

FORT BELVOIR

CAISSON PLATOON FACILITY

SUB-AREA MASTER PLAN/AREA DEVELOPMENT PLAN

FINAL ENVIRONMENTAL ASSESSMENT

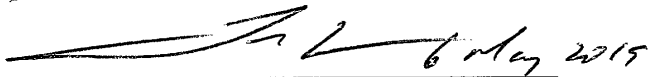
May 2020



**Caisson Platoon Facility Sub-Area Master Plan/Area Development Plan
Environmental Assessment**

U.S. Army Garrison Fort Belvoir

**Reviewed by:
U.S. Army Garrison Fort Belvoir**

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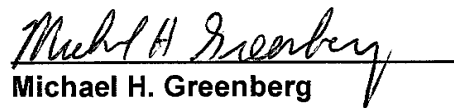
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**Michael H. Greenberg
Colonel, U.S. Army
Commanding**

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Finding of No Significant Impact
Environmental Assessment of the Caisson Platoon Facility
Sub-Area Master Plan/Area Development Plan
U.S. Army Garrison, Fort Belvoir
Directorate of Public Works
Fort Belvoir, Virginia

Name of Action: Environmental Assessment of the Caisson Platoon Facility Sub-Area Master Plan/Area Development Plan.

Description of Proposed Action and Need: The Proposed Action is the approval of the Unified Facilities Criteria (UFC) 2-100-1 compliant Real Property Master Plan (RPMP) that provides a means for sustainable installation development that supports mission and environmental requirements. The RPMP serves as a road map for future (short- and long-term) development. Caisson Platoon Facility improvements are needed to promote a sustainable, world-class facility in support of the Platoon's mission and provide a secure, high-quality environment for Soldiers, civilians, horses, and other users of the Caisson Platoon Facility.

Under the Proposed Action, the improvements include: the enhancement of the facility's security; relocation/expansion of the facility's classroom; expansion of the pasture area to accommodate 27 horses; provision of pasture fencing; provision of a separate hay storage facility; consolidation of equipment storage facilities; provision of an indoor riding training facility for year-round training; expansion of training trails, provision of permanent vehicular parking facilities to accommodate training and maintenance needs; paving of existing roadways; provision of a paved and covered roll off manure dumpster area; provision of effective stormwater management Best Management Practices (BMPs), and enhancement of facility signing. The Proposed Action would result in increasing the Caisson Platoon Facility from its existing 10.5 acres to 39.1 acres, including increasing the current 5.8 acres of pasture to 27.4 acres, and the expansion of the riding trails. The clearing of up to 27.53 acres of existing forest area is proposed for pasture and trail expansion.

Alternatives: Three alternatives to the Proposed Action were considered; however, these alternatives were not evaluated further in the Environmental Assessment (EA) as they did not adequately address the project purpose and need while minimizing environmental impacts. Specifically, these alternatives were not as effective as the Proposed Action in providing the required pasture area for 27 horses, providing required training facilities, and minimizing environmental impacts including impacts to wetlands, archaeological resources, or to the adjacent Wildlife Management Area. The No Action Alternative was evaluated in the EA, but would not result in the needed expansion of the Fort Belvoir Caisson Platoon Facility.

Environmental Consequences: The EA, which is attached and incorporated by reference to this Finding of No Significant Impact, examined the following potential effects of the Proposed Action and possible mitigation strategies:

• **Natural Resources:** The Proposed Action could result in impacts totaling a maximum of 0.12 acres within three wetlands and up to a maximum of 91 feet (140 square feet) of intermittent stream channel, and could result in the clearing of up to 27.53 acres of forest area; however, the Army will minimize impacts to the streams and wetlands to the extent practicable, and will minimize clearing of trees within the proposed pasture areas, preserving large trees where possible to provide shade for the horses, encourage hunting of rodents by birds of prey, and minimize disturbance to roots and soil. The Army would mitigate unavoidable impacts to waters through an established wetland mitigation bank at the appropriate replacement ratios. Consistent with Fort Belvoir's Tree Policy Memorandum, two new trees would be planted for each tree removed during construction, based on available space. In order to adhere to Fort Belvoir's tree policy, a mixture of tree planting on and off-site, as well as out-of-kind, compensatory mitigation involving ecologically beneficial enhancements would be employed for this project. The latter could include solar power, wind power, stream restoration or other such environmentally beneficial work. Other off-site mitigation options include: contributing to one or more of the 26 stream and wetland restoration projects on Fort Belvoir; incorporating Low Impact Development (LID) design features and Green Infrastructure (GI) practices; preserving the top 12 inches of material removed from wetlands for use as wetland seed and root-stock in another area; revegetating early successional vegetation (mix of grass, shrubs, herbaceous layer, etc.) around new buildings, in parking areas, and along the paddock fencing; and, removing invasive species and replanting with native species. More detailed plans regarding mitigation for tree removal will be identified prior to tree clearing activities. Tree removal in excess of 10 acres will be coordinated with the US Fish and Wildlife Service to minimize the potential for impacts to listed bat species.

• **Noise:** Construction would be limited to weekday business hours and construction equipment would use mufflers. Noise from the operation of the Caisson Platoon Facility is expected to be minor.

• **Infrastructure and Utilities:** The Proposed Action would not result in the need for any upgrades in utilities that service Fort Belvoir, would not increase the long-term demand for public utility services, and would not affect regional or local water or energy supplies.

• **Socioeconomic:** The Proposed Action, the expansion of the existing Caisson Platoon Facility, would be conducted consistent with the UFC 2-100-1 compliant RPMP. Impacts to land use, population, demographics, income, community services and facilities, or housing would be temporary and negligible with no long-term effects anticipated.

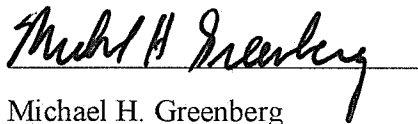
• **Transportation and Traffic:** A temporary and negligible increase in traffic is anticipated during construction; however, traffic is expected to return to preconstruction levels following construction.

Summary of Environmental Impacts: The Proposed Action would not have significant impacts to human health or the environment. No significant cumulative impacts or indirect impacts are anticipated. BMPs and adherence to applicable policies / standards that would be implemented for resource protection are included with discussions of each respective resource area in the EA. No mitigation measures for effects on socioeconomics, environmental justice, utilities, air quality, noise, cultural resources, topography, soil integrity, migratory birds, floodplains, land use, Coastal Zone Management, petroleum and hazardous substances, visual and aesthetic resources would be required. Air pollutant emissions from the Proposed Action would be below *de minimis* levels for general conformity.

Notice of Availability: A Notice of Availability was published on 14 November 2019 in the Mount Vernon Gazette, the Washington Post, the Washington Times, and the Springfield Connection. The EA was available for public review at the Directorate of Public Works and at the following locations: Fort Belvoir MWR Library and the Sherwood, Lorton, and Kingstowne Region branches of the Fairfax County Public Library. A copy of this finding and the EA were made available at www.belvoir.army.mil.

Response to Comments: Comments from federal, state, and local agencies were received during the review period and were considered by Fort Belvoir for inclusion into the Final Environmental Assessment. No comments were received from the general public during the 30-day public review period. For more information, contact the Fort Belvoir Directorate of Public Works, Environmental Division at 703-806-3193.

Conclusion: Pursuant to the Council on Environmental Quality (CEQ) regulations; 40 CFR Section 1500-1508 regarding procedural implementation of the National Environmental Policy Act (NEPA) of 1969; and implemented for the Army by 32 CFR Section 651, Environmental Analysis of Army Actions, it is anticipated that the Proposed Action would not have a significant effect on the environment and that this FNSI is appropriate. An environmental impact statement (EIS) will not be prepared.



Michael H. Greenberg
Colonel, U.S. Army
Commanding

6/19/2020
Date



1.0 PURPOSE AND NEED

1.1 INTRODUCTION

Pursuant to the National Environmental Policy Act (NEPA) of 1969, as amended, and 32 Code of Federal Regulations (CFR) Part 651, Fort Belvoir has prepared an EA to evaluate potential environmental and cultural effects associated with the implementation of the approved Area Development Plan (ADP) for improvements to the Department of the Army's (Army's) Caisson Platoon Facility, located in the Southwest District of Fort Belvoir.

The Caisson Platoon primarily operates out of Joint Base Myer-Henderson Hall (JBMHH), which is located adjacent to the Arlington National Cemetery. The Caisson Platoon Facility, the subject of this EA, is located at Fort Belvoir which is located about 18 miles south of JBMHH with the primary access routes being Interstates 395 and 95 (Figure 1-1).

The Caisson Platoon Facility EA study area encompasses approximately 115 acres of land within the Southwest District of Fort Belvoir. Approximately, 10.5 acres (excluding training trail) of the total 115-acre study area are currently developed in support the Caisson Platoon Facility with the remaining 104.5 acres (including training trail) being largely undeveloped. The study area is situated along the western boundary of Fort Belvoir, south of U.S. Route 1, in a rural setting surrounded by woodlands and isolated from Fort Belvoir's main post. Boundaries to the study area are U.S. Route 1 (Jefferson Davis Highway) to the north and Old Colchester Road to the west (Figure 1-2). The primary entrance to the Caisson Platoon Facility, Fort Stewart Road, is located off Old Colchester Road.

The Real Property Master Plan (RPMP) provides a means for sustainable installation development that supports mission and environmental requirements. The RPMP is a collection of products that serve as a road map for short and long-range development. The RPMP enables the installation to respond to future Army missions and community aspirations, while simultaneously providing and maintaining the capability to sustain, prepare, reset, and transform today's force.

The Army Regulation (AR) 420-1, AR 210-20, and the

Unified Facilities Criteria (UFC) 2-100-01 provide the prescribed methods and policy for developing RPMP products. Due to the size and nature of the mission, this plan has been modified to accommodate the platoon's unique mission. The ADP has been developed as a companion document to the Fort Belvoir Installation Vision and Development Plan (IVDP) and the Fort Belvoir Installation Planning Standards (IPS). The ADP is the next layer in the master planning process, building upon the information presented in the IVDP and IPS to create a more detailed plan for future development of the Caisson Platoon Facility. This EA evaluates the potential impacts of the proposed improvements as included in the ADP.

Facility improvements are needed to meet the Caisson Platoon's mission to honor deceased servicemen and women by carrying them to rest in the Arlington National Cemetery by supporting the training of Soldiers to ride and care for horses. These improvements include:

- the enhancement of the facility's security;
- relocation/expansion of the facility's classroom;
- expansion of the pasture area to accommodate 27 horses;
- provision of a separate hay storage facility;
- consolidation of equipment storage facilities;
- provision of an indoor riding training facility for year-round training;
- expansion of training trails;
- provision of permanent vehicular parking facilities to accommodate training and maintenance needs;
- paving of existing roadways; provision of a paved and covered roll-off manure dumpster area; and
- enhancement of facility signing.

1.1 INTRODUCTION

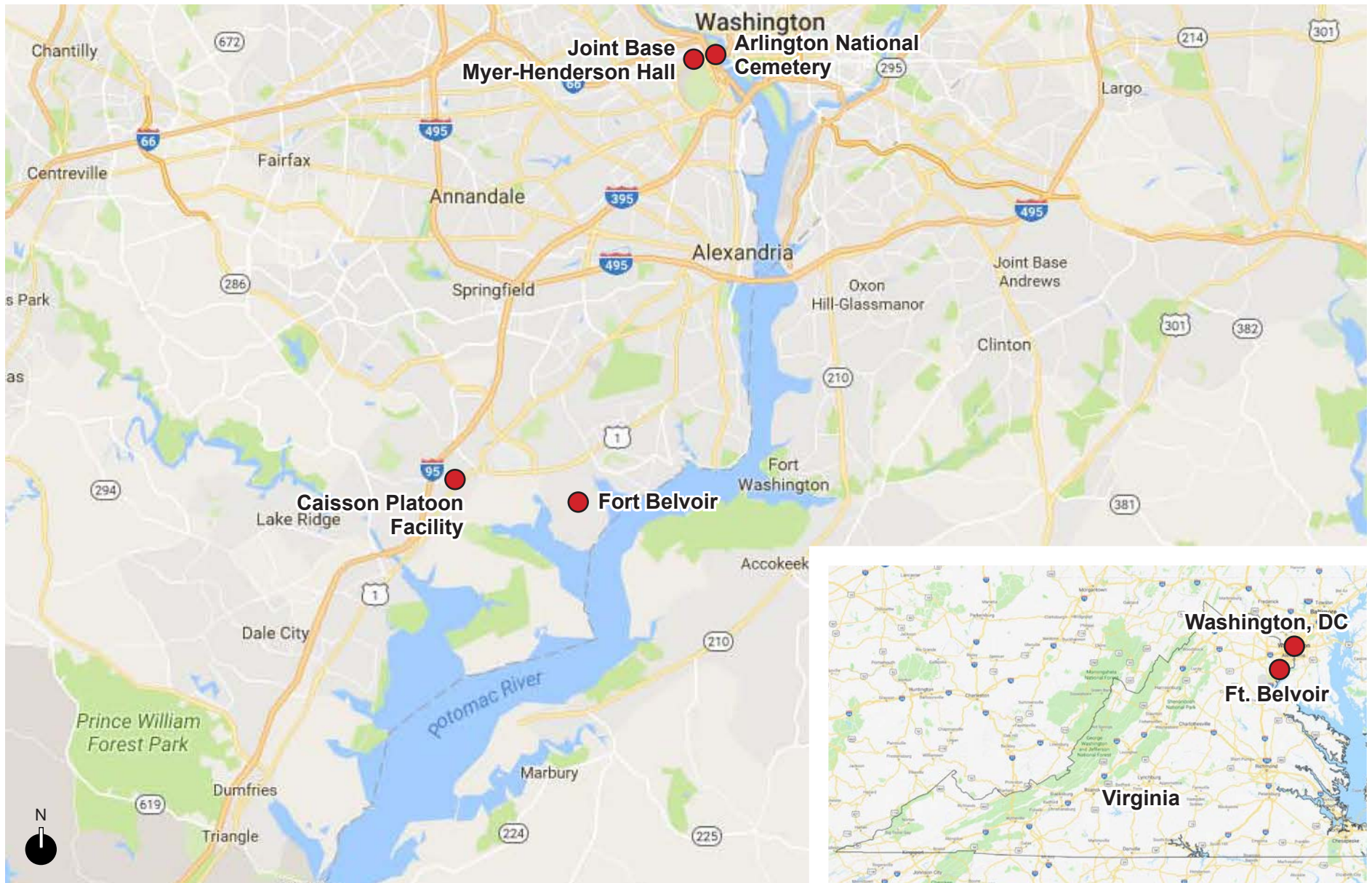


Figure 1-1 Regional Context Map, insert: State Map

1.1 INTRODUCTION

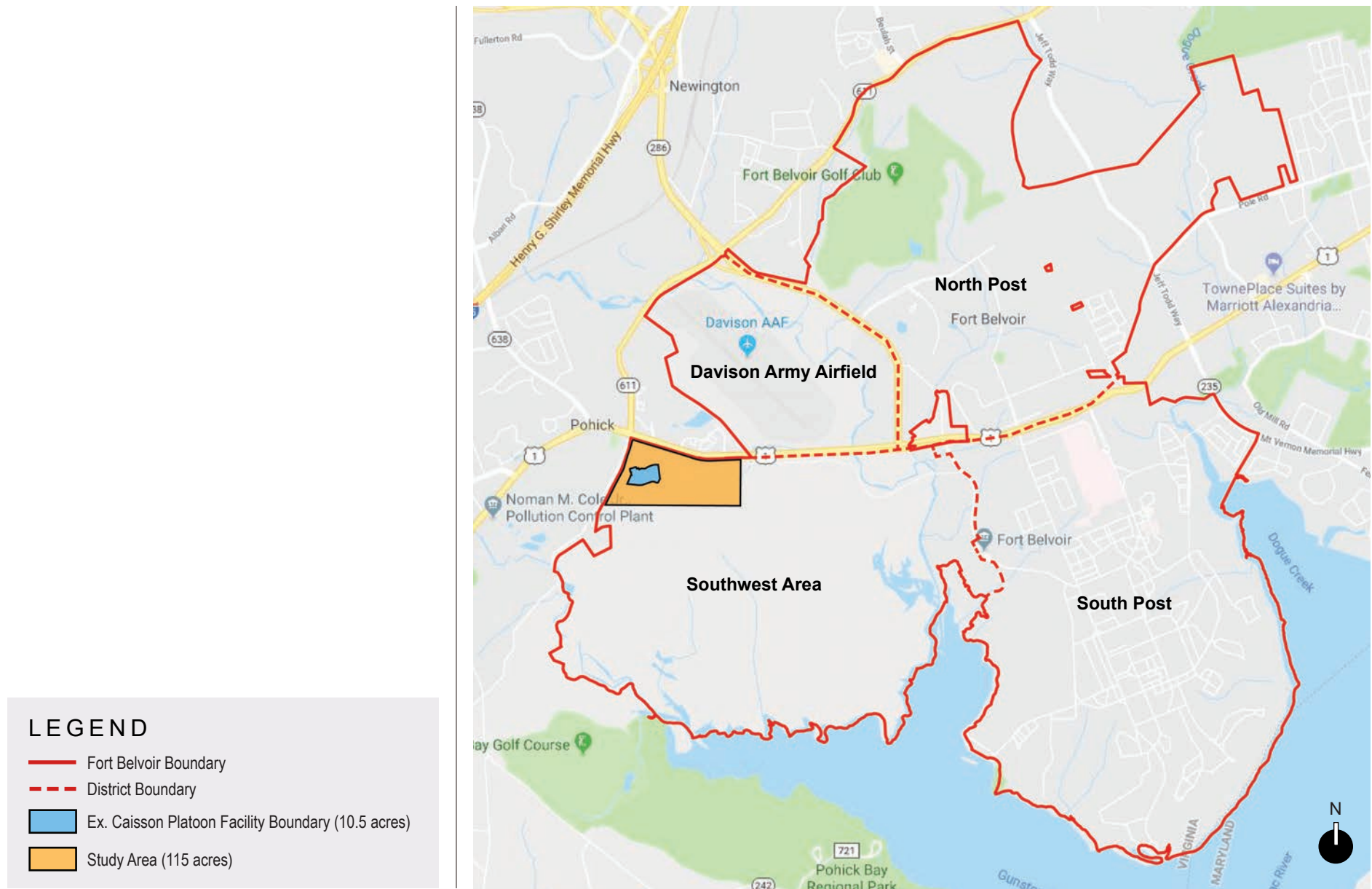


Figure 1-2 Local Context Map

1.2 BACKGROUND

Since 1784, the 3rd U.S. Infantry, traditionally known as The Old Guard (TOG), is the oldest active-duty infantry unit in the Army. Since World War II, TOG is the Army's official ceremonial unit and escort to the president. In time of national emergency or civil disturbance, TOG also provides security for Washington, D.C. TOG's ceremonial task list includes: full honor arrivals for visiting dignitaries; wreath ceremonies at the Tomb of the Unknowns; full honor reviews in support of senior Army leaders and retiring Soldiers; and all transfers of fallen Soldiers returning to the United States.

The Caisson Platoon is a specialty unit within TOG. The Caisson Platoon's mission is to honor deceased servicemen and women by carrying them on their last ride to Arlington National Cemetery, where they will rest in peace with other honored dead. The men and women that come to train with the Caisson Platoon are skilled Army Infantrymen that undergo a rigorous training program to become expert horsemen. In addition to caring for the horses and equipment, the Soldiers must learn to ride in the erect posture of solemn military attention sitting in a McClellan saddle, a riding style the Army hasn't used anywhere else since 1948. Because of this specialized equine training and experience, the Army recognizes the Caisson Soldiers with the additional Skill Identifier D2 - Army horseman.

The original use of a caisson was an artillery vehicle used to carry ammunition. The two-wheeled vehicle was later converted to transport caskets. The six horses that pull the caisson through Arlington National Cemetery are either all white or black and are paired into three teams. The lead team is in front, the swing team follows, and nearest the caisson is the wheel team. Although all six horses are saddled, only those on the left have mounted riders. This is a tradition that began in the early horse-drawn artillery days when one horse of each team was mounted while the other carried provisions and feed. The riderless horse is led behind the caisson wearing an empty saddle with the rider's boots reversed in the stirrups, indicating the warrior will never ride again. Only Army or Marine Corps commissioned officers holding the rank of Colonel or above can receive a full honor

funeral including the riderless horse. This is one of the oldest military traditions. In addition to their duties in military funerals, the Caisson Platoon participates in numerous historic pageants performed by TOG, among these are "Spirit of America," "Twilight Tattoo," and the time-honored custom of passing in-review with fixed bayonets at all parades, a distinction reserved for only TOG.

The Caisson Platoon performs eight funerals per day, 40 funerals per week, as well as additional reserve funerals under special circumstances. These Army horsemen not only ride in funeral processions, they care for the horses, train new Army Horsemen, maintain the ceremonial uniform of an Old Guard Soldier, and maintain ceremonial tack and harness that is unique to their mission in Arlington National Cemetery.

In support of this mission, the Caisson Platoon currently has 47 Soldiers, 15 training horses, and 44 Caisson horses. The training horses are always kept at the Caisson Platoon Facility at Fort Belvoir, where they are used to train prospective Army horsemen. (Figure 1-3).

The Caisson Platoon Facility at Fort Belvoir is used for training and to rest the Caisson horses. Each week a squad of 10-12 Caisson horses are transferred from JBMHH to the Fort Belvoir facility. At any given time, there are 25-27 horses at the Caisson Platoon Facility. There are always two Soldiers assigned to the Caisson Platoon Facility and a maximum of 16 Soldiers training. To support the mission, the Caisson Platoon Facility includes three buildings:

Building 3041 Classroom - This building contains classroom space and a small workshop. This building is currently listed in the Real Property Inventory (RPI) as Category Code (CATCD) 74049 Stable Building.

Building 3044 Stable - This 20-stall horse stable is currently also used for hay storage. It is not listed in the RPI.

Building 3045 Pole Barn - This structure is currently used as a covered riding arena. It is not listed in the RPI.

The facility also features several out-buildings that function as ad-hoc storage spaces. While the facility's primary function is a training facility for Army Horsemen and caring for horses, the site also serves several other important programmatic functions. The facility hosts equine therapy sessions with Soldiers suffering from Post-Traumatic Stress Disorder (PTSD) through the Warrior Care and Transition Program (WCTP); it manages the Caisson Horse Adoption Program, which finds homes for these magnificent animals to ensure each horse is rewarded with a great home following its well-earned retirement. The horse retirement events may be highly publicized with media exposure; and it boards visiting horse teams for various events held in the region.

1.2 BACKGROUND

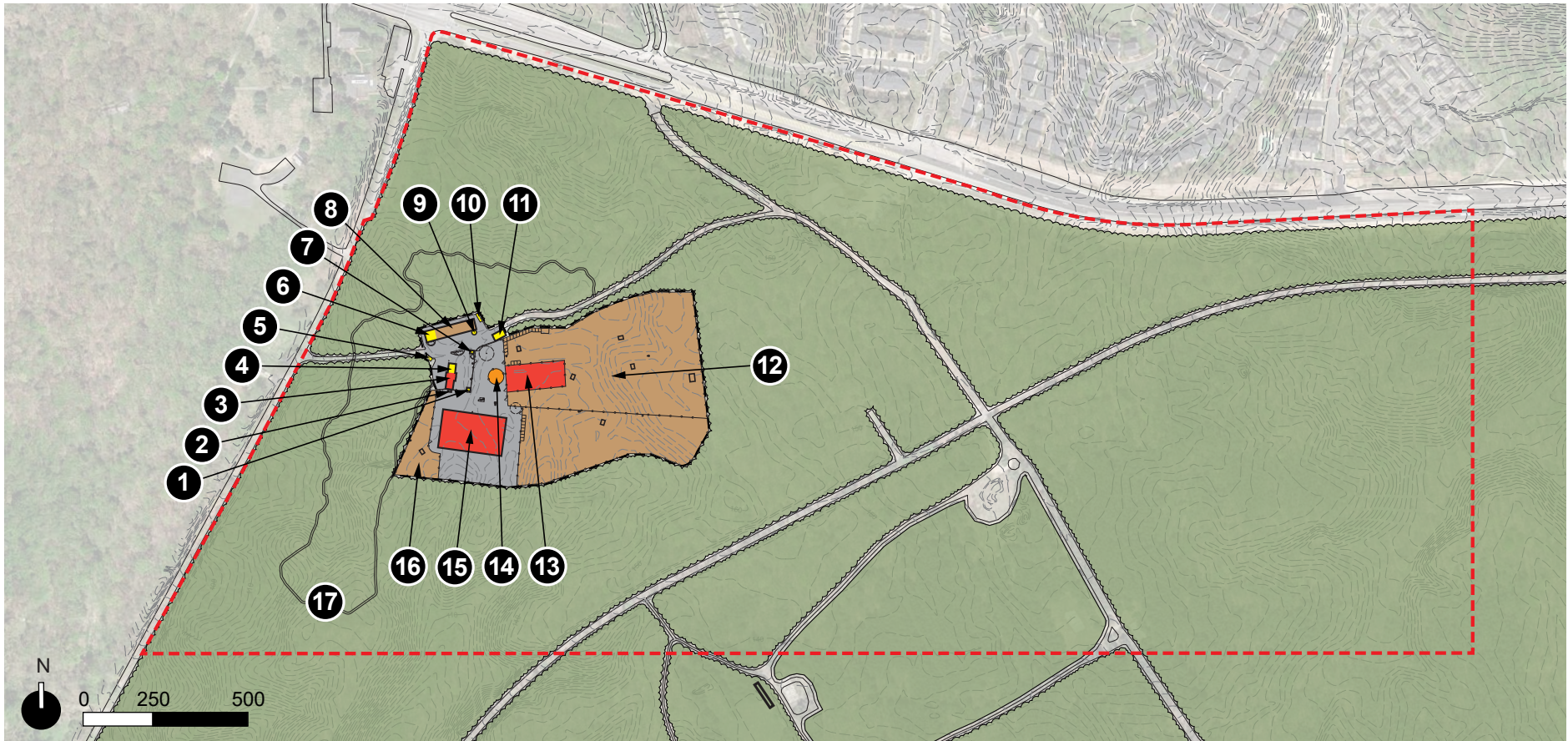


Figure 1-3 Site Analysis Map

LEGEND

- Study Area (115 acres)
- Ex. Facility Boundary (10.5 acres)
- Training Facility
- Horse Care Facility
- Storage/Service Facility
- Parking/Loading Area
- Special Use Area
- Woodland
- Containment Fence

- | | | |
|------------------------------------|------------------------------------|-----------------------------------|
| 1 Tractor Canopy | 7 Storage Shed | 13 Outdoor Riding Arena |
| 2 Saddle Storage Shed | 8 Building 3044 Stable | 14 Horse Corral |
| 3 Building 3041 Classroom | 9 Grain Silo | 15 Building 3045 Pole Barn |
| 4 Building 3041 Workshop | 10 Roll-Off Dumpster | 16 Quarantine |
| 5 Trash Enclosure | 11 Canvas Tractor Enclosure | 17 Training Trail |
| 6 Building 3044 Hay Storage | 12 Pasture (5.8 acres) | |

1.3 PURPOSE AND NEED FOR THE PROPOSED ACTION

The purpose of this project is to promote a sustainable, world-class facility in support of the Caisson Platoon's mission and to provide a secure, high-quality environment for Soldiers, civilians, horses, and other users.

This project is needed to address the deficiencies of the Caisson Platoon Facility that hinder the platoon's mission readiness and threaten the health and safety of both the Army horsemen and their horses. The deficiencies of the Caisson Platoon Facility relate to the Facility's inconsistency with applicable regulations, policies, technical guidance materials, and BMPs for the proper care of horses including:

- Northern Virginia Soil and Water Conservation District policies on Horse Farm Management and the US Department of Agriculture, Natural Resource Conservation Service's (USDA, NRCS) Natural Range and Pasture Handbook (September 1997) that establishes policies, technical assistance, and BMPs for pasture and grazing activities including:
 - **Pasture Size** - National standard requirements for a horse is a minimum of one acre per horse. Benefits of meeting the National standard of a minimum of one acre per horse includes sustainable vegetative growth for grazing, soils stabilization, reduced soil compaction, reduced erosion and sedimentation, reduced need to supplement horses' diet with grains, reduce hoof disease, and improved overall health of livestock.
 - **Stable Capacity** - Adequate stable facility include a capacity of one stall per horse and a separate hay storage facility. Benefits of adequate stable capacity include improve horse care (including grooming, saddling, feed consumption, manure production, health monitoring, complete shelter from weather, protecting lower status horses protected from dominant herd members, and reduced threat of fire due to accidents and spontaneous combustion of hay).
 - **Pasture Fencing** – Good pasture management

requires a secure pasture livestock containment fencing system that is constructed of appropriate material. Benefits of secure pasture fencing include maintaining livestock within pasture, reducing potential for livestock/vehicular collision, and improving overall livestock well-being is support of the mission.

- **Manure Management** – A proper manure management facility requires covered, concrete storage pads and loading ramps. Benefits of adhering to BMPs is ease of dumpster access and manure loading, roll-off dumpster pickup and manure removal, reduced potential for nutrient runoff and surface and groundwater contamination and improve safety for workers.
- **Training Facilities** – BMPs for effective horse husbandry promote adequate training and trail facilities. Benefits include establishing rider familiarity, conditioning horses, and reducing injury potential due to lack of activity.
- Fort Belvoir Real Property Master Plan's Installation Planning Standards (May 2015) and Installation Vision and Development Plan (May 2015), US Army Corps of Engineers Technical Instructions: Design Criteria (TI 800-01, July 1988), United Facilities Criteria (UFC) 3-400-01 Energy Conservation, UFC 4-030-1 Sustainable Development, Engineering Construction Bulletin (ECB) 2008-1 Sustainable Design and Development (SSD), and the Americans with Disabilities Act (ADA, 1990) including:
 - **Stormwater Management (SWM)** - Effective SWM BMPs promotes the control and treatment of drainage from impervious surfaces (roof tops, roadways, and parking lots) and pasture areas. Benefits include reducing flooding potential of low-lying facility assets and the potential degradation of surface and groundwater resources.

- **Paved Surfaces** - Adequately designed and surfaced roadway and parking areas promote improved vehicular traffic accommodation including maneuvering heavy-duty service vehicles and horse trailers. Benefits include minimization of erosion and sedimentation effects, and the ability to meet Americans with Disabilities Act (ADA) standards.
- **Buildings** - Adequately designed roadways, building access, and interiors promote improved functionality for intended uses and capacities. Benefits include efficient and flexible, sustainable energy efficient design consistent with the mission and vision as a world-class stable facility.
- UFC 4-022-3, Security Fences and Gates (October 2013) including:
 - **Security Fence** - Maintenance of secure perimeter fence and primary gate, signing, and secondary access point promote mission objectives. Benefits include enhanced facility safety of the Soldiers and horses and promoting the appropriate visual character consistent with the mission and vision as a world-class stable facility.

1.4 THE NEPA PROCESS

NEPA established the national policy for the environment and the Council on Environmental Quality (CEQ) and provides for the consideration of environmental issues in federal agency planning and decision-making. To implement the NEPA policies, CEQ promulgated the Regulations for Implementing the Procedural Provisions of the National Environmental Policy Act (40 CFR Parts 1500-1508, referred to as the CEQ Regulations). Both NEPA and the CEQ Regulations require that federal agencies establish procedures to comply with the intended purpose of NEPA. Both also require federal agencies to encourage and facilitate public involvement as part of the NEPA process.

Army procedures to comply with NEPA are set forth in 32 CFR Part 651, Environmental Analysis of Army Actions. As such, these regulations establish the Army policies and responsibilities to integrate environmental considerations early in the decision-making process. Instructions on preparing NEPA documentation and carrying out public and agency coordination are provided in the subject regulations.

Under the guidance provided in NEPA and in 32 CFR Part 651, federal actions are required to be assessed for their impacts to the environment. Actions that are determined to be exempt by law, emergencies, or categorically excluded do not require the preparation of an EA or Environmental Impact Statement (EIS). If an action may significantly affect the environment, an EIS would be prepared. An EA provides sufficient evidence and analysis for determining whether to prepare an EIS. The contents of an EA include the need for the Proposed Action; alternatives to the Proposed Action; environmental impacts of the Proposed Action and alternatives; and documentation of agency coordination.

An evaluation of the environmental consequences of the Proposed Action and alternatives include direct, indirect, and cumulative effects, as well as qualitative and quantitative (where possible) assessment of the level of significance of these effects. The EA results in either a FONSI or a Notice of Intent (NOI) to prepare an EIS. If Fort Belvoir determines that this Proposed Action may have a significant impact on the quality of the human environment, then an EIS will be prepared.

The Proposed Action and alternative are subject to the following federal and state environmental regulations:

- National Environmental Policy Act of 1969 (NEPA), as amended (42 United States Code [U.S.C.] Section 4321–4347)
- Council on Environmental Quality's (CEQ) Regulations for Implementing the Procedural Provisions of NEPA (40 Code of Federal Regulations [CFR] §Parts 1500–1508)
- Clean Air Act (CAA), as amended (42 USC §7401 et seq.) CAA Amendments of 1990
- National Pollutant Discharge Elimination System (40 CFR 122)
- Safe Drinking Water Act (42 USC §300f et seq.)
- Coastal Zone Management Act of 1972 (16 USC §1451 et seq., as amended)
- Endangered Species Act of 1973 (16 USC § 1531-1544)
- Bald and Golden Eagle Protection Act (16 USC § 668)
- Fish and Wildlife Conservation Act of 1980 (16 USC § 2901 – 2912)
- Noise Control Act of 1972 (42 USC 4901)
- Migratory Bird Treaty Act, as amended (16 USC §703-712)
- Magnuson-Stevens Fishery Conservation and Management Act (16 USC § 1801 et. seq.)
- National Historic Preservation Act of 1966 (16 USC 470)
- Executive Order (EO) 13175, Consultation and Coordination with Indian Tribal Governments
- EO 13045, Protection of Children from Environmental Health Risks and Safety Risks
- EO 11990, Protection of Wetlands
- EO 11988 Floodplain Management

- EO 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations
- EO 13508, Chesapeake Bay Protection and Restoration
- EO 13112 On Invasive Species
- Resource Conservation and Recovery Act (RCRA) of 1976 (42 USC § 6901 et. seq.)
- Federal Facilities Compliance Act (FFCA, PL 102-386) of 1992
- Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980 (42 USC Chapter 103)
- Toxic Substances Control Act (TSCA) of 1976 (15 USC § 2601 et. seq.)
- Energy Independence and Security Act of 2007 (Public Law (PL) 110-140)
- Fairfax County Code Section 108-4-1 Comprehensive Plan for the National Capital: Federal Elements (NCPC, 2004)
- Virginia Water Quality Assessment 305(b)/303(d) Integrated Report (VDEQ, 2014)
- Virginia Regulations for the Control and Abatement of Air Pollution (9 VA Code 5-50-60 et seq.)
- Virginia's Chesapeake Bay Preservation Act (VA Code 10.1-2100 et seq.)
- Virginia Water Protection Permit Program (9 Virginia Administrative Code [VA Code] 25-210-10 et seq.)

1.5 AGENCY AND PUBLIC PARTICIPATION

1.5.1 AGENCY REVIEW

All persons and organizations having potential interest in the Army's Proposed Action, including minority, low-income, disadvantaged, and federally-recognized Native American tribes, are urged to participate in the NEPA environmental analysis process.

Fort Belvoir initiated coordination with the Virginia State Historic Preservation Office (SHPO) regarding potential impacts to cultural resources. Fort Belvoir consulted USFWS through the online Project Review Process to review the Proposed Action as required by Section 7 of the ESA. Coordination letters and USFWS species list are included in Appendix A.

1.5.2 EA PUBLIC REVIEW

A Public Notice was released on November 14, 2019 to appropriate local, state, and federal agencies to provide the opportunity for their review of the EA. Copies of the Public Notice, coordination letters, and mailing list are included in Appendix A.

The opportunity for agency and public input will be provided during a 30-day public comment period following completion of the EA. Persons interested in receiving copies of the EA may contact:

Garrison Commander, U.S. Army Garrison
Fort Belvoir ATTN: Directorate of Public
Works Building 1442
9430 Jackson Loop
Fort Belvoir, VA 22060-5116

You may also email your comments to usarmy.belvoir.imcom-atlantic.mbx.enrd@mail.mil.

For further information, contact Mr. Felix Mariani, Chief of Environmental and Natural Resources Division at (703) 806-3193.

A Notice of Availability (NOA) has been published in the Washington Post, the Washington Times, the Springfield Connection, and the Mount Vernon Gazette on November 14, 2019 with comments due by December 14, 2019.

The EA was also available for review at the following libraries:

Fort Belvoir MWR Library
9800 Belvoir Road
Fort Belvoir, VA 22060

Fairfax County Library
Sherwood Regional Branch
2501 Sherwood Hall Lane
Alexandria, VA 22306-2799

Fairfax County Library
Lorton Branch
9520 Richmond Highway
Lorton, VA 22079-2124

Fairfax County Library
Kingstowne Branch
6500 Landsdowne Centre
Alexandria, VA 22315-5011

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2.0 DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES

2.1 PROPOSED ACTION

The Proposed Action consists of the expansion of the existing deficient Caisson Platoon Facility to address the identified project need through increasing the 10.5-acre Caisson Platoon Facility (excluding training trail) to about 39.1 acres. Site expansion would occur primarily to the north and east into an existing forested area (Figure 2-1). The Proposed Action would impact two existing intermittent streams (total impact includes 91 feet / 140 square feet intermittent stream channel), three isolated and tidal wetlands (total unavoidable loss of 0.06 acres of palustrine emergent wetland and 0.06 acres of palustrine forested wetlands), and 27.43 acres of forest area. The Proposed Action (Figure 2-2) includes:

- **Pasture Size** – A 27.4-acre pasture area would be developed (involving 22.0 acres of forest clearing) consisting of four paddocks (two for training horses and two for Caisson horses), a horse quarantine area, run-in shelters, feed pens, automatic waterers, and an outdoor riding arena. A new livestock containment fence would be constructed around the expanded pasture with additional fencing and gates between paddocks, and quarantine areas to control use by horses and promote sustainable forage.
- **Stable Capacity** – Hay storage is being removed from the existing stables to the existing pole barn (Building 3045) which is being converted to a separate storage facility. Additional horse stalls would be added. The stables would be connected to a new indoor riding arena via a covered walkway.
- **Manure Management** – A new dumpster storage area would be constructed including concrete pads for the siting of roll-off dumpsters, ramps for manure loading of dumpster, and the construction of a cover over the dumpster storage area for weather protection. A visual screen would be constructed around the dumpster storage area.
- **Training Facilities** - Training trails would be expanded and a new indoor climate-controlled

riding arena (of sufficient size to accommodate twelve horses, twelve Soldiers and three instructors) would be constructed. The arena would have a covered connection with the stables. The new arena would include a classroom, veterinarian room, office, kitchen, tack room, restrooms, lockers, and showers. Training trails expansion would require the clearing of some forest area to accommodate required 16 foot trail width. The potential amount of clearing is included in the overall acreage of forest removal noted in this document.

- **Stormwater Management (SWM)** – A SWM swale would be constructed around the perimeter of the expanded pasture area (including the four paddocks, horse quarantine area, run-in shelters, feed pens, and an outdoor riding arena) to collect run-off and transmit it to wet-bioretenion features and other Green SWM BMPs. Four optional stormwater bioretention areas will work to slow and infiltrate excess water during wet storm events. The primary goal of bioretention areas is to reduce stormwater runoff, increase water filtration, and allow stormwater to infiltrate, recharging the groundwater aquifer. Typical bioretention systems consist of a shallow wet depression in the landscape containing stormwater, landscape plants with the capability to capture sediment and filter pollutants from the water, and well-drained subsoil to maximize stormwater infiltration. The bioretention areas will require the ability to process heavy sediment loads from stormwater runoff from the pasture and pavements. Additional SWM features would be located along roadway and parking lots to capture and treat run-off.
- **Paved Surfaces** - Existing unpaved roadways and parking lots would be relocated and replaced with paved facilities properly designed to accommodate required traffic including meeting ADA standards.
- **Buildings** – The existing classroom building would be demolished, and a new indoor climate-controlled riding arena would be constructed. The existing open-sided Pole Barn (Building 3045) would be repurposed to a

closed, ventilated, and climate-controlled storage facility providing for hay storage, a workshop, a mechanic shop, and an equipment and vehicle storage facility. The existing utility network (water, sewer, electricity, communications) would be upgraded to serve the new and converted buildings and to provide illumination of the revised roadway/parking and dumpster area. The reconstructed roadway and parking areas would be appropriately landscaped.

- **Security Fence** – The existing perimeter security measures would be upgraded to meet Anti-Terrorism/Force Protection (AT/FP) standards and expanded to encompass the proposed expanded Caisson Platoon Facility. Proposed upgrades include the construction of a new Main Gate, a new secondary gate providing an alternate access point, and the upgrading of facility signage.

A map of the Proposed Action and environmental constraints is shown in Figure 2-3. The affected environment and environmental consequences of the Proposed Action are discussed in Chapter 3.

2.1 PROPOSED ACTION

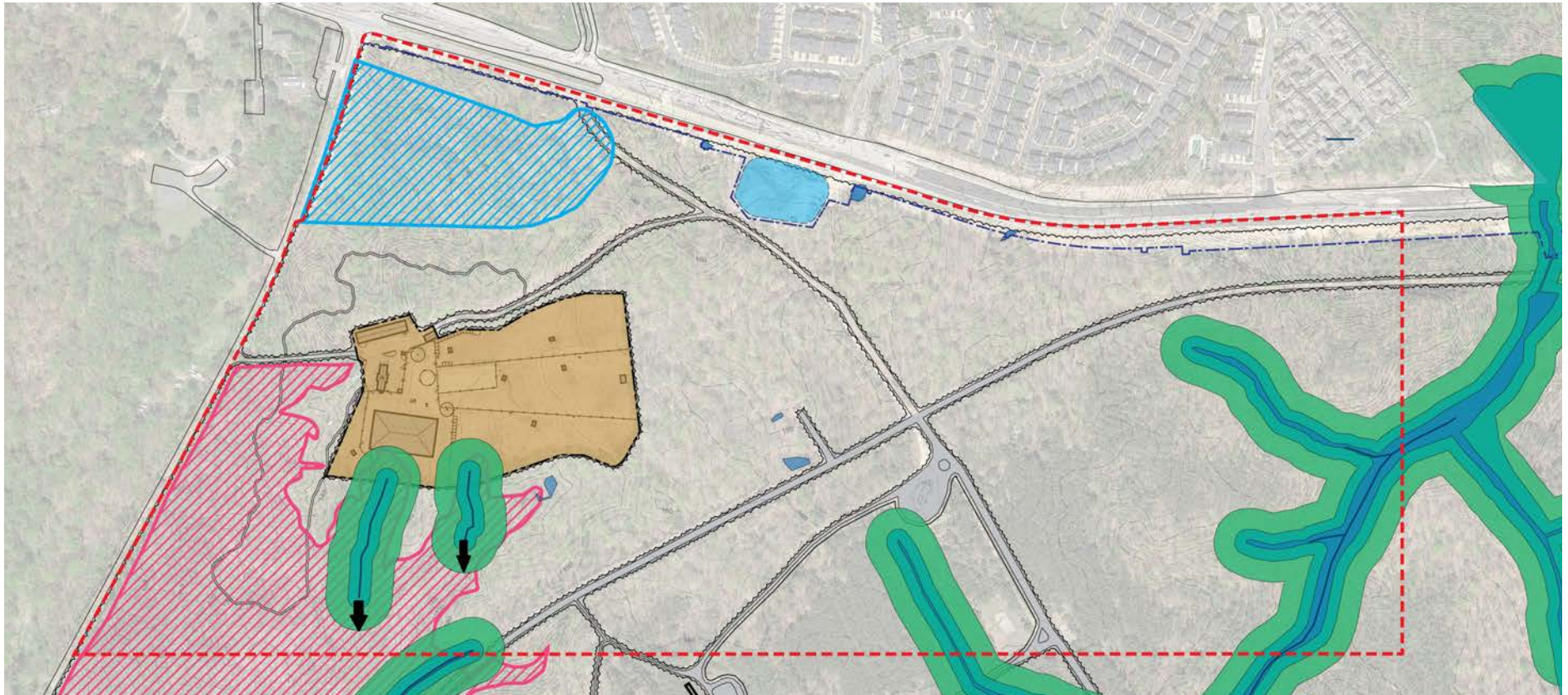


Figure 2-1 Existing Footprint * Arrows Indicate that the Intermittent Streams and Associated Riparian Buffer Continue South Towards the Study Area Boundary

LEGEND

- | | | |
|------------------------------|-----------------------|---|
| --- Study Area (115 acres) | --- Containment Fence | Resource Protection Area (RPA) Boundary 70' |
| Existing Building | --- Route 1 Easement | Environmental Quality Corridor (EQC) Boundary |
| Existing Footprint | Existing Wetland | Wildlife Management Area |
| Ex. Route 1 Stormwater Basin | Stream | |
| --- Perimeter Fence | Riparian Buffer 35' | |



Note: An RPA boundary was incorrectly assigned to the two Intermittent Streams draining from the southern edge of the existing facility. The RPA buffer is applicable to perennial features. The 35-foot riparian buffer remains applicable.

2.1 PROPOSED ACTION

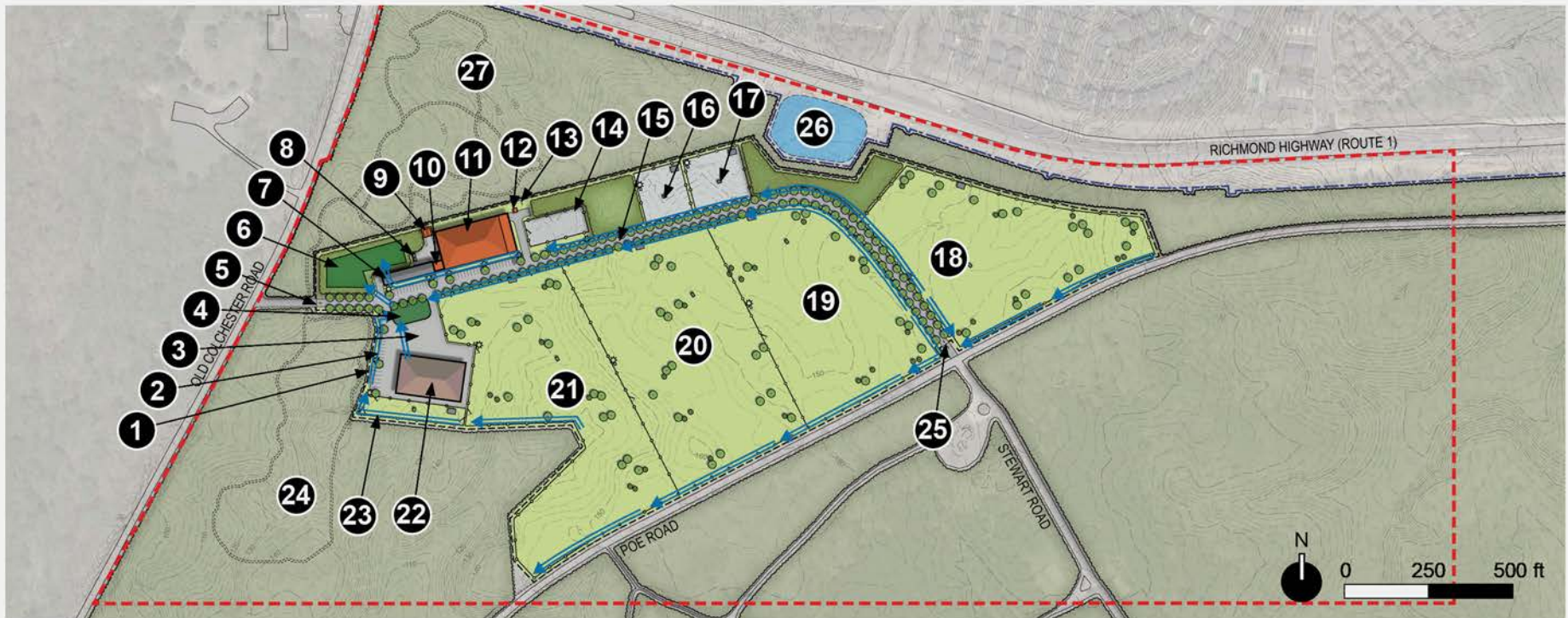


Figure 2-2 Proposed Action



2.1 PROPOSED ACTION



Figure 2-3 Proposed Action with Constraints

LEGEND

--- Study Area (115 acres)	Green Space	--- Route 1 Easement	EQC Boundary
Existing Building	Woodland	Existing Wetland	Training Trail
Proposed Building	Ex. Route 1 Stormwater Basin	Stream	
Converted Building	Tree	Riparian Buffer 35'	
Roadway	Perimeter Fence	RPA Boundary 70'	
Gravel	Containment Fence	Wildlife Management Area	



2.2 ALTERNATIVES

NEPA regulations require that reasonable alternatives be explored and objectively evaluated. Accordingly, this section summarizes the alternatives considered but eliminated from further analysis, including the no-action alternative. This section also describes the reasons that alternatives were eliminated from further consideration.



Figure 2-4 Existing Conditions

2.2 ALTERNATIVES

No Action Alternative:

NEPA regulations refer to the continuation of the present course of action (COA) without the implementation of, or in the absence of, the Proposed Action, as the “No Action Alternative.” The inclusion of the No Action Alternative is the baseline against which federal actions are evaluated and is prescribed by the CEQ regulations and 32 CFR 651.

Under the No Action Alternative, Fort Belvoir Caisson Platoon Facility would forego the proposed improvements and thereby jeopardize the facility’s mission to honor deceased servicemen and women and jeopardize the health and safety of the Army horsemen, Soldiers, and horses in meeting that mission.

Implementing the No Action Alternative would not satisfy the purpose and need to promote a sustainable, world-class facility in support of the Caisson Platoon’s mission and would not provide a secure, high-quality environment for Soldiers, civilians, and other users of the Caisson Platoon Facility.

2.3 ALTERNATIVES CONSIDERED BUT ELIMINATED

2.3.1 ALTERNATIVE 1

Alternative 1 proposes to maximize the use of the existing facility, to minimize the extent of modifications to the existing facility, and to minimize environmental impacts. Site expansion would be conducted primarily to the north to accommodate the new buildings. The pasture would not be expanded. The hay storage would be removed from the stables building and additional stalls would be added. A new indoor and a new outdoor riding arena would be constructed. The manure management facility would be upgraded. Site expansion would be conducted primarily to the north to accommodate the new buildings. Roadway and parking lot improvements would be conducted to accommodate truck and trailers and would be ADA compliant. The existing open-sided pole barn would be repurposed to a closed storage facility. Perimeter security improvements would be constructed including an updated AT/FP compliant perimeter fence, a Main Gate, and secondary gate access point. Signage would be updated throughout.

Alternative 1 was not advanced for further consideration as it does not address the need for a pasture large enough to accommodate 27 horses. Alternative 1 proposes to maintain the existing 5.8-acre pasture, but to divided it into two paddocks. The project need establishes a minimum pasture area of one acre per horse which is not met by this alternative. Therefore, this alternative does not adequately address the project purpose and need and is not advanced for further consideration.

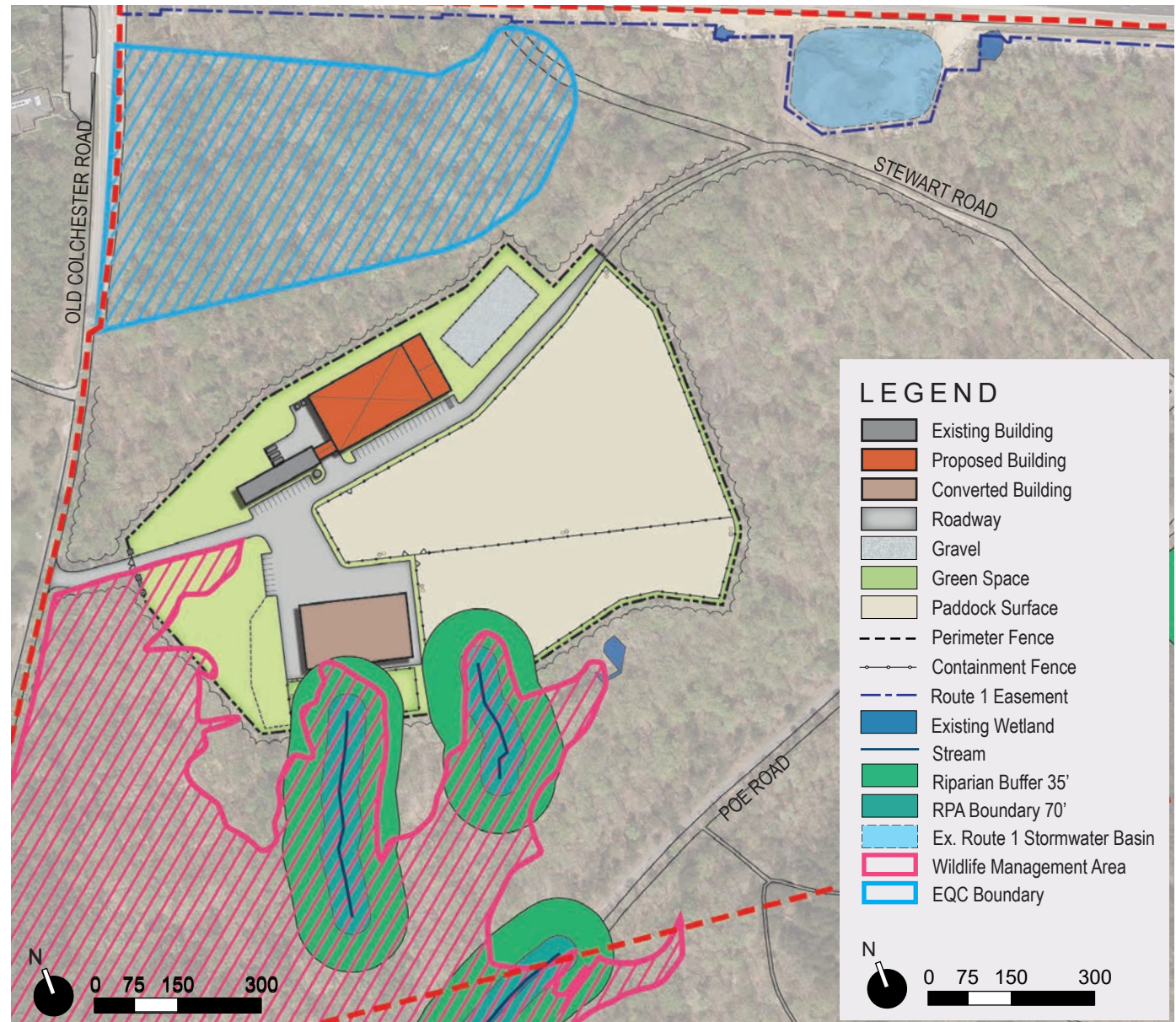


Figure 2-6 Alternative 1 with Constraints

2.3 ALTERNATIVES CONSIDERED BUT ELIMINATED

2.3.2 ALTERNATIVE 2

Alternative 2 proposes pasture expansion to the east, west and south and expansion for building construction to the north (see Figure 2-7). Pasture expansion to the south further encroaches on the two intermittent streams and the Wildlife Management Area. This alternative proposes the construction of a 25-acre pasture area including four paddocks, a horse quarantine area, run-in shelters, feed pens, automatic waterers, and an outdoor riding arena. A new livestock containment fence would be constructed around the expanded pasture with additional fencing and gates between paddocks, and quarantine areas to control use by horses and promote sustainable forage. The stable building would be improved including the removal of the hay storage and the adding of stalls to accommodate all horses.

A new indoor climate-controlled riding arena (of sufficient size to accommodate twelve horses, twelve Soldiers and three instructors) would be constructed. The arena would have a covered walkway connection with the stables. The new arena would include a classroom, veterinarian room, office, kitchen, tack room, restrooms, lockers, and showers. A new outdoor riding arena would be constructed.

A new dumpster storage area would be constructed including concrete pads for the siting of roll-off dumpsters, ramps for manure loading of dumpster, and the construction of a cover over the dumpster storage area for weather protection. A visual screen will be constructed around the dumpster storage area. A SWM swale would be constructed around the new pasture to collect run-off and transmit it to wet-bio-retention feature and other Green SWM BMPs. Additional SWM features would be located along roadway and parking lots to capture and treat run-off. Existing unpaved roadways and parking lots would be relocated and replaced with paved facilities meeting ADA standards. However, under this alternative, the parking areas are not designed to accommodate larger trucks or trailers.

The existing open-sided Pole Barn (Building 3045) would be demolished. In addition to the construction of the new indoor climate-controlled riding arena, a new storage facility would be constructed. The existing utility network (water, sewer, electricity, communications) would be upgraded to serve the new and converted buildings and to provide illumination of the revised roadway/parking and dumpster area. The reconstructed roadway and parking areas would be appropriately landscaped.

The existing perimeter security measures would be upgraded to meet AT/FP standards and expanded to encompass the proposed expanded Caisson Platoon Facility. Proposed upgrades include the construction of a new Main Gate, a new secondary gate providing an alternate access point, and the upgrading of facility signage.

Alternative 2 was not advanced for further consideration as it involves the unnecessary demolition of Building 3045 Pole Barn which could be adequately re-purposed in meeting the project need. Also, Alternative 2 lacks sufficient parking and maneuverability for larger trucks and trailers. The proposed facility the expansion to the south impacts two intermittent streams, wetlands (along the facility's current southern boundary), and the Wildlife Management Area. Therefore, this alternative does not adequately address all the project purpose and need and results in an otherwise avoidable impact to sensitive areas and therefore is not advanced for further consideration.

2.3 ALTERNATIVES CONSIDERED BUT ELIMINATED



Figure 2-7 Alternative 2 with Constraints

2.3 ALTERNATIVES CONSIDERED BUT ELIMINATED

2.3.3 ALTERNATIVE 3

Alternative 3 proposes a total reconstruction of the Caisson Platoon Facility. Buildings are sited at the optimal location for construction, and facilities are grouped according to compatibility. This alternative extends the pastures to the east, west and south and thereby, encroaching on the established Wildlife Management Area, identified archaeological site, and two intermittent streams. The overall design is the most-grand of the alternatives, featuring a loop road surrounding a central focal point or gathering space. This alternative proposes the construction of a 25-acre pasture area including four paddocks, a horse quarantine area, run-in shelters, feed pens, automatic waterers, and an outdoor riding arena. A new livestock containment fence would be constructed around the expanded pasture with additional fencing and gates between paddocks, and quarantine areas to control use by horses and promote sustainable forage.

Proposed is the construction of a new combined stable and indoor climate-controlled riding arena. The existing stables building would be demolished. The riding arena would be of sufficient size to accommodate twelve horses, twelve Soldiers and three instructors. The new arena would include a classroom, veterinarian room, office, kitchen, tack room, restrooms, lockers, and showers. A new outdoor riding arena would be constructed.

A new dumpster storage area would be constructed including concrete pads for the siting of roll-off dumpsters, ramps for manure loading of dumpster, and the construction of a cover over the dumpster storage area for weather protection. A visual screen will be constructed around the dumpster storage area. A SWM swale would be constructed around the new pasture to collect run-off and transmit it to wet-bio-retention feature and other Green SWM BMPs. Additional SWM features would be located along roadway and parking lots to capture and treat run-off. The roadway and parking areas would be reconfigured and paved to provide adequate parking and maneuvering areas for larger vehicles and trailers and ADA accommodations.

The existing open-sided Pole Barn (Building 3045) and existing stables buildings would be demolished and replaced with a new combined stable and indoor riding arena. A new storage facility would also be constructed. The existing utility network (water, sewer, electricity, communications) would be upgraded to serve the new and converted buildings and to provide illumination of the revised roadway/parking and dumpster area. The reconstructed roadway and parking areas would be appropriately landscaped.

The existing perimeter security measures would be upgraded to meet AT/FP standards and expanded to encompass the proposed expanded Caisson Platoon Facility. Proposed upgrades include the construction of a new Main Gate, a new secondary gate providing an alternate access point, and the upgrading of facility signage.

Alternative 3 was not advanced for further consideration because it involves otherwise avoidable impacts to the existing Wildlife Management Area, two intermittent streams, and an area of high archaeological potential that would require survey for below ground resources. For these reasons, this alternative is not advanced for further consideration.

2.3 ALTERNATIVES CONSIDERED BUT ELIMINATED



Figure 2-8 Alternative 3 with Constraints



3.0 AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

3.1 INTRODUCTION

The purpose of this chapter is to identify the affected environment and to disclose the potential environmental consequences of the Proposed Action and the No Action Alternative.

The affected environment includes the existing conditions of the environmental resources that may be potentially impacted by the alternatives. The first step in describing the affected environment is to establish the geographic area where potential impacts are expected to take place by identifying a study area. The study area is the geographic area where the potential impacts of the alternatives retained for further study are analyzed. The extent of the study area depends upon the environmental resource being evaluated. For the purposes of this EA, Caisson Platoon Facility EA study area is approximately 115 acres of land within the Southwest District of Fort Belvoir, Fairfax County, VA (see Figure 1-2).

The potential effects of the alternatives on the affected environment are assessed within this section of the EA. Several terms are used to describe effects, also referred to as impacts, in this document. The effect may be described as positive or adverse. "Positive" means that the alternative would have a beneficial effect on the subject resource. The level of adverse or negative effect is described relative to the established threshold of significance. Adverse or negative impacts described as minimal or minor would have a negligible effect on the resource and therefore would not exceed the applicable threshold of significance. An impact would be described as "significant" if it were to exceed the applicable threshold of significance. The threshold of significance is resource specific and established by considering context and intensity. Both context and intensity are considered because the level of intensity deemed significant may differ based on context. For instance, the threshold of significance for noise impacts would likely be different in a large city as compared to a remote national park.

3.2 RESOURCES NOT EVALUATED IN THIS ENVIRONMENTAL ASSESSMENT

To the extent possible, analyses of the various resources presented in this EA are streamlined based on the anticipated level of potential impact. The focus of this EA is on the potential environmental impacts associated with the Proposed Action, the upgrade of the existing Caisson Platoon Facility, including the enhancement of the facility's perimeter security, relocation/expansion of the facility's classroom capacity; expansion of pasture area to accommodate 27 horses; provision of a separate hay storage facility; consolidation of equipment storage facilities; provision of a year round indoor riding training facility; provision of permanent vehicular parking facilities to accommodate training and maintenance needs; pavement of existing roadways; provision of a paved and covered roll-off manure dumpster area; expansion of riding trails, and enhancement of facility signing in compliance with the AR UFC 2-100-01. The following resource areas either have no potential to be impacted by the Proposed Action or the potential impacts would be negligible and are therefore not further analyzed in this EA:

3.2.1 LAND USE

In 2007, in response to the 2005 Base Realignment and Closure (BRAC) actions, the United States (U.S.) Department of the Army (DA) updated and amended the land use plan in Fort Belvoir's 1993 Real Property Master Plan. The *Final Environmental Impact Statement (FEIS) for Implementation of the 2005 Base Realignment and Closure Recommendations and Related Army Actions at Fort Belvoir, Virginia* addressed the adoption of the amended land use plan as well as the BRAC realignment actions at Fort Belvoir. In 2015, Fort Belvoir's Real Property Master Plan Final Environmental Impact Statement was completed. Implementation of the Proposed Action, the expansion of the existing Caisson Platoon Facility, would not impact current or future land use as the entire 115-acre Caisson Platoon Facility study area is designated as administrative and educational land use which would not change because of the Proposed Action.

Additionally, the National Capital Planning Commission (NCPC) provides planning guidance for federal land and building in the National Capital Region through its document, *Comprehensive Plan for the National Capital: Federal Elements* (NCPC, 2004). NCPC will be afforded the opportunity to review this EA; assess the Proposed Action's compatibility with federal planning goals, guidelines, and initiatives; and provide comments before a decision is made on the final action. As a result, impacts to land use are not analyzed in this EA.

3.2.2 NOISE

The Noise Control Act of 1972 (Public Law 92-574) directs federal agencies to comply with applicable federal, state, interstate, and local noise control regulations. Fairfax County Code prohibits creating sounds louder than 55 decibels (dB) in a residential area and 60 dB in a commercial area. It also prohibits creating any excessive noise on any street adjacent to any school, institution of learning, court, or hospital that interferes with its function (Fairfax County Code Section 108-4-1). Construction and demolition activities are, however, exempt from the Fairfax County ordinance if they occur between 7:00 a.m. and 9:00 p.m. The proposed construction of the Proposed Action would involve heavy construction equipment (earth graders, cranes, wood chippers, etc.) that would generate short-term, construction-related increases in noise within the Caisson Platoon Facility. These activities would be performed during the noted hours and would comply with all noise ordinances and regulations; therefore, impacts would be negligible. No long-term impacts of the Proposed Action are anticipated to the noise environment at Fort Belvoir. Therefore, noise impacts are not analyzed in this EA.

3.2.3 CULTURAL RESOURCES

The Proposed Action is not expected to impact cultural resources as defined by Section 106 of the National Historic Preservation Act (NHPA) of 1966, as amended. No historic properties are located within the area of proposed forest clearing for pasture and riding trail expansion

or within other areas of potential construction at the Caisson Platoon Facility. Additionally, no archaeological resources that are potentially eligible for listing on the National Register of Historic Places are located in or within 50 feet of the area of proposed construction activities. The closest historic property that is listed on or eligible for listing on the National Register of Historic Places, the Pohick Church Historic District, is located about one quarter of a mile to the west of the facility with the planning Overlay District extending on to the Caisson Platoon Facility. An Overlay District is a planning tool to provide regulations over and above the regular zoning protection to better protect those unique areas, sites, and buildings that are of special architectural, historic, or archaeological value to local residents and visitors. Proposed improvements are within the Overlay District include the construction of the proposed building for indoor riding arena and classrooms, roadway and parking improvements, and security entrance gate, and limited tree removal due to riding trail expansion. Stormwater bioretention features will also be constructed.

The northern and western portion of the study area is heavily wooded which buffers potential views of the Pohick Church Historic District and would remain largely intact as a result of the proposed Caisson Platoon Facility improvements. Additionally, the proposed improvements would be sufficiently removed from the Historic District property to anticipate a "no effect" or "no adverse effect" determination as an outcome of required coordination with Virginia Department of Historic Resources (VDHR).

Fort Belvoir initiated Section 106 consultation for the Proposed Action with the VDHR, Catawba Indian Nation, Eastern Band of Cherokee-Indians, Pamunkey Indian Tribe, Tuscarora Nation of New York, United Keetoowah Band of Cherokee Indians in Oklahoma, Chickahominy Indian Tribe, Upper Mattaponi Indian Tribe, Chickahominy Indians Eastern Division, Rappahannock Tribe, Monacan Indian Nation, and the Nansemond Indian Tribe. Section 106 Consultation letters are included in Appendix A.

3.2 RESOURCES NOT EVALUATED IN THIS ENVIRONMENTAL ASSESSMENT

The Proposed Action does not impact any cultural resources; at the Caisson Platoon Facility. The Proposed Action is not anticipated to adversely affect the Pohick Church Historic District. Five potentially eligible archaeological sites are located within the study area, but none are located within the Area of Potential Effect. No impacts to cultural resources are expected and no further analysis is included in this EA (see Appendix A for Agency Coordination).

3.2.1 SOCIOECONOMICS

The Proposed Action to expand the existing Caisson Platoon Facility, would not result in changes to population, demographics, income, community services and facilities, or housing. Personnel hired and required to complete the Proposed Action are not likely to change their place of residence. Additionally, the Proposed Action would result in only temporary and negligible additive impacts to the local economy, no long-term effects are anticipated. As a result, socioeconomics issues are not analyzed in this EA.

3.2.2 ENVIRONMENTAL JUSTICE

EO 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-income Populations*, directs agencies to address environmental and human health conditions in minority and low-income communities to avoid disproportionate adverse effects from federal policies and actions on these populations. There are no residential properties adjacent to the Caisson Platoon Facility that could be directly affected by the Proposed Action. The Proposed Action does not involve the acquisition of private properties nor changes in access that could affect adjacent private properties. All proposed improvement activities are to be conducted within the boundaries of Fort Belvoir. Areas of woodland cutting would be minimally visible from adjacent properties. The proposed access gate upgrade would not pose an adverse visible impact to adjacent properties where environmental justice populations may be located. The Proposed Action would not cause disproportionate adverse effects on minority or low-income population groups and therefore environmental justice is not analyzed in this EA.

3.2.3 TRAFFIC AND TRANSPORTATION

Implementation of the Proposed Action would require facility access by construction equipment, materials, and laborers. The Caisson Platoon Facility is served by Old Colchester Road which is located about 1,000 feet from Richmond Highway (State Route 1). Most of Old Colchester Road, between the Caisson Platoon Facility and Richmond Highway, is upgraded. The increase in traffic created by the Proposed Action would be negligible, temporary, and related to construction activities; therefore, traffic and transportation are not analyzed in this EA.

3.2.4 UTILITIES

Implementation of the Proposed Action would not result in the need for any upgrades in utilities that service Fort Belvoir. The Proposed Action would not increase the long-term demand for public utility services and would not affect regional or local water or energy supplies. Onsite utility modifications are anticipated to provide services to proposed buildings and facility improvements. The current utility service to the facility is adequate to accommodate the proposed facility improvements. Any work involving the trimming or removal of trees near overhead electric conductors would be performed by qualified line-clearance arborists. The Proposed Action would result in an increase in amounts of electricity, water or other resources supplied by the base or by regional utilities; however, the increase is expected to be negligible, and utilities are not analyzed further in this EA.

3.2.5 HAZARDOUS MATERIALS AND WASTES

The installation has a Hazardous Waste Management/Waste Minimization Plan and a Master Spill Plan. The cleaning and maintenance departments have replaced toxic and hazardous materials with environmentally friendly chemicals and adhere to an Integrated Pest Management Plan. Fort Belvoir, Environmental Division, also files annual hazardous material and toxic chemical reports in compliance with the Emergency Planning and Community Right-to-Know Act (EPCRA).

The Proposed Action would not generate hazardous waste but would generate solid waste in the form of debris from demolition activities and trees potentially removed from the site for disposal conducted in compliance with the Federal Emerald Ash Borer Quarantine (7 CFR 301.53) where all trees would be chipped or taken to landfills within the quarantine zone.

The nature of the historical and present training activity will be coordinated through Directorate of Plans, Training, Mobilization and Security (DPTMS) to identify the types of Army training that have been conducted in the area over the years.

Geophysical surveys to delineate and remove identified ordnance and munitions debris would be conducted before any construction could be initiated in this area. It is anticipated that waste-related effects from the Proposed Action would be temporary and minimal and therefore are not analyzed in this EA.

3.2 RESOURCES NOT EVALUATED IN THIS ENVIRONMENTAL ASSESSMENT

3.2.6 VISUAL AND AESTHETIC RESOURCES

The existing aesthetics of the Caisson Platoon Facility is characterized as open pastures, unimproved internal roadways and parking areas, buildings, and woodlands around the outer edge of the facility. Minor and short-term impacts are anticipated during the construction process. However, long-term impacts are not anticipated as the aesthetic effects would be minimal and would be consistent with that of the existing facility. The proposed woodland cutting is entirely within the boundary of Fort Belvoir and would not affect areas outside of the base. The Pohick Church Historic District is located across Old Colchester Road one-quarter of a mile to the northwest of the Caisson Platoon Facility with a planning Overlay District that extends on to the Caisson Platoon Facility. The Historic District is protected under Section 106 of the National Historic Preservation Act and potential effects to this historic resource are not anticipated (See documentation in Appendix A). It is anticipated that the modifications to aesthetic environment from the Proposed Action would be temporary and minimal and therefore are not be analyzed in this EA.

3.3 RESOURCES POTENTIALLY IMPACTED

3.3.1 AIR QUALITY

3.3.1.1 Affected Environment

Air Quality is protected by the Clean Air Act. In the following sections, air quality in and around the Caisson Platoon Facility are described, applicable laws and regulations are explained, and potential impacts are disclosed. The study area for this analysis includes Fairfax County as a portion of the Washington, D.C., Maryland-Virginia airshed.

The U.S. Environmental Protection Agency (USEPA) defines ambient air in 40 CFR Part 50 as: “that portion of the atmosphere, external to buildings, to which the public has access.” In compliance with the 1970 Clean Air Act (CAA) and the 1977 and 1990 CAA Amendments, the USEPA has promulgated National Ambient Air Quality Standards (NAAQS). The NAAQS were enacted for the protection of the public health and welfare, allowing for an adequate margin of safety. To date, the USEPA has issued NAAQS for the following criteria pollutants: carbon monoxide (CO), sulfur dioxide (SO₂), particulate matter (PM) (particles with a diameter less than or equal to a nominal, 10 micrometers [PM₁₀] and particles with a diameter less than or equal to nominal 2.5 micrometers [PM_{2.5}]), ozone (O₃), nitrogen dioxide (NO₂), and lead (Pb).

Air Quality General Conformity

Federal regulations designate Air Quality Control Regions (AQCRs) in violation of the NAAQS as nonattainment areas. According to the severity of the pollution problem, nonattainment areas can be categorized as marginal, moderate, serious, severe, or extreme. Severity categories have not yet been applied to PM_{2.5} nonattainment areas. The USEPA classifies AQCR 47, which includes Fairfax County, in marginal nonattainment for O₃ and in nonattainment for PM_{2.5}. Fairfax County is in attainment for all other criteria pollutants. AQCR 47 is also in the Ozone Transport Region which includes states in the northeast United States that must adhere to stricter conformity thresholds for nitrogen oxides (NO_x) and volatile organic compounds (VOCs), which are precursors for O₃.

The NAAQS for PM_{2.5} and O₃ are listed in Figure 3-1.

Pollutant	Federal Standard	Virginia Standard
PM _{2.5} – 24-hour average	35 µg/m ³	35 µg/m ³
Ozone (O ₃)– 8-hour average	0.070 ppm	0.075 ppm

Sources: USEPA (2016), Commonwealth of Virginia (2012)
Notes: µg/m³ – micrograms per cubic meter; ppm – parts per million

Figure 3-1 Ambient Air Quality Standards

To regulate the emission levels resulting from a project, federal actions located in nonattainment or maintenance areas are required to demonstrate compliance with the general conformity guidelines established in 40 CFR Part 93, *Determining Conformity of Federal Actions to State or Federal Implementation Plans* (the Rule).

AQCR 47 is in nonattainment for O₃ and PM_{2.5}; therefore, a General Conformity Rule applicability analysis to evaluate any impact to air quality is required. A summary of the results of the analysis is presented below, while detail of the methodology is included in Appendix B. Emissions have been estimated for the O₃ precursor pollutants NO_x and VOCs, along with PM_{2.5}. Annual emissions for these compounds were estimated for the project actions (woodland tree removal, site grading, building construction, and paving activities) and compared to the *de minimis* levels established in the Rule. The *de minimis* level for marginal O₃ nonattainment areas is 100 tons per year for NO_x and 50 tons per year for VOCs. Sources of NO_x and VOCs associated with the proposed project also would include emissions from construction worker commuter vehicles.

During land-disturbing activities, fugitive dust must be kept to a minimum by using control methods outlined in 9VAC5-50-60 et seq. of the Regulations for the Control and Abatement of Air Pollution. These precautions include, but are not limited to, the following:

- Use, where possible, of water or suitable chemicals

for dust control during the proposed demolition and construction operations and from material stockpiles

- Install and use of hoods, fans and fabric filters to enclose and vent the handling of dusty materials
- Cover open equipment for conveying materials
- Promptly remove spilled or tracked dirt or other materials from paved streets and dried sediments resulting from soil erosion

If project activities include the burning of vegetative debris or use of special incineration devices in the disposal of land clearing debris, this activity must meet the requirements under 9VAC5-130 et seq. and 9VAC5-80-1100 et seq. of the regulations for open burning, and it may require an open burning permit and permits for fuel-burning equipment. The regulations provide for, but do not require, the local adoption of a model ordinance concerning open burning.

On July 11, 2006, USEPA established *de minimis* levels for PM_{2.5}. The final rule established 100 tons per year (tpy) as the *de minimis* emission level for directly emitted PM_{2.5} and each of the precursors that form it (sulfur dioxide [SO₂], NO_x, VOCs, and ammonia). This 100 tpy threshold applies separately to each precursor, meaning that if an action's direct or indirect emissions of PM_{2.5}, SO₂, NO_x, VOC, and ammonia cumulatively exceed 100 tpy, but the emissions of no single precursor exceed 100 tpy, a general conformity determination would not be required. Neither the USEPA nor Virginia have found VOCs or ammonia to be a significant precursor of PM_{2.5} in AQCR 47; therefore, VOCs and ammonia are not required to be evaluated for PM_{2.5} under the Rule. Ammonia is not further addressed in this EA (VOCs are addressed as an O₃ precursor).

Air Permit Requirements - Title V Permit

The Virginia Department of Environmental Quality (VDEQ) administers a program for permitting the construction and operation of new, existing, and modified stationary sources of air emissions in Virginia. Air permitting is required for many industries and facilities that emit regulated pollutants. The

3.3 RESOURCES POTENTIALLY IMPACTED

VDEQ sets permit rules and standards for emission sources based on the age and size of the emitting units, attainment status of the region where the source is located, dates of equipment installation and/or modification, and type and quantities of pollutants emitted.

As a major stationary source for emissions, Fort Belvoir operates under a Title V Permit. The current installation-wide Title V Permit had an expiration date of March 21, 2008, but because Fort Belvoir submitted a renewal application by the regulatory deadline, the current permit does not expire until the Virginia DEQ either issues or denies a renewal permit, which it has not done to date. All terms and conditions of the Title V Permit issued on March 21, 2003, remain in effect. The installation is required to submit a comprehensive emission statement annually.

Air Emissions at Fort Belvoir

As part of its Title V Permit, Fort Belvoir calculates permanent source emissions annually. Construction and vehicle emissions are not included in the calculation of annual emissions because these emission sources are temporary and not regulated by Title V of the CAA. Total emissions from significant sources at Fort Belvoir for 2014 are shown in Figure 3-2.

Greenhouse Gases

There is broad scientific consensus that humans are changing the chemical composition of the earth’s atmosphere. Activities, such as fossil fuel combustion, deforestation, and other changes in land use, are resulting in the accumulation

SO ₂	CO	PM ₁₀	PM _{2.5}	NO _x	VOC
0.3	23.94	2.23	1.55	40.29	3.06

Source: Virginia DEQ (2014)
Note: Emission totals do not include emissions from stationary sources that are not significant under Title V and/or otherwise subject to permit terms or restrictions.

Figure 3-2 Emissions for Permitted Stationary Sources in 2014 (tons)

of trace greenhouse gases (GHGs), such as CO₂, in our atmosphere. An increase in GHG emissions is said to result in an increase in the earth’s average surface temperature, which is commonly referred to as global warming. Global warming is expected, in turn, to affect weather patterns, the average sea level, ocean acidification, chemical reaction rates, and precipitation rates, all of which is commonly referred to as climate change.

GHGs include water vapor, CO₂, methane, nitrous oxide, O₃, and several hydrocarbons and chlorofluorocarbons. Each GHG has an estimated global warming potential, which is a function of its atmospheric lifetime and its ability to absorb and radiate infrared energy emitted from the earth’s surface. A gas’s global warming potential provides a relative basis for calculating its carbon dioxide equivalent (CO_{2e}), which is a metric measure used to compare the emissions from various GHGs based upon their global warming potential. CO₂ has a global warming potential of 1 and is therefore the standard to which all other GHGs are measured.

Water vapor is a naturally occurring GHG and accounts for the largest percentage of the greenhouse effect. Next to water vapor, CO₂ is the second-most abundant GHG. Uncontrolled CO₂ emissions from power plants, heating sources, and mobile sources are a function of the power rating of each source, the feedstock (fuel) consumed, and the source’s net efficiency at converting the energy in the feedstock into other useful forms of energy (e.g., electricity, heat, and kinetic). Because CO₂ and the other GHGs are relatively stable in the atmosphere and essentially uniformly mixed throughout the troposphere and stratosphere, the climatic impact of these emissions does not depend upon the source location on the earth (i.e., regional climatic impacts/ changes will be a function of global emissions).

Regulatory Climate

In April 2007, the U.S. Supreme Court determined that the USEPA has the regulatory authority to list GHGs as pollutants under the federal CAA. Congress has considered

numerous proposals and bills to regulate GHGs but has not adopted any legislation.

Currently, federal agencies address emissions of GHGs by reporting and meeting reductions mandated in laws, EOs, and policies.

The Energy Policy Act of 2005, Energy Independence and Security Act of 2007 requires an installation to adhere to specific energy improvements, which address waste reduction and improvements in efficiency. Specifically, the Department of Defense (DoD) Strategic Sustainability Performance Plan contains strategies to reduce energy waste and improve efficiency (DoD, 2015).

Baseline Greenhouse Gas Emissions at Fort Belvoir

GHG emission sources at Fort Belvoir include vehicle use, boilers, chillers, water heaters, and emergency generators. Current CO₂ emissions at Fort Belvoir in 2017 were 24,548 metric tons. The emission total is the amount reported annually under the requirements of 40 CFR Part 98 and does not include GHG emissions from mobile sources or emergency generator use.

3.3.1.2 Environmental Consequences

Threshold of Significance

The threshold of significance for air quality impacts would be exceeded if the alternative would result in any of the following:

- Emissions exceed “de minimus” standards as designated in federal or state air quality regulations during construction and/or operation

3.3.1.2.1 Impacts of No Action Alternative

Under the No Action Alternative, there would be no expansion of the Caisson Platoon Facility at Fort Belvoir. No additional emissions would be generated from Fort Belvoir, and as a result, there would be no impacts to air quality.

3.3 RESOURCES POTENTIALLY IMPACTED

3.3.1.2.2 Impacts of Proposed Action

A General Conformity Applicability Analysis was performed for the Proposed Action, which estimated the level of potential air emissions (CO, NO_x, VOC, SO₂, and PM_{2.5}). Appendix B contains a detailed description of the assumptions and methodology used to estimate the potential emissions for the project.

Emissions related to the proposed expansion of the Caisson Platoon Facility would be temporary and only occur during construction. Emissions from proposed facility expansion activities are shown in Table 3-3. Emissions would occur over an anticipated three-year project implementation period. Emissions for each of the three-year project implementation phases are presented in tons per year (tpy) for comparison with conformity thresholds.

Greenhouse Gases

Under the Proposed Action Alternative, short-term GHG emissions would be produced because of construction activities. The contribution to CO₂ emissions is estimated at 2,178 tpy, 2,262 tpy, and 1,037 tpy, for implementation years 1-3, respectively. As such, this increase is short-term and essentially negligible. Long-term GHG emissions would not increase under this alternative; therefore, the Proposed Action Alternative would have no significant, adverse impacts on GHG emissions.

The conclusion is that air quality impacts would not be

significant on either a local or regional level from the construction activities of the Proposed Action. All emissions would be below *de minimis* levels and would also not be regionally significant for the pollutants of concern. A Record of Non-Applicability is available in Appendix B.

3.3.2 GEOLOGY, TOPOGRAPHY, AND SOILS

3.3.2.1 Affected Environment

The Caisson Platoon Facility is in the Coastal Plain Physiographic Province which consists of unconsolidated sand, silt, and clay underlain by residual soil and weathered crystalline rocks. Most of the Coastal Plain Physiographic Province deposits in the Fort Belvoir area consist of a sequence of unconsolidated sediments that belong to the Potomac Group, a 600-foot thick formation located under most of Fort Belvoir. The Caisson Platoon Facility is in the uplands of the Potomac Group which is characterized as being underlain by sands, silts, and clays of riverine origin.

The topography of the Caisson Platoon Facility is characterized as rolling terrain, ranging in elevation from approximately 110 feet above Mean Sea Level (MSL) along its western boundary with Old Colchester Road to 160 feet above MSL in the area of proposed woodland removal for pasture development.

Soils of the study area include soils of state-wide farmland importance (Sassafras-Marumsc complex), prime farmland

soils (Beltsville silt loam, Metapeake silt, and Metapeake silt loam), and Gunston silt loam.

3.3.2.2 Environmental Criteria

Threshold of Significance

The threshold of significance for geology, topography, and soil impacts would be exceeded if the alternative would result in any of the following:

- Change to regional groundwater patterns, quality or depletion of groundwater; or
- Irreversibly converted farmland soils to non-agricultural/pastural use.

3.3.2.2.1 Impacts of No Action Alternative

Under the No Action Alternative, there would be no improvements or expansion of the Caisson Platoon Facility and therefore no impacts to geologic, topographic, or soil features of the study area are anticipated.

3.3.2.2.2 Impacts of Proposed Action

The Proposed Action involves the expansion of the existing facility including woodland removal for pasture development, building construction for an indoor riding arena, repurposing an existing pole barn, roadway and parking improvements, improvement of the stormwater drainage system utilizing vegetative swales and bioretention, expansion of riding trails, and improvements to facility security including gate access and perimeter fencing.

Tree removal due to pasture and trail expansion affecting about 27.53 acres of existing woodland, would be conducted by heavy equipment. Stumps would be ground to a depth below proposed grading. Proposed grading of the cleared woodland for pasture development would be to the minimum depth and extent necessary to minimize runoff and erosion with all drainage being conducted towards the perimeter of the pasture where vegetated water quality swales would be located to convey the stormwater runoff to bioretention features in the western portion of the facility. Grading would be conducted to a shallow depth to minimize surficial soil disturbance. Where applicable, top soils would be removed, stockpiled, and reapplied after grading activities.

	VOC	NO _x	CO	PM ₁₀ /PM _{2.5}	SO _x	TOTAL
YEAR 1	4.74	56.83	18.94	4.17	0.02	84.7
YEAR 2	4.92	59	19.67	4.33	0.02	87.93
YEAR 3	2.25	20.29	9.02	1.98	0.01	33.55
Conformity Threshold	50.00	100.00	100.00	100.00	100.00	100.00

Figure 3-3 Total Annual Emissions from the Proposed Action's Implementation (Tons Per Year)

3.3 RESOURCES POTENTIALLY IMPACTED

Soil augmentation would be conducted as necessary. Trees would be chipped and the product of which would be used for soil augmentation and/or for soil stabilization. The pastures will be revegetated with grass species selected for fast growth, soil stabilization, and grazing value. The pasture will be partitioned into four separate main paddock areas where horse use will be rotated between paddocks; thereby, maintaining a minimum sustainable 70 percent ground cover and minimizing the potential for soil erosion.

The Proposed Action would cause negligible impacts to existing geology, topography, and soils. Proposed excavation/grading would not be conducted to a depth sufficient to substantially alter geological features or topography. Soil disturbance would be kept to the minimum depth and extent necessary in associating with the conversion of woodland to pasture. Soils of farmland significance would not be irreversibly converted to non-agricultural/pastoral use.

3.3.3 WATER RESOURCES

3.3.3.1 Affected Environment

Water resources are protected by the Clean Water Act, EOs, and state laws and regulations. In the following sections, the water resources in and around Caisson Platoon Facility are described, applicable laws and regulations are explained, and potential impacts are disclosed. The study area for this analysis includes portions of the watersheds of Pohick Creek and Accotink Creek and the streams and wetlands in which the Proposed Action would occur.

There are no existing Industrial Stormwater Outfalls that are covered under an existing Virginia Pollution Discharge Elimination System (VPDES) General Permit at the Caisson Platoon Facility.

Groundwater

Fort Belvoir is underlain by three main aquifers: lower Potomac aquifer, middle Potomac aquifer, and Bacons Castle Formation. The lower Potomac aquifer is the primary aquifer at the installation and in eastern Fairfax County. The

lower Potomac aquifer exists between a layer of crystalline bedrock and a thick wedge of clay that contains interbedded layers of sand. Water in this aquifer flows to the southeast; it is recharged in the western section of Fort Belvoir. Depth to the water table on the installation fluctuates, but it is typically 10 to 35 feet below ground surface. However, the water table may be at or near the surface in the vicinity of streams in the form of shallow, unconfined aquifers or perched water tables.

Surface Water

Laws and regulations have been implemented to protect water quality. The Federal Water Pollution Control Act, as amended by the Clean Water Act (CWA) of 1977, establishes water quality standards for restoring and maintaining the integrity of the nation's water. "Water quality standards define the goals for a water body by designating its uses, setting criteria to measure attainment of those uses, and establishing policies to protect water quality from pollutants." Section 305(b) of the CWA, requires that states report on the status of water quality of their navigable waters every two years. Section 303(d) requires that states identify impaired waters; waters where the water quality does not meet standards for the designated use. Section 303(d) also requires that the state identify impaired waters for which Total Maximum Daily Loads (TMDLs) will be developed to improve water quality. A TMDL "is a calculation of the maximum amount of a pollutant that a water body can receive and still safely meet water quality standards."

Water quality problems in the waterways on the installation relate mostly to urbanization, including issues related to bacteria, changes in stream morphology from increased runoff from impervious surface, and sedimentation. Within Fort Belvoir, according to the draft 2014 Virginia Water Quality Assessment 305(b)/303(d) Integrated Report (VDEQ, 2016), Accotink Creek is listed as impaired for recreation because of the presence of *Escherichia coli* (*E. coli*) bacteria because of:

- Urban runoff/storm sewers
- Wastes from pets

- Waterfowl
- Wildlife other than waterfowl

Accotink Creek is also listed as impaired for fish consumption due to high-levels of polychlorinated biphenyls in fish tissue (VDEQ, 2014). Aquatic life is also impaired, as seen from benthic-macroinvertebrate bioassessments indicators (VDEQ, 2014). Despite these impairments under the Clean Water Act (33 USC §1251 et seq.), the waterways on the installation still possess significant water resources with high conservation priority (US Army Garrison [USAG] Fort Belvoir, 2001).

For projects with land disturbance of 10,000 square feet or greater, an Erosion and Sediment Control (ESC) plan is required to be prepared and submitted to VDEQ for review and approval. In addition, for projects with land disturbance one acre or greater, a stormwater management (SWM) plan is required to be prepared and submitted to VDEQ for review and approval. For projects with land disturbance of one acre or greater, a Construction General Permit must be obtained from VDEQ prior to commencement of construction. A Stormwater Pollution Prevention Plan is required to be developed prior to submittal for the Construction General Permit and is reviewed by Directorate of Public Works (DPW), Environmental and Natural Resources Division to ensure that TMDL, pollution prevention, SWM and erosion and sediment control requirements are met during construction.

The headwaters of two intermittent stream channels (and Fort Belvoir 35-foot intermittent stream buffers) are present extending into the southwest portion of the facility. The headwater channels of these two intermittent streams begin in the existing pasture area and extend to the south where they join to form one channel which drains to Pohick Creek, then to the Potomac River, which drains to the Chesapeake Bay (see Figure 3-4).

Wetlands and Chesapeake Bay Preservation Areas

Construction in jurisdictional wetlands and streams is regulated by the U.S. Army Corps of Engineers (USACE)

3.3 RESOURCES POTENTIALLY IMPACTED

pursuant to Section 404 of the Clean Water Act as implemented in regulations contained in 33 CFR, Parts 320–330. Impacts to state waters, including wetlands, are regulated by the Virginia Water Protection Permit Program (Virginia Administrative Code [VAC] 25-210-10 et seq.), which serves as Virginia's 401 Water Quality Certification (WQC) Program for federal Section 404 Permits. The Virginia Marine Resources Commission regulates activities in submerged lands, marine fisheries, and coastal resources (tidal wetlands and coastal sand dunes/beaches) under the Code of Virginia Title 28.2, Chapters 12, 13, and 14.

Virginia's Chesapeake Bay Preservation Act (CBPA), Virginia Code 10.1-2100 et seq., and its implementing Chesapeake Bay Preservation Area Designation and Management Regulations, 9 VAC 10-20-120 et seq., protect lands

designated as Chesapeake Bay Preservation Areas, which if improperly developed could result in substantial damage to the water quality of the Chesapeake Bay and its tributaries. Projects that occur on lands that are protected under the CBPA must be consistent with the Act and may be subject to the performance criteria for RPAs, as specified in 9 AC 10-20-130 of the regulations. Under the CBPA, Fairfax County adopted a Chesapeake Bay Preservation Ordinance that designates RPAs and Resource Management Areas (RMAs) within the county.

RPAs are sensitive lands at or near the shoreline or stream bank that have an intrinsic water quality value due to the ecological and biological processes they perform. RPAs include tidal wetlands, tidal shores, nontidal wetlands connected by surface flow and contiguous to tidal wetlands

or tributary perennial streams, and a minimum 100-foot buffer landward of the previous RPA components, riparian areas, and major floodplains (USAG Fort Belvoir, 2001). All lands not designated as RPAs in Fairfax County are classified as RMAs. Fort Belvoir recognizes the RPA designation but, being a federal entity, is not subject to the provisions of the Fairfax County ordinance. As a result, Fort Belvoir does not use RPA maps produced by Fairfax County; instead, the Army delineates the RPAs on the installation. In addition to RPA areas, Fort Belvoir places a 35-foot buffer around all intermittent streams.

It should be noted that EO 13508, *Chesapeake Bay Protection and Restoration*, must be addressed in terms of the Army's obligation to consider the protection and restoration of the Chesapeake watershed in terms of meeting

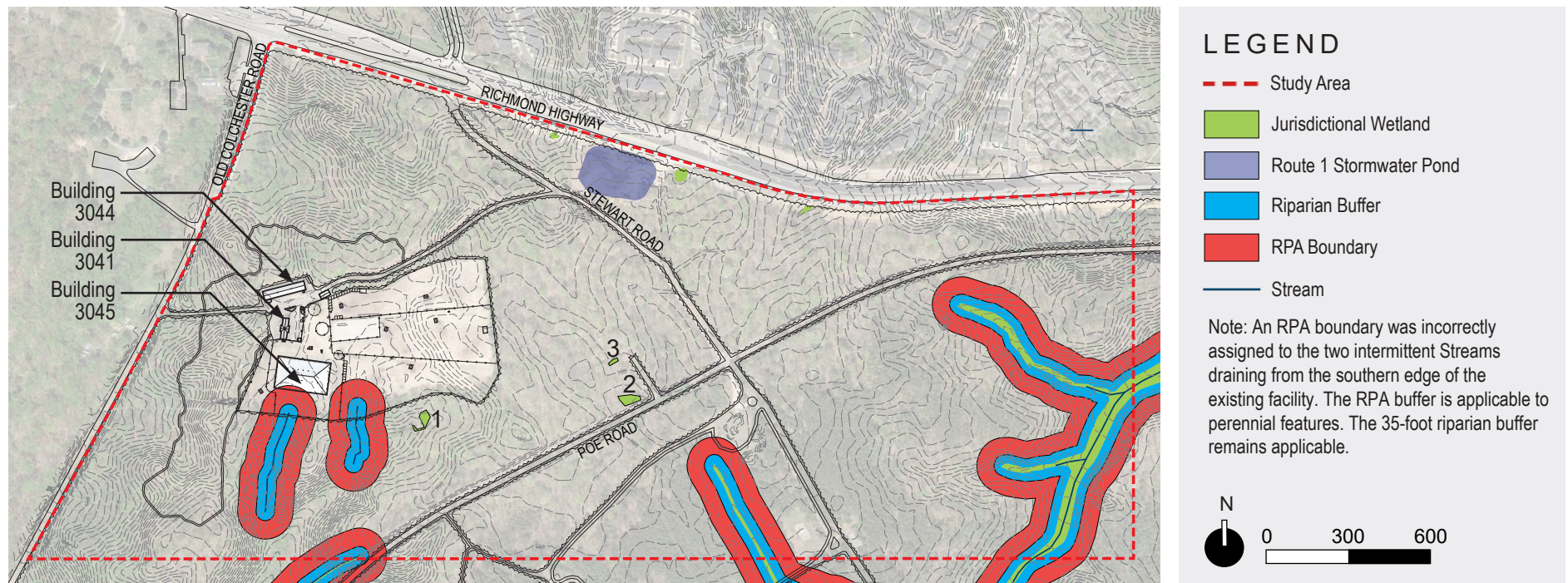


Figure 3-4 Water Resources Map

3.3 RESOURCES POTENTIALLY IMPACTED

the goals, outcomes and objectives set out in the *Strategy for Protecting and Restoring the Chesapeake Bay Watershed*. This document not only sets goals/outcomes/objectives of the federal government, but encourages coordination with state, local, and non-governmental partners to protect and restore the health of the Chesapeake Bay Watershed.

A wetland survey was conducted by the U.S Army Corps of Engineers (Baltimore District), and the results documented in “Wetland Delineation and Small Whorled Pogonia Habitat Survey, The Old Guard, Fort Belvoir, Virginia (February 2018)”. As a result of the survey, three isolated, non-tidal wetland areas were identified within the area of potential impact (Figure 3-4). Although an inter- agency jurisdictional determination wetland verification is pending, the wetlands are characterized as follows:

- Wetland 1 is just to the south of the existing pasture area. This wetland was created due to poor grading activities during the original construction of the horse pasture that resulted in a berm feature that backed up drainage and supported wetland formation. Wetland 1 is classified as a palustrine emergent (PEM) wetland and is about 0.05 acres in size.
- Wetland 2 is within a forested area to the east of the existing pasture area. This wetland is the result of restricted runoff by an existing gravel road that supports wetland development. Wetland 2 is classified a palustrine forested (PFO) wetland and is about 0.06 acres in size.
- Wetland 3 is within a forested area to the east of the existing pasture area and to the north of Wetland 2. This wetland formed in a man-made depression that captures runoff and supports wetland development. It is classified as a PEM wetland and is about 0.01 acre in size.

Floodplains

EO 11988, *Floodplain Management*, was issued “... in order to avoid, to the extent possible, the long and short-term

adverse impacts associated with the occupancy and modification of floodplains and to avoid direct and indirect support of floodplain development wherever there is a practicable alternative...”. The EO was issued in furtherance of NEPA, the National Flood Insurance Act of 1968, and the Flood Disaster Protection Act of 1973. Floodplains were defined as follows in EO 11988.

“The term ‘floodplain’ shall mean the lowland and relatively flat areas adjoining inland and coastal waters including flood prone areas of offshore islands, including at a minimum, that area subject to a one percent or greater chance of flooding in any given year.”

There are no floodplain areas located on the Caisson Platoon Facility.

3.3.3.2 Environmental Consequences

Threshold of Significance

The threshold of significance for water resources impacts would be exceeded if the alternative would result in any of the following:

- Change to regional groundwater patterns or depletion of groundwater;
- Alteration of local surface water;
- Notable adverse impact on natural and beneficial floodplain values; or
- Substantial degradation of wetlands without mitigation.

3.3.3.2.1 Impacts of the No Action Alternative

Under the No Action Alternative, no improvements to the existing Caisson Platoon Facility would be conducted. As a baseline condition for comparison purposes, the existing Caisson Platoon Facility would not be improved, and the 8.5-acre pasture area would continue to accommodate 27 horses. As a result, no potential adverse impacts to local surface water, groundwater, floodplains, or wetlands would occur.

3.3.3.2.2 Impacts of the Proposed Action

The Proposed Action involves the expansion of the existing facility including woodland removal for pasture and trail expansion, building construction for an indoor riding arena, repurpose of an existing pole barn, roadway and parking improvements, improvement of stormwater drainage system utilizing vegetative swales and bioretention, and improvements to facility security including gate access and perimeter fencing.

The groundwater resources would not be disturbed because of the Proposed Action. Earth disturbance for pasture development would include limited grading activities to promote effective and controlled stormwater drainage conveyance, control, and treatment would be conducted to a sufficiently shallow depth to avoid impacting aquifers and groundwater resources. Additionally, the storage or appreciable use of materials that could degrade groundwater quality would be similar for the No Action Alternative and the Proposed Action Alternative. Short- and long-term less-than-significant beneficial impacts to groundwater resources are anticipated due to the project. The proposed expanded pasture area and the proposed stormwater drainage system including vegetated swales and bioretention would reduce the potential for groundwater due to livestock issues.

Minor impacts to surface waters would result due to the reduction in extent of two intermittent streams. The headwater extent of these streams would be reduced by about 91 linear feet (140 square feet). Currently, the extent of streams affected by the Proposed Action are located in the existing pasture area that is barren of vegetation and subject to erosion due to concentrated livestock usage. The proposed expansion of the horse pasture, grading to promote effective and controlled drainage, and the construction of a stormwater management system including vegetated swales around the pasture area and bioretention ponds would result in long-term minor improvements to surface water quality. The relocated and treated stormwater drainage outlet would be within the same Pohick Creek headwater tributary system.

3.3 RESOURCES POTENTIALLY IMPACTED

Under the Proposed Action, stream impacts would be minimal and not substantially alter local surface water flows, volumes, or quality.

Wetlands 1, 2 and 3 would be directly and permanently impacted by the Proposed Action. Impacted wetlands include a 0.06-acre of PEM wetland (0.05-acre and 0.01, Wetlands 1 and 3, respectively) and 0.06-acre PFO for Wetland 2. These impacts are due to the proposed pasture expansion, including tree removal and grading activities. Total unavoidable wetland loss would be 0.06 acres of PEM wetlands and 0.06 acres of PFO wetlands.

3.3.4 BIOLOGICAL RESOURCES

3.3.4.1 Affected Environment

Potential impacts to plants, wildlife, and fish are evaluated in accordance with applicable regulations including but not

limited to the Endangered Species Act of 1973; the Fish and Wildlife Conservation Act of 1980; the Magnuson-Stevens Fishery Conservation and Management Act, as amended; the Migratory Bird Treaty Act; and EO 13112 on Invasive Species.

Vegetation

Fort Belvoir is home to multiple plant communities and vegetative species including 17 plant community types. Four of these plant communities possess species with state conservation rankings of rare or very rare, but none of these four habitats are located in the study area. The 17 habitat types are included in the broader categories of mixed hardwood forests, pine forests, floodplain hardwood forests, wetlands, old field, grasslands and urban land, which describes land that has been developed. Approximately

70 percent of Fort Belvoir is undeveloped and supports predominantly forest communities, as well as tidally flooded marsh and shrub-scrub communities. Within Fort Belvoir's Main Post, areas of native vegetation occur in large tracts, aligned from the northeast to the southwest. Vegetation cover in the remaining 30 percent of Fort Belvoir consists primarily of improved and semi-improved grounds associated with the installation's developed land uses that includes administration, housing and community service facilities, developed training areas, golf courses, and other recreational facilities. Figure 3-5 illustrates the multiple plant communities found on Fort Belvoir.

The Proposed Action consists of the removal of an estimated 27.53 acres of woodland at the Caisson Platoon Facility. Plant communities in the tree removal areas, listed by prominence, include upland hardwood forests, beech mixed

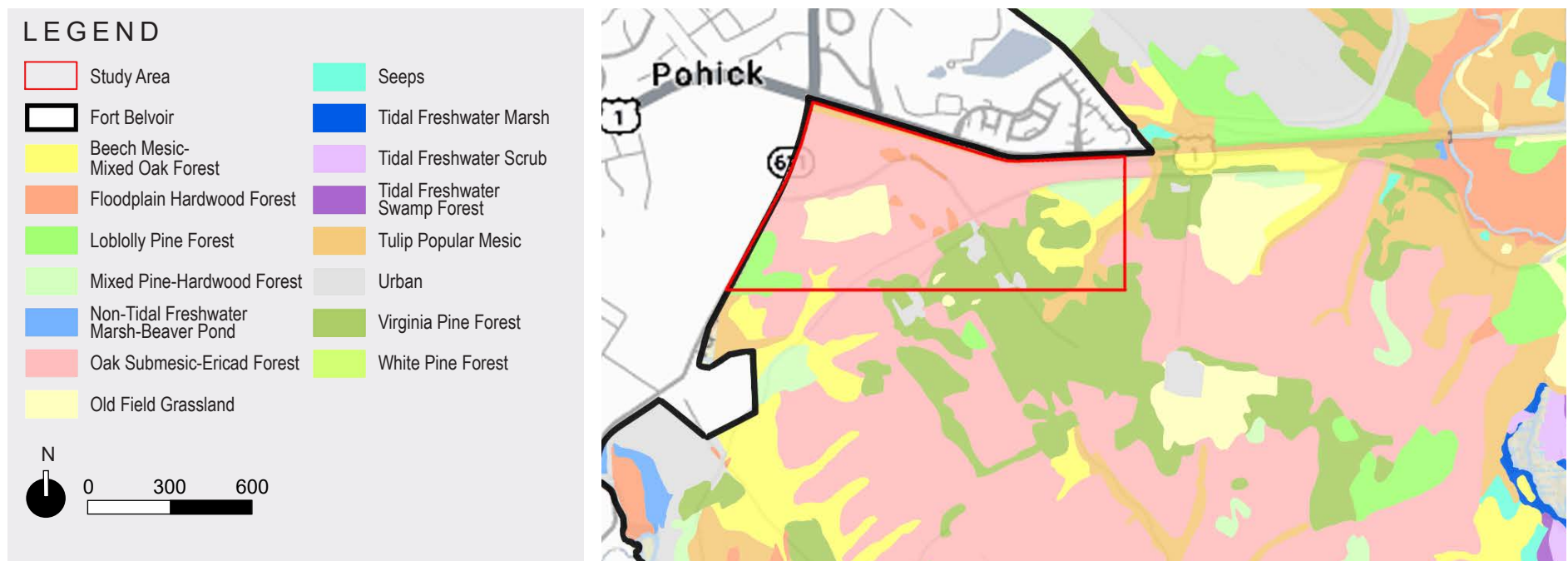


Figure 3-5 Plant Community Map

3.3 RESOURCES POTENTIALLY IMPACTED

oak forest, and palustrine forested wetland. None of the vegetative communities in the proposed project area are considered rare by the Commonwealth of Virginia.

Wildlife and Wildlife Habitat

Fort Belvoir is home to numerous wildlife species. Based on installation-wide surveys, Fort Belvoir contains the potential habitat for 43 species of mammals, 274 species of birds, 32 species of reptiles, 27 species of amphibians and 60 species of fish (USAG Fort Belvoir, 2001). More than 3,300 acres of land have been set aside on Fort Belvoir for wildlife as Special Natural Areas (SNA) including the Accotink Bay Wildlife Refuge, the Jackson Miles Abbott Wildlife Refuge, T-17, Accotink Creek Conservation Corridor, and a Forest and Wildlife Corridor. Fort Belvoir also participates in the Partners in Flight Program. Partners in Flight is a partnership between federal and state agencies, industry, non-governmental organizations and others, with the goal of conserving North American birds. A portion (3.9 acres) of the Accotink Bay Wildlife Refuge, the boundary of which was established based on land contours, extends into the existing Caisson Platoon Facility from the southwest.

The proposed project area is not within any wildlife corridors, refuges, or Partners in Flight habitat areas. Many of the wildlife species associated with forests on Fort Belvoir can be found on or near the project site.

No aquatic species and their habitat exist in the intermittent streams and wetlands within impact area of the Proposed Action. A full listing of species and habitat are found in the installation's Integrated Natural Resources Management Plan (USAG Fort Belvoir, 2018).

Rare, Threatened and Endangered Species

The Endangered Species Act of 1973 (ESA) requires federal agencies to ensure that their actions are not likely to jeopardize the continued existence of any endangered or threatened species (animal and plant species) or result in the destruction or adverse modification of designated critical habitat. Special status species include species listed under the ESA as endangered, threatened, proposed endangered,

proposed threatened, candidate, and species of special concern; and species listed by the Virginia Department of Conservation and Recreation (VDCR) as endangered, threatened, or rare.

Federally-listed Species

The northern long-eared bat (*Myotis septentrionalis*) is a listed threatened species under the Endangered Species Act, due largely to the impacts of White-nose Syndrome. This bat species roosts singly or in colonies underneath bark or in crevices of live and dead trees during the summer. During the winter, the bats hibernate in caves and mines. Female northern long-eared bats roost in maternity colonies in the summer months, and typically give birth between late May and late July. The study area is within the White-nose Syndrome Buffer Zone for the northern long-eared bats. The White-nose Syndrome Buffer Zone identifies the portion of the range of the northern long-eared bat within 150 miles of the boundaries of U.S. counties or Canadian districts where White-nose Syndrome or the associated fungus has been detected. Under Section 7 of the Endangered Species Act, federal agencies must consult with the USFWS to ensure that any action they authorize, fund, permit or carry out does not jeopardize the existence of a listed species. Per USFWS's conservation measures, tree removal is prohibited during the northern long-eared bat active season from April 15 through September 15. Fort Belvoir would consult with the USFWS prior to tree removal associated with the Proposed Action as required by Section 7 of the ESA.

The rusty patch bumble bee (*Bombus affinis*) is a federally listed endangered species which is historically known to occur in the region. The rusty patch bumble bee once occupied grasslands and tallgrass prairies habitats, but most grasslands and prairies have been lost, degraded, or converted to other uses such as farming. Historically, its range extended across much of the U.S. including the northeast, eastern U.S. south to northern Georgia, and west to North Dakota and South Dakota.

The small whorled pogonia (*Isotria medeoloides*) is an orchid found in deciduous woods. It is considered threatened throughout its range by the USFWS and is considered endangered by the State of Virginia. A survey was conducted, and the results are documented in "*Wetland Delineation and Small Whorled Pogonia Habitat Survey, The Old Guard, Fort Belvoir, Virginia*" (February 2018) (see Appendix A). The habitat at Fort Belvoir has been mapped previously and was characterized by low, medium, and high quality for this species. A field survey was conducted on the Caisson Platoon Facility and study area for suitable small whorled pogonia habitat. No individuals were observed during the surveys and none are expected to occur within the project area based on the habitat observed.

Habitat for the federally threatened Sensitive joint-vetch (*Aeschynomene virginica*) is not present at the Caisson Platoon Facility; habitat for this species is mudflats that have been surveyed elsewhere on Fort Belvoir and this species was not observed.

State-listed Species

Fort Belvoir has five state-listed animal species that occur on the installation and include the state-listed threatened wood turtle (*Glyptemys insculpta*), the state-listed threatened peregrine falcon (*Falco peregrinus*, during fall migration), the state-listed endangered little brown bat (*Myotis lucifugus*), the state-listed endangered tri-colored bat (*Perimyotis subflavus*), and the state and federally-listed threatened northern long-eared bat (*Myotis septentrionalis*). Potential habitat for the wood turtle is primarily located along Accotink Creek and its tributaries.

The wood turtle is documented in the northern portion of the Commonwealth of Virginia, including Fairfax County and

3.3 RESOURCES POTENTIALLY IMPACTED

Fort Belvoir. The wood turtle is generally terrestrial during the warm part of the year, and aquatic during cool spells and hibernation. It hibernates in deep pools or under the mud or sand bottom of waterways. Potential habitat for the wood turtle at Fort Belvoir is primarily along the Accotink Creek and its tributaries. No potential habitat is within the study area. Populations of this species have declined due to degradation of aquatic habitats, loss of wetlands, fragmentation of habitats, urbanization, and by being killed by vehicular traffic.

The peregrine falcon became an endangered species in many areas because of the widespread use of certain pesticides, especially dichlorodiphenyltrichloroethane (DDT). Since the ban on DDT from the early 1970s, populations have recovered, supported by large-scale protection of nesting places and releases to the wild. Through conservation and recovery efforts, the peregrine recovered sufficiently to be federally delisted in 1999. Because falcons have not recovered as a nesting population in their historic mountainous range within Virginia, they remain listed as a threatened species under Virginia's Endangered Species Act. The current Virginia falcon population is heavily managed and not yet self-sustaining.

The little brown bat and the tri-colored bat have an active season similar to that of the northern long-eared bat. The conservation measures outlined by the state include time of year restrictions that fall within the bounds of the time of year restrictions already established for the northern long-eared bat. Therefore, the conservation measures required for protection of the northern long-eared bat would also be adequate for the protection of the state-listed species.

The bald eagle (*Haliaeetus leucocephalus*) was delisted by the Commonwealth of Virginia in 2013; however, it is still protected by the Bald and Golden Eagle Protection Act. The bald eagle occurs on the installation, but the known nesting sites are found along the eastern and southern coastal shoreline of Fort Belvoir. No known bald eagle nesting or roosting sites are in or around the Caisson Platoon Facility. The nearest eagle nest and eagle concentration area are

more than one mile from the Caisson Platoon Facility.

3.3.4.2 Environmental Consequences

Threshold of Significance

The threshold of significance for biological resources impacts would be exceeded if the alternative would:

- Jeopardize the continued existence of any federally listed threatened or endangered species or result in destruction of critical habitat;
- Decrease the available habitat for commonly found species to the extent that the species could no longer exist in the area;
- Eliminate a sensitive habitat such as breeding areas, habitats of local significance, or rare or state-designate significant natural communities needed for the survival of a species; or
- Substantially degrade or minimize habitat.

3.3.4.2.1 Impacts of No Action Alternative

Under the No Action Alternative, no improvements would be conducted at the Caisson Platoon Facility. As a result, no potential adverse impacts to biological resources, including vegetation, wildlife, and aquatic species would occur. Based on the characteristics of species of special concern and the location of the potential areas impacted, it is expected that the No Action Alternative would not result in any impacts to species of special concern. All biological resources would continue to be managed in accordance with the Fort Belvoir INRMP.

3.3.4.2.2 Impacts of the Proposed Action

The Proposed Action involves the expansion of the existing facility including woodland removal for pasture and trail expansion, building construction for an indoor riding arena, repurposing existing pole barn, roadway and parking improvements, improvement of stormwater drainage system utilizing vegetative swales and bioretention, and improvements to facility security including gate access

and perimeter fencing.

Vegetation

A full Forest Stand Delineation was conducted on January 11, 2018. A one-tenth acres fixed plot sampling technique was used to assess forest stand conditions and forest structure. Sampling plots were chosen to be evenly distributed throughout the stand. All forest structure and stand procedures for data collection follow guidelines of the Maryland State Forest Conservation Technical Manual (Third edition, 1997). The forest retention priorities are assigned according to the guidelines in the Technical Manual. The highest priority forest retention stand designation, Priority 1, are defined as having one or more of the following characteristics: wetlands, specimen trees, streams, steep slopes, and/or other sensitive areas. It should be noted that, in some cases, a stand can have one or more Priority 1 characteristics, but be of a lower quality stand ranking based upon quality of vegetation, presence of invasive species or characteristics detrimental to a Priority 1 stand retention rating.

Generally, the forest has a well-developed, mature structure and its composition is dominated by chestnut oak (*Quercus prinus*) and white oak (*Quercus alba*) of size class 12" to 19.9" diameter at breast height (dbh) and with approximately 76% canopy closure. Other trees in the canopy included red maple (*Acer rubrum*), black gum (*Nyssa sylvatica*), and American beech (*Fagus grandifolia*). The understory averaged 85% coverage and included red maple, black gum, mountain laurel (*Kalmia latifolia*), American beech, American holly (*Ilex opaca*), chestnut oak and scarlet oak (*Quercus coccinea*). Common herbaceous and woody species included low bush blueberry (*Vaccinium angustifolium*), glaucous greenbrier (*Smilax glauca*), American holly, black huckleberry (*Gaylussacia baccata*) and striped wintergreen (*Chimaphila maculata*) with approximately 50% coverage. No invasive species were observed. The wildlife value of the stand is high due to the presence of cover and forage,

3.3 RESOURCES POTENTIALLY IMPACTED

mostly in the form of hard mast. The stand rates a Priority 1 retention area due to the presence of wetlands, steep slopes, no invasive species cover, and its connection with off-site contiguous forest.

Priority 1 forest retention stand designation have a well-developed forest structure and the highest potential in contributing to good water quality. Other ecological functions provided by forests include soil stability, flooding intensity and duration reduction, and habitat biodiversity. The ecological functions provided by forests would be lost due to the proposed 27.53 acres for forest removal for pasture and trail expansion. The forest canopy and understory intercepts precipitation, decreases the speed of water dispersion, and reduces the rate of runoff. A well-developed leaf litter layer on the forest floor also decrease runoff, increases infiltration potential, and enhances water uptake by the forest root network and evapotranspiration during the growing season. The accumulated leaf litter and the forest root network also protect the soil from erosional effects of runoff and wind and provide soil stability. Through delayed and reduced runoff rates to receiving lowlands and streams, forests reduce the effects of erosion and sedimentation, promote improved water quality, provide a buffer to flood intensity and duration.

Forests provide habitat for a variety of wildlife including indigenous species, migratory species, and species of special concern. Indigenous species, not of special concern, are those species regionally common to the forest such as raccoon, whitetail deer, opossum, grey squirrel, red squirrel, and song birds. Migratory species are those species visit the area seasonally to complete a vital portion of the life cycle such as breeding, feeding, or roosting. Many migratory neotropical bird species require large forest tracts with a deep forest core (more than 300 yards away from the forest edge) to minimize predation and competition for successful nesting and rearing of young. Species of special concern are those species whose occurrence is historically irregular,

diminishing in frequency, or rare. Species of special concern may be listed as threatened or endangered by state and federal agencies or maybe a candidate species for such listing. Often, habitat loss or degradation is cited for the cause for the identification of species of special concern.

The Caisson Platoon Facility is in the northern section of Fort Belvoir, abutting U.S. Route 1 – Richmond Highway, to the south, and Old Colchester Road, to the east. The forest tract at the Caisson Platoon Facility, although abutting transportation facilities and fragmented by existing facility development, the horse pasture, and local roads, is associated an estimated 6,311 acres of contiguous forest of Fort Belvoir, Mason Neck State Park, Mason Neck Wildlife Refuge, and Meadowood Special Recreation Area. Forests on Fort Belvoir account for 2,305 acres of the total contiguous forest area. The proposed removal of 27.53 acres of forest is an adverse forest impact. However, because the loss of 27.53 acres of Caisson Platoon Facility forest amounts to 1.19 percent of the contiguous forested area of Fort Belvoir and about 0.44 percent of the total contiguous forest area present, this impact does not reach the threshold of significant. This determination is consistent with the determination of the EA prepared for The National Museum of the U.S. Army (NMUSA), Fort Belvoir and the FONSI, signed May 19, 2011, for the project which involved the clearing of 35.75 acres of forest habitat similar to the habitat at the Caisson Platoon Facility (See Figure 3.6 for a description of the NMUSA vegetation impacts). Specifically, the loss of 27.53 acres of forest at the Caisson Platoon Facility does not jeopardize the continued existence of species of special concern or their critical habitat, it does not reduce available habitat to the extent that commonly found species could no longer exist, it does not eliminate sensitive habitat of significant natural communities, and it does not substantially degrade or minimize the contiguous forest habitat. The 27.53 acres of woodland proposed to be selectively removed amounts to about 0.44 percent of an estimated 6,311 acres of contiguous forest area present

which is a less-than-significant adverse impact. Additionally, as per the Fort Belvoir Tree Policy Memorandum, two new trees shall be planted for each live tree (4" or more in diameter at breast height) removed through construction. A tree survey would also be conducted for the affected woodland to identify existing tree species that may remain within the proposed pasture area.

Wildlife and Wildlife Habitat

The proposed removal of an estimated 27.53 acres of woodland for the creation of pasture land would reduce forest habitat. The impacted woodland is located sufficiently close to SR 1 (Richmond Highway) and urbanized areas further to the north to not result in the fragmentation of the extensive contiguous forested area to the south. Tree cutting, and removal would be avoided from April 1 to July 15 to avoid disturbance, removal, damage or destruction to birds and their nests, eggs, and hatchlings per the Migratory Bird Treaty Act. The existing land use of the 3.9 acres of the Accotink Bay Wildlife Refuge that extends into the Caisson Platoon Facility would not be changed. Therefore, the Proposed Action would result in minimal impacts to the wildlife and wildlife habitat.

Rare, Threatened and Endangered Species

There is a potential to impact the federally threatened northern long-eared bat (pending federal threatened status) and habitat with the proposed woodland tree removal. As proposed forest clearing exceeds 10.0 acres, consultation with the U.S. Fish and Wildlife Service, Section 7 of the U.S. Endangered Species Act, is required. To minimize potential impacts, tree removal would only be performed outside of the closure period, from April 15 to September 15, per the Section 7 of the ESA consultation in Appendix A. Therefore, impacts to the northern long-eared bat would be avoided or minimized. Impacts to the federally listed rusty patch bumble bee and small whorled pogonia are not anticipated as the respective preferred habitat of these species is not in the study area.

3.3 RESOURCES POTENTIALLY IMPACTED

3.3.5 COASTAL ZONE

3.3.5.1 Affected Environment

The Coastal Zone Management Act of 1972 (16 USC §1451 et seq., as amended) assists the states, in cooperation with federal and local agencies, for developing land and water use programs in coastal zones. Section 307 (c)(1) of the Coastal Zone Management Act Reauthorization Amendment stipulates that federal projects that affect land uses, water uses, or coastal resources of a state's coastal zone must be consistent to the maximum extent practicable with the enforceable policies of the state's federally approved coastal management plan. The Commonwealth of Virginia has developed and implemented a federally approved Coastal Resources Management Program describing current coastal legislation and enforceable policies. There are enforceable policies for:

- Fisheries management
- Subaqueous lands management
- Wetlands management
- Dune management
- Non-point source pollution control
- Point source pollution control
- Shoreline sanitation
- Air pollution control
- Coastal lands management

Virginia's coastal zone includes all of Fairfax County, including Fort Belvoir; therefore, federal actions at Fort Belvoir are subject to federal consistency requirements. The VDEQ serves as the lead agency for consistency reviews. The project area is characterized as a Training Facility consisting of several buildings, unimproved roads and parking areas, and a small pasture area. The Caisson Platoon Facility is abutted by forested areas, the Accotink Bay Wildlife Refuge to the south, and the Pohick Church Historic District and associated overlay boundary to the west. Three small, isolated, non-tidal wetlands are present on the existing facility. There is no coastline or coastal dunes present.

3.3.5.2 Environmental Consequences

Threshold of Significance

The threshold of significance for coastal zone impacts would be exceeded if the alternative would not be consistent with the federal coastal zone policy include consideration of the following:

- Impacts of the Proposed Action on any land or water use or natural resource of the coastal zone;
- Incremental impacts of Proposed Action on any land or water use or natural resource of the coastal zone when added to past, present, and reasonably foreseeable future actions; and
- Collective impacts of individual unrelated actions on any land or water use or natural resource of the coastal zone.

3.3.5.2.1 Impacts of the No Action Alternative

The No Action Alternative would have no impacts on the Virginia coastal zone or future implementation of the Coastal Resources Management Plan.

3.3.5.2.2 Impacts of the Proposed Action Alternative

The proposed improvements to the Caisson Platoon Facility would be consistent with Virginia's Coastal Resources Management Policies. As described above in Section 3.3.3.2, impacts to two isolated, non-tidal PEM wetlands (0.06 acres); one, isolated, non-tidal PFO wetland (0.06 acres); and the loss of 91 feet (140 square feet) of intermittent stream channel would result from the Proposed Action. If compensation is required to offset impacts associated with this project, the applicant will satisfy the compensation obligation through the purchase of wetland credits from one or more approved mitigation banks servicing the project's 8-digit Hydrologic Unit Code (HUC) (02070010). Credit ratios greater than 1:1 may apply to any compensation obligation, as specified by the regulatory authorities.

Non-point source pollution would be managed using temporary erosion and sediment control measures defined in the approved Erosion and Sediment Control plan or permanent SWM BMPs, as appropriate. Minor temporary impacts to air quality are anticipated for the duration of the Proposed Action implementation. The Coastal Zone Consistency determination will be submitted to the Commonwealth of Virginia as an appendix in the Draft EA/Draft FONSI. A copy of a draft Coastal Zone Management Consistency Determination is in Appendix C.

3.4 CUMULATIVE EFFECTS

3.4.1 AFFECTED ENVIRONMENT

In addition to identifying the direct and indirect environmental impacts of their actions, the CEQ's NEPA regulations require federal agencies to address cumulative impacts related to their proposals. A cumulative impact is defined in the CEQ regulations (40 CFR Part 1508.7) as "the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (federal or non-federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time." This section describes the process used to identify potential cumulative impacts related to the Proposed Action at Fort Belvoir and discusses those impacts for each of the resources analyzed in this EA.

The process outlined by CEQ includes identifying significant cumulative impacts issues, establishing the relevant geographic and temporal (time frame) extent of the cumulative effects analysis, identifying other actions affecting the resources of concern, establishing the cause-and-effect relationship between the Proposed Action and the cumulative impacts, determining the magnitude and significance of the cumulative impacts and identifying ways in which the agency's proposal might be modified to avoid, minimize, or mitigate significant cumulative impacts.

CEQ regulations specify that cumulative impacts analyses encompass past, present, and reasonably foreseeable future actions. As a practical matter, the impacts of past actions on Fort Belvoir are already reflected in the conditions that currently exist, as described earlier in this chapter, in the Affected Environment section of each resource topic. For example, past actions on Fort Belvoir that involve the clearing of trees.

Present and reasonably foreseeable future actions on Fort Belvoir that may have a cumulative impact in combination with the Proposed Action are listed in Figure 3-6. In general, this EA considered present and reasonably foreseeable future actions as those that currently exist or are under construction, are the subject of an existing plan or proposal, or have identified funding. Actions beyond that become increasingly speculative and difficult to assess.

Project	Description	Distance to Caisson Platoon Facility	Project Type	NEPA Action
Hazardous Tree Removal at Davison Army Airfield (DAAF)	Removal of 16.4 acres of trees intercepting the runway approach clear zones.	0.8 mile	Maintenance	Environmental Assessment with Finding of No Significant Impact (2016). Project is completed.
DAAF Skills Training Compound	Construct a permanent compound for DAAF training and operations.	2.7 miles	Construction	Environmental Assessment prepared, and FONSI signed. Construction is ongoing.
DAAF Area Development Plan	Proposed facility consolidation consistent with Real Property Master Plan involving new construction, a 200-ft runway expansion, and demolishing up to 25 existing structures.	2.7 miles	Construction	Notice of Intent to prepare an Environmental Impact Statement issued April 2018.
National Museum of the US Army (NMUSA)	Construct a national museum facility affecting 74.9 acres of land including the clearing of 35.75 acres of forests, 39.14 acres of maintained lawn/golf course turf, and 0.01 acres of aquatic resources.	1.5 miles	Construction	Environmental Assessment prepared, and FONSI signed. Construction started February 2016 to continue into 2019.
911th Engineering Company Operations Complex	Construct a medium-duty tactical equipment maintenance complex with integrated company operations and administrative space	2.2 miles	Construction	Environmental Assessment being prepared.
Fairfax County Parkway/John J. Kingman Road Intersections & NMUSA Entrance	Grade separate intersections along Fairfax County Parkway at John J Kingman Road and the NMUSA entrance.	1.5 miles	Transportation	Environmental Assessment prepared, and FONSI signed.
US Route 1 intersections with Fairfax County Parkway, Pohick Road and Belvoir Road	Monitor intersections along US Route 1 at Fairfax County Parkway, Pohick Road, and Belvoir Road to determine need for future improvements.	0.3 mile	Transportation	Environmental Documentation has yet to be prepared.

Source: Final Environmental Impact Statement for Short-Term Projects & Real Property Master Plan Update. Volume 1 June 2015.

Figure 3-6 Projects Near the Caisson Platoon Facility

3.4 CUMULATIVE EFFECTS

3.4.2 ENVIRONMENT CONSEQUENCES

Threshold of Significance

The threshold of significance for cumulative impacts would include consideration of the following:

- Impacts of the Proposed Action and related actions;
- Incremental impacts of Proposed Action when added to past, present, and reasonably foreseeable future actions; and
- Collective impacts of individual unrelated actions.

The Proposed Action involves the expansion of the existing facility including woodland removal for pasture development, building construction for an indoor riding arena, repurposing an existing pole barn, roadway and parking improvements, improvement of stormwater drainage system utilizing vegetative swales and bioretention, and improvements to facility security including gate access and perimeter fencing.

3.4.2.1 Air Quality

The Proposed Action would result in minimal adverse cumulative impacts related to air quality. The proposed new indoor riding arena and classroom facility would be more energy efficient than existing buildings and thereby would improve sustainability and minimize air pollution. Impacts are expected through construction activities, but these would be minor and of short-term. No long-term cumulative air quality impacts are anticipated.

3.4.2.2 Water Resources

Groundwater

Cumulative impacts to groundwater are not anticipated because the Proposed Action and other associated planned activities would not involve earth disturbance of sufficient depth to directly affect aquifers or involve the storage or appreciable use of materials that could degrade groundwater quality.

Surface Water

Cumulative impacts to surface water from the Proposed Action would be minor for the proposed improvements to the Caisson

Platoon Facility. Appropriate temporary erosion and sediment control measures would be employed during construction and be maintained until soil stabilization is achieved. Permanent SWM BMPs would manage potential increased stormwater runoff would be implemented in compliance with applicable permit requirements. Projects at Fort Belvoir with a land disturbance of greater than 2,500 square feet are required to have erosion and sediment control measures and SWM plans in compliance with Section 438 of the Energy Independence and Security Act, the Fort Belvoir Municipal Separate Storm Sewer System (MS4) permit, Virginia Erosion and Sediment Control (ESC) regulations, SWM and Chesapeake Bay laws and regulations.

Wetlands

The Proposed Action anticipates the unavoidable, less-than-significant loss of two isolated, non-tidal PEM wetlands (0.06 acres) and one, isolated, non-tidal PFO wetland (0.06 acres). Though there would be a direct and permanent impact to wetlands, proper mitigation in accordance with Section 404 of the Clean Water Act, as well as implementation of temporary erosion and sediment control measures, would manage these impacts. If compensation is required to offset impacts associated with this project, the applicant will satisfy the compensation obligation through the purchase of wetland and/or stream credits from one or more approved mitigation banks servicing the project's 8-digit HUC (02070010). Credit ratios greater than 1:1 may apply to any compensation obligation, as specified by the regulatory authorities. Tree removal in areas that are not within a wetland are expected to have no impact to wetlands. Other projects at Fort Belvoir have also minimized impacts to wetlands and completed wetland mitigation to address unavoidable wetland losses. Thus, minor cumulative impacts are anticipated to wetlands as impacts from this project and all projects on Fort Belvoir are mitigated.

3.4.2.3 Biological Resources

The Caisson Platoon Facility is characterized by mostly open pasture land, a few buildings, and unimproved roadways

and parking areas. The facility is surrounded by forested land. The proposed tree removal affecting about 27.53 acres of woodland would be an insignificant adverse effect. The woodland is not of a rare forest composition and does not serve as critical habitat for species of special concern. The impacted woodland area is located to the south of SR 1 and urban development to the north and, as such, would not disrupt forest interior habitats; therefore, no further forest fragmentation is expected to result from the Proposed Action. The Proposed Action removal of an estimated 27.53 acres of Priority 1 forest retention woodland would result in negligible effect on the water quality. The 27.53 acres of woodland proposed to be selectively removed, amounts to about 1.19 percent of the contiguous forested area of Fort Belvoir and about 0.44 percent of the total contiguous forest area present, this impact does not reach the threshold of significance. Specifically, the loss of 27.53 acres of forest does not jeopardize the continued existence of species of special concern or their critical habitat, it does not reduce available habitat to the extent that commonly found species could no longer exist, it does not eliminate sensitive habitat of significant natural communities and it does not substantially degrade or minimize the contiguous forest habitat. Additionally, as per the Fort Belvoir Tree Policy Memorandum two new trees shall be planted for each live tree (4" or more in diameter at breast height) removed through construction. It should be noted that most available space for replacement tree planting at Fort Belvoir has been previously utilized requiring the consideration of alternative mitigation. A tree survey would also be conducted for the affected woodland to identify existing tree species that may remain within the proposed pasture area.

3.4 CUMULATIVE EFFECTS

Minor adverse impacts are expected to wildlife and migratory birds because of the Proposed Action due to the removal of forest habitat. Most of the cumulative projects listed in Figure 3-6 would occur in developed areas and would have minimal impacts to wildlife and wildlife habitat. Many of the listed cumulative projects would occur on previously disturbed areas and impacts to wildlife and migratory birds in these areas would be minor. The removal of trees would not create fragmented unsuitable habitat, and therefore would result in minor cumulative impacts to wildlife and migratory birds. Additionally, tree removal would be restricted between April 1 and July 15 to avoid disturbance, removal, damage or destruction to birds and their nests, eggs, and hatchlings per the Migratory Bird Treaty Act.

No cumulative effects are anticipated to the federally listed northern long-eared bat as tree removal and other construction projects on Fort Belvoir would be performed outside the active period from April 15 to September 15.

3.4.2.4 Coastal Zone

The Proposed Action is consistent with the Coastal Zone Management Program and would abide by current appropriate permits and mitigation requirements. Therefore, there are no anticipated cumulative effects as future projects would also be consistent with the Coastal Zone Management Program.

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4.0 FINDINGS AND CONCLUSIONS

4.1 UNAVOIDABLE ADVERSE IMPACTS

Unavoidable impacts are those impacts that Fort Belvoir would experience if the proposed Caisson Platoon Facility improvements were implemented under the Proposed Action Alternative. The Proposed Action is required to promote a sustainable, world-class facility in support of the facility's mission and providing a secure, high-quality environment for Soldiers, civilians, and other users of the Caisson Platoon Facility and to address facility deficiencies as they hinder the platoon's mission readiness and threaten the health and safety of both the Army Horsemen and their horses.

Potential minor impacts that would occur from implementation of the Proposed Action include: minor temporary adverse impacts to air quality from construction equipment use; unavoidable loss of two isolated, non-tidal PEM wetlands (0.06 acres) and one, isolated, non-tidal PFO wetland (0.06 acres); minor permanent impacts to two surface water intermittent and headwater tributaries; and the loss of about 27.53 acres of woodland forest required for pasture development.

The Proposed Action would result in no or negligible impacts to: land use; noise; geology; topography; soils; cultural resources; socioeconomic; environmental justice; traffic and transportation; utilities; hazardous materials and wastes; visual and aesthetic resources; groundwater; floodplains; rare, threatened, and endangered species; and the coastal zone. Tree cutting activities in excess of 10 acres would be coordinated with the US Fish and Wildlife Service to minimize the potential for impact, such as conducting tree cutting activities outside of the northern long-eared bat active period to avoid impacts. No significant cumulative impacts are anticipated. No significant impacts on the environment are expected to result from the Proposed Action.

Under the No Action Alternative, the Caisson Platoon Facility would continue to be non-compliant with safety requirements and best management practices for the proper care of horses and horseman which would impact the Platoon's mission. The No Action Alternative would not improve the Caisson Platoon Facility which would continue to be an unsafe environment for horses and horseman.

4.2 BEST MANAGEMENT PRACTICES AND MITIGATION MEASURES

Mitigation for the unavoidable loss of two isolated, non-tidal PEM wetlands (0.06 acres) and one, isolated, non-tidal PFO wetland (0.06 acres) would occur through the purchase of wetland credits from one or more approved mitigation banks servicing the project's 8-digit HUC (02070010). Credit ratios greater than 1:1 may apply to any compensation obligation, as specified by the regulatory authorities.

Other than wetland mitigation, there are no other anticipated impacts that would require mitigation. Temporary erosion and sediment control measures and permanent SWM BMPs would be employed where appropriate to reduce or minimize impacts. The actions discussed below would be employed to minimize potential adverse impacts:

- In compliance with the Federal Emerald Ash Borer Quarantine (7 CFR 301.53), all trees removed for this project would be chipped or taken to landfills within the quarantine zone or be used onsite for soil stabilization
- Permanent SWM BMPs would also be employed, as appropriate, in compliance with all applicable local, state, and federal regulations
- Seasonal restrictions would be followed for tree removal activities to avoid impacts to the northern long-eared bat and pursuant to the Migratory Bird Treaty Act
- A Tree survey would be conducted for the affected woodland to identify existing tree species that may remain within the proposed pasture area, consistent with horse pasture best management practices. Additionally, the tree survey will establish the number of trees to be removed upon which the tree replacement mitigation requirement may be based

- Replacement of trees removed during construction would be conducted consistent with the Fort Belvoir Tree Policy Memorandum that requires planting of two trees per each tree (4" or more in diameter at breast height) removed through construction. If tree replacement space is not available, alternative mitigations for the tree removal will be developed. Coordination with US Fish and Wildlife service will also support minimizing impacts from tree removal. In addition to these BMPs and mitigation measures, all activities would be conducted in compliance with the Federal Consistency Determination and the recommendations from VDEQ; and Occupational Safety and Health Administration regulations and standard operating procedures to ensure the safety of all installation and construction personnel.

4.3 PERMITS AND OTHER REQUIREMENTS

Fort Belvoir is responsible for preparing and submitting permit applications and other information needed for the proposed improvements to the Caisson Platoon Facility. Permits or other requirements that could be required include, but are not limited to:

- Virginia Stormwater Management Program, General Permit for Discharges of Stormwater and Construction Activities and associated Stormwater Pollution Prevention
- Virginia Pollutant Discharge Elimination System (VPDES) Industrial Stormwater General Permit and Individual Major Permit
- VDEQ approved Erosion and Sediment Control Plan
- VDEQ approved SWM Plan
- Section 404/Virginia Wetland Program Jurisdictional Determination
- Section 404 General Permit
- Section 401 Water Quality Certification
- Virginia State Programmatic General Permit or Water Protection Permit
- State Historic Preservation Office concurrence
- Coastal Zone Federal Consistency Determination concurrence

4.4 CONCLUSION

The implementation of the Caisson Platoon Facility improvements, as proposed under the Proposed Action Alternative, is not expected to result in significant impacts on the environment; therefore, an environmental impact statement is not required.

Figure 4-1 provides a brief comparison of the environmental impacts associated with the Proposed Action and No Action Alternatives.

Resource	Resource Evaluated in Detail in the EA	Proposed Action	No Action Alternative
Air Quality	Yes	Short-term, less-than significant temporary impacts from construction-related activities.	No impacts
Groundwater	Yes	Minor short- and long-term less-than significant beneficial impacts due to improvements to groundwater quality.	No impacts
Water	Yes	<p>Short- and long-term, less-than significant impact due to the loss of the headwater extent of two intermittent streams (91 linear feet / 140 square feet) being impacted due to the construction of a stormwater management system including vegetated swale around the perimeter of the proposed pasture and convey the collected stormwater to bioretention features prior to discharge.</p> <p>Temporary erosion and sediment control measures would be employed during grading activities.</p> <p>The 27 acres of pasture would be divided into 4 separate paddocks, vegetated with species selected for soil stabilization, fast growth, and grazing values. Horse use of paddocks would be rotated to maintain healthy turf coverage at 70% minimum. Stream mitigation would be provided by the purchase of credits from a mitigation bank.</p>	No impacts
Floodplains	Yes	No impacts.	No impacts

Figure 4-1 Summary of Impacts of the Proposed Action and the No Action Alternative

4.4 CONCLUSION

Resource	Resource Evaluated in Detail in the EA	Proposed Action	No Action Alternative
Wetlands	Yes	Short- and long-term, less-than significant permanent impacts to two isolated, non-tidal PEM wetlands (0.06 acres) and one, isolated, non-tidal PFO wetland (0.06 acres) would occur. Wetland compensation is anticipated to be required to offset impacts associated with this project, the applicant will satisfy the compensation obligation through the purchase of wetland credits from one or more approved mitigation banks servicing the project's 8-digit HUC (02070010). Credit ratios greater than 1:1 may apply to any compensation obligation, as specified by the regulatory authorities.	No impacts
Vegetation	Yes	Short- and long-term, less-than significant adverse impacts will occur due to the removal of trees affecting 27.53 acres of an existing woodland for the development of pasture land. Conduct tree survey to determine tree mitigation commitments.	No impacts
Wildlife and Wildlife Habitat	Yes	Short- and long-term, less-than significant adverse impacts due to the removal of trees, converting 27.53 acres of an existing woodland to pasture.	No impacts
Rare, threatened and endangered species	Yes	Short- and long-term, less-than significant impacts to protected species that may occur at the Caisson Platoon facility due to the removal of 27.53 acres of forest habitat. Tree removal activities would take place outside of the active period for the northern long-eared bat and nesting time for migratory birds.	No impacts

Figure 4-1 (cont.) Summary of Impacts of the Proposed Action and the No Action Alternative

4.4 CONCLUSION

Resource	Resource Evaluated in Detail in the EA	Proposed Action	No Action Alternative
Coastal Zone	Yes	Short- and long-term, less-than significant impacts anticipated due to the removal of 27.53 acres of forest, the loss of 0.12 acres of isolated PFO (0.06 ac.) and PEM (0.06 ac.) wetlands, and the loss of 91 feet (140 square feet) of intermittent stream channel. The Proposed Action would be consistent with the Virginia Coastal Zone Management Policy.	No impacts
Land Use	No	No impacts.	No impacts
Noise	No	Short-term, less-than significant minor temporary construction-related impacts.	No impacts
Geology, Topography, and Soils	No	Negligible impacts.	No impacts
Cultural Resources	No	No impacts.	No Impacts
Socioeconomics	No	Short- term, less-than significant beneficial impacts during project construction due to temporary increases in employment, purchase of materials, and support of local commercial services.	No impacts
Environmental Justice	No	No impacts.	No impacts
Traffic and Transportation	No	Short-term, less-than significant impacts due to minimal traffic increases from implementation of the Proposed Action.	No impacts
Utilities	No	Negligible impacts.	No impacts
Hazardous Materials and Wastes	No	Short-term, minor impacts due to the Proposed Action's generation of solid waste materials including wood chips and other wood products.	No impacts
Visual and Aesthetic Resources	No	Short-term, minor impacts due to the implementation of the Proposed Action including the removal of trees and pasture expansion	No impacts

Figure 4-1 (cont.) Summary of Impacts of the Proposed Action and the No Action Alternative

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Role: GIS, Mapping, Document Preparation

Bachelors of Landscape Architecture, Pennsylvania State University

Years of experience: 1

Raymond Maginness

Environmental Specialist, Michael Baker International

Role: Lead Author

B.S. Environmental Science, Slippery Rock University, PA

M.A. Environmental Management, Montclair State College, NJ

Years of experience: 36



6.0 REFERENCES

6.0 REFERENCES

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7.0 ACRONYMS

7.0 ACRONYMS

#

µg Micrograms

A

ADA Americans with Disabilities Act

AQCR Air-quality Control Region

AQI Air Quality Index

AR Army Regulations

AT/FP Anti-Terrorism/Force Protection

B

BMP Best Management Practice

BRAC Base Realignment and Closure

C

°C Degrees Celsius

CAA Clean Air Act

CBPA Chesapeake Bay Preservation Act

CEQ Council on Environmental Quality

CFR Code of Federal Regulations

COA Course of Action

CO Carbon Monoxide

CO₂ Carbon Dioxide

CO_{2e} Carbon Dioxide Equivalent

CRMP Cultural Resource Management Plan

CWA Clean Water Act

D

DA Department of the Army

dB Decibel

DCR

Department of Conservation and Recreation

DDT

Dichlorodiphenyltrichloroethane

DEQ

Department of Environmental Quality

DPW

Directorate of Public Works

DOD

Department of Defense

E

EA

Environmental Assessment

EIS

Environmental Impact Statement

ENRD

Environmental and Natural Resources Division

EO

Executive Order

EQC

Environmental Quality Corridor

ESA

Endangered Species Act

ESC

Erosion and Sediment Control

F

FEIS

Final Environmental Impact Statement

FONSI

Finding Of No Significant Impact

G

GHG

Greenhouse Gas

I

INRMP

Integrated Natural Resource Management Plan

M

MS4

Municipal Separate Storm Sewer System

MWR

Morale, Welfare, and Recreation

N

NAAQS

National Ambient Air Quality Standards

NCPC

National Capital Planning Commission

NEPA

National Environmental Policy Act

NHPA

National Historic Preservation Act

NMUSA

National Museum of the United States Army

NO₂

Nitrogen Dioxide

NO_x

Nitrogen Oxides

NOA

Notice of Availability

NOI

Notice of Intent

O

O₃

Ozone

OSEG

Operations Security Evaluation Group

P

Pb

Lead

PEM

Palustrine Emergent

PFO

Palustrine Forested

PM

Particulate Matter

POV

Privately Owned Vehicle

POW

Palustrine Open Water

ppm

Parts Per Million

R

RMA

Resource Management Area

RPA

Resource Protection Area

RPMP

Real Property Management Plan

7.0 ACRONYMS

S

SHPO	State Historic Preservation Office
SO ₂	Sulfur Dioxide
SR	State Route
SWM	Stormwater Management

T

TMDL	Total Maximum Daily Load
TOG	The Old Guard
TYP	Tons Per Year

U

UFC	Unified Facilities Code
U.S.	United States
USAG	United State Army Garrison
USC	United States Code
USACE	United States Army Corps of Engineers
USEPA	United States Environmental Protection Agency
USFWS	United States Fish and Wildlife Service

V

VAC	Virginia Administrative Code
VDEQ	Virginia Department of Environmental Quality
VDHR	Virginia Department of Historic Resources
VPDES	Virginia Pollution Discharge Elimination Systems
VOC	Volatile Organic Compound



APPENDIX A

PUBLIC AND AGENCY COORDINATION

APPENDIX A

PUBLIC AND AGENCY COORDINATION

Public and Agency Distribution List

Name	Department and Mailing Address	Type	Position
Mr. Marc Holma	Virginia Department of Historic Resources 2801 Kensington Ave. Richmond, Virginia 23221	State Agency	Architectural Historian, Division of Review and Compliance (SHPO)
Chief Leo Henry	2006 Mt. Hope Road Lewiston, NY 14092	Tribes	Chief, Tuscarora Nation of New York
Chief Joe Bunch	P.O. Box 746 Tahlequah, OK 74465	Tribes	Chief, United Keetoowah Band of Cherokee Indians in Oklahoma
Chief William Harris	996 Avenue of the Nations Rock Hill, SC 29730	Tribes	Chief, Catawba Indian Nation Tribal Historic Preservation Office
Principal Chief Richard Sneed	Qualla Boundary P.O. Box 455 Cherokee, NC 28719	Tribes	Principal Chief, Eastern Band of Cherokee Indians
Chief Robert Gray	Pamunkey Indian Reservation 1054 Pochantas Trail King William, VA 23086	Tribes	Pamunkey Indian Tribe
Chief Stephen R Adkins	8200 Lott Cary Road Providence Forge, VA 23140	Tribes	Chickahominy Indian Tribe
Assistant Chief Gerald Stewart	2895 Mt Pleasant Road Providence Forge, VA 23140	Tribes	Chickahominy Indians Eastern Division
Chief Frank Adams	P.O. Box 184 King William, VA 23086	Tribes	Upper Mattaponi Tribe
Tribal Chief Dean Branham	PO Box 960 Amherst, VA 24571	Tribes	Monocan Indian Nation
Chief Anne Richardson	5036 Indian Neck Rd Indian Neck, VA 23148	Tribes	Rappahannock Tribe
Chief Samuel Bass	1001 Pembroke Lane Suffolk, VA 23434	Tribes	Nansemond Indian Tribe

APPENDIX A

PUBLIC AND AGENCY COORDINATION

Name	Title/Position	Department and Mailing Address	Type
Ms. Valerie Fulcher	Executive Secretary Senior	Office of Environmental Impact Review Virginia Department of Environmental Quality P.O. Box 1105 Richmond, Virginia 23218	State Agency
Ms. Laura McKay	Manager	Coastal Zone Management Program Virginia Department of Environmental Quality 629 East Main Street Richmond, Virginia 23219	State Agency
Mr. John (Jack) Bricker	State Conservationist	USDA Natural Resources Conservation Service 1606 Santa Rosa Road, Suite 209 Richmond, Virginia 23229	Federal Agency
Ms. Kimberly Damon-Randall	Deputy Regional Administrator for Protected Resources	Greater Atlantic Region Fisheries Office National Marine Fisheries Service Protected Resources 55 Great Republic Drive Gloucester, Massachusetts 01930	Federal Agency
Mr. Sean Corson	Acting Director	Chesapeake Bay Program Office National Marine Fisheries Service 410 Severn Avenue, Suite 207-A Annapolis, Maryland 21403	Regional Agency
Ms. Pat Montanio	Director	National Oceanic Atmospheric Administration National Marine Fisheries Service Habitat Conservation Division 1315 East-West Highway SSMC3, 14th Floor F/HC Silver Spring, Maryland 20910	Federal Agency
Ms. Michaela Noble	Director	U.S. Department of the Interior Office of Environmental Policy and Compliance 1849 C Street, NW Washington, DC 20240	Federal Agency

APPENDIX A

PUBLIC AND AGENCY COORDINATION

Name	Title/Position	Department and Mailing Address	Type
Mr. Troy M. Anderson	Conservation Planning Assistance Supervisor	U.S. Fish and Wildlife Service Region 5, Virginia Field Office 6669 Short Lane Gloucester, Virginia 23061-4410	Federal Agency
Ms. Barbara Rudnick	NEPA Program Manager	Office of Environmental Programs (3EA30) U.S. Environmental Protection Agency Region 3 1650 Arch Street Philadelphia, Pennsylvania 19103	Federal Agency
Ms. Emily Biondi	Director	U.S. Department of Transportation Federal Highway Administration Office of Project Development & Environmental Review 1200 New Jersey Ave, SE, HEPE-1 Washington, DC 20590-0001	Federal Agency
Mr. Tom Biesiadny	Director	Fairfax County Department of Transportation Centrepont 1 Office Building 4050 Legato Road, Suite 400 Fairfax, Virginia 22033	Local Government - Fairfax County
Mr. Peter F. Murphy	Chairman	Fairfax County Planning Commission Springfield District Government Center 12000 Government Center Parkway, Suite 552 Fairfax, Virginia 22035	Local Government - Fairfax County
Mr. Fred Selden	Director	Fairfax County Department of Planning and Zoning 12055 Government Center Parkway, Suite 73 Fairfax, Virginia 22035	Local Government - Fairfax County
Mr. Marcel Acosta	Executive Director	National Capital Planning Commission 401 9th Street NW, Suite 500N Washington, DC 20004	Regional Agency
Mr. Daniel G. Storck	Supervisor of Mount Vernon District	Fairfax County Board of Supervisors Mount Vernon Government Center Fairfax County 2511 Parkers Lane Mt. Vernon, Virginia 22306	Local Government - Fairfax County

APPENDIX A

PUBLIC AND AGENCY COORDINATION

Name	Title/Position	Department and Mailing Address	Type
Ms. Karen Sheffield	Manager	Huntley Meadows Park Fairfax County Parks Authority 3701 Lockheed Boulevard Alexandria, Virginia 22306	Local Government - Fairfax County
Mr. Willie Woode	Senior Conservation Specialist	Northern Virginia Soil and Water Conservation District (Fairfax County) 12055 Government Center Parkway, Suite 905 Fairfax, VA 22035	Local Government - Fairfax County
Ms. Sandy Collins	Primary Conservator	Friends of Accotink Creek 127 Poplar Road Fredericksburg, Virginia 22406-5022	Non-Government Organization
Ms. Cathy Ledec	President	Friends of Huntley Meadows C/ O Huntley Meadows Park 3701 Lockheed Blvd. Alexandria, Virginia 22306	Non-Government Organization
Ms. Martha Catlin	Associated with Alexandria Friends Meeting at Woodlawn	8324 Mount Vernon Hwy. Alexandria, Virginia 22309	Interested Party
Ms. Elizabeth Crowell	Branch Manager	Fairfax County Cultural Resources Management and Protection Branch James Lee Center 2855 Annandale Road Fairfax, Virginia 22042	Historical and Cultural Agencies and Properties
Ms. Barbara Rice Branch Manager Fairfax County Public Library		Kingstowne Branch 6500 Lansdowne Centre Alexandria, Virginia 22315-5011	Library
Ms. Lyn McKinney Branch Manager Fairfax County Public Library		Lorton Branch 9520 Richmond Highway Lorton, Virginia 22079-2124	Library
Ms. Linda Schlekau Branch Manager Fairfax County Public Library		Sherwood Regional Branch 2501 Sherwood Hall Lane Alexandria, Virginia 22306-2799	Library
Ms. Nilya Carrato Director Van Noy Library		5966 12th St Building 1024 Fort Belvoir, Virginia 22060	Library

Section 106 Consultation Documentation



DEPARTMENT OF THE ARMY
US ARMY INSTALLATION MANAGEMENT COMMAND
HEADQUARTERS, UNITED STATES ARMY GARRISON, FORT BELVOIR
9820 FLAGLER ROAD, SUITE 213
FORT BELVOIR, VIRGINIA 22060-5928

OCT 29 2019

Directorate of Public Works

SUBJECT: Section 106 Consultation - Caisson Platoon Facility Area Development Plan
Environmental Assessment, Fort Belvoir, Virginia

Mr. Marc Holma
Architectural Historian
Department of Historic Resources
2801 Kensington Avenue
Richmond, Virginia 23221

Dear Mr. Holma:

Fort Belvoir is proposing the implementation of an Area Development Plan (ADP) for the Caisson Platoon Facility, which encompasses approximately 115 acres in the Southwest District of Fort Belvoir. The Caisson Platoon primarily operates out of Joint Base Myer-Henderson Hall (JBMHH), 18 miles to the north of Fort Belvoir. Its mission is to honor deceased servicemen and women by carrying them to rest in the Arlington National Cemetery. The Caisson Platoon Facility at Fort Belvoir provides the Caisson Platoon with space for training, trail riding, storage, stables, and pasture area for horses to support the overall mission. An Environmental Assessment (EA) was prepared and determined there would be no significant impacts to any identified resources. This EA will be made available to the public for review in both digital and hardcopy. A CD with the EA is enclosed in this consultation packet, and all other parties will refer to the publically available digital copy.

Approximately 10.5 acres (excluding training trail) of the total 115-acre area study are currently developed in support of the Caisson Platoon Facility with the remaining 104.5 acres (including training trail) being largely undeveloped. The proposed undertaking (please refer to pages 14-16 of EA) consists of expanding the existing deficient Caisson Platoon Facility from 10.5 acres to 39.1 acres in order to address identified project needs. Site expansion would occur primarily to the north and west into an existing forested area. The proposed undertaking would impact existing two intermittent streams, three isolated and tidal wetlands, and 27.43 acres of forest area. The Area of Potential Effect (APE) for this undertaking includes those areas that will be directly or indirectly affected by the ADP improvements. Work to be developed includes the following:

- **Pasture Size:** A 27.4-acre pasture area would be developed (involving 22.0 acres of forest clearing) consisting of four paddocks (two for training horses and two for Caisson horses), a horse quarantine area, run-in shelters, feed pens, automatic waterers, and an outdoor riding arena. A new livestock containment fence would be constructed around the expanded pasture with additional fencing and gates between the paddocks and quarantine areas to control use by horses and promote sustainable forage.

“LEADERS IN EXCELLENCE”

- Stable Capacity: Hay storage is being converted from the existing stables to the existing pole barn (Building 3045) which is being converted to a separate storage facility. Additional horse stalls would be added. The stables would be connected to a new indoor riding arena via a covered walkway.
- Manure Management: A new dumpster storage area would be established and a new indoor climate-controlled riding arena (of sufficient size to accommodate twelve horses, twelve soldiers and three instructors) would be constructed. The arena would have a covered classroom, veterinarian room, office, kitchen, tack-room, restrooms, lockers, and showers. A new riding trail system would be established consisting of 2.85 miles of trails that would require the clearing of 5.53 acres of forest area to accommodate the 16-foot trail width.
- Stormwater Management (SWM): A SWM swale would be constructed around the perimeter of the expanded pastures area (including the four paddocks, horse quarantine area, run-in shelters, feed pens, and an outdoor riding arena) to collect run-off and transmit it to wet-bioretenion features and other Green SWM Best Management Practices. Four optional stormwater bioretention areas will work to slow and infiltrate excess water during wet storm events. The bioretention areas will require the ability to process heavy sediment loads from stormwater run-off from the pasture and pavements. Additional SWM features would be located along roadway and parking lots to capture and treat run-off.
- Paved Surfaces: Existing unpaved roadways and parking lots would be relocated and replaced with paved facilities properly designed to accommodate required traffic including meeting ADA standards.
- Buildings: The existing classroom building would be demolished, and a new indoor climate-controlled riding arena would be constructed. The existing open-sided Pole Barn (Building 3045) would be repurposed to a closed, ventilated, and climate-controlled storage facility providing for hay storage, a workshop, a mechanic shop, and an equipment and vehicle storage facility. The existing utility network (water, sewer, electricity, and communications) would be upgraded to serve the new and converted buildings and to provide illumination of the revised roadway/parking and dumpster area. The reconstructed roadway and parking areas would be appropriately landscaped.
- Security Fence: The existing perimeter security measures would be upgraded to meet Anti-Terrorism/ Force Protection (AT/FP) standards and expanded to encompass the proposed expanded Caisson Platoon Facility. Proposed upgrades include the construction of a new Main Gate, a new secondary gate providing an alternate access point, and the upgrading of facility signage.

Fort Belvoir has reviewed the undertaking and identified historic properties in or nearby the proposed undertaking's APE. While there are no historic buildings within the APE, there is one potentially eligible site (44FX1679). This site was identified in 1992 in the *Phase I Investigations of Various Development Sites and Training Areas* conducted by MAAR Associates Inc. (DHR File No. 2001-0007). While the site is located within the APE, there will not be any of the proposed forest clearing for pasture expansion and riding trail development or construction at the Caisson Platoon Facility within 50 feet of the site. This part of the APE has

been identified in the plans as a 6 acre horse paddock for the Caisson horses (EA, page 15-16) and the work to be completed is limited to vegetation (laying grass seed and adding new soil). There were five ineligible archaeological sites identified within the study area (44FX1655, 44FX1656, 44FX1660, 44FX1671, 44FX1711) and one potentially eligible site, 44FX1657. While the potentially eligible site is within the study area, it is outside the undertaking's APE and will not be affected by the proposed action.

The EA (page 27) also discusses a property outside of Fort Belvoir's boundaries. The closest historic property listed on the National Register of Historic Places is the Pohick Church, which is located about one quarter of a mile to the west of the facility. The surrounding Pohick Church Overlay District extends into the proposed Caisson Platoon Facility. The proposed improvements that are within the Overlay District include the construction of the proposed building for the indoor riding arena and classrooms, stormwater bioretention features, roadway and parking improvements, security entrance gate, and limited tree removal due to riding trail development. The northern and western portions of the study area are heavily wooded which buffers potential views of the Pohick Church Historic District and would remain largely intact as a result of the proposed improvements.

Fort Belvoir has applied the criteria of adverse effect to the proposed undertaking and determined that there will be no adverse effects to historic properties by the proposed improvements to the Caisson Platoon Facility listed in the ADP [36 CFR § 800.5]. If requested, Fort Belvoir will continue to consult when the proposed projects are initiated. Please provide comment on our determination of no adverse effect in accordance with 36 CFR § 800.4(d). If we do not receive your comments within the requested 30 days, we will assume no comment and proceed with the project as planned.

Point of contact is Mr. Christopher W. Landgraf, Acting Director of Public Works, at 703-806-4194.

Sincerely,


Michael H. Greenberg
Colonel, U.S. Army
Commanding

Enclosures



DEPARTMENT OF THE ARMY
US ARMY INSTALLATION MANAGEMENT COMMAND
HEADQUARTERS, UNITED STATES ARMY GARRISON, FORT BELVOIR
9820 FLAGLER ROAD, SUITE 213
FORT BELVOIR, VIRGINIA 22060-5928

OCT 29 2019

Directorate of Public Works

SUBJECT: Section 106 Consultation - Caisson Platoon Facility Area Development Plan
Environmental Assessment, Fort Belvoir, Virginia

Ms. Caitlin Rogers
Catawba Indian Nation
Tribal Historic Preservation Office
1536 Tom Steven Road
Rock Hill, South Carolina 29730

Dear Ms. Rogers:

Fort Belvoir is proposing the implementation of an Area Development Plan (ADP) for the Caisson Platoon Facility, which encompasses approximately 115 acres in the Southwest District of Fort Belvoir. The Caisson Platoon primarily operates out of Joint Base Myer-Henderson Hall (JBMHH), 18 miles to the north of Fort Belvoir. Its mission is to honor deceased servicemen and women by carrying them to rest in the Arlington National Cemetery. The Caisson Platoon Facility at Fort Belvoir provides the Caisson Platoon with space for training, trail riding, storage, stables, and pasture area for horses to support the overall mission. An Environmental Assessment (EA) was prepared and determined there would be no significant impacts to any identified resources. The document is available for review and can be found on the Environmental Division website at the following link:

https://home.army.mil/belvoir/index.php/download_file/force/729/549.

Approximately 10.5 acres (excluding training trail) of the total 115-acre area study are currently developed in support of the Caisson Platoon Facility with the remaining 104.5 acres (including training trail) being largely undeveloped. The proposed undertaking (please refer to pages 14-16 of EA) consists of expanding the existing deficient Caisson Platoon Facility from 10.5 acres to 39.1 acres in order to address identified project needs. Site expansion would occur primarily to the north and west into an existing forested area. The proposed undertaking would impact existing two intermittent streams, three isolated and tidal wetlands, and 27.43 acres of forest area. The Area of Potential Effect (APE) for this undertaking includes those areas that will be directly or indirectly affected by the ADP improvements. Work to be developed includes the following:

- **Pasture Size:** A 27.4-acre pasture area would be developed (involving 22.0 acres of forest clearing) consisting of four paddocks (two for training horses and two for Caisson horses), a horse quarantine area, run-in shelters, feed pens, automatic waterers, and an outdoor riding arena. A new livestock containment fence would be constructed around the expanded pasture with additional fencing and gates between the paddocks and quarantine areas to control use by horses and promote sustainable forage.
- **Stable Capacity:** Hay storage is being converted from the existing stables to the existing pole barn (Building 3045) which is being converted to a separate storage facility.

“LEADERS IN EXCELLENCE”

Additional horse stalls would be added. The stables would be connected to a new indoor riding arena via a covered walkway.

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Fort Belvoir has reviewed the undertaking and identified historic properties in or nearby the proposed undertaking's APE. While there are no historic buildings within the APE, there is one potentially eligible site (44FX1679). This site was identified in 1992 in the *Phase I Investigations of Various Development Sites and Training Areas* conducted by MAAR Associates Inc. (DHR File No. 2001-0007). While the site is located within the APE, there will not be any of the proposed forest clearing for pasture expansion and riding trail development or construction at the Caisson Platoon Facility within 50 feet of the site. This part of the APE has been identified in the plans as a 6 acre horse paddock for the Caisson horses (EA, page 15-16) and the work to be completed is limited to vegetation (laying grass seed and adding new soil). There were five ineligible archaeological sites identified within the study area (44FX1655,

44FX1656, 44FX1660, 44FX1671, 44FX1711) and one potentially eligible site, 44FX1657. While the potentially eligible site is within the study area, it is outside the undertaking's APE and will not be affected by the proposed action.

The EA (page 27) also discusses a property outside of Fort Belvoir's boundaries. The closest historic property listed on the National Register of Historic Places is the Pohick Church, which is located about one quarter of a mile to the west of the facility. The surrounding Pohick Church Overlay District extends into the proposed Caisson Platoon Facility. The proposed improvements that are within the Overlay District include the construction of the proposed building for the indoor riding arena and classrooms, stormwater bioretention features, roadway and parking improvements, security entrance gate, and limited tree removal due to riding trail development. The northern and western portions of the study area are heavily wooded which buffers potential views of the Pohick Church Historic District and would remain largely intact as a result of the proposed improvements.

Fort Belvoir has applied the criteria of adverse effect to the proposed undertaking and determined that there will be no adverse effects to historic properties by the proposed improvements to the Caisson Platoon Facility listed in the ADP [36 CFR § 800.5]. If requested, Fort Belvoir will continue to consult when the proposed projects are initiated. Please provide comment on our determination of no adverse effect in accordance with 36 CFR § 800.4(d). If we do not receive your comments within the requested 30 days, we will assume no comment and proceed with the project as planned.

Point of contact is Mr. Christopher W. Landgraf, Acting Director of Public Works, at 703-806-4194.

Sincerely,


Michael H. Greenberg
Colonel, U.S. Army
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DEPARTMENT OF THE ARMY
US ARMY INSTALLATION MANAGEMENT COMMAND
HEADQUARTERS, UNITED STATES ARMY GARRISON, FORT BELVOIR
9820 FLAGLER ROAD, SUITE 213
FORT BELVOIR, VIRGINIA 22060-5928

OCT 29 2019

Directorate of Public Works

SUBJECT: Section 106 Consultation - Caisson Platoon Facility Area Development Plan
Environmental Assessment, Fort Belvoir, Virginia

Principal Chief Richard Sneed
Eastern Band of Cherokee Indians
Qualla Boundary P.O. Box 455
Cherokee, North Carolina 28719

Dear Principal Chief Sneed:

Fort Belvoir is proposing the implementation of an Area Development Plan (ADP) for the Caisson Platoon Facility, which encompasses approximately 115 acres in the Southwest District of Fort Belvoir. The Caisson Platoon primarily operates out of Joint Base Myer-Henderson Hall (JBMHH), 18 miles to the north of Fort Belvoir. Its mission is to honor deceased servicemen and women by carrying them to rest in the Arlington National Cemetery. The Caisson Platoon Facility at Fort Belvoir provides the Caisson Platoon with space for training, trail riding, storage, stables, and pasture area for horses to support the overall mission. An Environmental Assessment (EA) was prepared and determined there would be no significant impacts to any identified resources. The document is available for review and can be found on the Environmental Division website at the following link:

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Approximately 10.5 acres (excluding training trail) of the total 115-acre area study are currently developed in support of the Caisson Platoon Facility with the remaining 104.5 acres (including training trail) being largely undeveloped. The proposed undertaking (please refer to pages 14-16 of EA) consists of expanding the existing deficient Caisson Platoon Facility from 10.5 acres to 39.1 acres in order to address identified project needs. Site expansion would occur primarily to the north and west into an existing forested area. The proposed undertaking would impact existing two intermittent streams, three isolated and tidal wetlands, and 27.43 acres of forest area. The Area of Potential Effect (APE) for this undertaking includes those areas that will be directly or indirectly affected by the ADP improvements. Work to be developed includes the following:

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- **Stable Capacity:** Hay storage is being converted from the existing stables to the existing pole barn (Building 3045) which is being converted to a separate storage facility.

“LEADERS IN EXCELLENCE”

Additional horse stalls would be added. The stables would be connected to a new indoor riding arena via a covered walkway.

- Manure Management: A new dumpster storage area would be established and a new indoor climate-controlled riding arena (of sufficient size to accommodate twelve horses, twelve soldiers and three instructors) would be constructed. The arena would have a covered classroom, veterinarian room, office, kitchen, tack-room, restrooms, lockers, and showers. A new riding trail system would be established consisting of 2.85 miles of trails that would require the clearing of 5.53 acres of forest area to accommodate the 16-foot trail width.
- Stormwater Management (SWM): A SWM swale would be constructed around the perimeter of the expanded pastures area (including the four paddocks, horse quarantine area, run-in shelters, feed pens, and an outdoor riding arena) to collect run-off and transmit it to wet-bioretenion features and other Green SWM Best Management Practices. Four optional stormwater bioretention areas will work to slow and infiltrate excess water during wet storm events. The bioretention areas will require the ability to process heavy sediment loads from stormwater run-off from the pasture and pavements. Additional SWM features would be located along roadway and parking lots to capture and treat run-off.
- Paved Surfaces: Existing unpaved roadways and parking lots would be relocated and replaced with paved facilities properly designed to accommodate required traffic including meeting ADA standards.
- Buildings: The existing classroom building would be demolished, and a new indoor climate-controlled riding arena would be constructed. The existing open-sided Pole Barn (Building 3045) would be repurposed to a closed, ventilated, and climate-controlled storage facility providing for hay storage, a workshop, a mechanic shop, and an equipment and vehicle storage facility. The existing utility network (water, sewer, electricity, and communications) would be upgraded to serve the new and converted buildings and to provide illumination of the revised roadway/parking and dumpster area. The reconstructed roadway and parking areas would be appropriately landscaped.
- Security Fence: The existing perimeter security measures would be upgraded to meet Anti-Terrorism/ Force Protection (AT/FP) standards and expanded to encompass the proposed expanded Caisson Platoon Facility. Proposed upgrades include the construction of a new Main Gate, a new secondary gate providing an alternate access point, and the upgrading of facility signage.

Fort Belvoir has reviewed the undertaking and identified historic properties in or nearby the proposed undertaking's APE. While there are no historic buildings within the APE, there is one potentially eligible site (44FX1679). This site was identified in 1992 in the *Phase I Investigations of Various Development Sites and Training Areas* conducted by MAAR Associates Inc. (DHR File No. 2001-0007). While the site is located within the APE, there will not be any of the proposed forest clearing for pasture expansion and riding trail development or construction at the Caisson Platoon Facility within 50 feet of the site. This part of the APE has been identified in the plans as a 6 acre horse paddock for the Caisson horses (EA, page 15-16) and the work to be completed is limited to vegetation (laying grass seed and adding new soil). There were five ineligible archaeological sites identified within the study area (44FX1655,

44FX1656, 44FX1660, 44FX1671, 44FX1711) and one potentially eligible site, 44FX1657. While the potentially eligible site is within the study area, it is outside the undertaking's APE and will not be affected by the proposed action.

The EA (page 27) also discusses a property outside of Fort Belvoir's boundaries. The closest historic property listed on the National Register of Historic Places is the Pohick Church, which is located about one quarter of a mile to the west of the facility. The surrounding Pohick Church Overlay District extends into the proposed Caisson Platoon Facility. The proposed improvements that are within the Overlay District include the construction of the proposed building for the indoor riding arena and classrooms, stormwater bioretention features, roadway and parking improvements, security entrance gate, and limited tree removal due to riding trail development. The northern and western portions of the study area are heavily wooded which buffers potential views of the Pohick Church Historic District and would remain largely intact as a result of the proposed improvements.

Fort Belvoir has applied the criteria of adverse effect to the proposed undertaking and determined that there will be no adverse effects to historic properties by the proposed improvements to the Caisson Platoon Facility listed in the ADP [36 CFR § 800.5]. If requested, Fort Belvoir will continue to consult when the proposed projects are initiated. Please provide comment on our determination of no adverse effect in accordance with 36 CFR § 800.4(d). If we do not receive your comments within the requested 30 days, we will assume no comment and proceed with the project as planned.

Point of contact is Mr. Christopher W. Landgraf, Acting Director of Public Works, at 703-806-4194.

Sincerely,


Michael H. Greenberg
Colonel, U.S. Army
Commanding

Enclosures



DEPARTMENT OF THE ARMY
US ARMY INSTALLATION MANAGEMENT COMMAND
HEADQUARTERS, UNITED STATES ARMY GARRISON, FORT BELVOIR
9820 FLAGLER ROAD, SUITE 213
FORT BELVOIR, VIRGINIA 22060-5928

OCT 29 2019

Directorate of Public Works

SUBJECT: Section 106 Consultation - Caisson Platoon Facility Area Development Plan
Environmental Assessment, Fort Belvoir, Virginia

Chief Joe Bunch
United Keetowah of Cherokee Indians in Oklahoma
P.O. Box 746
Tahlequah, Oklahoma 74465

Dear Chief Bunch:

Fort Belvoir is proposing the implementation of an Area Development Plan (ADP) for the Caisson Platoon Facility, which encompasses approximately 115 acres in the Southwest District of Fort Belvoir. The Caisson Platoon primarily operates out of Joint Base Myer-Henderson Hall (JBMHH), 18 miles to the north of Fort Belvoir. Its mission is to honor deceased servicemen and women by carrying them to rest in the Arlington National Cemetery. The Caisson Platoon Facility at Fort Belvoir provides the Caisson Platoon with space for training, trail riding, storage, stables, and pasture area for horses to support the overall mission. An Environmental Assessment (EA) was prepared and determined there would be no significant impacts to any identified resources. The document is available for review and can be found on the Environmental Division website at the following link:

https://home.army.mil/belvoir/index.php/download_file/force/729/549.

Approximately 10.5 acres (excluding training trail) of the total 115-acre area study are currently developed in support of the Caisson Platoon Facility with the remaining 104.5 acres (including training trail) being largely undeveloped. The proposed undertaking (please refer to pages 14-16 of EA) consists of expanding the existing deficient Caisson Platoon Facility from 10.5 acres to 39.1 acres in order to address identified project needs. Site expansion would occur primarily to the north and west into an existing forested area. The proposed undertaking would impact existing two intermittent streams, three isolated and tidal wetlands, and 27.43 acres of forest area. The Area of Potential Effect (APE) for this undertaking includes those areas that will be directly or indirectly affected by the ADP improvements. Work to be developed includes the following:

- **Pasture Size:** A 27.4-acre pasture area would be developed (involving 22.0 acres of forest clearing) consisting of four paddocks (two for training horses and two for Caisson horses), a horse quarantine area, run-in shelters, feed pens, automatic waterers, and an outdoor riding arena. A new livestock containment fence would be constructed around the expanded pasture with additional fencing and gates between the paddocks and quarantine areas to control use by horses and promote sustainable forage.
- **Stable Capacity:** Hay storage is being converted from the existing stables to the existing pole barn (Building 3045) which is being converted to a separate storage facility.

“LEADERS IN EXCELLENCE”

Additional horse stalls would be added. The stables would be connected to a new indoor riding arena via a covered walkway.

- Manure Management: A new dumpster storage area would be established and a new indoor climate-controlled riding arena (of sufficient size to accommodate twelve horses, twelve soldiers and three instructors) would be constructed. The arena would have a covered classroom, veterinarian room, office, kitchen, tack-room, restrooms, lockers, and showers. A new riding trail system would be established consisting of 2.85 miles of trails that would require the clearing of 5.53 acres of forest area to accommodate the 16-foot trail width.
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- Paved Surfaces: Existing unpaved roadways and parking lots would be relocated and replaced with paved facilities properly designed to accommodate required traffic including meeting ADA standards.
- Buildings: The existing classroom building would be demolished, and a new indoor climate-controlled riding arena would be constructed. The existing open-sided Pole Barn (Building 3045) would be repurposed to a closed, ventilated, and climate-controlled storage facility providing for hay storage, a workshop, a mechanic shop, and an equipment and vehicle storage facility. The existing utility network (water, sewer, electricity, and communications) would be upgraded to serve the new and converted buildings and to provide illumination of the revised roadway/parking and dumpster area. The reconstructed roadway and parking areas would be appropriately landscaped.
- Security Fence: The existing perimeter security measures would be upgraded to meet Anti-Terrorism/ Force Protection (AT/FP) standards and expanded to encompass the proposed expanded Caisson Platoon Facility. Proposed upgrades include the construction of a new Main Gate, a new secondary gate providing an alternate access point, and the upgrading of facility signage.

Fort Belvoir has reviewed the undertaking and identified historic properties in or nearby the proposed undertaking's APE. While there are no historic buildings within the APE, there is one potentially eligible site (44FX1679). This site was identified in 1992 in the *Phase I Investigations of Various Development Sites and Training Areas* conducted by MAAR Associates Inc. (DHR File No. 2001-0007). While the site is located within the APE, there will not be any of the proposed forest clearing for pasture expansion and riding trail development or construction at the Caisson Platoon Facility within 50 feet of the site. This part of the APE has been identified in the plans as a 6 acre horse paddock for the Caisson horses (EA, page 15-16) and the work to be completed is limited to vegetation (laying grass seed and adding new soil). There were five ineligible archaeological sites identified within the study area (44FX1655,

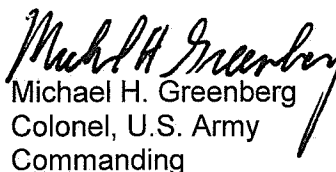
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The EA (page 27) also discusses a property outside of Fort Belvoir's boundaries. The closest historic property listed on the National Register of Historic Places is the Pohick Church, which is located about one quarter of a mile to the west of the facility. The surrounding Pohick Church Overlay District extends into the proposed Caisson Platoon Facility. The proposed improvements that are within the Overlay District include the construction of the proposed building for the indoor riding arena and classrooms, stormwater bioretention features, roadway and parking improvements, security entrance gate, and limited tree removal due to riding trail development. The northern and western portions of the study area are heavily wooded which buffers potential views of the Pohick Church Historic District and would remain largely intact as a result of the proposed improvements.

Fort Belvoir has applied the criteria of adverse effect to the proposed undertaking and determined that there will be no adverse effects to historic properties by the proposed improvements to the Caisson Platoon Facility listed in the ADP [36 CFR § 800.5]. If requested, Fort Belvoir will continue to consult when the proposed projects are initiated. Please provide comment on our determination of no adverse effect in accordance with 36 CFR § 800.4(d). If we do not receive your comments within the requested 30 days, we will assume no comment and proceed with the project as planned.

Point of contact is Mr. Christopher W. Landgraf, Acting Director of Public Works, at 703-806-4194.

Sincerely,


Michael H. Greenberg
Colonel, U.S. Army
Commanding

Enclosures



DEPARTMENT OF THE ARMY
US ARMY INSTALLATION MANAGEMENT COMMAND
HEADQUARTERS, UNITED STATES ARMY GARRISON, FORT BELVOIR
9820 FLAGLER ROAD, SUITE 213
FORT BELVOIR, VIRGINIA 22060-5928

OCT 29 2019

Directorate of Public Works

SUBJECT: Section 106 Consultation - Caisson Platoon Facility Area Development Plan
Environmental Assessment, Fort Belvoir, Virginia

Chief Robert Gray
Pamunkey Indian Tribe
1054 Pochahontas Trail
King William, Virginia 23086

Dear Chief Gray:

Fort Belvoir is proposing the implementation of an Area Development Plan (ADP) for the Caisson Platoon Facility, which encompasses approximately 115 acres in the Southwest District of Fort Belvoir. The Caisson Platoon primarily operates out of Joint Base Myer-Henderson Hall (JBMHH), 18 miles to the north of Fort Belvoir. Its mission is to honor deceased servicemen and women by carrying them to rest in the Arlington National Cemetery. The Caisson Platoon Facility at Fort Belvoir provides the Caisson Platoon with space for training, trail riding, storage, stables, and pasture area for horses to support the overall mission. An Environmental Assessment (EA) was prepared and determined there would be no significant impacts to any identified resources. The document is available for review and can be found on the Environmental Division website at the following link:

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Approximately 10.5 acres (excluding training trail) of the total 115-acre area study are currently developed in support of the Caisson Platoon Facility with the remaining 104.5 acres (including training trail) being largely undeveloped. The proposed undertaking (please refer to pages 14-16 of EA) consists of expanding the existing deficient Caisson Platoon Facility from 10.5 acres to 39.1 acres in order to address identified project needs. Site expansion would occur primarily to the north and west into an existing forested area. The proposed undertaking would impact existing two intermittent streams, three isolated and tidal wetlands, and 27.43 acres of forest area. The Area of Potential Effect (APE) for this undertaking includes those areas that will be directly or indirectly affected by the ADP improvements. Work to be developed includes the following:

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“LEADERS IN EXCELLENCE”

Additional horse stalls would be added. The stables would be connected to a new indoor riding arena via a covered walkway.

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- Paved Surfaces: Existing unpaved roadways and parking lots would be relocated and replaced with paved facilities properly designed to accommodate required traffic including meeting ADA standards.
- Buildings: The existing classroom building would be demolished, and a new indoor climate-controlled riding arena would be constructed. The existing open-sided Pole Barn (Building 3045) would be repurposed to a closed, ventilated, and climate-controlled storage facility providing for hay storage, a workshop, a mechanic shop, and an equipment and vehicle storage facility. The existing utility network (water, sewer, electricity, and communications) would be upgraded to serve the new and converted buildings and to provide illumination of the revised roadway/parking and dumpster area. The reconstructed roadway and parking areas would be appropriately landscaped.
- Security Fence: The existing perimeter security measures would be upgraded to meet Anti-Terrorism/ Force Protection (AT/FP) standards and expanded to encompass the proposed expanded Caisson Platoon Facility. Proposed upgrades include the construction of a new Main Gate, a new secondary gate providing an alternate access point, and the upgrading of facility signage.

Fort Belvoir has reviewed the undertaking and identified historic properties in or nearby the proposed undertaking's APE. While there are no historic buildings within the APE, there is one potentially eligible site (44FX1679). This site was identified in 1992 in the *Phase I Investigations of Various Development Sites and Training Areas* conducted by MAAR Associates Inc. (DHR File No. 2001-0007). While the site is located within the APE, there will not be any of the proposed forest clearing for pasture expansion and riding trail development or construction at the Caisson Platoon Facility within 50 feet of the site. This part of the APE has been identified in the plans as a 6 acre horse paddock for the Caisson horses (EA, page 15-16) and the work to be completed is limited to vegetation (laying grass seed and adding new soil). There were five ineligible archaeological sites identified within the study area (44FX1655,

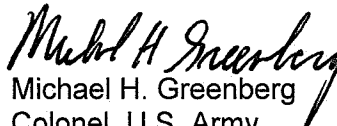
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The EA (page 27) also discusses a property outside of Fort Belvoir's boundaries. The closest historic property listed on the National Register of Historic Places is the Pohick Church, which is located about one quarter of a mile to the west of the facility. The surrounding Pohick Church Overlay District extends into the proposed Caisson Platoon Facility. The proposed improvements that are within the Overlay District include the construction of the proposed building for the indoor riding arena and classrooms, stormwater bioretention features, roadway and parking improvements, security entrance gate, and limited tree removal due to riding trail development. The northern and western portions of the study area are heavily wooded which buffers potential views of the Pohick Church Historic District and would remain largely intact as a result of the proposed improvements.

Fort Belvoir has applied the criteria of adverse effect to the proposed undertaking and determined that there will be no adverse effects to historic properties by the proposed improvements to the Caisson Platoon Facility listed in the ADP [36 CFR § 800.5]. If requested, Fort Belvoir will continue to consult when the proposed projects are initiated. Please provide comment on our determination of no adverse effect in accordance with 36 CFR § 800.4(d). If we do not receive your comments within the requested 30 days, we will assume no comment and proceed with the project as planned.

Point of contact is Mr. Christopher W. Landgraf, Acting Director of Public Works, at 703-806-4194.

Sincerely,


Michael H. Greenberg
Colonel, U.S. Army
Commanding

Enclosures



DEPARTMENT OF THE ARMY
US ARMY INSTALLATION MANAGEMENT COMMAND
HEADQUARTERS, UNITED STATES ARMY GARRISON, FORT BELVOIR
9820 FLAGLER ROAD, SUITE 213
FORT BELVOIR, VIRGINIA 22060-5928

OCT 29 2019

Directorate of Public Works

**SUBJECT: Section 106 Consultation - Caisson Platoon Facility Area Development Plan
Environmental Assessment, Fort Belvoir, Virginia**

Chief Leo Henry
Tuscarora Nation of New York
2006 Mt. Hope Road
Lewistown, New York 14092

Dear Chief Henry:

Fort Belvoir is proposing the implementation of an Area Development Plan (ADP) for the Caisson Platoon Facility, which encompasses approximately 115 acres in the Southwest District of Fort Belvoir. The Caisson Platoon primarily operates out of Joint Base Myer-Henderson Hall (JBMHH), 18 miles to the north of Fort Belvoir. Its mission is to honor deceased servicemen and women by carrying them to rest in the Arlington National Cemetery. The Caisson Platoon Facility at Fort Belvoir provides the Caisson Platoon with space for training, trail riding, storage, stables, and pasture area for horses to support the overall mission. An Environmental Assessment (EA) was prepared and determined there would be no significant impacts to any identified resources. The document is available for review and can be found on the Environmental Division website at the following link:

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Approximately 10.5 acres (excluding training trail) of the total 115-acre area study are currently developed in support of the Caisson Platoon Facility with the remaining 104.5 acres (including training trail) being largely undeveloped. The proposed undertaking (please refer to pages 14-16 of EA) consists of expanding the existing deficient Caisson Platoon Facility from 10.5 acres to 39.1 acres in order to address identified project needs. Site expansion would occur primarily to the north and west into an existing forested area. The proposed undertaking would impact existing two intermittent streams, three isolated and tidal wetlands, and 27.43 acres of forest area. The Area of Potential Effect (APE) for this undertaking includes those areas that will be directly or indirectly affected by the ADP improvements. Work to be developed includes the following:

- **Pasture Size:** A 27.4-acre pasture area would be developed (involving 22.0 acres of forest clearing) consisting of four paddocks (two for training horses and two for Caisson horses), a horse quarantine area, run-in shelters, feed pens, automatic waterers, and an outdoor riding arena. A new livestock containment fence would be constructed around the expanded pasture with additional fencing and gates between the paddocks and quarantine areas to control use by horses and promote sustainable forage.
- **Stable Capacity:** Hay storage is being converted from the existing stables to the existing pole barn (Building 3045) which is being converted to a separate storage facility.

“LEADERS IN EXCELLENCE”

Additional horse stalls would be added. The stables would be connected to a new indoor riding arena via a covered walkway.

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- Security Fence: The existing perimeter security measures would be upgraded to meet Anti-Terrorism/ Force Protection (AT/FP) standards and expanded to encompass the proposed expanded Caisson Platoon Facility. Proposed upgrades include the construction of a new Main Gate, a new secondary gate providing an alternate access point, and the upgrading of facility signage.

Fort Belvoir has reviewed the undertaking and identified historic properties in or nearby the proposed undertaking's APE. While there are no historic buildings within the APE, there is one potentially eligible site (44FX1679). This site was identified in 1992 in the *Phase I Investigations of Various Development Sites and Training Areas* conducted by MAAR Associates Inc. (DHR File No. 2001-0007). While the site is located within the APE, there will not be any of the proposed forest clearing for pasture expansion and riding trail development or construction at the Caisson Platoon Facility within 50 feet of the site. This part of the APE has been identified in the plans as a 6 acre horse paddock for the Caisson horses (EA, page 15-16) and the work to be completed is limited to vegetation (laying grass seed and adding new soil). There were five ineligible archaeological sites identified within the study area (44FX1655,

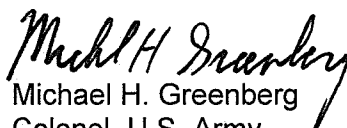
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Fort Belvoir has applied the criteria of adverse effect to the proposed undertaking and determined that there will be no adverse effects to historic properties by the proposed improvements to the Caisson Platoon Facility listed in the ADP [36 CFR § 800.5]. If requested, Fort Belvoir will continue to consult when the proposed projects are initiated. Please provide comment on our determination of no adverse effect in accordance with 36 CFR § 800.4(d). If we do not receive your comments within the requested 30 days, we will assume no comment and proceed with the project as planned.

Point of contact is Mr. Christopher W. Landgraf, Acting Director of Public Works, at 703-806-4194.

Sincerely,


Michael H. Greenberg
Colonel, U.S. Army
Commanding

Enclosures



DEPARTMENT OF THE ARMY
US ARMY INSTALLATION MANAGEMENT COMMAND
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FORT BELVOIR, VIRGINIA 22060-5928

OCT 29 2019

Directorate of Public Works

SUBJECT: Section 106 Consultation - Caisson Platoon Facility Area Development Plan
Environmental Assessment, Fort Belvoir, Virginia

Chief Stephen R. Adkins
Chickahominy Indian Tribe
8200 Lott Cary Road
Providence Forge, Virginia 23140

Dear Chief Adkins:

Fort Belvoir is proposing the implementation of an Area Development Plan (ADP) for the Caisson Platoon Facility, which encompasses approximately 115 acres in the Southwest District of Fort Belvoir. The Caisson Platoon primarily operates out of Joint Base Myer-Henderson Hall (JBMHH), 18 miles to the north of Fort Belvoir. Its mission is to honor deceased servicemen and women by carrying them to rest in the Arlington National Cemetery. The Caisson Platoon Facility at Fort Belvoir provides the Caisson Platoon with space for training, trail riding, storage, stables, and pasture area for horses to support the overall mission. An Environmental Assessment (EA) was prepared and determined there would be no significant impacts to any identified resources. The document is available for review and can be found on the Environmental Division website at the following link:
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“LEADERS IN EXCELLENCE”

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- Buildings: The existing classroom building would be demolished, and a new indoor climate-controlled riding arena would be constructed. The existing open-sided Pole Barn (Building 3045) would be repurposed to a closed, ventilated, and climate-controlled storage facility providing for hay storage, a workshop, a mechanic shop, and an equipment and vehicle storage facility. The existing utility network (water, sewer, electricity, and communications) would be upgraded to serve the new and converted buildings and to provide illumination of the revised roadway/parking and dumpster area. The reconstructed roadway and parking areas would be appropriately landscaped.
- Security Fence: The existing perimeter security measures would be upgraded to meet Anti-Terrorism/ Force Protection (AT/FP) standards and expanded to encompass the proposed expanded Caisson Platoon Facility. Proposed upgrades include the construction of a new Main Gate, a new secondary gate providing an alternate access point, and the upgrading of facility signage.

Fort Belvoir has reviewed the undertaking and identified historic properties in or nearby the proposed undertaking's APE. While there are no historic buildings within the APE, there is one potentially eligible site (44FX1679). This site was identified in 1992 in the *Phase I Investigations of Various Development Sites and Training Areas* conducted by MAAR Associates Inc. (DHR File No. 2001-0007). While the site is located within the APE, there will not be any of the proposed forest clearing for pasture expansion and riding trail development or construction at the Caisson Platoon Facility within 50 feet of the site. This part of the APE has been identified in the plans as a 6 acre horse paddock for the Caisson horses (EA, page 15-16) and the work to be completed is limited to vegetation (laying grass seed and adding new soil). There were five ineligible archaeological sites identified within the study area (44FX1655,

44FX1656, 44FX1660, 44FX1671, 44FX1711) and one potentially eligible site, 44FX1657. While the potentially eligible site is within the study area, it is outside the undertaking's APE and will not be affected by the proposed action.

The EA (page 27) also discusses a property outside of Fort Belvoir's boundaries. The closest historic property listed on the National Register of Historic Places is the Pohick Church, which is located about one quarter of a mile to the west of the facility. The surrounding Pohick Church Overlay District extends into the proposed Caisson Platoon Facility. The proposed improvements that are within the Overlay District include the construction of the proposed building for the indoor riding arena and classrooms, stormwater bioretention features, roadway and parking improvements, security entrance gate, and limited tree removal due to riding trail development. The northern and western portions of the study area are heavily wooded which buffers potential views of the Pohick Church Historic District and would remain largely intact as a result of the proposed improvements.

Fort Belvoir has applied the criteria of adverse effect to the proposed undertaking and determined that there will be no adverse effects to historic properties by the proposed improvements to the Caisson Platoon Facility listed in the ADP [36 CFR § 800.5]. If requested, Fort Belvoir will continue to consult when the proposed projects are initiated. Please provide comment on our determination of no adverse effect in accordance with 36 CFR § 800.4(d). If we do not receive your comments within the requested 30 days, we will assume no comment and proceed with the project as planned.

Point of contact is Mr. Christopher W. Landgraf, Acting Director of Public Works, at 703-806-4194.

Sincerely,


Michael H. Greenberg
Colonel, U.S. Army
Commanding

Enclosures



DEPARTMENT OF THE ARMY
US ARMY INSTALLATION MANAGEMENT COMMAND
HEADQUARTERS, UNITED STATES ARMY GARRISON, FORT BELVOIR
9820 FLAGLER ROAD, SUITE 213
FORT BELVOIR, VIRGINIA 22060-5928

OCT 29 2013

Directorate of Public Works

SUBJECT: Section 106 Consultation - Caisson Platoon Facility Area Development Plan
Environmental Assessment, Fort Belvoir, Virginia

Chief Frank Adams
Upper Mattaponi Indian Tribe
P.O. Box 184
King William, Virginia 23086

Dear Chief Adams:

Fort Belvoir is proposing the implementation of an Area Development Plan (ADP) for the Caisson Platoon Facility, which encompasses approximately 115 acres in the Southwest District of Fort Belvoir. The Caisson Platoon primarily operates out of Joint Base Myer-Henderson Hall (JBMHH), 18 miles to the north of Fort Belvoir. Its mission is to honor deceased servicemen and women by carrying them to rest in the Arlington National Cemetery. The Caisson Platoon Facility at Fort Belvoir provides the Caisson Platoon with space for training, trail riding, storage, stables, and pasture area for horses to support the overall mission. An Environmental Assessment (EA) was prepared and determined there would be no significant impacts to any identified resources. The document is available for review and can be found on the Environmental Division website at the following link:

https://home.army.mil/belvoir/index.php/download_file/force/729/549.

Approximately 10.5 acres (excluding training trail) of the total 115-acre area study are currently developed in support of the Caisson Platoon Facility with the remaining 104.5 acres (including training trail) being largely undeveloped. The proposed undertaking (please refer to pages 14-16 of EA) consists of expanding the existing deficient Caisson Platoon Facility from 10.5 acres to 39.1 acres in order to address identified project needs. Site expansion would occur primarily to the north and west into an existing forested area. The proposed undertaking would impact existing two intermittent streams, three isolated and tidal wetlands, and 27.43 acres of forest area. The Area of Potential Effect (APE) for this undertaking includes those areas that will be directly or indirectly affected by the ADP improvements. Work to be developed includes the following:

- Pasture Size: A 27.4-acre pasture area would be developed (involving 22.0 acres of forest clearing) consisting of four paddocks (two for training horses and two for Caisson horses), a horse quarantine area, run-in shelters, feed pens, automatic waterers, and an outdoor riding arena. A new livestock containment fence would be constructed around the expanded pasture with additional fencing and gates between the paddocks and quarantine areas to control use by horses and promote sustainable forage.
- Stable Capacity: Hay storage is being converted from the existing stables to the existing pole barn (Building 3045) which is being converted to a separate storage facility.

“LEADERS IN EXCELLENCE”

Additional horse stalls would be added. The stables would be connected to a new indoor riding arena via a covered walkway.

- Manure Management: A new dumpster storage area would be established and a new indoor climate-controlled riding arena (of sufficient size to accommodate twelve horses, twelve soldiers and three instructors) would be constructed. The arena would have a covered classroom, veterinarian room, office, kitchen, tack-room, restrooms, lockers, and showers. A new riding trail system would be established consisting of 2.85 miles of trails that would require the clearing of 5.53 acres of forest area to accommodate the 16-foot trail width.
- Stormwater Management (SWM): A SWM swale would be constructed around the perimeter of the expanded pastures area (including the four paddocks, horse quarantine area, run-in shelters, feed pens, and an outdoor riding arena) to collect run-off and transmit it to wet-bioretenion features and other Green SWM Best Management Practices. Four optional stormwater bioretention areas will work to slow and infiltrate excess water during wet storm events. The bioretention areas will require the ability to process heavy sediment loads from stormwater run-off from the pasture and pavements. Additional SWM features would be located along roadway and parking lots to capture and treat run-off.
- Paved Surfaces: Existing unpaved roadways and parking lots would be relocated and replaced with paved facilities properly designed to accommodate required traffic including meeting ADA standards.
- Buildings: The existing classroom building would be demolished, and a new indoor climate-controlled riding arena would be constructed. The existing open-sided Pole Barn (Building 3045) would be repurposed to a closed, ventilated, and climate-controlled storage facility providing for hay storage, a workshop, a mechanic shop, and an equipment and vehicle storage facility. The existing utility network (water, sewer, electricity, and communications) would be upgraded to serve the new and converted buildings and to provide illumination of the revised roadway/parking and dumpster area. The reconstructed roadway and parking areas would be appropriately landscaped.
- Security Fence: The existing perimeter security measures would be upgraded to meet Anti-Terrorism/ Force Protection (AT/FP) standards and expanded to encompass the proposed expanded Caisson Platoon Facility. Proposed upgrades include the construction of a new Main Gate, a new secondary gate providing an alternate access point, and the upgrading of facility signage.

Fort Belvoir has reviewed the undertaking and identified historic properties in or nearby the proposed undertaking's APE. While there are no historic buildings within the APE, there is one potentially eligible site (44FX1679). This site was identified in 1992 in the *Phase I Investigations of Various Development Sites and Training Areas* conducted by MAAR Associates Inc. (DHR File No. 2001-0007). While the site is located within the APE, there will not be any of the proposed forest clearing for pasture expansion and riding trail development or construction at the Caisson Platoon Facility within 50 feet of the site. This part of the APE has been identified in the plans as a 6 acre horse paddock for the Caisson horses (EA, page 15-16) and the work to be completed is limited to vegetation (laying grass seed and adding new soil). There were five ineligible archaeological sites identified within the study area (44FX1655,

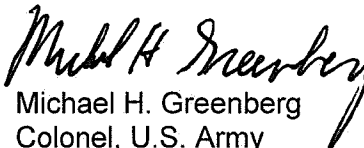
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The EA (page 27) also discusses a property outside of Fort Belvoir's boundaries. The closest historic property listed on the National Register of Historic Places is the Pohick Church, which is located about one quarter of a mile to the west of the facility. The surrounding Pohick Church Overlay District extends into the proposed Caisson Platoon Facility. The proposed improvements that are within the Overlay District include the construction of the proposed building for the indoor riding arena and classrooms, stormwater bioretention features, roadway and parking improvements, security entrance gate, and limited tree removal due to riding trail development. The northern and western portions of the study area are heavily wooded which buffers potential views of the Pohick Church Historic District and would remain largely intact as a result of the proposed improvements.

Fort Belvoir has applied the criteria of adverse effect to the proposed undertaking and determined that there will be no adverse effects to historic properties by the proposed improvements to the Caisson Platoon Facility listed in the ADP [36 CFR § 800.5]. If requested, Fort Belvoir will continue to consult when the proposed projects are initiated. Please provide comment on our determination of no adverse effect in accordance with 36 CFR § 800.4(d). If we do not receive your comments within the requested 30 days, we will assume no comment and proceed with the project as planned.

Point of contact is Mr. Christopher W. Landgraf, Acting Director of Public Works, at 703-806-4194.

Sincerely,


Michael H. Greenberg
Colonel, U.S. Army
Commanding

Enclosures



DEPARTMENT OF THE ARMY
US ARMY INSTALLATION MANAGEMENT COMMAND
HEADQUARTERS, UNITED STATES ARMY GARRISON, FORT BELVOIR
9820 FLAGLER ROAD, SUITE 213
FORT BELVOIR, VIRGINIA 22060-5928

OCT 29 2019

Directorate of Public Works

SUBJECT: Section 106 Consultation - Caisson Platoon Facility Area Development Plan
Environmental Assessment, Fort Belvoir, Virginia

Assistant Chief Gerald Stewart
Chickahominy Indians Eastern Division
2895 Mt. Pleasant Road
Providence Forge, Virginia 23140

Dear Assistant Chief Stewart:

Fort Belvoir is proposing the implementation of an Area Development Plan (ADP) for the Caisson Platoon Facility, which encompasses approximately 115 acres in the Southwest District of Fort Belvoir. The Caisson Platoon primarily operates out of Joint Base Myer-Henderson Hall (JBMHH), 18 miles to the north of Fort Belvoir. Its mission is to honor deceased servicemen and women by carrying them to rest in the Arlington National Cemetery. The Caisson Platoon Facility at Fort Belvoir provides the Caisson Platoon with space for training, trail riding, storage, stables, and pasture area for horses to support the overall mission. An Environmental Assessment (EA) was prepared and determined there would be no significant impacts to any identified resources. The document is available for review and can be found on the Environmental Division website at the following link:

https://home.army.mil/belvoir/index.php/download_file/force/729/549.

Approximately 10.5 acres (excluding training trail) of the total 115-acre area study are currently developed in support of the Caisson Platoon Facility with the remaining 104.5 acres (including training trail) being largely undeveloped. The proposed undertaking (please refer to pages 14-16 of EA) consists of expanding the existing deficient Caisson Platoon Facility from 10.5 acres to 39.1 acres in order to address identified project needs. Site expansion would occur primarily to the north and west into an existing forested area. The proposed undertaking would impact existing two intermittent streams, three isolated and tidal wetlands, and 27.43 acres of forest area. The Area of Potential Effect (APE) for this undertaking includes those areas that will be directly or indirectly affected by the ADP improvements. Work to be developed includes the following:

- **Pasture Size:** A 27.4-acre pasture area would be developed (involving 22.0 acres of forest clearing) consisting of four paddocks (two for training horses and two for Caisson horses), a horse quarantine area, run-in shelters, feed pens, automatic waterers, and an outdoor riding arena. A new livestock containment fence would be constructed around the expanded pasture with additional fencing and gates between the paddocks and quarantine areas to control use by horses and promote sustainable forage.
- **Stable Capacity:** Hay storage is being converted from the existing stables to the existing pole barn (Building 3045) which is being converted to a separate storage facility.

“LEADERS IN EXCELLENCE”

Additional horse stalls would be added. The stables would be connected to a new indoor riding arena via a covered walkway.

- Manure Management: A new dumpster storage area would be established and a new indoor climate-controlled riding arena (of sufficient size to accommodate twelve horses, twelve soldiers and three instructors) would be constructed. The arena would have a covered classroom, veterinarian room, office, kitchen, tack-room, restrooms, lockers, and showers. A new riding trail system would be established consisting of 2.85 miles of trails that would require the clearing of 5.53 acres of forest area to accommodate the 16-foot trail width.
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- Paved Surfaces: Existing unpaved roadways and parking lots would be relocated and replaced with paved facilities properly designed to accommodate required traffic including meeting ADA standards.
- Buildings: The existing classroom building would be demolished, and a new indoor climate-controlled riding arena would be constructed. The existing open-sided Pole Barn (Building 3045) would be repurposed to a closed, ventilated, and climate-controlled storage facility providing for hay storage, a workshop, a mechanic shop, and an equipment and vehicle storage facility. The existing utility network (water, sewer, electricity, and communications) would be upgraded to serve the new and converted buildings and to provide illumination of the revised roadway/parking and dumpster area. The reconstructed roadway and parking areas would be appropriately landscaped.
- Security Fence: The existing perimeter security measures would be upgraded to meet Anti-Terrorism/ Force Protection (AT/FP) standards and expanded to encompass the proposed expanded Caisson Platoon Facility. Proposed upgrades include the construction of a new Main Gate, a new secondary gate providing an alternate access point, and the upgrading of facility signage.

Fort Belvoir has reviewed the undertaking and identified historic properties in or nearby the proposed undertaking's APE. While there are no historic buildings within the APE, there is one potentially eligible site (44FX1679). This site was identified in 1992 in the *Phase I Investigations of Various Development Sites and Training Areas* conducted by MAAR Associates Inc. (DHR File No. 2001-0007). While the site is located within the APE, there will not be any of the proposed forest clearing for pasture expansion and riding trail development or construction at the Caisson Platoon Facility within 50 feet of the site. This part of the APE has been identified in the plans as a 6 acre horse paddock for the Caisson horses (EA, page 15-16) and the work to be completed is limited to vegetation (laying grass seed and adding new soil). There were five ineligible archaeological sites identified within the study area (44FX1655,

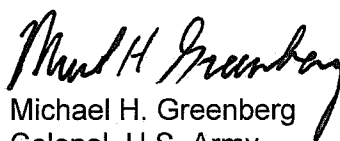
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The EA (page 27) also discusses a property outside of Fort Belvoir's boundaries. The closest historic property listed on the National Register of Historic Places is the Pohick Church, which is located about one quarter of a mile to the west of the facility. The surrounding Pohick Church Overlay District extends into the proposed Caisson Platoon Facility. The proposed improvements that are within the Overlay District include the construction of the proposed building for the indoor riding arena and classrooms, stormwater bioretention features, roadway and parking improvements, security entrance gate, and limited tree removal due to riding trail development. The northern and western portions of the study area are heavily wooded which buffers potential views of the Pohick Church Historic District and would remain largely intact as a result of the proposed improvements.

Fort Belvoir has applied the criteria of adverse effect to the proposed undertaking and determined that there will be no adverse effects to historic properties by the proposed improvements to the Caisson Platoon Facility listed in the ADP [36 CFR § 800.5]. If requested, Fort Belvoir will continue to consult when the proposed projects are initiated. Please provide comment on our determination of no adverse effect in accordance with 36 CFR § 800.4(d). If we do not receive your comments within the requested 30 days, we will assume no comment and proceed with the project as planned.

Point of contact is Mr. Christopher W. Landgraf, Acting Director of Public Works, at 703-806-4194.

Sincerely,

A handwritten signature in black ink, appearing to read "Michael H. Greenberg". The signature is fluid and cursive, with the first name "Michael" and last name "Greenberg" clearly distinguishable.

Michael H. Greenberg
Colonel, U.S. Army
Commanding

Enclosures



DEPARTMENT OF THE ARMY
US ARMY INSTALLATION MANAGEMENT COMMAND
HEADQUARTERS, UNITED STATES ARMY GARRISON, FORT BELVOIR
9820 FLAGLER ROAD, SUITE 213
FORT BELVOIR, VIRGINIA 22060-5928

OCT 29 2018

Directorate of Public Works

SUBJECT: Section 106 Consultation - Caisson Platoon Facility Area Development Plan
Environmental Assessment, Fort Belvoir, Virginia

Chief Anne Richardson
Rappahannock Tribe
5036 Indian Neck Road
Indian Neck, Virginia 23148

Dear Chief Richardson:

Fort Belvoir is proposing the implementation of an Area Development Plan (ADP) for the Caisson Platoon Facility, which encompasses approximately 115 acres in the Southwest District of Fort Belvoir. The Caisson Platoon primarily operates out of Joint Base Myer-Henderson Hall (JBMHH), 18 miles to the north of Fort Belvoir. Its mission is to honor deceased servicemen and women by carrying them to rest in the Arlington National Cemetery. The Caisson Platoon Facility at Fort Belvoir provides the Caisson Platoon with space for training, trail riding, storage, stables, and pasture area for horses to support the overall mission. An Environmental Assessment (EA) was prepared and determined there would be no significant impacts to any identified resources. The document is available for review and can be found on the Environmental Division website at the following link:

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Approximately 10.5 acres (excluding training trail) of the total 115-acre area study are currently developed in support of the Caisson Platoon Facility with the remaining 104.5 acres (including training trail) being largely undeveloped. The proposed undertaking (please refer to pages 14-16 of EA) consists of expanding the existing deficient Caisson Platoon Facility from 10.5 acres to 39.1 acres in order to address identified project needs. Site expansion would occur primarily to the north and west into an existing forested area. The proposed undertaking would impact existing two intermittent streams, three isolated and tidal wetlands, and 27.43 acres of forest area. The Area of Potential Effect (APE) for this undertaking includes those areas that will be directly or indirectly affected by the ADP improvements. Work to be developed includes the following:

- **Pasture Size:** A 27.4-acre pasture area would be developed (involving 22.0 acres of forest clearing) consisting of four paddocks (two for training horses and two for Caisson horses), a horse quarantine area, run-in shelters, feed pens, automatic waterers, and an outdoor riding arena. A new livestock containment fence would be constructed around the expanded pasture with additional fencing and gates between the paddocks and quarantine areas to control use by horses and promote sustainable forage.
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“LEADERS IN EXCELLENCE”

Additional horse stalls would be added. The stables would be connected to a new indoor riding arena via a covered walkway.

- Manure Management: A new dumpster storage area would be established and a new indoor climate-controlled riding arena (of sufficient size to accommodate twelve horses, twelve soldiers and three instructors) would be constructed. The arena would have a covered classroom, veterinarian room, office, kitchen, tack-room, restrooms, lockers, and showers. A new riding trail system would be established consisting of 2.85 miles of trails that would require the clearing of 5.53 acres of forest area to accommodate the 16-foot trail width.
- Stormwater Management (SWM): A SWM swale would be constructed around the perimeter of the expanded pastures area (including the four paddocks, horse quarantine area, run-in shelters, feed pens, and an outdoor riding arena) to collect run-off and transmit it to wet-bioretenion features and other Green SWM Best Management Practices. Four optional stormwater bioretention areas will work to slow and infiltrate excess water during wet storm events. The bioretention areas will require the ability to process heavy sediment loads from stormwater run-off from the pasture and pavements. Additional SWM features would be located along roadway and parking lots to capture and treat run-off.
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- Security Fence: The existing perimeter security measures would be upgraded to meet Anti-Terrorism/ Force Protection (AT/FP) standards and expanded to encompass the proposed expanded Caisson Platoon Facility. Proposed upgrades include the construction of a new Main Gate, a new secondary gate providing an alternate access point, and the upgrading of facility signage.

Fort Belvoir has reviewed the undertaking and identified historic properties in or nearby the proposed undertaking's APE. While there are no historic buildings within the APE, there is one potentially eligible site (44FX1679). This site was identified in 1992 in the *Phase I Investigations of Various Development Sites and Training Areas* conducted by MAAR Associates Inc. (DHR File No. 2001-0007). While the site is located within the APE, there will not be any of the proposed forest clearing for pasture expansion and riding trail development or construction at the Caisson Platoon Facility within 50 feet of the site. This part of the APE has been identified in the plans as a 6 acre horse paddock for the Caisson horses (EA, page 15-16) and the work to be completed is limited to vegetation (laying grass seed and adding new soil). There were five ineligible archaeological sites identified within the study area (44FX1655,

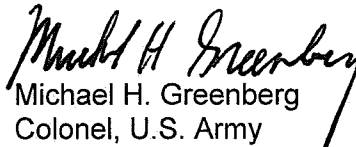
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Fort Belvoir has applied the criteria of adverse effect to the proposed undertaking and determined that there will be no adverse effects to historic properties by the proposed improvements to the Caisson Platoon Facility listed in the ADP [36 CFR § 800.5]. If requested, Fort Belvoir will continue to consult when the proposed projects are initiated. Please provide comment on our determination of no adverse effect in accordance with 36 CFR § 800.4(d). If we do not receive your comments within the requested 30 days, we will assume no comment and proceed with the project as planned.

Point of contact is Mr. Christopher W. Landgraf, Acting Director of Public Works, at 703-806-4194.

Sincerely,


Michael H. Greenberg
Colonel, U.S. Army
Commanding

Enclosures



DEPARTMENT OF THE ARMY
US ARMY INSTALLATION MANAGEMENT COMMAND
HEADQUARTERS, UNITED STATES ARMY GARRISON, FORT BELVOIR
9820 FLAGLER ROAD, SUITE 213
FORT BELVOIR, VIRGINIA 22060-5928

OCT 29 2019

Directorate of Public Works

SUBJECT: Section 106 Consultation - Caisson Platoon Facility Area Development Plan
Environmental Assessment, Fort Belvoir, Virginia

Tribal Chief Dean Branham
Monacan Indian Nation
P.O. Box 960
Amherst, Virginia 24571

Dear Tribal Chief Branham:

Fort Belvoir is proposing the implementation of an Area Development Plan (ADP) for the Caisson Platoon Facility, which encompasses approximately 115 acres in the Southwest District of Fort Belvoir. The Caisson Platoon primarily operates out of Joint Base Myer-Henderson Hall (JBMHH), 18 miles to the north of Fort Belvoir. Its mission is to honor deceased servicemen and women by carrying them to rest in the Arlington National Cemetery. The Caisson Platoon Facility at Fort Belvoir provides the Caisson Platoon with space for training, trail riding, storage, stables, and pasture area for horses to support the overall mission. An Environmental Assessment (EA) was prepared and determined there would be no significant impacts to any identified resources. The document is available for review and can be found on the Environmental Division website at the following link:

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“LEADERS IN EXCELLENCE”

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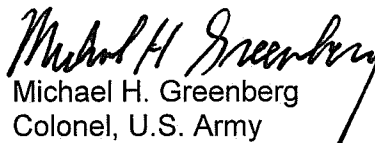
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The EA (page 27) also discusses a property outside of Fort Belvoir's boundaries. The closest historic property listed on the National Register of Historic Places is the Pohick Church, which is located about one quarter of a mile to the west of the facility. The surrounding Pohick Church Overlay District extends into the proposed Caisson Platoon Facility. The proposed improvements that are within the Overlay District include the construction of the proposed building for the indoor riding arena and classrooms, stormwater bioretention features, roadway and parking improvements, security entrance gate, and limited tree removal due to riding trail development. The northern and western portions of the study area are heavily wooded which buffers potential views of the Pohick Church Historic District and would remain largely intact as a result of the proposed improvements.

Fort Belvoir has applied the criteria of adverse effect to the proposed undertaking and determined that there will be no adverse effects to historic properties by the proposed improvements to the Caisson Platoon Facility listed in the ADP [36 CFR § 800.5]. If requested, Fort Belvoir will continue to consult when the proposed projects are initiated. Please provide comment on our determination of no adverse effect in accordance with 36 CFR § 800.4(d). If we do not receive your comments within the requested 30 days, we will assume no comment and proceed with the project as planned.

Point of contact is Mr. Christopher W. Landgraf, Acting Director of Public Works, at 703-806-4194.

Sincerely,


Michael H. Greenberg
Colonel, U.S. Army
Commanding

Enclosures



DEPARTMENT OF THE ARMY
US ARMY INSTALLATION MANAGEMENT COMMAND
HEADQUARTERS, UNITED STATES ARMY GARRISON, FORT BELVOIR
9820 FLAGLER ROAD, SUITE 213
FORT BELVOIR, VIRGINIA 22060-5928

OCT 29 2019

Directorate of Public Works

SUBJECT: Section 106 Consultation - Caisson Platoon Facility Area Development Plan
Environmental Assessment, Fort Belvoir, Virginia

Chief Samuel Bass
Nansemond Indian Tribe
1001 Pembroke Lane
Suffolk, Virginia 23434

Dear Chief Bass:

Fort Belvoir is proposing the implementation of an Area Development Plan (ADP) for the Caisson Platoon Facility, which encompasses approximately 115 acres in the Southwest District of Fort Belvoir. The Caisson Platoon primarily operates out of Joint Base Myer-Henderson Hall (JBMHH), 18 miles to the north of Fort Belvoir. Its mission is to honor deceased servicemen and women by carrying them to rest in the Arlington National Cemetery. The Caisson Platoon Facility at Fort Belvoir provides the Caisson Platoon with space for training, trail riding, storage, stables, and pasture area for horses to support the overall mission. An Environmental Assessment (EA) was prepared and determined there would be no significant impacts to any identified resources. The document is available for review and can be found on the Environmental Division website at the following link:

https://home.army.mil/belvoir/index.php/download_file/force/729/549.

Approximately 10.5 acres (excluding training trail) of the total 115-acre area study are currently developed in support of the Caisson Platoon Facility with the remaining 104.5 acres (including training trail) being largely undeveloped. The proposed undertaking (please refer to pages 14-16 of EA) consists of expanding the existing deficient Caisson Platoon Facility from 10.5 acres to 39.1 acres in order to address identified project needs. Site expansion would occur primarily to the north and west into an existing forested area. The proposed undertaking would impact existing two intermittent streams, three isolated and tidal wetlands, and 27.43 acres of forest area. The Area of Potential Effect (APE) for this undertaking includes those areas that will be directly or indirectly affected by the ADP improvements. Work to be developed includes the following:

- **Pasture Size:** A 27.4-acre pasture area would be developed (involving 22.0 acres of forest clearing) consisting of four paddocks (two for training horses and two for Caisson horses), a horse quarantine area, run-in shelters, feed pens, automatic waterers, and an outdoor riding arena. A new livestock containment fence would be constructed around the expanded pasture with additional fencing and gates between the paddocks and quarantine areas to control use by horses and promote sustainable forage.
- **Stable Capacity:** Hay storage is being converted from the existing stables to the existing pole barn (Building 3045) which is being converted to a separate storage facility.

“LEADERS IN EXCELLENCE”

Additional horse stalls would be added. The stables would be connected to a new indoor riding arena via a covered walkway.

- Manure Management: A new dumpster storage area would be established and a new indoor climate-controlled riding arena (of sufficient size to accommodate twelve horses, twelve soldiers and three instructors) would be constructed. The arena would have a covered classroom, veterinarian room, office, kitchen, tack-room, restrooms, lockers, and showers. A new riding trail system would be established consisting of 2.85 miles of trails that would require the clearing of 5.53 acres of forest area to accommodate the 16-foot trail width.
- Stormwater Management (SWM): A SWM swale would be constructed around the perimeter of the expanded pastures area (including the four paddocks, horse quarantine area, run-in shelters, feed pens, and an outdoor riding arena) to collect run-off and transmit it to wet-bioretenion features and other Green SWM Best Management Practices. Four optional stormwater bioretention areas will work to slow and infiltrate excess water during wet storm events. The bioretention areas will require the ability to process heavy sediment loads from stormwater run-off from the pasture and pavements. Additional SWM features would be located along roadway and parking lots to capture and treat run-off.
- Paved Surfaces: Existing unpaved roadways and parking lots would be relocated and replaced with paved facilities properly designed to accommodate required traffic including meeting ADA standards.
- Buildings: The existing classroom building would be demolished, and a new indoor climate-controlled riding arena would be constructed. The existing open-sided Pole Barn (Building 3045) would be repurposed to a closed, ventilated, and climate-controlled storage facility providing for hay storage, a workshop, a mechanic shop, and an equipment and vehicle storage facility. The existing utility network (water, sewer, electricity, and communications) would be upgraded to serve the new and converted buildings and to provide illumination of the revised roadway/parking and dumpster area. The reconstructed roadway and parking areas would be appropriately landscaped.
- Security Fence: The existing perimeter security measures would be upgraded to meet Anti-Terrorism/ Force Protection (AT/FP) standards and expanded to encompass the proposed expanded Caisson Platoon Facility. Proposed upgrades include the construction of a new Main Gate, a new secondary gate providing an alternate access point, and the upgrading of facility signage.

Fort Belvoir has reviewed the undertaking and identified historic properties in or nearby the proposed undertaking's APE. While there are no historic buildings within the APE, there is one potentially eligible site (44FX1679). This site was identified in 1992 in the *Phase I Investigations of Various Development Sites and Training Areas* conducted by MAAR Associates Inc. (DHR File No. 2001-0007). While the site is located within the APE, there will not be any of the proposed forest clearing for pasture expansion and riding trail development or construction at the Caisson Platoon Facility within 50 feet of the site. This part of the APE has been identified in the plans as a 6 acre horse paddock for the Caisson horses (EA, page 15-16) and the work to be completed is limited to vegetation (laying grass seed and adding new soil). There were five ineligible archaeological sites identified within the study area (44FX1655,

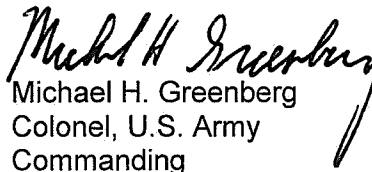
44FX1656, 44FX1660, 44FX1671, 44FX1711) and one potentially eligible site, 44FX1657. While the potentially eligible site is within the study area, it is outside the undertaking's APE and will not be affected by the proposed action.

The EA (page 27) also discusses a property outside of Fort Belvoir's boundaries. The closest historic property listed on the National Register of Historic Places is the Pohick Church, which is located about one quarter of a mile to the west of the facility. The surrounding Pohick Church Overlay District extends into the proposed Caisson Platoon Facility. The proposed improvements that are within the Overlay District include the construction of the proposed building for the indoor riding arena and classrooms, stormwater bioretention features, roadway and parking improvements, security entrance gate, and limited tree removal due to riding trail development. The northern and western portions of the study area are heavily wooded which buffers potential views of the Pohick Church Historic District and would remain largely intact as a result of the proposed improvements.

Fort Belvoir has applied the criteria of adverse effect to the proposed undertaking and determined that there will be no adverse effects to historic properties by the proposed improvements to the Caisson Platoon Facility listed in the ADP [36 CFR § 800.5]. If requested, Fort Belvoir will continue to consult when the proposed projects are initiated. Please provide comment on our determination of no adverse effect in accordance with 36 CFR § 800.4(d). If we do not receive your comments within the requested 30 days, we will assume no comment and proceed with the project as planned.

Point of contact is Mr. Christopher W. Landgraf, Acting Director of Public Works, at 703-806-4194.

Sincerely,


Michael H. Greenberg
Colonel, U.S. Army
Commanding

Enclosures



DEPARTMENT OF THE ARMY
US ARMY INSTALLATION MANAGEMENT COMMAND
HEADQUARTERS, UNITED STATES ARMY GARRISON, FORT BELVOIR
9820 FLAGLER ROAD, SUITE 213
FORT BELVOIR, VIRGINIA 22060-5928

OCT 29 2019

Directorate of Public Works

SUBJECT: Section 106 Consultation - Caisson Platoon Facility Area Development Plan
Environmental Assessment, Fort Belvoir, Virginia

Ms. Laura Arseneau
Fairfax County Dept. of Planning & Zoning
12055 Government Center Parkway
DPZ-PD, Suite 730
Fairfax, Virginia 22035

Dear Ms. Arseneau:

Fort Belvoir is proposing the implementation of an Area Development Plan (ADP) for the Caisson Platoon Facility, which encompasses approximately 115 acres in the Southwest District of Fort Belvoir. The Caisson Platoon primarily operates out of Joint Base Myer-Henderson Hall (JBMHH), 18 miles to the north of Fort Belvoir. Its mission is to honor deceased servicemen and women by carrying them to rest in the Arlington National Cemetery. The Caisson Platoon Facility at Fort Belvoir provides the Caisson Platoon with space for training, trail riding, storage, stables, and pasture area for horses to support the overall mission. An Environmental Assessment (EA) was prepared and determined there would be no significant impacts to any identified resources. The document is available for review and can be found on the Environmental Division website at the following link:

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Approximately 10.5 acres (excluding training trail) of the total 115-acre area study are currently developed in support of the Caisson Platoon Facility with the remaining 104.5 acres (including training trail) being largely undeveloped. The proposed undertaking (please refer to pages 14-16 of EA) consists of expanding the existing deficient Caisson Platoon Facility from 10.5 acres to 39.1 acres in order to address identified project needs. Site expansion would occur primarily to the north and west into an existing forested area. The proposed undertaking would impact existing two intermittent streams, three isolated and tidal wetlands, and 27.43 acres of forest area. The Area of Potential Effect (APE) for this undertaking includes those areas that will be directly or indirectly affected by the ADP improvements. Work to be developed includes the following:

- Pasture Size: A 27.4-acre pasture area would be developed (involving 22.0 acres of forest clearing) consisting of four paddocks (two for training horses and two for Caisson horses), a horse quarantine area, run-in shelters, feed pens, automatic waterers, and an outdoor riding arena. A new livestock containment fence would be constructed around the expanded pasture with additional fencing and gates between the paddocks and quarantine areas to control use by horses and promote sustainable forage.
- Stable Capacity: Hay storage is being converted from the existing stables to the existing pole barn (Building 3045) which is being converted to a separate storage facility.

“LEADERS IN EXCELLENCE”

Additional horse stalls would be added. The stables would be connected to a new indoor riding arena via a covered walkway.

- Manure Management: A new dumpster storage area would be established and a new indoor climate-controlled riding arena (of sufficient size to accommodate twelve horses, twelve soldiers and three instructors) would be constructed. The arena would have a covered classroom, veterinarian room, office, kitchen, tack-room, restrooms, lockers, and showers. A new riding trail system would be established consisting of 2.85 miles of trails that would require the clearing of 5.53 acres of forest area to accommodate the 16-foot trail width.
- Stormwater Management (SWM): A SWM swale would be constructed around the perimeter of the expanded pastures area (including the four paddocks, horse quarantine area, run-in shelters, feed pens, and an outdoor riding arena) to collect run-off and transmit it to wet-bioretenion features and other Green SWM Best Management Practices. Four optional stormwater bioretention areas will work to slow and infiltrate excess water during wet storm events. The bioretention areas will require the ability to process heavy sediment loads from stormwater run-off from the pasture and pavements. Additional SWM features would be located along roadway and parking lots to capture and treat run-off.
- Paved Surfaces: Existing unpaved roadways and parking lots would be relocated and replaced with paved facilities properly designed to accommodate required traffic including meeting ADA standards.
- Buildings: The existing classroom building would be demolished, and a new indoor climate-controlled riding arena would be constructed. The existing open-sided Pole Barn (Building 3045) would be repurposed to a closed, ventilated, and climate-controlled storage facility providing for hay storage, a workshop, a mechanic shop, and an equipment and vehicle storage facility. The existing utility network (water, sewer, electricity, and communications) would be upgraded to serve the new and converted buildings and to provide illumination of the revised roadway/parking and dumpster area. The reconstructed roadway and parking areas would be appropriately landscaped.
- Security Fence: The existing perimeter security measures would be upgraded to meet Anti-Terrorism/ Force Protection (AT/FP) standards and expanded to encompass the proposed expanded Caisson Platoon Facility. Proposed upgrades include the construction of a new Main Gate, a new secondary gate providing an alternate access point, and the upgrading of facility signage.

Fort Belvoir has reviewed the undertaking and identified historic properties in or nearby the proposed undertaking's APE. While there are no historic buildings within the APE, there is one potentially eligible site (44FX1679). This site was identified in 1992 in the *Phase I Investigations of Various Development Sites and Training Areas* conducted by MAAR Associates Inc. (DHR File No. 2001-0007). While the site is located within the APE, there will not be any of the proposed forest clearing for pasture expansion and riding trail development or construction at the Caisson Platoon Facility within 50 feet of the site. This part of the APE has been identified in the plans as a 6 acre horse paddock for the Caisson horses (EA, page 15-16) and the work to be completed is limited to vegetation (laying grass seed and adding new soil). There were five ineligible archaeological sites identified within the study area (44FX1655,

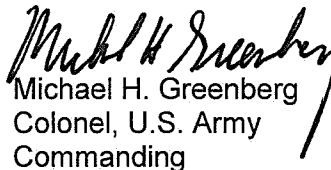
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The EA (page 27) also discusses a property outside of Fort Belvoir's boundaries. The closest historic property listed on the National Register of Historic Places is the Pohick Church, which is located about one quarter of a mile to the west of the facility. The surrounding Pohick Church Overlay District extends into the proposed Caisson Platoon Facility. The proposed improvements that are within the Overlay District include the construction of the proposed building for the indoor riding arena and classrooms, stormwater bioretention features, roadway and parking improvements, security entrance gate, and limited tree removal due to riding trail development. The northern and western portions of the study area are heavily wooded which buffers potential views of the Pohick Church Historic District and would remain largely intact as a result of the proposed improvements.

Fort Belvoir has applied the criteria of adverse effect to the proposed undertaking and determined that there will be no adverse effects to historic properties by the proposed improvements to the Caisson Platoon Facility listed in the ADP [36 CFR § 800.5]. If requested, Fort Belvoir will continue to consult when the proposed projects are initiated. Please provide comment on our determination of no adverse effect in accordance with 36 CFR § 800.4(d). If we do not receive your comments within the requested 30 days, we will assume no comment and proceed with the project as planned.

Point of contact is Mr. Christopher W. Landgraf, Acting Director of Public Works, at 703-806-4194.

Sincerely,


Michael H. Greenberg
Colonel, U.S. Army
Commanding

Enclosures



DEPARTMENT OF THE ARMY
US ARMY INSTALLATION MANAGEMENT COMMAND
HEADQUARTERS, UNITED STATES ARMY GARRISON, FORT BELVOIR
9820 FLAGLER ROAD, SUITE 213
FORT BELVOIR, VIRGINIA 22060-5928

OCT 29 2019

Directorate of Public Works

SUBJECT: Section 106 Consultation - Caisson Platoon Facility Area Development Plan
Environmental Assessment, Fort Belvoir, Virginia

Reverend Dr. Lynn P. Ronaldi
Pohick Episcopal Church
9301 Richmond Highway
Lorton, Virginia 22079

Dear Reverend Dr. Ronaldi:

Fort Belvoir is proposing the implementation of an Area Development Plan (ADP) for the Caisson Platoon Facility, which encompasses approximately 115 acres in the Southwest District of Fort Belvoir. The Caisson Platoon primarily operates out of Joint Base Myer-Henderson Hall (JBMHH), 18 miles to the north of Fort Belvoir. Its mission is to honor deceased servicemen and women by carrying them to rest in the Arlington National Cemetery. The Caisson Platoon Facility at Fort Belvoir provides the Caisson Platoon with space for training, trail riding, storage, stables, and pasture area for horses to support the overall mission. An Environmental Assessment (EA) was prepared and determined there would be no significant impacts to any identified resources. This EA will be made available to the public for review in both digital and hardcopy. A CD with the EA is enclosed in this consultation packet, and all other parties will refer to the publically available digital copy.

Approximately 10.5 acres (excluding training trail) of the total 115-acre area study are currently developed in support of the Caisson Platoon Facility with the remaining 104.5 acres (including training trail) being largely undeveloped. The proposed undertaking (please refer to pages 14-16 of EA) consists of expanding the existing deficient Caisson Platoon Facility from 10.5 acres to 39.1 acres in order to address identified project needs. Site expansion would occur primarily to the north and west into an existing forested area. The proposed undertaking would impact existing two intermittent streams, three isolated and tidal wetlands, and 27.43 acres of forest area. The Area of Potential Effect (APE) for this undertaking includes those areas that will be directly or indirectly affected by the ADP improvements. Work to be developed includes the following:

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“LEADERS IN EXCELLENCE”

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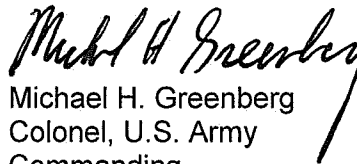
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Fort Belvoir has applied the criteria of adverse effect to the proposed undertaking and determined that there will be no adverse effects to historic properties by the proposed improvements to the Caisson Platoon Facility listed in the ADP [36 CFR § 800.5]. If requested, Fort Belvoir will continue to consult when the proposed projects are initiated. Please provide comment on our determination of no adverse effect in accordance with 36 CFR § 800.4(d). If we do not receive your comments within the requested 30 days, we will assume no comment and proceed with the project as planned.

Point of contact is Mr. Christopher W. Landgraf, Acting Director of Public Works, at 703-806-4194.

Sincerely,


Michael H. Greenberg
Colonel, U.S. Army
Commanding

Enclosures

Public and Agency Distribution Letters



DEPARTMENT OF THE ARMY
US ARMY INSTALLATION MANAGEMENT COMMAND
HEADQUARTERS, UNITED STATES ARMY GARRISON, FORT BELVOIR
9820 FLAGLER ROAD, SUITE 213
FORT BELVOIR, VIRGINIA 22060-5928

November 4, 2019

Directorate of Public Works

SUBJECT: Environmental Assessment and Draft Finding of No Significant Impact
Caisson Platoon Facility Sub-Area Master Plan/Area Development Plan Fort Belvoir, Virginia

Ms. Valerie Fulcher
Executive Secretary Senior
Office of Environmental Impact Review
Virginia Department of Environmental Quality
P.O. Box 1105
Richmond, Virginia 23218

Dear Ms. Fulcher:

The Army has prepared an Environmental Assessment (EA) and draft Finding of No Significant Impact (FNSI) for the Caisson Platoon Facility Sub-Area Master Plan on U.S. Army Garrison Fort Belvoir, Virginia. The EA analyzes the potential environmental impacts that may occur as a result of the proposed implementation of the approved Area Development Plan (ADP). The ADP includes improvements such as enhanced security, an expanded pasture area, consolidated equipment storage, and construction of an indoor riding facility to promote year-round training. The EA has been prepared in accordance with the National Environmental Policy Act (NEPA) of 1969, and regulations implementing the procedural provisions of the NEPA, 40 Code of Federal Regulations (CFR) 1500-1508, and Environmental Analysis of Army Actions, 32 CFR 651.

We request your assistance in review and comment of the EA and draft FNSI. The documents for review can be found on the Environmental Division website at the following link: https://home.army.mil/belvoir/index.php/download_file/force/729/549. You are invited to submit written comments within 30 days of the date of this notice. Please submit comments to Mr. Felix M. Mariani, Chief, Environmental Division, Directorate of Public Works (DPW), Building 1442, 9430 Jackson Loop, Fort Belvoir, VA 22060-5116 or email comments to usarmy.belvoir.imcom-atlantic.mbx.enrd@mail.mil.

For further information, contact Mr. Felix M. Mariani, Chief, Environmental Division, DPW at (703) 806-3193.

Sincerely,

A handwritten signature in cursive script, reading "Chris Landgraf", is positioned above the printed name.

Christopher W. Landgraf
Acting Director of Public Works

“LEADERS IN EXCELLENCE”



DEPARTMENT OF THE ARMY
US ARMY INSTALLATION MANAGEMENT COMMAND
HEADQUARTERS, UNITED STATES ARMY GARRISON, FORT BELVOIR
9820 FLAGLER ROAD, SUITE 213
FORT BELVOIR, VIRGINIA 22060-5928

November 4, 2019

Directorate of Public Works

SUBJECT: Environmental Assessment and Draft Finding of No Significant Impact
Caisson Platoon Facility Sub-Area Master Plan/Area Development Plan Fort Belvoir, Virginia

Ms. Laura McKay
Manager
Coastal Zone Management Program
Virginia Department of Environmental Quality
629 East Main Street
Richmond, Virginia 23219

Dear Ms. McKay:

The Army has prepared an Environmental Assessment (EA) and draft Finding of No Significant Impact (FNSI) for the Caisson Platoon Facility Sub-Area Master Plan on U.S. Army Garrison Fort Belvoir, Virginia. The EA analyzes the potential environmental impacts that may occur as a result of the proposed implementation of the approved Area Development Plan (ADP). The ADP includes improvements such as enhanced security, an expanded pasture area, consolidated equipment storage, and construction of an indoor riding facility to promote year-round training. The EA has been prepared in accordance with the National Environmental Policy Act (NEPA) of 1969, and regulations implementing the procedural provisions of the NEPA, 40 Code of Federal Regulations (CFR) 1500-1508, and Environmental Analysis of Army Actions, 32 CFR 651.

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For further information, contact Mr. Felix M. Mariani, Chief, Environmental Division, DPW at (703) 806-3193.

Sincerely,

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Christopher W. Landgraf
Acting Director of Public Works

“LEADERS IN EXCELLENCE”



DEPARTMENT OF THE ARMY
US ARMY INSTALLATION MANAGEMENT COMMAND
HEADQUARTERS, UNITED STATES ARMY GARRISON, FORT BELVOIR
9820 FLAGLER ROAD, SUITE 213
FORT BELVOIR, VIRGINIA 22060-5928

November 4, 2019

Directorate of Public Works

SUBJECT: Environmental Assessment and Draft Finding of No Significant Impact
Caisson Platoon Facility Sub-Area Master Plan/Area Development Plan Fort Belvoir, Virginia

Mr. John (Jack) Bricker
State Conservationist
USDA
Natural Resources Conservation Service
1606 Santa Rosa Road, Suite 209
Richmond, Virginia 23229

Dear Mr. Bricker:

The Army has prepared an Environmental Assessment (EA) and draft Finding of No Significant Impact (FNSI) for the Caisson Platoon Facility Sub-Area Master Plan on U.S. Army Garrison Fort Belvoir, Virginia. The EA analyzes the potential environmental impacts that may occur as a result of the proposed implementation of the approved Area Development Plan (ADP). The ADP includes improvements such as enhanced security, an expanded pasture area, consolidated equipment storage, and construction of an indoor riding facility to promote year-round training. The EA has been prepared in accordance with the National Environmental Policy Act (NEPA) of 1969, and regulations implementing the procedural provisions of the NEPA, 40 Code of Federal Regulations (CFR) 1500-1508, and Environmental Analysis of Army Actions, 32 CFR 651.

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For further information, contact Mr. Felix M. Mariani, Chief, Environmental Division, DPW at (703) 806-3193.

Sincerely,

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Christopher W. Landgraf
Acting Director of Public Works

“LEADERS IN EXCELLENCE”



DEPARTMENT OF THE ARMY
US ARMY INSTALLATION MANAGEMENT COMMAND
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November 4, 2019

Directorate of Public Works

SUBJECT: Environmental Assessment and Draft Finding of No Significant Impact
Caisson Platoon Facility Sub-Area Master Plan/Area Development Plan Fort Belvoir, Virginia

Ms. Kimberly Damon-Randall
Deputy Regional Administrator for Protected Resources
Greater Atlantic Region Fisheries Office
National Marine Fisheries Service
Protected Resources
55 Great Republic Drive
Gloucester, Massachusetts 01930


Dear Ms. Damon-Randall:

The Army has prepared an Environmental Assessment (EA) and draft Finding of No Significant Impact (FNSI) for the Caisson Platoon Facility Sub-Area Master Plan on U.S. Army Garrison Fort Belvoir, Virginia. The EA analyzes the potential environmental impacts that may occur as a result of the proposed implementation of the approved Area Development Plan (ADP). The ADP includes improvements such as enhanced security, an expanded pasture area, consolidated equipment storage, and construction of an indoor riding facility to promote year-round training. The EA has been prepared in accordance with the National Environmental Policy Act (NEPA) of 1969, and regulations implementing the procedural provisions of the NEPA, 40 Code of Federal Regulations (CFR) 1500-1508, and Environmental Analysis of Army Actions, 32 CFR 651.

We request your assistance in review and comment of the EA and draft FNSI. The documents for review can be found on the Environmental Division website at the following link: https://home.army.mil/belvoir/index.php/download_file/force/729/549. You are invited to submit written comments within 30 days of the date of this notice. Please submit comments to Mr. Felix M. Mariani, Chief, Environmental Division, Directorate of Public Works (DPW), Building 1442, 9430 Jackson Loop, Fort Belvoir, VA 22060-5116 or email comments to usarmy.belvoir.imcom-atlantic.mbx.enrd@mail.mil.

For further information, contact Mr. Felix M. Mariani, Chief, Environmental Division, DPW at (703) 806-3193.

Sincerely,


Christopher W. Landgraf
Acting Director of Public Works

“LEADERS IN EXCELLENCE”



DEPARTMENT OF THE ARMY
US ARMY INSTALLATION MANAGEMENT COMMAND
HEADQUARTERS, UNITED STATES ARMY GARRISON, FORT BELVOIR
9820 FLAGLER ROAD, SUITE 213
FORT BELVOIR, VIRGINIA 22060-5928

November 4, 2019

Directorate of Public Works

SUBJECT: Environmental Assessment and Draft Finding of No Significant Impact
Caisson Platoon Facility Sub-Area Master Plan/Area Development Plan Fort Belvoir, Virginia

Mr. Sean Corson
Acting Director
Chesapeake Bay Program Office
National Marine Fisheries Service
410 Severn Avenue, Suite 207-A
Annapolis, Maryland 21403

Dear Mr. Corson:

The Army has prepared an Environmental Assessment (EA) and draft Finding of No Significant Impact (FNSI) for the Caisson Platoon Facility Sub-Area Master Plan on U.S. Army Garrison Fort Belvoir, Virginia. The EA analyzes the potential environmental impacts that may occur as a result of the proposed implementation of the approved Area Development Plan (ADP). The ADP includes improvements such as enhanced security, an expanded pasture area, consolidated equipment storage, and construction of an indoor riding facility to promote year-round training. The EA has been prepared in accordance with the National Environmental Policy Act (NEPA) of 1969, and regulations implementing the procedural provisions of the NEPA, 40 Code of Federal Regulations (CFR) 1500-1508, and Environmental Analysis of Army Actions, 32 CFR 651.

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For further information, contact Mr. Felix M. Mariani, Chief, Environmental Division, DPW at (703) 806-3193.

Sincerely,

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Christopher W. Landgraf
Acting Director of Public Works

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November 4, 2019

Directorate of Public Works

SUBJECT: Environmental Assessment and Draft Finding of No Significant Impact
Caisson Platoon Facility Sub-Area Master Plan/Area Development Plan Fort Belvoir, Virginia

Ms. Pat Montanio
Director
National Oceanic Atmospheric Administration
National Marine Fisheries Service
Habitat Conservation Division
1315 East-West Highway
SSMC3, 14th Floor F/HC
Silver Spring, Maryland 20910

Dear Ms. Montanio:

The Army has prepared an Environmental Assessment (EA) and draft Finding of No Significant Impact (FNSI) for the Caisson Platoon Facility Sub-Area Master Plan on U.S. Army Garrison Fort Belvoir, Virginia. The EA analyzes the potential environmental impacts that may occur as a result of the proposed implementation of the approved Area Development Plan (ADP). The ADP includes improvements such as enhanced security, an expanded pasture area, consolidated equipment storage, and construction of an indoor riding facility to promote year-round training. The EA has been prepared in accordance with the National Environmental Policy Act (NEPA) of 1969, and regulations implementing the procedural provisions of the NEPA, 40 Code of Federal Regulations (CFR) 1500-1508, and Environmental Analysis of Army Actions, 32 CFR 651.

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For further information, contact Mr. Felix M. Mariani, Chief, Environmental Division, DPW at (703) 806-3193.

Sincerely,

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Christopher W. Landgraf
Acting Director of Public Works

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DEPARTMENT OF THE ARMY
US ARMY INSTALLATION MANAGEMENT COMMAND
HEADQUARTERS, UNITED STATES ARMY GARRISON, FORT BELVOIR
9820 FLAGLER ROAD, SUITE 213
FORT BELVOIR, VIRGINIA 22060-5928

November 4, 2019

Directorate of Public Works

SUBJECT: Environmental Assessment and Draft Finding of No Significant Impact
Caisson Platoon Facility Sub-Area Master Plan/Area Development Plan Fort Belvoir, Virginia

Ms. Michaela Noble
Director
U.S. Department of the Interior
Office of Environmental Policy and Compliance
1849 C Street, NW
Washington, DC 20240

Dear Ms. Noble:

The Army has prepared an Environmental Assessment (EA) and draft Finding of No Significant Impact (FNSI) for the Caisson Platoon Facility Sub-Area Master Plan on U.S. Army Garrison Fort Belvoir, Virginia. The EA analyzes the potential environmental impacts that may occur as a result of the proposed implementation of the approved Area Development Plan (ADP). The ADP includes improvements such as enhanced security, an expanded pasture area, consolidated equipment storage, and construction of an indoor riding facility to promote year-round training. The EA has been prepared in accordance with the National Environmental Policy Act (NEPA) of 1969, and regulations implementing the procedural provisions of the NEPA, 40 Code of Federal Regulations (CFR) 1500-1508, and Environmental Analysis of Army Actions, 32 CFR 651.

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For further information, contact Mr. Felix M. Mariani, Chief, Environmental Division, DPW at (703) 806-3193.

Sincerely,

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Christopher W. Landgraf
Acting Director of Public Works

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US ARMY INSTALLATION MANAGEMENT COMMAND
HEADQUARTERS, UNITED STATES ARMY GARRISON, FORT BELVOIR
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FORT BELVOIR, VIRGINIA 22060-5928

November 4, 2019

Directorate of Public Works

SUBJECT: Environmental Assessment and Draft Finding of No Significant Impact
Caisson Platoon Facility Sub-Area Master Plan/Area Development Plan Fort Belvoir, Virginia

Mr. Troy M. Anderson
Conservation Planning Assistance Supervisor
U.S. Fish and Wildlife Service
Region 5, Virginia Field Office
6669 Short Lane
Gloucester, Virginia 23061-4410

Dear Mr. Anderson:

The Army has prepared an Environmental Assessment (EA) and draft Finding of No Significant Impact (FNSI) for the Caisson Platoon Facility Sub-Area Master Plan on U.S. Army Garrison Fort Belvoir, Virginia. The EA analyzes the potential environmental impacts that may occur as a result of the proposed implementation of the approved Area Development Plan (ADP). The ADP includes improvements such as enhanced security, an expanded pasture area, consolidated equipment storage, and construction of an indoor riding facility to promote year-round training. The EA has been prepared in accordance with the National Environmental Policy Act (NEPA) of 1969, and regulations implementing the procedural provisions of the NEPA, 40 Code of Federal Regulations (CFR) 1500-1508, and Environmental Analysis of Army Actions, 32 CFR 651.

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For further information, contact Mr. Felix M. Mariani, Chief, Environmental Division, DPW at (703) 806-3193.

Sincerely,

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Christopher W. Landgraf
Acting Director of Public Works

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FORT BELVOIR, VIRGINIA 22060-5928

November 4, 2019

Directorate of Public Works

SUBJECT: Environmental Assessment and Draft Finding of No Significant Impact
Caisson Platoon Facility Sub-Area Master Plan/Area Development Plan Fort Belvoir, Virginia

Ms. Barbara Rudnick
NEPA Program Manager
Office of Environmental Programs (3EA30)
U.S. Environmental Protection Agency
Region 3, 1650 Arch Street
Philadelphia, Pennsylvania 19103

Dear Ms. Rudnick:

The Army has prepared an Environmental Assessment (EA) and draft Finding of No Significant Impact (FNSI) for the Caisson Platoon Facility Sub-Area Master Plan on U.S. Army Garrison Fort Belvoir, Virginia. The EA analyzes the potential environmental impacts that may occur as a result of the proposed implementation of the approved Area Development Plan (ADP). The ADP includes improvements such as enhanced security, an expanded pasture area, consolidated equipment storage, and construction of an indoor riding facility to promote year-round training. The EA has been prepared in accordance with the National Environmental Policy Act (NEPA) of 1969, and regulations implementing the procedural provisions of the NEPA, 40 Code of Federal Regulations (CFR) 1500-1508, and Environmental Analysis of Army Actions, 32 CFR 651.

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For further information, contact Mr. Felix M. Mariani, Chief, Environmental Division, DPW at (703) 806-3193.

Sincerely,

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Christopher W. Landgraf
Acting Director of Public Works

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DEPARTMENT OF THE ARMY
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FORT BELVOIR, VIRGINIA 22060-5928

November 4, 2019

Directorate of Public Works

SUBJECT: Environmental Assessment and Draft Finding of No Significant Impact
Caisson Platoon Facility Sub-Area Master Plan/Area Development Plan Fort Belvoir, Virginia

Ms. Emily Biondi
Director, U.S. Department of Transportation
Federal Highway Administration
Office of Project Development & Environmental Review
1200 New Jersey Ave, SE, HEPE-1
Washington, DC 20590-0001

Dear Ms. Biondi:

The Army has prepared an Environmental Assessment (EA) and draft Finding of No Significant Impact (FNSI) for the Caisson Platoon Facility Sub-Area Master Plan on U.S. Army Garrison Fort Belvoir, Virginia. The EA analyzes the potential environmental impacts that may occur as a result of the proposed implementation of the approved Area Development Plan (ADP). The ADP includes improvements such as enhanced security, an expanded pasture area, consolidated equipment storage, and construction of an indoor riding facility to promote year-round training. The EA has been prepared in accordance with the National Environmental Policy Act (NEPA) of 1969, and regulations implementing the procedural provisions of the NEPA, 40 Code of Federal Regulations (CFR) 1500-1508, and Environmental Analysis of Army Actions, 32 CFR 651.

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For further information, contact Mr. Felix M. Mariani, Chief, Environmental Division, DPW at (703) 806-3193.

Sincerely,

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Christopher W. Landgraf
Acting Director of Public Works

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November 4, 2019

Directorate of Public Works

SUBJECT: Environmental Assessment and Draft Finding of No Significant Impact
Caisson Platoon Facility Sub-Area Master Plan/Area Development Plan Fort Belvoir, Virginia

Mr. Tom Biesiadny
Director
Fairfax County Department of Transportation
Centrepont 1 Office Building
4050 Legato Road, Suite 400
Fairfax, Virginia 22033

Dear Mr. Biesiadny:

The Army has prepared an Environmental Assessment (EA) and draft Finding of No Significant Impact (FNSI) for the Caisson Platoon Facility Sub-Area Master Plan on U.S. Army Garrison Fort Belvoir, Virginia. The EA analyzes the potential environmental impacts that may occur as a result of the proposed implementation of the approved Area Development Plan (ADP). The ADP includes improvements such as enhanced security, an expanded pasture area, consolidated equipment storage, and construction of an indoor riding facility to promote year-round training. The EA has been prepared in accordance with the National Environmental Policy Act (NEPA) of 1969, and regulations implementing the procedural provisions of the NEPA, 40 Code of Federal Regulations (CFR) 1500-1508, and Environmental Analysis of Army Actions, 32 CFR 651.

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For further information, contact Mr. Felix M. Mariani, Chief, Environmental Division, DPW at (703) 806-3193.

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Christopher W. Landgraf
Acting Director of Public Works

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FORT BELVOIR, VIRGINIA 22060-5928

November 4, 2019

Directorate of Public Works

SUBJECT: Environmental Assessment and Draft Finding of No Significant Impact
Caisson Platoon Facility Sub-Area Master Plan/Area Development Plan Fort Belvoir, Virginia

Mr. Peter F. Murphy
Chairman
Fairfax County Planning Commission
Springfield District, Government Center
12000 Government Center Parkway, Suite 552
Fairfax, Virginia 22035

Dear Mr. Murphy:

The Army has prepared an Environmental Assessment (EA) and draft Finding of No Significant Impact (FNSI) for the Caisson Platoon Facility Sub-Area Master Plan on U.S. Army Garrison Fort Belvoir, Virginia. The EA analyzes the potential environmental impacts that may occur as a result of the proposed implementation of the approved Area Development Plan (ADP). The ADP includes improvements such as enhanced security, an expanded pasture area, consolidated equipment storage, and construction of an indoor riding facility to promote year-round training. The EA has been prepared in accordance with the National Environmental Policy Act (NEPA) of 1969, and regulations implementing the procedural provisions of the NEPA, 40 Code of Federal Regulations (CFR) 1500-1508, and Environmental Analysis of Army Actions, 32 CFR 651.

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For further information, contact Mr. Felix M. Mariani, Chief, Environmental Division, DPW at (703) 806-3193.

Sincerely,

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Christopher W. Landgraf
Acting Director of Public Works

“LEADERS IN EXCELLENCE”



DEPARTMENT OF THE ARMY
US ARMY INSTALLATION MANAGEMENT COMMAND
HEADQUARTERS, UNITED STATES ARMY GARRISON, FORT BELVOIR
9820 FLAGLER ROAD, SUITE 213
FORT BELVOIR, VIRGINIA 22060-5928

November 4, 2019

Directorate of Public Works

SUBJECT: Environmental Assessment and Draft Finding of No Significant Impact
Caisson Platoon Facility Sub-Area Master Plan/Area Development Plan Fort Belvoir, Virginia

Mr. Fred Selden
Director
Fairfax County Department of Planning and Zoning
12055 Government Center Parkway, Suite 73
Fairfax, Virginia 22035

Dear Mr. Selden:

The Army has prepared an Environmental Assessment (EA) and draft Finding of No Significant Impact (FNSI) for the Caisson Platoon Facility Sub-Area Master Plan on U.S. Army Garrison Fort Belvoir, Virginia. The EA analyzes the potential environmental impacts that may occur as a result of the proposed implementation of the approved Area Development Plan (ADP). The ADP includes improvements such as enhanced security, an expanded pasture area, consolidated equipment storage, and construction of an indoor riding facility to promote year-round training. The EA has been prepared in accordance with the National Environmental Policy Act (NEPA) of 1969, and regulations implementing the procedural provisions of the NEPA, 40 Code of Federal Regulations (CFR) 1500-1508, and Environmental Analysis of Army Actions, 32 CFR 651.

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For further information, contact Mr. Felix M. Mariani, Chief, Environmental Division, DPW at (703) 806-3193.

Sincerely,

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Christopher W. Landgraf
Acting Director of Public Works

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November 4, 2019

Directorate of Public Works

SUBJECT: Environmental Assessment and Draft Finding of No Significant Impact
Caisson Platoon Facility Sub-Area Master Plan/Area Development Plan Fort Belvoir, Virginia

Mr. Marcel Acosta
Executive Director
National Capital Planning Commission
401 9th Street NW, Suite 500N
Washington, DC 20004

Dear Mr. Acosta:

The Army has prepared an Environmental Assessment (EA) and draft Finding of No Significant Impact (FNSI) for the Caisson Platoon Facility Sub-Area Master Plan on U.S. Army Garrison Fort Belvoir, Virginia. The EA analyzes the potential environmental impacts that may occur as a result of the proposed implementation of the approved Area Development Plan (ADP). The ADP includes improvements such as enhanced security, an expanded pasture area, consolidated equipment storage, and construction of an indoor riding facility to promote year-round training. The EA has been prepared in accordance with the National Environmental Policy Act (NEPA) of 1969, and regulations implementing the procedural provisions of the NEPA, 40 Code of Federal Regulations (CFR) 1500-1508, and Environmental Analysis of Army Actions, 32 CFR 651.

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For further information, contact Mr. Felix M. Mariani, Chief, Environmental Division, DPW at (703) 806-3193.

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Christopher W. Landgraf
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November 4, 2019

Directorate of Public Works

SUBJECT: Environmental Assessment and Draft Finding of No Significant Impact
Caisson Platoon Facility Sub-Area Master Plan/Area Development Plan Fort Belvoir, Virginia

Mr. Daniel G. Storck
Supervisor of Mount Vernon District
Fairfax County Board of Supervisors
Mount Vernon Government Center
Fairfax County
2511 Parkers Lane
Mt. Vernon, Virginia 22306


Dear Mr. Storck:

The Army has prepared an Environmental Assessment (EA) and draft Finding of No Significant Impact (FNSI) for the Caisson Platoon Facility Sub-Area Master Plan on U.S. Army Garrison Fort Belvoir, Virginia. The EA analyzes the potential environmental impacts that may occur as a result of the proposed implementation of the approved Area Development Plan (ADP). The ADP includes improvements such as enhanced security, an expanded pasture area, consolidated equipment storage, and construction of an indoor riding facility to promote year-round training. The EA has been prepared in accordance with the National Environmental Policy Act (NEPA) of 1969, and regulations implementing the procedural provisions of the NEPA, 40 Code of Federal Regulations (CFR) 1500-1508, and Environmental Analysis of Army Actions, 32 CFR 651.

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For further information, contact Mr. Felix M. Mariani, Chief, Environmental Division, DPW at (703) 806-3193.

Sincerely,


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Acting Director of Public Works

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November 4, 2019

Directorate of Public Works

SUBJECT: Environmental Assessment and Draft Finding of No Significant Impact
Caisson Platoon Facility Sub-Area Master Plan/Area Development Plan Fort Belvoir, Virginia

Ms. Karen Sheffield
Manager
Huntley Meadows Park
Fairfax County Parks Authority
3701 Lockheed Boulevard
Alexandria, Virginia 22306

Dear Ms. Sheffield:

The Army has prepared an Environmental Assessment (EA) and draft Finding of No Significant Impact (FNSI) for the Caisson Platoon Facility Sub-Area Master Plan on U.S. Army Garrison Fort Belvoir, Virginia. The EA analyzes the potential environmental impacts that may occur as a result of the proposed implementation of the approved Area Development Plan (ADP). The ADP includes improvements such as enhanced security, an expanded pasture area, consolidated equipment storage, and construction of an indoor riding facility to promote year-round training. The EA has been prepared in accordance with the National Environmental Policy Act (NEPA) of 1969, and regulations implementing the procedural provisions of the NEPA, 40 Code of Federal Regulations (CFR) 1500-1508, and Environmental Analysis of Army Actions, 32 CFR 651.

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For further information, contact Mr. Felix M. Mariani, Chief, Environmental Division, DPW at (703) 806-3193.

Sincerely,

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Christopher W. Landgraf
Acting Director of Public Works

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US ARMY INSTALLATION MANAGEMENT COMMAND
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November 4, 2019

Directorate of Public Works

SUBJECT: Environmental Assessment and Draft Finding of No Significant Impact
Caisson Platoon Facility Sub-Area Master Plan/Area Development Plan Fort Belvoir, Virginia

Mr. Willie Woode
Senior Conservation Specialist
Northern Virginia Soil and Water Conservation District (Fairfax County)
12055 Government Center Parkway, Suite 905
Fairfax, VA 22035

Dear Mr. Woode:

The Army has prepared an Environmental Assessment (EA) and draft Finding of No Significant Impact (FNSI) for the Caisson Platoon Facility Sub-Area Master Plan on U.S. Army Garrison Fort Belvoir, Virginia. The EA analyzes the potential environmental impacts that may occur as a result of the proposed implementation of the approved Area Development Plan (ADP). The ADP includes improvements such as enhanced security, an expanded pasture area, consolidated equipment storage, and construction of an indoor riding facility to promote year-round training. The EA has been prepared in accordance with the National Environmental Policy Act (NEPA) of 1969, and regulations implementing the procedural provisions of the NEPA, 40 Code of Federal Regulations (CFR) 1500-1508, and Environmental Analysis of Army Actions, 32 CFR 651.

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For further information, contact Mr. Felix M. Mariani, Chief, Environmental Division, DPW at (703) 806-3193.

Sincerely,

Christopher W. Landgraf
Acting Director of Public Works

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US ARMY INSTALLATION MANAGEMENT COMMAND
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November 4, 2019

Directorate of Public Works

SUBJECT: Environmental Assessment and Draft Finding of No Significant Impact
Caisson Platoon Facility Sub-Area Master Plan/Area Development Plan Fort Belvoir, Virginia

Ms. Sandy Collins
Primary Conservator
Friends of Accotink Creek
127 Poplar Road
Fredericksburg, Virginia 22406-5022

Dear Ms. Collins:

The Army has prepared an Environmental Assessment (EA) and draft Finding of No Significant Impact (FNSI) for the Caisson Platoon Facility Sub-Area Master Plan on U.S. Army Garrison Fort Belvoir, Virginia. The EA analyzes the potential environmental impacts that may occur as a result of the proposed implementation of the approved Area Development Plan (ADP). The ADP includes improvements such as enhanced security, an expanded pasture area, consolidated equipment storage, and construction of an indoor riding facility to promote year-round training. The EA has been prepared in accordance with the National Environmental Policy Act (NEPA) of 1969, and regulations implementing the procedural provisions of the NEPA, 40 Code of Federal Regulations (CFR) 1500-1508, and Environmental Analysis of Army Actions, 32 CFR 651.

We request your assistance in review and comment of the EA and draft FNSI. The documents for review can be found on the Environmental Division website at the following link: https://home.army.mil/belvoir/index.php/download_file/force/729/549. You are invited to submit written comments within 30 days of the date of this notice. Please submit comments to Mr. Felix M. Mariani, Chief, Environmental Division, Directorate of Public Works (DPW), Building 1442, 9430 Jackson Loop, Fort Belvoir, VA 22060-5116 or email comments to usarmy.belvoir.imcom-atlantic.mbx.enrd@mail.mil.

For further information, contact Mr. Felix M. Mariani, Chief, Environmental Division, DPW at (703) 806-3193.

Sincerely,

A handwritten signature in cursive script, reading "Chris Landgraf", is positioned above the printed name.

Christopher W. Landgraf
Acting Director of Public Works

“LEADERS IN EXCELLENCE”



DEPARTMENT OF THE ARMY
US ARMY INSTALLATION MANAGEMENT COMMAND
HEADQUARTERS, UNITED STATES ARMY GARRISON, FORT BELVOIR
9820 FLAGLER ROAD, SUITE 213
FORT BELVOIR, VIRGINIA 22060-5928

November 4, 2019

Directorate of Public Works

SUBJECT: Environmental Assessment and Draft Finding of No Significant Impact
Caisson Platoon Facility Sub-Area Master Plan/Area Development Plan Fort Belvoir, Virginia

Ms. Cathy Ledec
President
Friends of Huntley Meadows
C/O Huntley Meadows Park
3701 Lockheed Blvd.
Alexandria, Virginia 22306

Dear Ms. Ledec:

The Army has prepared an Environmental Assessment (EA) and draft Finding of No Significant Impact (FNSI) for the Caisson Platoon Facility Sub-Area Master Plan on U.S. Army Garrison Fort Belvoir, Virginia. The EA analyzes the potential environmental impacts that may occur as a result of the proposed implementation of the approved Area Development Plan (ADP). The ADP includes improvements such as enhanced security, an expanded pasture area, consolidated equipment storage, and construction of an indoor riding facility to promote year-round training. The EA has been prepared in accordance with the National Environmental Policy Act (NEPA) of 1969, and regulations implementing the procedural provisions of the NEPA, 40 Code of Federal Regulations (CFR) 1500-1508, and Environmental Analysis of Army Actions, 32 CFR 651.

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For further information, contact Mr. Felix M. Mariani, Chief, Environmental Division, DPW at (703) 806-3193.

Sincerely,

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Christopher W. Landgraf
Acting Director of Public Works

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9820 FLAGLER ROAD, SUITE 213
FORT BELVOIR, VIRGINIA 22060-5928

November 4, 2019

Directorate of Public Works

SUBJECT: Environmental Assessment and Draft Finding of No Significant Impact
Caisson Platoon Facility Sub-Area Master Plan/Area Development Plan Fort Belvoir, Virginia

Ms. Martha Catlin
Associated with Alexandria Friends Meeting at Woodlawn
8324 Mount Vernon Hwy.
Alexandria, Virginia 22309

Dear Ms. Catlin:

The Army has prepared an Environmental Assessment (EA) and draft Finding of No Significant Impact (FNSI) for the Caisson Platoon Facility Sub-Area Master Plan on U.S. Army Garrison Fort Belvoir, Virginia. The EA analyzes the potential environmental impacts that may occur as a result of the proposed implementation of the approved Area Development Plan (ADP). The ADP includes improvements such as enhanced security, an expanded pasture area, consolidated equipment storage, and construction of an indoor riding facility to promote year-round training. The EA has been prepared in accordance with the National Environmental Policy Act (NEPA) of 1969, and regulations implementing the procedural provisions of the NEPA, 40 Code of Federal Regulations (CFR) 1500-1508, and Environmental Analysis of Army Actions, 32 CFR 651.

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For further information, contact Mr. Felix M. Mariani, Chief, Environmental Division, DPW at (703) 806-3193.

Sincerely,

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Christopher W. Landgraf
Acting Director of Public Works

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DEPARTMENT OF THE ARMY
US ARMY INSTALLATION MANAGEMENT COMMAND
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9820 FLAGLER ROAD, SUITE 213
FORT BELVOIR, VIRGINIA 22060-5928

November 4, 2019

Directorate of Public Works

SUBJECT: Environmental Assessment and Draft Finding of No Significant Impact
Caisson Platoon Facility Sub-Area Master Plan/Area Development Plan Fort Belvoir, Virginia

Ms. Elizabeth Crowell
Branch Manager
Fairfax County Cultural Resources Management and Protection Branch
James Lee Center
2855 Annandale Road
Fairfax, Virginia 22042

Dear Ms. Crowell:

The Army has prepared an Environmental Assessment (EA) and draft Finding of No Significant Impact (FNSI) for the Caisson Platoon Facility Sub-Area Master Plan on U.S. Army Garrison Fort Belvoir, Virginia. The EA analyzes the potential environmental impacts that may occur as a result of the proposed implementation of the approved Area Development Plan (ADP). The ADP includes improvements such as enhanced security, an expanded pasture area, consolidated equipment storage, and construction of an indoor riding facility to promote year-round training. The EA has been prepared in accordance with the National Environmental Policy Act (NEPA) of 1969, and regulations implementing the procedural provisions of the NEPA, 40 Code of Federal Regulations (CFR) 1500-1508, and Environmental Analysis of Army Actions, 32 CFR 651.

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For further information, contact Mr. Felix M. Mariani, Chief, Environmental Division, DPW at (703) 806-3193.

Sincerely,

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Christopher W. Landgraf
Acting Director of Public Works

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HEADQUARTERS, UNITED STATES ARMY GARRISON, FORT BELVOIR
9820 FLAGLER ROAD, SUITE 213
FORT BELVOIR, VIRGINIA 22060-5928

November 4, 2019

Directorate of Public Works

SUBJECT: Environmental Assessment and Draft Finding of No Significant Impact
Caisson Platoon Facility Sub-Area Master Plan/Area Development Plan Fort Belvoir, Virginia

Ms. Barbara Rice
Branch Manager
Fairfax County Public Library
Kingstowne Branch
6500 Lansdowne Centre
Alexandria, Virginia 22315-5011

Dear Ms. Rice:

The Army has prepared an Environmental Assessment (EA) and draft Finding of No Significant Impact (FNSI) for the Caisson Platoon Facility Sub-Area Master Plan on U.S. Army Garrison Fort Belvoir, Virginia. The EA analyzes the potential environmental impacts that may occur as a result of the proposed implementation of the approved Area Development Plan (ADP). The ADP includes improvements such as enhanced security, an expanded pasture area, consolidated equipment storage, and construction of an indoor riding facility to promote year-round training. The EA has been prepared in accordance with the National Environmental Policy Act (NEPA) of 1969, and regulations implementing the procedural provisions of the NEPA, 40 Code of Federal Regulations (CFR) 1500-1508, and Environmental Analysis of Army Actions, 32 CFR 651.

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For further information, contact Mr. Felix M. Mariani, Chief, Environmental Division, DPW at (703) 806-3193.

Sincerely,

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Christopher W. Landgraf
Acting Director of Public Works

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DEPARTMENT OF THE ARMY
US ARMY INSTALLATION MANAGEMENT COMMAND
HEADQUARTERS, UNITED STATES ARMY GARRISON, FORT BELVOIR
9820 FLAGLER ROAD, SUITE 213
FORT BELVOIR, VIRGINIA 22060-5928

November 4, 2019

Directorate of Public Works

SUBJECT: Environmental Assessment and Draft Finding of No Significant Impact
Caisson Platoon Facility Sub-Area Master Plan/Area Development Plan Fort Belvoir, Virginia

Ms. Lyn McKinney
Branch Manager
Fairfax County Public Library
Lorton Branch
9520 Richmond Highway
Lorton, Virginia 22079-2124

Dear Ms. McKinney:

The Army has prepared an Environmental Assessment (EA) and draft Finding of No Significant Impact (FNSI) for the Caisson Platoon Facility Sub-Area Master Plan on U.S. Army Garrison Fort Belvoir, Virginia. The EA analyzes the potential environmental impacts that may occur as a result of the proposed implementation of the approved Area Development Plan (ADP). The ADP includes improvements such as enhanced security, an expanded pasture area, consolidated equipment storage, and construction of an indoor riding facility to promote year-round training. The EA has been prepared in accordance with the National Environmental Policy Act (NEPA) of 1969, and regulations implementing the procedural provisions of the NEPA, 40 Code of Federal Regulations (CFR) 1500-1508, and Environmental Analysis of Army Actions, 32 CFR 651.

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For further information, contact Mr. Felix M. Mariani, Chief, Environmental Division, DPW at (703) 806-3193.

Sincerely,

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Christopher W. Landgraf
Acting Director of Public Works

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DEPARTMENT OF THE ARMY
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FORT BELVOIR, VIRGINIA 22060-5928

November 4, 2019

Directorate of Public Works

SUBJECT: Environmental Assessment and Draft Finding of No Significant Impact
Caisson Platoon Facility Sub-Area Master Plan/Area Development Plan Fort Belvoir, Virginia

Ms. Linda Schlekau
Branch Manager
Fairfax County Public Library
Sherwood Regional Branch
2501 Sherwood Hall Lane
Alexandria, Virginia 22306-2799

Dear Ms. Schlekau:

The Army has prepared an Environmental Assessment (EA) and draft Finding of No Significant Impact (FNSI) for the Caisson Platoon Facility Sub-Area Master Plan on U.S. Army Garrison Fort Belvoir, Virginia. The EA analyzes the potential environmental impacts that may occur as a result of the proposed implementation of the approved Area Development Plan (ADP). The ADP includes improvements such as enhanced security, an expanded pasture area, consolidated equipment storage, and construction of an indoor riding facility to promote year-round training. The EA has been prepared in accordance with the National Environmental Policy Act (NEPA) of 1969, and regulations implementing the procedural provisions of the NEPA, 40 Code of Federal Regulations (CFR) 1500-1508, and Environmental Analysis of Army Actions, 32 CFR 651.

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For further information, contact Mr. Felix M. Mariani, Chief, Environmental Division, DPW at (703) 806-3193.

Sincerely,

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Christopher W. Landgraf
Acting Director of Public Works

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November 4, 2019

Directorate of Public Works

SUBJECT: Environmental Assessment and Draft Finding of No Significant Impact
Caisson Platoon Facility Sub-Area Master Plan/Area Development Plan Fort Belvoir, Virginia

Ms. Nilya Carrato
Director
Van Noy Library
5966 12th St.
Building 1024
Fort Belvoir, Virginia 22060

Dear Mrs. Carrato:

The Army has prepared an Environmental Assessment (EA) and draft Finding of No Significant Impact (FNSI) for the Caisson Platoon Facility Sub-Area Master Plan on U.S. Army Garrison Fort Belvoir, Virginia. The EA analyzes the potential environmental impacts that may occur as a result of the proposed implementation of the approved Area Development Plan (ADP). The ADP includes improvements such as enhanced security, an expanded pasture area, consolidated equipment storage, and construction of an indoor riding facility to promote year-round training. The EA has been prepared in accordance with the National Environmental Policy Act (NEPA) of 1969, and regulations implementing the procedural provisions of the NEPA, 40 Code of Federal Regulations (CFR) 1500-1508, and Environmental Analysis of Army Actions, 32 CFR 651.

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For further information, contact Mr. Felix M. Mariani, Chief, Environmental Division, DPW at (703) 806-3193.

Sincerely,

A handwritten signature in cursive script, reading "Chris Landgraf", is positioned above the printed name.

Christopher W. Landgraf
Acting Director of Public Works

“LEADERS IN EXCELLENCE”



United States Department of the Interior



FISH AND WILDLIFE SERVICE
Virginia Ecological Services Field Office
6669 Short Lane
Gloucester, VA 23061-4410
Phone: (804) 693-6694 Fax: (804) 693-9032
<http://www.fws.gov/northeast/virginiafield/>

In Reply Refer To:
Consultation Code: 05E2VA00-2019-SLI-1569
Event Code: 05E2VA00-2020-E-01387
Project Name: Fort Belvoir Caisson EA

November 04, 2019

Subject: Updated list of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*). Any activity proposed on National Wildlife Refuge lands must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered

species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

<http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF>

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan (http://www.fws.gov/windenergy/eagle_guidance.html). Additionally, wind energy projects should follow the wind energy guidelines (<http://www.fws.gov/windenergy/>) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm>; <http://www.towerkill.com>; and <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html>.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List
 - USFWS National Wildlife Refuges and Fish Hatcheries
-

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Virginia Ecological Services Field Office

6669 Short Lane

Gloucester, VA 23061-4410

(804) 693-6694

Project Summary

Consultation Code: 05E2VA00-2019-SLI-1569

Event Code: 05E2VA00-2020-E-01387

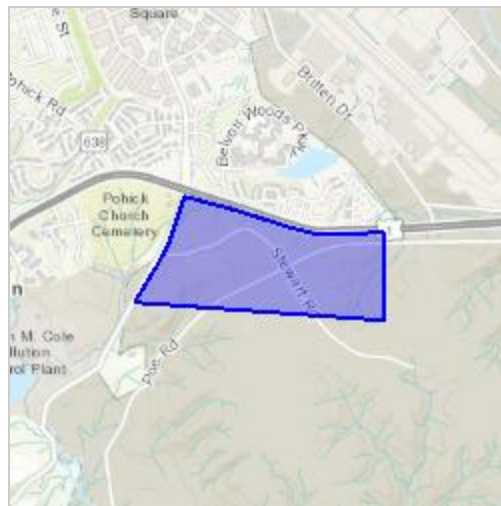
Project Name: Fort Belvoir Caisson EA

Project Type: DEVELOPMENT

Project Description: Improvements include: the enhancement of the facility's security; relocation/expansion of the facility's classroom; expansion of the pasture area to accommodate 27 horses; provision of pasture fencing; provision of a separate hay storage facility; consolidation of equipment storage facilities; provision of an indoor riding training facility for year-round training; expansion of the training trail network; provision of permanent vehicular parking facilities to accommodate training and maintenance needs; paving of existing roadways; provision of a paved and covered roll-off manure dumpster area; provision of effective stormwater management BMPs, and enhancement of facility signing.

Project Location:

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/place/38.70606689602461N77.18763414213166W>



Counties: Fairfax, VA

Endangered Species Act Species

There is a total of 1 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries¹, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

-
1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Mammals

NAME	STATUS
Northern Long-eared Bat <i>Myotis septentrionalis</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9045	Threatened

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

USFWS National Wildlife Refuge Lands And Fish Hatcheries

Any activity proposed on lands managed by the [National Wildlife Refuge](#) system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS OR FISH HATCHERIES WITHIN YOUR PROJECT AREA.



United States Department of the Interior

FISH AND WILDLIFE SERVICE



Virginia Field Office
6669 Short Lane
Gloucester, VA 23061

Date: November 4, 2019

Self-Certification Letter

Project Name: Caisson Platoon Facility Sub-Area Master Plan/Area Development Plan

Dear Applicant:

Thank you for using the U.S. Fish and Wildlife Service (Service) Virginia Ecological Services online project review process. By printing this letter in conjunction with your project review package, you are certifying that you have completed the online project review process for the project named above in accordance with all instructions provided, using the best available information to reach your conclusions. This letter, and the enclosed project review package, completes the review of your project in accordance with the Endangered Species Act of 1973 (16 U.S.C. 1531-1544, 87 Stat. 884), as amended (ESA). This letter also provides information for your project review under the National Environmental Policy Act of 1969 (P.L. 91-190, 42 U.S.C. 4321-4347, 83 Stat. 852), as amended. A copy of this letter and the project review package must be submitted to this office for this certification to be valid. This letter and the project review package will be maintained in our records.

The species conclusions table in the enclosed project review package summarizes your ESA conclusions. These conclusions resulted in:

- “no effect” determinations for proposed/listed species and/or proposed/designated critical habitat; and/or
- Action may affect the northern long-eared bat; however, any take that may occur as a result of the Action is not prohibited under the ESA Section 4(d) rule adopted for this species at 50 CFR § 17.40(o) [as determined through the Information, Planning, and Consultation System (IPaC) northern long-eared bat assisted determination key]; and/or
- “may affect, not likely to adversely affect” determinations for proposed/listed species and/or proposed/designated critical habitat.

We certify that use of the online project review process in strict accordance with the instructions provided as documented in the enclosed project review package results in reaching the appropriate determinations. Therefore, we concur with the determinations described above for proposed and listed species and proposed and designated critical habitat. Additional coordination with this office is not needed.

Candidate species are not legally protected pursuant to the ESA. However, the Service encourages consideration of these species by avoiding adverse impacts to them. Please contact this office for additional coordination if your project action area contains candidate species.

Should project plans change or if additional information on the distribution of proposed or listed species, proposed or designated critical habitat becomes available, this determination may be reconsidered. This certification letter is valid for 1 year.

Information about the online project review process including instructions and use, species information, and other information regarding project reviews within Virginia is available at our website http://www.fws.gov/northeast/virginiafield/endspecies/project_reviews.html. If you have any questions, please contact Troy Andersen of this office at (804) 824-2428.

Sincerely,

A handwritten signature in blue ink that reads "Cynthia A. Schulz". The signature is written in a cursive style and is positioned above the printed name and title.

Cindy Schulz
Field Supervisor
Virginia Ecological Services

Enclosures - project review package

From: [Traver, Carrie](#)
To: [USARMY Ft Belvoir IMCOM Atlantic Mailbox ENRD](#)
Cc: [Rudnick, Barbara](#)
Subject: [Non-DoD Source] Environmental Assessment and Draft FONSI - Caisson Platoon Facility Sub-Area Master Plan/Area Development Plan - Fort Belvoir, VA
Date: Wednesday, December 4, 2019 1:46:51 PM

All active links contained in this email were disabled. Please verify the identity of the sender, and confirm the authenticity of all links contained within the message prior to copying and pasting the address to a Web browser.

Dear Mr. Mariani,

Thank you for the opportunity to review the Environmental Assessment (EA or Study) and Draft Finding of No Significant Impact for the Fort Belvoir Caisson Platoon Facility Sub-Area Master Plan/Area Development, dated April 2019. Our comments are prepared in accordance with the National Environmental Policy Act (NEPA) of 1969, Section 309 of the Clean Air Act and the Council on Environmental Quality regulations implementing NEPA (40 CFR 1500-1508).

The EA states that the purpose of this project is to promote a sustainable, world-class facility in support of the Caisson Platoon's mission and to provide a secure, high-quality environment for soldiers, horses, civilians, and other users. We have several recommendations for your consideration regarding the Study.

The Proposed Action would result in increasing the Caisson Platoon Facility from its existing 10.5 acres to 39.1 acres, including expansion of riding trails and increasing the current 5.8 acres of pasture to 27.4 acres. This expansion requires the clearing of 27.53 acres of existing forest area.

Threatened and Endangered Species

The recommendations from Fish and Wildlife Service are critical to prevent and reduce impacts on federally-listed species, particularly the Threatened northern long-eared bat; likewise, recommendations from the Virginia Department of Game and Inland Fisheries should be followed to reduce the potential for impacts on state-listed species. Section 7 consultation should be concluded and documented prior to any tree removal or earth disturbance. Please note that the Environmental Assessment provided for download did not include documentation of agency coordination.

Habitat and biological resources

The 27.53 acres of tree removal predominantly consist of upland hardwood forests and beech mixed oak forest. The EA concludes that this impact does not reach the threshold of significant.

However, as noted, the 27.53 acres of forest is Priority 1 for retention, and the ecological value, including habitat function, is high. While impacts will occur, there appear to be other opportunities to mitigate effects on wildlife and habitat.

The EA states that a tree survey would be conducted to identify existing tree species that may remain within the proposed pasture area. Preserving some trees in the pasture has multiple benefits. In addition to the ecological functions provided by mature trees (which are detailed in the EA and include habitat, stormwater interception, stabilization, and others), incorporating trees can promote the health and comfort of the horses by providing shade, windbreaks, and reducing muddy conditions in the growing season. The presence of large trees in or near pastures may also encourage hunting of rats and mice by birds of prey, which also is a benefit to stable facilities.

The EA indicates that Fort Belvoir is a Partners in Flight participant. We recommend consulting with Partners in Flight to explore opportunities to create and manage pastures as habitat. Evaluating practices such as mowing timing and frequency, grass species, and allowing the growth of hedgerow vegetation may enhance habitat value and

diversity without adversely impacting the value of the pastures for grazing.

The Study also states that the Fort Belvoir Tree Policy Memorandum requires planting of two trees per each tree removed that is 4" or more in diameter at breast height. However, Section 3.4.2.3 notes that most available space for replacement tree planting has been previously utilized, which will require the consideration of alternative mitigation. As the policy is cited to reduce impacts from tree removal, it would be beneficial to identify and discuss the mitigation options that will be considered.

Tree removal

The EA indicates that all trees removed for this project would be chipped or taken to landfills within the quarantine zone or be used onsite for soil stabilization in compliance with the Federal Emerald Ash Borer Quarantine (7 CFR 301.53). We recommend stating that the trees will be chipped onsite and used for stabilization, as this appears to be the assumption in the document and is reflected in the general conformity analysis. If trees will be trucked to a landfill (or disposed of in a different way) factors such as the emission sources and calculations and projected traffic during the construction period should be re-analyzed for that scenario.

Water Resources

A total of 91 linear feet of streams (140 square feet) would be impacted through grading and fill placement as the two intermittent tributaries to Pohick Creek would be terminated at the perimeter of the pasture. Drainage to these two intermittent streams would be diverted by the proposed vegetated swales. The EA concludes that the stream impacts would be minimal. However, impacts to local surface water flow, volume, and quality are unclear without a more detailed assessment of stream hydrology sources and potential impacts from discharges.

Intermittent streams are seasonally connected to groundwater sources. Even minimal grading, compaction, or clearing/grubbing can disrupt or reroute shallow groundwater sources; this could have adverse impacts on the hydrology and water quality of the remaining stream reaches and their habitat. To avoid and minimize such impacts, disturbance to seeps or springs should be avoided if possible. If intercepted, spring boxes or similar techniques should capture the flow and route it to the stream directly. Capture of groundwater by the stormwater management system can reduce the capacity of the system and can lead to water quality degradation through temperature impacts and loss of dilution. Furthermore, we recommend routing flow as close to the top of remaining channels as possible as the location of the proposed stormwater discharge points can create impacts by re-routing flow and dewatering stream reaches.

The EA states that post construction stormwater would be managed through multiple stormwater retention basins designed to have a shallow pool of water all the time. We suggest that Fort Belvoir consider a combination of BMPs, including native planting areas that do not include permanent pools of standing water. As part of this analysis, potential temperature impacts from stormwater BMPs that discharge to streams should be considered; standing surface water sources generally warm in sunlight and have the potential to adversely impact downstream biota. Also, where standing water exists, it may require regular treatment for mosquitos as a maintenance activity.

Noise

The EA does not analyze noise from construction impacts as these activities would be performed during 7AM and 9PM and would comply with all noise ordinances and regulations. However, noise can impact quality of life for nearby residents, particularly young children. As the proposed construction window appears to be 3 years, we recommend further consideration of potential noise impacts on nearby residences from equipment, tree removal, and traffic especially during evening hours when residents may be outside.

Cultural resources

Section 106 consultation with Virginia State Historic Preservation Office and interested Indian Nations should be concluded prior to starting any earth disturbance.

Cumulative effects

The discussion of Cumulative Effects in section 3.4 lists actions that were recently completed or planned at Fort Belvoir, including the construction of the National Museum of the U.S. Army. We would recommend including an expanded discussion of cumulative impacts from tree clearing on habitat that includes a discussion of the value of the previously cleared areas and the mitigation provided to offset the losses. Likewise, a discussion of the cumulative previous impacts to water resources onsite and mitigative actions taken would be useful.

Section 3.4.2.1 concludes the action would result in minimal adverse cumulative impacts related to air quality as the proposed new indoor riding arena and classroom facility would be more energy efficient than existing buildings. It would be helpful if the study clarified how the energy use of expanded facility, including the addition of the climate-controlled riding arena and amenities, has been evaluated.

As Fort Belvoir has a number of projects completed, underway or planned, we would be interested in understanding more about these activities. We would welcome the opportunity to meet with you at the facility and discuss at your convenience.

Again, thank you for providing us with notice to review the EA. If you have any questions or would like to discuss these comments, please don't hesitate to contact me.

Sincerely,
Carrie Traver

Carrie Traver
Life Scientist
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IN REPLY REFER TO:
NCPC FILE No. MP20-8134

December 4, 2019

Mr. Felix M. Mariani
Environmental Division
Directorate of Public Works
Building 1442
9430 Jackson Loop
Fort Belvoir, Virginia 22060-5116

Re: Caisson Platoon Facility Area Development Plan – Draft Environmental Assessment / Finding of No Significant Impact Review Comments

Dear Mr. Mariani:

Thank you for the opportunity to comment on the draft Environmental Assessment (EA) and Finding of No Significant Impact (FONSI) for the Caisson Platoon Facility Area Development Plan on behalf of the National Capital Planning Commission (NCPC). As the federal government's planning agency in the National Capital Region, NCPC has advisory review authority over projects at Fort Belvoir under the National Capital Planning Act (40 USC § 8722 (b) (1)).¹ Please use the following staff comments, which reflect our *Comprehensive Plan for the National Capital* and the current 2015 Fort Belvoir master plan, as guidance on future project/plan development. After reviewing the EA, we recommend future coordination between staff from NCPC, Fairfax County, and Fort Belvoir to discuss ways to minimize project impacts to the surrounding environment.

In general, we acknowledge the defined Purpose and Need, which is to redevelop the current Caisson Platoon Facility to better serve the mission of the Platoon, as a sustainable, secure, high-quality environment for soldiers, civilians, horses, and other users. While the project intent is admirable - to develop a facility that adheres to the highest standards for horse care - the Army should be flexible in the size and design of the facility to better protect environmental and historic resources. Specifically, the caisson facility would impact two Resource Protection Areas (RPAs), a significant amount of "Priority 1" forest land, and part of a historic (Pohick Church) district.²

Master Plan Consistency

The EA should include more information about the project's consistency with the current 2015 master plan since the caisson facility expansion is not envisioned in the planning documents, and the Vision and Development Plan characterizes the Southwest Area as largely undevelopable with extensive operational

¹ The Planning Act requires federal agencies to advise and consult with NCPC in the preparation of agency plans prior to preparation of construction plans.

² "Priority 1" forest is defined as having a well-developed structure, with the highest potential for contributing to good water quality.

Mr. Felix M. Mariani
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and environmental constraints. The master plan shows the project area as situated on land that is only moderately-to-least suitable for new development, rather than compatible for development.

Tree Removal

The EA describes the project's potential tree removal area of 27.5 acres as insignificant based on its relative size to the total area of contiguous forest on installation property (2,305 acres) and additional nearby recreational and wildlife refuge forested areas (6,311 acres). We believe a more accurate assessment would be to show the impact area compared to the 115-acre study area, which equates to approximately 24 percent. Within the context of the study area, we believe the potential tree removal to be relatively significant without appropriate mitigation. The EA states that tree removal will be mitigated pursuant to the Fort Belvoir tree replacement policy, with no additional information related to where new trees will be planted, removal/replacement quantities, and/or tree maintenance. The final EA and FONSI should include more detailed information related to mitigation considering the proposed scale of the removal.

NCPC encourages minimal tree/vegetation removal and appropriate mitigation, with the intent of no net tree loss on the project site. Specifically, our Comprehensive Plan tree mitigation (FE.G.2) policy specifies one-to-one replacement for trunk widths of 10" or less, and application of local jurisdiction replacement requirements for larger trees with trunk widths of greater than 10-inches. Projects should follow Federal Environment Element policies as closely as possible, with landscape designs using native vegetation, based on the latest landscape design strategies. During design development, we encourage applicants to look for opportunities to plant trees and vegetation in parking lots for their user and environmental benefits.

Water Resources / Stormwater Management

With the project's potential large-scale tree removal, future impacts to nearby streams, wetlands, and the Potomac River may be magnified and therefore, water resource impact mitigation should be prioritized during design development. The EA shows two intermittent streams with associated RPAs and protective buffers that overlap the study area. The Army should consult with Fairfax County planners to ensure that impacts are minimized pursuant to Executive Order 13508, Chesapeake Bay Protection and Restoration, which encourages coordination to protect and restore the health of the Chesapeake Bay Watershed. In addition, please reference NCPC policies that pertain to floodplains, wetlands, and water bodies in the Federal Environment Element.

New development on Fort Belvoir is required to comply with Virginia state stormwater regulations as well as federal requirements under Section 438 of the Energy Independence Security Act (www.epa.gov/sites/production/files/2015-09/documents/eisa-438.pdf). We recommend compliance with stormwater requirements through interconnected features (bioswales, permeable paving, green roofs, cisterns, rain barrels, etc.) rather than detention ponds, with their potential for unnatural heating of captured water and tendency to attract nuisance wildlife. Project designers should consider pavers and permeable materials for on-site parking and sidewalks to help manage site off-flow stormwater volume. Consult NCPC Comprehensive Plan Federal Environment Element policies for guidance during design development (pages 8-10).

Employee Travel

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Page Three

Our Commission encourages sustainable travel behavior (using transit, biking, walking, carpool/vanpool rather than driving alone) amongst federal installations throughout the National Capital Region, which includes Fort Belvoir. Our Comprehensive Plan employs a system of parking ratio goals for federal installations based on future projected accessibility levels. NCPC's goal for Fort Belvoir is a ratio of no more than one employee space for every two employees (50% of the total employment population) under the Commission's new ratio policies. The ratios apply to employee parking only, and not to visitor, government vehicle, service, and/or other types of special parking. It is the intent of NCPC's transportation-related policies and goals to encourage more sustainable travel amongst military and other federal employees in the Region. For more information, consult our Transportation Element.

Cultural Resources

The EA notes that some proposed caisson facility improvements would be located within the Pohick Church Overlay District but concludes no impact from the project to the historic district nor any other cultural resources. NCPC staff notes that the current 2015 master plan prohibits all development within 1/4-mile of Pohick Church (page 2-28, Vision and Development Plan) however, some project improvements are planned within the 1/4-mile prohibition threshold. As such, the project appears to be inconsistent with the Fort Belvoir master plan. The Army should reconsider the layout/scope of the facility expansion in light of the restriction, in addition to reconsideration of the EA's "no impact" finding and changes to the level of mitigation.

We appreciate the opportunity to comment on the draft EA and FONSI for the Caisson Platoon Facility Area Development Plan. In follow-up to this letter, we recommend consultation between NCPC, Fairfax County, and Fort Belvoir Department of Public Works staff to discuss how to improve the ADP so that the future facility expansion is more consistent with NCPC and County policies. If you have any questions, please contact Michael Weil at (202) 482-7253 / michael.weil@ncpc.gov, or consult our Agency website (www.ncpc.gov/) for information regarding our Comprehensive Plan policies, review process, and/or submission guidelines. We look forward to future coordination with you.

Sincerely,

Diane Sullivan 12/4/19

Diane Sullivan
Director, Urban Design and Plan Review Division

cc: Mr. Noel Kaplan, Fairfax County Department of Planning and Zoning



COMMONWEALTH of VIRGINIA

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December 16, 2019

Mr. Felix M. Mariani
Chief, Environmental Division
Directorate of Public Works (DPW), Building 1442
9430 Jackson Loop, Fort Belvoir, VA 22060-5116
Sent via email: usarmy.belvoir.imcomatlantic.mbx.enrd@mail.mil

RE: U.S. Department of the Army, Draft Environmental Assessment and Federal Consistency Determination: Fort Belvoir Caisson Platoon Facility Sub-Area Master Plan/Area Development Plan, Fairfax County (DEQ 19-140F).

Dear Mr. Mariani:

The Commonwealth of Virginia has completed its review of the draft Environmental Assessment (EA), which includes a federal consistency determination (FCD), for the above-referenced project. The Department of Environmental Quality (DEQ) is responsible for coordinating Virginia's review of federal environmental documents prepared pursuant to the National Environmental Policy Act (NEPA) and responding to appropriate federal officials on behalf of the Commonwealth. DEQ is also responsible for coordinating state reviews of FCDs submitted under the Coastal Zone Management Act. The following agencies and locality participated in this review:

Department of Environmental Quality
Department of Conservation and Recreation
Department of Health
Virginia Marine Resources Commission
Fairfax County

The Department of Game and Inland Fisheries, Department of Historic Resources, Department of Forestry and the Northern Virginia Regional Commission also were invited to comment on the project.

PROJECT DESCRIPTION

The U.S. Department of the Army is proposing to construct improvements at the Caisson Platoon Facility at the U.S. Army Garrison Fort Belvoir in Fairfax County. Under the proposed action, the improvements include: the enhancement of the facility's security; relocation/expansion of the facility's classroom; expansion of the pasture area to accommodate 27 horses; provision of pasture fencing; provision of a separate hay storage facility; consolidation of equipment storage facilities; provision of an indoor riding training facility for year-round training; expansion of training trails, provision of permanent vehicular parking facilities to accommodate training and maintenance needs; paving of existing roadways; provision of a paved and covered rolloff manure dumpster area; provision of effective stormwater management Best Management Practices (BMPs), and enhancement of facility signing. This project would expand the facility from its existing 10.5 acres to 39.1 acres, including increasing the current 5.8 acres of pasture to 27.4 acres and riding trails. The clearing of 27.53 acres of existing forest area is required for pasture and trail expansion. The study area is situated along the western boundary of Fort Belvoir, south of U.S. Route 1, in a rural setting surrounded by woodlands and isolated from Fort Belvoir's main post. Boundaries to the study area are U.S. Route 1 (Jefferson Davis Highway) to the north and Old Colchester Road to the west. The primary entrance to the Caisson Platoon Facility, Fort Stewart Road, is located off Old Colchester Road.

FEDERAL CONSISTENCY PURSUANT TO THE COASTAL ZONE MANAGEMENT ACT

Pursuant to the Coastal Zone Management Act of 1972, as amended, activities both within and outside of the Commonwealth's designated coastal zone with reasonably foreseeable effects on any coastal uses or resources resulting from a Federal agency activity (15 CFR Part 930, Subpart C) must be consistent to the maximum extent practicable with Virginia's Coastal Zone Management (CZM) Program. The Virginia CZM Program consists of a network of programs administered by several agencies. DEQ coordinates the review of FCDs with agencies administering the enforceable policies of the Virginia CZM Program.

PUBLIC PARTICIPATION

In accordance with 15 CFR §930.2, a public notice with a comment period of November 14, 2019 to December 4, 2019 of this proposed action was published in OEIR's Program Newsletter and on the DEQ website. No public comments were received in response to the notice.

FEDERAL CONSISTENCY CONCURRENCE

The FCD states that the project is consistent to the maximum extent practicable with the enforceable policies of the Virginia CZM Program. The reviewing agencies that are responsible for the administration of the enforceable policies generally agree with the FCD. Based on the review of the FCD and the comments submitted by agencies administering the enforceable policies of the Virginia CZM Program, DEQ concurs that the proposed project is consistent to the maximum extent practicable with the Virginia CZM Program provided all applicable permits and approvals are obtained as described. In addition, in accordance with 15 CFR §930.39(c), DEQ recommends that the Army consider the impacts of the proposed action on the [advisory policies](#) of the Virginia CZM Program. However, other state approvals which may apply to this project are not included in this concurrence. Therefore, the responsible agent must also ensure that this project is constructed and operated in accordance with all applicable federal, state and local laws and regulations.

ENVIRONMENTAL IMPACTS AND MITIGATION

1. Wetlands and Water Quality. The EA (Appendix C, FCD, page 71) states that the Proposed action would result in the unavoidable loss of two isolated, non-tidal Palustrine emergent wetlands (0.06 acres) and one, isolated, non-tidal palustrine emergent wetland (0.06 acres). A total of 91 linear feet of intermittent stream length (140 square feet) would be impacted through grading and fill placement.

1(a) Agency Jurisdiction. The State Water Control Board promulgates Virginia's water regulations covering a variety of permits to include the Virginia Pollutant Discharge Elimination System Permit regulating point source discharges to surface waters, Virginia Pollution Abatement Permit regulating sewage sludge, storage and land application of biosolids, industrial wastes (sludge and wastewater), municipal wastewater, and animal wastes, the Surface and Groundwater Withdrawal Permit, and the Virginia Water Protection (VWP) Permit regulating impacts to streams, wetlands, and other surface waters. The VWP Permit is a state permit which governs wetlands, surface water, and surface water withdrawals and impoundments. It also serves as §401 certification of the federal Clean Water Act and §404 permits for dredge and fill activities in waters of the U.S. The VWP Permit Program is under the Office of Wetlands and Stream Protection within the DEQ Division of Water Permitting. In addition to central office staff who review and issue VWP permits for transportation and water withdrawal projects, the six DEQ regional offices perform permit application reviews and issue permits for the covered activities:

- Clean Water Act, §401;
- Section 404(b)(i) Guidelines Mitigation Memorandum of Agreement (2/90);
- State Water Control Law, Virginia Code section 62.1-44.15:20 *et seq.*; and
- State Water Control Regulations, 9VAC25-210-10.

Tidal wetlands are regulated by the Virginia Marine Resources Commission (VMRC) under the authority of Virginia Code §28.2-1301 through §28.2-1320.

1(b) Requirements. The DEQ Northern Regional Office (NRO) states that a VWP permit from DEQ may be required. Upon receipt of a Joint Permit Application, for the proposed surface water impacts, DEQ VWP Permit staff will review the proposed project in accordance with the VWP permit program regulations and current VWP permit program guidance.

VMRC states that any construction with impacts to tidal wetlands will need a permit from the Fairfax County Wetlands Board. They would also recommend mitigation to offset any impacts during the project.

1(c) Agency Recommendations. In general, DEQ recommends that stream and wetland impacts be avoided to the maximum extent practicable. To minimize unavoidable impacts to wetlands and waterways, DEQ recommends the following practices:

- Operate machinery and construction vehicles outside of stream-beds and wetlands; use synthetic mats when in-stream work is unavoidable.
- Preserve the top 12 inches of material removed from wetlands for use as wetland seed and root-stock in the excavated area.
- Design erosion and sedimentation controls in accordance with the most current edition of the *Virginia Erosion and Sediment Control Handbook*. These controls should be in place prior to clearing and grading, and maintained in good working order to minimize impacts to state waters. The controls should remain in place until the area is stabilized.
- Place heavy equipment, located in temporarily impacted wetland areas, on mats, geotextile fabric, or use other suitable measures to minimize soil disturbance, to the maximum extent practicable.
- Restore all temporarily disturbed wetland areas to pre-construction conditions and plant or seed with appropriate wetlands vegetation in accordance with the cover type (emergent, scrub-shrub or forested). The applicant should take all appropriate measures to promote revegetation of these areas. Stabilization and restoration efforts should occur immediately after the temporary disturbance of each wetland area instead of waiting until the entire project has been completed.
- Place all materials which are temporarily stockpiled in wetlands, designated for use for the immediate stabilization of wetlands, on mats or geotextile fabric in order to prevent entry in state waters. These materials should be managed in a manner that prevents leachates from entering state waters and must be entirely removed within thirty days following completion of that construction activity. The disturbed areas should be returned to their original contours, stabilized within thirty days following removal of the stockpile, and restored to the original

vegetated state.

- Clearly flag or mark all non-impacted surface waters within the project or right-of-way limits that are within 50 feet of any clearing, grading or filling activities for the life of the construction activity within that area. The project proponent should notify all contractors that these marked areas are surface waters where no activities are to occur.
- Employ measures to prevent spills of fuels or lubricants into state waters.

1(d) Conclusion. Provided a VWP Permit or approval is obtained if necessary and the requirements are met, the proposed project would be consistent to the maximum extent practicable with the wetlands management enforceable policy of the Virginia CZM Program.

2. Subaqueous Lands. The EA (Appendix C, FCD, page 71) states that the project would have no foreseeable impact on subaqueous resources.

2(a) Agency Jurisdiction. The VMRC regulates encroachments in, on or over state-owned subaqueous beds as well as tidal wetlands pursuant to Virginia Code §28.2-1200 through 1400. For nontidal waterways, VMRC states that it has been the policy of the Habitat Management Division to exert jurisdiction only over the beds of perennial streams where the upstream drainage area is 5 square miles or greater. The beds of such waterways are considered public below the ordinary high water line.

2(b) Agency Findings. VMRC states that there are no subaqueous lands in close proximity to the project area.

2(c) Conclusion. As proposed, the project would be consistent to the maximum extent practicable with the subaqueous lands management enforceable policy of the Virginia CZM Program.

3. Air Pollution Control. The EA (Appendix C, FCD, page 72) states that a construction emissions estimate indicates that the proposed action would not generate sufficient emissions to trigger a need for a full General Conformity Analysis. No changes to Fort Belvoir's Title V air permit would be required.

3(a) Agency Jurisdiction. The DEQ Air Division, on behalf of the State Air Pollution Control Board, is responsible for developing regulations that implement Virginia's Air Pollution Control Law (Virginia Code §10.1-1300 *et seq.*). DEQ is charged with carrying out mandates of the state law and related regulations as well as Virginia's federal obligations under the Clean Air Act as amended in 1990. The objective is to protect and enhance public health and quality of life through control and mitigation of air pollution. The division ensures the safety and quality of air in Virginia by monitoring and analyzing air quality data, regulating sources of air pollution, and working with local, state and

federal agencies to plan and implement strategies to protect Virginia's air quality. The appropriate DEQ regional office is directly responsible for the issuance of necessary permits to construct and operate all stationary sources in the region as well as monitoring emissions from these sources for compliance. As a part of this mandate, environmental impact reviews (EIRs) of projects to be undertaken in the state are also reviewed. In the case of certain projects, additional evaluation and demonstration must be made under the general conformity provisions of state and federal law.

The Air Division regulates emissions of air pollutants from industries and facilities and implements programs designed to ensure that Virginia meets national air quality standards. The most common regulations associated with projects are:

- Open burning: 9VAC5-130 *et seq.*
- Fugitive dust control: 9VAC5-50-60 *et seq.*
- Permits for fuel-burning equipment: 9VAC5-80-1100 *et seq.*

3(b) Ozone Nonattainment Area. According to the DEQ Air Division, the project site is located in an ozone nonattainment area and an emission control area for volatile organic compounds (VOCs) and oxides of nitrogen (NO_x), which are contributors to ozone pollution.

3(c) Requirements. The following requirements may be applicable to the proposed project.

3(c)(i) Fugitive Dust. During land-disturbing activities, fugitive dust must be kept to a minimum by using control methods outlined in 9VAC5-50-60 *et seq.* of the Regulations for the Control and Abatement of Air Pollution. These precautions include, but are not limited to, the following:

- Use, where possible, of water or suitable chemicals for dust control during the proposed demolition and construction operations and from material stockpiles;
- Installation and use of hoods, fans and fabric filters to enclose and vent the handling of dusty materials;
- Covering of open equipment for conveying materials; and
- Prompt removal of spilled or tracked dirt or other materials from paved streets and removal of dried sediments resulting from soil erosion.

3(c)(ii) Open Burning. If project activities change to include the burning of vegetative debris, this activity must meet the requirements under 9VAC5-130 *et seq.* of the regulations for open burning, and it may require a permit. The regulations provide for, but do not require, the local adoption of a model ordinance concerning open burning. Contact officials with the locality to determine what local requirements, if any, exist.

3(c)(iii) Fuel-Burning Equipment. Fuel-burning equipment (generators, compressors, etc.) or any other air-pollution-emitting equipment may be subject to registration or permitting requirements.

3(d) Conclusion. Provided the project adheres to any applicable requirements, the project would be consistent to the maximum extent practicable with the air pollution control enforceable policy of the Virginia CZM Program.

4. Coastal Lands Management. The EA (Appendix C, FCD, page 72) states that all erosion and sediment controls would be designed in accordance with the Chesapeake Bay Preservation Area Designation and Management guidelines. In addition, there are lands analogous to designated Chesapeake Bay Resource Protection Areas (RPAs) located within the proposed project area. The RPAs are associated with the two intermittent stream corridors, which are proposed to be impacted, that originate within the existing pasture area.

4(a) Agency Jurisdiction. The DEQ Local Government Assistance Programs (LGAP) administers the Chesapeake Bay Preservation Act (Virginia Code §62.1-44.15:67 *et seq.*) (Bay Act) and Chesapeake Bay Preservation Area Designation and Management Regulations (9VAC25-830-10 *et seq.*). Each Tidewater locality must adopt a program based on the Chesapeake Bay Preservation Act and the Chesapeake Bay Preservation Area Designation and Management Regulations. The Act and regulations recognize local government responsibility for land use decisions and are designed to establish a framework for compliance without dictating precisely what local programs must look like. Local governments have flexibility to develop water quality preservation programs that reflect unique local characteristics and embody other community goals. Such flexibility also facilitates innovative and creative approaches in achieving program objectives. The regulations address nonpoint source pollution by identifying and protecting certain lands called Chesapeake Bay Preservation Areas. The regulations use a resource-based approach that recognizes differences between various land forms and treats them differently.

4(b) Chesapeake Bay Preservation Area. In Fairfax County, the areas protected by the Chesapeake Bay Preservation Act, as locally implemented, require conformance with performance criteria. These areas include Resource Protection Areas (RPAs) and Resource Management Areas (RMAs) as designated by the local government. RPAs include tidal wetlands, certain non-tidal wetlands and tidal shores. RPAs also include a 100-foot vegetated buffer area located adjacent to and landward of these features and along both sides of any water body with perennial flow. RMAs, which require less stringent performance criteria, include those areas of the county not included in the RPAs.

4(c) Clarification. In response to questions from the DEQ LGAP, Fort Belvoir provided additional information (email, November 15, 2019, attached). Fort Belvoir states that intermittent streams referenced were displayed incorrectly in figure 3-4. Intermittent streams should not depict a 100-foot buffer that is analogous to an RPA. Therefore, they should not be referenced on Page 72 of the EA and the applicable sections of the EA and FCD will be revised to reflect this information. In addition, the Fort Belvoir Tree Policy Memorandum is an informal name for Garrison Policy #27.

4(d) Agency Findings. The EA submittal indicates that 2.1 Proposed Action, Figure 2-3 (Proposed Action with Constraints; p. 17) is the preferred course of action. Expansion of the existing Caisson Platoon Facility from 10.5 acres to 39.1 acres will result in the removal of 27.53 acres of trees and woody vegetation. A Fort Belvoir memorandum dated August 2, 2018 (subject – Policy Letter #27: Tree Removal and Protection) states, “Two new trees shall be planted for each live tree four inches in diameter and larger removed through construction.” The same memorandum indicates that a Tree Protection Plan shall be prepared in accordance with requirements of the Fort Belvoir Directorate of Public Works – Environmental Division.

4(e) Requirements. Under the Federal Consistency Regulations of the Coastal Zone Management Act of 1972, federal actions in Virginia must be conducted in a manner consistent to the maximum extent practicable with the enforceable policies of the Virginia Coastal Zone Management Program. Those enforceable policies are administered through the Chesapeake Bay Preservation Act and Regulations.

Federal actions on installations located within Tidewater Virginia are required to be consistent with the performance criteria of the Regulations on lands analogous to locally designated RPAs and RMAs, as provided in 9VAC25-830-130 and 140 of the Regulations, including the requirement to minimize land disturbance (including access and staging areas), retain existing vegetation and minimize impervious cover as well as including compliance with the requirements of the Virginia Erosion and Sediment Control Handbook, and stormwater management criteria consistent with water quality protection provisions of the Virginia Stormwater Management Regulations.” For land disturbance over 2,500 square feet, the project must comply with the requirements of the *Virginia Erosion and Sediment Control Handbook*.

4(f) Conclusion. Provided adherence to the above requirements, particularly as relates to the 2:1 tree replacement ratio and the pending Tree Protection Plan referenced above, the proposed activity would be consistent to the maximum extent practicable with the coastal lands management enforceable policy of the Virginia CZM Program.

5. Erosion and Sediment Control and Stormwater Management. According to the EA (Appendix C, FCD, page 72), temporary erosion and sediment control measures and/or permanent stormwater Best Management Practices (BMPs) would be employed

to minimize impacts to water quality from disturbance during tree removal and potential increase in stormwater runoff.

5(a) Agency Jurisdiction. The DEQ Office of Stormwater Management (OSM) administers the following laws and regulations governing construction activities:

- Virginia Erosion and Sediment Control Law (VESCL) (§ 62.1-44.15:51 *et seq.*) and Regulations (VESCL&R) (9VAC25-840);
- Virginia Stormwater Management Act (VSMA) (§ 62.1-44.15:24 *et seq.*);
- Virginia Stormwater Management Program (VSMP) regulation (9VAC25-870); and
- 2014 General Virginia Pollutant Discharge Elimination System (VPDES) Permit for Discharges of Stormwater from Construction Activities (9VAC25-880).

In addition, DEQ is responsible for the VSMP General Permit for Stormwater Discharges from Construction Activities related to Municipal Separate Storm Sewer Systems (MS4s) and construction activities for the control of stormwater discharges from MS4s and land disturbing activities under the Virginia Stormwater Management Program (9VAC25-890-40).

5(b) Requirements.

5(b)(i) Erosion and Sediment Control and Stormwater Management Plans. The applicant and its authorized agents conducting regulated land-disturbing activities on private and public lands in the state must comply with VESCL&R and VSMA and regulations, including coverage under the general permit for stormwater discharge from construction activities, and other applicable federal nonpoint source pollution mandates (e.g. Clean Water Act-Section 313, federal consistency under the Coastal Zone Management Act). Clearing and grading activities, installation of staging areas, parking lots, roads, buildings, utilities, borrow areas, soil stockpiles, and related land-disturbing activities that result in the total land disturbance of equal to or greater than 10,000 square feet (2,500 square feet in Chesapeake Bay Preservation Area) would be regulated by VESCL&R. Accordingly, the applicant must prepare and implement an erosion and sediment control (ESC) plan to ensure compliance with state law and regulations. Land-disturbing activities that result in the total land disturbance of equal to or greater than 1 acre (2,500 square feet in Chesapeake Bay Preservation Area) would be regulated by VSMA and regulations. Accordingly, the applicant must prepare and implement a Stormwater Management (SWM) plan to ensure compliance with state law and regulations. The ESC/SWM plan is submitted to the DEQ regional office that serves the area where the project is located for review for compliance. The applicant is ultimately responsible for achieving project compliance through oversight of on-site contractors, regular field inspection, prompt action against non-compliant sites, and

other mechanisms consistent with agency policy (VESCL 62.1-44.15 *et seq.*) (Reference: VESCL 62.1-44.15 *et seq.*).

5(b)(ii) General Permit for Stormwater Discharges from Construction Activities

(VAR10). The operator or owner of a construction project involving land-disturbing activities equal to or greater than one acre is required to register for coverage under the General Permit for Discharges of Stormwater from Construction Activities and develop a project-specific SWPPP. The SWPPP must be prepared prior to submission of the registration statement for coverage under the general permit and the SWPPP must address water quality and quantity in accordance with the VSMP Permit Regulations. General information and registration forms for the General Permit are available on DEQ's website at <http://www.deq.virginia.gov/Programs/Water/StormwaterManagement/VSMPPermits/ConstructionGeneralPermit.aspx> (Reference: VSMA 62.1-44.15 *et seq.*; VSMP Permit Regulations 9VAC 25-870-10 *et seq.*).

5(c) Conclusion. Provided the above requirements are satisfied, the project would be consistent to the maximum extent practicable with the nonpoint pollution control enforceable policy of the Virginia CZM Program.

6. Solid and Hazardous Waste Management. The EA (page 28) states that the proposed action would not generate hazardous waste but would generate solid waste in the form of debris from demolition activities and trees potentially removed from the site for disposal conducted in compliance with the Federal Emerald Ash Borer Quarantine.

6(a) Agency Jurisdiction. On behalf of the Virginia Waste Management Board, the DEQ Division of Land Protection and Revitalization is responsible for carrying out the mandates of the Virginia Waste Management Act (Virginia Code §10.1-1400 *et seq.*), as well as meeting Virginia's federal obligations under the Resource Conservation and Recovery Act (RCRA) and the Comprehensive Environmental Response Compensation Liability Act (CERCLA), commonly known as Superfund. The DEQ Division of Land Protection and Revitalization also administers those laws and regulations on behalf of the State Water Control Board that govern Petroleum Storage Tanks (Virginia Code §62.1-44.34:8 *et seq.*), including Aboveground Storage Tanks (9VAC25-91 *et seq.*) and Underground Storage Tanks (9VAC25-580 *et seq.* and 9VAC25-580-370 *et seq.*), also known as Virginia Tank Regulations, and § 62.1-44.34:14 *et seq.* which covers oil spills. Virginia:

- Virginia Waste Management Act, Virginia Code § 10.1-1400 *et seq.*
- Virginia Solid Waste Management Regulations, 9VAC20-81
 - (9VAC20-81-620 applies to asbestos-containing materials)
- Virginia Hazardous Waste Management Regulations, 9VAC20-60
 - (9VAC20-60-261 applies to lead-based paints)
- Virginia Regulations for the Transportation of Hazardous Materials, 9VAC20-110.

Federal:

- Resource Conservation and Recovery Act (RCRA), 42 U.S. Code sections 6901 *et seq.*
- U.S. Department of Transportation Rules for Transportation of Hazardous Materials, 49 Code of Federal Regulations, Part 107
- Applicable rules contained in Title 40, Code of Federal Regulations.

6(b) Database Search. The DEQ Division of Land Protection and Revitalization (DLPR) conducted a search (500-foot radius) of the project area of solid and hazardous waste databases (including petroleum releases) to identify waste sites in close proximity to the project area. DLPR identified one petroleum release sites within the project area which might impact the project: PC Number 20043317, Route 1 and Telegraph Road Intersection, Route 1 and Telegraph Rd, Lorton, Virginia, Release Date: 06/16/2004, Status: Closed.

6(c) Agency Recommendations. Evaluate the identified petroleum release to determine its ability to affect the project site. DEQ encourages all projects to implement pollution prevention principles, including:

- the reduction, reuse and recycling of all solid wastes generated; and
- the minimization and proper handling of generated hazardous wastes.

6(d) Requirements.

- Test and dispose of any soil/sediment that is suspected of contamination (including petroleum contamination) or wastes that are generated during construction-related activities in accordance with applicable federal, state, and local laws and regulations.
- All structures being demolished or removed should be checked for asbestos-containing materials (ACM) and lead-based paint (LBP) prior to demolition. If ACM and LBP are found, in addition to the federal waste-related regulations mentioned above, state regulations 9VAC20-81-640 for ACM and 9VAC20-60-261 for LBP must be followed.

7. Natural Heritage Resources. The EA (page 36) states that the proposed action consists of the removal of an estimated 27.53 acres of woodland at the Caisson Platoon Facility. Wildlife can be found on and near the project site (page 37).

7(a) Agency Jurisdiction.

7(a)(i) The Virginia Department of Conservation and Recreation's (DCR) Division of Natural Heritage (DNH): DNH's mission is conserving Virginia's biodiversity through inventory, protection and stewardship. The Virginia Natural Area Preserves Act (Virginia Code §10.1-209 through 217), authorized DCR to maintain a statewide database for conservation planning and project review, protect land for the conservation of biodiversity, and to protect and ecologically manage the natural heritage resources of Virginia (the habitats of rare, threatened and endangered species, significant natural communities, geologic sites, and other natural features).

7(a)(ii) The Virginia Department of Agriculture and Consumer Services (VDACS): The Endangered Plant and Insect Species Act of 1979 (Virginia Code Chapter 39 §3.1-1020 through 1030) authorizes VDACS to conserve, protect and manage endangered and threatened species of plants and insects. Under a Memorandum of Agreement established between VDACS and the DCR, DCR represents VDACS in comments regarding potential impacts on state-listed threatened and endangered plant and insect species.

7(b) Agency Findings – Natural Heritage Resources and Forest Fragmentation.

According to the information currently in the Biotics Data System, natural heritage resources have not been documented within the submitted project boundary, including a 100-foot buffer. The absence of data may indicate that the project area has not been surveyed, rather than confirm that the area lacks natural heritage resources. In addition, the project boundary does not intersect any of the predictive models identifying potential habitat for natural heritage resources.

In addition, the proposed project will fragment an Ecological Core C5 as identified in the Virginia Natural Landscape Assessment (<https://www.dcr.virginia.gov/natural-heritage/vaconvisvnl>), one of a suite of tools in Virginia ConservationVision that identify and prioritize lands for conservation and protection.

Ecological Cores are areas of unfragmented natural cover with at least 100 acres of interior that provide habitat for a wide range of species, from interior-dependent forest species to habitat generalists, as well as species that utilize marsh, dune, and beach habitats. Cores also provide benefits in terms of open space, recreation, water quality (including drinking water protection and erosion prevention), and air quality (including carbon sequestration and oxygen production), along with the many associated economic benefits of these functions. The cores are ranked from C1 to C5 (C5 being the least ecologically relevant) using many prioritization criteria, such as the proportions of sensitive habitats of natural heritage resources they contain.

Fragmentation occurs when a large, contiguous block of natural cover is dissected by development, and other forms of permanent conversion, into one or more smaller patches. Habitat fragmentation results in biogeographic changes that disrupt species

interactions and ecosystem processes, reducing biodiversity and habitat quality due to limited recolonization, increased predation and egg parasitism, and increased invasion by weedy species. Therefore, minimizing fragmentation is a key mitigation measure that will reduce deleterious effects and preserve the natural patterns and connectivity of habitats that are key components of biodiversity. Mapped cores in the project area can be viewed via the Virginia Natural Heritage Data Explorer (<http://vanhde.org/content/map>).

7(c) Agency Findings – State-listed Plant and Insect Species. DCR states that the proposed project will not affect any documented state-listed plants or insects.

7(d) Agency Findings – Natural Area Preserves. There are no State Natural Area Preserves under DCR’s jurisdiction in the project vicinity.

7(e) Agency Recommendations. DCR DNH has the following recommendations:

- Reduce the deleterious effects of fragmentation by minimizing edge in remaining fragments; by retaining natural corridors that allow movement between fragments; and by designing the intervening landscape to minimize its hostility to native wildlife (natural cover versus lawns).
- Contact the DCR DNH and re-submit project information and a map for an update on this natural heritage information if the scope of the project changes and/or six months has passed before it is utilized.

8. Floodplain Management. The EA (page 35) states that there are no floodplain areas located on the facility.

8(a) Agency Jurisdiction. DCR is the lead coordinating agency for the Commonwealth’s floodplain management program and the National Flood Insurance Program (Executive Memorandum 2-97). Pursuant to §10.1-603 of the Virginia Code and in accordance with 44 CFR section 60.12 of the National Flood Insurance Program Regulations for Floodplain Management and Flood Hazard Identification, all construction or land-disturbing activities initiated by an agency of the Commonwealth, or by its contractor, in floodplains shall be submitted to the locality and comply with the locally adopted floodplain management ordinance.

8(b) Agency Recommendation. For federal projects, DCR encourages the applicant/developer to reach out to the local floodplain administrator and comply with the community’s local floodplain ordinance. If the project is located in the Special Flood Hazard Area (SFHA), DCR recommends that this project comply with the community’s local floodplain ordinance. To find flood zone information, use the Virginia Flood Risk Information System (VFRIS): www.dcr.virginia.gov/vfris.

8(c) Requirement. Projects conducted by federal agencies within the SFHA must comply with Executive Order 11988: Floodplain Management.

9. Water Supply. The EA (page 28) states that utility upgrades would not be necessary as a result of the proposed action.

9(a) Agency Jurisdiction. The Virginia Department of Health (VDH) Office of Drinking Water (ODW) reviews projects for the potential to impact public drinking water sources (groundwater wells, springs and surface water intakes). The VDH ODW administers both federal and state laws governing waterworks operation.

9(b) Agency Finding. VDH states that there are no public groundwater wells within a 1-mile radius of the project site. The project is not within the watershed of any public surface water intakes. The Fairfax County Water Authority's Occoquan Reservoir Intake is within a 5-mile radius of the project site.

9(c) Requirement. Potential impacts to public water distribution systems must be verified by the local utility, according to VDH.

9(d) Agency Recommendations.

- Best Management Practices, including erosion and sedimentation controls and spill prevention controls and countermeasures, should be employed on the project site.
- Materials should be managed while on-site and during transport to prevent impacts to nearby surface water.

10. Historic Resources. The EA (page 27) states that the proposed project is not expected to impact cultural resources.

10(a) Agency Jurisdiction. The Virginia Department of Historic Resources (DHR) conducts reviews of both federal and state projects to determine their effect on historic properties. Under the federal process, DHR is the State Historic Preservation Office, and ensures that federal undertakings – including licenses, permits, or funding – comply with Section 106 of the National Historic Preservation Act of 1966, as amended, and its implementing regulation at 36 CFR Part 800. Section 106 requires federal agencies to consider the effects of federal projects on properties that are listed or eligible for listing on the National Register of Historic Places.

10(b) Agency Findings. DHR has reviewed the proposed project and concurs with the Army's determination that there would be no adverse effects to historic properties.

11. Pesticides and Herbicides. In general, when pesticides or herbicides must be used, their use should be strictly in accordance with manufacturers' recommendations. In addition, we recommend that the applicable use the least toxic pesticides or herbicides effective in controlling the target species to the extent feasible. For more information on pesticide or herbicide use, contact VDACS (804-371-6560).

12. Energy Conservation. Architectural and engineering designers should consider incorporating the energy, environmental, and sustainability concepts listed in the Leadership in Energy and Environmental Design (LEED) Green Building Rating System into the development and procurement of their projects.

Please contact Department of Mines, Minerals and Energy (David Spears at 434-951-6350) for additional information on energy conservation measures. For more information on the LEED rating system, visit www.leedbuilding.org.

13. Pollution Prevention. DEQ advocates that principles of pollution prevention and sustainability be used in all construction projects as well as in facility operations. Effective siting, planning, and on-site Best Management Practices (BMPs) will help to ensure that environmental impacts are minimized. However, pollution prevention and sustainability techniques also include decisions related to construction materials, design, and operational procedures that will facilitate the reduction of wastes at the source.

13(a) Recommendations. We have several pollution prevention recommendations that may be helpful in constructing or operating this facility:

- Consider development of an effective Environmental Management System (EMS). An effective EMS will ensure that the proposed facility is committed to complying with environmental regulations, reducing risk, minimizing environmental impacts, setting environmental goals, and achieving improvements in its environmental performance. DEQ offers EMS development assistance and recognizes facilities with effective Environmental Management Systems through its Virginia Environmental Excellence Program (VEEP). VEEP provides recognition, annual permit fee discounts, and the possibility for alternative compliance methods.
- Consider environmental attributes when purchasing materials. For example, the extent of recycled material content, toxicity level, and amount of packaging should be considered and can be specified in purchasing contracts.
- Consider contractors' commitment to the environment when choosing contractors. Specifications regarding raw materials and construction practices can be included in contract documents and requests for proposals.

- Choose sustainable materials and practices for building construction and design.

DEQ's Office of Pollution Prevention provides information and technical assistance relating to pollution prevention techniques and EMS. If interested, please contact DEQ (Meghann Quinn at 804-698-4021).

14. Local Coordination. As customary, DEQ invited the affected locality and planning district commission to comment.

14(a) Jurisdiction. DEQ distributes a copy of environmental documents to the chief administrative officer of every locality in which each project is proposed to be located. The purpose of the distribution is to enable the locality to evaluate the proposed project for environmental impact, consistency with the locality's comprehensive plan, local ordinances adopted pursuant to this chapter, and other applicable law and to provide the locality with an opportunity to comment.

14(b) Local Recommendations. Additional information from the county is attached. Fairfax County has the following recommendations for Fort Belvoir:

Water Resources

- Consider some or all of the following practices in order to minimize the impacts that new development and redevelopment projects may have on the county's streams:
 - "Minimize the amount of impervious surface created ...
 - Where feasible, convey drainage from impervious areas into pervious areas ...
 - Encourage the preservation of wooded areas and steep slopes adjacent to stream valley areas ...
 - Where appropriate, use protective easements in areas outside of private residential lots as a mechanism to protect wooded areas and steep slopes.
 - Encourage the use of open ditch road sections ...
 - Encourage the use of innovative BMPs and infiltration techniques of stormwater management ...
 - Apply nonstructural best management practices and bioengineering practices ...
 - Maximize the use of infiltration landscaping within streetscapes consistent with county and state requirements."

(Fairfax County Comprehensive Plan, 2017 Edition, Policy Plan, Environment, Amended through 3-14-2017, Pages 7-9).

- Fairfax County Stormwater Management staff encourages Fort Belvoir staff to work closely with Northern Virginia Soil and Water Conservation District on a Soil and Water Quality Conservation Plan to ensure the successful operation of the facility and to limit impacts to the surrounding environment.
- Where possible, Fairfax County urges Fort Belvoir to pursue on-site stream mitigation by improving the outfalls of the two impacted intermittent streams using natural channel design.

Forest Cover

- County staff recommends that a tree survey be conducted to determine tree mitigation commitments and that the proposed project area and on-post riparian areas receive special consideration for tree replacement plantings.

Heritage Resources

- Most of the site lies within the county's Pohick Church Historic Overlay District. Therefore, per the Fairfax County Zoning Ordinance, staff requests that the applicant complete and submit a county Archaeological Survey Data Form (attached). If project plans change, necessitating impacts to sites 44FX1657 and 44FX1679, staff requests that the applicant consult with DHR. If sites are found to be significant or eligible for inclusion onto the National Register of Historic Places, avoidance or additional archaeological work may be required.
- In addition to the completion of an Archaeological Data Form, county staff requests that Fort Belvoir staff present the proposed project and effects to the Fairfax County Architectural Review Board (ARB). To schedule a time on the ARB's agenda, Fort Belvoir staff can contact Laura Arseneau at Laura.Arseneau@fairfaxcounty.gov.
- Heritage Resources staff agrees that the project as proposed would not have an adverse effect on historic properties and agrees with the Fairfax County Park Authority that if sites are found to be eligible for inclusion, that additional work or avoidance may be required, as well as additional consultation with DHR.

REGULATORY AND COORDINATION NEEDS

1. Wetlands and Water Quality. The project must adhere to the requirements of any DEQ permit or authorization issued pursuant to Virginia Code § 62.1-44.15:20 *et seq.* and 9VAC25-210 *et seq.* and a tidal wetlands permit if issued from the Fairfax County Wetlands Board pursuant to Virginia Code §28.2-1301 through 28.2-1320 for consistency with the wetlands management enforceable policy. A VWP Permit or

approval may be required. Contact DEQ NRO (Trisha Beasley at Trisha.Beasley@deq.virginia.gov) for coordination. Submit a JPA application to VMRC (Mark Eversole at Mark.Eversole@mrc.virginia.gov) for proposed impacts to surface waters, including wetlands.

2. Air Quality. The following sections of Virginia Administrative Code may be applicable:

- fugitive dust and emissions control (9VAC5-50-60 *et seq.*);
- permits for fuel-burning equipment (9VAC5-80-110 *et seq.*); and
- open burning restrictions (9VAC5-130 *et seq.*).

Contact DEQ NRO (Justin Wilkinson at Justin.Wilkinson@deq.virginia.gov) for additional information about air quality regulations and to determine air permitting or registration needs for fuel-burning equipment.

3. Coastal Lands Management. The project must be conducted in a manner that is consistent with the coastal lands management enforceable policy of the Virginia CZM Program as administered by DEQ pursuant to the Chesapeake Bay Preservation Act (Virginia Code 62.1-44.15 *et seq.*) and the Chesapeake Bay Preservation Area Designation and Management Regulations (9VAC25-830 *et seq.*). Coordinate with the locality for project-specific questions. For additional information about DEQ's comments, contact DEQ OLGP (Daniel Moore at Daniel.Moore@deq.virginia.gov).

4. Erosion and Sediment Control and Stormwater Management. This project must comply with Virginia's Erosion and Sediment Control Law (Virginia Code § 62.1-44.15:61) and Regulations (9VAC25-840-30 *et seq.*) and Stormwater Management Law (Virginia Code § 62.1-44.15:31) and Regulations (9VAC25-870-210 *et seq.*) as administered by DEQ. Erosion and sediment control, and stormwater management requirements should be coordinated with the DEQ NRO (Kelly Vanover at Kelly.Vanover@deq.virginia.gov).

4. General Permit for Stormwater Discharges from Construction Activities (VAR10). The operator or owner of a construction activity involving land disturbance of equal to or greater than 1 acre is required to register for coverage under the General Permit for Discharges of Stormwater from Construction Activities and develop a project specific stormwater pollution prevention plan (SWPPP). Specific questions regarding the Stormwater Management Program requirements should be directed to DEQ (Holly Sepety at 804-698-4039) (Reference: VSMA §62.1-44.15 *et seq.*).

5. Solid and Hazardous Wastes. Contact DEQ NRO (Richard Doucette at 703-583-3813 or Richard.Doucette@deq.virginia.gov) for additional information about waste management if necessary. All solid waste, hazardous waste and hazardous materials

must be managed in accordance with all applicable federal, state and local environmental regulations.

5(a) Asbestos-Containing Material. It is the responsibility of the owner or operator of a renovation or demolition activity, prior to the commencement of the renovation or demolition, to thoroughly inspect the affected part of the facility where the operation will occur for the presence of asbestos, including Category I and Category II nonfriable asbestos-containing material (as applicable). Upon classification as friable or non-friable, all asbestos-containing material shall be disposed of in accordance with the Virginia Solid Waste Management Regulations (9VAC20-81-640) and transported in accordance with the Virginia regulations governing Transportation of Hazardous Materials (9VAC20-110-10 *et seq.*). Contact the DEQ Division of Land Protection and Revitalization (Carlos Martinez at 804-698-4575) and the Department of Labor and Industry (804-371- 2327) for additional information.

5(b) Lead-Based Paint. If applicable, this project must comply with the U.S. Department of Labor Occupational Safety and Health Administration (OSHA) regulations and with the Virginia Lead-Based Paint Activities Rules and Regulations. For additional information regarding these requirements, contact the Department of Professional and Occupational Regulation (804-367-8500).

6. Natural Heritage Resources. Contact the DCR DNH (804-371-2708) to re-submit project information and a map for an update on natural heritage information if the scope of the project changes and/or six months has passed before it is utilized.

7. Water Supply. Potential impacts to public water distribution systems must be verified by the local utility, according to VDH. Contact VDH (Arlene Warren at Arlene.Warren@vdh.virginia.gov) for additional information about its comments.

8. Floodplain Management. Contact the local floodplain administrator for an official floodplain determination, and if the project is located in the SFHA, consider complying with the community's local floodplain ordinance. To find local floodplain administrator contact information, use DCR's Local Floodplain Management Directory: www.dcr.virginia.gov/dam-safety-and-floodplains/floodplain-directory.

9. Local Coordination. Coordinate with Fairfax County (Joseph Gorney at 703-324-1380) regarding its recommendations as necessary.

Thank you for the opportunity to comment on this EA and FCD. The detailed comments of reviewers are attached. If you have questions, please do not hesitate to call me at (804) 698-4204 or Julia Wellman at (804) 698-4326.

Sincerely,

A handwritten signature in black ink, appearing to read "Bettina Rayfield". The signature is fluid and cursive, with a long horizontal stroke at the end.

Bettina Rayfield, Manager
Environmental Impact Review and Long Range
Priorities Program

Enclosures

ec: Amy Ewing, DGIF
Robbie Rhur, DCR
Arlene Warren, VDH
Roger Kirchen, DHR
Mark Eversole, VMRC
Tony Watkinson, VMRC
Terry Lasher, DOF
Robert Lazaro, NRVC
Bryan J. Hill, Fairfax County

**DEPARTMENT OF ENVIRONMENTAL QUALITY
DIVISION OF AIR PROGRAM COORDINATION**

ENVIRONMENTAL REVIEW COMMENTS APPLICABLE TO AIR QUALITY

TO: Julia H. Wellman

We thank **OEIR** for providing DEQ-AIR an opportunity to review the following project:

Document Type: Environmental Assessment and Federal Consistency Determination

Project Sponsor: US Army

Project Title: Fort Belvoir Caisson Platoon Facility Sub-Area Master Plan/Area Development Plan

Location: Fairfax County

Project Number: DEQ #19-140F

Accordingly, I am providing following comments for consideration.

PROJECT LOCATION: **X OZONE NON ATTAINMENT
AND EMISSION CONTROL AREA FOR NOX & VOC**

REGULATORY REQUIREMENTS MAY BE APPLICABLE TO: **X CONSTRUCTION
 ☐ OPERATION**

STATE AIR POLLUTION CONTROL BOARD REGULATIONS THAT MAY APPLY:

1. ☐ 9 VAC 5-40-5200 C & 9 VAC 5-40-5220 E – STAGE I
2. ☐ 9 VAC 5-45-760 et seq. – Asphalt Paving operations
3. **X 9 VAC 5-130 et seq. – Open Burning**
4. **X 9 VAC 5-50-60 et seq. Fugitive Dust Emissions**
5. ☐ 9 VAC 5-50-130 et seq. - Odorous Emissions; Applicable to _____
6. ☐ 9 VAC 5-60-300 et seq. – Standards of Performance for Toxic Pollutants
7. ☐ 9 VAC 5-50-400 Subpart _____, Standards of Performance for New Stationary Sources, designates standards of performance for the _____
8. ☐ 9 VAC 5-80-1100 et seq. of the regulations – Permits for Stationary Sources
9. ☐ 9 VAC 5-80-1605 et seq. Of the regulations – Major or Modified Sources located in PSD areas. This rule may be applicable to the _____
10. ☐ 9 VAC 5-80-2000 et seq. of the regulations – New and modified sources located in non-attainment areas
11. ☐ 9 VAC 5-80-800 et seq. Of the regulations – State Operating Permits. This rule may be applicable to _____

COMMENTS SPECIFIC TO THE PROJECT:

All precautions are necessary to restrict the emissions of volatile organic compounds (VOC) and oxides of nitrogen (NO_x) during construction.



**(Kotur S. Narasimhan)
Office of Air Data Analysis**

DATE: November 14, 2019

Matthew J. Strickler
Secretary of Natural Resources

Clyde E. Cristman
Director



Rochelle Altholz
*Deputy Director of
Administration and Finance*

Russell W. Baxter
*Deputy Director of
Dam Safety & Floodplain
Management and Soil & Water
Conservation*

Thomas L. Smith
Deputy Director of Operations

COMMONWEALTH of VIRGINIA
DEPARTMENT OF CONSERVATION AND RECREATION

MEMORANDUM

DATE: December 3, 2019

TO: Julia Wellman, DEQ

FROM: Roberta Rhur, Environmental Impact Review Coordinator

SUBJECT: DEQ 19-140F, Fort Belvoir Caisson Platoon Facility Development Plan EA

Division of Natural Heritage

The Department of Conservation and Recreation's Division of Natural Heritage (DCR) has searched its Biotics Data System for occurrences of natural heritage resources from the area outlined on the submitted map. Natural heritage resources are defined as the habitat of rare, threatened, or endangered plant and animal species, unique or exemplary natural communities, and significant geologic formations.

According to the information currently in Biotics, natural heritage resources have not been documented within the submitted project boundary including a 100 foot buffer. The absence of data may indicate that the project area has not been surveyed, rather than confirm that the area lacks natural heritage resources. In addition, the project boundary does not intersect any of the predictive models identifying potential habitat for natural heritage resources.

In addition, the proposed project will fragment an Ecological Core C5 as identified in the Virginia Natural Landscape Assessment (<https://www.dcr.virginia.gov/natural-heritage/vaconvisynla>), one of a suite of tools in Virginia ConservationVision that identify and prioritize lands for conservation and protection.

Ecological Cores are areas of unfragmented natural cover with at least 100 acres of interior that provide habitat for a wide range of species, from interior-dependent forest species to habitat generalists, as well as species that utilize marsh, dune, and beach habitats. Cores also provide benefits in terms of open space, recreation, water quality (including drinking water protection and erosion prevention), and air quality (including carbon sequestration and oxygen production), along with the many associated economic benefits of these functions. The cores are ranked from C1 to C5 (C5 being the least ecologically relevant) using many prioritization criteria, such as the proportions of sensitive habitats of natural heritage resources they contain.

Fragmentation occurs when a large, contiguous block of natural cover is dissected by development, and other forms of permanent conversion, into one or more smaller patches. Habitat fragmentation results in biogeographic changes that disrupt species interactions and ecosystem processes, reducing biodiversity and habitat quality due to limited recolonization, increased predation and egg parasitism, and increased invasion by weedy species.

Therefore minimizing fragmentation is a key mitigation measure that will reduce deleterious effects and preserve the natural patterns and connectivity of habitats that are key components of biodiversity. DCR recommends efforts to minimize edge in remaining fragments, retain natural corridors that allow movement between fragments and designing the intervening landscape to minimize its hostility to native wildlife (natural cover versus lawns). Mapped cores in the project area can be viewed via the Virginia Natural Heritage Data Explorer, available here: <http://vanhde.org/content/map>.

There are no State Natural Area Preserves under DCR's jurisdiction in the project vicinity.

Under a Memorandum of Agreement established between the Virginia Department of Agriculture and Consumer Services (VDACS) and the DCR, DCR represents VDACS in comments regarding potential impacts on state-listed threatened and endangered plant and insect species. The current activity will not affect any documented state-listed plants or insects.

New and updated information is continually added to Biotics. Please re-submit project information and map for an update on this natural heritage information if the scope of the project changes and/or six months has passed before it is utilized.

The Virginia Department of Game and Inland Fisheries (VDGIF) maintains a database of wildlife locations, including threatened and endangered species, trout streams, and anadromous fish waters that may contain information not documented in this letter. Their database may be accessed from <http://vafwis.org/fwis/> or contact Ernie Aschenbach at 804-367-2733 or Ernie.Aschenbach@dgif.virginia.gov.

Division of Dam Safety and Floodplain Management

Floodplain Management Program:

The National Flood Insurance Program (NFIP) is administered by the Federal Emergency Management Agency (FEMA), and communities who elect to participate in this voluntary program manage and enforce the program on the local level through that community's local floodplain ordinance. Each local floodplain ordinance must comply with the minimum standards of the NFIP, outlined in 44 CFR 60.3; however, local communities may adopt more restrictive requirements in their local floodplain ordinance, such as regulating the 0.2% annual chance flood zone (shaded X Zone).

All development within a Special Flood Hazard Area (SFHA) or floodplain, as shown on the locality's Flood Insurance Rate Map (FIRM), must be permitted and comply with the requirements of the local floodplain ordinance. As per Executive Memorandum 2-97, development in a floodplain by an agency of the Commonwealth, or by its contractor, shall comply with the locally adopted floodplain management ordinance. Additionally, new state-owned buildings shall not be constructed in the SFHA unless a variance is granted by the Department of General Services. Projects conducted by federal agencies within the SFHA must comply with Executive Order 11988: Floodplain Management.

The NFIP defines development as *"any man-made change to improved or unimproved real estate, including but not limited to buildings or other structures, mining, dredging, filling, grading, paving, excavation or drilling operations or storage of equipment or materials."* (44 CFR 59.1)

The NFIP defines Special Flood Hazard Area (SFHA) as *"the land in the flood plain within a community subject to a 1 percent or greater chance of flooding in any given year. The area may be designated as Zone A on the FHB. After detailed ratemaking has been completed in preparation for publication of the flood insurance rate map, Zone A usually is refined into Zones A, AO, AH, A1-30, AE, A99, AR, AR/A1-30, AR/AE, AR/AO, AR/AH, AR/A, VO, or V1-30, VE, or V."* (44 CFR 59.1)

DCR's Floodplain Management Program does not have regulatory authority for projects in the SFHA. The applicant/developer must contact the local floodplain administrator for an official floodplain determination, and if the project is located in the SFHA, this project must comply with the community's local floodplain ordinance, including receiving a local permit. Failure to comply with the local floodplain ordinance could result in enforcement action from the locality. For state projects, DCR recommends that compliance documentation be provided prior to the project being funded. For federal projects, the applicant/developer is encouraged reach out to the local floodplain administrator and comply with the community's local floodplain ordinance.

To find flood zone information, use the Virginia Flood Risk Information System (VFRIS): www.dcr.virginia.gov/vfris

To find local floodplain administrator contact information, use DCR's Local Floodplain Management Directory: www.dcr.virginia.gov/dam-safety-and-floodplains/floodplain-directory

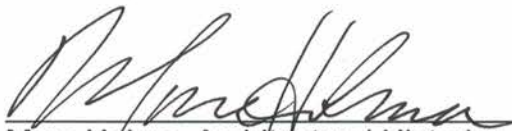
The remaining DCR divisions have no comments regarding the scope of this project. Thank you for the opportunity to comment.

US Army Garrison Fort Belvoir

Section 106 Consultation; Caisson Platoon Facility Area Development Plan
Environmental Assessment, Fort Belvoir, Virginia

VDHR File #: 2019-0687

VDHR has reviewed the above referenced project and concurs with the Army's
determination of No Adverse Effect to Historic Properties.

A handwritten signature in black ink, appearing to read "Marc Holma", written over a horizontal line.

Marc Holma, Architectural Historian
Office of Review and Compliance
Virginia Department of Historic Resources

6 Dec 19

Date



MEMORANDUM

TO: Julia Wellman, DEQ/EIR Environmental Program Planner

FROM: Carlos A. Martinez, Division of Land Protection & Revitalization Review Coordinator

DATE: December 4, 2019

COPIES: Sanjay Thirunagari, Division of Land Protection & Revitalization Review Manager; file

SUBJECT: Environmental Impact Review: 19-140F Fort Belvoir Caisson Platoon Facility Sub-Area Master Plan/Area Development Plan in Fort Belvoir, Virginia.

The Division of Land Protection & Revitalization (DLPR) has completed its review of the US Army's November 13, 2019 EIR for Fort Belvoir Caisson Platoon Facility Sub-Area Master Plan/Area Development Plan in Fort Belvoir, Virginia.

Solid and hazardous waste were addressed in the submittal. The submittal did not indicate that a search of Federal or State environmental databases was conducted. DLPR staff conducted a search (500 ft. radius) of the project area of solid and hazardous waste databases (including petroleum releases) to identify waste sites in close proximity to the project area. DLPR identified one (1) petroleum release sites within the project area which might impact the project.

DLPR staff has reviewed the submittal and offers the following comments:

Hazardous Waste/RCRA Facilities – none in close proximity to the project area

CERCLA Sites – none in close proximity to the project area

Formerly Used Defense Sites (FUDS) – none in close proximity to the project area.

Solid Waste – none in close proximity to the project area

Virginia Remediation Program (VRP) – none in close proximity to the project area

Petroleum Releases – One (1) found in close proximity to the project area.

1. PC Number 20043317, Route 1 and Telegraph Road Intersection, Rte 1 and Telegraph Rd, Lorton, Virginia, Release Date: 06/16/2004, Status: Closed.

Please note that the DEQ's Pollution Complaint (PC) cases identified should be further evaluated by the project engineer or manager to establish the exact location, nature and extent of the petroleum release and the potential to impact the proposed project. In addition, the project engineer or manager should contact the DEQ's Northern Regional Office at (703) 583-3800 (Tanks Program) for further information about the PC cases.

PROJECT SPECIFIC COMMENTS

None

GENERAL COMMENTS

Soil, Sediment, Groundwater, and Waste Management

Any soil, sediment or groundwater that is suspected of contamination or wastes that are generated must be tested and disposed of in accordance with applicable Federal, State, and local laws and regulations. Some of the applicable state laws and regulations are: Virginia Waste Management Act, Code of Virginia Section 10.1-1400 *et seq.*; Virginia Hazardous Waste Management Regulations (VHWMR) (9VAC 20-60); Virginia Solid Waste Management Regulations (VSWMR) (9VAC 20-81); Virginia Regulations for the Transportation of Hazardous Materials (9VAC 20-110). Some of the applicable Federal laws and regulations are: the Resource Conservation and Recovery Act (RCRA), 42 U.S.C. Section 6901 *et seq.*, and the applicable regulations contained in Title 40 of the Code of Federal Regulations; and the U.S. Department of Transportation Rules for Transportation of Hazardous Materials, 49 CFR Part 107.

Asbestos and/or Lead-based Paint

All structures being demolished/renovated/removed should be checked for asbestos-containing materials (ACM) and lead-based paint (LBP) prior to demolition. If ACM or LBP are found, in addition to the federal waste-related regulations mentioned above, State regulations 9VAC 20-81-620 for ACM and 9VAC 20-60-261 for LBP must be followed. Questions may be directed to Richard Doucette at the DEQ's Northern Regional Office at (703) 583-3800.

Pollution Prevention – Reuse - Recycling

Please note that DEQ encourages all construction projects and facilities to implement pollution prevention principles, including the reduction, reuse, and recycling of all solid wastes generated. All generation of hazardous wastes should be minimized and handled appropriately.

If you have any questions or need further information, please contact Carlos A. Martinez by phone at (804) 698-4575 or email carlos.martinez@deq.virginia.gov.



Wellman, Julia <julia.wellman@deq.virginia.gov>

RE: [Non-DoD Source] Ft. Belvoir Caisson Platoon Facility Sub-Area Plan (UNCLASSIFIED)

1 message

Yesmant, Christopher K CIV USARMY ID-SUSTAINMENT (USA)

Fri, Nov 15, 2019 at 12:20 PM

<christopher.k.yesmant.civ@mail.mil>

To: "Moore, Daniel" <daniel.moore@deq.virginia.gov>

Cc: Julia Wellman <julia.wellman@deq.virginia.gov>, "Mariani, Felix M CIV USARMY ID-SUSTAINMENT (USA)" <felix.m.mariani3.civ@mail.mil>, "Bartley, Brice C CIV USARMY ID-SUSTAINMENT (USA)" <brice.c.bartley.civ@mail.mil>, "Fleming, Gregory W CIV USARMY ID-SUSTAINMENT (USA)" <gregory.w.fleming.civ@mail.mil>, "Penney, Christopher T CIV USARMY CENAB (USA)" <Christopher.Penney@usace.army.mil>, "Harback, Wilamena G CIV USARMY ID-SUSTAINMENT (USA)" <wilamena.g.harback.civ@mail.mil>, "Cowen, Nicola D CTR USARMY ID-SUSTAINMENT (USA)" <nicola.d.cowen.ctr@mail.mil>, "Keough, Dorothy E CIV USARMY ID-SUSTAINMENT (USA)" <dorothy.e.keough.civ@mail.mil>, "Wetmore, Marisa L CIV USARMY CENAB (USA)" <Marisa.L.Wetmore@usace.army.mil>

CLASSIFICATION: UNCLASSIFIED

Mr. Moore,

Thank you for your comments and questions. Ft. Belvoir Tree Policy Memorandum is an informal name for Garrison Policy #27. Sorry for the confusion. A copy of the policy which pertains to any tree removal on Fort Belvoir is attached. The intermittent streams referenced were displayed incorrectly in figure 3-4. Intermittent streams should not depict a 100 foot RPA buffer. Therefore they should not be referenced on Page 72 of the EA and the applicable sections of the EA and FCD will be revised to reflect that.

Please let us know if this answers your immediate requests or if you have further questions.

Sincerely,

Christopher Yesmant
Environmental Specialist
NEPA Program Manager
DPW-Environmental Division
9430 Jackson Loop, Building 1442
Fort Belvoir, VA 22060
Desk: 703-806-4008
christopher.k.yesmant.civ@mail.mil

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-----Original Message-----

From: Mariani, Felix M CIV USARMY ID-SUSTAINMENT (USA)

Sent: Thursday, November 14, 2019 12:59 PM

To: Bartley, Brice C CIV USARMY ID-SUSTAINMENT (USA) <brice.c.bartley.civ@mail.mil>; Fleming, Gregory W CIV

USARMY ID-SUSTAINMENT (USA) <gregory.w.fleming.civ@mail.mil>; Yesmant, Christopher K CIV USARMY ID-SUSTAINMENT (USA) <christopher.k.yesmant.civ@mail.mil>

Cc: Moore, Daniel <daniel.moore@deq.virginia.gov>; Julia Wellman <julia.wellman@deq.virginia.gov>; Harback, Wilamena G CIV USARMY ID-SUSTAINMENT (USA) <wilamena.g.harback.civ@mail.mil>; Cowen, Nicola D CTR USARMY ID-SUSTAINMENT (USA) <nicola.d.cowen.ctr@mail.mil>; Keough, Dorothy E CIV USARMY ID-SUSTAINMENT (USA) <dorothy.e.keough.civ@mail.mil>

Subject: RE: [Non-DoD Source] Ft. Belvoir Caisson Platoon Facility Sub-Area Plan (UNCLASSIFIED)

Importance: High

CLASSIFICATION: UNCLASSIFIED

Gentlemen:

Could you please assist Mr. Moore as per his request below?

Thanks!

Felix

-----Original Message-----

From: Moore, Daniel [mailto:daniel.moore@deq.virginia.gov]

Sent: Wednesday, November 13, 2019 2:55 PM

To: Mariani, Felix M CIV USARMY ID-SUSTAINMENT (USA) <felix.m.mariani3.civ@mail.mil>; Julia Wellman <julia.wellman@deq.virginia.gov>

Subject: [Non-DoD Source] Ft. Belvoir Caisson Platoon Facility Sub-Area Plan

Mr. Mariani -

I am reviewing the Army's Environmental Assessment/Federal Consistency Determination application for the proposed Caisson Platoon Facility project for compliance with the Chesapeake Bay Preservation Act and Regulations and have a few questions.

The Environmental Assessment (EA) references a "Ft. Belvoir Tree Policy Memorandum", a document I've not been able to locate online. I found Garrison Policy #27 (Tree Removal and Protection) online but was not able to open or download it. Can you send me a link to either of these documents? Also, page 46 of the EA indicates that "Tree cutting activities in excess of 10 acres would be coordinated with the U.S. Fish and Wildlife Service to minimize the potential for impact..." Does Ft. Belvoir's Environmental Division have performance criteria in place for less than 10 acres of tree removal?

Fig. 3-4 (Water Resources Map) of the EA shows two linear, isolated wetlands running north-south directly south and southeast of Building 3045. Are these wetlands (which are shown as intermittent streams with both riparian buffers and RPAS boundaries around them) the same RPAs referenced in the "Forests" text shown on page 72 of the EA?

Under "Coastal Zone Management" on page 72 of the EA the Chesapeake Bay Preservation Act Regulations are mistakenly referred to a "guidelines". While technically RPA and RMA lands do not exist on Federal lands, Federal lands are considered to be "lands analogous to locally designated RPAs and RMAs..."

Please note that Federal actions on installations located within Tidewater Virginia are required to be consistent with the performance criteria of the Regulations on lands analogous to locally designated RPAs and RMAs, as provided in §9VAC25-830-130 and 140 of the Regulations, including the requirement to minimize land disturbance (including access and staging areas), retain existing vegetation and minimize impervious cover as well as including compliance with the requirements of the Virginia Erosion and Sediment Control Handbook, and stormwater management criteria consistent with water quality protection provisions of the Virginia Stormwater Management Regulations."

The requirement to retain indigenous vegetation and the need to avoid unnecessary encroachments into the RPAs shown on Fig. 3-4 may necessitate a slight redesign of the proposed pasture expansion. It appears that there is land west of and adjacent to the Cemetery Horse Paddock (#18, per Figure 2-2), between the existing Route 1 Stormwater Basin and Stewart Road that could be reserved for pastureland rather than the "green space" shown on Figure 2-3 (Proposed Action with Constraints). Please note that the mapped riparian buffers and RPA boundaries should be considered constraints to development just as the EQC Boundary and Wildlife Management Areas are.

Please feel free to call me if you have questions regarding any of the above questions or observations. Thanks for your time.

11/15/2019

Commonwealth of Virginia Mail - RE: [Non-DoD Source] Ft. Belvoir Caisson Platoon Facility Sub-Area Plan (UNCLASSIFIED)

Daniel Moore
Principal Environmental Planner
Department of Environmental Quality
Office of Local Government Programs
1111 E. Main Street
Richmond, VA 23219
(804) 698-4520
daniel.moore@deq.virginia.gov < Caution-mailto:daniel.moore@deq.virginia.gov >

CLASSIFICATION: UNCLASSIFIED

CLASSIFICATION: UNCLASSIFIED



Tree Policy #27 18.pdf

50K



DEPARTMENT OF THE ARMY
US ARMY INSTALLATION MANAGEMENT COMMAND
HEADQUARTERS, UNITED STATES ARMY GARRISON, FORT BELVOIR
9820 FLAGLER ROAD, SUITE 213
FORT BELVOIR, VIRGINIA 22060-5928

IMBV-PW

2 August 2018

MEMORANDUM FOR US Army Fort Belvoir Personnel

SUBJECT: Policy Letter #27, Tree Removal and Protection

1. Purpose. To ensure protection and preservation of specimen trees on Fort Belvoir.
2. Applicability. This policy applies to all military, civilian, tenant, and contractor activities on Fort Belvoir.
3. Reference. American Association of Nurseryman Standard for Nursery Stock (ANSI Z60.1), as amended.
4. Discussion.

a. Fort Belvoir's urban forest and associated natural resources are a major asset to the Installation and its residents. In recognition of the value and benefits that trees provide to the Fort Belvoir Community, all proposed tree removals as well as construction and excavation activities that may impact the growth and survival of trees, require prior review and written approval by the Fort Belvoir Director of Public Works.

b. It is the policy of Fort Belvoir to promote site planning techniques and construction practices that maximize retention and protection of trees before considering removal. Site reviews regarding natural resource impacts shall be made early in the planning and design process. When considering open trenching of utility lines, consideration must be given to boring, pipe-bursting, slip-lining and other techniques that lower impacts to trees. Utility rights-of-way shall be co-located except when prohibited by code. Tree protection measures for retained trees shall be required for all construction. Project leaders, master planners, and designers shall meet with DPW Environmental Division (ED) to review project objectives, design features, natural resource impacts and mitigations, and compliance with applicable environmental laws and regulations.

c. Construction projects shall include a DPW approved landscape plan. The construction design and landscape plan shall include mitigation for tree loss and identification of all trees four inches and larger in diameter at breast height that may be impacted by the construction project, to include specimen trees that should be preserved as well as tree replacements and new plantings.

d. Two new trees shall be planted for each live tree four inches in diameter and larger removed through construction, unless the project in question is expressly exempted from this replacement requirement. The rationale behind this 2:1 replacement ratio is that trees planted in urban forest situations only survive for an average of seven years and trees being replaced are generally far larger than trees planted as in-kind, compensatory mitigation. Requirements for size and species will depend upon site characteristics and location. DPW-ED will make this assessment. Tree

"LEADERS IN EXCELLENCE"

IMBV-PW

SUBJECT: Fort Belvoir Policy Memorandum #27, Tree Removal and Protection


replacements will generally adhere to a prescribed scheme that includes nursery-grown landscape trees for those removed in improved grounds and high visibility areas, and native tree seedlings with a mixture of landscape trees in unimproved grounds. If it is not possible to plant the required number of replacement trees, project-related alternatives such as environmentally-beneficial restoration, enhancement, or preservation measures may be done. DPW approval of out-of-kind, compensatory mitigations is required and funding must be equivalent to that required to plant the remaining trees. DPW-ED maintains a list of mitigation options and restoration sites.

e. All trees to be planted shall meet the specifications of American Association of Nurseryman Standard for Nursery Stock (ANSI Z60.1) latest edition.

f. A Tree Protection Plan shall be prepared in accordance with DPW-ED requirements and included with the 35 percent design submittal.

g. Dogwood, Holly, Redbud, and Mountain Laurel are to be left standing on utility rights-of-way unless an exception is specifically approved in writing by DPW-ED.

5. Proponent. Directorate of Public Works, Environmental Division, at 806-4142.


MICHAEL H. GREENBERG
COL, FI
Commanding



COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY

Street address: 1111 East Main Street, Suite 1400, Richmond, VA 23219

Mailing address: P.O. Box 1105, Richmond, Virginia 23218

www.deq.virginia.gov

Matthew J. Strickler
Secretary of Natural Resources

David K. Paylor
Director

(804) 698-4000
1-800-592-5482

MEMORANDUM

TO: Julia Wellman, DEQ Environmental Program Planner

FROM: Daniel Moore, DEQ Principal Environmental Planner

DATE: December 2, 2019

SUBJECT: DEQ #19-140F: US Army, Ft. Belvoir Caisson Platoon Facility Sub-Area Master Plan, Fairfax County

We have reviewed the Environmental Assessment (EA) for the proposed Caisson Platoon Facility Sub-Area Master Plan at Fort Belvoir in Fairfax County and offer the following comments regarding consistency with the provisions of the *Chesapeake Bay Preservation Area Designation and Management Regulations* (Regulations):

In Fairfax County, the areas protected by the Chesapeake Bay Preservation Act, as locally implemented, require conformance with performance criteria. These areas include Resource Protection Areas (RPAs) and Resource Management Areas (RMAs) as designated by the local government. RPAs include tidal wetlands, certain non-tidal wetlands and tidal shores. RPAs also include a 100-foot vegetated buffer area located adjacent to and landward of these features and along both sides of any water body with perennial flow. RMAs, which require less stringent performance criteria, include those areas of the County not included in the RPAs.

Under the Federal Consistency Regulations of the *Coastal Zone Management Act of 1972*, federal actions in Virginia must be conducted in a manner "consistent to the maximum extent practicable" with the enforceable policies of the Virginia Coastal Zone Management Program. Those enforceable policies are administered through the Chesapeake Bay Preservation Act and Regulations.

Federal actions on installations located within Tidewater Virginia are required to be consistent with the performance criteria of the Regulations on lands analogous to locally designated RPAs and RMAs, as provided in §9VAC25-830-130 and 140 of the Regulations, including the requirement to minimize land disturbance (including access and staging areas), retain existing

vegetation and minimize impervious cover as well as including compliance with the requirements of the *Virginia Erosion and Sediment Control Handbook*, and stormwater management criteria consistent with water quality protection provisions of the *Virginia Stormwater Management Regulations*.” For land disturbance over 2,500 square feet, the project must comply with the requirements of the *Virginia Erosion and Sediment Control Handbook*.

The EA submittal indicates that 2.1 Proposed Action, Figure 2-3 (Proposed Action with Constraints; p. 17) is the preferred course of action. Expansion of the existing Caisson Platoon Facility from 10.5 acres to 39.1 acres will result in the removal of 27.53 acres of trees and woody vegetation. A memorandum dated August 2, 2018 (subject – Policy Letter #27: Tree Removal and Protection) indicates, “Two new trees shall be planted for each live tree four inches in diameter and larger removed through construction.” The same memorandum indicates that a Tree Protection Plan shall be prepared in accordance with requirements of the Fort Belvoir Directorate of Public Works – Environmental Division.

Provided adherence to the above requirements, particularly as relates to the 2:1 tree replacement ratio and the pending Tree Protection Plan referenced above, the proposed activity would be consistent with the *Chesapeake Bay Preservation Act* and the Regulations.



Wellman, Julia <julia.wellman@deq.virginia.gov>

Re: EXPEDITED NEW PROJECT Fort Belvoir Caisson Platoon Facility EA/FCD

1 message

Holland, Benjamin <benjamin.holland@deq.virginia.gov>
To: "Wellman, Julia" <julia.wellman@deq.virginia.gov>

Tue, Nov 19, 2019 at 11:53 AM

Northern Regional Office comments regarding the *Federal Consistency Determination for Fort Belvoir Caisson Platoon Facility Sub-Area Master Plan/Area Development Plan, DEQ # 19-140F*, are as follows:

Land Protection Division – The project manager is reminded that if any solid or hazardous waste is generated/encountered during construction, the project manager would follow applicable federal, state, and local regulations for their disposal.

Air Compliance/Permitting - The project manager is reminded that during the construction phases that occur with this project; the project is subject to the Fugitive Dust/Fugitive Emissions Rule 9 VAC 5-50-60 through 9 VAC 5-50-120. In addition, should any open burning or use of special incineration devices be employed in the disposal of land clearing debris during demolition and construction, the operation would be subject to the Open Burning Regulation 9 VAC 5-130-10 through 9 VAC 5-130-60 and 9 VAC 5-130-100.

Virginia Water Protection Permit (VWPP) Program – The project manager is reminded that a VWP permit from DEQ may be required should impacts to surface waters be necessary. DEQ VWP staff recommends that the avoidance and minimization of surface water impacts to the maximum extent practicable as well as coordination with the US Army Corps of Engineers. Upon receipt of a Joint Permit Application for the proposed surface water impacts, DEQ VWP Permit staff will review the proposed project in accordance with the VWP permit program regulations and current VWP permit program guidance.

Erosion and Sediment Control and Storm Water Management: DEQ has regulatory authority for the Virginia Pollutant Discharge Elimination System (VPDES) programs related to municipal separate storm sewer systems (MS4s) and construction activities. Erosion and sediment control measures are addressed in local ordinances and State regulations. Additional information is available at <http://www.deq.virginia.gov/Programs/Water/StormwaterManagement.aspx>. Non-point source pollution resulting from this project should be minimized by using effective erosion and sediment control practices and structures. Consideration should also be given to using permeable paving for parking areas and walkways where appropriate, and denuded areas should be promptly revegetated following construction work. If the total land disturbance exceeds 10,000 square feet, an erosion and sediment control plan will be required. Some localities also require an E&S plan for disturbances less than 10,000 square feet. A stormwater management plan may also be required. For any land disturbing activities equal to one acre or more, you are required to apply for coverage under the VPDES General Permit for Discharges of Storm Water from Construction Activities. The Virginia Stormwater Management Permit Authority may be DEQ or the locality.

On Wed, Nov 13, 2019 at 10:15 AM Wellman, Julia <julia.wellman@deq.virginia.gov> wrote:

Good morning - this is a new OEIR review request/project:

Document Type: Environmental Assessment and Federal Consistency Determinaon

Project Sponsor: US Army

Project Title: Fort Belvoir Caisson Platoon Facility Sub-Area Master Plan/Area Development Plan

Locaon: Fairfax County

Project Number: DEQ #19-140F

The document is attached for your review.

The due date for comments is **DECEMBER 4, 2019**. The review period is expedited due to the deadline set by the federal agency. You can send your comments either directly to JULIA WELLMAN by email (Julia.Wellman@deq.virginia.gov), or you can send your comments by regular interagency/U.S. mail to the Department of Environmental Quality, Office of Environmental Impact Review, 1111 East Main St., Richmond, VA 23219.

If you cannot meet the deadline, please notify the project coordinator prior to the comment due date. Arrangements may be made to extend the deadline for comments if possible. An agency will be considered to have no concerns if comments are not received (or contact is made) within the review period. However, it is important that agencies consistently participate in accordance with Virginia Code Section 10.1-1192.

REVIEW INSTRUCTIONS:

- A. Please review the document carefully. If the proposal has been previously reviewed (e.g. as a draft EIS or a Part 1 EIR), please consider whether your earlier comments have been adequately addressed.
- B. Prepare your agency's comments in a form which would be acceptable for responding directly to a project proponent agency (agency stationery or email) and include the project number on all correspondence.

If you have any questions, please email me.

--

Julia Wellman
Environmental Impact Review Coordinator
Department of Environmental Quality
1111 E Main Street, Suite 1400
Richmond, VA 23219
804-698-4326
Julia.Wellman@deq.virginia.gov
www.deq.virginia.gov

**** For program updates and public notices, please subscribe to Constant Contact: <https://lp.constantcontact.com/su/MVcCump/EIR> ****

--

BENJAMIN D. HOLLAND, MPH
DEQ Regional Enforcement Specialist

VA Department of Environmental Quality
Northern Regional Office
13901 Crown Court
Woodbridge, VA 22193

Phone: (703) 583-3812
Email: benjamin.holland@deq.virginia.gov
Website: www.deq.virginia.gov



Wellman, Julia <julia.wellman@deq.virginia.gov>

Re: EXPEDITED NEW PROJECT Fort Belvoir Caisson Platoon Facility EA/FCD

1 message

Gavan, Lawrence <larry.gavan@deq.virginia.gov>
To: "Wellman, Julia" <julia.wellman@deq.virginia.gov>

Wed, Nov 13, 2019 at 12:20 PM

(a) Agency Jurisdiction. The Department of Environmental Quality (DEQ) administers the *Virginia Erosion and Sediment Control Law and Regulations (VESCL&R)* and *Virginia Stormwater Management Law and Regulations (VSWML&R)*.

(b) Erosion and Sediment Control and Stormwater Management Plans. The Applicant and its authorized agents conducting regulated land-disturbing activities on private and public lands in the state must comply with *VESCL&R* and *VSWML&R*, including coverage under the general permit for stormwater discharge from construction activities, and other applicable federal nonpoint source pollution mandates (e.g. Clean Water Act-Section 313, federal consistency under the Coastal Zone Management Act). Clearing and grading activities, installation of staging areas, parking lots, roads, buildings, utilities, borrow areas, soil stockpiles, and related land-disturbing activities that result in the total land disturbance of equal to or greater than 10,000 square feet (2,500 square feet in Chesapeake Bay Preservation Area) would be regulated by *VESCL&R*. Accordingly, the Applicant must prepare and implement an erosion and sediment control (ESC) plan to ensure compliance with state law and regulations. Land-disturbing activities that result in the total land disturbance of equal to or greater than 1 acre (2,500 square feet in Chesapeake Bay Preservation Area) would be regulated by *VSWML&R*. Accordingly, the Applicant must prepare and implement a Stormwater Management (SWM) plan to ensure compliance with state law and regulations. The ESC/SWM plan is submitted to the DEQ Regional Office that serves the area where the project is located for review for compliance. The Applicant is ultimately responsible for achieving project compliance through oversight of on-site contractors, regular field inspection, prompt action against non-compliant sites, and other mechanisms consistent with agency policy. [Reference: *VESCL 62.1-44.15 et seq.*]

(c) General Permit for Stormwater Discharges from Construction Activities (VAR10). DEQ is responsible for the issuance, denial, revocation, termination and enforcement of the Virginia Stormwater Management Program (VSMP) General Permit for Stormwater Discharges from Construction Activities related to municipal separate storm sewer systems (MS4s) and construction activities for the control of stormwater discharges from MS4s and land disturbing activities under the Virginia Stormwater Management Program.

The owner or operator of projects involving land-disturbing activities of equal to or greater than 1 acre is required to register for coverage under the General Permit for Discharges of Stormwater from Construction Activities and develop a project-specific Stormwater Pollution Prevention Plan. Construction activities requiring registration also include land disturbance of less than one acre of total land area that is part of a larger common plan of development or sale if the larger common plan of development will collectively disturb equal to or greater than one acre. The SWPPP must be prepared prior to submission of the registration statement for coverage under the general permit and the SWPPP must address water quality and quantity in accordance with the *VSMP Permit Regulations*. General information and registration forms for the General Permit are available at: <http://www.deq.virginia.gov/Programs/Water/StormwaterManagement/VSMPPermits/ConstructionGeneralPermit.aspx>
[Reference: Virginia Stormwater Management Act 62.1-44.15 et seq.; VSMP Permit Regulations 9VAC25-880 et seq.]

On Wed, Nov 13, 2019 at 10:15 AM Wellman, Julia <julia.wellman@deq.virginia.gov> wrote:

Good morning - this is a new OEIR review request/project:

Document Type: Environmental Assessment and Federal Consistency Determinaon

Project Sponsor: US Army

Project Title: Fort Belvoir Caisson Platoon Facility Sub-Area Master Plan/Area Development Plan

Locaon: Fairfax County

Project Number: DEQ #19-140F

The document is a [attached](#) for your review.

The due date for comments is **DECEMBER 4, 2019**. **The review period is expedited due to the deadline set by the federal agency.** You can send your comments either directly to JULIA WELLMAN by email (Julia.Wellman@deq.virginia.gov), or you can send your comments by regular interagency/U.S. mail to the Department of Environmental Quality, Office of Environmental Impact Review, **1111 East Main St., Richmond, VA 23219**.

If you cannot meet the deadline, please notify the project coordinator prior to the comment due date. Arrangements may be made to extend the deadline for comments if possible. An agency will be considered to have no concerns if comments are not received (or contact is made) within the review period. However, it is important that agencies consistently participate in accordance with Virginia Code Section 10.1-1192.

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If you have any questions, please email me.

--

Julia Wellman
Environmental Impact Review Coordinator
Department of Environmental Quality
1111 E Main Street, Suite 1400
Richmond, VA 23219
804-698-4326
Julia.Wellman@deq.virginia.gov
www.deq.virginia.gov

**** For program updates and public notices, please subscribe to Constant Contact: <https://lp.constantcontact.com/su/MVcCump/EIR> ****



Wellman, Julia <julia.wellman@deq.virginia.gov>

Re: EXPEDITED NEW PROJECT Fort Belvoir Caisson Platoon Facility EA/FCD

1 message

Warren, Arlene <arlene.warren@vdh.virginia.gov>
To: "Wellman, Julia" <julia.wellman@deq.virginia.gov>
Cc: rr Environmental Impact Review <eir@deq.virginia.gov>

Tue, Nov 26, 2019 at 3:19 PM

Project Name: Fort Belvoir Caisson Platoon Facility Sub-Area Master Plan/Area Development Plan**Project #: 19-140 F****UPC #: N/A****Location: Fairfax County**

VDH – Office of Drinking Water has reviewed the above project. Below are our comments as they relate to proximity to **public drinking water sources** (groundwater wells, springs and surface water intakes). Potential impacts to public water distribution systems or sanitary sewage collection systems **must be verified by the local utility**.

There are no public groundwater wells within a 1-mile radius of the project site.

The following surface water intakes are located within a 5-mile radius of the project site:

PWS ID Number	System Name	Facility Name
6059501	FAIRFAX CO WATER AUTHORITY	OCCOQUAN RESERVIOR INTAKE

The project is not within the watershed of any public surface water intakes.

Best Management Practices should be employed, including Erosion & Sedimentation Controls and Spill Prevention Controls & Countermeasures on the project site.

Materials should be managed while on-site and during transport to prevent impacts to nearby surface water.

The Virginia Department of Health – Office of Drinking Water appreciates the opportunity to provide comments. If you have any questions, please let me know.

Best Regards,

Arlene Fields Warren

GIS Program Support Technician

Office of Drinking Water

Virginia Department of Health

109 Governor Street

Richmond, VA 23219

(804) 864-7781

On Wed, Nov 13, 2019 at 10:15 AM Wellman, Julia <julia.wellman@deq.virginia.gov> wrote:

Good morning - this is a new OEIR review request/project:

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Project Sponsor: US Army

Project Title: Fort Belvoir Caisson Platoon Facility Sub-Area Master Plan/Area Development Plan

Locaon: Fairfax County

Project Number: DEQ #19-140F

The document is a **ached for your review.**

The due date for comments is **DECEMBER 4, 2019**. The review period is expedited due to the deadline set by the federal agency. You can send your comments either directly to JULIA WELLMAN by email (Julia.Wellman@deq.virginia.gov), or you can send your comments by regular interagency/U.S. mail to the Department of Environmental Quality, Office of Environmental Impact Review, 1111 East Main St., Richmond, VA 23219.

If you cannot meet the deadline, please nof y the project coordinator prior to the comment due date. Arrangements may be made to extend the deadline for comments if possible. An agency will be considered to have no concerns if comments are not received (or contact is made) within the review period. However, it is important that agencies consistently parcipa te in accordance with Virginia Code Secon 10.1-1192.

REVIEW INSTRUCTIONS:

- A. Please review the document carefully. If the proposal has been previously reviewed (e.g. as a draft EIS or a Part 1 EIR), please consider whether your earlier comments have been adequately addressed.
- B. Prepare your agency's comments in a form which would be acceptable for responding directly to a project proponent agency (agency staonar y or email) and include the project number on all correspondence.

If you have any quesons, please email me.

--

Julia Wellman
Environmental Impact Review Coordinator
Department of Environmental Quality
1111 E Main Street, Suite 1400
Richmond, VA 23219
804-698-4326
Julia.Wellman@deq.virginia.gov
www.deq.virginia.gov

**** For program updates and public notices, please subscribe to Constant Contact: <https://lp.constantcontact.com/su/MVcCump/EIR> ****



COMMONWEALTH of VIRGINIA

*Marine Resources Commission
380 Fenwick Road
Bldg 96
Fort Monroe, VA 23651-1064*

Matthew J. Strickler
Secretary of Natural Resources

Steven G. Bowman
Commissioner

November 19, 2019

Department of Environmental Quality
Attn: Julia Wellman
Office of Environmental Impact Review
1111 East Main St.
Richmond, VA 23219

Re: Environmental Assessment and Federal Consistency
Determination
Fort Belvoir Caisson Platoon Facility Sub-Area Master
Plan/Area Development Plan
DEQ #19-140F

Dear Ms. Wellman:

This will respond to the request for comments regarding the Environmental Assessment and Federal Consistency Determination for the Fort Belvoir Caisson Platoon Facility Sub-Area Master Plan/Area Development Plan (DEQ #19-140F), prepared by the United States Army. Specifically, the Army has proposed to improve the Caisson Platoon Facility located at Fort Belvoir, including the expansion of pasture, stables, and training field. The project is located in Fairfax County, Virginia.

We reviewed the provided documents and found the proposed project will NOT require permits from the Marine Resources Commission (VMRC). However, permits may be required by the Fairfax County Wetlands Board.

Please be advised that VMRC pursuant to Chapter 12, 13, & 14 of Title 28.2 of the Code of Virginia administers permits required for submerged lands, tidal wetlands, and beaches and dunes. The VMRC administers the enforceable policies of fisheries management, subaqueous lands, tidal wetlands, and coastal primary sand dunes and beaches which comprise some of Virginia's Coastal Zone Management Program. VMRC staff has reviewed the submittal and offers the following comments:

Fisheries and Shellfish: Any impacts from erosion to anadromous fish and other marine species should be controlled during construction.

State-owned Submerged Lands: None in close proximity to the project area.

Tidal Wetlands: Any construction with impacts to tidal wetlands WILL need a permit from the Fairfax County Wetlands Board. They would also recommend mitigation to offset any impacts during the project.

An Agency of the Natural Resources Secretariat
www.mrc.virginia.gov

Telephone (757) 247-2200 (757) 247-2292 V/TDD Information and Emergency Hotline 1-800-541-4646 V/TDD

Department of Environmental Quality
November 19, 2019
Page Two

Beaches and Coastal Primary Sand Dunes: None in close proximity to the project area.

As such, this project will not have foreseeable impacts on the VMRC's enforceable policies. As proposed, we have no objection to the consistency findings provided by the applicant. Should the proposed project change, a new review by this agency may be required relative to these jurisdictional areas.

If you have any questions please contact me at (757) 247-8028 or by email at mark.eversole@mrc.virginia.gov. Thank you for the opportunity to comment.

Sincerely,

A handwritten signature in dark ink, appearing to read "Mark Eversole", written in a cursive style.

Mark Eversole
Environmental Engineer, Habitat Management

MCE/keb
HM



Wellman, Julia <julia.wellman@deq.virginia.gov>

Fairfax County Comments - DEQ Project #19-140F

1 message

Hunt, Janice L. <Janice.Hunt@fairfaxcounty.gov>
To: "Wellman, Julia (DEQ)" <Julia.Wellman@deq.virginia.gov>
Cc: "Gorney, Joseph" <Joseph.Gorney@fairfaxcounty.gov>

Wed, Dec 11, 2019 at 1:22 PM

Ms. Wellman,

Attached are Fairfax County's comments regarding the Fort Belvoir Caisson Platoon Facility. Please let us know if you have any questions.

Janice Hunt

Administrative Assistant III

Planning Division

Fairfax County Department of Planning and Development, Suite 730

[12055 Government Center Parkway, Fairfax Virginia 22035](#)

703-324-1340

janice.hunt@fairfaxcounty.gov



DEQ_Project__19-140F_1F.pdf
1060K



County of Fairfax, Virginia

To protect and enrich the quality of life for the people, neighborhoods and diverse communities of Fairfax County

December 9, 2019

Julia Wellman
Environmental Impact Review Coordinator
Virginia Department of Environmental Quality
1111 East Main Street, Suite 1400
Richmond, Virginia 23219

RE: Environmental Analysis: DEQ Project: #19-140F, Fort Belvoir Caisson Platoon Facility
Sub-Area Master Plan/Area Development Plan

Dear Ms. Wellman:

This memorandum provides comments from Fairfax County regarding the Environmental Assessment (EA) and Draft Finding of No Significant Impact (FONSI) for the Fort Belvoir Caisson Platoon Facility Sub-Area Master Plan /Area Development Plan dated November 2019. The Development Plan shows a new Caisson Platoon Facility with new expanded horse care, riding, training, parking, and storage facilities in the same general location as the current facility on Fort Belvoir.

DESCRIPTION OF THE APPLICATION

Facility improvements are proposed to meet the Caisson Platoon's mission to honor deceased servicemen and women by carrying them to rest in the Arlington National Cemetery by supporting the training of Soldiers to ride and care for horses. These improvements include:

- The enhancement of the facility's security;
- Relocation/expansion of the facility's classroom;
- Expansion of the pasture area to accommodate 27 horses;
- Provision of a separate hay storage facility;
- Consolidation of equipment storage facilities;
- Provision of an indoor riding training facility for year-round training;
- Expansion of training trails;
- Provision of permanent vehicular parking facilities to accommodate training and maintenance needs;
- Paving of existing roadways; provision of a paved and covered roll-off manure dumpster area; and
- Enhancement of facility signing.

More specifically, the Proposed Action would result in increasing the Caisson Platoon Facility from its existing 10.5 acres to 39.1 acres, including increasing the current 5.8 acres of pasture



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12055 Government Center Parkway, Suite 730
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www.fairfaxcounty.gov/planning-development

to 27.4 acres, and the expansion of the riding trails. The clearing of 27.53 acres of existing forest area would be required for pasture and trail expansion. A new dumpster storage area would be constructed including concrete pads for the siting of roll-off dumpsters, ramps for the loading of manure into the dumpsters, and the construction of a cover over the dumpster storage area for weather protection. A visual screen would be constructed around the dumpster storage area. Existing unpaved roadways and parking lots would be relocated and replaced with paved facilities. Construction would be limited to weekday business hours and construction equipment would use mufflers. Noise from the operation of the Caisson Platoon Facility is expected to be minor.

Three alternatives to the Proposed Action were considered. However, these alternatives were not advanced as they did not adequately address the project purpose and need while minimizing environmental impacts. Specifically, these alternatives were not as effective as the Proposed Action in providing the required pasture area for 27 horses, providing required training facilities, and minimizing environmental impacts, including impacts to wetlands, archaeological resources, and the adjacent Wildlife Management Area. The No Action Alternative was also evaluated but would not result in the needed expansion of the Fort Belvoir Caisson Platoon Facility.

ANALYSIS

Water Resources

The Fairfax County Comprehensive Plan calls for the prevention and reduction of “*pollution of surface and groundwater resources*” and the protection and restoration of “*the ecological integrity of streams in Fairfax County.*” (*Fairfax County Comprehensive Plan, 2017 Edition, Policy Plan, Environment, Amended through 3-14-2017, Page 7*).

Additionally, new development and redevelopment are expected to result in high quality site design and low impact development (LID) techniques and “*pursue commitments to reduce stormwater runoff volumes and peak flows, to increase groundwater recharge, and to increase preservation of undisturbed areas.*” Some or all of the following practices should be considered in order to minimize the impacts that new development and redevelopment projects may have on the county’s streams:

- “*Minimize the amount of impervious surface created ...*
- “*Where feasible, convey drainage from impervious areas into pervious areas ...*
- “*Encourage the preservation of wooded areas and steep slopes adjacent to stream valley EQC areas ...*
- “*Where appropriate, use protective easements in areas outside of private residential lots as a mechanism to protect wooded areas and steep slopes.*
- “*Encourage the use of open ditch road sections ...*

- *Encourage the use of innovative BMPs and infiltration techniques of stormwater management ...*
- *Apply nonstructural best management practices and bioengineering practices ...*
- *Maximize the use of infiltration landscaping within streetscapes consistent with county and state requirements."*

(Fairfax County Comprehensive Plan, 2017 Edition, Policy Plan, Environment, Amended through 3-14-2017, Pages 7-9).

The Proposed Action would result in impacts to three wetlands totaling 0.12 acres and 91 feet (140 square feet) of intermittent stream channel, and would result in the clearing of 27.53 acres of forested area. Short- and long-term permanent impacts to two isolated, non-tidal PEM wetlands (0.06 acres) and one, isolated, non-tidal PFO wetland (0.06 acres) would occur.

Currently, the streams affected by the Proposed Action are located in the existing pasture area that is barren of vegetation and subject to erosion due to concentrated livestock use. The proposed expansion of the horse pasture, grading to promote effective and controlled drainage, and the construction of a stormwater management system, including vegetated swales around the pasture area and bioretention ponds, is expected to result in long-term minor improvements to surface water quality. The relocated and treated stormwater drainage outlet would be within the same Pohick Creek headwater tributary system. Temporary erosion and sediment control measures would be employed during grading activities.

The 27 acres of proposed pasture would be divided into 4 separate paddocks, vegetated with species selected for soil stabilization, fast growth, and grazing values. Horse use of paddocks would be rotated to maintain healthy turf coverage at 70 percent minimum.

Stream mitigation would be provided by the purchase of credits from a mitigation bank. Additionally, wetland compensation is anticipated to be required to offset impacts associated with this project, which are expected to be satisfied through the purchase of wetland credits from one or more approved mitigation banks servicing the project's 8-digit HUC (02070010). Credit ratios greater than 1:1 may apply to any compensation obligation, as specified by regulatory authorities.

A stormwater management (SWM) swale would be constructed around the perimeter of the expanded pasture area (including the four paddocks, horse quarantine area, run-in shelters, feed pens, and an outdoor riding arena) to collect run-off and transmit it to wet-bioretention features and other SWM Best Management Practices (BMPs). Four optional stormwater bioretention areas are proposed to slow and infiltrate excess water during rain events. Typical bioretention systems would consist of shallow wet depressions in the landscape containing stormwater, landscape plants with the capability to capture sediment and filter pollutants from the water, and well-drained subsoil to maximize stormwater infiltration. The bioretention areas would

require the ability to process heavy sediment loads from stormwater runoff from the pasture and pavements. Additional SWM features would be located along roadways and parking lots to capture and treat the run-off.

Fort Belvoir recognizes the Resource Protection Area (RPA) designation but, being a federal entity, is not subject to the provisions of the Fairfax County Chesapeake Bay Preservation Ordinance. As a result, Fort Belvoir does not use RPA maps produced by Fairfax County. Instead, the Army delineates the RPAs on the installation. In addition to RPA areas, Fort Belvoir places a 35-foot buffer around all intermittent streams.

- County staff notes that the project site is located in the Pohick Creek watershed. Pohick Creek is listed by the Virginia Department of Environmental Quality as an impaired waterway for *Escherichia coli*. The EA cites Mr. Wood with the Northern Virginia Soil and Water Conservation District (NVSWCD) as an EA reviewer. Fairfax County Stormwater Management staff encourages Fort Belvoir staff to work closely with NVSWCD on a Soil and Water Quality Conservation Plan to ensure the successful operation of the facility and to limit impacts to the surrounding environment.
- The Environmental Assessment notes that wetland and stream credits would be purchased to mitigate for impacts. Where possible, Fairfax County urges Fort Belvoir to pursue on-site stream mitigation by improving the outfalls of the two impacted intermittent streams using natural channel design.

Forest Cover

The Comprehensive Plan anticipates the conservation and restoration of “*tree cover on developed and developing sites*” and the provision of “*tree cover on sites where it is absent prior to development.*” (Fairfax County Comprehensive Plan, 2017 Edition, Policy Plan, Environment, Amended through 3-14-2017, Page 4).

The project would include the development of a 27.4-acre pasture area consisting of four paddocks, a horse quarantine area, run-in shelters, feed pens, automatic waterers, and an outdoor riding arena. A new livestock containment fence would be constructed around the expanded pasture with additional fencing and gates between paddocks, and quarantine areas to control use by horses and promote sustainable forage. Short- and long-term impacts would occur due to the removal of trees affecting 27.53 acres of an existing woodland for the conversion of the area to pasture land.

Tree removal activities are proposed to take place outside of the active period for the northern long-eared bat and nesting time for migratory birds in order to minimize impacts to protected species that may occur at the Caisson Platoon facility due to the removal of the 27.53 acres of forest habitat.

Additionally, consistent with Fort Belvoir's Tree Policy Memorandum, two new trees would be planted for each tree removed during construction, based on available space. If tree replacement space is not available, alternative mitigation for the removal of 27.53 acres of trees would be developed. Tree removal, in excess of 10 acres, would be coordinated with the US Fish and Wildlife Service to minimize the potential for impacts to bat species of special concern.

- County staff recommends that a tree survey be conducted to determine tree mitigation commitments and that the proposed project area and on-post riparian areas receive special consideration for tree replacement plantings.

Heritage Resources

The Comprehensive Plan anticipates the protection of "*significant heritage resources from degradation, or damage and destruction by public or private action.*" Additionally, activities affecting heritage resources should be coordinated "*among county agencies and with other public agencies and private organizations.*" (Fairfax County Comprehensive Plan, 2017 Edition, Policy Plan, Heritage Resources, Amended through 4-29-2014, Page 4).

- Fairfax County Park Authority (FCPA) staff noted that the site was subjected to cultural resources review, which indicated that there are seven known historic sites within the area of impact which have already been surveyed archaeologically. Phase II studies on these sites have determined that five of these sites are not eligible for inclusion onto the National Register of Historic Places. Two of the sites, 44FX1657 and 44FX1679, were considered potentially eligible, but will not be impacted by the current plan.

Given that the Proposed Action is a Federal project that triggered Section 106 of the National Historic Preservation Act, the applicant has already initiated consultation on the current plan with the Virginia Department of Historic Resources (VDHR). However, most of the site lies within the county's Pohick Church Historic Overlay District (HOD). Therefore, per the Fairfax County Zoning Ordinance, staff requests that the applicant complete and submit a county Archaeological Survey Data Form. If project plans change, necessitating impacts to sites 44FX1657 and 44FX1679, staff requests that the applicant consult with VDHR. If sites are found to be significant or eligible for inclusion onto the National Register of Historic Places, avoidance or additional archaeological work may be required.

- Additionally, county Heritage Resources staff reviewed the EA and its Section 106 consultation. As FCPA noted in their comments, the proposed undertaking is within the Pohick Church HOD. In addition to the completion of an Archaeological Data Form, county staff requests that Fort Belvoir staff present the proposed project and effects to the Fairfax County Architectural Review Board (ARB). To schedule a time on the ARB's

Julia Wellman

Fort Belvoir Caisson Platoon Facility Sub-Area Master Plan/Area Development Plan

Page 6

agenda, Fort Belvoir staff can contact Laura Arseneau at
Laura.Arseneau@fairfaxcounty.gov.

Heritage Resources staff agrees that the project as proposed would not have an adverse effect on historic properties and agrees with FCPA that if sites are found to be eligible for inclusion, that additional work or avoidance may be required, as well as additional consultation with VDHR.

Transportation

Fort Belvoir anticipates a temporary and negligible increase in traffic during construction, with a return to preconstruction levels following construction.

- The Fairfax County Department of Transportation concurred with the assessment and had no further comments.

Thank you for the opportunity to comment on this project. If you have any questions regarding our comments, please contact Joseph Gorney at 703-324-1380.

Sincerely,



Leanna O'Donnell, Acting Director, Planning Division

Department of Planning and Development

Attachment: Fairfax County Park Authority Memorandum – November 21, 2019

LO: JCG

cc: Board of Supervisors

Bryan Hill, County Executive

Rachel Flynn, Deputy County Executive

Barbara Byron, Director, DPD

Tom Biesiadny, Director, FCDOT

Denise James, Chief, Environment & Development Review Branch, DPD

Joseph Gorney, Senior Environmental Planner, Planning Division, DPD

Catherine Torgersen, Stormwater Planning Division, DPWES

Andrew Galusha, Fairfax County Park Authority

Nicole Brannan, Heritage Resources Planner, Planning Division, DPD

Felix M. Marini, Chief of Environmental and Natural Resources Division, Fort Belvoir



FAIRFAX COUNTY PARK AUTHORITY

M E M O R A N D U M

TO: Denise James, Chief
Environment and Development Review Branch
Department of Planning and Development

FROM: Andrea L. Dorlester, Development Review Section Chief
Park Planning Branch, PDD *ADD*

DATE: November 21, 2019

SUBJECT: EIR-DEQ #19-140F; Fort Belvoir Caisson Platoon Facility Sub Area Master Plan
Tax Map Number: 115-2 ((1)) 1

The Park Authority staff has reviewed the documentation provided for the Fort Belvoir Caisson Platoon Facility Sub-Area Master Plan /Area Development Plan Environmental Assessment dated November 2019. The Development Plan shows a new Caisson Platoon Facility with new, expanded horse care, riding, training, parking, and storage facilities in the same location as the current facility on Fort Belvoir.

The site was subjected to cultural resources review which indicated that there are seven known historic sites within the area of impact which have already been surveyed archaeologically. Phase II studies on these sites have determined that five of these sites are not eligible for inclusion onto the National Register of Historic Places. Two of the sites, 44FX1657, and 44FX1679 were considered potentially eligible, but will not be impacted by the current plan.

Since this is a Federal project that triggered Section 106 of the National Historic Preservation Act, the applicant has already initiated consultation on the current plan with the Virginia Department of Historic Resources (VDHR). However, most of the site lies within the Pohick Church Historic Overlay District. Therefore, per the Fairfax County Zoning Ordinance, staff requests that the applicant fill out and return the attached Archaeological Survey Data Form. If the plans change necessitating impacts to sites 44FX1657 and 44FX1679, staff requests that the applicant reconsult with VDHR. If sites are found to be significant or eligible for inclusion onto the National Register of Historic Places, avoidance or additional archaeological work may be required.

FCPA Reviewer: Andy Galusha
DPD Coordinator: Joe Gorney

Att: Archaeological Survey Data Form

eCopy: Barbara Nugent, Director, Resource Management Division

Liz Crowell, Manager, Archaeology & Collections Branch

Joe Gorney, Zoning Coordinator, DPD

Andy Galusha, Park Planner, Park Planning Branch

File Copy

Archaeological Survey Data Form – Part A

In order to determine the existing on-site conditions, the following information must be provided to the Cultural Resource Management and Protection Section of the Fairfax County Park Authority, James Lee Community Center 2855 Annandale Road, Room 124, Falls Church, VA, 22042, prior to submission of any rezoning, development plan, special exception, special permit or variance application that involves 2500 square feet or more of land disturbing activity and where the application property is located wholly or partially within or contiguous to a Historic Overlay District. Following the County's review of available files and GIS information for the application property, a determination will be made as to the probability of the application property to yield significant archaeological resources. The Cultural Resource Management and Protection Section will reply to the applicant within fifteen (15) working days of receipt of the following required information:

APPLICANT	Name
	Mailing Address
	Phone Home () Work () Mobile ()
PROPERTY INFORMATION	Property Address
	Tax Map and Parcel Number: Size (acre/sq.ft.)
	Zoning District: Magisterial District
	Proposed Zoning if concurrent with rezoning application:
HISTORIC OVERLAY DISTRICT ARCHAEOLOGICAL SURVEY REQUEST INFORMATION	Provide the following: One (1) copy of the current Fairfax County Zoning Section Sheet(s) at a scale of one inch equals five hundred feet (1" = 500'), covering the area within at least a 500 foot radius of the proposed use, showing the existing zoning classification for all land appearing on the map. If more than one (1) Zoning Section Sheet is required to cover the area, such sheets shall be attached so as to create an intelligible map. The boundaries of the subject site shall be outlined in red thereon.
	Description of the proposal including type of application and proposed use, and a graphic drawn to scale showing the dimensions of all existing buildings and their distance from property lines (attach additional sheets, as necessary):
AGENT/CONTACT INFORMATION	Name
	Mailing Address
	Phone Home () Work () Mobile ()
MAILING	Send all correspondence to (check one): ____ Applicant or ____ Agent/Contact
<div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> _____ Type/Print Name of Applicant </div> <div style="width: 45%;"> _____ Signature of Applicant/Agent </div> </div>	

FOR OFFICIAL COUNTY USE ONLY

Date all required information received: _____

No probability. No Survey Required. _____

Low probability. Survey Required (see Sect. 7-210 of the Zoning Ordinance): _____

Medium to high probability. Survey Required (see Sect. 7-210 of the Zoning Ordinance): _____

Comments (attach additional sheets, if necessary): _____

Date of response to applicant: _____

Archaeological Survey Data Form – Part B

If the Cultural Resource Management and Protection Section of the Fairfax County Park Authority determines that a Survey is required and a report of the survey results must be submitted prior to submission of any rezoning, development plan, special exception, special permit or variance application that involves 2500 square feet or more of land disturbing activity and where the application property is located wholly or partially within or contiguous to a Historic Overlay District, then a copy of the Executive Summary contained in the report must be printed in the space below (attach additional sheets if necessary). (See Par. 6L of Sect. 7-210 of the Zoning Ordinance.)

EXECUTIVE SUMMARY:

I certify that the above Executive Summary is a true copy of the Executive Summary contained in the Report dated _____ submitted to the Cultural Resource Section.

Type/Print Name of Applicant

Signature of Applicant/Agent and Date

FOR OFFICIAL COUNTY USE ONLY

Date of Report submitted to the Park Authority _____

Report submitted and meets submission requirements. Staff recommendation forthcoming: _____

Comment #	Reviewer Comment #	Chapter #	Page #	Comment	Reviewer (Name & Office)	Action Needed/Taken
1	1		46	The Environmental Assessment (EA) references a "Ft. Belvoir Tree Policy Memorandum", a document I've not been able to locate online. I found Garrison Policy #27 (Tree Removal and Protection) online but was not able to open or download it. Can you send me a link to either of these documents? Also, page 46 of the EA indicates that "Tree cutting activities in excess of 10 acres would be coordinated with the U.S. Fish and Wildlife Service to minimize the potential for impact..." Does Ft. Belvoir's Environmental Division have performance criteria in place for less than 10 acres of tree removal?	Daniel Moore, VDEQ, Office of Local Government Programs	Please use the following link for the electronic copy of Policy #27, Tree Removal and Protection, dated 2 Aug 2018: https://home.army.mil/belvoir/application/files/8715/5292/8322/Garrison_Policy__27_-_Tree_Removal_and_Protection.pdf . Further, Fort Belvoir adheres to performance criteria discussed in its 2018 Integrated Natural Resources Management Plan (INRMP), specifically Section 8.2, for all projects. This guidance is the result of the Memorandum of Instruction- Northern Long-eared Bat Protection on Fort Belvoir which can be found in the 2018 INRMP on the Fort Belvoir website at the following link: https://home.army.mil/belvoir/index.php/about/Garrison/directorate-public-works/environmental-division .
2	2	3	72	Fig. 3-4 (Water Resources Map) of the EA shows two linear, isolated wetlands running north-south directly south and southeast of Building 3045. Are these wetlands (which are shown as intermittent streams with both riparian buffers and RPAS boundaries around them) the same RPAs referenced in the "Forests" text shown on page 72 of the EA?	Daniel Moore, VDEQ, Office of Local Government Programs	The two north-south features shown on Figure 3-4 are intermittent stream tributaries that connect further downstream and then discharge to Pohick Creek, a tributary to the Potomac River. These are the same features listed as RPAs under the "Forests" section of Appendix C (Page 72 of the EA); however, RPAs, as designated by Fairfax County, do not apply to intermittent waters. Further, the installation designates RPAs pursuant to its own policies, but these two features did not receive an RPA designation. Therefore, the mapping on Figure 3-4, as well as the description under the "Forests" section of Appendix C (CZM Consistency Determination), is inaccurate. These two intermittent streams that originate within the current pasture area and flow north to south are correctly located, but were not mapped to show their downstream connection. These features should not have an RPA buffer, but, rather, only the 35 foot buffer used by Fort Belvoir to protect intermittent waters.
3	3			Please note that Federal actions on installations located within Tidewater Virginia are required to be consistent with the performance criteria of the Regulations on lands analogous to locally designated RPAs and RMAs, as provided in §9VAC25-830-130 and 140 of the Regulations, including the requirement to "minimize land disturbance (including access and staging areas), retain existing vegetation and minimize impervious cover as well as including compliance with the requirements of the Virginia Erosion and Sediment Control Handbook, and stormwater management criteria consistent with water quality protection provisions of the Virginia Stormwater Management Regulations."	Daniel Moore, VDEQ, Office of Local Government Programs	Fort Belvoir acknowledges the information in your comment. As referenced in the CZM Consistency Determination (Appendix C; page 72 "Coastal Lands Management"), the Virginia Department of Environmental Quality and the Virginia Pollution Discharge Elimination Systems reviews would ensure adherence to stormwater management measures and appropriate erosion and sediment controls to minimize non-point source pollution. All erosion and sediment controls would be designed in accordance with the Virginia Erosion and Sediment Control Regulations handbook, and would be implemented in accordance with the VSMP and the Virginia Department of Environmental Quality VSMP General Permit for Storm Water discharges associated with land disturbing activities.

Comment #	Reviewer Comment #	Chapter #	Page #	Comment	Reviewer (Name & Office)	Action Needed/Taken
4	4	3		The requirement to retain indigenous vegetation and the need to avoid unnecessary encroachments into the RPAs shown on Fig. 3-4 may necessitate a slight redesign of the proposed pasture expansion. It appears that there is land west of and adjacent to the Cemetery Horse Paddock (#18, per Figure 2-2), between the existing Route 1 Stormwater Basin and Stewart Road that could be reserved for pastureland rather than the "green space" shown on Figure 2-3 (Proposed Action with Constraints). Please note that the mapped riparian buffers and RPA boundaries should be considered constraints to development just as the EQC Boundary and Wildlife Management Areas are.	Daniel Moore, VDEQ, Office of Local Government Programs	The comment regarding RPA boundaries and riparian buffers as environmental constraints is acknowledged. The two intermittent streams in Figure 3-4 were incorrectly mapped as RPAs. The preferred alternative presented in the EA is conceptual in nature, and all practicable measures will be taken during project design to minimize impacts to the intermittent streams and their buffers, including the consideration of the feasibility of moving the quarantine pasture and modifying the boundaries of Paddock #2 to avoid impacts to the streams and their riparian buffers.
5	1			The recommendations from Fish and Wildlife Service are critical to prevent and reduce impacts on federally-listed species, particularly the Threatened northern long-eared bat; likewise, recommendations from the Virginia Department of Game and Inland Fisheries should be followed to reduce the potential for impacts on state-listed species. Section 7 consultation should be concluded and documented prior to any tree removal or earth disturbance. Please note that the Environmental Assessment provided for download did not include documentation of agency coordination.	Carrie Traver, EPA Region III	On Page 39 of the EA, it is stated: "As proposed forest clearing exceeds 10.0 acres, consultation with the U.S. Fish and Wildlife Service pursuant to Section 7 of the U.S. Endangered Species Act, is required. MDW with assistance from USACE would consult for the proposal. To minimize potential impacts, tree removal would only be performed outside of the closure period, from April 15 to September 15, per the Section 7 of the ESA consultation in Appendix A (pgs. 135 - 142)." Under 50 CFR 402.12(e) of the regulations implementing Section 7 of the Endangered Species Act, the accuracy of the species list will be verified every 90 days.
6	2			The 27.53 acres of tree removal predominantly consist of hardwood forests and beech mixed oak forest. The EA concludes that this impact does not reach the threshold of significant. However, as noted, the 27.53 acres of forest is Priority 1 for retention, and the ecological value, including habitat function, is high. While impacts will occur, there appear to be other opportunities to mitigate effects on wildlife and habitat.	Carrie Traver, EPA Region III	Opportunities considered in order to mitigate effects on wildlife and habitat resulting from tree clearing include: restricting tree removal between April 1 and July 15 to avoid disturbance, removal, damage or destruction to birds and their nests, eggs and hatchlings, per the Migratory Bird Treaty Act; implementation of erosion control measures to minimize potential loss or degradation of wildlife habitat; avoidance of activities requiring the use of heavy equipment to the maximum extent possible; protection of wildlife habitat on the edge of the project boundary; conducting pre-disturbance surveys in the construction area prior to any construction activities; and, establishing vegetated berms using soil from regrading of the new paddocks.
7	3			The EA states that a tree survey would be conducted to identify existing tree species that may remain within the proposed pasture area. Preserving some trees in the pasture has multiple benefits. In addition to the ecological functions provided by mature trees (which are detailed in the EA and include habitat, stormwater interception, stabilization, and others), incorporating trees can promote the health and comfort of the horses by providing shade, windbreaks, and reducing muddy conditions in the growing season. The presence of large trees in or near pastures may also encourage hunting of rats and mice by birds of prey, which also is a benefit to stable facilities.	Carrie Traver, EPA Region III	Thank you for the information in the comment. All efforts will be made to preserve the maximum amount of trees feasible within the pastures.
8	4			The EA indicates that Fort Belvoir is a Partners in Flight participant. We recommend consulting with Partners in Flight to explore opportunities to create and manage pastures as habitat. Evaluating practices such as mowing timing and frequency, grass species, and allowing the growth of hedgerow vegetation may enhance habitat value and diversity without adversely impacting the value of the pastures for grazing.	Carrie Traver, EPA Region III	Thank you for your comment. As stated in Section 3.3 of the EA, "the proposed project is not within any wildlife corridors, refuges, or Partners in Flight habitat areas."

Comment #	Reviewer Comment #	Chapter #	Page #	Comment	Reviewer (Name & Office)	Action Needed/Taken
9	5			The Study also states that the Fort Belvoir Tree Policy Memorandum requires planting of two trees per each tree removed that is 4" or more in diameter at breast height. However, Section 3.4.2.3 notes that most available space for replacement tree planting has been previously utilized, which will require consideration of alternative mitigation. As the policy is cited to reduce impacts from tree removal, it would be beneficial to identify and discuss the mitigation options that will be considered.	Carrie Traver, EPA Region III	Where on-site measures are not practicable, mitigation options include: contributing to one or more of the 26 stream and wetland restoration projects on Fort Belvoir; incorporating Low Impact Development (LID) design features and Green Infrastructure (GI) practices; preserving the top 12 inches of material removed from wetlands for use as wetland seed and root-stock in another area; revegetating early successional vegetation (mix of grass, shrubs, herbaceous layer, etc.) around new buildings, in parking areas, and along the paddock fencing; and, removing invasive species and replanting with native species.
10	6			The EA indicates that all trees removed for this project would be chipped or taken to landfills within the quarantine zone or be used on site for soil stabilization in compliance with the Federal Emerald Ash Borer Quarantine (7 CFR 301.53). We recommend stating that the trees will be chipped onsite and used for stabilization, as this appears to be the assumption in the document and is reflected in the general conformity analysis. If trees will be trucked to a landfill (or disposed of in a different way) factors such as emission sources and calculations and projected traffic during the construction period should be re-analyzed for that scenario.	Carrie Traver, EPA Region III	Thank you for your comment. As a point of clarification, all trees removed as part of this project will be chipped and used on-site. No removed trees will be trucked to a landfill as this would add cost to the project.
11	7			A total of 91 linear feet of stream (140 square feet) would be impacted through grading and fill placement as the two intermittent tributaries to Pohick Creek would be terminated at the perimeter of the pasture. Drainage to these two intermittent streams would be diverted by the proposed vegetated swales. The EA concludes that the stream impacts would be minimal. However, impacts to local surface water flow, volume, and quality are unclear without a more detailed assessment of stream hydrology sources and potential impacts from discharges.	Carrie Traver, EPA Region III	This EA covers the scope of an area development plan, and, as such is largely conceptual in nature. Details of the proposed plan's impacts to local surface water flow, volume and quality would be addressed and resolved through the permitting process.
12	8			Intermittent streams are seasonally connected to groundwater sources. Even minimal grading, compaction, or clearing/grubbing can disrupt or reroute shallow groundwater sources; this could have adverse impacts on the hydrology and water quality of the remaining stream reaches and their habitat. To avoid and minimize such impacts, disturbance to seeps or springs should be avoided if possible. If intercepted, spring boxes and similar techniques should capture the flow and route it to the stream directly. Capture of groundwater by the stormwater management system can reduce the capacity of the system and can lead to water quality degradation through temperature impacts and loss of dilution. Furthermore, we recommend routing flow as close to the top of remaining channels as possible as the location of the proposed stormwater discharge points can create impacts by re-routing flow and dewatering stream reaches.	Carrie Traver, EPA Region III	Thank you for your comment. Details of the proposed plan's impacts to local hydrology and water quality to remaining stream reaches would be addressed and resolved through the permitting process.
13	9			The EA states that post construction stormwater would be managed through multiple stormwater retention basins designed to have a shallow pool of water all the time. We suggest that Fort Belvoir consider a combination of BMPs, including native planting areas that do not include permanent pools of standing water. As part of this analysis, potential temperature impacts from stormwater BMPs that discharge to streams should be considered; standing surface water sources generally warm in sunlight and have the potential to adversely impact downstream biota. Also, where standing water exists, it may require regular treatment for mosquitos as a maintenance activity.	Carrie Traver, EPA Region III	Thank you for your comment. Fort Belvoir acknowledges that permanent pools of standing water can adversely affect water temperature in downstream reaches and inadvertently serve as mosquito breeding sites. All practical measures to employ BMP's that do not create unnecessary standing water will be incorporated into the design plans.

Comment #	Reviewer Comment #	Chapter #	Page #	Comment	Reviewer (Name & Office)	Action Needed/Taken
14	10			The EA does not analyze noise from construction impacts as these activities would be performed during 7AM and 9PM and would comply with all noise ordinances and regulations. However, noise can impact quality of life for nearby residents, particularly young children. As the proposed construction appears to be 3 years, we recommend further consideration of potential noise impacts on nearby residents from equipment, tree removal, and traffic especially during evening hours when residents may be outside.	Carrie Traver, EPA Region III	Thank you for your comment. Please note that construction equipment mufflers will be used. Fort Belvoir will consider implementing engineering controls to dampen noise, such as installing a modular sound barrier along the border of the construction area, if the noise becomes a nuisance to surrounding residents.
15	11			Section 106 consultation with Virginia State Historic Preservation Office and interested Indian Nations should be concluded prior to starting any earth disturbance.	Carrie Traver, EPA Region III	Thank you for your comment. The draft EA has been coordinated with the Virginia State Historic Preservation Office and interested tribes, as documented in Appendix A. On 6 December 2019 the Virginia Department of Historic Resources provided concurrence with the Army's determination of no adverse effect to historic properties, thereby concluding the Section 106 consultation requirement.
16	12			The discussion of Cumulative Effects in Section 3.4 lists actions that were completed or planned at Fort Belvoir, including the construction of the National Museum of the U.S. Army. We would recommend including an expanded discussion of cumulative impacts from tree clearing on habitat that includes a discussion of the value of the previously cleared areas and the mitigation provided to offset the losses. Likewise, a discussion of the cumulative previous impacts to water resources onsite and mitigative actions taken would be useful.	Carrie Traver, EPA Region III	The original clearing of the pastures predated the adoption of the tree policy; there are no historic mitigation measures in place for the facility to address tree or aquatic resource impacts. The Cumulative Effects discussion under Section 3.4.2.3, Biological Resources, provides a discussion of the value of the forest resources on site in relation to the overall Fort Belvoir area.
17	13			Section 3.4.2.1 concludes the action would result in minimal adverse cumulative impacts related to air quality as the proposed new indoor riding arena and classroom facility would be more energy efficient than existing buildings. It would be helpful if the study clarified how the energy use of the expanded facility, including the addition of the climate-controlled riding arena and amenities, has been evaluated.	Carrie Traver, EPA Region III	Noted. Thank you for your comment.
18	1			The Fairfax County Comprehensive Plan calls for the prevention and reduction of "pollution of surface and groundwater resources" and the protection and restoration of "the ecological integrity of streams in Fairfax County".	Leanna O'Donnell, Fairfax County Department of Planning and Development	Noted. Thank you for your comment.

Comment #	Reviewer Comment #	Chapter #	Page #	Comment	Reviewer (Name & Office)	Action Needed/Taken
19	2			Additionally, new development and redevelopment are expected to result in high quality site design and low impact development (LID) techniques and "pursue commitments to reduce stormwater runoff volumes and peak flows, to increase groundwater recharge, and to increase preservation of undisturbed areas". Some or all of the following practices should be considered in order to minimize the impacts that new development and redevelopment projects may have on the county's streams: "minimize the amount of impervious surface created; where feasible, convey drainage from impervious areas into pervious areas; encourage the preservation of wooded areas and steep slopes adjacent to stream valley EQC areas; where appropriate, use protective easements in areas outside of private residential lots as a mechanism to protect wooded areas and steep slopes; encourage the use of open ditch road sections; encourage the use of innovative BMPs and infiltration techniques of stormwater management; apply nonstructural best management practices and bioengineering practices; maximize the use of infiltration landscaping within streetscapes consistent with county and state requirements".	Leanna O'Donnell, Fairfax County Department of Planning and Development	Noted. Thank you for your comment. Fort Belvoir believes the conceptual site design largely incorporates measures to reduce stormwater runoff volumes, increase groundwater recharge and increase preservation of undisturbed areas. Specific design features to accomplish this will be identified as the installation proceeds through the permitting process.
20	3			Stream mitigation would be provided by the purchase of credits from a mitigation bank. Additionally, wetland compensation is anticipated to be required to offset impacts associated with this project, which are expected to be satisfied through the purchase of wetland credits from one or more approved mitigation banks servicing the project's 8-digit HUC (020700010). Credit ratios greater than 1:1 may apply to any compensation obligation, as specified by regulatory authorities.	Leanna O'Donnell, Fairfax County Department of Planning and Development	Noted. Specific information regarding mitigation will be identified and addressed as the installation proceeds through the permitting process. The scope of this EA pertains to a conceptual sub-area master plan/area development plan.
21	4			County staff notes that the project site is located in the Pohick Creek watershed. Pohick Creek is listed by the Virginia Department of Environmental Quality as an impaired waterway for <i>Escherichia coli</i> . The EA cites Mr. Wood with the Northern Virginia Soil and Water Conservation District (NVSWCD) as an EA reviewer. Fairfax County Stormwater Management staff encourages Fort Belvoir staff to work closely with NVSWCD on a Soil and Water Quality Conservation Plan to ensure the successful	Leanna O'Donnell, Fairfax County Department of Planning and Development	Noted. Fort Belvoir will coordinate with Northern Virginia Soil and Water Conservation District (NVSWCD).
22	5			The Environmental Assessment notes that wetland and stream credits would be purchased to mitigate for impacts. Where possible, Fairfax County urges Fort Belvoir to pursue on-site stream mitigation by improving the outfalls of the two impacted intermittent streams using natural channel design.	Leanna O'Donnell, Fairfax County Department of Planning and Development	The recommendation is noted. Specific mitigation would be identified during the permit review process.
23	6			County staff recommends that a tree survey be conducted to determine tree mitigation commitments and that the proposed project areas and on-post riparian areas receive special consideration for tree replacement plantings.	Leanna O'Donnell, Fairfax County Department of Planning and Development	Noted. Thank you for your comment.

Comment #	Reviewer Comment #	Chapter #	Page #	Comment	Reviewer (Name & Office)	Action Needed/Taken
24	7			Fairfax County Park Authority (FCPA) staff noted that the site was subjected to cultural resources review, which indicated that there are seven known historic sites within the area of impact which have already been surveyed archaeologically. Phase II studies on these sites have determined that five of these sites are not eligible for inclusion onto the National Register of Historic Places. Two of the sites, 44FX1657 and 44FX1679, were considered potentially eligible, but will not be impacted by the current plan.	Leanna O'Donnell, Fairfax County Department of Planning and Development	Noted. Thank you for your comment.
25	8			Given that the Proposed Action is a Federal project that triggered Section 106 of the National Historic Preservation Act, the applicant has already initiated consultation on the current plan with the Virginia Department of Historic Resources (VDHR). However, most of the site lies within the county's Pohick Church Historic Overlay District (HOD). Therefore, per the Fairfax County Zoning Ordinance, staff requests that the applicant complete and submit a county Archaeological Survey Data Form. If project plans change, necessitating impacts to sites 44FX1657 and 44FX1679, staff requests that the applicant consult with VDHR. If sites are found to be significant or eligible for inclusion onto the National Register of Historic Places, avoidance or additional archaeological work may be required.	Leanna O'Donnell, Fairfax County Department of Planning and Development	Fort Belvoir will work with Fairfax County to submit the requested county archeological survey data forms. Fort Belvoir acknowledges that if project plans change in such a manner that impacts to sites 44FX1657 and 44FX1679 become necessary, consultation with VDHR would be initiated.
26	9			Additionally, county Heritage Resources staff reviewed the EA and its Section 106 consultation. As FCPA noted in their comments, the proposed undertaking is within the Pohick Church HOD. In addition to the completion of an Archaeological Data Form, county staff requests that Fort Belvoir staff present the proposed project and effects to the Fairfax County Architectural Review Board (ARB). To schedule a time on the ARB's agenda, Fort Belvoir staff can contact Laura Arseneau at Laura.Arseneau@fairfaxcounty.gov .	Leanna O'Donnell, Fairfax County Department of Planning and Development	Fort Belvoir will work with Fairfax County and present to the Fairfax County Architectural Review Board (ARB) when there are construction plans for the proposed development.
27	10			Heritage Resources staff agrees that the project as proposed would not have adverse effects on historic properties and agrees with FCPA that if sites are found to be eligible for inclusion, that additional work or avoidance may be required, as well as additional consultation with VDHR.	Leanna O'Donnell, Fairfax County Department of Planning and Development	Noted. Thank you for your comment.
28	1			In general, we acknowledge the defined Purpose and Need, which is to redevelop the current Caisson Platoon Facility to better serve the mission of the Platoon, as a sustainable, secure, high-quality environment for soldiers, civilians, horses, and other users. While the project intent is admirable - to develop a facility that adheres to the highest standards for horse care - the Army should be flexible in the size and design of the facility to better protect environmental and historic resources. Specifically, the caisson facility would impact two Resource Protection Areas (RPAs), a significant amount of "Priority 1" forest land, and part of a historic (Pohick Church) district.	Diane Sullivan, National Capital Planning Commission	Noted. Thank you for your comment.

Comment #	Reviewer Comment #	Chapter #	Page #	Comment	Reviewer (Name & Office)	Action Needed/Taken
29	2			The EA should include more information about the project's consistency with the current 2015 master plan since the caisson facility expansion is not envisioned in the planning documents, and the Vision and Development Plan characterizes the Southwest Area as largely undevelopable with extensive operational and environmental constraints. The master plan shows the project area as situated on land that is only moderately-to-least suitable for new development, rather than compatible for development.	Diane Sullivan, National Capital Planning Commission	The expansion of the Caisson facility in the western part of the Southwest Area (within the Lower Potomac Planning District), does not commercialize or industrialize the area, and is kept within the intent of the area's low-density residential designation. The Master Plan states that "Areas of low-density residential should maintain their stable character, thereby aiding in preserving sensitive natural habitat and agricultural resources." The Southwest Area is not entirely undisturbed land, as it is used for training (small unit maneuvers and orienteering) and for limited hunting. The proposed action does not compromise the planning objectives of the Lower Potomac Planning District, as it pertains to the preservation of stable residential areas, limitation of commercial encroachment, and providing adequate buffering, screening and appropriate transitional land uses. The DPW acknowledges that this project was not fully coordinated with the approved 2015 Master Plan. Since its approval, the DPW has hired a new Chief, Facility Planning Division, and the new Chief will provide in writing an amendment to the approved plan for the installation and NCPC's records. Consequently, when the 2015 Master Plan revision is funded and initiated, this project will be incorporated as an existing requirement.
30	3			The EA describes the project's potential tree removal area of 27.5 acres as insignificant based on its relative size to the total area of contiguous forest on installation property (2,305 acres) and additional nearby recreational and wildlife refuge forested areas (6,311 acres). We believe a more accurate assessment would be to show the impact area compared to the 115-acre study area, which equates to approximately 24%. Within the context of the study area, we believe the potential tree removal to be relatively significant without appropriate mitigation. The EA states that tree removal will be mitigated pursuant to the Fort Belvoir tree replacement policy, with no additional information related to where new trees will be planted, removal/replacement quantities, and/or tree maintenance. The final EA and FNSI should include more detailed information related to mitigation considering the proposed scale of the removal.	Diane Sullivan, National Capital Planning Commission	Noted. Thank you for your comment. More detailed plans regarding mitigation for tree removal will be identified prior to tree clearing activities. In order to adhere to Fort Belvoir's tree policy, a mixture of tree planting on and off-site, as well as out-of-kind, compensatory mitigation involving ecologically beneficial enhancements will be employed for this project. The latter could include solar power, wind power, stream restoration or other such environmentally beneficial work. Other off-site mitigation options include: contributing to one or more of the 26 stream and wetland restoration projects on Fort Belvoir; incorporating Low Impact Development (LID) design features and Green Infrastructure (GI) practices; preserving the top 12 inches of material removed from wetlands for use as wetland seed and root-stock in another area; revegetating early successional vegetation (mix of grass, shrubs, herbaceous layer, etc.) around new buildings, in parking areas, and along the paddock fencing; and, removing invasive species and replanting with native species.
31	4			NCPC encourages minimal tree/vegetation removal and appropriate mitigation, with the intent of no net tree loss on the project site. Specifically, our Comprehensive Plan tree mitigation (FE.G.2) policy specifies one-to-one replacement for trunk widths of 10" or less, and application of local jurisdiction replacement requirements for larger trees with trunk widths of greater than 10-inches. Projects should follow Federal Environment Element policies as closely as possible, with landscape designs using native vegetation, based on the latest landscape design strategies. During design development, we encourage applicants to look for opportunities to plant trees and vegetation in parking lots for their user and environmental benefits.	Diane Sullivan, National Capital Planning Commission	Noted. Thank you for your comment.

Comment #	Reviewer Comment #	Chapter #	Page #	Comment	Reviewer (Name & Office)	Action Needed/Taken
32	5			With the project's potential large-scale tree removal, future impacts to nearby streams, wetlands, and the Potomac River may be magnified and therefore, water resource impact mitigation should be prioritized during design development. The EA shows two intermittent streams with associated RPAs and protective buffers that overlap the study area. The Army should consult with Fairfax County planners to ensure that impacts are minimized pursuant to Executive Order 13508, which encourages coordination to protect and restore the health of the Chesapeake Bay Watershed. In addition, please reference NCPC policies that pertain to floodplains, wetlands, and water bodies in the Federal Environment Element.	Diane Sullivan, National Capital Planning Commission	Noted. Thank you for your comment.
33	6			New development on Fort Belvoir is required to comply with Virginia state stormwater regulations as well as federal requirements under Section 438 of the Energy Independence Security Act. We recommend compliance with stormwater requirements through interconnected features (bioswales, permeable paving, green roofs, cisterns, rain barrels, etc.) rather than detention ponds, with their potential for unnatural heating of captured water and tendency to attract nuisance wildlife. Project designers should consider pavers and permeable materials for on-site parking and sidewalks to help manage site off-flow stormwater volume. Consult NCPC Comprehensive Plan Federal Environment Element policies for guidance during design development (pages 8-10).	Diane Sullivan, National Capital Planning Commission	Thank you for your comment. The recommendations are noted. Further, applicable regulations will be satisfied by obtaining the required state stormwater permits.
34	7			Our Commission encourages sustainable travel behavior (using transit, biking, walking, carpool/vanpool rather than driving alone) amongst federal installations throughout the National Capital Region, which includes Fort Belvoir. Our Comprehensive Plan employs a system of parking ratio goals for federal installations based on future projected accessibility levels. NCPC's goal for Fort Belvoir is a ratio of no more than one employee space for every two employees (50% of the total employment population) under the Commission's new ratio policies. The ratios apply to employee parking only, and not to visitor, government vehicle, service, and/or other types of special parking. It is the intent of NCPC's transportation-related policies and goals to encourage more sustainable travel amongst military and other federal employees in the Region. For more information, consult our Transportation Element.	Diane Sullivan, National Capital Planning Commission	Noted. Thank you for your comments.
35	8			The EA notes that some proposed caisson facility improvements would be located within the Pohick Church Overlay District but concludes no impact from the project to the historic district not any other cultural resources. NCPC staff notes that the current 2015 master plan prohibits all development within 1/4-mile of Pohick Church; however, some project improvements are planned within the 1/4-mile prohibited threshold. As such, the project appears to be inconsistent with the Fort Belvoir master plan. The Army should reconsider the layout/scope of the facility expansion in light of the restriction, in addition to reconsideration of the EA's "no impact" finding and changes to the level of mitigation.	Diane Sullivan, National Capital Planning Commission	The Caisson Platoon Facility is physically and visually separated from the Pohick Historic site by woodlands and Old Colchester Road. Development would preserve this separation to minimize any potential viewshed impacts to the Pohick Historic Site. Although Fort Belvoir is not required to follow county regulations, coordination with Fairfax County (Historic Preservation) will be conducted (see response to Comment #26). Please see response to Comment #29 regarding the 2015 Master Plan.



APPENDIX B

GENERAL CONFORMITY – RECORD OF NON-APPLICABILITY

APPENDIX B
GENERAL CONFORMITY – RECORD OF NON-APPLICABILITY

Project/Action Name: Fort Belvoir Caisson Platoon Improvements
Project/Action Point of Contact: USACE Baltimore District
Begin Date (Anticipated): 2020
End Date (Anticipated): 2024

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 requirements of this rule are not applicable to this project/action because the total project emissions (presented as tons per year) which occur over each of an assumed air quality worse-case construction scenario that considers a three-year construction duration is estimated in Figure B-1.

EMISSIONS (Tons per Year)	Year 1	Year 2	Year 3
Volatile Organic Compounds (VOC)	4.74	4.92	2.25
Nitrogen Oxides (NOx)	56.83	59	20.29
Carbon Monoxide (CO)	18.94	19.67	9.02
Particulate Matter Less than 2.5 µm (PM2.5)	4.17	4.33	1.98
Sulfur Oxides (SOx)	0.02	0.02	0.01
Total	84.7	87.93	33.55

Figure B-1 Total Emissions (Tons per Year)

These emission rates, including any combination of PM_{2.5} and its potential precursors (i.e., NO_x, SO_x, and VOC), are below the conformity threshold values established at 40 CFR 93.153(b):

Conformity Threshold Rate	
VOC	50 Tons per year (tpy)
NOx	100 tpy
SOx	100 tpy
CO	100 tpy
PM2.5	100 tpy

Figure B-2 Conformity Threshold Rate

Supporting documentation and emissions estimates are attached.

SIGNED Michael H. Greenberg
Michael H. Greenberg
Colonel, U.S. Army
Commanding

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DESCRIPTION OF PROJECT/ACTION:

The Proposed Action entails the proposed upgrades of the existing Caisson Platoon Facility, in compliance with the Army Regulation (AR) 420-1 and the Unified Facilities Criteria (UFC) 2-100-01, including:

- enhancement of facility's perimeter security
- relocation/expansion of the facility's classroom capacity
- expanding pasture area to accommodate 27 horses
- provision of a separate hay storage facility
- consolidation of equipment storage facilities
- provision of a year-round indoor riding training facility
- provision of permanent vehicular parking facilities to accommodate training and maintenance needs
- paving existing roadways
- provision of a paved and covered roll-off manure dumpster area
- enhancement of facility signing

The purpose of the proposed improvements is to meet Fort Belvoir Caisson's mission to honor deceased servicemen and women by carrying them to rest in the Arlington National Cemetery. The proposed improvements are needed to support the training of soldiers to ride and care for horses; to promote a sustainable, world-class facility in support of the facility's mission; to provide a secure, high-quality environment for Soldiers, civilians, and other users of the Caisson Platoon Facility; and to address the deficiencies of the Caisson Platoon Facility that hinder the platoon's mission readiness and threaten the health and safety of both the Army Horsemen and their horses (Caisson Platoon Facility Area Development Plan (December 2017)).

ANALYSIS METHODOLOGY:

Analysis was performed related to the projected air emissions associated with equipment to be used in the implementation of the proposed facility improvements.

Published emission rates for representative equipment horse-power ratings were obtained from EPA sources and incorporated into an Excel spreadsheet developed for this analysis. Emission estimation methodology and information was obtained from the following sources: *Exhaust Emission Factors for Nonroad Engine Modeling – Spark Ignition*, US EPA, Report Number EPA-420-R-10-019, NR-010f, July 2010; and *AP-42, Compilation of Air Pollutant Emission Factors, Section 3-3 Gasoline and Diesel Industrial Engines (10/96)*. The spreadsheet quantifies emissions from the operation of the equipment to be employed in construction activities at the facility. The emissions were then compared to the applicable regulatory thresholds.

According to the US Environmental Protection Agency (EPA), between 900 and 1,100 kg (1,984 and 2,425 pounds [lb]) of CO₂ is emitted for every 1,000 kg (2,205 lb) of Portland cement produced in the US due to the burning of fossil fuels and the heating of the raw materials in large kilns to temperatures in excess of 1,500 Celsius (2,700 Fahrenheit) in a process called calcination. The Portland Cement Association has established 927 kg (2,044 lb) of CO₂ is emitted for every 1,000 kg (2,205 lb) of Portland cement produced in the US. Portland cement accounts for between 7 and 15 percent (by weight) of concrete; therefore, 1 cubic yard (cy) of concrete (3,800 lb) contains between 253 and 543 lb of Portland cement with an equivalent CO₂ production emission of between 235 and 505 lb per cy of concrete. The Caisson Platoon Facility improvements estimate the use of 970 cy of concrete which would have between 114 and 245 tons of CO₂ emissions associated with Portland cement production.

Concrete is also documented to reabsorb atmospheric CO₂ during its product life cycle through a process called carbonation. It is estimated that between 33 and 57 percent of the CO₂ emitted during Portland cement production is reabsorbed during the products 100-year life cycle. Using an average reabsorption of 45 percent, the net CO₂ emission estimated over the life of the concrete is 51 to 110 tons.

As the CO₂ emissions associated with Portland cement production and reabsorption occur beyond the anticipated three-year Fort Belvoir Caisson Platoon Facility construction schedule, they are not accounted for in this analysis. Instead, emissions associated with the transportation of concrete construction materials to the construction site, via concrete trucks, is accounted for in this analysis.

INPUT PARAMETERS AND ASSUMPTIONS:

A Sub-Area Master Plan / Area Development Plan (ADP) was finalized for the Caisson Platoon Facility (December 2017). The ADP identified proposed improvements under the ADP's Proposed Action. An Implementation Plan is also included in the Sub-Area Master Plan /ADP which identifies various projects being advanced in three phases based on priorities and available funding.

Phase 1 proposed improvements include:

- Installation of utilities for the new street, buildings and parking areas
- Construction of the primary gate and secondary gate at Stewart Road
- Construction of the streetscape with parking including trash dumpsters enclosure, street lights and partial stormwater facilities
- Removal of 27.53 acres of woodland trees to expand pasture and riding trail area
- Initiation of pasture grading to improve stormwater collection, conveyance, and treatment
- Construction of containment and perimeter fencing

Phase 2 proposed improvements include:

- Completion of regrading of expanded pasture area
- Implementation of soil stabilization measures to control runoff and sedimentation
- Construction of covered roll-off dumpster storage area

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- Installation of light emitting diode (LED) and/or solar powered lighting
- Installation of solar panels

Phase 3 proposed improvements include:

- Construction of indoor Riding Arena with classrooms, veterinarian room, offices, and break/kitchen area
- Construction of covered walkway connecting the new Riding Arena with the existing stables
- Demolition of various outbuildings
- Conversion of the Pole Barn into the Storage Facility

According to the Implementation Plan, the project would be implemented in three phases over an extended period of time which is dependent upon availability of funding and prioritization of the proposed improvements. However, for this analysis, the construction approach presented in this analysis assumes a compressed implementation schedule which completes the project in three successive years. This approach will result in higher annual construction-related pollution emissions than would otherwise be anticipated for the project advanced under an extended schedule. This analysis is based on a reasonable worst-case construction approach relative to air pollutant emissions.

Additional air quality-related assumptions include:

- A five-day work week and a 52-week work-year (260 annual work days)
- Equipment operation of 6 hours per workday (1440 equipment-hours per year)
 - Phase 1 (Year 1) construction equipment (tree clearing & grading) assumed an average of 1.5 pieces of equipment for the year (2160 equipment-hours) with paving equipment for 2 months (240 equipment-hours)
 - Phase 1 (Year 2) construction equipment assumed at 1 piece of equipment (1440 equipment-hours), with exception of tree cutter which is assumed for 6 months (720 equipment-hours)

- Phase 2 (Year 2) construction equipment assumed an average of 1.5 pieces of grading equipment (2160 equipment-hours), 1 backhoe for 1 year (1440 equipment-hours), and 1 hydro-seeder for 3 months (360 equipment-hours)
- Phase 3 (Year 3) crane use assumed for 3 months (360 equipment-hours), crawler for 6 months (720 equipment-hours), and 1.5 years of use for the air compressor (2160 equipment-hours)
- An average of 15 workers on-site during the workday throughout the three-year construction schedule
 - Transportation based on 15 workers, three trips per day, and 15 miles per trip, for a 260-day year, factored by an assumed travel speed of 30 mph (7,800 annual travel hours)
- All tree cutting, chipping, and stump grinding would be conducted by heavy equipment
- All construction equipment is assumed to be diesel fuel powered
- Concrete use during construction assumes Phase 1 (243 cubic yards [cy]), Phase 2 (87 cy), and Phase 3 (640 cy) at 10 cy concrete delivery capacity per trip and 6 hours vehicle operation per delivery trip
- PM_{2.5} will be a fraction of the PM10 emissions; to be conservative, it was assumed that PM10 is equal to PM_{2.5}. Therefore, if application of the emission factors available for PM10 indicates the predicted PM10 emissions do not exceed regulatory thresholds, then neither will PM_{2.5} emissions

RESULTS

Estimated Calculations

The annual emission estimates seen in Figure B-1 and Figure B-3 are from the Excel spreadsheets developed for this project.

	VOC	NO _x	CO	PM ₁₀ /PM _{2.5}	SO _x	TOTAL
YEAR 1	4.74	56.83	18.94	4.17	0.02	84.7
YEAR 2	4.92	59	19.67	4.33	0.02	87.93
YEAR 3	2.25	20.29	9.02	1.98	0.01	33.55

Figure B-3 Annual Pollution Emission Summary

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POUNDS PER HORSEPOWER PER HOUR						
	VOC	NOx	CO	PM ₁₀ /PM _{2.5}	SOx	CO ₂
	0.0025	0.03	0.01	0.0022	0.00001	1.15
CONSTRUCTION EQUIPMENT BY PHASE	HOURS PER CONSTRUCTION YEAR				HP-HOURS PER YEAR	
	Horse-power	Year 1	Year 2	Year 3		
Phase 1					YEAR 1	YEAR 2
Crawler, tree cutter	250	2160	720	0	540000	180000
Crawler, tree stump grinder	250	2160	1440	0	540000	360000
Other Equipment, wood chipper	150	2160	1440	0	324000	216000
Tractors, loaders, backhoe	225	2160	1440	0	486000	324000
Off-highway truck	275	2160	1440	0	594000	396000
Paver, self-propelled	70	240	0	0	16800	
Roller	70	240	0	0	16800	
Concrete Truck	335	150	0	0	50250	
Phase 2					YEAR 2	
Tractor, crawler, dozer	250	0	2160	0	540000	
Tractors, loaders, backhoe	225	0	1440	0	324000	
Grader	135	0	2160	0	291600	
Other equipment, hydro-seeder	175	0	360	0	63000	
Concrete Truck	335	0	54	0	18090	
Phase 3					YEAR 3	
Crane	225	0	0	360	81000	
Crawler	300	0	0	720	216000	
Air Compressor (100 CFM)	49	0	0	2160	105840	
Concrete Truck	335	0	0	384	128640	
TRANSPORTATION						
Truck, highway (22T) 3 axle	275	80	80	160		
Truck, highway, conventional (5T) 2 axle	360	80	80	160		
Passenger Car / pick-up	150	7800	7800	7800		
TRANSPORTATION						
TRANSPORTATION HP-HOURS PER YEAR						
	YEAR 1	YEAR 2	YEAR 3			
Trucks	50800	50800	101600			
Passenger Cars	1170000	1170000	1170000			

Figure B-4 Annual Pollution Emission in Tons / Year

APPENDIX B

GENERAL CONFORMITY – RECORD OF NON-APPLICABILITY

TONS OF POLLUTANTS PER YEAR						
	VOC	NO _x	CO	PM ₁₀ /PM _{2.5}	SO _x	CO ₂
YEAR 1 EMISSIONS						
Phase 1	3.21	38.52	12.84	2.82	0.01	1476.51
Phase 2	0.00	0.00	0.00	0.00	0.00	0.00
Phase 3	0.00	0.00	0.00	0.00	0.00	0.00
Transportation	1.53	18.31	6.10	1.34	0.01	701.96
TOTAL	4.74	56.83	18.94	4.17	0.02	2178.47
Year 1 Total (excluding CO₂)						84.70
YEAR 2 EMISSIONS						
Phase 1	1.85	22.14	7.38	1.62	0.01	848.70
Phase 2	1.55	18.55	6.18	1.36	0.01	711.10
Phase 3	0.00	0.00	0.00	0.00	0.00	0.00
Transportation	1.53	18.31	6.10	1.34	0.01	701.96
TOTAL	4.92	59.00	19.67	4.33	0.02	2261.76
Year 2 Total (excluding CO₂)						87.93
YEAR 3 EMISSIONS						
Phase 1	0.00	0.00	0.00	0.00	0.00	0.00
Phase 2	0.00	0.00	0.00	0.00	0.00	0.00
Phase 3	0.66	1.22	2.66	0.58	0.00	305.60
Transportation	1.59	19.07	6.36	1.40	0.01	731.17
TOTAL	2.25	20.29	9.02	1.98	0.01	1036.77
Year 3 Total (excluding CO₂)						33.55

Figure B-4 (cont'd) Annual Pollution Emission in Tons / Year



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DETERMINATION OF CONSISTENCY WITH VIRGINIA'S COASTAL RESOURCES MANAGEMENT PROGRAM

APPENDIX C

DETERMINATION OF CONSISTENCY WITH VIRGINIA'S COASTAL RESOURCES MANAGEMENT PROGRAM

This document provides the Commonwealth of Virginia with the Fort Belvoir Consistency Determination under the Coastal Zone Management Act Section 307(c)(1) and 15 CFR Part 930, Subpart C, for the Caisson Platoon Facility Draft EA for the Sub-Area Master Plan / Area Development Plan. The information in this Consistency Determination is provided pursuant to 15 CFR §930.39.

This document represents an analysis of project activities considering established Virginia Coastal Resources Management Program (CRMP) Enforceable Policies and Programs. Furthermore, submission of this Consistency Determination reflects the commitment of the U.S. Department of the Army (Army) to comply with those Enforceable Policies and Programs. The Proposed Action would be implemented in a manner that is consistent with the Virginia CRMP.

C1 DESCRIPTION OF THE PROPOSED ACTION

The Caisson Platoon Facility, is located at Fort Belvoir which is located about 18 miles south of Joint Base Myer-Henderson Hall (JBMHH) with the primary access routes being Interstates 395 and 95 (Figure 1-1 of EA). The Caisson Platoon primarily operates out of JBMHH, which is located adjacent to the Arlington National Cemetery. The Caisson Platoon's mission is to honor deceased servicemen and women by carrying them on their last ride to Arlington National Cemetery, where they will rest in peace with other honored dead. The men and women that come to train with the Caisson Platoon are skilled Army Infantrymen that undergo a rigorous training program to become expert horsemen. In addition to caring for the horses and equipment, the Soldiers must learn to ride in the erect posture of solemn military attention sitting in a McClellan saddle, a riding style the Army hasn't used anywhere else since 1948. Because of this specialized equine training and experience, the Army recognizes the Caisson Soldiers with the additional Skill Identifier D2 - Army horseman.

The Caisson Platoon Facility EA study area occupies

approximately 115 acres of land within the Southwest District of Fort Belvoir. It is situated along the western boundary of Fort Belvoir, south of U.S. Route 1, in a rural setting surrounded by woodlands and isolated from Fort Belvoir's main post. Boundaries to the study area are U.S. Route 1 (Jefferson Davis Highway) to the north and Old Colchester Road to the west (Figure 1-2 of EA). The primary entrance to the facility, Fort Stewart Road, is located off Old Colchester Road.

The Real Property Master Plan (RPMP) provides a means for sustainable installation development that supports mission and environmental requirements. The RPMP is a collection of products that serve as a road map for short-range to long-range development. The RPMP enables the installation to respond to future Army missions and community aspirations, while simultaneously providing and maintaining the capability to sustain, prepare, reset, and transform today's force.

The purpose for this project is to promote a sustainable, world-class facility in support of the facility's mission and providing a secure, high-quality environment for Soldiers, civilians, horses, and other users of the Caisson Platoon Facility. Facility improvements are required to meet the Caisson Platoon's mission. These improvements include:

- Enhancement of the facility's perimeter fencing, main gate, and secondary gate
- Relocation/expansion of the facility's classroom which is under sized and subject to flooding due to uncontrolled stormwater runoff
- Expansion of the current pasture area (about 8 acres) to accommodate 27 horses (27 acres)
- Provision of a separate hay storage facility
- Consolidation of equipment storage facilities
- Provision of an indoor riding training facility for year-round training
- Expansion of training trails

- Provision of permanent vehicular parking facilities to accommodate training and maintenance needs
- Paving of existing roadways and parking areas
- Provision of a paved and covered roll-off manure dumpster area
- Enhancement of facility signage

The Proposed Action consists of the removal of an estimated 27.53 acres of woodland at the Caisson Platoon Facility. Plant communities in the tree removal areas, listed by prominence, include upland hardwood forests, beech mixed oak forest, and palustrine forested wetland. None of the vegetative communities in the proposed project area are considered rare by the Commonwealth of Virginia. The Proposed Action removal of an estimated 27.53 acres of Priority 1 forest retention woodland would result in negligible effect on the water quality. The 27.53 acres of woodland proposed to be selectively removed amounts to about 1.29 percent of an estimated 1,700 acres of contiguous forest area of Fort Belvoir. Also, as per the Fort Belvoir Tree Policy Memorandum two new trees shall be planted for each live tree (4" or more in diameter at breast height) removed through construction.

Two intermittent stream corridors (and associated Resource Protection Areas [RPAs] and Fort Belvoir 35-foot intermittent stream buffers) extent into the existing Caisson Platoon Facility (see Section 3.3 of the EA). All lands not designated as RPAs in Fairfax County are classified as RMAs. Fort Belvoir recognizes the RPA designation but, being a federal entity, is not subject to the provisions of the Fairfax County ordinance. As a result, Fort Belvoir does not use RPA maps produced by Fairfax County; instead, the Army delineates the RPAs on the installation. In addition to RPA areas, Fort Belvoir places a 35-foot buffer around all intermittent streams.

Under the Proposed Action, a vegetated swale feature would be established around the perimeter of the proposed pasture to collect, treat, and convey stormwater to bioretention features before discharge. The two intermittent streams

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that minimally extend into the existing pasture would be terminated at the perimeter of the pasture due to the construction of the vegetated stormwater swale system. In addition, the proposed improvement to the pasture fencing and the facility's perimeter security fence would also impact the streams by reducing their headwater reach. A total of 91 linear feet of intermittent stream length (140 square feet) would be impacted through grading and fill placement. Drainage to these two intermittent streams would be diverted by the proposed vegetated swales and bioretention features. However, the ultimate release of the treated stormwater would be to the same tributary system served by the two affected intermittent stream channels. Under the Proposed Action, stream impacts would be minimal and would not substantially alter local surface water flows, volumes, or quality.

The Proposed Action results in the unavoidable loss of two isolated, non-tidal PEM wetlands (0.06 acres) and one, isolated, non-tidal PFO wetland (0.06 acres). Though there would be a direct and permanent impact to wetlands, proper mitigation in accordance with Section 404 of the Clean Water Act, as well as implementation of temporary erosion and sediment control measures, would mitigate these impacts. Mitigation would be provided through the purchase of credits from a mitigation bank. Tree removal in areas that are not within a wetland are expected to have no impact to wetlands. Other projects at Fort Belvoir have also minimized impacts to wetlands and completed wetland mitigation to address unavoidable wetland losses.

C2 ASSESSMENT OF PROBABLE EFFECTS

Fort Belvoir has prepared a Draft EA to evaluate the potential environmental impacts from the Caisson Platoon Facility Proposed Action in accordance with the National Environmental Policy Act (NEPA) of 1969, as amended (42 U.S. Code 4321-4347), and 32 Code of Federal Regulations (CFR) Part 651, Environmental Analysis of Army Actions.

The Army intends to obtain all applicable permits required for implementation of the Proposed Action alternative. A review

of the permits and/or approvals required under the enforceable policies is being conducted. The Army has evaluated the Proposed Action at the Caisson Platoon Facility for its foreseeable effects on the following enforceable policies:

Fisheries Management – The proposed site is located nearly 2.0 and 4.0 miles northwest of the Accotink Bay and Potomac River, respectively. The closest water features include on-site non-tidal wetlands, located in isolated landscape depressions, and not associated with stream corridors (ephemeral, intermittent, or perennial). Two intermittent streams are present and minimally extend into the existing pasture area. These streams would be terminated at the southern perimeter of the pasture due to the construction of pasture fencing, a vegetated SWM swale system, and the construction of perimeter security fencing. A total of 91 linear feet of intermittent stream length (140 square feet) would be impacted through grading and fill placement. Drainage to these two intermittent streams would be diverted by the proposed SWM vegetated swale and bioretention features. However, the ultimate release of the treated stormwater would be to the same tributary system served by the two affected intermittent stream channels. Under the Proposed Action, stream impacts would be minimal and would not substantially alter local surface water flows, volumes, or quality. The Proposed Action alternative has no foreseeable impacts on fish or shellfish resources and would not effect the promotion of, or access to, commercial or recreational fisheries.

Subaqueous Lands Management – The Virginia Marine Resources Commission (VMRC), pursuant to Virginia Administrative Code (VAC) Section 28.2-1204, has jurisdiction over encroachments in, on, or over any state-owned rivers, streams and creeks. The project would have no foreseeable impact on subaqueous resources.

Tidal and Non-tidal Wetlands Management – The Proposed Action results in the unavoidable loss of two isolated, non-tidal PEM wetlands (0.06 acres) and one, isolated, non-tidal PSS/PFO wetland (0.06 acres). Though

there would be a direct and permanent impact to wetlands, proper mitigation in accordance with Section 404 of the Clean Water Act, as well as implementation of temporary erosion and sediment control measures, would mitigate these impacts. Mitigation would be provided through the purchase of credits from a mitigation bank. Tree removal in areas that are not within a wetland are expected to have no impact to wetlands. Other projects at Fort Belvoir have also minimized impacts to wetlands and completed wetland mitigation to address unavoidable wetland losses.

The permanent loss of two isolated, non-tidal PEM wetlands (0.06 acres) and one, isolated, non-tidal PSS/PFO wetland (0.06 acres) would be addressed by The Army by obtaining applicable permits from the U.S. Army Corps of Engineers (USACE) and the Virginia Department of Environmental Quality (DEQ) prior to work. The Army would provide compensation as required by the USACE and the DEQ for unavoidable impacts through the purchase of wetland mitigation bank credits. Following clearing, wetland seed mix will be spread, at the appropriate time of year, to stabilize soils.

Dunes Management – The Proposed Action alternative would not affect any coastal primary sand dunes.

Non-Point Source Water Pollution Control – Typically, a Proposed Action that is greater than one acre, would require an Erosion and Sediment Control (ESC) plan and a SWM plan to be developed. The ESC plan would include temporary erosion and sediment control measures. The ESC plan and SWM plan would be prepared utilizing the requirements for water quality and quantity found in the Virginia Technical Criteria Part IIB (9VAC25-870-62 through 9VAC25-870-92). During the proposed tree removal process, affecting 27.53 acres of woodland, the contractor selected should be prepared to stabilize areas of exposed bare soils. Trees are to be chipped onsite and the woodchips should remain in place for additional soil stabilization. Minor adverse impacts would occur from the Proposed Action on surface water regarding water quantity and water quality.

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Temporary erosion and sediment control measures and/or permanent stormwater Best Management Practices (BMPs) will be employed to minimize impacts to water quality from disturbance during tree removal and potential increase in stormwater runoff. The Proposed Action removal of an estimated 27.53 acres of Priority 1 forest retention woodland would result in negligible effect on the water quality. The 27.53 acres of woodland proposed to be selectively removed, amounts to about 1.29 percent of an estimated 1,700 acres of contiguous forest area of Fort Belvoir. Additionally, as per the Fort Belvoir Tree Policy Memorandum two new trees shall be planted for each live tree (4" or more in diameter at breast height) removed through construction. Monitoring of the discharge locations would occur to ensure water quality is maintained during and after the tree removal activity.

Point Source Water Pollution Control – The Proposed Action would not result in point source water discharge.

Shoreline Sanitation – The Proposed Action is not located on or near a shoreline. Therefore, the Proposed Action would have no impact on shoreline sanitation.

Air Pollution Control – The proposed site is located within an ozone and PM_{2.5} non-attainment area, triggering the need to analyze emissions and determine the applicability of General Conformity Rule under the Clean Air Act. A construction emissions estimate indicates that the Proposed Action would not generate sufficient emissions to trigger a need for a full General Conformity Analysis. No changes to the Fort Belvoir's Title V air permit would be required.

As the basis for the emissions estimated, a three-year construction schedule was envisioned for the implementation of the Proposed Action. This schedule is likely to be compressed and represents a "worst-case" estimated emissions associated with the implementation of the Proposed Action. The results of the analysis indicated that the assessed pollutants were estimated at annual levels below established thresholds for both individual and collective criteria. The temporary impacts to air quality would be minor, temporary, and not regionally or locally significant.

Coastal Lands Management – Construction activities would result in soil disturbances that have the potential to create non-point source pollution. However, the Virginia Department of Environmental Quality and the Virginia Pollution Discharge Elimination Systems reviews would ensure adherence to stormwater management measures and appropriate erosion and sediment controls to minimize non-point source pollution. All erosion and sediment controls would be designed in accordance with the Virginia Erosion and Sediment Control Regulations handbook and would be implemented in accordance with the VSMP; the Chesapeake Bay Preservation Area Designation and Management guidelines; and the Virginia Department of Environmental Quality VSMP General Permit for Storm Water discharges associated with land disturbing activities. Implementation of the Proposed Action for Fort Belvoir Caisson Platoon Facility would not cause significant non-point source pollution. Post-construction, stormwater would be managed through multiple stormwater retention basins designed to have a shallow pool of water all the time along with the capacity to retain the total volume of rainfall from the 95th percentile storm, thus maintaining pre-development hydrology as required under Section 438 of the Energy Independence and Security Act.

Forests – There are designated Chesapeake Bay Resource Protection Areas (RPA's) located within the proposed project area. The RPA's are associated the two intermittent stream corridors that originate within the existing pasture area. Fort Belvoir recognizes the RPA designation but, being a federal entity, is not subject to the provisions of the Fairfax County ordinance. As a result, Fort Belvoir does not use RPA maps produced by Fairfax County; instead, the Army delineates the RPAs on the installation. In addition to RPA areas, Fort Belvoir places a 35-foot buffer around all intermittent streams. The two intermittent streams that minimally extend into the existing pasture area would be terminated at the perimeter of the pasture due to the construction of pasture fencing, a vegetated SWM swale system, and the construction of perimeter security fencing. A total of 91 linear feet of intermittent stream length (140 square feet) would

be impacted through grading and fill placement. Drainage to these two intermittent streams would be diverted by the proposed SWM vegetated swale and bioretention features. However, the ultimate release of the treated stormwater would be to the same tributary system served by the two affected intermittent stream channels. Under the Proposed Action, stream impacts would be minimal and would not substantially alter local surface water flows, volumes, or quality.

The Proposed Action would permanently impact two isolated, non-tidal PEM wetlands (0.06 acres) and one, isolated, non-tidal PSS/PFO wetland (0.06 acres). These wetlands would be eliminated through grading for pasture development. The permanent wetland loss of 0.12 acres and 91 linear feet of intermittent stream channel (140 square feet) would be addressed by The Army through the obtaining of applicable permits from the U.S. Army Corps of Engineers (USACE) and the Virginia Department of Environmental Quality (DEQ) prior to work. The Army would provide compensation as required by the USACE and the DEQ for unavoidable impacts through the purchase of mitigation bank credits.

C3 SUMMARY OF FINDINGS

Based on the above analysis, which is elaborated on in the EA, Fort Belvoir personnel would: (1) ensure that the construction contractor uses and maintains appropriate temporary erosion and sediment controls and permanent stormwater BMPs; and (2) obtain the requisite permits and approvals.

Fort Belvoir finds that the proposed Fort Belvoir Caisson Platoon project is fully consistent to the maximum extent practicable with the federally approved enforceable provisions of Virginia CRMP, pursuant to the Coastal Zone Management Act of 1972, as amended and in accordance with 15 CFR 930.30.

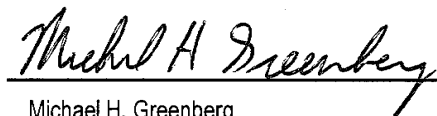
Pursuant to 15 CFR Part 930.41, the Virginia Coastal Resources Management Program has 60 days from

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receipt of this letter in which to concur with or object to this Consistency Determination, or to request an extension, in writing, under 15 CFR Part 930.41(b). Virginia's concurrence will be presumed if its response is not received by Fort Belvoir on the 60th day from receipt of this determination. The state's response should be sent to U.S. Army Garrison Fort Belvoir, 9430 Jackson Loop, Suite 200, Fort Belvoir, VA 22060-5116.

SIGNED



Michael H. Greenberg
Colonel, U.S. Army
Commanding

