torch cut area, a charge prep building, a ship façade trainer, an observation control tower and smaller supporting structures. Earthen berms would be used to separate each training element. The third smaller area would be for demolition training for explosive charges up to 35 pounds.

Training activities would include explosive breaching to doors, windows, and steel plates and using torches to cut through steel, cinderblock, concrete and masonry panels. Breach house training would include the use of live ammunition using 12 gauge shot gun rounds and simunitions rounds which are similar to a paint ball wrapped in plastic. Firing would be at door and window facades.

The shoot house, also referred to as the breach house, would be a two story structure containing movable interior walls with door and window facades, stairways and balconies. All components would be re-configurable and contain replaceable parts. The doors would be built out of metal and wood with plastic pins instead of standard hinges. This would allow for multiple uses of each door and window. The adjacent wall structures would be designed to have a five year lifespan. Supporting facilities would include a target building workshop and a target and tool storage building. Simulated two-way paved streets complete with sidewalks and fencing between buildings would offer enhanced real-world training.

The ship trainer, constructed from stackable conex boxes, would be designed for multiple training activities including methods-of-entry, and maritime visit-board-search-and-seizure training. Demolition training is not planned for this element. An underwater explosive training tank, designed as a large oval swimming pool type of structure, may be added to the NSWECE site at some point in the future.

The anticipated average use of the NSWECE would be 100 days each year. Each class would be four weeks long and it is anticipated that there would be five classes per year. Classes would include 20 students and 10 instructors. All students and staff would stay on Camp Connors located on Fort A. P. Hill during the course of the training.

SECTION 3.0

3.0 ALTERNATIVES CONSIDERED

3.1 Alternatives Development

For proposed actions that require preparation of an EA, Council of Environmental Quality regulations (§1508.9[b]), NEPA (§102[2][E]), and Army regulations (32 CFR Part 651) and policy require that appropriate alternatives for the proposed action be described and evaluated. A reasonable range of alternatives that meet the underlying purpose and need for the proposed action should be analyzed for their environmental impacts to support a fully informed decision by the decision-maker. An EA must include an evaluation of the No Action Alternative as a reference for the comparison of potential environmental impacts associated with the proposed action. Additionally, the EA should identify any alternatives eliminated from detailed analysis and indicate the reasons for their elimination.

Four alternatives, including the Preferred Alternative and the No Action Alternative, were considered by Fort A. P. Hill as part of the NEPA process. Each alternative was considered for meeting the purpose and need, cost and impact to the human and natural environment. Alternatives which did not meet the screening criteria established were not considered throughout the EA.

3.2 Screening Criteria

Fort A. P. Hill was originally considered to support the NSWECE due to available land and resources. Screening criteria established by NSWECE and Fort A. P. Hill staff for the proposed training site includes:

- An area large enough to support state-of-the-art training facilities,
- A site which can be dedicated to use by the NSWATC to eliminate scheduling restrictions and training limitations,
- A site that either has the necessary infrastructure and utilities or can support construction of the new infrastructure and utilities to meet minimum training standards.

3.3 Preferred Alternative, Enhance Training Lands at Fort A. P. Hill, VA

The description of the proposed action presented in Section 2.0 is the Preferred Alternative. This alternative meets the screening criteria provided in Section 3.2, and is the only alternative carried throughout this EA. This alternative involves 20 acres located on Fort A. P. Hill approximately one quarter mile (400 meters) south of Wilcox Drive on the north side of the installation, on a site currently used as a wildlife enhancement area (wildlife food plot).

3.4 Second Alternative, Convert Interim NSWECE into Permanent Site

Consideration was given to enhancing the interim NSWECE into a permanent site. The interim site is located south of the proposed site on Fort A. P. Hill on Perrin Road. The interim site is not large enough to meet the training standards established by the NSWATC for Naval Special Forces operations and training. State-of-the-art training facilities are required to provide specialized training for a real-world environment. Currently training is being limited on the interim site due to land size. This alternative did not meet minimum essential requirements and screening criteria established by the NSWATC.

3.5 Alternatives Considered and Rejected

Consideration was given to upgrading the NSWATC Breacher Training Facility previously used at Fort Pickett in Blackstone, Virginia. However the staff at Fort Pickett would not agree to exclusive use or preferred scheduling of the training area once it was constructed. NSWATC personnel would need to schedule around other activities and organizations that would also be allowed to use the training site. This would not meet minimum essential requirements and screening criteria established by the NSWATC.

3.6 No Action Alternative

Under the No Action Alternative, the permanent NSWECE would not be constructed at Fort A. P. Hill and would remain at Fort Pickett. The NSWATC Breacher Training Facility at Fort Pickett consisted of a small, poorly designed wood breaching structure until it was destroyed by fire in March 2007. The NSWATC utilized a co-use range agreement with other units at Fort Pickett to accomplish training. Supporting infrastructure at Fort Pickett consists of refurbished trailers for berthing and classroom areas and a small workshop for gear storage and target preparation. All of the facilities are of insufficient size and age and suffer from extensive use. Mechanical, electrical, telephone and water/sewer systems are old and inadequate. A cost/benefit analysis of all alternatives was developed during the Department of the Navy 1390/1391 project development process. This cost/benefit analysis does not support upgrading or alternate use of the current facilities at Fort Pickett. Fort Pickett does not have the state-of-the-art training facilities, teaching equipment and support infrastructure necessary to train SEALs and other Special Warfare Forces.

The No Action Alternative would be expected to have a negative impact on national security and training objectives and mission. Training standards in this specialized skill area would not be fully satisfied. SEAL forces would not be fully prepared to conduct mission tactics. With the loss of the breach house at Fort Pickett, NSWATC's ability to train personnel in special operations and tactics is significantly degraded. The No Action Alternative would, however, eliminate the potential environmental impacts associated with construction and operation of a NSWECE on Fort A. P. Hill. The land on the proposed site would continue to be used for its current purpose and the existing conditions of the affected environment would not change under the No Action Alternative. The NSWATC would continue to use the temporary Breacher Facility on Fort A. P. Hill or the inadequate facility on Fort Pickett. These baseline environmental conditions are described in Section 4.0 of this EA and serve as a benchmark for the evaluation of potential impacts of the proposed action. CEQ regulations and 32 CFR Part 651 require consideration of the No Action Alternative.

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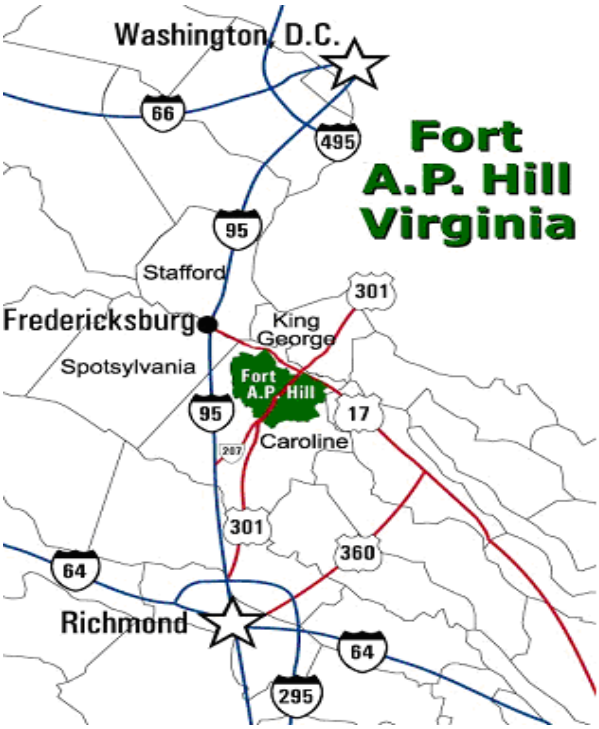

Figure 1. Location of Fort A. P. Hill, Caroline County, Virginia

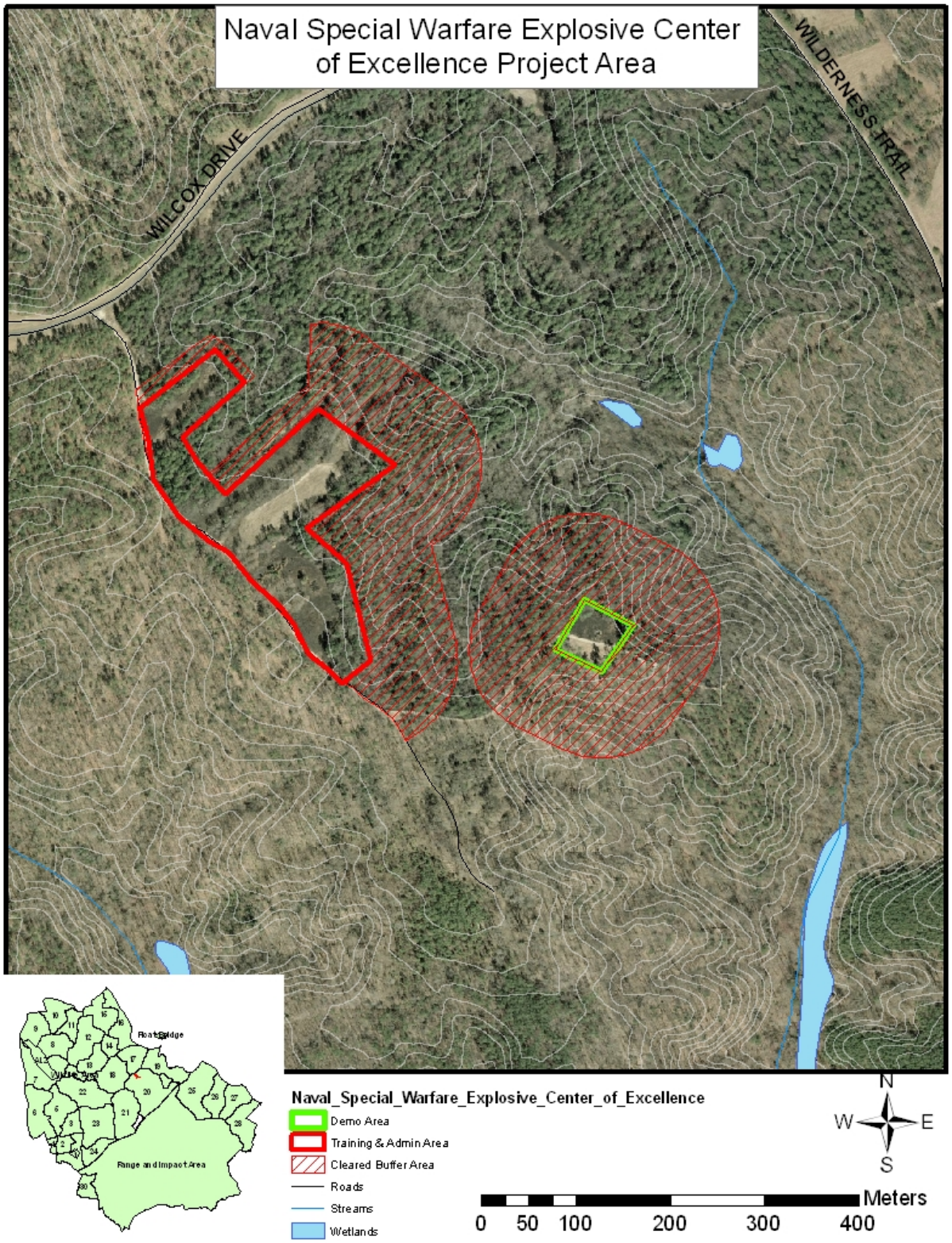

Figure 2. Proposed NSWECE Site

SECTION 4.0

4.0 AFFECTED ENVIRONMENT

4.1 Location Description

Fort A. P. Hill is a Department of the Army training facility located primarily in Caroline County, Virginia, north of the town of Bowling Green. The installation is approximately 76,000 acres in size and is bisected east and west by U. S. Route 301 (Figure 1). The mission of Fort A.P. Hill is to provide realistic joint and combined arms training, logistics and support, enabling America's Defense Forces to win in the 21st Century operational environment. Fort A. P. Hill maintains an all-purpose year-round training facility for the military units assigned to the installation. Active Army, National Guard and Reserve units as well as the Marines and the Navy use the installation for training activities. The proposed location of the NSWECE is within Fort A. P. Hill training area 20A north of U. S. Route 301. The site is located on Fort A. P. Hill approximately one quarter mile (400 meters) south of Wilcox Drive 2/10 of a mile (300 meters) east of General Forest Road and 4/10 of a mile (700 meters) west of Wilderness Trail (Figure 2).

4.2 Land Use

The proposed NSWECE would be located on 20 acres within training area 20A of Fort A. P. Hill northwest of U. S. Route 301. The site is mainly open land with some wooded areas. The proposed footprint would be located in a wildlife enhancement area currently used for wildlife food plots.

4.3 Air Quality

Fort A. P. Hill is located in the Northeastern Virginia Air Quality Control Region. The Virginia Department of Environmental Quality (VDEQ) has classified Caroline County as an attainment area for all National Ambient Air Quality Standards (NAAQS). Fort A. P. Hill currently has an air quality, state operating permit for all emissions activities which occur on post including explosive training activities.

4.4 Noise

The Federal Interagency Committee on Urban Noise (FICUN) has developed land use guidelines, adopted by the Department of Defense, for areas on or near noise producing activities, such as highways, airports and firing ranges. The Army uses these guidelines to designate Noise Zones (NZ) for land use planning. Land use guidelines are meant to ensure the compatibility with the noise environment while allowing maximum beneficial use of contiguous property. Fort A. P. Hill has an obligation to the surrounding communities to determine ways to protect both the people living and working adjacent to the installation and the public's investment in the installation and the training which occurs there.

4.4.1 Noise Zones

Noise Zones (NZ) are designated as Land Use Planning Zone (LUPZ), I, II or III based on the number of decibels (dB) produced for both long term and impulsive events. NZ descriptions for Fort A. P. Hill include:

- LUPZ consists of the areas around a noise source where the C-weighted day-night level (CDNL) is less than 57 dB for all noise. A LUPZ is usually acceptable for all types of land use activities.

- NZ I consists of the areas around a noise source where a single event noise is less than 87 dB for small arms and the C-weighted day-night level (CDNL) is less than 62 dB for large arms impulsive noise. The CDNL is the time weighted average sound level with a 10 dB penalty added to night time (2200 to 0700 hours) noise levels.

- NZ II consists of the area where a single event noise is between 87 and 104 dB for small arms and the CDNL is between 62 and 70 dB for large arms impulsive events. Land use within a NZ II area is normally limited to industrial, manufacturing and transportation type activities.

- NZ III consists of the area around a noise source where a single event noise is greater than 104 dB for small arms and the CDNL is greater than 70 dB for large arms impulsive events. Noise sensitive land uses are not recommended for NZ III areas.

Based on Department of Defense guidance, the Department of the Army has developed an Environmental Noise Management Program which considers noise from all sources of military activities. Fort A. P. Hill has an installation Environmental Noise Management Plan (ENMP). The ENMP, which applies to all tenants and activities, provides information and recommendations for reducing noise impact during land and air training exercises. It also provides limits for weapons firing and noise complaint investigation procedures.

4.5 Soils and Vegetation

4.5.1 Soils

Fort A. P. Hill is located in the Atlantic Coastal Plain physiographic province. The terrain includes rolling countryside to mostly level plains, interrupted by numerous shallow valleys. The elevation ranges from 10 to 255 feet above mean sea level. The land on the proposed site is relatively flat in an area of rolling hills and valleys. The soils on the site ranges from potentially erodible to moderately erodible due to location, soil texture, structure, slope and permeability. Soil types on the proposed site include Kempsville and Slagle soils.

Kempsville soil consists of very deep, well drained soils on coastal plain uplands formed in fluvial sediments. They are typically found on nearly level to moderately steep Coastal Plain uplands. Slopes range from 0 to 25 percent. Slagle soils consist of deep, moderately well drained fine

sandy loam formed on marine terraces and uplands. They are typically found on moderate slopes of 0 to 25 percent grade.

4.5.2 Vegetation

The Breacher Facility footprint would be constructed in an area of open and forested land. The open wildlife foods plots consist of mixed grasses, wildflowers, blackberry (*Rhubus* spp.), and small sawtooth oak (*Quercus acutissima*) plantations. The forested area overstory consists largely of loblolly pine (*Pinus taeda*) of approximately 35 years of age. This pine plantation was thinned in 2001 and experienced a prescribed burn in approximately 2003. The midstory consists mostly of mixed hardwoods including yellow-poplar, oaks (*Quercus* spp.), sweetgum (*Liquidambar styraciflua*), and black cherry (*Prunus serotina*). The understory is relatively open due to limited light from the mature, closed canopy as well as evident recent wildland fire events.

4.6 Water Resources.

4.6.1 Surface Water

No surface water, including streams or ponds, is located on the proposed NSWECE site. The property sits on a drainage divide between two unnamed tributaries to Mill Creek. One tributary is approximately 300 meters east of the trail into the site; the other is approximately 250 meters west of the trail. The eastern lying tributary is approximately 175 meters from the proposed demolition area.

4.6.2 Wetlands

Wetlands have been identified and delineated throughout the installation on the National Wetlands Inventory (NWI) Survey. Additionally, water quality protection standards have been established for lands adjacent to wetlands and water bodies with perennial flow. Fort A. P. Hill imposes a 100 foot protective buffer around all wetlands to minimize impacts from erosion or soil disturbance. Wetlands located on the proposed NSWECE site are shown on Figure 3.

4.6.3 Drinking Water

Drinking water on Fort A. P. Hill is provided by a series of ground water wells located throughout the installation. These wells are typically 350 to 500 feet deep and provide approximately 100 to 250 gallons per minute. Water lines exist along primary and secondary roads throughout post. Shallow groundwater is typically located 25 to 30 feet below grade throughout Fort A. P. Hill.

4.7 Biological Resources

4.7.1 Threatened and Endangered Species

The Department of Conservation and Recreation Natural Heritage Program has conducted surveys throughout the installation. Based upon background review of previous surveys, three species with legal designation and one species of concern could possibly exist on the proposed NSWECE site. These species include Swamp Pink (*Helonias bullata*), Small Whorled Pagonia (*Isotria medeoloides*), American Ginseng (*Panax quinquefolius*) and New Jersey Rush (*Juncus caesariensis*). No threatened and endangered species survey of the proposed site has been conducted in the past.

4.7.2 Threatened and Endangered Species Potential Habitat

Helonias bullata can occur within forested semi-permanent to permanently saturated spring-seepage areas. *Isotria medeoloides* typically occurs within mature hardwood dominated forests on level to moderate slopes. *Panax quinquefolius* is typically found within hardwood dominated forests. *Juncus caesariensis* can be found in forested and open, wet, springy bogs, swamps and borders of wet woods. Small amounts of each of these habitats exist within the proposed NSWECE site.

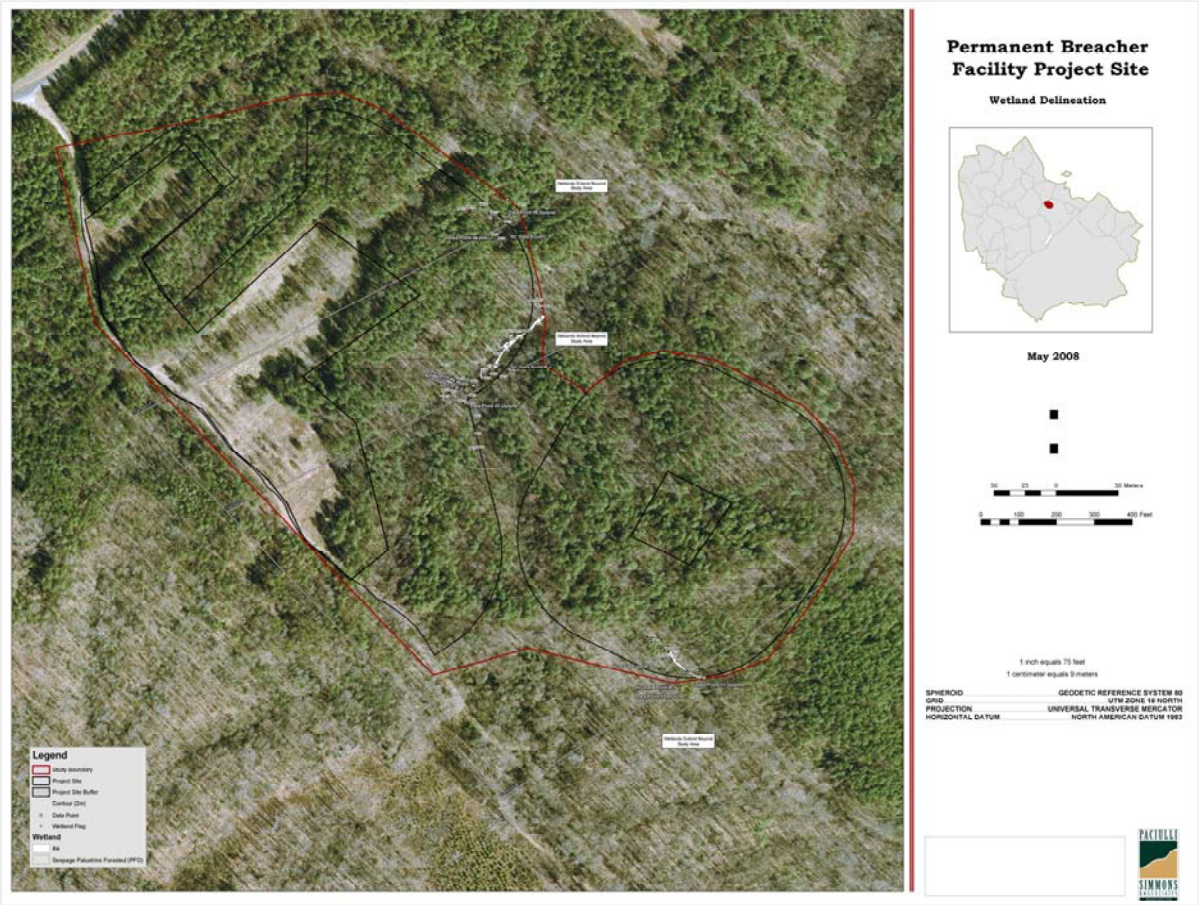

Figure 3. Location of wetlands on proposed NSWECE site.

4.8 Cultural Resources

4.8.1 Archaeological Sites

Fort A.P. Hill has identified over 50 archaeological sites that are eligible for inclusion in the National Register of Historic Places (National Register). According to the Fort A. P. Hill Integrated Cultural Resources Management Plan (ICRMP), one previously identified archaeological site, 44CE0080, is located within a one mile radius of the proposed NSWECE site.

4.8.2 Architectural Resources

Fort A.P. Hill has identified two architectural resources that are eligible for inclusion in the National Register of Historic Places (National Register). According to a 2004 Phase I Cultural Resources Survey conducted on Fort A. P. Hill, no architectural resources exist within the boundaries of the proposed NSWECE.

4.9 Socioeconomic Resources

4.9.1 Demographics

Caroline County is located in the rapidly growing I-95 urban corridor, separating two major metropolitan statistical areas (MSA): the Baltimore-Washington MSA comprising a population in excess of 2,407,400 (Virginia portion only, 2005) and the Richmond-Petersburg MSA encompassing a population of nearly 1,167,500 (2005). Caroline County is part of the Fredericksburg Region, which was the fastest growing area in the state between 1980 and 1990, in terms of population and job creation. The Fredericksburg Region contains a population in excess of 215,000 (2000). As the southernmost locality in the Fredericksburg Region, Caroline County draws from both the Fredericksburg and Greater Richmond regional labor markets.

4.9.2 Economy

Historically, Caroline County's major private industries have been tied directly to natural resources. These include agriculture and forestry products and nearly 51,604 acres of farmland. Principal crops are soybeans, wheat, barley and corn. There are over 261,700 acres of commercial forestland, which predominantly include loblolly pine, short leaf pine, oak and hickory. Significant mineral resources include sand, gravel, clay, mica and beryl. In addition to the expansion of some resource-based industries, Caroline County is seeing a new wave of activity from a variety of businesses and industries and growth in Caroline County has significantly changed in recent years.

The population areas surrounding Fort A. P. Hill tend to have lower incomes than Virginia residents as a whole; however, this fact most likely reflects the rural nature of the county and the

lag in growth compared to its more rapidly urbanizing neighbors such as Stafford and Spotsylvania Counties.

4.9.3 Protection of Children

Executive Order 13045 seeks to protect children from disproportionately incurring environmental health or safety risks that might arise as a result of installation policies, procedures, programs, activities and standards. The training lands and ranges of Fort A. P. Hill are restricted to authorized personnel only and access is limited, excluding the entry of unauthorized adults and children.

4.10 Environmental Justice

Executive Order 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*, requires Federal agencies to identify and address disproportionate adverse effects of their programs, policies and activities on minority and low-income populations.

The Region of Influence (ROI) for this proposed action lies within the confines of Fort A. P. Hill. The training mission applies only to facilities that lie within the installation boundaries and has no applicability to resources that are located on lands outside Fort A. P. Hill. No low income or minority populations exist on the installation or immediately adjacent to the NSWECE site.

4.11 Infrastructure and Utilities

Existing infrastructure on the proposed NSWECE consists of paved and gravel roads and unimproved trails.

Utilities, including water, sewer, power, and communications lines, exist on Wilcox Drive, but these utilities do not currently exist on the proposed NSWECE site.

4.12 Hazardous Materials/Wastes

4.12.1 Hazardous Materials/Wastes

Hazardous materials and hazardous wastes used and generated on Fort A. P. Hill are handled within the guidelines of Army regulations and any other applicable state and local laws and regulations. Hazardous wastes are not currently generated in the training areas proposed for the NSWECE. Fort A. P. Hill has an on-going contract for collection and disposal of any regulated and hazardous waste generated on the installation. Fort A. P. Hill follows Department of the Army pollution prevention and recycling methods wherever applicable.

4.12.2 Regulated Materials/Wastes

Current use of the training area proposed for the NSWECE does not include generation, storage or disposal of regulated materials/waste. Fort A. P. Hill currently has a contract for collection and disposal of regulated waste generated on post.

4.13 Energy Conservation and Sustainability

To the extent possible and practicable, the Department of the Army and Fort A. P. Hill participate in the Leadership in Energy and Environmental Design (LEED) program. The LEED rating system recognizes building sustainability and promotes healthier work and living environments. The program emphasizes modifying construction materials and techniques and promotes the use of recycled materials to reduce the human carbon footprint on the earth. Fort A. P. Hill has requested that all units, contractors, vendors and any other activities that live, work, train or operate on the installation consider using more sustainable materials and recycle whatever materials they can.

SECTION 5.0

5.0 ENVIRONMENTAL IMPACTS

5.1 Land Use

5.1.1 Effects of the Preferred Alternative

The proposed NSWECE site is currently part of Fort A. P. Hill training area 20A; therefore, the proposed operations and activities are similar to those currently performed on or near this site. No significant impact to land use is anticipated due to the proposed action.

5.1.2 Effects of the No Action Alternative

The No Action Alternative would have no impact to land use because the site would not be used for establishment of the NSWECE. The land would remain as part of the training area on Fort A. P. Hill.

5.2 Air Quality

5.2.1 Effects of the Preferred Alternative

Air impacts from the proposed action would include short-term, temporary emissions from construction equipment operation, the removal of vegetation and possible fugitive dust from vehicle movement. During construction, all fugitive dust would be kept at a minimum using control methods recommended under the Virginia Air Quality Regulations, such as wetting roadways and using construction entrances. During site operations, fugitive dust would be kept at a minimum through the use of operational controls such as limiting vehicles within the training areas.

Training operations at the NSWECE would be short-term and localized. There are no regulatory emissions restrictions for the proposed training on this site.

No significant effects to air quality are anticipated by construction and operation of the NSWECE.

5.2.2 Effects of the No Action Alternative

The No Action Alternative would have no impact to air quality because the site would not be used for establishment of the NSWECE. Existing conditions would continue.

5.3 Noise

5.3.1 Effects of the Preferred Alternative

Noise would be generated within the NSWECE during construction and during training operations. Construction noise would be short-term and localized. Noise during training would include breaching activities and demolition training. Noise modeling was conducted for proposed operations at the NSWECE. The results indicated that the NZ would not extend beyond the FAPH boundary. However, the NZ are calculated based on average levels. The most common activity at the site would be the detonation of 1 lb. charges. The noise levels from the 1 lb. charges should not have a negative impact off-post. However, less frequently charges up to 35 lbs would be used at the site. Depending on weather conditions at the time of detonation, levels may be loud enough to fall within the moderate complaint risk criteria off post.

Although there is a risk of noise complaints during adverse weather conditions, noise complaints would be investigated and mitigated in accordance with the Fort A. P. Hill policy to promote an open dialogue with the local community. The installation would continue to promote an open dialogue with neighboring localities, to include re-zoning reviews, education and outreach with local communities, and a comprehensive, proactive noise complaint management program.

5.3.2 Effects of the No Action Alternative

The No Action Alternative would have no new impact to noise because the site would continue to be used as a wildlife enhancement area within the training lands. Existing conditions would continue.

5.4 Soils and Vegetation

5.4.1 Effects of the Preferred Alternative

An Erosion & Sediment Control Plan would be developed and implemented in accordance with the Virginia Erosion & Sediment Control Law and Regulations. The proposed NSWECE is on a drainage divide and site topography is fairly flat. The NSWECE would require minimal site development: therefore, minimal disturbance is anticipated.

Vegetation would be removed as necessary during construction to provide space for infrastructure and structure emplacement. Much of the proposed site is already cleared of trees. Portions of the forested area surrounding the wildlife openings would be cleared to create an open buffer to reduce wildfire risk around the training facility. A surface danger zone (SDZ) buffer of 100 yards around buildings would be cleared of trees and other vegetation.

While minimal impact to wildlife may occur by having food plots removed, other food plots nearby and throughout Fort A. P. Hill have been established for use by local wildlife. These food plots are regularly maintained by the Fort A. P. Hill forestry staff.

5.4.2 Effects of the No Action Alternative

The No Action Alternative would have no impact to vegetation because the site would not be used for establishment of the NSWECE. Existing conditions would continue.

5.5 Water Resources

5.5.1 Effects of the Preferred Alternative

For the period of construction, Fort A. P. Hill would prepare and implement an Erosion and Sediment Control Plan and a Storm Water Pollution Prevention Plan in accordance with the VSMP and the Chesapeake Bay Local Assistance Department (CBLAD) Regulations. Stormwater management practices required by the VSMP would be implemented, and Fort A. P. Hill would apply for a general permit for storm water discharges prior to construction. After construction, natural infiltration would be used for storm water drainage. Sheet flow would drain into a graded channel along the entrance roadway and flow across the site footprint. The Erosion and Sediment Control Plan would determine the appropriate site controls for this project.

A wetlands survey was completed on the proposed NSWECE site during April 2008. No wetlands exist within the proposed facility footprint; however, there are wetlands within the 100 yard training buffer area surrounding the NSWECE. According to the facility design, these wetlands and their 100 foot protective buffer areas would remain undisturbed during facility construction and use.

Based on local topography and stream networks, excavation depths for clearing and grubbing are not expected to encroach upon groundwater levels at the proposed site. To protect groundwater from possible spills, the construction contractor would maintain spill control equipment on the site during construction. Military personnel are required to use drip pans underneath parked vehicles during training activities.

5.5.2 Effects of the No Action Alternative

The No Action Alternative would have no impact to water resources, including surface water, wetlands, storm water, groundwater and drinking water because the sites would not be used for establishment of the NSWECE. Existing conditions would continue.

5.6 Biological Resources

5.6.1 Effects of the Preferred Alternative

The possible existence of three species with legal designation (Swamp Pink, Small Whorled Pogonia and American Ginseng) and one species of concern (New Jersey Rush) was investigated on the proposed NSWECE site. A threatened and endangered species survey of the site was conducted on June 18, 2008, a time of the year when all four target species are considered to be searchable within the region. All potential habitats for the species were walked during this survey, but none of the species were found at the proposed site.

5.6.2 Effects of the No Action Alternative

The No Action Alternative would have no impact to biological resources because the site would not be used for establishment of the NSWECE. Existing conditions would continue.

5.7 Cultural Resources

5.7.1 Effects of the Preferred Alternative

A phase I cultural resources survey of the proposed NSWECE was performed by Paciulli, Simmons and Associates during the period 24 to 27 March 2008. No cultural materials or previously unrecorded archaeological sites were identified during the Phase I survey. It is anticipated that no historic properties or cultural resources would be affected by the construction and operation of the proposed NSWECE.

5.7.2 Effects of the No Action Alternative

The No Action Alternative would have no impact to cultural resources because this site would not be used for establishment of the NSWECE. Existing conditions would continue.

5.8 Socioeconomic Resources

5.8.1 Effects of the Preferred Alternative

Use of the proposed NSWECE could bring as many as 150 additional soldiers to Fort A. P. Hill yearly for Special Forces training. The NSWATC currently uses other facilities and training areas on Fort A. P. Hill. While training at the NSWECE, soldiers would stay on post and spend a minimal amount of time and money in the local economy. However, by providing realistic training that meets military standards, Fort A. P. Hill can ensure regular use of the installation by Army, Reserve and National Guard units and other governmental law enforcement agencies. The economy of Caroline County benefits from the regular influx of troops using the post because soldiers typically spend some money in the local economy.

The NSWECE would be restricted to authorized personnel only; therefore, the proposed action would have no effect on children. There would be no significant impact to socioeconomic resources due to establishment of the NSWECE on Fort A. P. Hill.

5.8.2 Effects of the No Action Alternative

The No Action Alternative would have no impact to socioeconomic resources because the site would not be used for establishment of the NSWECE. Existing conditions would continue.

5.9 Environmental Justice

5.9.1 Effects of the Preferred Alternative

Existing conditions at Fort A. P. Hill would continue under the proposed action. Construction and operation of the proposed NSWECE does not create any advantage or disadvantage for any group or individual, and its use would not create any adverse human health or environmental effects on children, minorities or low-income populations or communities within or surrounding the installation. The proposed NSWECE operations and activities would be completely within the existing boundaries of Fort A. P. Hill.

5.9.2 Effects of the No Action Alternative

The No Action Alternative would have no disproportionate or adverse impacts or environmental or social effects on minority and low-income populations. Existing conditions would continue.

5.10 Infrastructure and Utilities

5.10.1 Effects of the Preferred Alternative

Utilities, including phone and power lines, are available at General Forrest Road and lines would be brought down Wilcox Drive to the administrative building, the breacher house and the supporting facilities for the breacher house. Water lines are already available on Wilcox Drive; however, a small residential-type water well may be installed to provide drinking water to the site. Water would be made available at the administrative building. A septic system would be used for waste water from the administrative area. No latrines are proposed for the breacher training area or demolition area, so no water, sewer or septic systems are planned these areas.

The pre-existing road off Wilcox Drive into the proposed NSWECE would be enhanced with gravel. A new gravel road would be constructed leading to the breacher house and supporting facilities. Other dirt trails would remain the same and lead into the demolition area.

No significant impact to existing post infrastructure is anticipated due to the proposed action.

5.10.2 Effects of the No Action Alternative

Under the No Action Alternative there would be no additional infrastructure added to Fort A. P. Hill, and existing conditions would continue.

5.11 Hazardous Materials/Wastes

5.11.1 Effects of the Preferred Alternative

Wastes generated during training activities would be tested to determine whether or not it was considered hazardous. If testing indicates hazardous waste, all wastes would be containerized for proper disposal. Prior to transporting any hazardous waste, the Environmental Division

would be notified and all hazardous waste manifests would be signed and approved by the Environmental Division prior to leaving the installation. Any hazardous materials and wastes generated would be handled, stored and disposed of in accordance with federal, state and Army regulations and requirements. Fort A. P. Hill would provide disposal for all wastes through existing contracts. Fort A. P. Hill also has a program for recycling and pollution prevention and a fully implemented Environmental Management System.

5.11.2 Effects of the No Action Alternative

Under the No Action Alternative there would be no hazardous materials and wastes on the proposed site, and existing conditions would continue.

5.12 Energy Conservation and Sustainability

5.12.1 Effects of the Preferred Alternative

Per the Department of Army requirements for energy conservation and sustainability, the Department of the Navy and Fort A. P. Hill plans to incorporate as many sustainable design elements into the proposed NSWECE as possible without impacting military training. Long life, low maintenance, recycled materials would be used for building construction. All lights installed within the proposed NSWECE administrative building and breacher house and parking areas would be energy efficient. Heat pumps used for heating and cooling buildings would meet energy efficiency ratings required for the LEED program. All parking areas and roadways would be covered by a pervious gravel surface.

No significant impact to existing energy conservation is anticipated due to the proposed action. Overall, there may be a positive impact to energy conservation and sustainability.

5.12.2 Effects of the No Action Alternative

Under the No Action Alternative there would be no need for energy conservation and sustainable construction on the proposed site, and existing conditions would continue.

5.13 Best Management Practices

Air emissions would be temporary either during construction or during short duration training exercises. Operational controls, such as road wetting, use of construction entrances, and limited speed limits, would be used to control dust emissions.

Noise complaints would be investigated and mitigated in accordance with Fort A. P. Hill policy.

Minimal vegetation removal would be done to minimize environmental impact. Existing topography would be followed wherever possible so that excavation and grading would be minimal.

A threatened and endangered species survey would be conducted prior to any construction to determine if there are plants, animals or habitats which must be avoided and protected.

5.14 Secondary and Cumulative Effects

A cumulative effect is defined as an effect on the environment that results from the incremental effect of the action when added to other past, present and reasonably foreseeable future actions regardless of what agency or person undertakes these actions. Cumulative effects can result from individually minor but collectively significant actions taking place locally or regionally over a period of time.

The proposed NSWECE would be constructed on a pre-existing training area within an active Army training installation. Future proposed activities at Fort A. P. Hill include construction of a training complex, a demolition range, indoor firing range and 800-meter range for use by the Asymmetric Warfare Group (AWG). Other future activities include construction of a maneuver corridor and re-location of Fort Lee training activities to Fort A. P. Hill. EAs for immediate past and proposed activities are referenced in Section 7 and are available on the Fort A. P. Hill website http://www.aphill.army.mil/. At this time, there are no plans to change the current use of the property contained within Fort A. P. Hill. All proposed construction and military training activities are within the current mission of Fort A. P. Hill. The Preferred Alternative is not anticipated to have any significant secondary or cumulative effects on Fort A. P. Hill or the surrounding area of Caroline County.

SECTION 6.0

6.0 CONCLUSIONS

Construction and use of the proposed NSWECE at Fort A. P. Hill would not result in significant environmental or socioeconomic impacts. Army regulations, management plans and environmental requirements implemented by Fort A. P. Hill would ensure activities are in compliance with all applicable federal and state and local laws, regulations, Executive Orders, Presidential Memoranda and Army guidelines. Mitigation measures implemented prior to construction and land disturbing activities would minimize or prevent significant impact to environmental resources. Air emissions would be controlled during construction and training activities with operational procedures. Noise complaints would be investigated and mitigated as necessary under the Fort A. P. Hill policy to have an open dialogue with the surrounding county and communities. Local socioeconomics may be enhanced by soldiers spending money in the local economy. Existing topography would be followed wherever possible so that impacts from excavation and grading would be minimal. Wetlands have been identified on the proposed NSWECE site, and would be avoided. No threatened and endangered species were identified on the proposed site. No cultural resources were identified on the proposed NSWECE site.

As a result of the analyses performed by this EA, it has been determined that the known and potential impacts of the Preferred Alternative on the physical and socioeconomic environment would not be significant. Based on the findings and conclusions in this EA, issuance of a FONSI would be appropriate and preparation of an EIS would not be required.

SECTION 7.0

7.0 REFERENCES

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SECTION 8.0

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APPENDIX A

ACRONYMS AND ABBREVIATIONS

APE	Area of Potential Effect
AR	Army Regulation
AWG	Asymmetric Warfare Group
BMPs	Best Management Practices
CAAA	Clean Air Act Amendments
CBLAB	Chesapeake Bay Local Assistance Board
CEQ	Council of Environmental Quality
DoD	Department of Defense
EA	Environmental Assessment
EIS	Environmental Impact Statement
ED	Environmental Division
ENMP	Environmental Noise Management Plan
EPA	Environmental Protection Agency
ESA	Endangered Species Act
FONSI	Finding of No Significant Impact
GIS	Geographic Information System
ICRMP	Integrated Cultural Resources Management Plan
MDW	Military District Washington
MSA	Metropolitan Statistical Area
NAAQS	National Ambient Air Quality Standards
NEPA	National Environmental Policy Act
NRHP	National Register of Historic Places
NSWATC	Naval Special Warfare Advanced Training Command
NSWECE	Naval Special Warfare Explosive Center of Excellence
NWI	National Wetlands Inventory
NZ	Noise Zone
OSHA	Occupational Safety and Health Administration
PK	Peak Level
ROI	Region of Influence
SHPO	State Historic Preservation Officer
USFWS	United States Fish and Wildlife Service
VDEQ	Virginia Department of Environmental Quality
VPDES	Virginia Pollution Discharge Elimination System
VSMP	Virginia Stormwater Management Program

APPENDIX B
AGENCY CORRESPONDENCE

Agency comments will be added once received.

APPENDIX C

PUBLIC NOTICES/PUBLIC COMMENTS

Public comments will be added once received.

APPENDIX D

RESPONSE TO COMMENTS

Response to comments on the Draft Final EA will be added after comment period is closed.

APPENDIX E

COASTAL RESOURCES CONSISTENCY DETERMINATION

Determination of Consistency with Virginia's Coastal Resources Management Program Naval Special Warfare Explosive Center of Excellence

Pursuant to Section 307 of the Coastal Zone Management Act of 1972, as amended, this is a Federal Consistency Determination for Fort A.P. Hill's construction and use of a NSWECE. The Army is required to determine the consistency of its activities affecting Virginia's coastal resources or coastal uses with the Virginia Coastal Resources Management Program (VCRMP).

This document represents an analysis of project activities in light of established VCRMP Enforceable Programs. Furthermore, submission of this consistency determination reflects the commitment of the Army to comply with those Enforceable Programs. The proposed project will be constructed and operated in a manner, which is consistent with the VCRMP. Fort A. P. Hill has determined that the construction and use of the NSWECE would not affect the land and water uses or natural resources of the Commonwealth of Virginia's coastal zone.

1. Description of Proposed Action

The proposed action is construction and operation of a breacher facility to include an administrative area, a breacher training area and a demolition area. The total area proposed for use for the NSWECE would be 20 acres divided into three separate sites. One site would be the administrative area consisting of classroom and office buildings and associated structures and parking lots. The second site is the training area consisting of a multi-story breach house, door and wall mock-up facades, a workshop, a saw and torch cut area, a student prep building, a ship façade trainer, an observation control tower and smaller supporting structures. Earthen berms would be used to separate each training element. The third smaller area would be for demolition training for explosive charges up to 35 pounds.

2. Assessment of Probable Effects

The planning and design phase of the proposed action would have no coastal zone effects to relevant VCRMP elements. All applicable permits required for the proposed action would be obtained and complied with throughout project duration. A review of the permits and/or approvals required under the enforceable regulatory program has been conducted. Fort A.P. Hill staff evaluated the construction and operation of the NSWECE based on the foreseeable effect on the following enforceable policies:

Fisheries - The NSWECE has no foreseeable impacts on finfish or shellfish resources and would not affect the promotion of commercial or recreational fisheries at the project site area. The property lies on a drainage divide between two unnamed tributaries of Mill Creek. There is no surface water on the project site. The project implements best management practices (BMPs) recommended by the Virginia Department of Conservation and Recreation (VDCR) and Fort A.P. Hill's Environmental Division.

Subaquaeous Lands Management – The project has no foreseeable impact on subaquaeous resources. The NSWECE is located on existing training lands. The project implements BMPs recommended by the VDCR and the Department of Forestry.

Wetlands Management –NWI maps indicate no wetlands on the project site. A wetlands survey of the proposed site has been conducted. It is Fort A. P. Hill's policy is to avoid or minimize wetlands impacts and maintain a 100 foot buffer around all wetland areas. Wetlands would be avoided during construction and operation of the NSWECE.

Dunes Management – Construction and operation of the NSWECE has no foreseeable impact on coastal primary sand dunes. The project would not destroy or alter coastal primary sand dunes.

Non-Point Source Pollution Control – During project construction and long-term operation, storm water runoff would be directed to a vegetated area for natural infiltration. All erosion control would be designed in accordance with the Virginia Erosion and Sediment Control Regulations handbook. Land disturbing activities within the sites are limited to timber harvesting, clearing, grubbing and grading. Erosion and sediment controls would be implemented in accordance with the Virginia Stormwater Management Program (VSMP), Forestry BMPs for Water Quality, Chesapeake Bay Preservation Area Designation and Management guidelines, and the VSMP General Permit for Storm Water discharges associated with land disturbing activities. An approved Erosion and Sediment Control Plan would be implemented for construction on these sites. Fort A.P. Hill natural resource staff would implement the Forestry BMPs described in the installation Integrated Natural Resources Management Plan (INRMP) for land and water quality monitoring, impact mitigation and land rehabilitation programs specific to this project. These programs would continue into the operational phase of the project. The project would not cause non-point source pollution.

Point Source Pollution Control – The NSWECE would have water connections on site and septic at the administrative building. All water and septic would be constructed in accordance with the Virginia Department of Health and Chesapeake Bay Preservation Area Designation and Management Regulations.

Shoreline Sanitation – The project would have no impact on shoreline sanitation.

Air Pollution Control – The project would be located in an attainment area for air pollutants. Construction activity related to the proposed action is likely to create fugitive dust emissions. During construction, fugitive dust would be kept to a minimum by employing measures that include, but are not limited to: installing and using material to enclose and vent the handling of dusty material, covering open equipment for transporting materials, washing down construction vehicles, providing construction entrances, applying water to suppress dust, and washing down paved roadways immediately adjacent to the construction site.

The NSWECE would have negligible impact on air quality. Construction and operation of the proposed project would be subject to regulation 9 VAC 5-50-80/ 90, *Visible and Fugitive Dust Emissions,* by the Department of Environmental Quality (DEQ).

Coastal Lands Management – The project would have no impact on any coastal lands.

Chesapeake Bay Preservation Areas –The project would not involve either development or redevelopment activities on any properly designated Resource Protection Areas (RPA) as defined by the Chesapeake Bay Preservation Act, Virginia Code 10.1-2100 *et seq.* and its implementing Chesapeake Bay Preservation Area Designation and Management Regulations, 9 VAC 10-20-10 *et seq.*

3. Summary of Findings

Based on the above analysis and as elaborated in the Draft Environmental Assessment, Fort A.P. Hill finds the proposed NSWECE fully consistent, or consistent to the maximum extent practicable, with the federally approved enforceable provisions of VCRMP, pursuant to the Coastal Zone Management Act of 1972, as amended and in accordance with 15 CFR Part 930.30(c).

By certification that the proposed action is consistent with VCRMP Enforceable Programs, the Commonwealth of Virginia will be notified that it has 60 days from receipt of this letter, in which to concur with or object to this Consistency Determination. However, pursuant to 15 CFR Part 903.63(b), if the Commonwealth of Virginia has not issued a decision by the 60th day from receipt of this determination, it shall notify Fort A. P. Hill of the status of the matter and the basis for further delay. The State's concurrence, objection, or notification of review status shall be sent to:

Commander, US Army Garrison Fort A.P. Hill
ATTN: ED
19952 North Range Road
Fort A.P. Hill, VA 22427-3123