FINAL

ENVIRONMENTAL ASSESSMENT

For

Construction and Operation of a Marine Corps Reserve Center

At

Camp Fretterd Military Reservation Reisterstown, Maryland

June 2021

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Abstract

Designation:	Environmental Assessment
Title of Proposed Action:	Construction and Operation of a Marine Corps Reserve Center at Camp Fretterd Military Reservation
Project Location:	Reisterstown, Maryland
Lead Agency for the EA:	Department of the Navy, U.S. Marine Corps
Cooperating Agency:	None
Affected Region:	Baltimore County, Maryland
Action Proponent:	Marine Corps Forces Reserve
Point of Contact:	Christopher Hurst, EA Project Manager Marine Corps Forces Reserve HQ/Facilities Marine Corps Support Facility New Orleans 2000 Opelousas Avenue New Orleans, Louisiana 70114 Email address: christopher.a.hurst@usmc.mil
Date:	June 2021

The Marine Corps Forces Reserve has prepared this Environmental Assessment in accordance with the National Environmental Policy Act, as implemented by the Council on Environmental Quality Regulations and Navy and Marine Corps regulations for implementing the National Environmental Policy Act. The Proposed Action would construct and operate a new Marine Corps Reserve Center at the Camp Fretterd Military Reservation in Reisterstown, Maryland. The Camp Fretterd Military Reservation Marine Corps Reserve Center would support operational training requirements for up to 320 Marine reservists assigned to the 4th Combat Engineer Battalion, 4th Marine Division that would be reassigned from the Baltimore Marine Corps Reserve Center to the Camp Fretterd Military Reservation Marine Corps Reserve Center. This Environmental Assessment evaluates the potential environmental impacts associated with the Action Alternative and the No Action Alternative to the following resource areas: air quality; water resources; geological resources; cultural resources; biological resources; infrastructure and utilities; and transportation.

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Executive Summary

ES.1 Proposed Action

Marine Corps Forces Reserve (MARFORRES) proposes to construct and operate a multi-functional Marine Corps Reserve Center (MCRC) at Camp Fretterd Military Reservation (CFMR) located in Reisterstown, Baltimore County, Maryland (MD). The CFMR MCRC would ensure that reservists in the Baltimore area have the resources needed to meet United States (U.S.) Marine Corps current individual and/or unit level operational readiness training requirements. The Proposed Action evaluated in this Environmental Assessment (EA) would include the following elements: 1) site preparation, clearing, and grading; 2) construction of the MCRC and associated features; 3) utility service improvements and connections; and 4) operation of the MCRC to conduct reservist training.

ES.2 Purpose of and Need for the Proposed Action

The purpose of the Proposed Action is to provide an adequately sized, multi-functional facility to train reservists assigned to the 4th Combat Engineer Battalion, 4th Marine Division. The need for the Proposed Action is to provide capabilities for training and equipping combat-capable forces ready to deploy worldwide as mandated for the U.S. Marine Corps under 10 United States Code, section 5063.

ES.3 Alternatives Considered

Potential alternatives were evaluated against screening factors to meet the purpose and need and siting criteria. The location must allow for an adequately sized, efficient, and multi-functional MCRC for Baltimore area MARFORRES ground units; have space to allow for future expansion of MCRC; be able to meet Antiterrorism/Force Protection standoff requirements; and include minimal total ownership costs. Siting criteria for new construction within CFMR must: meet Baltimore County Maryland Route 30 scenic preservation setback requirements (1993 Hanover Pike Corridor Study); reduce the need for development of off-site utility service connections; and be compatible with the long-term goals of CFMR's Area Development Plan.

MARFORRES is considering one action alternative that meets the purpose of and need for the Proposed Action and a No Action Alternative. The Action Alternative would implement the Proposed Action. Specifically, the Action Alternative includes: construction of an approximate 50,000 square foot multi-function MCRC with an indoor armory and outdoor covered weapons maintenance area; parking areas for privately owned and organizational vehicles; vehicle maintenance facility to service organizational vehicles; a closed-loop vehicle wash platform and refueling station; storage shed; and storage pads for hazardous materials and quadruple containers. Additional features of the MCRC include a septic system; natural gas powered emergency generator; and guard house and security fencing. Connections to existing utilities systems would be made to the extent practicable. A concrete retaining wall; curbs; landscaping; and stormwater drainage would be integrated into the site. Fire suppression would be provided by an onsite aboveground water storage tank and pump house to be located either behind or adjacent to the training center. The above ground storage tank would be filled by tanker trucks from an offsite source. Post construction, the MCRC would be operated to train Marine Corps reservists to meet current Marine Corps individual and/or unit level operational readiness training requirements. Up to 320 Marine personnel would be stationed at CFMR MCRC with approximately 10 percent relocating to the area. During weekdays, an average of 34 active duty Marines would be on site in support of administrative functions; during drill weekends, up to 286 reserve Marines would train at CFMR MCRC. Training would include classes, meetings, weapons maintenance, gear issue and storage, and drill

formations. These activities would occur within the training center and outdoors under the covered weapons maintenance area. Vehicle maintenance training would occur within the Vehicle Maintenance Facility (VMF). No field training exercises would take place at CFMR.

The No Action Alternative will be used to analyze the consequences of not undertaking the Proposed Action. Under the No Action Alternative, MARFORRES would not construct and operate a MCRC at CFMR. The Baltimore MCRC would continue to provide training for MARFORRES ground units. However, the site lacks adequate space to accommodate vehicle storage and organizational parking requirements that are critical to the overall mission. In addition, the training center and vehicle maintenance facilities were constructed in 1958; these facilities were not designed for their current use and have exceeded their useful life cycle. The inadequacies of the Baltimore MCRC would result in lost mission-critical training opportunities and degraded unit operational readiness.

ES.4 Summary of Environmental Resources Evaluated in the EA

Council on Environmental Quality regulations, National Environmental Policy Act (NEPA), and Navy and Marine Corps instructions for implementing NEPA, specify that an EA should address those resource areas potentially subject to impacts. In addition, the level of analysis should be commensurate with the anticipated level of environmental impact.

The following resource areas have been evaluated in this EA: air quality; water resources; geological resources; cultural resources; biological resources; infrastructure and utilities; and transportation. Because potential impacts were considered to be negligible or nonexistent, the following resources were not evaluated in this EA: land use; visual resources; airspace; noise; public health and safety; hazardous materials and wastes; socioeconomics; and environmental justice.

ES.5 Summary of Potential Environmental Consequences of the Action Alternatives and Major Mitigating Actions

Table ES-1 provides a tabular summary of the potential impacts to the resources associated with each of the alternative actions analyzed. Based on the analysis presented in the EA, no significant environmental impacts would result from implementation of the proposed action (i.e., Action Alternative) or the No Action Alternative.

ES.6 Public and Agency Participation and Intergovernmental Coordination

MARFORRES published a notice of availability (NOA) for one day in the Baltimore Sun newspaper on March 31, 2021. The NOA indicated the availability of the preliminary final EA on the following public website: https://www.navfac.navy.mil/navfac_worldwide/atlantic/fecs/mid-atlantic/about_us/environmental_norfolk/environmental_planning_and_conservation.html. No comments were received from the public during the review period that ended April 14, 2021. Comments received from MD Water and Science Administration/Integrated Water Planning Program during the MD State Clearinghouse 30-day review period (March 31 to May 1, 2021) were considered in preparation of the final EA.

MARFORRES consulted with the following federal and state agencies: Maryland Army National Guard (MDARNG); U.S. Army Corps of Engineers (USACE) Baltimore District; MD Department of the Environment, Wetland and Waterways Program; Maryland Historical Trust (MHT); U.S. Fish and Wildlife Service (USFWS), and MD Department of Natural Resources during the preparation of the EA.

Table ES-1. Summary of Potential Impacts to Resource Areas

Resource Area	*No Action Alternative*	*Action Alternative*
Air Quality	The Proposed Action would not occur; there would be no change to baseline air quality.	Potential for short-term impacts to air quality during construction activities; criteria pollutant emissions would be less than significant. Long-term commuting vehicle emissions would be minimal and transient resulting in no significant impact to air quality.
Water Resources	The Proposed Action would not occur; there would be no change to baseline water resources.	Groundwater to the project site would be withdrawn via Permit Number BA1988G043-Expiration 10-31-2028 issued to the Maryland State Military Department by the Maryland Department of Environment, Water Management Administration. The groundwater withdrawal would represent a long-term impact; however, adherence to permit conditions would result in no significant impact. A small palustrine emergent wetland area of 18,584 square feet (0.43 acres) located in the northeast corner of the 21-acre site was confirmed by the U.S. Army Corps of Engineers (USACE) Baltimore District; a preliminary jurisdictional wetland determination was rendered on May 21, 2020. The wetland area would not be disturbed as the project design includes a greater than 100-foot buffer around the wetland. Potential for minor, short-term impacts to surface waters during construction; stormwater protection measures would be installed, and no long-term impacts anticipated. The project site is not located on or adjacent to 100-year or 500-year floodplains; as such, no impact to floodplains would occur. A Coastal Consistency Determination was prepared and submitted to Maryland Department of the Environment, Wetland and Waterways Program on August 26, 2020. MARFORRES determined the Proposed Action would be conducted in a manner fully consistent or consistent to the maximum extent practicable with the federally approved enforceable policies of the Maryland Coastal Zone Management Plan; Maryland concurred with the determination on November 2, 2020. The Proposed Action would not result in significant impacts to water resources.
Geological Resources	The Proposed Action would not occur; there would be no change to baseline geological resources.	To accommodate the approximate 40-foot change in elevation from the high point to the low point and an approximately six percent slope, grading would be required with retaining walls incorporated to help transition grades. Potential for short-term impact to soils during the construction process; no long-term impacts anticipated with installation of stormwater protection measures and best management practices. No significant impact to geological resources would occur.
Cultural Resources	The Proposed Action would not occur; there would be no change to cultural resources.	No historic properties are located within the 21-acre site and no National Register of Historic Places-eligible archaeological resources have been identified. Two historic properties and a private residence located within the viewshed of the proposed MCRC would not be significantly affected. MARFORRES consulted with the Maryland Historical Trust (MHT) on March 30, 2020 in accordance with Section 106 of the National Historic Preservation Act; the consultation package included a viewshed analysis. MHT concurred with the findings of MARFORRES on May 7, 2020 stating that the proposed MCRC would result in no adverse effect on historic properties. As such, there would be no significant impact to cultural resources. MARFORRES consulted with federally-recognized Native American tribes regarding the environmental impact analysis and Maryland Historical Trust's (MHT) determination of effects

Table ES-1. Summary of Potential Impacts to Resource Areas

Resource Area	*No Action Alternative*	*Action Alternative*
		under Section 106. The Oneida Indian Nation provide a response indicating the project will not affect historic properties related to Oneida Indian Nation ancestors; no other Native American Tribes commented during the 45-day review period that ended May 21, 2021.
Biological Resources	The Proposed Action would not occur; there would be no change to biological resources.	Potential for minor short-term impacts to biological resources during the construction phase; no significant short- or long-term impacts anticipated during the operational phase. MARFORRES consulted with the U.S. Fish and Wildlife Service (USFWS) regarding potential effects of the Proposed Action on federally listed threatened and endangered species via the Service's Information, Planning, and Consultation (IPaC) system on June 9, 2020. The USFWS indicated that since critical habitat for the species is not present and less than 15 acres of trees would be cleared, the project would not be expected to impact to the Northern long-eared bat. An online certification letter with the IPaC report was submitted to the USFWS Chesapeake Field Office on November 23, 2020 thereby completing the Section 7 consultation. MARFORRES also consulted with the Maryland Department of Natural Resources (DNR) regarding potential effects of the Proposed Action on state protected species via the state's Environmental Review Process on June 22, 2020. In an email response received July 23, 2020, Maryland DNR determined there were no official state or federal records for listed plant or animal species within the project area and they had no specific concerns regarding potential impacts or recommendations for protection measures at this time.
Infrastructure and Utilities	The Proposed Action would not occur; there would be no change to existing infrastructure and utilities at CFMR.	Potential for minor, short-term disruption of utilities service connections during the construction phase. During the operational phase, water consumption at the MCRC would total approximately 338,988 gallons per year; the average daily usage would be less than 10 percent of the annual permitted withdrawal limits and water usage during drill weekends would not exceed use levels stipulated under the revised State Water Appropriation and Use Permit [Permit No. BA1988G043 (05)]. Wastewater treatment systems and solid waste management, energy (electrical and natural gas) and communications systems would not exceed capacity. No significant short- or long-term impacts would be anticipated during the operational phase.
Transportation	The Proposed Action would not occur; there would be no change to transportation beyond baseline conditions.	Potential impacts to traffic during construction would be short-term in duration and would not be significant. Weekday traffic on the local area roads would increase slightly on a daily basis and would surge on drill weekends (representing less than 1 percent of the annual average daily volume of traffic); the long-term impact would not be significant.

Final

Environmental Assessment for Marine Corps Reserve Center at Camp Fretterd Military Reservation, Reisterstown, Maryland

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Abbreviations and Acronyms

Acronym	Definition
APE	Area of Potential Effects
AT/FP	Antiterrorism Force Protection
BMP	best management practice
CAA	Clean Air Act
CCD	Coastal Consistency Determination
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
CFMR	Camp Fretterd Military Reservation
CO	carbon monoxide
CO_2	carbon dioxide
CO_2e	carbon dioxide equivalent
CWA	Clean Water Act
CZMA	Coastal Zone Management Act
CZMP	Coastal Zone Management Plan
DNR	Department of Natural Resources
DoD	United States Department of Defense
EA	Environmental Assessment
EO	Executive Order
GHG(s)	greenhouse gases
HAP(s)	hazardous air pollutants
LID	low impact development
ug/m^3	microgram per cubic meter
MARFORRES	Marine Corps Forces Reserve
MCRC	Marine Corps Reserve Center
MD	Maryland
MDARNG	Maryland Army National Guard
MEMA	Maryland Emergency Management Agency
MHT	Maryland Historical Trust
MISG	Montrose Industrial School for Girls
NAAQS	National Ambient Air Quality Standards
NEPA	National Environmental Policy Act

Acronym	Definition
NO_2	nitrogen dioxide
NO_x	nitrogen oxides
NOA	notice of availability
NPDES	National Pollutant Discharge Elimination System
O_3	Ozone
Pb	lead
PM_{10}	particulate matter less than or equal to 10 microns in diameter
$PM_{2.5}$	particulate matter less than or equal to 2.5 microns in diameter
POV(s)	privately owned vehicles
ppb	parts per billion
ppm	parts per million
PSD	Prevention of Significant Deterioration
SO_2	sulfur dioxide
SPCC	Spill Prevention Control and Countermeasure
SWPPP	Stormwater Pollution Prevention Plan
tpy	tons per year
UFC	Unified Facilities Criteria
U.S.	United States
U.S.C.	U.S. Code
USACE	U.S. Army Corps of Engineers
USEPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service
VMF	Vehicle Maintenance Facility
VOC(s)	volatile organic compounds

1 Purpose of and Need for the Proposed Action

1.1 Introduction

The United States (U.S.) Marine Corps Forces Reserve (MARFORRES) proposes to construct and operate a Marine Corps Reserve Center (MCRC) at the Camp Fretterd Military Reservation (CFMR), located in Reisterstown, Baltimore County, Maryland (MD).

The mission of MARFORRES is to augment and reinforce the active Marine forces in times of war, national emergencies, or contingency operations; provide personnel and operational tempo (i.e., rate of activity) relief for the active forces in peacetime; and to provide a service to the community. MARFORRES is comprised of active and inactive reservists. Active reservists are required to drill one weekend a month and two weeks a year. Inactive reservists consist of previously active duty Marines or reservists that may be called back in to service at any time. As such, regularly scheduled drill training is crucial. The primary purpose of drills is to provide individual and/or unit level readiness of active and inactive reservists thereby ensuring that they are equipped and trained to the same standards as the active Marine forces.

The 4th Combat Engineer Battalion, 4th Marine Division currently trains at the Baltimore MCRC, located in the City of Baltimore, MD. The Baltimore MCRC and support shops are structurally deficient and unable to support their operational training requirements. Under the Proposed Action, a new MCRC would be constructed at CFMR that would provide the facilities necessary to support the training requirements of the 4th Combat Engineer Battalion, 4th Marine Division within the greater Baltimore area. Marine reservists that are currently assigned for training at the Baltimore MCRC would be reassigned to the CFMR MCRC to meet their operational training requirements. The CFMR MCRC would be located within a 25-mile driving distance of the Baltimore MCRC (**Figure 1.2-1**).

MARFORRES has prepared this Environmental Assessment (EA) in accordance with the requirements of the National Environmental Policy Act (NEPA), as implemented by the Council on Environmental Quality (CEQ) Regulations and Navy and Marine Corps regulations for implementing NEPA.

1.2 Location

CFMR is located in Baltimore County, MD, approximately five miles from Reisterstown, MD (**Figure 1.2-1**). CFMR is divided into three campus areas (upper, middle, and lower). The upper campus includes the main entry control point and Maryland Emergency Management Agency (MEMA) headquarters. The middle campus is comprised of a dining facility, auditorium, and billeting facilities. The lower campus includes various training facilities and warehouse spaces. Rue Saint Lo Drive bisects CFMR beginning at the main entry access point at the intersection with Hanover Pike (Maryland State Route 30 [MD-30]). The site proposed for construction of the MCRC is located in the upper campus in the northeast quadrant across from the MEMA headquarters on Rue Saint Lo Drive (**Figure 1.2-2**).

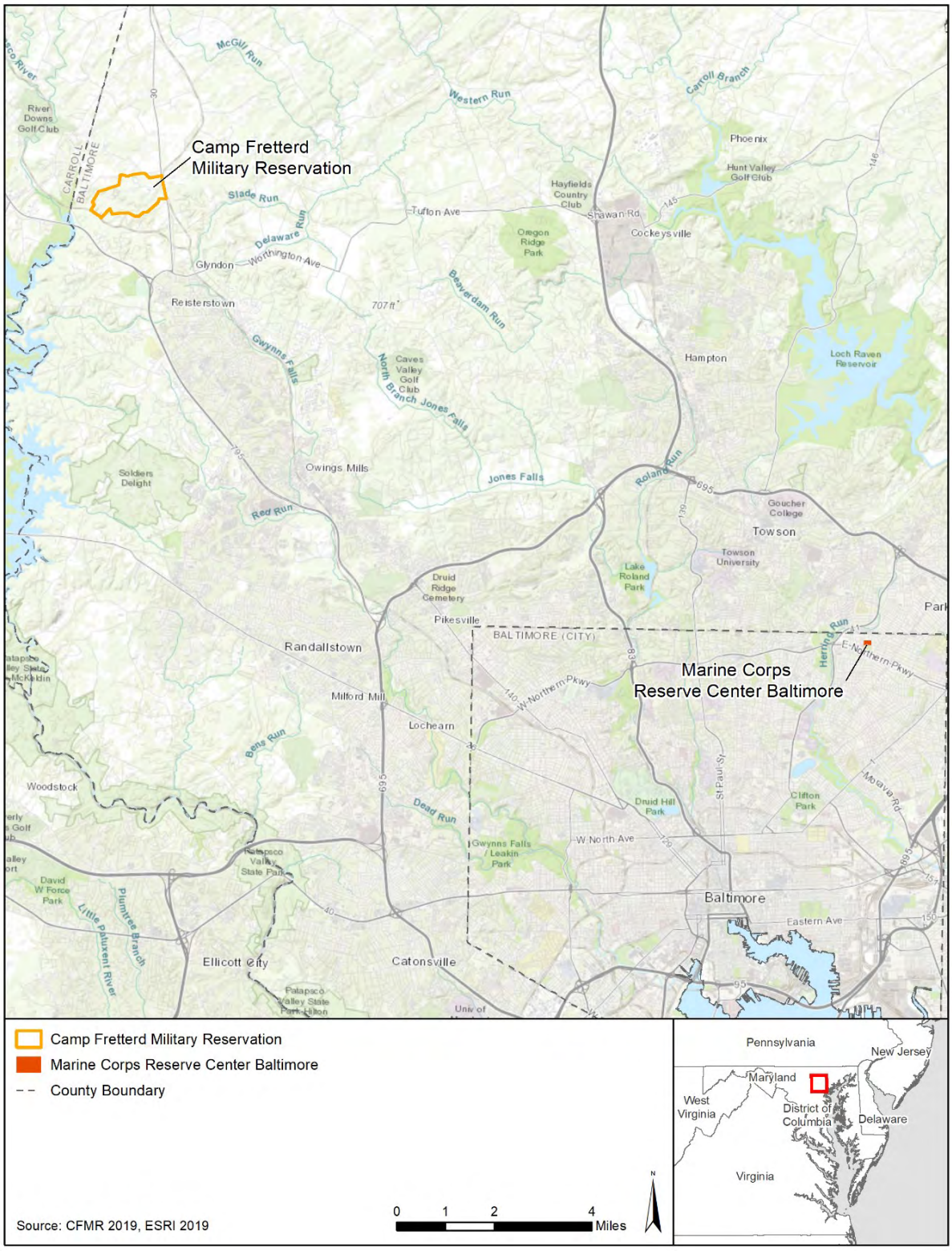

Figure 1.2-1. Regional Location of Camp Fretterd Military Reservation

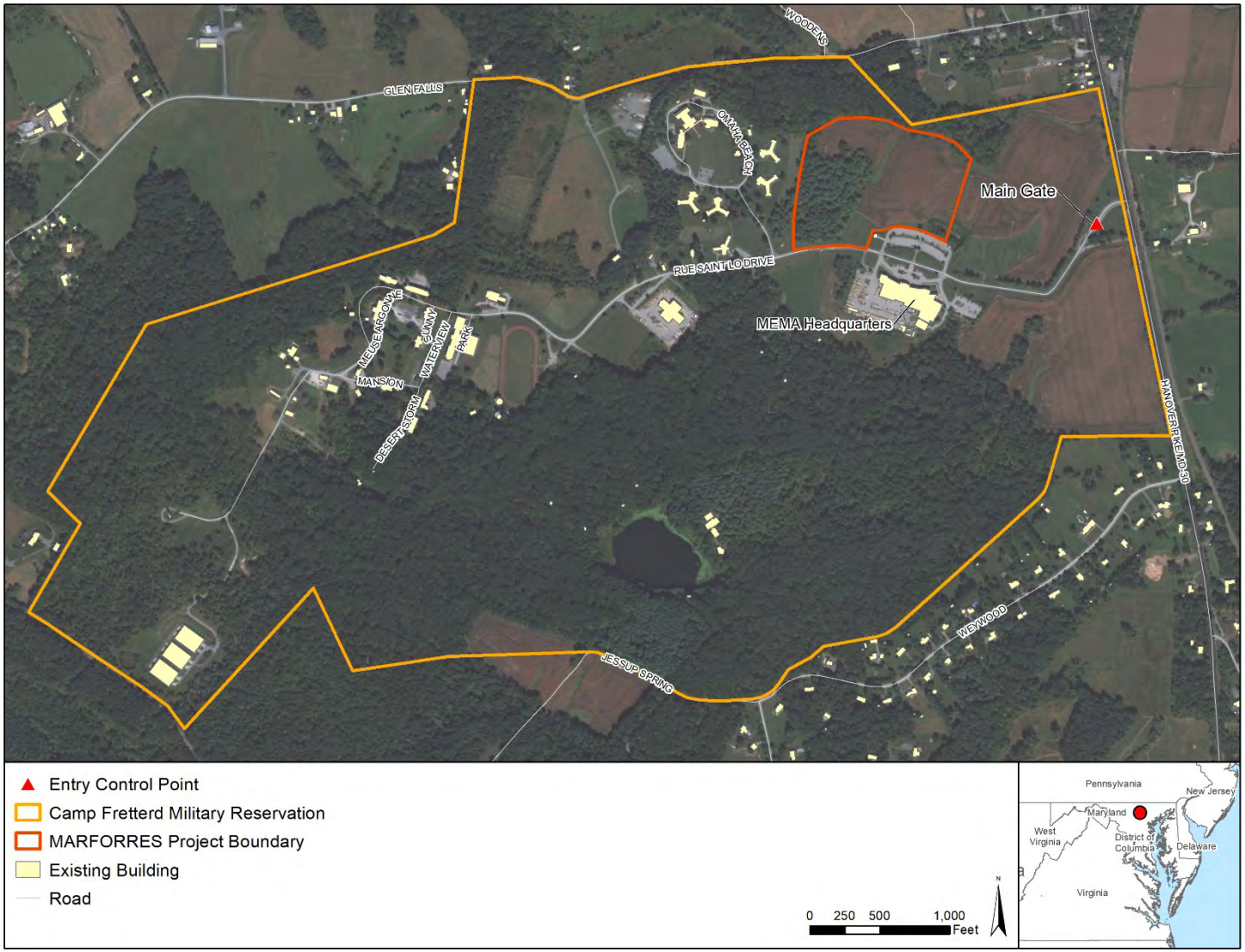

Figure 1.2-2. Location of Proposed Marine Corps Reserve Center at Camp Fretterd Military Reservation

1.3 Background

The Baltimore MCRC is bound within a 9.3 acre site surrounded by residential homes to the west, north and east and athletic fields to the south. The Baltimore MCRC is not compatible with the low-density residential neighborhood. The site lacks adequate space to accommodate vehicle storage and organizational parking requirements that are critical to the overall mission. The training center and vehicle maintenance facilities were constructed in 1958; these facilities were not designed for their current use and have exceeded their useful life cycle (U.S. Marine Corps Forces Reserve, 2013, 2018a). In addition, CFMR has ample space for a new MCRC and associated infrastructure and is located within a 25-mile driving distance of the Baltimore MCRC, within the greater Baltimore area.

CFMR is currently owned by the Maryland Army National Guard (MDARNG) and is home to the MEMA headquarters. CFMR had been the location of the Montrose Industrial School for Girls but served as a juvenile rehabilitation center until 1988 when the MDARNG acquired the 640-acre site from the State of Maryland following closure of the center. The property was named after Lieutenant General James F. Fretterd, Maryland Military Division's adjutant general from 1987 to 2003. In 1992, Major General James F. Fretterd, dedicated an Honor Grove with over 800 white pine trees planted as a living memorial to the Maryland National Guard soldiers, airmen, and volunteers activated for Operations Desert Storm and Desert Shield (Maryland National Guard, 1992). In 1997, MEMA, a component of the Maryland Military Division under the leadership of Major General Fretterd, became a tenant at CFMR.

In April 2017, MARFORRES presented the State of Maryland State Facility Board with a request to construct a new reserve center at CFMR. MDARNG accepted the request and with unilateral support, the State Facility Board granted the request (State of Maryland, 2018). In its May 2017 Area Development Plan, MDARNG identified a 21-acre site for development of the MCRC at CFMR (MDARNG, 2017).

1.4 Purpose of and Need for the Proposed Action

The purpose of the Proposed Action is to provide an adequately sized, multi-functional facility to train Marine reservists assigned to the 4th Combat Engineer Battalion, 4th Marine Division. The need for the Proposed Action is to provide capabilities for training and equipping combat-capable forces ready to deploy worldwide. In this regard, the Proposed Action furthers the U.S. Marine Corps' execution of its congressionally mandated roles and responsibilities under 10 United States Code (U.S.C.) section 5063:

> "The Marine Corps shall be organized, trained, and equipped to provide fleet marine forces of combined arms, together with supporting air components, for service with the fleet in the seizure or defense of advanced naval bases and for the conduct of such land operations as may be essential to the prosecution of a naval campaign."

As such, the Proposed Action would ensure the 4th Combat Engineer Battalion, 4th Marine Division reservists meet current Marine Corps individual and/or unit level operational readiness training requirements.

1.5 Scope of Environmental Analysis

This EA includes an analysis of potential environmental impacts associated with the Action Alternative and the No Action Alternative. The environmental resource areas analyzed in this EA include: air quality; water resources; geological resources; cultural resources; biological resources; infrastructure and

utilities; and transportation. The study area for each resource analyzed may differ due to how the Proposed Action interacts with or impacts the resource. For instance, the study area for geological resources may only include the construction footprint of a building whereas the study area for visual resources may include the geographical area visible from the construction location.

1.6 Key Documents

Key documents are sources of information incorporated into this EA. Documents are considered to be key because of similar actions, analyses, or impacts that may apply to this Proposed Action. CEQ guidance encourages incorporating documents by reference. Documents incorporated by reference in part or in whole include:

- 1993 Hanover Pike Corridor Study (Baltimore County, 1993)
- 2007 Archaeological Sensitivity Study, Maryland Army National Guard, Camp Fretterd (U.S. Army Corps of Engineers, 2007)
- 2017 Camp Fretterd Military Reservation Area Development Plan (MDARNG, 2017)
- 2018 Capability Gap and Global Shore Infrastructure Plan Alternatives Impact Analysis (U.S. Marine Corps Forces Reserve, 2018a)
- 2018 Land Use Survey Supplemental, Camp Fretterd Military Reservation (U.S. Marine Corps Forces Reserve, 2018b)
- 2020 Jurisdictional Wetland Determination, Camp Fretterd Military Reservation (U.S. Marine Corps Forces Reserve, 2020a)
- 2020 Phase I Archaeological Survey, Camp Fretterd Military Reservation (U.S. Marine Corps Forces Reserve, 2020b)
- 2020 Viewshed Analysis, Proposed Marine Corps Reserve Center, Camp Fretterd Military Reservation, Reisterstown, MD (U.S. Marine Corps Forces Reserve, 2020c).

1.7 Relevant Laws and Regulations

MARFORRES has prepared this EA based upon federal and state laws, statutes, regulations, and policies pertinent to the implementation of the Proposed Action, including but not limited to the following:

- NEPA (42 U.S.C. sections 4321–4370h), which requires an environmental analysis for major federal actions that have the potential to significantly impact the quality of the human environment
- CEQ Regulations for Implementing the Procedural Provisions of NEPA (40 Code of Federal Regulations [CFR] parts 1500–1508)
- Navy regulations for implementing NEPA (32 CFR part 775), which provides Navy policy for implementing CEQ regulations and NEPA
- Marine Corps Order 5090.2 and U.S. Marine Corps NEPA Manual 3.4
- Clean Air Act (42 U.S.C. section 7401 et seq.)
- Clean Water Act (33 U.S.C. section 1251 et seq.)
- Coastal Zone Management Act (16 U.S.C. sections 1451–1465)
- National Historic Preservation Act (54 U.S.C. section 306108 et seq.)
- Endangered Species Act (16 U.S.C. section 1531 et seq.)

- Migratory Bird Treaty Act (16 U.S.C. section 703–712)
- Bald and Golden Eagle Protection Act (16 U.S.C. section 668–668d)
- Executive Order (EO) 11988, Floodplain Management
- EO 11990, Wetlands Protection.

A description of the Proposed Action's consistency with these laws, policies, and regulations is presented in Chapter 5 (**Table 5.1-1**).

1.8 Public and Agency Participation and Intergovernmental Coordination

1.8.1 Public and Agency Participation

Regulations from the CEQ direct agencies to involve the public in preparing and implementing their NEPA procedures. A notice of availability (NOA) published in the Baltimore Sun newspaper on March 31, 2021 indicated the availability of the preliminary final EA on the following public website for a 14-day review period: https://www.navfac.navy.mil/navfac_worldwide/atlantic/fecs/mid-atlantic/about_us/environmental_norfolk/environmental_planning_and_conservation.html. No comments were received from the public during the review period that ended April 14, 2021. Comments received from MD Water and Science Administration/Integrated Water Planning Program during the MD State Clearinghouse 30-day review period (March 31 to May 1, 2021) were considered in preparation of the final EA. **Appendix A** provides the NOA and comments received.

1.8.2 Intergovernmental Coordination

MARFORRES consulted with the Maryland Army National Guard (MDARNG) regarding the partial or complete removal of the Maryland National Guard Honor Grove dedicated in 1992. In a memorandum dated September 25, 2019, the Adjutant General of Maryland notified MARFORRES that the MDARNG has "no objections to the alteration or removal of the 'Honor Grove' at [CFMR] as required for construction [of a MCRC]" (MDARNG, 2019). Research conducted produced no federal laws or regulations which give the Honor Grove status as an historic landmark or memorial (e.g., National Historic Preservation Act or Veteran's Memorial Preservation and Recognition Act). The Honor Grove will be rededicated by MDARNG. The relocated and rededicated memorial will provide for inclusion by unit name of all MDARNG units and Maryland Air National Guard units deployed to serve in the Gulf War.

MARFORRES consulted with the U.S. Army Corps of Engineers (USACE) Baltimore District regarding the identification of a small palustrine emergent wetland area of 18,584 square feet (0.43 acres) located in the northeast corner of the project site. The USACE Baltimore District confirmed the site in January 2020 and rendered a preliminary jurisdictional wetland determination May 21, 2020. The wetland delineation and USACE Baltimore District determination are provided in **Appendix C**. A Coastal Consistency Determination (CCD) was prepared and submitted to Maryland Department of the Environment, Wetland and Waterways Program on August 26, 2020. MARFORRES determined the Proposed Action is consistent with the enforceable policies of the Maryland Coastal Zone Management Plan. Maryland concurred with the determination on November 2, 2020; the CCD and Maryland's concurrence are provided in **Appendix D**.

MARFORRES consulted with the Maryland Historical Trust (MHT) on March 30, 2020 regarding potential effects of the Proposed Action on historic properties in accordance with Section 106 of the National

Historic Preservation Act; the consultation package included a viewshed analysis. MHT concurred with the findings of MARFORRES on May 7, 2020 stating that the proposed MCRC would result in no adverse effect on historic properties. The consultation correspondence is provided in **Appendix E.** Section 106 also requires agencies to consult with federally-recognized Indian tribes that attach religious and cultural significance to historic properties that may be affected by an undertaking. In accordance with the National Historic Preservation Act (36 CFR 800.3(f)(2)) and Executive Order 13175 (*Consultation and Coordination with Indian Tribal Governments*), MARFORRES consulted with federally-recognized Native American tribes regarding the environmental impact analysis and MHT's determination of effects under Section 106. The Oneida Indian Nation provide a response indicating the project will not affect historic properties related to Oneida Indian Nation ancestors; no other Native American Tribes commented during the 45-day review period that ended May 21, 2021. See **Appendix E** for the Government-to-Government consultation correspondence.

MARFORRES consulted with the U.S. Fish and Wildlife Service (USFWS) regarding potential effects of the Proposed Action on federally listed threatened and endangered species via the Service's Information, Planning, and Consultation (IPaC) system on June 9, 2020. The IPaC report indicated the Northern Long-eared bat (Myotis septentrionalis), a federally listed threatened species, may be present at CFMR. The USFWS indicated that since critical habitat for the species is not present and less than 15 acres of trees would be cleared, the project would not be expected to impact to the Northern long-eared bat. An online certification letter with the IPaC report was submitted to the USFWS Chesapeake Field Office on November 23, 2020 thereby completing the Section 7 consultation. **Appendix F** provides the USFWS consultation package.

MARFORRES also consulted with the Maryland Department of Natural Resources (DNR) regarding potential effects of the Proposed Action on state protected species via the state's Environmental Review Process on June 22, 2020. In an email response received July 23, 2020, Maryland DNR determined there were no official state or federal records for listed plant or animal species within the project area and they had no specific concerns regarding potential impacts or recommendations for protection measures at this time. The Maryland DNR correspondence is provided in **Appendix F**.

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2 Proposed Action and Alternatives

2.1 Proposed Action

Marine Corps Forces Reserve (MARFORRES) proposes to construct and operate a multi-functional Marine Corps Reserve Center (MCRC) at Camp Fretterd Military Reservation (CFMR) located in Reisterstown, Baltimore County, Maryland (MD). The CFMR MCRC would ensure reservists in the Baltimore area have the resources needed to meet United States (U.S.) Marine Corps current individual and/or unit level operational readiness training requirements. Upon completion of the new MCRC, reservists assigned to the Baltimore MCRC would transfer to the CFMR MCRC and the Baltimore MCRC would be vacated. Once vacated, the Baltimore MCRC would become excess federal property and would be transferred to the U.S. General Services Administration, or potentially to another agency within the Department of Defense (DoD), for disposition.

The Proposed Action evaluated in this Environmental Assessment (EA) would include the following elements: 1) site preparation, clearing, and grading; 2) construction of the MCRC and associated features; 3) utility service improvements and connections; and 4) operation of the MCRC to conduct reservist training. **Figure 2.1-1** illustrates the proposed CRMR MCRC site layout.

Under the Proposed Action, an approximate 50,000 square foot MCRC would be constructed within a designated 21-acre site at CFMR. The MCRC would include an indoor armory and an outdoor covered weapons maintenance area. As shown in **Figure 2.1-1**, two parking areas would be constructed adjacent to and in front of the training center to accommodate up to 256 privately owned vehicles (POVs). An organizational parking area would be constructed behind the training center and adjacent to the vehicle maintenance facility (VMF). A closed-loop vehicle wash platform and refueling station, comprised of an approximate 2,250-gallon aboveground storage tank filled with diesel/JP-8 fuel, would be located on the east edge of the organizational parking area. Two pads for placement of quadruple containers and hazardous storage shed would be placed in the northeast corner of the site.

A right turn lane would be added to Rue Saint Lo Drive to provide entry/exit to the MCRC via two separate driveways. The first entrance would provide entry to the tactical vehicle parking area; the second to the POV parking area. A guard house would be constructed at the entrance to the POV parking area. Security fencing would be placed around the MCRC and a remotely controlled sliding gate would be installed to allow entry to the tactical vehicle parking area. Pedestrian sidewalks would be located along Rue Saint Lo Drive and around the POV parking areas leading to the training center entrances.

Additional features of the MCRC include a site septic system, a concrete retaining wall, curbs, landscaping, and stormwater drainage. Fire suppression would be provided by an onsite aboveground water storage tank and pump house to be located either behind or adjacent to the training center. The above ground storage tank would be filled by tanker trucks from an offsite source.

Mechanical and electrical systems would be located within an enclosed utilities yard next to the training center (**Figure 2.1-1**). A natural gas powered backup generator would provide emergency backup power for the lift, pump and septic systems, lighting, and fire pump systems in the event of a power outage.

Figure 2.1-1. Proposed Marine Corps Reserve Center Site Layout

2.1.1 Construction of MCRC

2.1.1.1 Site Preparation and Improvements

The proposed construction site primarily consists of a grove of white pines. The Honor Grove is located to the south and west of the site with agricultural land to the north and east (refer to **Figure 2.1-1**). Site preparation would include clearing (tree removal), excavation (cut), and preparation for construction (fill, grade, and drainage). Approximately 6 acres of the existing 9-acre Honor Grove would be cleared; however, if the site layout were to change, the removal of the entire Honor Grove may be required. The Maryland Forest Conservation Act (State of Maryland, 1991) requires the preparation of a Forest Conservation Plan, prepared by a licensed forester or other qualified professional, for projects that would affect greater than 1 acre of forested land. Preparation of a Forest Conservation Plan and permits for site grading and sediment control would be obtained by the State of Maryland prior to the military construction phase of the project.

The proposed site has an approximate 40-foot change in elevation from the high point to the low point on a south to north axis and an aggregate slope of approximately 6 percent (ECS Mid-Atlantic, 2019). Due to the elevation at Rue Saint Lo Drive and the need to keep the driveway at a relatively gentle grade, a retaining wall would be needed immediately adjacent to the road that would transition down to the elevation of the training center building. Utilities (gas, electric, telecommunications, wastewater) would connect underground to existing lines.

The total area of ground disturbance for construction of the MCRC and associated features would be approximately 15 acres within the 21-acre site.

2.1.1.2 Design Specifications

Sustainable design principles would be included in the design and construction of the MCRC in accordance with Unified Facilities Criteria (UFC) 1-200-02, *High Performance and Sustainable Building Requirements* (2019). Federal projects that involve the development of over 5,000 square feet (0.1 acre) are required to maintain or restore the predevelopment hydrology of a project site through development and use of low impact development (LID) methods per UFC 3-210-10N, *Low Impact Development*. LID methods would be incorporated as appropriate to minimize stormwater runoff.

Maryland Department of the Environment LID guidelines requires an approach of "quantity reduction and quality improvement" for stormwater runoff. As such, stormwater drainage would be by sheet flow and open channels to the extent possible. Curbs and gutters would be used in parking areas and along driveways to direct the flow to drain inlets that would eventually discharge into the existing stormwater infrastructure. Infiltration areas would be incorporated into parking lot islands in the POV parking areas. Additional infiltration areas would be provided on the perimeter of the organizational vehicle parking area. Depending upon the performance of the soils and the feasibility of constructing multiple infiltration basins, a larger basin may be required northeast of the site within the shallow drainage swale. Ditches on either side of Rue Saint Lo Drive currently convey water to channels flowing to the southeast. Drainage within the developed site would be directed towards the northern end of the site.

UFC 4-010-01, *DoD Minimum Antiterrorism Standards for Buildings*, issued in December 2018, established minimum engineering standards for DoD projects that incorporate antiterrorism based mitigating measures not associated with an identified threat or level of protection. Antiterrorism Force Protection (AT/FP) features would be incorporated in accordance with UFC 4-010-01. The MCRC site

would be located within a controlled perimeter to meet minimum AT/FP standoff requirements. Within the controlled perimeter, the building force protection measures would include notification systems, emergency shutoffs for ventilation systems, laminated windows, emergency lighting, and signage as required. Force protection measures outside the building would include a guardhouse, bollards, and vehicle barriers.

2.1.1.3 Utilities

Natural gas and electrical service to the site would be provided by Baltimore Gas and Electric. Natural gas would be delivered via connection with an existing line located approximately 300 feet south of the proposed training center building. Electrical service would be provided by extending an electrical ductbank from an existing electrical manhole located on the south side of Rue Saint Lo Drive near the Maryland Emergency Management Agency (MEMA) parking lot west entrance. Depending upon the available capacity, a new service line may be required; the new service line would be approximately 1,500 feet long extending from Maryland State Route 30 (MD-30).

Telecommunications service would be provided by Verizon. Connections to the site would be made by extending the fiber optics duct bank located on the north side of Rue Saint Lo Drive near the MEMA parking lot east entrance.

Potable water would be via connection to the existing 8-inch water line west of the site on the north side of Rue Saint Lo Drive. A smaller service line would supply water to the VMF and closed-loop vehicle wash rack.

Wastewater would be treatment onsite via a connection to the existing wastewater treatment plant west of the site. The project would provide an onsite sewage lift station that would collect the wastewater from the MCRC and VMF buildings. The lift station would discharge the waste, via 4-inch force main, to an equalization tank in the approximate area of the existing wastewater treatment plant (refer to **Figure 2.1-1**). The wastewater would be processed through a four-stage membrane bio-reactor system which is designed to treat the permitted annual average flow capacity of 5,250 gallons per day or 10,500 in a 24-hour period.

Stormwater would be conveyed on site to several stormwater management collection areas which would receive, store, convey and eventually discharge into the existing CFMR stormwater infrastructure.

2.1.2 Operation of the MCRC

The MCRC would provide MARFORRES personnel with individual and/or unit readiness training. The MCRC would be open weekdays (Monday through Friday) from 7:30 a.m. to 4:30 p.m. and during drill weekends (Saturday and Sunday) from 7:30 a.m. to 4:30 p.m. MARFORRES anticipates 12 drill weekends annually with approximately one drill weekend occurring each month.

2.1.2.1 Personnel

Up to 320 Marine personnel of the 4th Combat Engineer Battalion, 4th Marine Division would be assigned to CFMR MCRC; approximately 10 percent would relocate to the area. During weekdays, an average of 34 active duty Marines would be on site in support of administrative functions. During drill weekends, active duty Marines and up to 286 reserve Marines would train at CFMR MCRC. The majority of reservists would drive alone to the MCRC; however, approximately 20 percent would be expected to

carpool. None of the Marines would stay at the CFMR dorms; roughly 50 percent would stay in local area hotels.

2.1.2.2 Training

Monthly training would include classes, meetings, weapons maintenance, gear issue and storage, and drill formations. These activities would occur within the training center and outdoors under the covered weapons maintenance area. Vehicle maintenance training would occur within the VMF. There are many exclusion zones and/or no go training areas at CFMR. Marine personnel would not conduct field training exercises at CFMR; field training exercises and annual two-week training exercises would take place aboard another DoD installation, or abroad, as part of a large exercise. Use of CFMR physical training areas (i.e., track) would be by reservation only. MARFORRES would coordinate with the MDARNG reservation manager in advance of the intended need.

2.1.2.3 Vehicles and Equipment

Tactical (i.e., organizational) vehicles would be maintained and stored at the MCRC. The types of tactical vehicles anticipated at the MCRC are shown in **Photo 2.1-1**. These vehicles would remain on existing roads; the vehicles would not be driven off road within CFMR. The tactical vehicles would be driven from CFMR MCRC to another training venue for off road training purposes. Tactical vehicles driven off site would return to the CFMR MCRC to be cleaned in the closed-loop vehicle wash rack prior to being stored. Minor maintenance of tactical vehicles would take place in the VMF. As such, small quantities of oil and lubricants would be stored on site. The types of maintenance activities that may occur would include suspension system lubrication, oil and transmission fluid changes, and exhaust and air compressor systems cleaning. Waste products would be collected and picked up each month by a licensed contractor.

MARFORRES anticipates the need for quadruple storage containers (**Photo 2.1-1**). When not in use, the containers and tactical vehicles would remain in the organizational vehicle parking area (refer to **Figure 2.1-1**).

2.2 Screening Factors

The National Environmental Policy Act's (NEPA's) implementing regulations provide guidance on the consideration of alternatives to a federally proposed action and require rigorous exploration and objective evaluation of reasonable alternatives. Only those alternatives determined to be reasonable and to meet the purpose and need require detailed analysis.

Potential alternatives that meet the purpose and need were evaluated against the following screening factors:

Location for MCRC:

- Must provide an adequately sized, efficient, and multi-functional MCRC for Baltimore area MARFORRES ground units
- Must have space to allow for future expansion of MCRC
- Must meet AT/FP standoff requirements
- Must minimize total ownership costs.

Siting within CFMR:

- Must meet Baltimore County MD-30 scenic preservation setback requirements
- Must reduce the need for development of off site utility service connections
- Must be compatible with the long-term goals of CFMR.

HUMMWV 1151 (Humvee)

MK27 Cargo Truck

Quadruple Containers

Photo 2.1-1. Tactical Vehicles and Containers

2.3 Alternatives Carried Forward for Analysis

Based on the reasonable alternative screening factors and meeting the purpose and need for the Proposed Action, MARFORRES has identified one action alternative that will be analyzed within this EA.

2.3.1 No Action Alternative

Under the No Action Alternative, the Proposed Action would not occur. MARFORRES would not construct and operate a MCRC at CFMR. The Baltimore MCRC would continue to provide training for MARFORRES ground units. However, the inadequacies of the Baltimore MCRC would result in lost mission-critical training opportunities and degraded unit operational readiness. The No Action Alternative would not meet the purpose and need for the Proposed Action; however, the No Action Alternative will be used to establish a comparative baseline for impacts analysis.

2.3.2 Action Alternative

Under the Action Alternative, the Proposed Action as described in **Section 2.1** would be implemented. Specifically, the Action Alternative includes: construction of an approximate 50,000 square foot multi-function MCRC with an indoor armory and outdoor covered weapons maintenance area; parking areas for POV and organizational vehicles; VMF to service organizational vehicles; a closed-loop vehicle wash platform and refueling station; storage shed; and storage pads for hazardous materials and quadruple containers. Additional features of the MCRC include a septic system; fire suppression system; natural gas powered emergency generator; and guard house and security fencing. Connections to existing utilities systems would be made to the extent practicable. A concrete retaining wall; curbs; landscaping; and stormwater drainage would be integrated into the site.

Post construction, the MCRC would be operated to train Marine Corps reservists to meet current Marine Corps individual and/or unit level operational readiness training requirements. Up to 320 Marine personnel would be stationed at CFMR MCRC with approximately 10 percent relocating to the area. During weekdays, an average of 34 active duty Marines would be on site in support of administrative functions; during drill weekends, up to 286 reserve Marines would train at CFMR MCRC.

2.4 Alternatives Considered but not Carried Forward for Detailed Analysis

2.4.1 Renovation

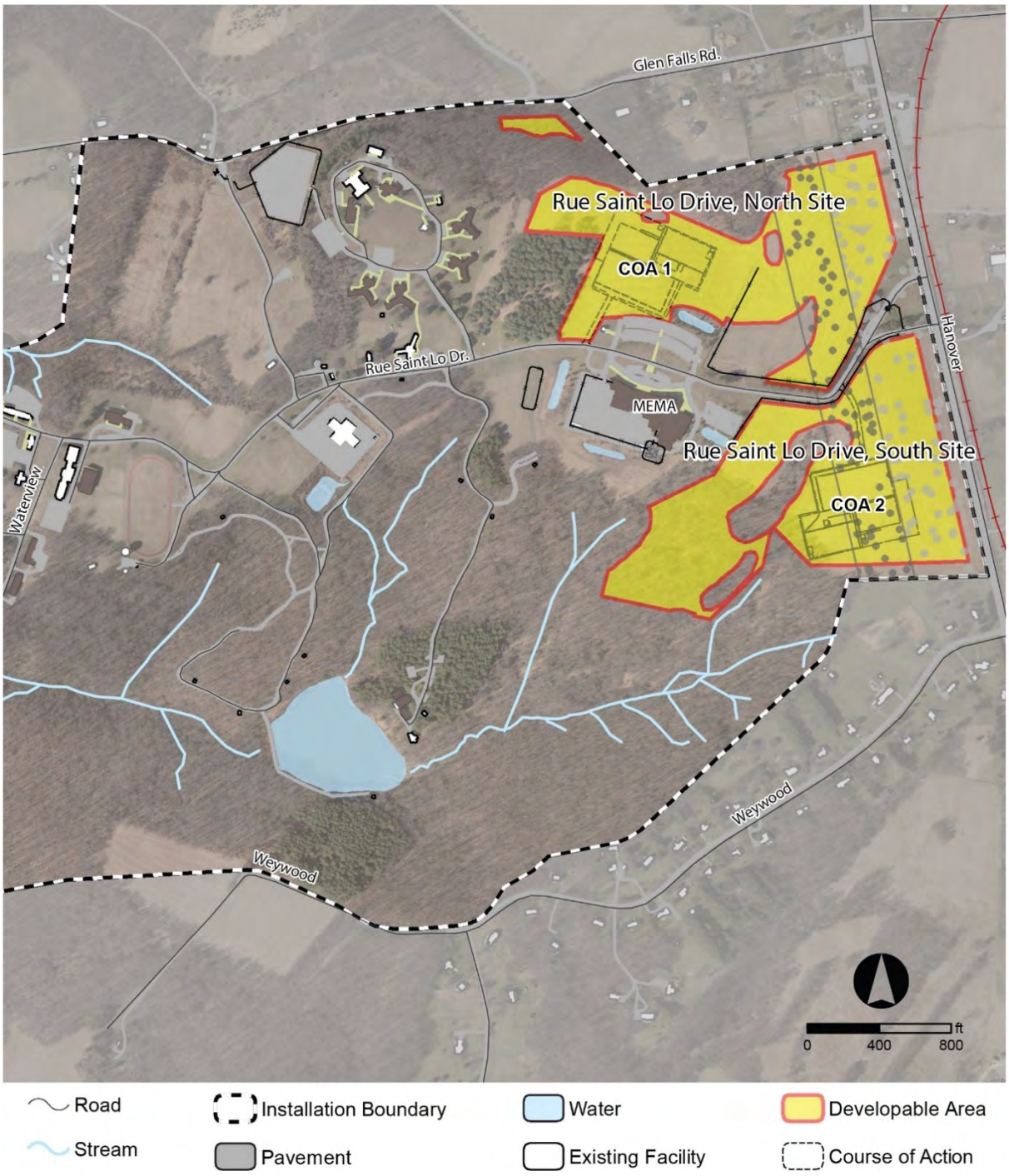
The Baltimore MCRC site lacks adequate space to accommodate vehicle storage and organizational parking requirements that are critical to the overall mission. The training center and vehicle maintenance facilities were constructed in 1958; these facilities were not designed for their current use and have exceeded their useful life cycle (U.S. Marine Corps Forces Reserve, 2013, 2018a). The buildings require continual maintenance and would require both significant short- and long-term investments to repair or replace the existing deficiencies. Additionally, the Baltimore MCRC site does not meet current AT/FP requirements (U.S. Marine Corps Forces Reserve, 2019). Given these many inadequacies, this alternative is not carried forward for detailed analysis in the EA.

2.4.2 CFMR North and South Sites

The 2017 CFMR Area Development Plan considered the placement of a MCRC in developable land across from the MEMA headquarters (Maryland Army National Guard [MDARNG], 2017). The CFMR Supplemental Land Use Survey (U.S. Marine Corps Forces Reserve, 2018b) considered location of a MCRC across from the MEMA headquarters (north site) and included a second location of developable land southeast of the MEMA headquarters (south site). **Figure 2.4-1** illustrates the location of the north and south sites.

The north site met the overall purpose of and need for the Proposed Action; however, the location significantly overlapped with an area of leased agricultural land. As such, this alternative as presented in the CFMR Supplemental Land Use Survey (U.S. Marine Corps Forces Reserve, 2018b) is not carried forward for detailed analysis in the EA.

The south site met the overall purpose and need for the Proposed Action; however, the south site is the proposed location of a future helipad and solar field recommended in the 2017 CFMR Area Development Plan (MDARNG, 2017). Therefore, this alternative is not carried forward for detailed analysis in the EA.



Source: U.S. Marine Corps Forces Reserve, 2018b.

Figure 2.4-1. Camp Fretterd Military Reservation North and South Sites Considered

2.5 Best Management Practices Included in Proposed Action

Best Management Practices (BMPs) are existing policies, practices, and measures that the Navy and Marine Corps would adopt to reduce the environmental impacts of designated activities, functions, or processes. Although BMPs mitigate potential impacts by avoiding, minimizing or reducing/eliminating impacts, BMPs are distinguished from potential mitigation measures because BMPs are (1) existing requirements for the Proposed Action, (2) ongoing, regularly occurring practices, or (3) not unique to this Proposed Action. In other words, the BMPs identified in this document are inherently part of the Proposed Action and are not potential mitigation measures proposed as a function of the NEPA environmental review process for the Proposed Action.

BMPs that would be considered to help minimize potential impacts to the environment during the construction period may include, but are not limited to, the following:

- Coordination with the responsible agencies regarding the use of public roads during project construction to minimize any disruption to local traffic.
- All mechanized clearing and grading, vehicle traffic, equipment staging, and the deposition of soil would be confined to the temporary and/or permanent project footprint or to other disturbed or developed land.
- The use of shields, protective mats, or other fire prevention equipment would be used during grinding and welding to prevent or minimize the potential for fire, and vehicles would not be driven or parked in areas where catalytic converters could ignite dry vegetation. No smoking or disposal of cigarette butts would take place within vegetated areas.
- All fill material brought to the construction site from off site would be checked to ensure that it is clean – specifically, that it is free from contaminants and does not contain any seeds or plant materials from non-native or invasive species.
- Particulate matter emissions would be moderated through dust reduction measures (e.g., watering of exposed soils) during construction activities.
- A Stormwater Pollution Prevention Plan (SWPPP) would be prepared in accordance with a National Pollutant Discharge Elimination System permit. This plan would contain an erosion and sedimentation control plan. The plan would incorporate BMPs for erosion and sedimentation control, including techniques to diffuse and slow the velocity of stormwater runoff. SWPPP BMPs may include, but are not limited to, erosion, sedimentation, and stormwater control measures such as sandbags, silt fences, earthen berms, fiber rolls, and sediment traps. Maryland Department of the Environment stormwater BMPs would be adhered to and all erosion control devices would be inspected after a storm event and maintained throughout the construction phase.

In addition, the LID methods and guidelines, as described in **Section 2.1.1.2**, would be observed.

MARFORRES has requested to be included in CFMR installation planning documents (e.g., Installation Cultural Resources Management Plan, Installation Natural Resources Management Plan, Spill Prevention, Control, and Countermeasure (SPCC) Plan, and SWPPP). The request is currently pending. In the interim, a SPCC Plan and SWPPP would be prepared by MARFORRES for the Proposed Action.

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3 Affected Environment and Environmental Consequences

This chapter presents a description of the environmental resources and baseline conditions that could be affected from implementing any of the alternatives.

All potentially relevant environmental resource areas were initially considered for analysis in this Environmental Assessment (EA). In compliance with the National Environmental Policy Act (NEPA), the Council on Environmental Quality (CEQ), and Department of Navy guidelines; the discussion of the affected environment (i.e., existing conditions) focuses only on those resource areas potentially subject to impacts. Additionally, the level of detail used in describing a resource is commensurate with the anticipated level of potential environmental impact. This section includes air quality, water resources, geological resources, cultural resources, biological resources, infrastructure and utilities, and transportation.

The potential impacts to the following resource areas are considered to be negligible or nonexistent so they were not analyzed in detail in this EA:

Land Use: Land use refers to real property classifications that indicate either natural conditions or the types of human activity occurring on a parcel. Camp Fretterd Military Reservation (CFMR) encompasses 640 acres and is composed of three campus areas (upper, middle, and lower). The upper campus includes the main entry control point and Maryland Emergency Management Agency (MEMA) headquarters. The 21-acre site proposed for the Marine Corps Forces Reserve (MARFORRES) Marine Corps Reserve Center (MCRC) is located in the upper campus of CFMR. The training mission proposed for the MCRC would be compatible with the administrative and recreational activities in the upper campus of CFMR. The functions performed in the MCRC would be low-intensity, organizational-level activities that would be done primarily during drill weekends. These activities would not be expected to impact adjacent land use functions during CFMR's standard operating hours (U.S. Marine Corps Forces Reserve, 2018b). As such, land use was eliminated from further analysis in this EA.

Visual Resources: Visual resources include the natural and built features of the landscape visible from public views that contribute to an area's visual quality. Short-term impacts to visual resources would occur during site clearing and construction activities. The location and construction of the proposed CFMR MCRC would align with the design guidelines for "development within or adjacent to an expansive view" as presented in the 1993 Hanover Pike Corridor Plan (Baltimore County, 1993). As such, visual resources was eliminated from further analysis in this EA.

Airspace: Construction and operation of a MCRC at CFMR would not involve the operation of aerial vehicles or equipment. As such, airspace was eliminated from further analysis in this EA.

Noise: Noise is often defined as any sound that is undesirable because it interferes with communication, is intense enough to damage hearing, diminishes the quality of the environment, or is otherwise annoying. Noise sources within and near CFMR are predominantly related to automobile traffic on Maryland State Route 30 (MD-30). Noise from site preparation and construction activities would be short-term and intermittent, resulting in no measurable effect to the surrounding area. Noise generated from operations at the MCRC would be anticipated to produce noise levels consistent with existing conditions. During drill weekends, an increase in vehicular traffic and the associated noise would be anticipated; however, the traffic flow would be short-term and occur primarily at the onset and conclusion of the weekend drill period. As such, this resource has been eliminated from future discussion in this EA.

Public Health and Safety: Construction activities would be performed by qualified personnel who are trained to safely operate the construction equipment; appropriate signage and fencing would be placed to alert pedestrians and motorists of project activities, as well as any changes in traffic patterns. Standard operating procedures during construction and operation of the MCRC would be followed by all personnel and visitors to the site and all activities would be conducted in accordance with federal and state Occupational Safety and Health Administration regulations. No impact to public health and safety would be anticipated; therefore, this resource is not carried forward for further analysis in this EA.

Hazardous Materials and Wastes: Construction activities would require the use of certain hazardous materials (e.g., paints, welding gases, solvents, preservatives, sealants). Hazardous materials usage during construction activities would be temporary and would be managed in accordance with federal and state regulations. Hazardous materials could be released during operational activities from an accidental spill or discharge from parked privately owned vehicles (POVs) or onsite maintenance of tactical vehicles. All hazardous materials would be stored and hazardous wastes would be disposed of in accordance with federal, state, and local regulations. In addition, the Marine Corps would follow the regulatory guidance for hazardous material and hazardous waste management and minimization provided in Marine Corps Order 5090.2, Volume 9, *Hazardous Waste Management*. Therefore, this resource is not carried forward for further analysis in this EA.

Socioeconomics: Marine reservists would transfer from the Baltimore MCRC to the CFMR MCRC. These reservists would be primarily from the Baltimore area or consist of reservists traveling from outside of the local area to participate in drill training. A slight beneficial impact to hotels and restaurants would be likely during construction and operation of the MCRC; however, no measurable impact to the local economy would be anticipated. As such, no further evaluation of this resource is warranted.

Environmental Justice: Executive Order (EO) 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*, mandates that federal agencies identify and address, as appropriate, disproportionately high and adverse human health or environmental effects of its programs on minority and low-income populations. EO 13045, *Protection of Children from Environmental Health Risks and Safety Risks*, mandates that federal agencies identify and assess environmental health and safety risks that may disproportionately affect children as a result of the implementation of federal policies, programs, activities, and standards. United States (U.S.) Census Bureau data indicate that minority or low-income populations are not adjacent to or in proximity to the location proposed for the CFMR MCRC (U.S. Census Bureau, 2020). The potential for proposed activities within the CFMR MCRC to disproportionately affect minority or low-income populations or children would be negligible. Therefore, this resource is not carried forward for further analysis in this EA.

3.1 Air Quality

This discussion of air quality includes criteria pollutants, standards, sources, permitting, and greenhouse gases. Air quality in a given location is defined by the concentration of various pollutants in the atmosphere. A region's air quality is influenced by many factors, including the type and amount of pollutants emitted into the atmosphere, the size and topography of the air basin, and the prevailing meteorological conditions.

Most air pollutants originate from human-made sources, including mobile sources (e.g., cars, trucks, buses) and stationary sources (e.g., factories, refineries, power plants), as well as indoor sources (e.g.,

some building materials and cleaning solvents). Air pollutants are also released from natural sources such as forest fires.

3.1.1 Regulatory Setting

3.1.1.1 Criteria Pollutants and National Ambient Air Quality Standard

The principal pollutants defining the air quality, called "criteria pollutants," include carbon monoxide (CO), sulfur dioxide (SO_2), nitrogen dioxide (NO_2), ozone (O_3), suspended particulate matter less than or equal to 10 microns in diameter (PM_{10}), fine particulate matter less than or equal to 2.5 microns in diameter ($PM_{2.5}$), and lead (Pb). CO, SO_2, Pb, and some particulates are emitted directly into the atmosphere from emissions sources. Ozone, NO_2, and some particulates are formed through atmospheric chemical reactions that are influenced by weather, ultraviolet light, and other atmospheric processes. Under the Clean Air Act (CAA), the U.S. Environmental Protection Agency (USEPA) has established National Ambient Air Quality Standards (NAAQS) (40 Code of Federal Regulations [CFR] part 50) for these pollutants. NAAQS are classified as primary or secondary. Primary standards protect against adverse health effects; secondary standards protect against welfare effects, such as damage to farm crops and vegetation and damage to buildings. Some pollutants have long-term and short-term standards. Short-term standards are designed to protect against acute, or short-term, health effects, while long-term standards were established to protect against chronic health effects. The current NAAQS are provided in **Table 3.1-1**.

Areas that are and have historically been in compliance with the NAAQS are designated as attainment areas. Areas that violate a federal air quality standard are designated as nonattainment areas. Areas that have transitioned from nonattainment to attainment are designated as maintenance areas and are required to adhere to maintenance plans to ensure continued attainment. The CAA requires states to develop a general plan to attain and maintain the NAAQS in all areas of the country and a specific plan to attain the standards for each area designated nonattainment for a NAAQS. These plans, known as State Implementation Plans, are developed by state and local air quality management agencies and submitted to USEPA for approval. In addition to the NAAQS for criteria pollutants, national standards exist for hazardous air pollutants (HAPs), which are regulated under Section 112(b) of the 1990 CAA Amendments. The *National Emission Standards for Hazardous Air Pollutants* regulate HAP emissions from stationary sources (40 CFR part 61).

3.1.1.2 Mobile Sources

HAPs emitted from mobile sources are called mobile source air toxics. These are compounds emitted from highway vehicles and non-road equipment that are known or suspected to cause cancer or other serious health and environmental effects. The primary control methodologies for these pollutants for mobile sources involves reducing their content in fuel and altering the engine operating characteristics to reduce the volume of pollutant generated during combustion. Mobile source air toxics would be the primary HAPs emitted by mobile sources during construction. The equipment used during construction would likely vary in age and have a range of pollution reduction effectiveness.

Table 3.1-1. National Ambient Air Quality Standards

Pollutant	*Primary or Secondary*	*Averaging Time*	*Level 1*	*Form*	*Site Status*
CO	Primary	8-hour	9 ppm	Not to be exceeded more than once per year	In attainment
		1-hour	35 ppm		
NO_2	Primary	1-hour	100 ppb	98th percentile of 1-hour daily maximum, averaged over three years	In attainment
	Both	Annual	53 ppb	Annual Mean	
O_3	Both	8-hour	0.070 ppm	Annual fourth-highest daily maximum 8-hour concentration, averaged over three years	Marginal nonattainment
$PM_{2.5}$	Primary	Annual	12 µg/m^3	Annual mean, averaged over three years	In attainment
	Secondary	Annual	15 µg/m^3	Annual mean, averaged over three years	
	Both	24-hour	35 µg/m^3	98th percentile, averaged over three years	
PM_{10}	Both	24-hour	150 µg/m^3	Not to be exceeded more than once per year on average over three years	In attainment
Pb	Both	Rolling 3-month average	0.15 µg/m^3	Not to be exceeded	In attainment
SO_2	Primary	1-hour	75 ppb	99th percentile of 1-hour daily maximum concentrations, averaged over three years	In attainment
	Secondary	3-hour	0.5 ppm	Not to be exceeded more than once per year	

Source: USEPA, 2016.
Legend: ppm = parts per million; ppb = parts per billion; µg/m^3 = micrograms per cubic meter.

However, construction equipment would be operated intermittently during the construction of the Proposed Action and would produce negligible ambient HAPs in a localized area. Therefore, mobile source air toxics emissions are not considered further in this analysis.

3.1.1.3 General Conformity

The USEPA General Conformity Rule applies to federal actions occurring in nonattainment or maintenance areas when the total direct and indirect emissions of nonattainment pollutants (or their precursors) exceed specified thresholds. The emissions thresholds that trigger requirements for a conformity analysis are called *de minimis* levels. *De minimis* levels (in tons per year [tpy]) vary by pollutant and also depend on the severity of the nonattainment status for the air quality management area in question.

A conformity applicability analysis is the first step of a conformity evaluation and assesses if a federal action must be supported by a conformity determination. This is typically done by quantifying applicable direct and indirect emissions that are projected to result due to implementation of the federal action. Indirect emissions are those emissions caused by the federal action and originating in the region of interest, but which can occur later or in a different location from the action itself and are reasonably foreseeable. The federal agency can control and would maintain control over the indirect action due to a continuing program responsibility of the federal agency. Reasonably foreseeable emissions are projected future direct and indirect emissions that are identified at the time the conformity evaluation is performed. The location of such emissions is known, and the emissions are quantifiable, as described and documented by the federal agency based on its own information and after reviewing any information presented to the federal agency. If the results of the applicability analysis indicate that the total emissions would not exceed the *de minimis* emissions thresholds, then the conformity evaluation process is completed. *De minimis* threshold emissions are presented in **Table 3.1-2**.

Table 3.1-2. General Conformity de minimis Emissions Thresholds

Pollutant	*Area Type*	*Tons per Year*
Ozone (volatile organic compounds [VOCs] or nitrogen oxide [NO_x])	Serious nonattainment	50
	Severe nonattainment	25
	Extreme nonattainment	10
	Other areas outside an ozone transport region	100
Ozone (NO_x)	Marginal and moderate nonattainment inside an ozone transport region	100
	Maintenance	100
Ozone (VOC)	Marginal and moderate nonattainment inside an ozone transport region	50
	Maintenance within an ozone transport region	50
	Maintenance outside an ozone transport region	100
Carbon monoxide, SO_2 and NO_2	All nonattainment and maintenance	100
PM_{10}	Serious nonattainment	70
	Moderate nonattainment and maintenance	100
$PM_{2.5}$ Direct emissions, SO_2, NO_x (unless determined not to be a significant precursor), VOC or ammonia (if determined to be significant precursors)	All nonattainment and maintenance	100
Lead (Pb)	All nonattainment and maintenance	25

Source: 40 CFR 93.153.

3.1.1.4 Permitting

New Source Review (Preconstruction Permit)

New major stationary sources and major modifications at existing major stationary sources are required by the CAA to obtain an air pollution permit before commencing construction. This permitting process for major stationary sources is called New Source Review and is required whether the major source or major modification is planned for nonattainment areas or attainment and unclassifiable areas. In

general, permits for sources in attainment areas and for other pollutants regulated under the major source program are referred to as Prevention of Significant Deterioration (PSD) permits, while permits for major sources emitting nonattainment pollutants and located in nonattainment areas are referred to as nonattainment new source review permits. In addition, a proposed project may have to meet the requirements of nonattainment new source review for the pollutants for which the area is designated as nonattainment and PSD for the pollutants for which the area is attainment. Additional PSD permitting thresholds apply to increases in stationary source greenhouse gas (GHG) emissions. PSD permitting can also apply to a new major stationary source (or any net emissions increase associated with a modification to an existing major stationary source) that is constructed within 6.2 miles of a Class I area, and which would increase the 24-hour average concentration of any regulated pollutant in the Class I area by 1 $\mu g/m^3$ or more.

3.1.1.5 Greenhouse Gases

GHGs are gas emissions that trap heat in the atmosphere. These emissions occur from natural processes and human activities. Scientific evidence indicates a trend of increasing global temperature over the past century due to an increase in GHG emissions from human activities. The climate change associated with this global warming is predicted to produce negative economic and social consequences across the globe.

USEPA issued the Final *Mandatory Reporting of Greenhouse Gases Rule* on September 22, 2009. GHGs covered under the Final *Mandatory Reporting of Greenhouse Gases Rule* are carbon dioxide (CO_2), methane, nitrogen oxide (NO_x), hydrofluorocarbons, perfluorocarbons, sulfur hexafluoride, and other fluorinated gases including nitrogen trifluoride and hydrofluorinated ethers. Each GHG is assigned a global warming potential. The global warming potential is the ability of a gas or aerosol to trap heat in the atmosphere. The global warming potential rating system is standardized to CO_2, which has a value of one. The equivalent CO_2 rate is calculated by multiplying the emissions of each GHG by its global warming potential and adding the results together to produce a single, combined emissions rate representing all GHGs (i.e. CO_2e). Under the rule, suppliers of fossil fuels or industrial GHGs, manufacturers of mobile sources and engines, and facilities that emit 25,000 metric tons or more per year of GHG emissions as CO_2e are required to submit annual reports to USEPA.

In an effort to reduce energy consumption, reduce GHGs, reduce dependence on petroleum, and increase the use of renewable energy resources the Navy and Marine Corps have established goals to reduce fossil fuel use and increase alternative energy use to at least 50 percent by 2020 (U.S. Marine Corps, 2017). Examples of GHG reduction projects include energy efficient construction, thermal and photovoltaic solar systems, geothermal power plants, and the generation of electricity with wind energy.

3.1.2 Affected Environment

The following discussion provides a description of the existing conditions for air quality in the affected region. The affected environment for the air quality analysis includes Baltimore County, which is within the Metropolitan Baltimore Intrastate Air Quality Control Region (40 CFR 81.28).

Baltimore County is designated as a moderate nonattainment area for the 2008 8-hour O_3 (ozone) standard and a marginal nonattainment area for the 2015 8-hour O_3 standard. Additionally, portions of Baltimore County that are within 16.7 miles of Herbert A. Wagner's Unit 3 stack (39.17765 N. latitude, 76.52752 W. longitude) are designated as nonattainment for the 2010 Sulfur Dioxide standard;

however, the Proposed Action is located outside of this designated area. Portions of Baltimore County, specifically Regional Planning District No. 118 (generally corresponding to the Central Business District or Baltimore City) is designated as a maintenance area for CO; however, the Proposed Action is located outside of this designated area.

The most recent emission inventory for Baltimore County is shown in **Table 3.1-3**. VOCs and NO_x emissions are used to represent ozone generation because they are precursors of ozone.

Table 3.1-3. Baltimore County Air Emissions Inventories (2017) in Tons per Year

Location	*NO_x*	*VOC*	*CO*	*SO_2*	*PM_{10}*	*$PM_{2.5}$*	*CO_2e*
Baltimore County	10,661	16,919	71,702	1,041	11,980	3.207	5,484,579

Source: USEPA, 2020.

3.1.3 Environmental Consequences

Effects on air quality are based on estimated direct and indirect emissions associated with the action alternatives. Estimated emissions from a proposed federal action are typically compared with the relevant national and state standards to assess the potential for increases in pollutant concentrations. Air quality impacts would be significant if emissions associated with the Proposed Action would: 1) increase ambient air pollution concentrations above the NAAQS; 2) contribute to an existing violation of the NAAQS; or 3) interfere with, or delay timely attainment of the NAAQS.

3.1.3.1 No Action Alternative

Under the No Action Alternative, the Proposed Action would not occur and there would be no change to baseline air quality. MARFORRES would not construct and operate the MCRC at CFMR, no new utility infrastructure and service connections would be made, and the training for MARFORRES ground units would continue to occur at the Baltimore MCRC. Under the No Action Alternative, baseline conditions would remain unchanged. Therefore, no significant impacts to air quality or air resources would occur with implementation of the No Action Alternative.

3.1.3.2 Action Alternative

The study area for the analysis of effects to air quality associated with the Action Alternative is Baltimore County.

Construction

Construction activities could last up to 20 months. The emissions associated with construction are minor, with PM_{10} emissions being the greatest and estimated at 9.56 tons in the first year of construction. The majority of emissions from construction would be fugitive dust and other air emissions generated by mobile sources such as diesel-powered construction equipment as well as delivery, dump and concrete trucks traveling to and returning from the site.

Baltimore County is in nonattainment for O_3. As such, the emissions of these pollutants are compared to the General Conformity Rule *de minimis* thresholds to assess the applicability of the Rule. Because Baltimore County is in attainment for the remaining criteria pollutants and has no designated maintenance areas, the General Conformity Rule does not otherwise apply. However, for the purposes of this analysis, 100 tons per year per pollutant was used as an indicator of pollutant levels that may

approach a threshold that would trigger a regulatory requirement and need for further evaluation of potential air quality impacts. Used in this way, indicators provide relevant evidence of the potential impacts to air quality. The 100 tons per year per pollutant indicator is based on the *de minimis* thresholds that apply under the General Conformity Regulations. No similar regulatory indicator is available for mobile source emissions which are the primary emissions sources for construction activities under the Action Alternative. Lacking any regulatory mobile source emissions thresholds, the 100 tons per year per pollutant indicator was used to equitably assess mobile source emissions. The estimated construction emissions are presented in **Table 3.1-4**.

Table 3.1-4. Estimated Construction Emissions in Tons per Year

Year	*VOC*	*CO*	*NO_x*	*SO_2*	*PM_{10}*	*$PM_{2.5}$*
Year 1	0.12	0.66	1.96	0.02	9.56	1.05
Year 2	0.08	0.44	1.31	0.02	0.70	0.13
de minimis threshold	50[1]	NA[2]	100[1]	NA[3]	NA[2]	NA[2]
Exceedance?	No	NA	No	No	NA	NA
Comparative Threshold	NA	100	NA	100	100	100
Exceedance?	NA	No	NA	NA	No	No

Notes: [1]VOC and NO_x thresholds for an ozone transport region; [2]Not applicable as Baltimore County is in attainment of the NAAQS for this criteria pollutant; [3]Not applicable as CFMR is in a portion of Baltimore County in attainment for SO_2.

Legend: CO = carbon monoxide; NA = not applicable; NAAQS = National Ambient Air Quality Standard; NO_x = oxides of nitrogen; PM_{10} = suspended particulate matter less than or equal to 10 microns in diameter; $PM_{2.5}$ = fine particulate matter less than or equal to 2.5 microns in diameter; SO_2 = sulfur dioxide; VOC = volatile organic compounds.

Based on the emission estimates for construction, these activities are exempt from General Conformity, as they do not exceed the *de minimis* thresholds. Additionally, the emissions of the remaining criteria pollutants are minimal and would not result in a violation or exceedance of the NAAQS.

Operation

The operation of the CFMR MCRC would likely include one or more stationary sources. These could include a natural gas-powered emergency backup generator and heating equipment. These stationary sources would fall under the New Source Review regulations and therefore be exempt from General Conformity Rule review. Any sources that would be planned for the facility would undergo review to assess any permitting requirements.

A small number (approximately 34) of active duty Marines would be onsite during the work week. Up to 286 reservist Marines would train at the site one weekend (i.e., Saturday/Sunday) per month. Approximately 10 percent of the permanent staff (3 to 4 people) would be anticipated to relocate to the Reisterstown area near the new MCRC, and the remainder of the permanent staff would be anticipated to commute to the facility from the City of Baltimore area. Reservists would travel from all over the state. Approximately 20 percent of the reservists (57 people) would be anticipated to carpool to/from the site. The remainder would come from further away and stay in hotels in the local area. The impact of the commuting vehicle emissions would be very small and transient. As a result, the operational impacts to air quality would not be significant.

In summary, implementation of the Action Alternative would not result in significant impacts to air quality.

Greenhouse Gases

Emission sources evaluated in this EA are exclusively associated with construction mobile source activities associated with the Proposed Action. Operational mobile source emissions (POVs for commuting staff and visiting reservists) were not evaluated as these operations currently occur. The anticipated increase due to the change in location from the City of Baltimore to Reisterstown (i.e., CFMR) would potentially increase the regular commute distance for approximately 30 personnel. The result of the Proposed Action would be mobile operations would occur at a different location. As such, no significant net change in operational GHG emissions would be anticipated.

Because the dominant GHG emitted from fossil fuel combustion is CO_2 (85.4 percent of emissions), the analysis estimate considers CO_2 as the primary source of construction related GHG emissions. **Table 3.1-5** presents the summary of anticipated CO_2 emissions for the Proposed Action.

Table 3.1-5. Anticipated CO_2 Emissions in Metric Tons per Year

Year of Construction	CO_2 Emissions
Year 1	180
Year 2	120
Total Additional Tons	300

An estimated total of 300 tons of CO_2 would be emitted by construction mobile sources and equipment operating during the construction phase. Additional details can be found in **Appendix B**. These emissions would slightly increase the atmosphere's concentration of GHGs, and, in combination with past and future emissions from all other sources, contribute incrementally to the global warming that produces the adverse effects of climate change.

3.2 Water Resources

This discussion of water resources includes groundwater, surface water, wetlands, floodplains, and coastal zone.

Groundwater is water that flows or seeps downward and saturates soil or rock, supplying springs and wells. Groundwater is frequently used for water consumption, agricultural irrigation, and industrial applications.

Surface water resources generally consist of wetlands, lakes, rivers, and streams. Surface water is important for its contributions to the economic, ecological, recreational, and human health of a community or locale.

Wetlands are jointly defined by USEPA and U.S. Army Corps of Engineers (USACE) as "those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions." Wetlands generally include "swamps, marshes, bogs and similar areas."

Floodplains are areas of low-level ground that occur along rivers, stream channels, large wetlands, or coastal waters. Floodplain ecosystem functions include natural floods attenuation, flood storage and conveyance, groundwater recharge, and nutrient cycling. Floodplains also help to maintain water quality and are often home to a diverse assemblage of plants and animals. In their natural vegetated state, floodplains slow the rate at which the incoming overland flows reach the main water body. Floodplain boundaries are most often defined in terms of frequency of inundation, that is, the 100-year and 500-

year flood. Floodplain delineation maps are produced by the Federal Emergency Management Agency and provide a basis for comparing the location of the Proposed Action to the floodplains.

Coastal zone is the border between the land and the ocean. The coastal zone is the zone in which the majority of infrastructure and human activities are directly connected to the ocean waters.

3.2.1 Regulatory Settings

The Safe Drinking Water Act is the federal law that protects public drinking water supplies throughout the nation. Under the Safe Drinking Water Act, The USEPA sets standards for drinking water quality. Groundwater quality and quantity are regulated under several statutes and regulations, including the Safe Drinking Water Act. The Clean Water Act (CWA) establishes federal limits, through the National Pollutant Discharge Elimination System (NPDES) program, on the amounts of specific pollutants that can be discharged into surface waters to restore and maintain the chemical, physical, and biological integrity of the water. The NPDES program regulates the discharge of point (i.e., end of pipe) and nonpoint sources (i.e., stormwater) of water pollution.

The Maryland NPDES stormwater program requires construction site operators engaged in clearing, grading, and excavating activities that disturb one acre or more to obtain coverage under an NPDES Construction General Permit for stormwater discharges. Construction or demolition that necessitates an individual permit also requires preparation of a Notice of Intent to discharge stormwater and a Stormwater Pollution Prevention Plan (SWPPP) that is implemented during construction. As part of the 2010 Final Rule for the CWA, titled *Effluent Limitations Guidelines and Standards for the Construction and Development Point Source Category*, activities covered by this permit must implement non-numeric erosion and sediment controls and pollution prevention measures.

Wetlands are currently regulated by the USACE under Section 404 of the CWA as a subset of all "Waters of the United States." Waters of the United States are defined as (1) traditional navigable waters, (2) wetlands adjacent to navigable waters, (3) non-navigable tributaries of traditional navigable waters that are relatively permanent where the tributaries typically flow perennially or have continuous flow at least seasonally (e.g., typically 3 months), and (4) wetlands that directly about such tributaries under Section 404 of the CWA, as amended, and are regulated by USEPA and the USACE. The CWA requires that Maryland establish a Section 303(d) list to identify impaired waters and establish total maximum daily loads for the sources causing the impairment.

Section 404 of the CWA authorizes the Secretary of the Army, acting through the Chief of Engineers, to issue permits for the discharge of dredge or fill into wetlands and other Waters of the United States. Any discharge of dredge or fill into Waters of the United States requires a permit from the USACE. Section 438 of the Energy Independence and Security Act establishes storm water design requirements for development and redevelopment projects. Under these requirements, federal facility projects larger than 5,000 square feet must "maintain or restore, to the maximum extent technically feasible, the predevelopment hydrology of the property with regard to the temperature, rate, volume, and duration of flow."

EO 11990, *Protection of Wetlands,* requires that federal agencies adopt a policy to avoid, to the extent possible, long- and short-term adverse impacts associated with destruction and modification of wetlands and to avoid the direct and indirect support of new construction in wetlands whenever there is a practicable alternative.

EO 11988, *Floodplain Management*, requires federal agencies 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 unless it is the only practicable alternative. Flood potential of a site is usually determined by the 100-year floodplain, which is defined as the area that has a one percent chance of inundation by a flood event in a given year. EO 13690, *Establishing a Federal Flood Risk Management Standard and a Process for Further Soliciting and Considering Stakeholder Input*, amends Executive Order 11988 and establishes the Federal Flood Risk Management Standard to improve the nation's resilience to current and future flood risks, which are anticipated to increase over time due to the effects of climate change and other threats.

The Coastal Zone Management Act (CZMA) of 1972 provides assistance to states, in cooperation with federal and local agencies, for developing land and water use programs in coastal zones. Actions occurring within the coastal zone commonly have several resource areas that may be relevant to the CZMA. Congress established national policy to preserve, protect, develop, restore, or enhance resources in the coastal zone. This Act encourages coastal states to properly manage use of their coasts and coastal resources, prepare and implement coastal management programs, and provide for public and governmental participation in decisions affecting the coastal zone. To this end, CZMA imparts an obligation upon federal agencies whose actions or activities affect any land or water use or natural resource of the coastal zone to be carried out in a manner consistent to the maximum extent practicable with the enforceable policies of federally approved state coastal management programs. However, federal lands, which are "lands the use of which is by law subject solely to the discretion of the federal Government, its officers, or agents," are statutorily excluded from the State's "coastal uses or resources." If, however, the proposed federal activity affects coastal uses or resources beyond the boundaries of the federal property (i.e., has spillover effects), the CZMA Section 307 federal consistency requirement applies. As a federal agency, the Marine Corps is required to determine whether its proposed activities would affect the coastal zone. This takes the form of a consistency determination, a negative determination, or a determination that no further action is necessary.

3.2.2 Affected Environment

The following discussions provide a description of the existing conditions for each of the categories under water quality resources at the proposed CFMR MCRC.

3.2.2.1 Groundwater

CFMR is located in the Maryland Piedmont Physiographic Province. Groundwater in the Maryland Piedmont is derived from precipitation that falls within the watershed where the site is located. The precipitation percolates downward through the soil and rock until it reaches the water table. The saturated zone below the water table is typically called an aquifer. Most aquifers in the Piedmont are unconfined aquifers, with no overlying impermeable layer to protect ground water from surface-based sources of contamination. The water table represents the top of the unconfined aquifer. Because they do not have a protective layer above them, unconfined aquifers are susceptible to contamination from substances released on or near the surface (Maryland Geological Survey, 2020).

During the geotechnical analysis performed by ECS Mid-Atlantic, groundwater was encountered at a depth of 48.5 feet on the eastern side of the wooded portion of the site (ECS Mid-Atlantic, 2019).

3.2.2.2 Surface Water

The source of onsite surface water is precipitation. The site drains to the north towards an un-named secondary tributary that ultimately outfalls to the North Branch of the Patapsco River finally discharging to the Chesapeake Bay (U.S. Geological Survey, 2019). **Figure 3.2-1** illustrates the location of surface waters in relation to the study area.

3.2.2.3 Wetlands

A jurisdictional wetland delineation was conducted in September 2019. The delineation identified a small palustrine emergent wetland area of 18,584 square feet (0.43 acres) located in the northeast corner of the site. The wetland is dominated by herbaceous species including cattails (*Typha angustifolia*), sedges (*Carex stricta*) and rush (*Juncus effuses*) with black Willow (*Salix nigra*) and red maple (*Acer rubrum*) trees beginning to encroach into the wetland at the northern limits of the study area. The USACE Baltimore District confirmed the site in January 2020 and rendered a preliminary jurisdictional wetland determination May 21, 2020 (U.S. Marine Corps Reserve, 2020a). The wetland delineation is provided in **Appendix C**.

3.2.2.4 Floodplains

There are no 100-year, or 500-year floodplains located within or adjacent to the project area (Federal Emergency Management Agency, 2020). As such, no impact to floodplains would occur and no further discussion in this EA is warranted.

3.2.2.5 Coastal Zone

Maryland has a federally approved Coastal Zone Management Plan (CZMP). Maryland's coastal zone is composed of the land, water, and subaqueous land between the territorial limits of Maryland in the Chesapeake Bay, Atlantic Coastal Bays, and the Atlantic Ocean. The Maryland coastal zone extends from 3 miles out in the Atlantic Ocean to the inland boundaries of the 16 counties and Baltimore City that border the Atlantic Ocean, Chesapeake Bay, and the Potomac River up to the District of Columbia (Maryland Department of Natural Resources [DNR], 2020).

CFMR is located approximately 20 miles from the Chesapeake Bay in Baltimore County, which lies within Maryland's coastal zone. The CZMA excludes all federal lands like CFMR from the legal definition of coastal zone (16 U.S.C. Section 1453(1)). However, in accordance with the CZMA, federal actions undertaken at CFMR that have reasonably foreseeable effects on the coastal zone must be consistent with Maryland's 19 enforceable policies.

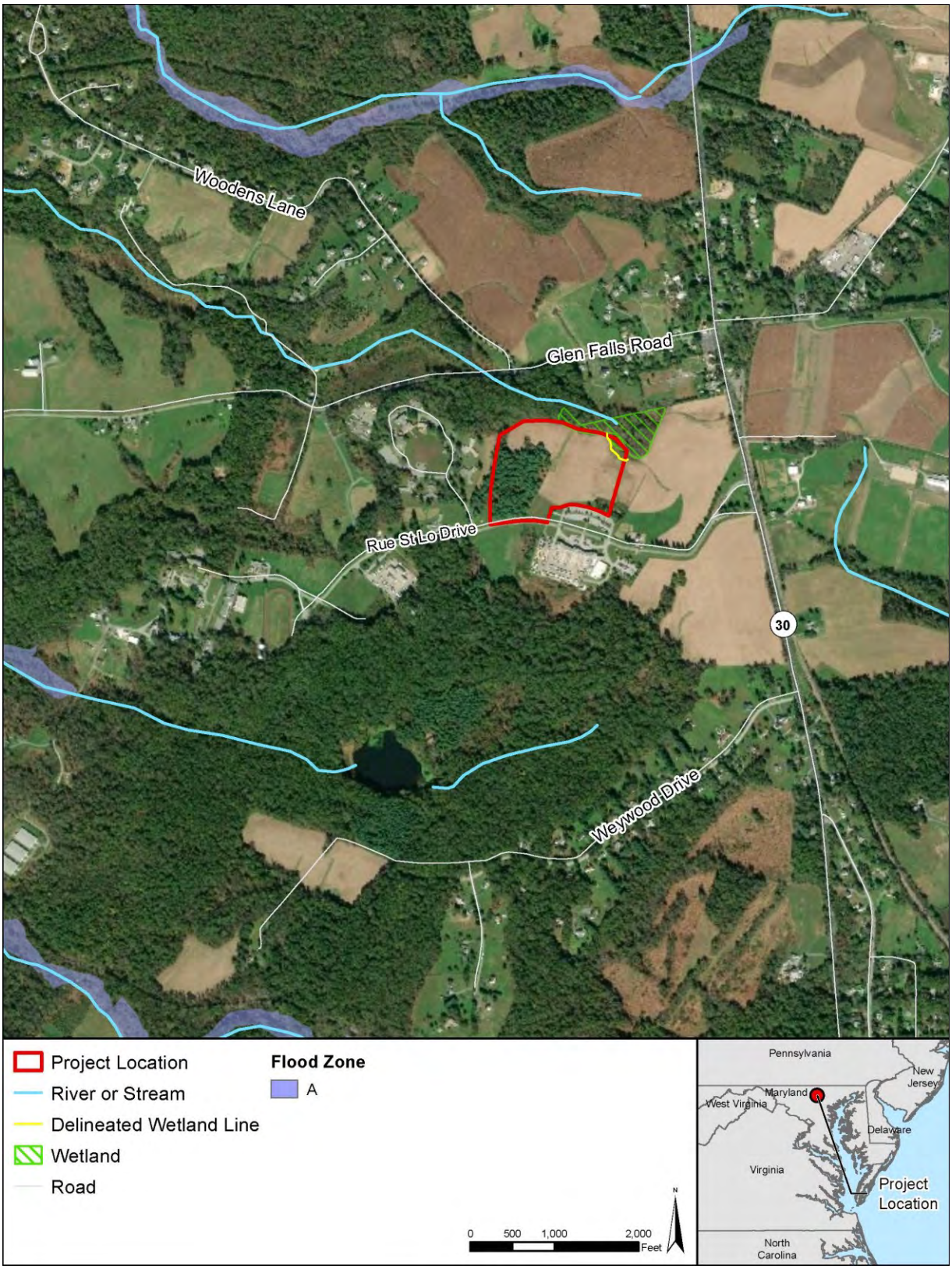

Figure 3.2-1. Water Resources in Relation to the Study Area

3.2.3 Environmental Consequences

In this EA, the analysis of water resources looks at the potential impacts on groundwater, surface water, wetlands, floodplains, and the coastal zone. Groundwater analysis focuses on the potential for impacts to the quality, quantity, and accessibility of the water. The analysis of surface water quality considers the potential for impacts that may change the water quality, including both improvements and degradation of current water quality. The impact assessment of wetlands considers the potential for impacts that may change the local hydrology, soils, or vegetation that support a wetland. The analysis of floodplains considers if any new construction is proposed within a floodplain or may impede the functions of floodplains in conveying floodwaters. The analysis of the coastal zone considers the potential for direct, indirect, or secondary change on any coastal zone resource under Maryland's CZMP. Impacts would be considered significant if elements of the Proposed Action were not consistent with the enforceable policies of the CZMP.

3.2.3.1 No Action Alternative

Under the No Action Alternative, the Proposed Action would not occur and there would be no change to baseline water resources. Therefore, no significant impacts to water resources and no effect on the coastal uses or resources of Maryland would occur with implementation of the No Action Alternative.

3.2.3.2 Action Alternative

The study area for the analysis of effects to water resources associated with the Action Alternative includes the MCRC project area at CFMR.

Construction

No aspect of construction would cause any direct impacts to groundwater, surface water, wetlands, or coastal zone. A small jurisdictional wetland area was identified at the north east corner of the site; no impacts to this wetland area would be proposed as part of this project. In addition, the proposed project features provide greater than a 100-foot buffer around the wetland.

Indirect impacts to surface waters down-grade from the area of proposed construction could occur from sedimentation due to exposed soils during site clearing and grading. However, potential impacts would be minimized through the use of BMPs for containing construction site soil disturbance such as silt fencing, hay bales, re-vegetation of exposed soils, or other methods that would prevent sediment from entering stormwater. A NPDES construction stormwater general permit would be obtained prior to any construction and a SWPPP would be prepared in accordance with the NPDES permit process. This plan would specify the BMPs for controlling stormwater runoff and minimizing potential impacts to water quality in the watershed during construction activities. In addition, low impact development (LID) methods would be incorporated as appropriate to minimize stormwater runoff (refer to **Section 2.1.1.2**). As such, no significant impacts to surface waters or the coastal zone would be anticipated.

Operation

A groundwater withdrawal permit (Permit Number BA1988G043-Expiration 10-31-2028) issued to the Maryland State Military Department by the Maryland Department of Environment, Water Management Administration would provide potable water to the proposed project. MARFORRES would adhere to the permit conditions; no significant impact to groundwater would be anticipated. Post construction stormwater would be managed in accordance with the NPDES permit. BMPs for controlling stormwater runoff and minimizing potential impacts to water quality in the watershed during the operational phase

would include use of infiltration basins; the infiltration basins would be incorporated into the MCRC facility design. As such, no short- or long-term impacts to surface waters or coastal zone resources would be anticipated.

MARFORRES has determined that the Proposed Action would be conducted in a manner fully consistent or consistent to the maximum extent practicable with the federally approved enforceable policies of the Maryland CZMP. Maryland concurred with the determination on November 2, 2020; the concurrence is provided in **Appendix C**.

In summary, implementation of the Action Alternative would not result in significant impacts to water resources.

3.3 Geological Resources

This discussion of geological resources includes topography, geology, and soils of a given area. Topography is typically described with respect to the elevation, slope, and surface features found within a given area. The geology of an area may include bedrock materials, mineral deposits, and fossil remains. The principal geological factors influencing the stability of structures are soil stability and seismic properties. Soil refers to unconsolidated earthen materials overlying bedrock or other parent material. Soil structure, elasticity, strength, shrink-swell potential, and erodibility determine the ability for the ground to support structures and facilities. Soils are typically described in terms of their type, slope, physical characteristics, and relative compatibility or limitations with regard to particular construction activities and types of land use.

3.3.1 Regulatory Settings

The Code of Maryland Regulations 26.17.01, *Erosion and Sediment Control* provides the procedures and plans promulgated by the state to control soil erosion and reduce sediment from polluting nearby waterways during construction activities.

3.3.2 Affected Environment

The following discussions provide a description of the existing conditions for each of the categories under geological resources at the site of the MCRC at CFMR.

3.3.2.1 Topography

The elevations of the site range from 680 to 720 feet with the high point on the southern portion of the site sloping down (approximately six percent) to the low point to the north (ECS Mid-Atlantic, 2019).

3.3.2.2 Geology

The project site is located in the Piedmont Upland Section of the Piedmont Plateau Physiographic Province in Maryland located between the Blue Ridge and Coastal Plain provinces. The Piedmont is underlain primarily by metamorphic and igneous crystalline rocks, with smaller amounts of sedimentary rocks. Over time the rocks have been folded, faulted, and fractured to varying degrees, and the region is commonly referred to as fractured-rock terrane. The boundary between the Piedmont and Coastal Plain provinces is known as the Fall Line, and it separates the hard, fractured rocks of the Piedmont from the unconsolidated sediments of the Coastal Plain (Maryland Geological Survey, 2020).

3.3.2.3 Soils

Soils identified by the U.S. Department of Agriculture Web Soil Survey in the proposed project area are primarily Glenelg loams found on 3 to 8 percent slopes and 8 to 15 percent slopes. Other soils mapped in the project area include Manor Chanery Loam found on 15 to 25 percent slopes, Glenvill silt loam found on 2 to 8 percent slopes, and Baile silt loam found on 3 to 8 percent slopes. Glenelg soils are described as well drained soils that are found on slopes and hilltops. Both Glenelg soils found in the study area are well suited to farming. Their parent material is residuum weathered from mica schist and mica fragments can be found throughout the soil column (U.S. Department of Agriculture, 2020).

3.3.3 Environmental Consequences

Geological resources are analyzed in terms of erosion. The analysis of topography and soils focuses on the area of soils that would be disturbed, the potential for erosion of soils from construction areas, and the potential for eroded soils to become pollutants in downstream surface water during storm events. BMPs are identified to minimize soil impacts and prevent or control pollutant releases into stormwater. The potentially affected environment for geological resources is limited to lands that would be disturbed by proposed construction activities.

3.3.3.1 No Action Alternative

Under the No Action Alternative, the Proposed Action would not occur and there would be no change to baseline geology, topography, or soils. Therefore, no significant impacts to geological resources would occur with implementation of the No Action Alternative.

3.3.3.2 Action Alternative

The study area encompasses the proposed construction and ground disturbance areas related to the Action Alternative.

Construction

Prior to construction, the area proposed for facility construction would be cleared and graded. To accommodate the approximate 40-foot change in elevation from the high point to the low point and an approximately six percent slope, retaining walls would be incorporated to help transition grades (ECS Mid-Atlantic, 2019). Soils would be temporarily disturbed during the construction process. Measures would be incorporated to address soil disturbance and stormwater runoff to meet federal and state requirements. The increase in impervious surface with the addition of a new facility and associated parking areas and sidewalks could result in higher levels of stormwater runoff, which could increase erosion in the area. LID guidelines, as described in **Section 2.1.1.2**, would be observed and BMPs to minimize construction and post construction impacts would be implemented (refer to **Section 2.5)**.

Operation

Operational activities of the MCRC would not result in impacts to geological sources. POV and tactical vehicles would remain on existing roads; the vehicles would not be driven off road within CFMR.

In summary, implementation of the Action Alternative would not result in significant impacts to geological resources.

3.4 Cultural Resources

This discussion of cultural resources includes prehistoric and historic archaeological sites; historic buildings, structures, sites, and districts; and physical entities and human-made or natural features important to a culture, a subculture, or a community for traditional, religious, or other reasons. Cultural resources can be divided into three major categories:

- Archaeological resources (prehistoric and historic) are locations where human activity measurably altered the earth or left deposits of physical remains.
- Architectural resources include standing buildings, structures, landscapes, and other built-environment resources of historic or aesthetic significance.
- Traditional cultural properties may include archaeological resources, structures, neighborhoods, prominent topographic features, habitat, plants, animals, and minerals that Native Americans or other groups consider essential for the preservation of traditional culture.

3.4.1 Regulatory

Cultural resources are governed by other federal laws and regulations, including the National Historic Preservation Act (NHPA), Archeological and Historic Preservation Act, American Indian Religious Freedom Act, Archaeological Resources Protection Act of 1979, and the Native American Graves Protection and Repatriation Act of 1990. Federal agencies' responsibility for protecting historic properties is defined primarily by sections 106 and 110 of the NHPA. Section 106 requires federal agencies to take into account the effects of their undertakings on historic properties. Section 110 of the NHPA requires federal agencies to establish—in conjunction with the Secretary of the Interior—historic preservation programs for the identification, evaluation, and protection of historic properties. Cultural resources also may be covered by state, local, and territorial laws.

3.4.2 Affected Environment

Cultural resources listed in the National Register of Historic Places (NRHP) or eligible for listing in the NRHP are "historic properties" as defined by the NHPA. The list was established under the NHPA and is administered by the National Park Service on behalf of the Secretary of the Interior. The NRHP includes properties on public and private land. Properties can be determined eligible for listing in the NRHP by the Secretary of the Interior or by a federal agency official with concurrence from the applicable State Historic Preservation Office (SHPO). A NRHP-eligible property has the same protections as a property listed in the NRHP. The historic properties include archaeological and architectural resources.

The area of potential effects (APE) for cultural resources is the geographic area or areas within which an undertaking (project, activity, program or practice) may cause changes in the character or use of any historic properties present. The APE is influenced by the scale and nature of the undertaking and may be different for various kinds of effects caused by the undertaking.

In accordance with 36 CFR § 800.4(a)(1), MARFORRES has determined an APE in consideration of both potential direct and indirect effects to historic properties as a result of implementing the proposed undertaking. The APE for archaeological resources is the 21-acre project site within CFMR where ground disturbance would occur. The APE for architectural resources encompasses the entire CFMR, and also extends to the east to include a 1-acre parcel with a dwelling at 13721 Hanover Pike (**Figure 3.4-1**).

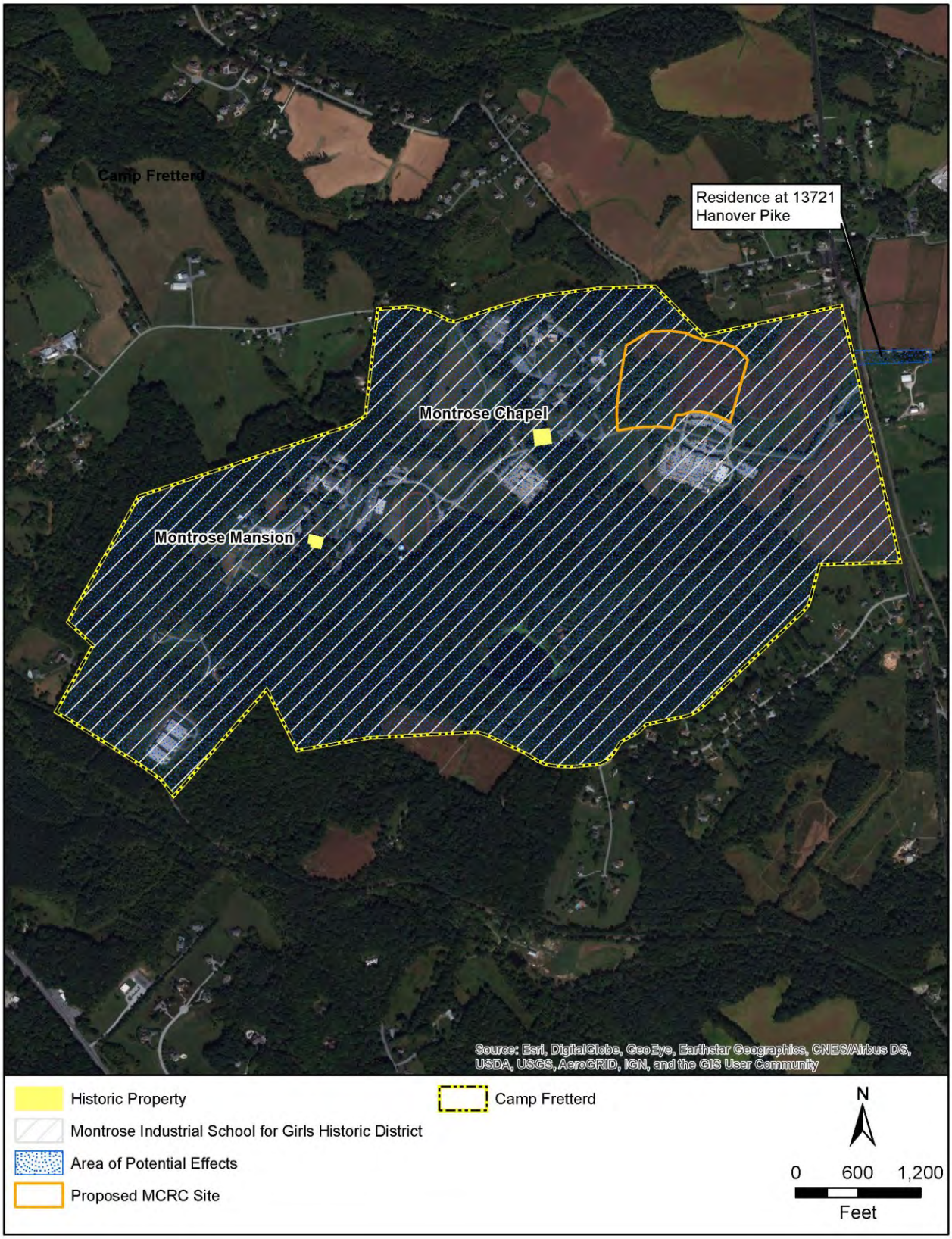

Figure 3.4-1. Area of Potential Effects at Camp Fretterd Military Reservation

The APE for architectural resources includes two historic properties: the Montrose Industrial School for Girls (MISG) Historic District (BA-3207) and the Montrose Mansion and Chapel (NR# 0000354; BA-949 and BA-950). This APE accounts for potential physical impacts on historic properties within the project area from construction, and potential visual effects to the setting of historic properties from construction of permanent facilities at the project site and potential visual and auditory effects from POV and tactical vehicle operations.

3.4.2.1 Archaeological Resources

The 21-acre site of the proposed MCRC comprises leased agricultural fields and the Honor Grove; there are no existing buildings or structures on the proposed MCRC site. In November 2019, MARFORRES' consultant, Cardno, conducted a Phase I archaeological survey of the entire 21-acre project site (U.S. Marine Corps Forces Reserve, 2020b). The survey did not identify any archaeological resources within the APE and no additional archaeological investigations were recommended. The Maryland Historical Trust (MHT) concurred with the findings of the Phase I survey on March 3, 2020. **Appendix E** provides the Phase I archaeological survey and MHT concurrence.

3.4.2.2 Architectural Resources

The site for the Proposed Action is located within the northeastern portion of the MISG Historic District. The MISG Historic District includes 25 contributing and 28 noncontributing resources (refer to **Appendix E**, Viewshed Analysis). The contributing resources include the Montrose Mansion and Chapel and associated late nineteenth century buildings, and early- to mid-twentieth century (1920–1956) classrooms, dormitories, and farming buildings and structures. Noncontributing resources include post-1962 buildings and structures.

In 2006, the USACE inventoried and evaluated the NRHP eligibility of the MISG, which operated as a juvenile rehabilitation center from 1920 to 1988. The USACE recommended the MISG eligible as an historic district under Criterion A "as a physical representation of evolving, early twentieth century ideas regarding juvenile reform, education, and training;" and under Criterion C for "its eclectic architecture that combines elements of various traditional architectural styles" (Watson, 2006). Neither the inventory form nor National Register Eligibility Review form on the MISG, however, were submitted to the MHT for review/concurrence on the eligibility of the property (Maryland Historical Trust, 2019). Nonetheless, the MDARNG considers and treats the MISG Historic District as an NRHP-eligible property (MDARNG, 2016).

The Montrose Mansion and Chapel were built in the nineteenth century as part of a country estate near Reisterstown and are now part of the CFMR. The stone mansion was initially built in 1826 as a two-story Neoclassical dwelling, and was expanded in the mid-nineteenth century, and then again in the late nineteenth century. Built in 1855, the chapel is a one-story, stone, Greek Revival building. A stone wall encloses the yard around the building and includes two marked graves to the east of the chapel. The buildings are significant for their Neoclassical, Second Empire, and Greek Revival architectural characteristics in Baltimore County during the period of significance of 1826 to 1885. The Montrose Mansion and Chapel were listed collectively in the NRHP on March 19, 1990, and are classified in the NRHP as "building(s)" rather than as a historic district. The NRHP boundaries surround each building; collectively, the property encompasses approximately two acres. The boundary of the Montrose Mansion includes two small domestic outbuildings, which are contributing resources of the NRHP property (McGrain, 1989).

The APE also includes a dwelling at 13721 Hanover Pike. The house is a vernacular Dormer Front Bungalow built in 1948 (Maryland Department of Assessments and Taxation, 2019). It has not been documented in the Maryland Inventory of Historic Properties or evaluated for NRHP eligibility. Nonetheless, because it is within the viewshed/APE for the Proposed Action, the impacts analysis considers the potential visual effects of construction of the proposed MCRC on this property.

The 21-acre site of the proposed MCRC overlaps with the Honor Grove established in 1992 with more than 800 white pines to memorialize the more than 800 Maryland National Guard soldiers and airmen who were activated for Operations Desert Shield and Desert Storm in the Persian Gulf in 1990 and 1991. The MDARNG dedicated "this honor grove" in May 1992 as "a living memorial" to these men and women (Maryland Army National Guard, 1992). In a memorandum dated September 25, 2019, the Adjutant General of Maryland notified MARFORRES that the MDARNG has "no objections to the alteration or removal of the 'Honor Grove' at [CFMR] as required for construction [of a MCRC]" (MDARNG, 2019). Thus, the Veterans' Memorial Preservation and Recognition Act of 2003 (Public Law 108–29), which established criminal penalties for anyone who "willfully injures or destroys, or attempts to injure or destroy" any veterans' memorial or other monument on public property, does not apply to the removal of the Honor Grove as part of the Proposed Action.

3.4.2.3 Traditional Cultural Properties

No traditional cultural properties (TCPs) or resources have been identified within the 21-acre APE for archaeological resources or the APE for architectural resources that includes CFMR and the additional 1-acre parcel to the east of CFMR.

3.4.3 Environmental Consequences

Analysis of potential impacts to cultural resources considers both direct and indirect impacts. Direct impacts may be the result of physically altering, damaging, or destroying all or part of a resource, altering characteristics of the surrounding environment that contribute to the importance of the resource, introducing visual, atmospheric, or audible elements that are out of character for the period the resource represents (thereby altering the setting), or neglecting the resource to the extent that it deteriorates or is destroyed. Indirect impacts primarily result from the effects that are farther removed from the immediate project area including visual, audible (noise), or atmospheric changes due to the project implementation.

3.4.3.1 No Action Alternative

Under the No Action Alternative, the Proposed Action would not occur and there would be no change to cultural resources. Therefore, no significant impacts to cultural resources would occur with implementation of the No Action Alternative.

3.4.3.2 Action Alternative

The study area for archaeological resources is the site of the proposed MCRC at CFMR. The study area for architectural resources is the APE which encompasses the entire CFMR, and also extends to the east to include a 1-acre parcel with a dwelling at 13721 Hanover Pike which is all of CFMR and for cultural resources for includes the site of the proposed MCRC at CFMR.

Construction

The Phase I archaeological survey did not identify any NRHP-eligible archaeological resources within the project site. No individual historic properties or contributing resources of the MISG Historic District would be physically destroyed or damaged by the Action Alternative, as no historic properties are located within the footprint of the 21-acre site.

MARFORRES' consultant, Cardno, conducted a viewshed analysis to assess the potential visual effects on historic properties within the viewshed of the proposed construction of the CFMR MCRC. The report presents a detailed analysis of the potential visual effect on the historic properties of the MISG Historic District and the Montrose Mansion and Chapel, as well as a residence at 13721 Hanover Pike, east of the CFMR. Although the residence is not documented in the Maryland Inventory of Historic Properties, it is within the viewshed of the Action Alternative, and therefore, was included in the viewshed analysis. The viewshed analysis concluded that the Action Alternative would have no significant impacts on either of the two historic properties, as their significant features would not change from construction of the MCRC. Similarly, the analysis concluded that there would be no significant visual impact on the residence at 13721 Hanover Pike, as views to the west of the residence would remain fairly consistent with current views so its overall setting would not significantly change.

MARFORRES consulted with MHT on March 30, 2020 in accordance with Section 106 of the NHPA; the consultation package included the viewshed analysis. MHT concurred with the findings of MARFORRES on May 7, 2020 stating that the proposed MCRC would result in no adverse effect on historic properties (U.S. Marine Corps Forces Reserve, 2020c). **Appendix E** provides MHT's concurrence. Section 106 also requires agencies to consult with federally recognized Indian tribes that attach religious and cultural significance to historic properties that may be affected by an undertaking. In accordance with the NHPA (36 CFR 800.3(f)(2)) and Executive Order 13175 (*Consultation and Coordination with Indian Tribal Governments*), MARFORRES consulted with federally recognized Native American tribes regarding the environmental impact analysis and MHT's determination of effects under Section 106. The Oneida Indian Nation provide a response indicating the project will not affect historic properties related to Oneida Indian Nation ancestors; no other Native American Tribes commented during the 45-day review period that ended May 21, 2021. See **Appendix E** for this correspondence.

Operation

MARFORRES has considered the potential visual and auditory effects from an increase in privately owned and tactical vehicle traffic when the new MCRC is open and operating. A small increase in noise levels within the MISG Historic District would be expected as a result of the operation of POVs and tactical vehicles. Increased noise levels would be associated with Marine personnel arrivals and departures and therefore, typically would be greatest in the morning and mid-afternoon, although these periods would be of relatively short duration. Additional occurrences of noise would occur during monthly drill weekends, when tactical vehicles would be driven from CFMR MCRC to another training venue for off road training purposes. An increase in traffic and its associated noise would not be expected to substantially change the setting of the MISG Historic District, which currently includes intermittent traffic noise associated with operations at the CFMR MCRC by the MDARNG and MEMA, whose headquarters are located south of the MARFORRES MCRC site, as well as day-long traffic noise along Hanover Pike (MD-30), a major north-south arterial road in this area. The site of the proposed MCRC is located in the eastern portion of the MISG Historic District, in an area containing only noncontributing resources; all the contributing resources of the historic district are located farther to

the west. No POVs or tactical vehicles associated with Marine operations would travel past the MCRC to other parts of the MISG Historic District. Therefore, no character-defining features important to conveying the historical and architectural significance of the MISG Historic District would change as a result of a small increase in traffic associated with the Proposed Action. Consequently, operation of CFMR MCRC would have no significant impacts on the MISG Historic District, as an intermittent increase in vehicular traffic and noise levels from traffic would not diminish its integrity of setting or feeling.

There would be no impacts to the Montrose Mansion and Chapel from operations of the CFMR MCRC. The mansion and chapel are located west of the MCRC site by 0.6 mile and 775 feet, respectively. Multiple sets of trees obscure lines-of-sight between historic properties and the location of the proposed MCRC. As indicated above, no POVs or tactical vehicles associated with Marine operations would travel past the MCRC to other parts of CFMR. Therefore, there would be no change to the integrity of setting or feeling of the Montrose Mansion and Chapel.

Based on this analysis, MARFORRES determined that the Action Alternative would result in no adverse effect on historic properties in accordance with Section 106 of the NHPA. MARFORRES consulted with MHT on the findings in accordance with Section 106 of the NHPA; MHT concurred with the findings of MARFORRES on May 7, 2020 stating that the proposed MCRC would result in no adverse effect on historic properties (U.S. Marine Corps Forces Reserve, 2020c). See **Appendix E** for this correspondence.

Therefore, implementation of the Action Alternative would have no significant impacts to cultural resources.

3.5 Biological Resources

Biological resources include living, native, or naturalized plant and animal species and the habitats within which they occur. Plant associations are referred to generally as vegetation, and animal species are referred to generally as wildlife. Habitat can be defined as the resources and conditions present in an area that support a plant or animal. Within this EA, biological resources are divided into two major categories: (1) terrestrial vegetation, and (2) terrestrial wildlife. Threatened, endangered, and other special-status species are discussed in their respective categories.

3.5.1 Regulatory Settings

Special-status species, for the purposes of this assessment, are those species listed as threatened or endangered under the Endangered Species Act and species afforded federal protection under the Migratory Bird Treaty Act. The purpose of the Endangered Species Act is to conserve the ecosystems upon which threatened and endangered species depend and to conserve and recover listed species. Section 7 of the Endangered Species Act requires action proponents to consult with the U.S. Fish and Wildlife Service (USFWS) to ensure that their actions are not likely to jeopardize the continued existence of federally listed threatened and endangered species, or result in the destruction or adverse modification of designated critical habitat. Critical habitat cannot be designated on any areas owned, controlled, or designated for use by the Department of Defense (DoD) where an Integrated Natural Resources Management Plan has been developed that, as determined by the Department of Interior or Department of Commerce Secretary, provides a benefit to the species subject to critical habitat designation.

Birds, both migratory and most native-resident bird species, are protected under the Migratory Bird Treaty Act, and their conservation by federal agencies is mandated by EO 13186 (Migratory Bird

Conservation). Bald and golden eagles are protected by the Bald and Golden Eagle Protection Act. This act prohibits anyone, without a permit issued by the Secretary of the Interior, from taking bald eagles, including their parts, nests, or eggs. The Act defines "take" as "pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest, or disturb."

3.5.2 Affected Environment

The following discussions provide a description of the existing conditions for each of the categories under biological resources at CFMR. The installation has not prepared an Integrated Natural Resources Management Plan. As such, information and data for this section have been obtained from Maryland DNR.

3.5.2.1 Terrestrial Vegetation and Terrestrial Wildlife

Vegetation at CFMR consists primarily of leased agricultural fields and the Maryland National Guard Honor Grove, a planted pine grove consisting of white pine established in 1992 (Maryland National Guard, 1992). Wildlife includes raccoons, rabbits, fox, squirrels, and opossums. Amphibians and reptile species would also be present. Wildlife would be indicative of those species that are habituated to disturbed habitats and tolerant of continued human presence.

3.5.2.2 Threatened and Endangered Species

MARFORRES consulted with USFWS regarding potential effects of the Proposed Action on federally listed threatened and endangered species via the Service's Information, Planning, and Consultation (IPaC) system on June 9, 2020 (USFWS, 2020). The USFWS IPaC report indicated the Northern Long-eared bat (*Myotis septentrionalis*), a federally listed threatened species, may be present at CFMR.

Maryland DNR maintains a list of rare, threatened, and endangered species within the state. For Baltimore County there are 39 animal and 266 plant species listed. This list also includes species thought to be extirpated from Maryland (Maryland DNR, 2019).

3.5.3 Environmental Consequences

This analysis focuses on wildlife or vegetation types that are important to the function of the ecosystem or are protected under federal or state law or statute. Potential impacts could result from site preparation and construction activities that would include clearing (tree removal), excavation (cut), and preparation for construction (fill, grade, and drainage).

3.5.3.1 No Action Alternative

Under the No Action Alternative, the Proposed Action would not occur and there would be no change to biological resources. Therefore, no significant impacts to biological resources would occur with implementation of the No Action Alternative.

3.5.3.2 Action Alternative

The study area for the analysis of effects to biological resources associated with the Action Alternative includes the location of the proposed CFMR MCRC.

Construction

<u>Terrestrial Vegetation and Terrestrial Wildlife</u>

Under the Proposed Action, approximately 6 acres of the existing 9-acre Honor Grove would be cleared for construction of the MCRC; however, if the site layout were to change, the removal of the entire Honor Grove may be required. Disturbance to wildlife would occur from construction activities but the disturbance would be temporary and not significant. Habitat would be lost with the removal of the Honor Grove, however, the habitat being lost to wildlife would be considered low quality, since it is active farmland and a monoculture of planted white pines. With the areas of natural forest nearby, this would not create a situation that would affect any species at a population level. In addition, a Forest Conservation Plan would be developed (see **Section 2.1.1.1**) that would identify areas where reforestation could be implemented to offset the removal of the Honor Grove. Given these factors, no significant impacts to vegetation would be anticipated.

Threatened and Endangered Species

The only federally listed species with the potential to occur in the study area is the threatened Northern Long-eared bat (USFWS, 2020). The USFWS indicated that since critical habitat for the species is not present and less than 15 acres of trees would be cleared, the project would not be expected to impact to the Northern long-eared bat. An online certification letter with the IPaC report was submitted to the USFWS Chesapeake Field Office on November 23, 2020 thereby completing the Section 7 consultation. **Appendix F** provides the USFWS consultation package. MARFORRES consulted with Maryland DNR regarding potential effects of the Proposed Action on state protected species via the state's Environmental Review Process on June 22, 2020. In an email response received July 23, 2020, Maryland DNR determined there were no official state or federal records for listed plant or animal species within the project area and they had no specific concerns regarding potential impacts or recommendations for protection measures at this time. **Appendix F** provides the Maryland DNR response. Given that no federal or state listed species have been identified within the project area, no impact to threatened or endangered species would be anticipated.

Operation

POV and tactical vehicles would remain on existing roads; the vehicles would not be driven off road within CFMR. In addition, no field training exercises would take place at CFMR (refer to **Section 2.1.2**, Operation of the MCRC). As such, potential impacts to terrestrial vegetation and wildlife would not be anticipated.

In summary, implementation of the Action Alternative would not result in significant impacts to biological resources. As no federal or state listed species have been identified within the project area, no impact to threatened or endangered species would be anticipated.

3.6 Infrastructure and Utilities

This section discusses infrastructure such as utilities (including drinking water production, storage, and distribution; wastewater collection treatment and disposal; storm water management; solid waste management; energy production, transmission, and distribution; and communications.

3.6.1 Regulatory Setting

UFC 4-010-01, *DoD Minimum Antiterrorism Standards for Buildings*, issued in December 2018, established minimum engineering standards for DoD projects that incorporate antiterrorism based mitigating measures not associated with an identified threat or level of protection. Antiterrorism Force Protection features would be incorporated in accordance with UFC 4-010-01.

3.6.2 Affected Environment

There are currently no utilities or infrastructure at the site proposed for construction of the MCRC. The following discussions provide descriptions of the existing conditions for each of the categories under infrastructure at CFMR.

Potable Water

Potable water to CFMR is supplied by onsite wells and a water distribution system. A three-inch water service line is located on the south side of Rue Saint Lo Drive. The revised State Water Appropriation and Use Permit [Permit No. BA1988G043 (05)] for CFMR was updated in 2016 to allow the drilling of a new well. CFMR is permitted to withdraw up to 10,000 gallons per day on a yearly basis with a daily average of 25,000 gallons per day for the month of maximum use. The water may be withdrawn from two wells in the Piney Run Formation (Maryland Department of the Environment, 2016).

Wastewater

Wastewater at CFMR is treated at a wastewater treatment plant that was recently upgraded to membrane bio-reactor process to comply with anticipated future trends of more stringent nutrient discharge limits. The wastewater treatment plant is capable of handling an average daily flow of 5,250 gallons per day with the ability to handle a peak daily flow of 10,500 gallons per day. Treated wastewater is discharged via absorption trenches into groundwater (email communication, Kurdoglu, 2019). For the month of January 2020, the average flow was 2,445 gallons per day (email communication, Bennett, 2020).

Stormwater

Stormwater at CFMR is conveyed via drains within developed areas of CFMR; stormwater at the project site is conveyed via ditches on Rue Saint Lo Drive that convey water to the southeast.

Solid Waste Management

Republic Services provides non-hazardous solid waste collection, transfer, disposal, and recycling services at CFMR. MARFORRES would obtain an inter-service support agreement for the same removal services.

Energy

Electrical and natural gas service to CFMR is provided by Baltimore Gas and Electric. Baltimore Gas and Electric has an electrical service area of 2,300 square miles and serves over 1.25 million customers. The natural gas service area for the company is 800 square miles with over 650,000 customers (Baltimore Gas and Electric, 2020). An electrical manhole is located on the north side of Rue Saint Lo Drive near the MEMA parking lot entrance. A natural gas line is located on the south side of Rue Saint Lo Drive directly in front of the project site.

Communications

Telecommunications service is available at CFMR; service is provided by Verizon. A fiber optics communications service manhole is located on the north side of Rue Saint Lo Drive approximately 825 feet from the project site.

3.6.3 Environmental Consequences

This section analyzes the magnitude of anticipated increases or decreases in public works infrastructure demands on the various systems and evaluates potential impacts to public works infrastructure associated with implementation of the alternatives. Impacts are evaluated by whether they would result in the use of a substantial proportion of the remaining system capacity, reach or exceed the current capacity of the system, or require development of facilities and sources beyond those existing or currently planned.

3.6.3.1 No Action Alternative

Under the No Action Alternative, the Proposed Action would not occur and there would be no change to the existing infrastructure of CFMR. Therefore, no significant impacts to infrastructure and utilities would occur with implementation of the No Action Alternative.

3.6.3.2 Action Alternative

The study area for impacts to infrastructure and utilities is CFMR and the surrounding area.

Construction

Potable Water, Wastewater, and Stormwater – Potable groundwater would either be provided via a new well with two connections to the existing water distribution system. A branch from the water service line would be connected to a pump that would supply water for up to six fire hydrants. A smaller service line would supply water to the vehicle maintenance facility and closed-loop vehicle wash rack. A pump may be required to augment the available pressure. Minor short-term disruptions in service would be anticipated during potable water and wastewater treatment service connections. A SWPPP would be prepared in accordance with the NPDES permit process. This plan would specify BMPs for controlling stormwater runoff and minimizing potential pollution during construction activities.

Solid Waste Management, Energy, Communications – Construction activities would not be anticipated to adversely impact the collection or management of solid waste at CFMR. Solid waste, recyclable materials, and construction debris would be collected, contained, and transported offsite. Temporary disruption of energy and communication services would be anticipated during the utility's connections to the site; however, the disruptions would be short-term in duration.

Operation

Potable Water, Wastewater, and Stormwater – Projected potable water usage at the MCRC is based on normal operations and drill weekends (refer to **Section 2.1.2.1**).

- Normal operations: considering an average daily indoor water usage of approximately 13.5 gallons per person in an office environment, water consumption during a normal workday at the MCRC (assume 34 people) would be approximately 459 gallons (9,180 gallons per month; 119,340 gallons per year).
- Drill weekends: water usage during a drill weekend would increase with use of showers, etc. Considering an average water usage of approximately 28.6 gallons per person per day, water consumption during a 16-hour (2 day) drill weekend (assume 320 people) would be approximately 18,304 gallons per drill weekend (approximately 9,152 gallons each day). With an average of 12 drill weekends per year, this would be approximately 219,648 gallons per year.

Combined, water consumption at the MCRC would total approximately 338,988 gallons per year. Average daily usage would be less than 10 percent of the annual permitted withdrawal limits and water usage during drill weekends would not exceed use levels stipulated under the revised State Water Appropriation and Use Permit [Permit No. BA1988G043 (05)].

To reduce water consumption at the MCRC, LID and Leadership in Energy and Environmental Design approved design methods such as low flow toilets and fixtures and stormwater reclamation would be used where feasible. In addition to approved design methods, MARFORRES would follow the requirement of Marine Corps Order 5090.2, Volume 16, *Drinking Water Systems and Water Conservation*. A closed-loop vehicle wash rack would further reduce water consumption at the site. LID guidelines, as described in **Section 2.1.1.2**, would be observed. In addition, BMPs for controlling stormwater runoff would be incorporated into the MCRC facility design.

Wastewater would be processed through a four-stage membrane bio-reactor system which is designed to treat the permitted annual average flow capacity of 5,250 gallons per day (or 10,500 gallons in a 24-hour period). The demand for wastewater processing would not exceed the system's capacity. A SWPPP would be prepared in accordance with the NPDES permit process. This plan would specify the BMPs for controlling stormwater runoff and minimizing potential pollution during operation of the MCRC.

Solid Waste Management, Energy, and Communications – A minor increase in demand on the solid waste management system at CFMR would be expected. This increase in demand would not be expected to exceed the capacity of local area landfills. There would be a minor increase in energy demand (i.e., electrical and natural gas); this increase in demand would not be expected to exceed the capacity of the area's Baltimore Gas and Electric's electrical or natural gas systems. A new duct bank would run from the MCRC to the communications manhole located on the north side of Rue Saint Lo Drive; new fiber and copper cables would be required. Connection to the existing service line would not meet or exceed the capacity of Verizon's telecommunication system.

Implementation of the Action Alternative would result in a minor increase in demand for public works infrastructure; however, the demand would not be expected to exceed capacity or require development of facilities and sources beyond those existing or currently planned. As such, no significant impact to infrastructure and utilities would be anticipated.

3.7 Transportation

Transportation in this EA focuses on the local area roadways. Roadway operating conditions and the capability of existing roadway systems to accommodate vehicle use are often described in terms of average annual daily traffic volumes.

3.7.1 Regulatory Setting

The Maryland Department of Transportation State Highway Administration is authorized by Maryland law to control access and maintain responsibility for safety along State-owned roadways and facilities (MD Transportation Code section 2-403).

3.7.2 Affected Environment

CFMR is located a driving distance of approximately 2.3 miles from Reisterstown, MD. As shown in **Figure 3.7-1**, several state routes surround CFMR with access onto CFMR via MD-30.

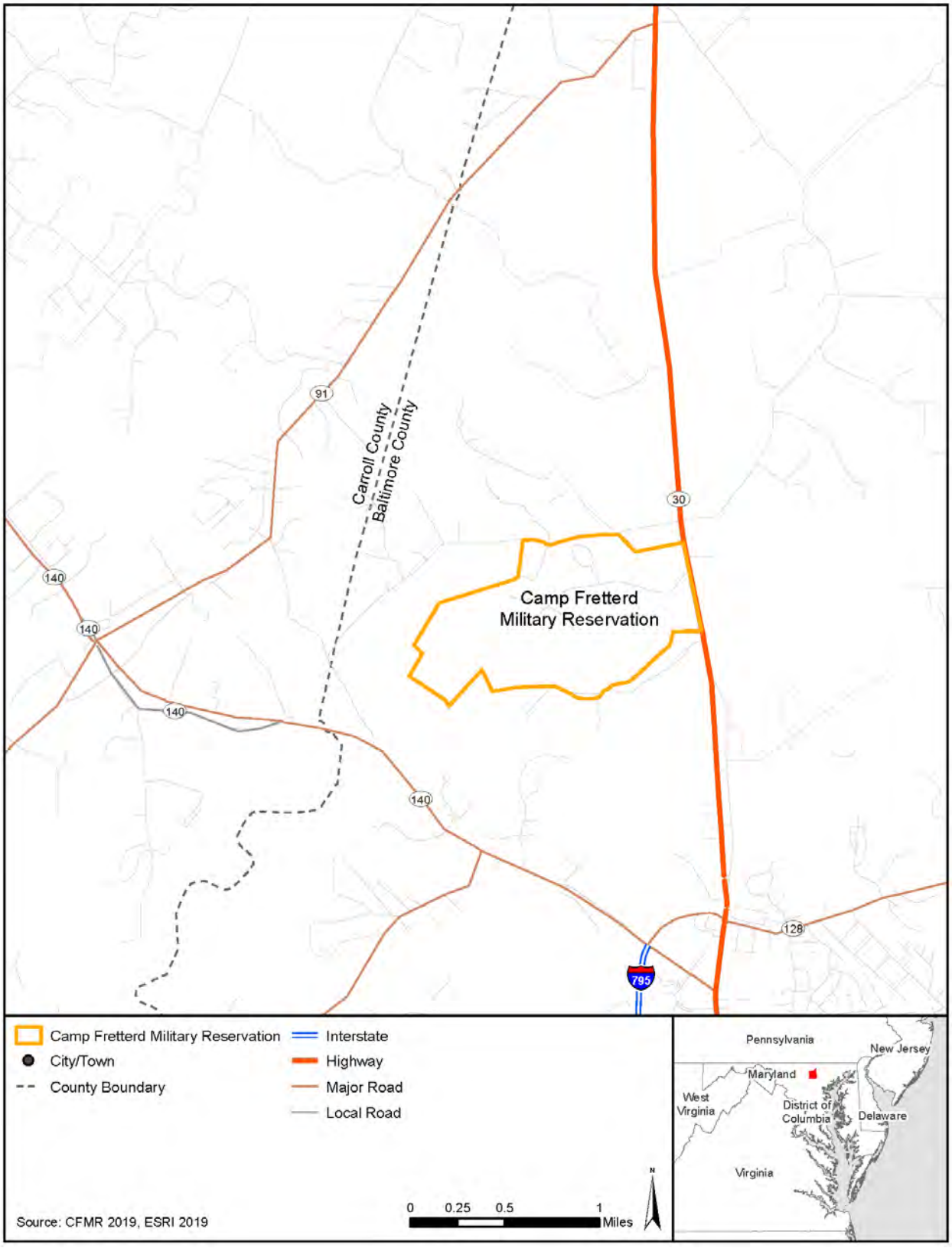

Figure 3.7-1. State Routes Surrounding Camp Fretterd Military Reservation

Table 3.7-1 provides the average annual daily traffic volumes (2019) for each of the state routes surrounding CFMR.

In 2019, the average annual daily traffic volume along State Route 30 (MD-30) between the intersections with State Route 91 and State Route 140 was 43,610 vehicles (Maryland Department of Transportation, 2019).

Table 3.7-1. Average Annual Daily Traffic Volumes

Roadway Segment	*Traffic Volume*
State Route 30 (MD-30)	43,610
State Route 91	5,822
State Route 140	136,886
Interstate 795 (exit ramp)	24,131

Source: Maryland Department of Transportation, 2019.

Access to CFMR is restricted to the Main Gate entry control point located less than 0.1 miles off of MD-30. Rue Saint Lo Drive bisects CFMR beginning at the main entry access point at the intersection with MD-30. The transportation system at CFMR was analyzed during preparation of the Area Development Plan in 2017. This analysis found that current roads on the installation are not wide enough to accommodate two-way vehicular traffic. Most of CFMR also lacks pedestrian pathways. There is no public transit access to CFMR. The Area Development Plan also suggested adding a second entry control point for the installation (MDARNG, 2017).

3.7.3 Environmental Consequences

Impacts to ground traffic and transportation are analyzed by considering the possible changes to existing traffic conditions and the capacity of area roadways from proposed increases in commuter and construction traffic.

3.7.3.1 No Action Alternative

Under the No Action Alternative, the Proposed Action would not occur and there would be no change to transportation. Therefore, no significant impacts would occur with implementation of the No Action Alternative.

3.7.3.2 Action Alternative

The study area for transportation includes the major roads leading to CFMR and to the proposed MCRC on Rue Saint Lo Drive.

Construction

During the construction period, temporary impacts to local area traffic (primarily State Route 30 and Rue Saint Lo Drive) from construction-related vehicles would be anticipated. Construction-related vehicles could include heavy equipment transport vehicles, concrete trucks, dump/haul trucks, and others, as necessary. Traffic flow along State Route 30 may incur temporary impediments due to the ingress and egress of construction vehicles at CFMR. In addition, there may be minor, short-term impacts to the traffic flow along Rue Saint Lo Drive from the daily access of construction vehicles. Possible solutions to alleviate safety concerns during the construction period may include signage to alert drivers of potentially slow or stopped traffic and use of traffic flaggers.

The volume of construction-related traffic would ebb and flow during the approximate 20-month construction period resulting in negligible to minor short-term impacts. Construction-related vehicular traffic would be greater at the onset of activities with less nearing construction completion.

Operation

During the operational period, traffic on the local roads would be anticipated to increase slightly as there would be 34 on site personnel traveling to and from CFMR during the work week. The anticipated increase would be observed during normal peak periods (i.e., 7:30 a.m. and 4:30 p.m.).

Traffic volume on the local roads would surge during drill weekends (Saturday and Sunday) from 7:30 a.m. to 4:30 p.m. when up to 320 Marines would be anticipated. The majority of Marine reservists would drive alone to the MCRC; however, approximately 20 percent would be expected to carpool. As such, approximately 256 additional vehicles would be anticipated on the local roads during drill weekends. While traffic on State Route 30 (MD-30) would increase daily and would surge on drill weekends, the increase would be less than 1 percent of the annual average daily volume of traffic.

Within CFMR, a right turn lane would be added to Rue Saint Lo Drive to provide entry/exit to the MCRC via two separate driveways. The right turn lane would permit daily traffic on Rue Saint Lo Drive to flow unimpeded and reduce traffic impediments during drill weekends.

In summary, implementation of the Action Alternative would not result in significant impacts to transportation.

3.8 Summary of Potential Impacts to Resources and Impact Avoidance and Minimization

A summary of the potential impacts associated with each of the action alternatives and the No Action Alternative and impact avoidance, and minimization measures are presented in **Table 3.8-1**.

Table 3.8-1. Summary of Potential Impacts to Resource Areas

Resource Area	*No Action Alternative*	*Action Alternative*
Air Quality	The Proposed Action would not occur; there would be no change to baseline air quality.	Potential for short-term impacts to air quality during construction activities; criteria pollutant emissions would be less than significant. Long-term commuting vehicle emissions would be minimal and transient resulting in no significant impact to air quality.
Water Resources	The Proposed Action would not occur; there would be no change to baseline water resources.	Groundwater to the project site would be withdrawn via Permit Number BA1988G043-Expiration 10-31-2028 issued to the Maryland State Military Department by the Maryland Department of Environment, Water Management Administration. The groundwater withdrawal would represent a long-term impact; however, adherence to permit conditions would result in no significant impact. A small palustrine emergent wetland area of 18,584 square feet (0.43 acres) located in the northeast corner of the 21-acre site was confirmed by the U.S. Army Corps of Engineers (USACE) Baltimore District; a preliminary jurisdictional wetland determination was rendered on May 21, 2020. The wetland area would not be disturbed as the project design includes a greater than 100-foot buffer around the wetland. Potential for minor, short-term impacts to surface waters during construction; stormwater protection measures would be installed, and no long-term impacts anticipated. The project site is not located on or adjacent to 100-year or 500-year floodplains; as such, no impact to floodplains would occur. A CCD was prepared and submitted to Maryland Department of the Environment, Wetland and Waterways Program on August 26, 2020. MARFORRES determined the Proposed Action would be conducted in a manner fully consistent or consistent to the maximum extent practicable with the federally approved enforceable policies of the Maryland Coastal Zone Management Plan; Maryland concurred with the determination on November 2, 2020. The Proposed Action would not result in significant impacts to water resources.
Geological Resources	The Proposed Action would not occur; there would be no change to baseline geological resources.	To accommodate the approximate 40-foot change in elevation from the high point to the low point and an approximately six percent slope, grading would be required with retaining walls incorporated to help transition grades. Potential for short-term impact to soils during the construction process; no long-term impacts anticipated with installation of stormwater protection measures and BMPs. No significant impact to geological resources would occur.
Cultural Resources	The Proposed Action would not occur; there would be no change to cultural resources.	No historic properties are located within the 21-acre site and no NRHP-eligible archaeological resources have been identified. Two historic properties and a private residence located within the viewshed of the proposed MCRC would not be significantly affected. MARFORRES consulted with MHT on March 30, 2020 in accordance with Section 106 of the NHPA; the consultation package included a viewshed analysis. MHT concurred with the findings of MARFORRES on May 7, 2020 stating that the proposed MCRC would result in no adverse effect on historic properties. As such, there would be no significant impact to cultural resources.

Table 3.8-1. Summary of Potential Impacts to Resource Areas

Resource Area	*No Action Alternative*	*Action Alternative*
Biological Resources	The Proposed Action would not occur; there would be no change to biological resources.	Potential for minor short-term impacts to biological resources during the construction phase; no significant short- or long-term impacts anticipated during the operational phase. MARFORRES consulted with the USFWS regarding potential effects of the Proposed Action on federally listed threatened and endangered species via the Service's IPaC system on June 9, 2020. The USFWS indicated that since critical habitat for the species is not present and less than 15 acres of trees would be cleared, the project would not be expected to impact to the Northern long-eared bat. An online certification letter with the IPaC report was submitted to the USFWS Chesapeake Field Office on November 23, 2020 thereby completing the Section 7 consultation. MARFORRES also consulted with the Maryland DNR regarding potential effects of the Proposed Action on state protected species via the state's Environmental Review Process on June 22, 2020. In an email response received July 23, 2020, Maryland DNR determined there were no official state or federal records for listed plant or animal species within the project area and they had no specific concerns regarding potential impacts or recommendations for protection measures at this time.
Infrastructure and Utilities	The Proposed Action would not occur; there would be no change to existing infrastructure and utilities at CFMR.	Potential for minor, short-term disruption of utilities service connections during the construction phase. During the operational phase, water consumption at the MCRC would total approximately 338,988 gallons per year; the average daily usage would be less than 10 percent of the annual permitted withdrawal limits and water usage during drill weekends would not exceed use levels stipulated under the revised State Water Appropriation and Use Permit [Permit No. BA1988G043 (05)]. Wastewater treatment systems and solid waste management, energy (electrical and natural gas) and communications systems would not exceed capacity. No significant short- or long-term impacts would be anticipated during the operational phase.
Transportation	The Proposed Action would not occur; there would be no change to transportation beyond baseline conditions.	Potential impacts to traffic during construction would be short-term in duration and would not be significant. Weekday traffic on the local area roads would increase slightly on a daily basis and would surge on drill weekends (representing less than 1 percent of the annual average daily volume of traffic); the long-term impact would not be significant.

4 Cumulative Impacts

This section (1) defines cumulative impacts, (2) describes past, present, and reasonably foreseeable future actions relevant to cumulative impacts, (3) analyzes the incremental interaction the proposed action may have with other actions, and (4) evaluates cumulative impacts potentially resulting from these interactions.

4.1 Definition of Cumulative Impacts

The approach taken in the analysis of cumulative impacts follows the objectives of the National Environmental Policy Act (NEPA), Council on Environmental Quality (CEQ) regulations, and CEQ guidance. Cumulative impacts are defined in 40 Code of Federal Regulations [CFR] section 1508.7 as "the impact on the environment that results from the incremental impact of the action when added to the 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."

To determine the scope of environmental impact analyses, agencies shall consider cumulative actions, which when viewed with other proposed actions have cumulatively significant impacts and should therefore be discussed in the same impact analysis document.

In addition, CEQ and U.S. Environmental Protection Agency (USEPA) have published guidance addressing implementation of cumulative impact analyses—*Guidance on the Consideration of Past Actions in Cumulative Effects Analysis* (CEQ, 2005) and *Consideration of Cumulative Impacts in EPA Review of NEPA Documents* (USEPA, 1999). CEQ guidance entitled *Considering Cumulative Impacts Under NEPA* (1997) states that cumulative impact analyses should:

> "…determine the magnitude and significance of the environmental consequences of the proposed action in the context of the cumulative impacts of other past, present, and future actions...identify significant cumulative impacts…[and]…focus on truly meaningful impacts."

Cumulative impacts are most likely to arise when a relationship or synergism exists between a proposed action and other actions expected to occur in a similar location or during a similar time period. Actions overlapping with or in close proximity to the proposed action would be expected to have more potential for a relationship than those more geographically separated. Similarly, relatively concurrent actions would tend to offer a higher potential for cumulative impacts. To identify cumulative impacts, the analysis needs to address the following three fundamental questions.

- Does a relationship exist such that affected resource areas of the proposed action might interact with the affected resource areas of past, present, or reasonably foreseeable actions?
- If one or more of the affected resource areas of the proposed action and another action could be expected to interact, would the proposed action affect or be affected by impacts of the other action?
- If such a relationship exists, then does an assessment reveal any potentially significant impacts not identified when the proposed action is considered alone?

4.2 Scope of Cumulative Impacts Analysis

The scope of the cumulative impacts analysis involves both the geographic extent of the effects and the time frame in which the effects could be expected to occur. For this Environmental Assessment (EA), the study area delimits the geographic extent of the cumulative impact analysis. In general, the study area will include those areas previously identified in Chapter 3 for the respective resource areas. The time frame for cumulative impacts centers on the timing of the proposed action.

Another factor influencing the scope of cumulative impacts analysis involves identifying other actions to consider. Beyond determining that the geographic scope and time frame for the actions interrelate to the proposed action, the analysis employs the measure of "reasonably foreseeable" to include or exclude other actions. For the purposes of this analysis, public documents prepared by federal, state, and local government agencies form the primary sources of information regarding reasonably foreseeable actions. Documents used to identify other actions include notices of intent for Environmental Impact Statements and EAs, management plans, land use plans, and other planning related studies.

4.3 Past, Present, and Reasonably Foreseeable Actions

This section will focus on past, present, and reasonably foreseeable future projects at and near the Proposed Action locale. In determining which projects to include in the cumulative impact analysis, a preliminary determination was made regarding the past, present, or reasonably foreseeable action. Specifically, using the first fundamental question included in **Section 4.1**, it was determined if a relationship exists such that the affected resource areas of the Proposed Action (included in this EA) might interact with the affected resource area of a past, present, or reasonably foreseeable action. If no such potential relationship exists, the project was not carried forward into the cumulative impact analysis. In accordance with CEQ guidance (CEQ, 2005), these actions considered but excluded from further cumulative effects analysis are not catalogued here as the intent is to focus the analysis on the meaningful actions relevant to informed decision-making.

4.3.1 Past Actions

Numerous facilities have been constructed at Camp Fretterd Military Reservation (CFMR) since the Maryland Army National Guard (MDARNG) acquired the site in 1988. These include a gate house, the Maryland Emergency Management Agency (MEMA) headquarters and armory, automotive repair shop, and rappelling tower, Weinberg Center, Decision Center, tractor shed, and several storage buildings (U.S. Army Corps of Engineers, 2007; MDARNG, 2016).

The Camp Fretterd Wastewater Improvements project increased wastewater treatment capacity. The wastewater treatment plant is capable of handling an average daily flow of 5,250 gallons per day with the ability to handle a peak daily flow of 10,500 gallons per day.

4.3.2 Present and Reasonably Foreseeable Actions

A proposed expansion of the MEMA headquarters would add approximately 18,000 square feet via a second story addition to existing building. Construction is anticipated to begin in early 2023 (MDARNG, 2017). The expansion may place an increased demand on potable water and wastewater treatment.

MDARNG is proposing to redesign the front gate; the project is in the early stages of design.

4.4 Cumulative Impact Analysis

The analytical methodology presented in Chapter 3, which was used to determine potential impacts to the various resources analyzed in this document, was also used to determine cumulative impacts. The study area considered for this cumulative impact analysis is CFMR.

The potential effects of GHG emissions generated by the Proposed Action are by nature cumulative impacts because GHGs contribute to global climate change. The GHG emissions from the Proposed Action are presented in **Table 3.1-5** and the potential effects are discussed in **Section 3.1.3.2**. The Proposed Action would generate criteria pollutant emissions that are significantly below the regulatory de minimis thresholds (refer to **Table 3.1-4**), and thus would not have the potential to meaningfully combine with other projects to result in a significant impact on ambient air quality. Therefore, a detailed cumulative analysis of air quality is not required.

Based on the analysis presented in Chapter 3, none of the resource areas, in combination with past actions and the present foreseeable actions, would experience cumulative impacts.

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5 Other Considerations Required by NEPA

5.1 Consistency with Other Federal, State, and Local Laws, Plans, Policies, and Regulations

In accordance with 40 Code of Federal Regulations (CFR) section 1502.16(c), analysis of environmental consequences shall include discussion of possible conflicts between the Proposed Action and the objectives of federal, regional, state, and local land use plans, policies, and controls. **Table 5.1-1** identifies the principal federal and state laws and regulations and Executive Orders (EO) that are applicable to the Proposed Action and describes briefly how compliance with these laws and regulations would be accomplished.

Table 5.1-1. Principal Federal and State Laws Applicable to the Proposed Action

Federal, State, Local, and Regional Land Use Plans, Policies, and Controls	Status of Compliance
National Environmental Policy Act (NEPA); Council on Environmental Quality (CEQ) NEPA implementing regulations; Navy and Marine Corps procedures for Implementing NEPA	This Environmental Assessment (EA) has been prepared in accordance with CEQ Regulations for implementing NEPA and Navy and Marine Corps NEPA procedures.
Clean Air Act	The air quality analysis concludes that the emissions under the Proposed Action would not affect the current attainment status and would comply with all applicable state and regional air agency rules and regulations. Construction emissions would not exceed the *de minimis* thresholds that apply under the General Conformity Regulations (refer to **Table 3.1-4**).
Clean Water Act	The Proposed Action analyzed in this EA would be implemented in accordance with this Act. A NPDES construction stormwater general permit would be obtained prior to any construction and a SWPPP would be prepared in accordance with the NPDES permit process. This plan would specify the BMPs for controlling stormwater runoff and minimizing potential pollution during construction activities. In addition, LID guidelines would be observed.
Coastal Zone Management Act	The Proposed Action would be conducted in a manner fully consistent or consistent to the maximum extent practicable with the federally approved enforceable policies of the Maryland Coastal Zone Management Plan. A CCD was prepared and submitted to Maryland Department of the Environment, Wetland and Waterways Program on August 26, 2020. MARFORRES determined the Proposed Action is consistent with the enforceable policies of the Maryland Coastal Zone Management Plan. Maryland concurred with the determination on November 2, 2020 (see **Appendix D**).
National Historic Preservation Act	MARFORRES consulted with the Maryland Historical Trust (MHT) on March 30, 2020 in accordance with Section 106 of the NHPA regarding potential effects of the Proposed Action on archaeological resources and

Table 5.1-1. Principal Federal and State Laws Applicable to the Proposed Action

Federal, State, Local, and Regional Land Use Plans, Policies, and Controls	Status of Compliance
	historic properties. MHT concurred with the findings of MARFORRES on May 7, 2020 stating that the proposed MCRC would result in no adverse effect on historic properties (see **Appendix E**). MARFORRES consulted with federally recognized Native American tribes regarding the environmental impact analysis and MHT's determination of effects under Section 106. The Oneida Indian Nation provide a response indicating the project will not affect historic properties related to Oneida Indian Nation ancestors; no other Native American Tribes commented during the 45-day review period that ended May 21, 2021. See **Appendix E** for the Government-to-Government consultation correspondence.
Endangered Species Act	The Proposed Action would have no effect to federally listed species. MARFORRES consulted with the U.S. Fish and Wildlife Service (USFWS) via the Service's Information, Planning, and Consultation (IPaC) system on June 9, 2020. The USFWS indicated that since critical habitat for the species is not present and less than 15 acres of trees would be cleared, the project would not be expected to impact to the Northern long-eared bat. An online certification letter with the IPaC report was submitted to the USFWS Chesapeake Field Office on November 23, 2020 thereby completing the Section 7 consultation (see **Appendix F**).
Migratory Bird Treaty Act	The Proposed Action analyzed in this EA would be implemented in accordance with this Act.
Bald and Golden Eagle Protection	The Proposed Action would have no effect to Bald and Golden Eagles and no permit is required under the Bald and Golden Eagle Protection Act.
EO 11988, Floodplain Management	There are no 100-year or 500-year floodplains located within or adjacent to the project area (refer to **Section 3.2**).
EO 11990, Wetlands Protection	The Proposed Action analyzed in this EA would be implemented in accordance with this EO. A small palustrine emergent wetland area of 18,584 square feet (0.43 acres) located in the northeast corner of the 21-acre site was confirmed by the U.S. Army Corps of Engineers (USACE) Baltimore District; a preliminary jurisdictional wetland determination was rendered on May 21, 2020 (see **Appendix C**).

5.2 Irreversible or Irretrievable Commitments of Resources

NEPA requires that environmental analyses include identification of any irreversible and irretrievable commitments of resources that would be involved if the Proposed Action is implemented. Resources that are irreversibly or irretrievably committed to a project are those that are used on a long-term or permanent basis. This includes the use of non-renewable resources such as metal and fuel, and natural or cultural resources. These resources are irretrievable in that they would be used for this project when they could have been used for other purposes. Human labor is also considered an irretrievable resource. Another impact that falls under this category is the unavoidable destruction of natural resources that could limit the range of potential uses of that particular environment.

Implementation of the Proposed Action would involve human labor, the consumption of fuel, oil, and lubricants for construction vehicles, and the use of construction materials such as wood and metal. The recycling and reuse of eligible metal materials during demolition could potentially offset the loss of some construction materials. The Proposed Action could remove all of the existing 9-acre forested Honor Grove; however, this would not result in a significant irreversible or irretrievable commitment of the resource as reforestation efforts under the Proposed Action would be implemented. The Proposed Action would not destroy any cultural resources. In summary, implementing the Proposed Action would not result in significant irreversible or irretrievable commitment of resources.

5.3 Unavoidable Adverse Impacts

NEPA requires a description of any significant impacts resulting from implementation of a proposed action, including those that can be mitigated to a less than significant level. Based on the analysis in this EA, the Proposed Action would not result in any significant or unavoidable adverse impacts to any resource area. As such, no mitigation actions are required.

5.4 Relationship between Short-Term Use of the Environment and Long-Term Productivity

NEPA requires an analysis of the relationship between a project's short-term impacts on the environment and the effects that these impacts may have on the maintenance and enhancement of the long-term productivity of the affected environment. Impacts that narrow the range of beneficial uses of the environment are of particular concern. This refers to the possibility that choosing one development site reduces future flexibility in pursuing other options, or that using a parcel of land or other resources often eliminates the possibility of other uses at that site.

The Proposed Action would dedicate equipment and other resources to a particular use during an extended period of time. These resources would not be available for other productive uses throughout the useful life of the proposed facilities and infrastructure. The Proposed Action has the potential to incrementally increase global emissions of greenhouse gases. However, the overall emissions do not exceed the comparative threshold, and as such, the Proposed Action does not represent a net incremental addition to the global greenhouse gases and global climate change problem. The Proposed Action would not be expected to result in any impacts that would significantly reduce environmental productivity or permanently narrow the range of beneficial uses of the environment.

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Appendix A
Public and Agency Participation

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NOTICE OF AVAILABILITY OF AN ENVIRONMENTAL ASSESSMENT FOR THE PROPOSED CONSTRUCTION AND OPERATION OF A MARINE CORPS RESERVE CENTER AT CAMP FRETTERD MILITARY RESERVATION REISTERSTOWN, MARYLAND

The Department of the Navy and the U.S. Marine Corps gives notice, per the National Environmental Policy Act (NEPA) of 1969, Council on Environmental Quality regulations at 40 Code of Federal Regulations parts 1500-1508, and Navy and Marine Corps regulations for implementing NEPA, that an Environmental Assessment (EA) has been prepared for the proposed construction and operation of a Marine Corps Reserve Center at the Camp Fretterd Military Reservation in Reisterstown, Maryland (MD). The proposed action is needed to ensure that Marine reservists assigned to the 4th Combat Engineer Battalion, 4th Marine Division meet current Marine Corps individual and/or unit level operational readiness training requirements.

Potential environmental impacts of this project have been evaluated for air quality; water, geological, cultural, and biological resources; infrastructure and utilities; and transportation. The proposed action would involve the partial or complete removal of the Maryland National Guard Honor Grove dedicated in 1992. The Honor Grove, an aged cluster of trees, dedicated to Maryland National Guard members serving in The Gulf War (2 August 1990 – 28 February 1991), will be rededicated. The relocated and rededicated memorial will provide for inclusion by unit name of all Maryland Army National Guard units and Maryland Air National Guard units deployed to serve in the Gulf War.

The following federal and state agencies were consulted for this project: MD Department of the Environment, Wetland and Waterways Program; MD Department of Natural Resources; MD Historical Trust; MD Department of Planning State Clearinghouse; U.S. Army Corps of Engineers, Baltimore District; and U.S. Fish and Wildlife Service.

A copy of the preliminary final EA may be obtained from the following public website: https://www.navfac.navy.mil/navfac_worldwide/atlantic/fecs/mid-atlantic/about_us/environmental_norfolk/environmental_planning_and_conservation.html

The public comment period ends April 14, 2021. For additional information, please contact Christopher Hurst in writing at Marine Corps Forces Reserve, 2000 Opelousas Avenue, New Orleans, Louisiana, 70114; or via e-mail: christopher.a.hurst@usmc.mil.

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COMMENTARY

Dear Mr. Bloomberg: Baltimore could use a billion bucks

Dan Rodricks

Dear Michael Bloomberg:

Please consider this a formal request for a billion dollars. It's not for me. It's for the people of Baltimore. Forbes lists you consistently in the top 20 of the world's richest men and women, with a net worth of about $59 billion. So I know you can afford to donate at least $1 billion to make Baltimore a better place in a lasting way. Allow me to explain.

You're an accomplished executive, former mayor of New York City, a philanthropist and major benefactor of your alma mater, the Johns Hopkins University. You joined Bill and Melinda Gates and Warren Buffett in signing the Giving Pledge, a promise to designate the majority of your wealth to good causes.

Having donated a few billion to Hopkins already, you probably figure you've done enough for Baltimore. But while donating to a university certainly has benefits for the community, what I propose could be transformative for the whole city.

So, when pondering your next contribution, please ponder $1 billion toward increasing homeownership and small businesses in neglected parts of Baltimore on a scale that could move the city from one struggling with population loss and disinvestment to one that would grow in a sustainable and equitable way.

Your money could convert thousands of vacant rowhouses to homes, improve houses whose owners can't afford repairs, seed small businesses, create jobs, stabilize neighborhoods and inspire more private investment.

My ideas for pulling this off are based on years of observations — seeing what works and doesn't work — and are shared by people who have devoted their careers to increasing homeownership, luring capital to the city and supporting small business. Here are my suggestions:

1. Designate $1 billion over 10 years for Baltimore Community Lending. That's an unheralded but effective, federally certified Community Development Financial Institution in the renovated Lion Brothers building in Southwest Baltimore. It's a nonprofit that has been around for three decades, doing what banks refuse to do. BCL has financed housing in underserved areas of the city, helping low- and moderate-income families become homeowners. More recently, it established a subsidiary to make loans to small businesses. BCL has a strong board and experienced staff that, with additional help, could handle the additional $100 million in annual loan capital it would get from you. Watchen Harris Bruce, BCL's CEO, says she has a five-year strategic plan and would be happy to share it.

2. A major portion of your money would go to buying some of Baltimore's 15,593 vacant houses, from the city or private owners, and rehabilitating them into homes for sale at affordable prices. (We could call them Bloomberg Homes, if you like.) Habitat For Humanity of the Chesapeake has been doing this since the 1980s, helping hundreds of renters become homeowners. Neighborhood Housing Services of Baltimore works with people, most of them low-income, to help them buy, renovate or maintain their homes. Healthy Neighborhoods is another important player on the homeownership front, and the National Community Stabilization Trust has been working with a developer in low- and moderate-income neighborhoods to renovate abandoned houses. So this could be a collaboration. Through BCL, Bloomberg money could be used for renovations, subsidized down payments, zero-interest mortgages and homeowner education programs. Your money, as direct assistance to the homebuyer, would be huge; it would help expand and accelerate the work these organizations are doing. Baltimore is a city of renters; 52% of the housing is tenant-occupied, according to the U.S. census. More homeownership means more stable neighborhoods and families. Mike Posko, CEO of Habitat, says 150 of the organization's clients have paid off their 20- and 30-year mortgages by now and most remain in their homes. Because their loans were affordable, they had money for other things — better food, a car, a college education for their kids.

3. Some of your money would be used for direct grants for improvements to homes owned by people who can't afford the repairs themselves. This is particularly true of older adults. Rebuilding Together Baltimore has been doing this work for years, carrying out home improvement projects for low-income families and seniors; that organization would make another good partner.

4. Many neighborhoods still lack amenities such as supermarkets and other retail, restaurants and businesses that produce jobs. This is where Bloomberg philanthropy would have another important effect. If your money goes into redevelopment in the most distressed of the city's 42 Opportunity Zones, it would create a buzz and attract capital from the private sector. Even with the tax breaks offered in the federal OZ policy, wealthy investors and investment funds remain stubborn; they are mainly interested in areas where redevelopment is already underway. Bloomberg Homes in OZs would almost certainly attract other capital to neglected but resurgent neighborhoods.

5. Some of the Bloomberg billion would go to small businesses and developers as zero-interest loans. The BCL subsidiary, Baltimore Business Lending, has helped finance, among other businesses, a bookstore, a health drink bottler, a staffing service, a clothing store and home renovators. Last year, 85% of its clients were minorities and 45% were women-owned businesses.

Mr. Bloomberg — or Mr. Mike, as you'd be called in Baltimore — the socioeconomic impact of a billion bucks on the city would be immense. It would give the people and organizations long engaged on these fronts the means to bring their good works to transformative scale. I hope you'll consider it.

CORRECTION

■ A caption in Friday's edition misidentified a plate in a photo. The picture was taken before Passover and featured a platter and challah bread.

■ An article on Tuesday about legislation to return control of the Baltimore Police Department to the city incorrectly reported that Baltimore City Lodge #3 Fraternal Order of Police was the city's largest police union and that multiple unions were concerned about labor protections under the bill. The FOP alone represents the department's officers and is the sole union with such concerns.

The Baltimore Sun regrets the errors.

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NOTICE OF AVAILABILITY OF AN ENVIRONMENTAL ASSESSMENT FOR THE PROPOSED CONSTRUCTION AND OPERATION OF A MARINE CORPS RESERVE CENTER AT CAMP FRETTERD MILITARY RESERVATION REISTERSTOWN, MARYLAND

The Department of the Navy and the U.S. Marine Corps gives notice, per the National Environmental Policy Act (NEPA) of 1969, Council on Environmental Quality regulations at 40 Code of Federal Regulations parts 1500-1508, and Navy and Marine Corps regulations for implementing NEPA, that an Environmental Assessment (EA) has been prepared for the proposed construction and operation of a Marine Corps Reserve Center at the Camp Fretterd Military Reservation in Reisterstown, Maryland (MD). The proposed action is needed to ensure that Marine reservists assigned to the 4th Combat Engineer Battalion, 4th Marine Division meet current Marine Corps individual and/or unit level operational readiness training requirements.

Potential environmental impacts of this project have been evaluated for air quality; water, geological, cultural, and biological resources; infrastructure and utilities; and transportation. The proposed action would involve the partial or complete removal of the Maryland National Guard Honor Grove dedicated in 1992. The Honor Grove, an aged cluster of trees, dedicated to Maryland National Guard members serving in The Gulf War (2 August 1990 – 28 February 1991), will be rededicated. The relocated and rededicated memorial will provide for inclusion by unit name of all Maryland Army National Guard units and Maryland Air National Guard units deployed to serve in the Gulf War.

The following federal and state agencies were consulted for this project: MD Department of the Environment, Wetland and Waterways Program; MD Department of Natural Resources; MD Historical Trust; MD Department of Planning State Clearinghouse; U.S. Army Corps of Engineers, Baltimore District; and U.S. Fish and Wildlife Service.

A copy of the preliminary final EA may be obtained from the following public website: https://www.navfac.navy.mil/navfac_worldwide/atlantic/fecs/mid-atlantic/about_us/environmental_norfolk/environmental_planning_and_conservation.html

The public comment period ends April 14, 2021. For additional information, please contact Christopher Hurst in writing at Marine Corps Forces Reserve, 2000 Opelousas Avenue, New Orleans, Louisiana, 70114; or via e-mail: christopher.a.hurst@usmc.mil.

THE BALTIMORE SUN MEDIA GROUP
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Notary Public

My commission expires 10/5/23

Maryland
DEPARTMENT OF PLANNING

March 31, 2021

Ms. Charee Hoffman, Senior Project Manager
Cardno
501 Butler Farm Road, Suite H
Hampton, VA 23666

STATE CLEARINGHOUSE REVIEW PROCESS

State Application Identifier: **MD20210331-0234**
Reviewer Comments Due By: April 27, 2021
Project Description: Environmental Assessment (EA): Proposed Construction and Operation of a Marine Corps Reserve Center at the Camp Fretterd Military Reservation in Reisterstown, Maryland.
Project Address: Camp Fretterd Military Reservation, Marine Corps Reserve Center, 5600 Rue Saint Lo Drive, Reisterstown, MD 21136
Project Location: Baltimore County
Clearinghouse Contact: Sylvia Mosser

Dear Ms. Hoffman:

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

Maryland Gubernatorial Executive Order 01.01.1998.04, Smart Growth and Neighborhood Conservation Policy, encourages federal agencies to adopt flexible standards that support "Smart Growth." In addition, Federal Executive Order 12072, Federal Space Management, directs federal agencies to locate facilities in urban areas. Consideration of these two Orders should be taken prior to making final site selections. A copy of Maryland Gubernatorial Executive Order 01.01.1998.04, Smart Growth and Neighborhood Conservation Policy is available upon request.

We have forwarded your project to the following agencies and/or jurisdictions for their review and comments: the Maryland Departments of Natural Resources, the Environment, Transportation, and General Services; the Maryland Military Department; Baltimore County; and the Maryland Department of Planning, including the Maryland Historical Trust. A composite review and recommendation letter will be sent to you by the reply due date. Your project has been assigned a unique State Application Identifier that you should use on all documents and correspondence. Please be assured that we will expeditiously process your project.

May 4, 2021

Ms. Charee Hoffman, Senior Project Manager
Cardno
501 Butler Farm Road, Suite H
Hampton, VA 23666

Mr. Christopher Hurst, EA Project Manager
Marine Corps Forces Reserve
Building 1, Floor 2, Room 2W2140
New Orleans, LA 70114

STATE CLEARINGHOUSE RECOMMENDATION

State Application Identifier: MD20210331-0234
Applicant: Cardno **and** Marine Corps Forces Reserve
Project Description: Environmental Assessment (EA): Proposed Construction and Operation of a Marine Corps Reserve Center at the Camp Fretterd Military Reservation in Reisterstown, Maryland
Project Address: Camp Fretterd Military Reservation, Marine Corps Reserve Center, 5600 Rue Saint Lo Drive, Reisterstown, MD 21136
Project Location: Baltimore County
Recommendation: Consistent with Qualifying Comments and Contingent Upon Certain Actions

Dear Ms. Hoffman and Mr. Hurst:

In accordance with Presidential Executive Order 12372 and Code of Maryland Regulation 34.02.02.04-.07, the State Clearinghouse has coordinated the intergovernmental review of the referenced project. This letter constitutes the State process review and recommendation.

Review comments were requested from the Maryland Departments of General Services, Natural Resources, Transportation, and the Environment; the Maryland Military Department; Baltimore County; and the Maryland Department of Planning, including the Maryland Historical Trust. Baltimore County did not have comments; and the Maryland Department of Natural Resources did not provide comments.

The Maryland Departments of General Services, and Transportation; the Maryland Military Department; and the Maryland Historical Trust found this project to be consistent with their plans, programs, and objectives.

The Maryland Historical Trust has determined that the project will have "no adverse effect on historic properties and that the federal and/or State historic preservation requirements have been met.

The Maryland Department of Planning found this project to be generally consistent with their plans, programs, and objectives, but included certain qualifying comments summarized below.

> "The site is not located inside a Priority Funding Area (PFA). As this is a federal facility, the PFA funding limitations do not apply to this project, but the county should be aware that any proposed supportive infrastructure development (roads, water and sewer) may be hindered by the lack of PFA status of the surrounding area. Baltimore County's comprehensive plan is relatively quiet on military installations, and does not at all mention the Marine Corps Reserve Center at Camp Fretterd. However, it does include recommendations to support the findings of the Route 40 Base Realignment and Closure study in Middle River, perhaps indicating support for military facility needs within the county."

The Maryland Department of the Environment (MDE) stated that their finding of consistency is contingent upon the applicant taking the actions summarized below.

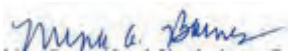
1. "Construction, renovation and/or demolition of buildings and roadways must be performed in conformance with State regulations pertaining to 'Particulate Matter from Materials Handling and Construction' requiring that during any construction and/or demolition work, reasonable precaution must be taken to prevent particulate matter, such as fugitive dust, from becoming airborne.
2. If a project receives federal funding, approvals and/or permits, and will be located in a nonattainment area or maintenance area for ozone or carbon monoxide, the applicant needs to determine whether emissions from the project will exceed the thresholds identified in the federal rule on general conformity. If the project emissions will be greater than 25 tons per year, contact Brian Hug at (410) 537-4125 for further information regarding threshold limits.
3. During the duration of the project, soil excavation/grading/site work will be performed; there is a potential for encountering soil contamination. If soil contamination is present, a permit for soil remediation is required from MDE. Please contact the New Source Permits Division at (410) 537-3230 to learn about the State's requirements.
4. Any above ground or underground petroleum storage tanks, which may be utilized, must be installed and maintained in accordance with applicable State and federal laws and regulations. Underground storage tanks must be registered and the installation must be conducted and performed by a contractor certified to install underground storage tanks by the Land Management Administration in accordance with COMAR 26.10. Contact the Oil Control Program at (410) 537-3442 for additional information.
5. If the proposed project involves demolition – Any above ground or underground petroleum storage tanks that may be on site must have contents and tanks along with any contamination removed. Please contact the Oil Control Program at (410) 537-3442 for additional information.
6. Any solid waste including construction, demolition and land clearing debris, generated from the subject project, must be properly disposed of at a permitted solid waste acceptance facility, or recycled if possible. Contact the Solid Waste Program at (410) 537-3315 for additional information regarding solid waste activities and contact the Waste Diversion and Utilization Program at (410) 537-3314 for additional information regarding recycling activities.
7. The proposed project may involve rehabilitation, redevelopment, revitalization, or property acquisition of commercial, industrial property. For specific information about these programs and eligibility, please contact the Land Restoration Program at (410) 537-3437.
8. Borrow areas used to provide clean earth back fill material may require a surface mine permit. Disposal of excess cut material at a surface mine may require site approval. Contact the Mining Program at (410) 537-3557 for further details.
9. Additional comments from the Water and Science Administration were emailed to Sylvia Mosser [enclosed]."

The State Application Identifier Number must be placed on any correspondence pertaining to this project.

Please remember, you must comply with all applicable state and local laws and regulations. If you need assistance or have questions, contact the State Clearinghouse staff person noted above at 410-767-4490 or through e-mail at sylvia.mosser@maryland.gov.

Thank you for your cooperation with the MIRC process.

Sincerely,



Myra Barnes, Lead Clearinghouse Coordinator

MB:SM
Enclosure—MDE Additional Comments
cc:

Tony Redman - DNR	Ian Beam - MDOT	Kirk Yaukey - MILT	Joseph Griffiths - MDPL
Amanda Redmiles - MDE	Tanja Rucci - DGS	Krystle Patchak - BLCO	Beth Cole - MHT

21-0234_CRR.CLS.docx

(EA): Proposed Construction and Operation of a Marine Corps Reserve Center at the Camp Fretterd Military Reservation

Maryland Department of the Environment – WSA/IWPP

REVIEW FINDING: R2 Contingent Upon Certain Actions (MD2021 0331-0234)

Direct any questions regarding the Antidegradation Review to Angel Valdez via email at angel.valdez@maryland.gov, or by phone at 410-537-3606.

Special protections for high-quality waters in the local vicinity, which are identified pursuant to Maryland's anti-degradation policy.

Anti-degradation of Water Quality: Maryland requires special protections for waters of very high quality (Tier II waters). The policies and procedures that govern these special waters are commonly called "anti-degradation policies." This policy states that "proposed amendments to county plans or discharge permits for discharge to Tier II waters that will result in a new, or an increased, permitted annual discharge of pollutants and a potential impact to water quality, shall evaluate alternatives to eliminate or reduce discharges or impacts." Satisfactory completion of the Tier II Antidegradation Review is required to receive numerous State permits, such as those for wastewater treatment, nontidal wetlands disturbance, waterways construction, and coverage under the general construction permit.

The Tier II review is applicable to all portions of the whole and complete project within the Tier II watershed of N Branch Patapsco River UT 2. The review is, at a minimum, a two-step alternatives analysis process. The initial analysis considers if the activity can avoid any impacts to Tier II waters (alternative site or potentially by strategic design). The second analysis considers minimization alternatives to limit associated water quality degradation. This includes BMP considerations for erosion and sediment controls, mitigation for net loss of vital resources such as forest cover, and justification for unavoidable impacts. Under certain circumstances, MDE may require a third analysis which justifies the project based on social or economic rationale.

MDE is revising the overall Tier II review procedures by creating or updating forms to assist with the no-discharge alternatives analysis, minimization analysis, temporary impacts, and social and economic justification. Completion of these forms is required for permitting and other approvals.

Tier II No-Discharge Analysis Form V1.2:[1]

1. Code of Maryland Regulations (COMAR) 26.08.02.04-1 (G(1)) states that "If a Tier II antidegradation review is required, the applicant shall provide an analysis of reasonable alternatives that do not require direct discharge to a Tier II water body (no-discharge alternative). The analysis shall include cost data and estimates to determine the cost effectiveness of the alternatives".

2. For land disturbing projects that result in permanent land use change, this 'no discharge' analysis specifically evaluates the reasonability of other sites or alternate routes which could be developed to meet the project purpose, but are located *outside* of the Tier II watershed. Reasonability considerations, as applicable, may take into account property availability, site constraints, natural resource concerns, size, accessibility, and cost to make the property suitable for the project.

3. This analysis shall be performed regardless of whether or not the applicant has ownership or lease agreements to a preferred property or route.

Tier II Minimization Alternative Analysis Form V1.1:[2]

1. Code of Maryland Regulations (COMAR) 26.08.02.04-1 (G(3)) states that "If the Department determines that the alternatives that do not require direct discharge to a Tier II water body are not cost effective, the applicant shall: (a) Provide the Department with plans to configure or structure the discharge to minimize the use of the assimilative capacity of the water body".

2. This form helps to ensure that water quality impacts due to the proposed project are comprehensively identified, minimized, mitigated, and justified.

3. To demonstrate that appropriate minimization practices have been considered and implemented, applicants must identify any minimization practices used when developing the project, calculate major Tier II resource impacts, consider alternatives for impacts, and adequately justify unavoidable impacts. Further water quality impact minimization such as mitigation or out-of-kind offsets may be required.

Construction Stormwater Antidegradation Checklist - Version 1.1 :[3]

1. This form replaces the Tier II checklist, *Enhanced Best Management Practices for Tier II Waters*, distributed in the past.

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[1] https://mde.maryland.gov/programs/Water/TMDL/WaterQualityStandards/Documents/Tier-II-Forms/TierII_NoDischargeAnalysis_Form_1.2.pdf
[2] https://mde.maryland.gov/programs/Water/TMDL/WaterQualityStandards/Documents/Tier-II-Forms/TierII_Minimization_Form_1.1.pdf
[3] https://mde.maryland.gov/programs/Water/TMDL/WaterQualityStandards/Documents/Tier-II-Forms/AntiDegradation%20Checklist%20V1.1.pdf

2. To complete the checklist, applicants are required to coordinate with the County or appropriate approval authority when developing construction plans and stormwater management plans.

3. Applicants are required to provide this form when seeking a NOI/DOI for coverage under the general construction permit. Other forms and documentation materials shall also be uploaded to the general construction permit site at this time.

N Branch Patapsco River UT 2, which is located within the vicinity of the Project, has been designated as a Tier II stream. The Environmental Assessment (EA) indicates "*Ditches on either side of Rue Saint Lo Drive currently convey water to channels flowing to the southeast.*" The Project's EA indicates the Project's proposed stormwater discharge could be directed to the Catchment (watershed) of the segment. (See attached map).

Currently, there is no assimilative capacity in this watershed. This means that recent data indicates that sometime after designation, the Tier II stream segment has degraded. Therefore, additional social and economic justification is needed. The SEJ is primarily a narrative that justifies the unavoidable impacts to water quality identified by the minimization alternatives analysis. A general outline of information required to complete the SEJ has been provided.

Planners should be aware of legal obligations related to Tier II waters described in the Code of Maryland Regulations (COMAR) 26.08.02.04 with respect to current and future land use plans. Information on Tier II waters can be obtained online at: http://www.dsd.state.md.us/comar/comarhtml/26/26.08.02.04.htm and policy implementation procedures are located at http://www.dsd.state.md.us/comar/comarhtml/26/26.08.02.04-1.htm

Planners should also note as described in the Code of Maryland Regulations (COMAR) 26.08.02.04-1(C), "Compilation and Maintenance of the List of High Quality Waters", states that "When the water quality of a water body is better than that required by water quality standards to support the existing and designated uses, the Department shall list the water body as a Tier II water body. *All readily available information may be considered to determine a listing. The Department shall compile and maintain a public list of the waters identified as Tier II waters*."

The public list is available in PDF from the following MDE website: http://mde.maryland.gov/programs/Water/TMDL/WaterQualityStandards/Documents/Tier_II_Updates/Antidegradation-Tier-II-Data-Table.pdf.

The interactive Tier II webmap is located at the following website: (https://mdewin64.mde.state.md.us/WSA/TierIIWQ/index.html).

Direct any questions regarding the Antidegradation Review to Angel Valdez via email at angel.valdez@maryland.gov, or by phone at 410-537-3606.

ADDITIONAL COMMENTS

Stormwater

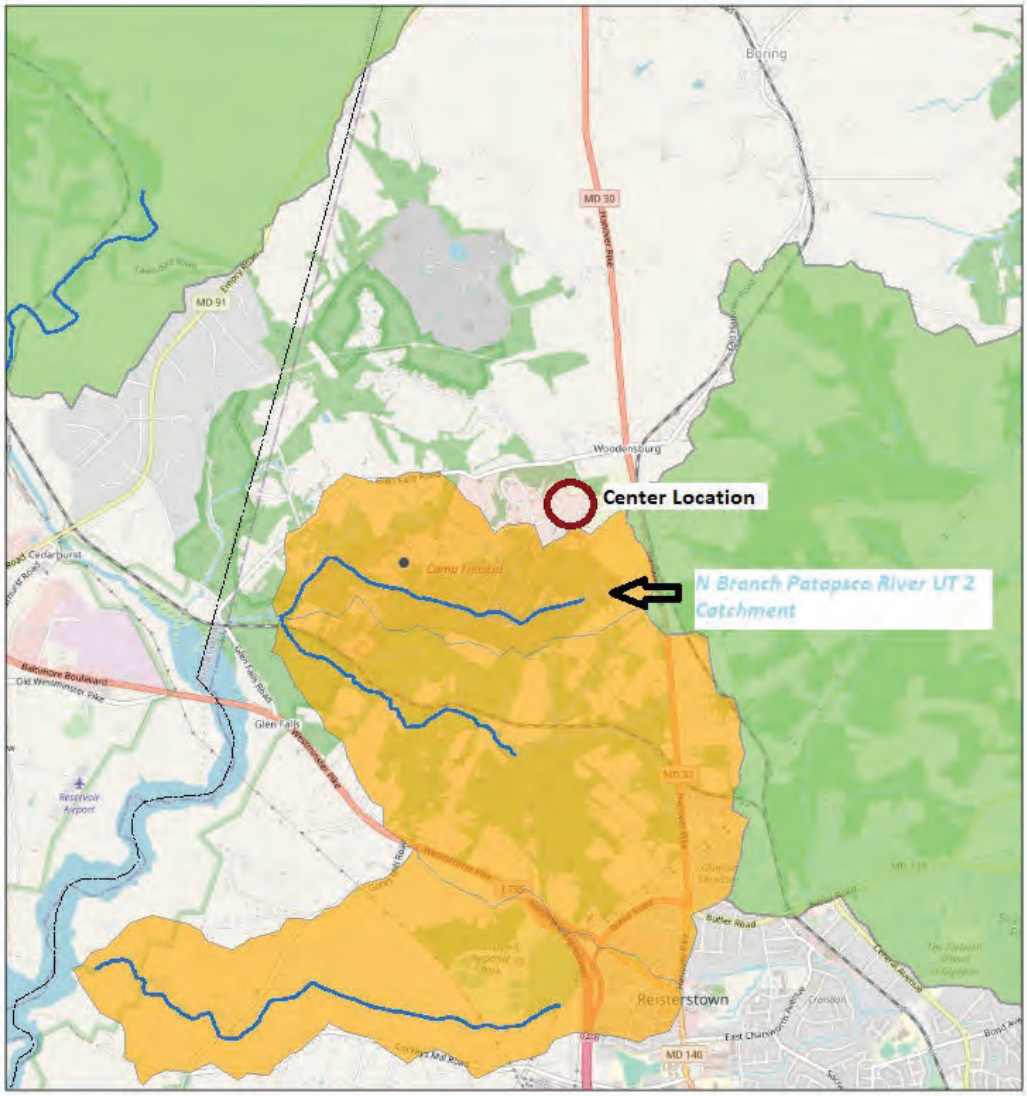
Planners should consider all Maryland Stormwater Management Controls and during Site Design the planner should consider all Environmental Site Design to the Maximum Extent Practicable and “Green Building” Alternatives. Designs that reduce impervious surface and BMPs that increase runoff infiltration are highly encouraged.

Further Information:
http://www.mde.state.md.us/programs/water/StormwaterManagementProgram/Pages/swm2007.aspx

Environmental Site Design (Chapter 5):
http://www.mde.state.md.us/programs/water/StormwaterManagementProgram/Documents/www.mde.state.md.us/assets/document/Design%20Manual%20Chapter%205%2003%2024%202009.pdf

Redevelopment Regulations:
http://www.dsd.state.md.us/comar/comarhtml/26/26.17.02.05.htm

MD2021 0331-0234



9/27/2020, 3:07:46 PM

1:50,456

0 0.33 0.65 1.3 mi

0 0.5 1 2 km

Tier II Catchments 2016

- Assimilative Capacity Remaining
- No Assimilative Capacity Remaining
- Tier II Stream Segments 2016
- Maryland County Boundaries

© OpenStreetMap (and) contributors, CC-BY-SA, Creator: Maryland Department of the Environment, Water and Science Administration (MDE WSA), MDE

Web AppBuilder for ArcGIS

MDE | Creator: Maryland Department of the Environment, Water and Science Administration (MDE WSA) | MD iMAP, MDP | Map data © OpenStreetMap contributors, CC-BY-SA |

Construction Stormwater Antidegradation Checklist – Version 1.1

This checklist is intended to be used as guidance for evaluating any portion of your construction site that is located with a watershed that is identified by the Department[1] or the EPA, as a Tier II for antidegradation purposes. This Checklist [2]is acceptable for use in documenting your antidegradation review and ensuring protection of Tier II resources during construction. This form, or other appropriate written evaluation, may be uploaded with your NOI or provided to the Industrial Stormwater Permits Division at the Maryland Department of the Environment. The information provided to the Department addresssing the antidegredation review shall be clearly marked on the erosion and sediment control (E&SC) plan and approved by the appropriate approval authority pursuant to COMAR 26.17.01.

Project Name: _____

General Permit Number (MD):_____ **OR, if not available,**

County or State ESC Plan Identifier: _____

County:_____ **Site Map #**_____ **Parcel #**_____

Applicant Signature: _____ **Date Complete:** _____

Do all Tier II watersheds impacted by the proposed activity have assimilative capacity(1)? If the proposed activity is to a stream segment which doesn't have assimilative capacity, you will need to consult with the Department's Tier II staff on available options and list the findings here. Comments: _____ _____ _____ _____	**Yes/No**
Were any waivers granted by the Approval Authority for stormwater controls for this project? For projects in Tier II watersheds, waivers need to be fully justified in light of the potential to impact water quality. A waiver that was granted that could lead to degradation would require modeling or other evidence that the lack of stormwater controls will not impact the receiving waters.	**Yes/No**
Verify whether you will meet the following minimum Stabilization Criteria. After initial soil disturbance or redisturbance, permanent (2011 ESC Handbook Section B-4-5) or temporary (2011 ESC Handbook Section B-4-4) stabilization is required within: i. Three (3) calendar days as to the surface of all perimeter controls, dikes, swales, ditches, perimeter slopes, and all slopes steeper than 3 horizontal to 1 vertical (3:1); and ii. Seven (7) calendar days as to all other disturbed areas on the project site except for those areas under active grading.	**Yes/No**

[1] Use the interactive Tier II webmap located at: https://mde.maryland.gov/programs/Water/TMDL/WaterQualityStandards/Pages/HighQualityWatersMap.aspx to assist you. On the map, Tier II watersheds colored orange have NO assimilative capacity.

[2] Alternative forms may be approved by the Department, if they contain the information in this checklist.

Verify Increased Inspection Frequency for activity within Tier II Watershed. For any portion of the site that discharges to a water that is identified by the Department as Tier II for antidegradation purposes, more frequent inspections are beneficial. Will you inspect at least once every four (4) calendar days?	**Yes/No**
Verify Piles are located outside the Stream Protection Zone. For stockpiles or land clearing debris piles composed, in whole or in part, of sediment and/or soil (2011 ESC Handbook Section B-4-8), locate the piles outside of any Stream Protection Zones.	**Yes/No**
Were there any E&SC exemptions to the requirements for Protections in the Stream Protection Zone below? Note: The list of potential exemptions are listed at the end of this checklist. If exemptions were applicable make sure to include them in the plan. Comments: _____ _____ _____	**Yes/No**
Have you Verified your Stream Protection Zone Considerations below? All additional controls selected in Compliance Alternative 2, to meet the Stream Protection Zone Considerations below shall be clearly marked on the erosion and sediment control (E&SC) plan and approved by the appropriate approval authority pursuant to COMAR 26.17.01. You are required to document in your E&SC plan where the natural buffer width that is retained (where you are implementing alternative 1 below) and you must document the reduced width of the buffer you will be retaining and document the additional erosion and sediment controls you will use (where you will be implementing alternative 2 below). Comments: _____ _____ _____	**Yes/No**
<u>Stream Protection Zone Alternative 1</u>: Provide and maintain an undisturbed natural buffer within the Stream Protection Zone (an average of 100 feet from edge of stream). Comments: _____ _____ _____	**Yes/No**
<u>Stream Protection Zone Alternative 2</u>: Provide and maintain an undisturbed natural buffer that is less than an average of 100 feet and is supplemented by additional erosion and sediment controls. The acceptable additional erosion and sediment controls include, but are not limited to, those listed in the 2011 ESC Handbook. Those controls are accelerated stabilization, redundant controls, upgraded controls, passive or active chemical treatment, or a reduction in the size of the grading unit. These options are provided below, which are the controls that must be considered and, once selected, implemented when construction activity occurs within these Stream Protection Zones. The local approval authorities may provide additional options that provide similar protection. Check each that apply below. Comments: _____ _____ _____ _____	**Yes/No**

□ ***a: Accelerated Stabilization Requirements***

Earth disturbance must be stabilized as soon as possible and as dictated by the approved plan (e.g., seed and mulch, soil stabilization matting, rip rap, sod, pavement):

- At a minimum, all perimeter controls (e.g., earth dikes, sediment traps) and slopes steeper than 3:1 require stabilization within three calendar days and all other disturbed areas within seven calendar days
- Accelerated stabilization (e.g., same day stabilization) may be required based on site characteristics or as specified by the approval authority

Comments: _____
_____

□ ***b: Redundant Controls***

Runoff must pass through two sediment control devices in series. The following are examples of possible combinations:

- When dewatering sump areas or sediment traps or basins, discharge sediment laden water first to a portable sediment tank and then a filter bag
- Install parallel rows of a perimeter filtering control or a combination thereof of silt fence, super silt fence, and filter logs (e.g., two rows of parallel silt fence or a row of filter log parallel to a row of super silt fence)

Comments: _____
_____

□ ***c: Upgrade Controls***

The following are examples of possible upgrades:

- Upgrade from silt fence to super silt fence
- Upgrade from temporary stone outlet structure to temporary gabion outlet structure
- Upgrade all sediment traps and basins to control additional storage volume; increase the required storage volume from 3,600 cubic feet/acre to 5,400 cubic feet/acre
- Upgrade standard inlet protection type A to type B and at grade inlet protection to gabion inlet protection

Comments: _____
_____

□ ***d: Passive or Active Chemical Treatment***

The use of chemical additives requires permit coverage and considerations related to potential aquatic toxicity. https://mdewwp.page.link/ChemAddReview.

Comments: _____
_____

□ ***e: Reduction in the Size of the Grading Unit***

- Require grading unit limitations to 10 acres of earth disturbance inside the Stream Protection Zone
- Require grading unit limitations to 20 acres for any earth disturbance that is adjacent to and contiguous with earth disturbances inside the Stream Protection Zone

Comments: _____
_____

□ ***f: Prerogative of Approval Authorities***

The additional controls described above for projects in Stream Protection Zones are examples of accelerated stabilization, redundant controls, upgraded controls, passive or active chemical treatment, or a reduction in the size of the grading unit. Approval authorities may use these examples as a guide when approving projects, but may also apply further erosion and sediment control measures based on local site conditions and best professional judgement.

Comments: _____
_____

Exemptions to the requirements for Protections in the Stream Protection Zone:

- The following disturbances within the Stream Protection Zone are exempt from the requirements this guidance:- Construction approved under a CWA Section 404 permit; or- Construction of a water-dependent structure or water access areas (e.g., pier, boat ramp, trail).

- If there is no discharge of stormwater to Waters of this State through the area between the disturbed portions of the site and receiving waters, you are not required to comply with the requirements in this guidance. This includes situations where you have implemented controls measures, such as a berm or other barrier, which will prevent such discharges.

- Where no natural buffer exists due to preexisting development disturbances (e.g., structures, impervious surfaces) that occurred prior to the initiation of planning for the current development of the site, you are not required to comply with the requirements in this guidance.

  Where some natural buffer exists but portions of the area within the Stream Protection Zone are occupied by preexisting development disturbances, you <u>are</u> required to comply with the requirements in this guidance. Clarity about how to implement the compliance alternatives for these situations is provided upon request from the Department.

- For “linear construction sites” , you are not required to comply with this requirement if site constraints (e.g., limited right-of-way) make it infeasible to implement one of the above compliance alternatives, provided that, to the extent feasible, you limit disturbances within Stream Protection Zone. You must also document in the Checklist your rationale for why it is infeasible for you to implement one of the above compliance alternatives, and describe any buffer width retained and supplemental erosion and sediment controls installed.

Maryland Department of the Environment

Antidegradation Review Report Form

Alternatives Analysis – Minimization Alternatives

Purpose

This form is designed to help applicants assemble a complete Tier II Review report. This form specifically addresses calculating Tier II resource impacts, and evaluating alternatives that minimize water quality degradation from unavoidable impacts to Tier II watersheds and streams. This analysis is applicable to all areas of the **whole and complete project** within a Tier II watershed.

The Department will use this information to determine whether or not the applicant evaluated all reasonable alternatives to minimize water quality degradation. MDE may provide additional comments, conditions, or requirements, during the course of the review.

Fill in all that apply:

1. **Project Name:** _____
2. **County ESC Plan Identifier:** _____
3. **Nontidal Wetlands & Waterways Construction Tracking Number: 20206_ _ _ _**
4. **General Permit Number:** _____
5. **Other Application Type and Number:** _____

_____

Applicant Signature: _____ **Date Complete:** _____

Background

Code of Maryland Regulations (COMAR) 26.08.02.04-1 (G(3)) states that "If the Department determines that the alternatives that do not require direct discharge to a Tier II water body are not cost effective, the applicant shall: (a) Provide the Department with plans to configure or structure the discharge to minimize the use of the assimilative capacity of the water body".

To demonstrate that appropriate minimization practices have been considered and implemented, applicants must identify any minimization practices used when developing the project, calculate major Tier II resource impacts, consider alternatives for impacts, and adequately justify unavoidable impacts. Further water quality impact minimization such as mitigation or out-of-kind offsets may be required.

Additionally, applicants are required to coordinate with the County or appropriate approval authority when developing construction plans, and incorporate additional practices as indicated by the guidance provided in the *Construction Stormwater Antidegradation Checklist*. This checklist, as well as the other portions of the Tier II Review Report are required prior to receiving many permits and authorizations from MDE.

Instructions and Notes

1. Review all of the information in this document carefully. Prepare a report to address all of the analysis required by this document. Submit all Tier II analysis and documentation together.

2. Do not leave any response blank. Please mark "N/A" for any questions or sections that are not applicable until you reach the end of the document.

3. Provide sufficient supporting documentation for narratives.

4. The level of analysis necessary, and amount of documentation that may be needed to determine if impacts have been adequately addressed, is dependent upon project size, scope, and scale of relative impacts to Tier II resources. Please develop responses accordingly.

5. Reports/responses shall be submitted in electronic format, as well as paper. Full plans are not required unless requested over the course of the review.

6. Direct any questions regarding this form to Angel Valdez at angel.valdez@maryland.gov, or by phone at 410-537-3606.

Minimization Alternative Analysis Final Documentation Checklist

- ☐ Signature & Date MDE Tier II Alternatives Analysis – Minimization Alternative form (page 1)
- ☐ Resource Impact Analysis (**Complete the analysis for each Tier II watershed affected**)
  - ☐ Tier II Stream Buffer Impacts
    - Impact Calculation
    - Impact Minimization
    - Impact Mitigation
    - Impact Justification
    - Stream Buffer Exhibit
  - ☐ Forest Cover Impacts
    - Impact Calculation
    - Impact Minimization
    - Impact Mitigation
    - Impact Justification
    - Forest Cover Exhibit
  - ☐ Impervious Cover
    - Impact Calculation
    - Impact Minimization
    - Impact Mitigation
    - Impact Justification
    - Impervious Cover Exhibit
  - ☐ Mitigation & Other Potential Requirements
    - Plans
    - Signature & Date (Page 8)
- ☐ Construction Stormwater Antidegradation Checklist

Tier II Resource Impacts

Sufficient riparian buffers, ample watershed forest cover, and lower levels of impervious cover are essential to maintaining high quality waters. This project may permanently reduce riparian buffers and forest cover, or increase impervious cover within Tier II watersheds leading to a decrease in water quality. Depending upon project specific impacts, MDE may require monitoring, additional BMPs, expanded buffers in Table 1, and other studies prior to approval. This analysis is applicable to all areas of the **whole and complete project** within a Tier II watershed.

MDE will use the following information to determine **permanent** impacts to Tier II watershed resources. Complete the analysis for each Tier II watershed the proposed project may impact.

A. Tier II Stream Buffers

1. Instructions:

- **a. If no stream buffer impacts are proposed (within 100' of stream), mark this section N/A and proceed to Section B, Forest Cover.**
- **b. Insert the Tier II watershed name at the top of each box.**
- **c. "Impacted" stream segments are those disrupted by road crossings, other infrastructure, construction (ex. sewer lines), or otherwise buried**
- **d. Calculate buffer averages for 2(f) below on a stream segment-by-segment basis.**
- **e. Explain in detail alternatives considered, and any actions taken**

A. Tier II Stream Buffers - - Tier II Watershed: _____		
2. Calculation of Permanent Riparian Buffer Impacts to State Regulated Waters	**Linear Feet +/-**	
	LEFT Bank	**Right Bank**
a. Combined length of on-site stream segments:		
b. Combined length of EXISTING, pre-development, impacted stream segments:		
c. Combined length of PROPOSED, post-development, impacted stream segments:		
d. Total post-development impacted stream segments 2(b) + 2(c)=		
e. Total post-development unimpacted stream segments 2(a) - 2(d) =		
f. Combined length of streams, post-development, with an average 100' buffer, based on the value in 2(e):		
g. Potential Tier II Buffer Impacts 2(e) - 2(f) =		

A. Tier II Stream Buffers - - Tier II Watershed: _____

3. Buffer Impact Minimization:

Evaluate on-site alternatives for buffer impacts for segments identified in 2(g). Examples include minimizing ROW, narrowing paths, alternate routes for walkways, roads, crossings, etc. to avoid buffer impacts.

4. Buffer Impact Mitigation:

Mitigation or offsets can occur both on and off-site. On-site, the intent is to achieve a 100' average stream buffer width.

Per segment, locate areas where impacts to the 100' buffer are unavoidable. Include those impacts in the mitigation/offset alternatives analysis. Conditions under section D shall apply.

a) Evaluate on-site alternatives to identify areas where buffers could be expanded beyond the minimum 100' to offset areas of unavoidable buffer width constraints.
b) If there are no on-site areas, evaluate off-site areas, within the Tier II watershed, where buffers could be improved, expanded, or established.

5. Buffer Impact Justification:

If there are any remaining unavoidable impacts, provide narrative justification and supporting documentation for impacts. Reasons may include existing infrastructure, clearance necessary to comply with regulation, no alternative location for stormwater management, property boundary, etc.

6. Buffer Exhibit

Prepare a Tier II Buffer Exhibit for on-site streams. Dependent upon the number of segments, multiple sheets (8 ½" by 11") may be used. On an overview, label each segment (a, b, c…) and provide a tabular summary, per bank-segment (e.g., left bank of segment a), of average buffer width.

In addition to on-site streams, the exhibit shall display the following information:

- 100- foot riparian buffer. (symbolize with a line)
- Areas where the post-construction stream buffer are +/- 100 feet. (symbolize with shading, hatches, or dots, etc.)
- On-site areas where buffers could be maintained at a distance of greater than a 100' if there are unavoidable constraints in some locations. (symbolize with shading, hatches, or dots, etc.)

Table 1: Expanded Tier II Riparian Buffer

Adjusted Average Optimal Buffer Width Key (in Feet)				
	Slopes (%)			
Soils	0-5%	5-15%	15-25%	>25%
ab	100	130	160	190
c	120	150	180	210
d	140	170	200	230

B. Tier II Forest Cover
1. Instructions: **a. If there is no net forest cover loss within the impacted Tier II watershed, mark this section N/A and proceed to Section C, Impervious Cover.** **b. Insert the Tier II watershed name at the top of each box.** **c. "Potential Constraints" include forest loss due to ROW, property boundaries, regulatory requirements, etc.** **d. Explain in detail alternatives considered, and any actions taken**

B. Tier II Forest Cover - - Tier II Watershed: _____	
2. **Calculation of Permanent Forest Cover Impacts**	**Acres +/-**
a. Total on-site forest cover, EXISTING:	
b. Total on-site forest cover, POST-PROJECT:	
c. Total off-site reforestation or restoration, IN the Tier II Watershed listed above:	
d. Permanent forest loss due to potential constraints:	
e. Total forest cover retained in Tier II Watershed 2(b) + 2(c) =	
f. Total forest cover loss in Tier II Watershed 2(e) – 2(a) =	

B. Tier II Forest Cover - - Tier II Watershed: _____
3. Forest Cover Loss Minimization
If 2(d) is greater than 0, or if 2(f) is a negative value, evaluate on-site alternatives for forest cover impact minimization. Examples include minimizing ROW, alternate routes for roads, crossings, etc. to avoid forest cover impacts.
4. Forest Cover Loss Mitigation
To achieve no net negative impact as a result of the proposed activity, the applicant shall consider alternatives to mitigate impacts 'in-kind', for forest cover loss, to the maximum extent economically feasible. Provide additional information regarding the value in 2(c). Once those options are exhausted, applicants shall evaluate out-of-kind alternatives within the Tier II watershed that will help offset water quality impacts. These out-of-kind alternatives include impervious cover disconnection or retrofits, stream restoration, buffer enhancement, etc.
5. Forest Cover Loss Justification
If there are any remaining unavoidable impacts to forest cover, provide narrative justification and supporting documentation for impacts. Reasons may include existing infrastructure, clearance necessary to comply with regulation, no alternative location for stormwater management, property boundary, etc.
6. Forest Cover Exhibit
On an 8 ½" by 11" sheet(s), prepare an on-site Tier II Forest Cover Exhibit. Using varying symbology, show a basic site layout relative to 2(a), 2(b), and 2(d) above. Prepare a separate exhibit regarding any off-site reforestation, or out-of-kind mitigation opportunities in accordance with Section D.

C. Impervious Cover
1. Instructions: **a. If ESD is used to treat all new, on-site, post-construction stormwater, mark this section N/A and proceed to Section D, Mitigation and Other Potential Requirements.** **b. Insert the Tier II watershed name at the top of each box.** **c. Explain in detail alternatives considered, and any actions taken.**

C. Tier II Impervious Cover - - Tier II Watershed: _____	
2. Calculation of Impervious Cover Increase	**Acres +/-**
a. Total additional (new) impervious cover, POST-PROJECT:	
b. Total additional (new) impervious cover treated with ESD practices, POST PROJECT:	
c. Total impervious cover not treated with ESD practices, POST-PROJECT: *2(a) – 2(b) =*	

C. Tier II Impervious Cover - - Tier II Watershed: _____
3. Impervious Cover Minimization
If 2(c) is greater than 0, evaluate on-site alternatives for impervious cover impact minimization by identifying additional areas where ESD stormwater management practices can be utilized.
4. Impervious Cover Offsets
Add the area-acres of remaining unavoidable impervious cover increases (not treated with ESD) to the total targeted for mitigation under Section B(4). Increases such as these can be mitigated with forest cover restoration/afforestation, or through off-site mitigation alternatives such as impervious cover disconnection or retrofits, stream restoration, buffer enhancement, etc.
5. Impervious Cover Justification
If there is any remaining unavoidable addition of impervious surface acreage (not treated with ESD) and which is not offset, provide narrative justification and supporting documentation for impacts. Reasons may include existing infrastructure, clearance necessary to comply with regulation, no alternative location for stormwater management, property boundary, etc.
6. Impervious Cover Exhibit
On an 8 ½" by 11" sheet(s), prepare an on-site Tier II Impervious Cover Exhibit. Using varying symbology, show a basic site layout relative to 2(a), 2(b), and 2(c) above. Prepare a separate exhibit regarding any off-site reforestation, or out-of-kind mitigation opportunities in accordance with Section D.

D. Tier II Mitigation and Other Potential Requirements

1. If mitigation is necessary:

- **a. In-kind mitigation shall occur at a target ratio of 1:1.**
- **b. In order to satisfy the requirements of the Antidegradation Review, an applicant must demonstrate that they have conducted a robust alternatives analysis, <u>including mitigation</u> as a means for additional minimization of unavoidable impact to Tier II resources.**
- **c. MDE strongly recommends pre-application meetings.**
- **d. Regardless of application status, prepare preliminary analysis, including:**
  - **i. Preliminary site search for potential properties**
  - **ii. Basic exploration of out-of-kind possibilities, such as restoration, impervious cover retrofit or removal, etc.**
- **e. Mitigation is required for unavoidable net forest cover loss.**
- **f. The greater the net loss, the higher the restoration target.**

D. Tier II Mitigation and Other Potential Requirements

2. Mitigation Plan Components

a. <u>Statement of unavoidable impacts to Tier II waters</u>. This is total loss calculated in Section A (2)h, Section A(2)i, Section B (2)f, and Section C (2)c. Identify values specifically associates with stream buffers, forest cover, and impervious cover. Tabular totals shall be broken according to resource type and Tier II watershed impacted. The accompanying narrative shall include a summary of why impacts are considered unavoidable.

b. <u>Preferred mitigation alternatives analysis within the impacted Tier II watershed</u>. The order of mitigation alternatives is as follows:
   i. In-kind, on-site
   ii. In-kind, off-site
   iii. Out-of-kind, on-site
   iv. Out-of-kind, off-site

c. <u>Mitigation site alternative analysis</u>. Establish site search criteria. All locations must be located within the affected Tier II watershed identified for each unavoidable impact calculated in 2(a). Tabular totals shall include the amount of mitigation/offset selected alternatives achieve. Include maps of each mitigation property.

d. <u>Protection Mechanism</u>. Explain the plan proposed to ensure that all areas identified for mitigation shall be protected in perpetuity. Permittees shall be required to provide documentation in the form of covenants, landowner agreements, deed details, etc. as well as financial assurances. This shall be provided no more than 60 days after completion.

e. <u>Site Description</u>. Provide site address, name of property if known, map and parcel number, and centroid coordinates in latitude/longitude. Include maps of each mitigation property. Maps shall include natural resources (i.e. existing forest cover, streams, wetlands, etc.), roads, railways, and any other important identifying features. Maps shall include natural resources (i.e. existing forest cover, streams, wetlands, etc.), roads, railways, and any other important identifying features.

f. <u>Planting plan</u>: Reforestation shall incorporate optimum vegetation selection guidance provided in the *State Forest Conservation Technical Manual, 3rd edition, 1997 by Maryland Department of Natural Resources*.

D. Tier II Mitigation and Other Potential Requirements
2. Mitigation Plan Components, Continued
g. Monitoring Reports. Properties shall be monitored for a minimum of five years to ensure site success. Reports shall provide visuals of establishment progress, as well as narrative descriptions. Include any issues encountered, overcome, and potential changes that may be necessary to meet objectives.

D. Tier II Mitigation and Other Potential Requirements
3. Other Potential Requirements
a. pH Monitoring and Corrective Action Plan. Often associated with in-stream grout activities. b. Compaction Management Plan. Often associated with linear activities, such as pipelines. c. Water Quality Monitoring and Corrective Action Plan. Associated with projects with in-stream impacts. d. Biological Monitoring. Project requirement for complex projects with direct or significant impacts. e. Hydraulic Analysis. Projects may include direct or significant near-stream disturbances, such as grading, vegetative removal, watershed boundary changes, etc. f. Other requirements. To address unique impacts specific to the activity or site. g. Social and Economic Justification. Depending upon the scope of impacts to Tier II resources and streams, applicants may be required to provide additional documentation to justify the permitting of an activity that will degrade Tier II streams, on an socio-economic basis.

Applicant Signature: _____ Date: _____

Provide a hardcopy responses to:

Maryland Department of the Environment
Environmental Assessment and Standards Program
Antidegradation Implementation Coordinator
ATTN: Angel D. Valdez
1800 Washington Blvd
Baltimore, Maryland 21230

Provide an electronic response, by CD to the address above, or a way to download the response from secure cloud-based site, email: to Angel Valdez at angel.valdez@maryland.gov.

Maryland Department of the Environment

Antidegradation Review Report Form

Alternatives Analysis - No Discharge Alternative

Purpose

This form is designed to help applicants assemble a complete Tier II Review report. This form specifically addresses evaluating alternatives that avoid impacts to Tier II watersheds and streams. It is strongly recommended that applicants complete this analysis as early in the project planning stages as possible, during initial property site search and screening analysis of purchase and feasibility alternatives.

The Department will use this information to determine whether or not an adequate alternatives analysis was conducted, and to help determine if a reasonable alternative to the proposed activity is available. MDE may provide additional comments during the course of the review.

Fill in all that apply:

1. **Project Name:** _____
2. **County ESC Plan Identifier:** _____
3. **Nontidal Wetlands & Waterways Construction Tracking Number: 20206_ _ _ _**
4. **General Permit Number:** _____
5. **Other Application Type and Number:** _____

_____

Applicant Signature: _____ **Date Complete:** _____

Background

Code of Maryland Regulations (COMAR) 26.08.02.04-1 (G(1)) states that "If a Tier II antidegradation review is required, the applicant shall provide an analysis of reasonable alternatives that do not require direct discharge to a Tier II water body (no-discharge alternative). The analysis shall include cost data and estimates to determine the cost effectiveness of the alternatives".

For land disturbing projects that result in permanent land use change, this 'no discharge' analysis specifically evaluates the reasonability of other sites or alternate routes which could be developed to meet the project purpose, but are located *outside* of the Tier II watershed. Reasonability considerations, as applicable, may take into account property availability, site constraints, natural resource concerns, size, accessibility, and cost to make the property suitable for the project. This analysis shall be performed regardless of whether or not the applicant has ownership or lease agreements to a preferred property or route.

Information from this analysis may be used to inform minimization analysis.

Instructions and Notes

1. Complete the analysis for each Tier II watershed impacted.
2. Review the information in this document carefully. Prepare a report to address all of the analyses required by this document. Submit all Tier II analysis and documentation at one time.
3. To help improve review efficiency and avoid delays, do not leave any response blank. Please use "N/A" for any questions or sections that are not applicable.
4. Provide sufficient supporting documentation for narratives.
5. The level of analysis necessary, and amount of documentation that may be needed to make a decision is dependent upon project size, scope, and scale of relative impacts to Tier II resources. Please develop responses accordingly.
6. Reports/responses shall be submitted in electronic format, as well as paper. Full plans are not required unless requested over the course of the review.
7. Direct any questions regarding this form to Angel Valdez at angel.valdez@maryland.gov, or by phone at 410-537-3606.

No Discharge Alternative Analysis Final Documentation Checklist

- ☐ Signed & Dated MDE Tier II Alternatives Analysis – No Discharge Alternative form (page 1)
- ☐ Qualifying Exemptions with supporting documentation
- ☐ General Project Purpose Statement with relevant definitions
- ☐ Alternative Site Reasonability Analysis
  - ☐ Results of initial site search
  - ☐ Map of alternatives relative to preferred site and Tier II streams/catchment
  - ☐ Alternative Sites Summary Analysis Table Supplementary Information (per site)
  - ☐ Detailed Narrative of Alternate Analysis Outcome
- ☐ Alternative Route Reasonability Analysis
  - ☐ Results of initial site search
  - ☐ Map of all alternatives relative to preferred route and Tier II streams/catchment
  - ☐ Alternative Sites Summary Analysis Table Supplementary Information (per site)
  - ☐ Detailed Narrative of Alternate Analysis Outcome
- ☐ Narrative rationale for final decision of reasonableness

Qualifying Exemptions

For the purposes of the no discharge analysis for land disturbing activities, extenuating circumstances may apply to projects that are developed to address a specific need, may be linked to special funding, or linked to a specific location. Supporting documentation is required before consideration. Please read the following examples and determine whether or not a given situation is applicable.

The applicant must get concurrence from MDE as to the applicability of any special circumstances prior to completing the no discharge alternatives analysis. It is at the Department's discretion to determine whether a special circumstance applies, and whether or not this applicability means that there is not a reasonable alternative that avoids the Tier II watershed.

If none of the special circumstances apply, check "**Not Applicable**".

☐ **Not Applicable**

☐ **Situation 1:** Project is linked to unique or special incentives for State, County, or Municipality

Example: County needs for 1000 units of low-income senior housing in legislative district 7. Documentation must include the request for proposals (RFP) or similar missive to meet the housing need, and unique benefits or incentives lost if the project is moved outside of legislative district 7.

Example: Project is located in a State Designated Priority Funding Area, State Designated Enterprise Zone, or similar area targeted by the State for economic growth, business development, or investment.

☐ **Situation 2:** Project has location specific limitations

Example: College campus extension. Education capital funding limits development to sites that are within 5 miles of the main campus. Documentation should include the RFP or similar documentation.

Example: Project is taking place in an existing right of way, or using an area that is currently operational. Such projects include replacing transmission lines, expanding operations on a working farm or business center.

☐ **Situation 3:** Military project (or similar) with restrictions due to national security, etc.

Example: Construct a new runway and hangar for Air Force 1. The military may identify a certain location or base where this construction shall occur due to existing facilities, support personnel, and security concerns.

☐ **Situation 4:** Project has little to no resource impacts.

Example: Repair or replacement of existing structures, road resurfacing, bridge maintenance using scaffolding, General Waterways Construction Permits, habitat restoration, rehabilitation, and stabilization.

☐ **Situation 5:** Project is a "Grandfathered" development, that meets the specifications within Chapter 1.2, in the *Maryland Model Stormwater Management Ordinance, June 2009 & April 2010*

Administrative waivers, extension documentation, etc. are required documentation.

Note -This exemption does not apply to linear projects like roads or pipelines. Grandfathered projects are not exempt from the minimization alternatives analysis.

General Project Purpose Statement

1. Define the overall project purpose and site selection criteria. To result in a fair and meaningful analysis for the antidegradation review the site selection criteria must fall into the following parameters:
    a. The statement must not be so narrowly constructed as to limit the results to one site with no other possible alternatives, or
    b. Likewise, the statement cannot be too broadly written creating too many alternatives to effectively consider.

2. Example Statements
    a. Too Narrow: To develop a high density residential housing complex consisting of 1000 living units on a 200 acre site adjacent to the Mall of Maryland. –- The likelihood that there are multiple properties other than the desired alternative available are unlikely, and this eliminates the possibility of properties outside of the Tier II watershed.
    b. Too Broad: To develop a residential housing complex in Charles County. –- This will yield hundreds of results, creating a burdensome and unrealistic amount of work to evaluate each alternative.**
    c. Reasonable: To develop a residential housing complex near a major shopping center in Northern Charles County. –- This will reduce the number of available properties to a more manageable amount, while still meeting the overall purpose of providing housing near a retail center in a target geographic area. The applicant can further refine the statement by defining "near", "major shopping center", and "Northern Charles County".

3. The applicant must craft a statement that yields at least 3 available alternative properties for further evaluation.

4. The level of detail for the alternative analysis process should appropriately match the complexity of the project taking into consideration factors such as resource impacts to Tier II watersheds in terms of impervious cover, forest cover loss, riparian buffer impacts, public comment, etc. For example, the amount of documentation provided for 3 alternatives to place a single dwelling on one acre is expected to be significantly less than the documentation expected for a 300 acre mixed-use development.

    **Based on comments received during the review or other mitigating circumstances, the Department may require the applicant to evaluate additional alternatives, or provide a more in-depth analysis.

Table 1: Alternative Site Evaluation Summary Analysis Table			
Evaluate each criteria listed in the left hand column for each alternative site. Populate each box with the appropriate conditions, i.e. either yes/no, or by listing one or more of the options provided (a, b, c…), such as types of utilities available at a given site.			
	Site 1	**Site 2**	**Site 3**
Availability: a. Owned by applicant b. For sale c. Special, please explain (example: remediation required)			
Sizing appropriate: a. As is b. Purchase of adjoining property/ROW required			
Accessible Utilities: a. Electric b. Water c. Sewer d. Site access (existing road/bridge, etc.). e. None			
Development Resources: a. Existing SWM b. Existing buildings/structures c. Site cleared			
Zoning: a. Appropriate b. Waiver required			
Resource Impacts: a. Streams b. Forest c. Wetlands/wetlands buffer d. 100-yr flood plain			
Cost to Acquire is Reasonable: Yes or No			

Alternative Sites Summary Analysis Table Supplementary Information:

1. Explanation of site search criteria and rationale.
    a. Relate project requirements to the criteria in Table 1.
    b. Include any additional critical criteria not identified in the above table.

2. Results of initial site search.
    a. List the available sites for consideration before the applicant chose 3 for further evaluation.
    b. Include a brief narrative description of each site.
    c. Include a table listing basic site address, lot size, parcel and map.
    d. Include an overview map showing sites and their relative location to the preferred property.
    e. If available, include Real Property Search Data (From Maryland Department of Assessments and Taxation (http://sdat.dat.maryland.gov/RealProperty/Pages/default.aspx), or MLS (Multiple Listing Service) information.

3. Expand upon the responses in Table 1.
    a. Include a narrative that clearly explains how the applicant determined the final 3 sites for further consideration in Table 1.
    b. Provide basic information about each site, i.e. land use, land cover, unique features, on-site resources such as streams, wetlands, relevant geology and/or hydrology, etc.
    c. Discuss specific resource impacts.
        i. Include a table that further breaks down the resource impacts associated with the 3 alternative sites.
        ii. Include a narrative that further details whether resources could be avoided. For example, an on-site stream that will most likely be crossed to accommodate site access would make that site less favorable when compared to another option.

4. Justify final site decision.

Table 1: Alternative Route Evaluation Summary Analysis Table (use for linear projects such as roads, utility lines, etc)			
Evaluate each criteria listed in the left hand column for each alternative site. Populate each box with the appropriate conditions, i.e. either yes/no, or by listing one or more of the options provided (a, b, c…), such as types of utilities available at a given site.			
	Site 1	**Site 2**	**Site 3**
Availability: a. ROW Owned by applicant b. ROW can be acquired or leased c. Other, please explain			
Accessible Utilities (i.e. where connecting infrastructure is required): a. Electric b. Water c. Sewer or pipeline d. Site access (existing road/bridge, etc.). e. None			
Zoning: a. Appropriate b. Waiver required			
Resource Impacts: a. Streams b. Forest c. Wetlands/wetlands buffer d. 100-yr flood plain			
Cost to Acquire is Reasonable: Yes or No			

Alternative Route Summary Analysis Table Supplementary Information:

1. Explanation of route search criteria and rationale.
    a. Relate project requirements to the criteria in Table 1.
    b. Include any additional critical criteria not identified in the above table. For example, if the purpose of the project is to improve public safety, documentation must be provided to support this claim. For a new road this may include data on accidents, visibility issues, or geometric design issues that can complicate travel.

2. Results of initial route search.
    a. List the available routes for consideration before the applicant chose 3 for further evaluation.
    b. Include a brief narrative description of each route.
    c. Include a table listing route start and end addresses, parcel and map, land use (i.e. residential neighborhood, commercial district, etc.)
    d. Include an overview map showing results and their relative location within the impacted Tier II watershed.

3. Expand upon the responses in Table 1.
    a. Include a narrative that clearly explains how the applicant determined the final 3 sites for further consideration in Table 1.
    b. Provide basic information about each site, i.e. land use, land cover, unique features, on-site resources such as streams, wetlands, etc.
    c. Discuss specific resource impacts.
        i. Include a table that further breaks down the resource impacts associated with the 3 alternative routes. For example identify the number of streams on-site, potential forest loss for site clearing, etc.
        ii. Include a narrative that further details whether resources could be avoided. For example, an on-site stream that will most likely be crossed to accommodate site access would make that site less favorable when compared to another option. Note: In making a final decision, MDE may take into consideration whether or not the project can avoid the impact by going over it (i.e. bridge) or under it (i.e. drilling). Consider this in the resource impact evaluation. The method of crossing may be a special permit condition.

4. Justify final route decision.

Provide a hardcopy responses to:

Maryland Department of the Environment
Environmental Assessment and Standards Program
Antidegradation Implementation Coordinator
ATTN: Angel D. Valdez
1800 Washington Blvd
Baltimore, Maryland 21230

Provide an electronic response, by CD to the address above, or a way to download the response from secure cloud-based site, email: to Angel Valdez at angel.valdez@maryland.gov.

Maryland Department of the Environment
Antidegradation Review Report Form
Social and Economic Justification – Outline for Basic Projects

Purpose

This form is designed to help applicants assemble a complete social and economic justification (SEJ) to complete the Antidegradation Tier II Review when there are certain unavoidable impacts to water quality. Pursuant to COMAR 26.08.02.04-1 (J), applicants must submit an SEJ if "(a) No cost effective alternative to the discharge is available; or (b) The cumulative degradation resulting from nonpoint source pollution and any other permitted discharges would diminish water quality". Therefore, if impacts cannot be fully avoided, minimized, or mitigated, the applicant may have to provide MDE with an SEJ. The SEJ must demonstrate that an economic hardship and/or public benefit overrides the value of the ecological services or water quality benefit that the Tier II water segment provides. The applicant must also provide documentation to show that all reasonable avoidance, minimization, and mitigation alternatives have been considered, and where economically feasible, implemented.

The Department will use this information to determine whether or not the SEJ is complete, if it adequately justifies the impact to water quality, and to make a final permit determination. MDE may provide additional comments during the course of the review.

- **Introduction**
  - Project Summary
  - Impacts
  - Antidegradation Policy
  - Document purpose

- **Socioeconomic Contributions of the Project**
  - Economic Importance and Benefit
    - Economic Impacts- During Construction
    - Economic Impacts –During Operations
    - Fiscal Impacts –Development Phase
    - Fiscal Impacts –During Operations
  - Social Importance and Benefit
    - Widespread social benefits to the community affected
    - Contributions to environment

- **Socioeconomic Benefits of High Quality Waters (as applicable)**
  - Social importance and benefit
    - Impacts on property value
    - Recreation value
    - Other quality of life benefits
  - General Evaluation of Economic Impacts of Restoring Degraded Stream Resources, including impacts to resources necessary to maintain high quality waters
    - Costs of 1:1 in-kind mitigation for all net forest cover loss based on area market value
    - Estimated cost of stream restoration, per linear foot, based on area market value

- **Conclusion**

- **References & Appendices as needed**

If you need assistance or have questions, contact the State Clearinghouse staff noted above at 410-767-4490 or through e-mail at sylvia.mosser@maryland.gov. Thank you for your cooperation with the MIRC process.

Sincerely,

Jason Dubow, Manager
Resource Conservation and Management

JD:SM
cc: Christopher Hurst, EA Project Manager (christopher.a.hurst@usmc.mil)

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Appendix B
Air Emissions Calculations

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TAB A. **CONSTRUCTION EMISSIONS**

Basic Conversions

453.59	grams per pound
43,560	Conversion from Acre to SF
0.03704	Cubic feet to Cubic Yards
0.1111	Square Feet to Square Yards
1.4	tons/CY for Gravel
80,000	lbs/Truck Load for Delivery
1.66	CY for each CY of asphalt/concrete demo
0.33333333	asphalt thickness for demolition
0.33333333	asphalt thickness for pavement
2000	pounds per ton
145	lb/ft^3 density of Hot Mix Asphalt

Table 1.1 **Clearing** 6 acres

Off-road Equipment	Hours of Operation	Engine HP	Load Factor	VOC g/hp-hr	CO g/hp-hr	NOx g/hp-hr	SO_2 g/hp-hr	PM10 g/hp-hr	PM2.5 g/hp-hr	CO_2 g/hp-hr
Dozer	70	145	0.58	0.38	1.41	4.17	0.12	0.30	0.29	536
Loader/Backhoe	70	87	0.21	1.43	7.35	6.35	0.15	1.06	1.03	692
Small Backhoe	70	55	0.21	1.43	7.35	6.35	0.15	1.06	1.03	692

	VOC lb	CO lb	NOx lb	SO2 lb	PM10 lb	PM2.5 lb	CO_2 lb
Dozer	4.86	18.24	53.81	1.49	3.82	3.70	6,907
Loader w/integral Backhoe	4.01	20.59	17.78	0.42	2.98	2.89	1,937
Small backhoe	2.54	13.01	11.24	0.26	1.88	1.83	1,225

20 miles RT

On-road Equipment	Miles	Engine HP	VOC lb/mile	CO lb/mile	NOx lb/mile	SO_2 lb/mile	PM_{10} lb/mile	$PM_{2.5}$ lb/mile	CO_2 lb/mile
Dump Truck (12 CY)	26,667	230	0.0015	0.0080	0.0361	0.0000	0.0015	0.0015	3.4385

	VOC lb	CO lb	NOx lb	SO2 lb	PM10 lb	PM2.5 lb	CO_2 lb
Dump Truck	40.57	214.45	961.87	0.48	40.12	38.87	91,694
Subtotal in lbs	52	266	1045	3	49	47	101,763
Clearing Grand Total in Tons	**0.03**	**0.13**	**0.52**	**0.00**	**0.02**	**0.02**	
Clearing Grand Total in Metric Tons							**46**

Table 1.2 **Site Prep**

Site Prep - Excavate/Fill (CY) 14,452 CY

Grading (SY) 145,200 SY

Off-road Equipment	Hours	Engine HP	Load Factor	VOC g/hp-hr	CO g/hp-hr	NOx g/hp-hr	SO_2 g/hp-hr	PM10 g/hp-hr	PM2.5 g/hp-hr	CO_2 g/hp-hr
Excavator	24	243	0.59	0.34	1.21	4.03	0.12	0.22	0.22	536
Skid Steer Loader	29	160	0.23	0.38	1.47	4.34	0.12	0.31	0.30	536
Dozer (Rubber Tired)	26	145	0.59	0.38	1.41	4.17	0.12	0.30	0.29	536
Compactor	56	103	0.58	0.40	1.57	4.57	0.12	0.32	0.31	536
Grader	52	285	0.58	0.34	1.21	4.07	0.12	0.23	0.22	536

	VOC lb	CO lb	NOx lb	SO2 lb	PM10 lb	PM2.5 lb	CO_2 lb
Excavator	2.61	9.18	30.58	0.87	1.69	1.64	4,066
Skid Steer Loader	0.90	3.44	10.14	0.27	0.71	0.69	1,252
Dozer (Rubber Tired)	1.85	6.96	20.54	0.57	1.46	1.41	2,637
Compactor	2.90	11.54	33.55	0.85	2.34	2.27	3,936
Grader	6.46	22.70	76.48	2.17	4.24	4.11	10,068

On-road Equipment	Hours	MPH	Engine HP	VOC lb/mile	CO lb/mile	NOx lb/mile	SO_2 lb/mile	PM10 lb/mile	PM2.5 lb/mile	CO_2 lb/mile
Dump Truck (12 CY)	32	5	230	0.0015	0.0080	0.0361	0.0000	0.0015	0.0015	3.4385

	VOC lb	CO lb	NOx lb	SO2 lb	PM10 lb	PM2.5 lb	CO_2 lb
Dump Truck (12 CY)	0.24	1.29	5.77	0.00	0.24	0.23	550
Subtotal in lb:	15	55	177	5	11	10	22,509
Site Prep Grand Total in Tons	**0.01**	**0.03**	**0.09**	**0.00**	**0.01**	**0.01**	
Site Prep Grand Total in Metric Tons							**10**

Table 1.3 **Gravel Work** 1,197 CY

Off-road Equipment	Hours	Engine HP	Load Factor	VOC g/hp-hr	CO g/hp-hr	NOx g/hp-hr	SO_2 g/hp-hr	PM_{10} g/hp-hr	$PM_{2.5}$ g/hp-hr	CO_2 g/hp-hr
Dozer	12	185	0.59	0.34	1.21	4.08	0.12	0.23	0.22	536
Wheel Loader for Spreading	15	87	0.59	0.35	1.25	4.23	0.12	0.24	0.23	536
Compactor	34	103	0.43	0.36	1.34	4.45	0.12	0.26	0.25	536

	VOC lb	CO lb	NOx lb	SO2 lb	PM10 lb	PM2.5 lb	CO_2 lb
Dozer	1.01	3.55	12.01	0.34	0.67	0.65	1,577
Wheel Loader for Spreading	0.60	2.16	7.33	0.20	0.41	0.40	927
Compactor	1.18	4.40	14.62	0.38	0.84	0.82	1,760

30 miles RT

On-road Equipment	Miles	Engine HP	VOC lb/mile	CO lb/mile	NOx lb/mile	SO_2 lb/mile	PM_{10} lb/mile	$PM_{2.5}$ lb/mile	CO_2 lb/mile
Dump Truck	2,993	230	0.0015	0.0080	0.0361	0.0000	0.0015	0.0015	3.4385

	VOC lb	CO lb	NOx lb	SO2 lb	PM10 lb	PM2.5 lb	CO_2 lb

	Dump Truck	4.55	24.07	107.96	0.05	4.50	4.36	10,292
	Subtotal (lbs):	**7**	**34**	**142**	**1**	**6**	**6**	**14,556**
	Gravel Work Grand Total in Tons	**0.00**	**0.02**	**0.07**	**0.00**	**0.00**	**0.00**	
	Gravel Work Grand Total in Metric Tons							**7**

Table 1.4 **Concrete Work**

Foundation Work 10,124 CY
Sidewalks, etc. 125 CY
Total 10,249 CY

				Emission Factors						
Off-road Equipment	**Hours of Operation**	**Engine HP**	**Load Factor**	**VOC** g/hp-hr	**CO** g/hp-hr	**NOx** g/hp-hr	**SO_2** g/hp-hr	**PM10** g/hp-hr	**PM2.5** g/hp-hr	**CO_2** g/hp-hr
Concrete Mixer	559	3.5	0.43	0.69	3.04	6.17	0.13	0.54	0.52	588
Concrete Truck	505	300	0.43	0.38	1.75	6.18	0.11	0.27	0.26	530

	Annual Emissions						
	VOC lb	**CO** lb	**NOx** lb	**SO2** lb	**PM10** lb	**PM2.5** lb	**CO_2** lb
Concrete Mixer	1.28	5.65	11.45	0.23	1.00	0.97	1,090.99
Concrete Truck	54.50	250.65	887.65	16.37	38.58	37.42	76,079.96
Subtotal (lbs):	**56**	**256**	**899**	**17**	**40**	**38**	**77,171**
Concrete Work Grand Total in Tons	**0.03**	**0.13**	**0.45**	**0.01**	**0.02**	**0.02**	
Concrete Work Grand Total in Metric Tons							**35**

14 miles RT

			VOC	**CO**	**NOx**	**SO_2**	**PM_{10}**	**$PM_{2.5}$**	**CO_2**
On-road Equipment	**Miles**	**Engine HP**	lb/mile	lb/mile	lb/mile	lb/mile	lb/mile	lb/mile	lb/mile
Concrete Truck	15,943	230	0.0015	0.0080	0.0361	0.0000	0.0015	0.0015	3.4385

	VOC lb	**CO** lb	**NOx** lb	**SO2** lb	**PM10** lb	**PM2.5** lb	**CO_2** lb
Concrete Truck	24.25	128.21	575.06	0.29	23.99	23.24	54,820
Subtotal (lbs):	**24**	**128**	**575**	**0**	**24**	**23**	**54,820**
Concrete Truck Travel Grand Total in Tons	**0.01**	**0.06**	**0.29**	**0.00**	**0.01**	**0.01**	
Concrete Truck Travel Grand Total in Metric Tons							**25**

Table 1.5 **Main Building Construction**

50,000 SF Foundation
50,000 SF Total

				Emission Factors						
Off-road Equipment	**Hours of Operation**	**Engine HP**	**Load Factor**	**VOC** g/hp-hr	**CO** g/hp-hr	**NOx** g/hp-hr	**SO_2** g/hp-hr	**PM10** g/hp-hr	**PM2.5** g/hp-hr	**CO_2** g/hp-hr
Crane	250	330	0.58	0.25	1.22	5.26	0.11	0.21	0.20	530
Concrete Truck	250	300	0.43	0.19	1.45	4.32	0.12	0.21	0.20	536
Diesel Generator	200	40	0.43	0.26	1.41	3.51	0.11	0.23	0.22	536
Telehandler	500	99	0.59	0.51	3.94	4.93	0.13	0.52	0.51	595
Scissors Lift	400	83	0.59	0.51	3.94	4.93	0.13	0.52	0.51	595
Skid Steer Loader	250	67	0.59	1.69	7.97	6.70	0.15	1.19	1.15	691
All Terrain Forklift	10	84	0.59	0.51	3.94	4.93	0.13	0.52	0.51	595

	Annual Emissions						
	VOC lb	**CO** lb	**NOx** lb	**SO2** lb	**PM10** lb	**PM2.5** lb	**CO_2** lb
Crane	25.92	128.65	554.86	12.03	21.91	21.26	55,942
Concrete Truck	13.34	103.42	307.20	8.20	14.94	14.49	38,128
Diesel Generator	1.99	10.68	26.61	0.82	1.76	1.71	4,066
Telehandler	32.81	253.67	317.36	8.24	33.55	32.55	38,285
Scissors Lift	22.00	170.13	212.85	5.52	22.50	21.83	25,678
Skid Steer Loader	36.87	173.59	145.93	3.24	25.91	25.13	15,052
All Terrain Forklift	0.56	4.30	5.39	0.14	0.57	0.55	650
Subtotal (lbs):	**133**	**844**	**1,570**	**38**	**121**	**118**	**177,802**
Building Construction Grand Total in Tons	**0.07**	**0.42**	**0.79**	**0.02**	**0.06**	**0.06**	
Building Construction Grand Total in Metric Tons							**81**

Table 1.6 **Vehicle Maintenance Building Construction**

11,250 SF Foundation
11,250 SF Total

				Emission Factors						
Off-road Equipment	**Hours of Operation**	**Engine HP**	**Load Factor**	**VOC** g/hp-hr	**CO** g/hp-hr	**NOx** g/hp-hr	**SO_2** g/hp-hr	**PM10** g/hp-hr	**PM2.5** g/hp-hr	**CO_2** g/hp-hr
Crane	68	330	0.58	0.25	1.22	5.26	0.11	0.21	0.20	530
Concrete Truck	51	300	0.43	0.19	1.45	4.32	0.12	0.21	0.20	536
Diesel Generator	360	40	0.43	0.26	1.41	3.51	0.11	0.23	0.22	536
Telehandler	113	99	0.59	0.51	3.94	4.93	0.13	0.52	0.51	595
Scissors Lift	90	83	0.59	0.51	3.94	4.93	0.13	0.52	0.51	595
Skid Steer Loader	55	67	0.59	1.69	7.97	6.70	0.15	1.19	1.15	691
All Terrain Forklift	55	84	0.59	0.51	3.94	4.93	0.13	0.52	0.51	595

	Annual Emissions						
	VOC lb	**CO** lb	**NOx** lb	**SO2** lb	**PM10** lb	**PM2.5** lb	**CO_2** lb
Crane	7.00	34.73	149.81	3.25	5.92	5.74	15,104
Concrete Truck	2.74	21.27	63.20	1.69	3.07	2.98	7,843
Diesel Generator	3.58	19.23	47.89	1.47	3.17	3.07	7,320
Telehandler	7.38	57.07	71.41	1.85	7.55	7.32	8,614
Scissors Lift	4.95	38.28	47.89	1.24	5.06	4.91	5,778
Skid Steer Loader	8.06	37.94	31.90	0.71	5.66	5.49	3,290
All Terrain Forklift	3.04	23.52	29.43	0.76	3.11	3.02	3,550

30 miles RT

On-road Equipment	Miles	Engine HP	VOC lb/mile	CO lb/mile	NOx lb/mile	SO_2 lb/mile	PM_{10} lb/mile	$PM_{2.5}$ lb/mile	CO_2 lb/mile
Dump Truck	6,834	230	0.0015	0.0080	0.0361	0.0000	0.0015	0.0015	3.4385
			VOC lb	**CO lb**	**NOx lb**	**SO2 lb**	**PM10 lb**	**PM2.5 lb**	**CO_2 lb**
		Dump Truck	10.40	54.96	246.50	0.12	10.28	9.96	23,499
		Subtotal (lbs):	47	287	688	11	44	42	74,998
		VMF Grand Total in Tons	**0.02**	**0.14**	**0.34**	**0.01**	**0.02**	**0.02**	
		VMF Grand Total in Metric Tons							**34**

Excavation - hauling 10 miles RT

On-road Equipment	Miles	Engine HP	VOC lb/mile	CO lb/mile	NOx lb/mile	SO_2 lb/mile	PM_{10} lb/mile	$PM_{2.5}$ lb/mile	CO_2 lb/mile
Dump Truck	12,043	230	0.0015	0.0080	0.0361	0.0000	0.0015	0.0015	3.4385
			VOC lb	**CO lb**	**NOx lb**	**SO2 lb**	**PM10 lb**	**PM2.5 lb**	**CO_2 lb**
		Dump Truck	18.32	96.85	434.41	0.22	18.12	17.56	41,412
		Subtotal (lbs):	18	97	434	0	18	18	41,412
		Excavation Hauling Grand Total in Tons	**0.01**	**0.05**	**0.22**	**0.00**	**0.01**	**0.01**	
		Excavation Hauling Grand Total in Metric Tons							**19**

Table 1.7 **Paving**

4,800 SF 44 CY
3,200 CF

Off-road Equipment	Hours of Operation	Engine HP	Load Factor	VOC g/hp-hr	CO g/hp-hr	NOx g/hp-hr	SO2 g/hp-hr	PM10 g/hp-hr	PM2.5 g/hp-hr	CO_2 g/hp-hr
Grader	10	145	0.59	0.38	1.41	4.16	0.12	0.30	0.29	536
Roller	15	401	0.59	0.34	2.46	5.53	0.12	0.34	0.33	536
Paving Machine	20	164	0.59	0.38	1.44	4.25	0.12	0.30	0.29	536
Asphalt Curbing Machine	2	130	0.59	0.40	1.57	4.57	0.12	0.32	0.31	536
				VOC lb	**CO lb**	**NOx lb**	**SO2 lb**	**PM10 lb**	**PM2.5 lb**	**CO_2 lb**
			Grader	0.73	2.73	8.04	0.22	0.57	0.55	1,034
			Roller	2.73	19.73	44.33	0.92	2.71	2.63	4,292
			Paving Machine	1.66	6.30	18.57	0.50	1.31	1.27	2,340
			Asphalt Curbing Machine	0.14	0.54	1.58	0.04	0.11	0.11	185

On-road Equipment	Hours of Operation	Engine HP	based Speed (miles/hour)	VOC lb/mile	CO lb/mile	NOx lb/mile	SO2 lb/mile	PM10 lb/mile	PM2.5 lb/mile	CO_2 lb/mile
Dump Truck	12	230	17	0.001521	0.008042	0.036070	1.80E-05	0.001504	0.001458	3.438541
Water Truck	12	230	10	0.001521	0.008042	0.036070	1.80E-05	0.001504	0.001458	3.438541
				VOC lb	**CO lb**	**NOx lb**	**SO2 lb**	**PM10 lb**	**PM2.5 lb**	**CO_2 lb**
			Dump Truck	0.32	1.69	7.58	0.00	0.32	0.31	722.48
			Water Truck	0.18	0.97	4.33	0.00	0.18	0.17	412.62

Hot Mix Asphalt (HMA)	Volume of HMA (ft^3)	Weight of HMA (tons)	VOC lb/ton	VOC lb	CO lb	NOx lb	SO2 lb	PM10 lb	PM2.5 lb	CO_2 lb
Standard Hot Mix Asphalt	3,200	232	0.04	9.28	-	-	-	-	-	-
			Subtotal (lbs):	15	32	84	2	5	5	8,986
			Paving Grand Total in Tons	**0.01**	**0.02**	**0.04**	**0.00**	**0.00**	**0.00**	
			Paving Grand Total in Metric Tons							**4**

Material Deliveries 640 40 miles RT

On-road Equipment	Miles	Engine HP	Speed (mph)	VOC lb/mile	CO lb/mile	NOx lb/mile	SO2 lb/mile	PM10 lb/mile	PM2.5 lb/mile	CO_2 lb/mile
Delivery Truck	25,600	265	-	0.0015	0.0080	0.0361	0.0000	0.0015	0.0015	3.4385
				VOC lb	**CO lb**	**NOx lb**	**SO2 lb**	**PM10 lb**	**PM2.5 lb**	**CO_2 lb**
			Delivery Truck	38.95	205.87	923.39	0.46	38.51	37.32	88,026.65
			Material Deliveries Grand Total in Tons	**0.02**	**0.10**	**0.46**	**0.00**	**0.02**	**0.02**	
			Material Deliveries Grand Total in Metric Tons							**40**

Table 1.8 **Fugitive Dust Emissions**

Year	PM_{10} tons/acre/mo	acres	days of disturbance	PM_{10} Total	PM2.5/ PM_{10} Ratio	$PM_{2.5}$ Total
Year 1	0.42	15	30	9.5	0.1	0.9
Year 2	0.42	1.50	20	0.6	0.1	0.1

Table 1.9 **Total Emissions**

Year	VOC Tons	CO Tons	NOx Tons	SO2 Tons	PM10 Tons	PM2.5 Tons	CO_2 Metric Tons
Year 1	0.12	0.66	1.96	0.02	9.56	1.05	180
Year 2	0.08	0.44	1.31	0.02	0.70	0.13	120
	0.20	1.10	3.27	0.04	10.26	1.18	300

TAB B. CONSTRUCTION ASSUMPTIONS

Project Name	Cleared Acres (AC)	Grading (SY)	Site Prep - Excavate/Fill (CY)	Building Construction - Total Size (sf)	Foundation footprint (sf)	Paving (CY)	Gravel Work (CY)	Concrete Work - sidewalks, etc (CY)	Concrete Work - foundation (CY)
MCRC Camp Fretterd - main building				50,000	50,000		926	125	1,933
MCRC CF - vehicle maint facility				11,250	11,250		208		417
Wash rack					1,000		19		37
Parking areas, road, wall						44	44		7,737
Fill/Excavate			14,452						
Grading	15	145,200							
Clearing	6								
Total		145,200	14,452	61,250	62,250	44	1,197	125	10,124

Total site: 21 acres
approx size, based on figure
approx size, based on figure

320 Total stationed
34 full-time staff
286 reservists on drill weekends

12 weekends per year = 26 days
2 weeks per year = 14 days
40 days total that 286 reservists are onsite

assume 3.4 10% would relocate
assume 57.2 carpool
assume 143 stay in local hotels

Post construction, up to 320 Marine personnel would be stationed at CFMR MCRC with approximately 10 percent relocating to the area. During weekdays, an average of 34 active Marines would be on site in support of administrative functions; during drill weekends, up to 286 reserve Marines would train at CFMR MCRC.

Alternative 1.

15 acres total disturbed of 21 acre site
6.0 acres cleared
800 LF concrete retaining walls (from Rue St Lo Dr to training center)
237 CY concrete for retaining wall
2 miles of trenching to install electric/natural gas/potable water/sanitary *Approx 0.5 for natural gas/electric connection, need to confirm for water connection length - left similar to Clinton LTA to be conservative
782 cubic feet of trench
13,535 cy of excavation
4,800 sf of asphalt paving *New right turn lane - 12' w x 400' l
270,000 sf of concrete parking area Includes: roughly 130,000 SF for POV parking, 140,000 SF for organizational parking
2,400 cf road asphalt
3,143 sf curbs & gutters concrete
7,500 cy of concrete parking area *Assume concrete is 5" thick (avg) = 1 CY of concrete covers 65 SF (https://www.schmitzmix.com/concrete-calculator/)
82 CY concrete pads Includes: Quadcon pad/HazMat Pad (~25'x100' for both), refueling station (~25x40'), veh wash platform (~25x40), utilities yard (~40'x20')
3,600 sf sidewalks *Standard sidewalk width: 4' or 48" x 600' lf
61,333 sf sand
917 CY excavated for septic field Septic field ~100'x250'= 25,000*3' (depth) = 75,000 cf/27 = cy; Note: most of dirt is returned - assume 2/3

Main Bldg 50,000 sf building 20 months construction
400 Material Deliveries
Veh Maint 11,250 sf building 12 months construction
240 Material Deliveries

Tree removal for clearing

40 CY = 15 trees, 8 inch diameter
1000 trees per acre, 5-11 DBH *Diameter at Breast Height (DBH) is the diameter of a tree four and one half feet above the ground. The height may be adjusted to work around bulges or splits in the trunk.*

6000 Total # trees cleared on 6 acres
16000 CY to be cleared
1333.333333 # Dump Truck trips (12 CY)

Appendix C
U.S. Army Corps of Engineers Jurisdictional Wetland Determination

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DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, BALTIMORE DISTRICT
2 HOPKINS PLAZA
BALTIMORE, MD 21201-2930

May 21, 2020

Operations Division

Mr. John Lowenthal
Cardno
501 Butler Farm Road, Suite H
Hampton, Virginia 23666

Dear Mr. Lowenthal:

This is in response to your letter submitted on behalf of the United States Marine Corps, Marine Forces Reserve, dated October 31, 2019, requesting a preliminary determination of the presence or indications of the approximate location(s) of waters of the United States, including wetlands on Camp Fretterd Military Reservation, off Rue Saint Lo Drive, near Reisterstown, Baltimore County, Maryland. Your project has been assigned the file name, **NAB-2019-00564 (Marine Corps Reserve Center/Camp Fretterd/Pre-app/Preliminary JD)**.

A field inspection was conducted on January 23, 2020. This preliminary jurisdictional determination finds that there "may be" waters of the United States, including wetlands within the review area as indicated by the approximate location(s) of waters of the United States, including wetlands within the review area on the enclosed drawing dated October 31, 2019, and prepared by Cardno for the approximately 21.1 acre property and identifies all potential jurisdictional waters and wetlands within the review area. These areas may be regulated by this office pursuant to Section 10 of the Rivers and Harbors Act of 1899 and/or Section 404 of the Clean Water Act.

This preliminary jurisdictional determination is based on the information included on the enclosed Preliminary Jurisdictional Determination Form and is not appealable. If you do not agree with the extent of waters or wetlands and this preliminary JD, you are hereby advised of your option to request and obtain an approved JD from this office at the address above. An approved JD is an official, written Corps determination stating the presence or absence of jurisdictional waters of the United States and identifies the limits of waters of the Unites States on a project site. An approved JD can be relied upon for a period of 5 years and can be appealed through the Corps' administrative appeal process set out at 33 CFR Part 331.

You are reminded that any grading or filling of waters of the United States, including wetlands, is subject to Department of the Army authorization. State and local authorizations may be required to conduct activities in these locations. Wetlands under the jurisdiction of the Maryland Department of the Environment (MDE) may be located

on the parcel. You may contact the MDE for information regarding jurisdiction and permitting requirements at (410) 537-3768. In addition, the Interstate Land Sales Full Disclosure Act may require that prospective buyers be made aware, by the seller, of the Federal authority over any waters of the United States, including wetlands, being purchased.

In future correspondence regarding this parcel, please include the file number located in the first paragraph of this letter.

A copy of this letter will be furnished to MDE for informational purposes. If you have any questions concerning this matter, please contact the undersigned at (410) 962-4501 or maria.teresi@usace.army.mil

Sincerely,

TERESI.MARIA.NICOLE.1229421979

Digitally signed by TERESI.MARIA.NICOLE.1229421979
Date: 2020.05.21 18:14:30 -04'00'

Maria N. Teresi
Biologist, Maryland North Section

Enclosures

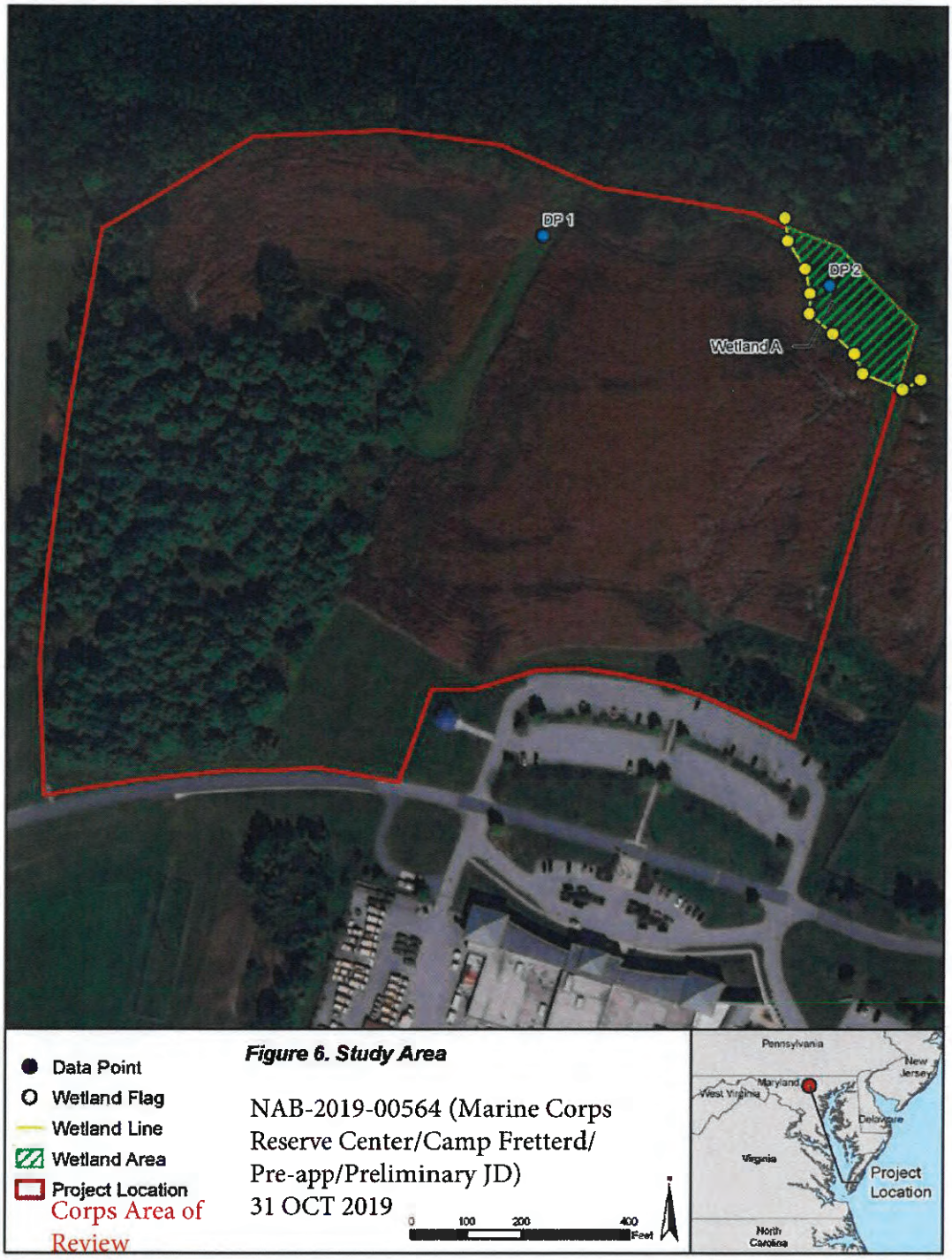

Figure 6. Study Area

NAB-2019-00564 (Marine Corps Reserve Center/Camp Fretterd/ Pre-app/Preliminary JD)
31 OCT 2019

ATTACHMENT

PRELIMINARY JURISDICTIONAL DETERMINATION FORM

BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR PRELIMINARY JURISDICTIONAL DETERMINATION (JD): 21 MAY 2020

B. NAME AND ADDRESS OF PERSON REQUESTING PRELIMINARY JD:

Mr. John Lowenthal
Cardno
501 Butler Farm Road, Suite H
Hampton, Virginia 23666

C. DISTRICT OFFICE, FILE NAME, AND NUMBER: NAB-2019-00564

(Marine Corps Reserve Center/Camp Fretterd/Pre-app/Preliminary JD

D. PROJECT LOCATION(S) AND BACKGROUND INFORMATION:
(USE THE ATTACHED TABLE TO DOCUMENT MULTIPLE WATERBODIES AT DIFFERENT SITES)

State: MD County/parish/borough: Baltimore City:
Center coordinates of site (lat/long in degree decimal format):
Lat. 30° 30'07.40" N **Pick List**, Long. -76°50"16.71" W **Pick List**.
Universal Transverse Mercator:
Name of nearest waterbody: Northern Branch of the Patapsco River

Identify (estimate) amount of waters in the review area:

Non-wetland waters: linear feet: width (ft) and/or acres.
Cowardin Class:
Stream Flow:
Wetlands: ~18,584 square feet (~0.43 acres)
Cowardin Class: PEM

Name of any water bodies on the site that have been identified as Section 10 waters:

Tidal:

Non-Tidal:

NOTIFICATION OF ADMINISTRATIVE APPEAL OPTIONS AND PROCESS AND REQUEST FOR APPEAL

Applicant: Marine Corps Reserve Center/Camp Fretterd/Pre-app/Preliminary JD	File Number: 2019-00564	Date: 21 MAY 2020
Attached is:		See Section below
	INITIAL PROFFERED PERMIT (Standard Permit or Letter of permission)	A
	PROFFERED PERMIT (Standard Permit or Letter of permission)	B
	PERMIT DENIAL	C
	APPROVED JURISDICTIONAL DETERMINATION	D
X	PRELIMINARY JURISDICTIONAL DETERMINATION	E

SECTION I - The following identifies your rights and options regarding an administrative appeal of the above decision. Additional information may be found at http://www.usace.army.mil/Missions/CivilWorks/RegulatoryProgramandPermits/appeals.aspx or Corps regulations at 33 CFR Part 331.

A: INITIAL PROFFERED PERMIT: You may accept or object to the permit.

- ACCEPT: If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
- OBJECT: If you object to the permit (Standard or LOP) because of certain terms and conditions therein, you may request that the permit be modified accordingly. You must complete Section II of this form and return the form to the district engineer. Your objections must be received by the district engineer within 60 days of the date of this notice, or you will forfeit your right to appeal the permit in the future. Upon receipt of your letter, the district engineer will evaluate your objections and may: (a) modify the permit to address all of your concerns, (b) modify the permit to address some of your objections, or (c) not modify the permit having determined that the permit should be issued as previously written. After evaluating your objections, the district engineer will send you a proffered permit for your reconsideration, as indicated in Section B below.

B: PROFFERED PERMIT: You may accept or appeal the permit

- ACCEPT: If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
- APPEAL: If you choose to decline the proffered permit (Standard or LOP) because of certain terms and conditions therein, you may appeal the declined permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

C: PERMIT DENIAL: You may appeal the denial of a permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

D: APPROVED JURISDICTIONAL DETERMINATION: You may accept or appeal the approved JD or provide new information.

- ACCEPT: You do not need to notify the Corps to accept an approved JD. Failure to notify the Corps within 60 days of the date of this notice, means that you accept the approved JD in its entirety, and waive all rights to appeal the approved JD.
- APPEAL: If you disagree with the approved JD, you may appeal the approved JD under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

E: PRELIMINARY JURISDICTIONAL DETERMINATION: You do not need to respond to the Corps regarding the preliminary JD. The Preliminary JD is not appealable. If you wish, you may request an approved JD (which may be appealed), by contacting the Corps district for further instruction. Also you may provide new information for further consideration by the Corps to reevaluate the JD.

SECTION II - REQUEST FOR APPEAL or OBJECTIONS TO AN INITIAL PROFFERED PERMIT

REASONS FOR APPEAL OR OBJECTIONS: (Describe your reasons for appealing the decision or your objections to an initial proffered permit in clear concise statements. You may attach additional information to this form to clarify where your reasons or objections are addressed in the administrative record.)

ADDITIONAL INFORMATION: The appeal is limited to a review of the administrative record, the Corps memorandum for the record of the appeal conference or meeting, and any supplemental information that the review officer has determined is needed to clarify the administrative record. Neither the appellant nor the Corps may add new information or analyses to the record. However, you may provide additional information to clarify the location of information that is already in the administrative record.

POINT OF CONTACT FOR QUESTIONS OR INFORMATION:

If you have questions regarding this decision and/or the appeal process you may contact:
Mr. Frank Plewa, Appeals Coordinator
Telephone: (717) 249-2522
U.S. Army Corps of Engineers
Regulatory Branch, Baltimore District
2 Hopkins Plaza
Baltimore, Maryland 21201
General Number: 410-962-3670
Email: nab-regulatory@usace.army.mil

If you only have questions regarding the appeal process you may also contact:
Regulatory Program Manager (CENAD-PD-OR)
U.S. Army Corps of Engineers
Fort Hamilton Military Community
301 General Lee Avenue
Brooklyn, New York 11252-6700
General Number: 347-370-4550

RIGHT OF ENTRY: Your signature below grants the right of entry to Corps of Engineers personnel, and any government consultants, to conduct investigations of the project site during the course of the appeal process. You will be provided a 15 day notice of any site investigation, and will have the opportunity to participate in all site investigations.

Signature of appellant or agent.	Date: 5-26-2020	Telephone number: 757-594-1465

E. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):

☒ Office (Desk) Determination. Date: 24 JAN 2020

☒ Field Determination. Date(s): 23 JAN 2020

1. The Corps of Engineers believes that there may be jurisdictional waters of the United States on the subject site, and the permit applicant or other affected party who requested this preliminary JD is hereby advised of his or her option to request and obtain an approved jurisdictional determination (JD) for that site. Nevertheless, the permit applicant or other person who requested this preliminary JD has declined to exercise the option to obtain an approved JD in this instance and at this time.

2. In any circumstance where a permit applicant obtains an individual permit, or a Nationwide General Permit (NWP) or other general permit verification requiring "pre-construction notification" (PCN), or requests verification for a non-reporting NWP or other general permit, and the permit applicant has not requested an approved JD for the activity, the permit applicant is hereby made aware of the following: (1) the permit applicant has elected to seek a permit authorization based on a preliminary JD, which does not make an official determination of jurisdictional waters; (2) that the applicant has the option to request an approved JD before accepting the terms and conditions of the permit authorization, and that basing a permit authorization on an approved JD could possibly result in less compensatory mitigation being required or different special conditions; (3) that the applicant has the right to request an individual permit rather than accepting the terms and conditions of the NWP or other general permit authorization; (4) that the applicant can accept a permit authorization and thereby agree to comply with all the terms and conditions of that permit, including whatever mitigation requirements the Corps has determined to be necessary; (5) that undertaking any activity in reliance upon the subject permit authorization without requesting an approved JD constitutes the applicant's acceptance of the use of the preliminary JD, but that either form of JD will be processed as soon as is practicable; (6) accepting a permit authorization (e.g., signing a proffered individual permit) or undertaking any activity in reliance on any form of Corps permit authorization based on a preliminary JD constitutes agreement that all wetlands and other water bodies on the site affected in any way by that activity are jurisdictional waters of the United States, and precludes any challenge to such jurisdiction in any administrative or judicial compliance or enforcement action, or in any administrative appeal or in any Federal court; and (7) whether the applicant elects to use either an approved JD or a preliminary JD, that JD will be processed as soon as is practicable. Further, an approved JD, a proffered individual permit (and all terms and conditions contained therein), or individual permit denial can be administratively appealed pursuant to 33 C.F.R. Part 331, and that in any administrative appeal, jurisdictional issues can be raised (see 33 C.F.R. 331.5(a)(2)). If, during that administrative appeal, it becomes necessary to make an official determination whether CWA jurisdiction exists over a site, or

to provide an official delineation of jurisdictional waters on the site, the Corps will provide an approved JD to accomplish that result, as soon as is practicable. This preliminary JD finds that there *"may be"* waters of the United States on the subject project site, and identifies all aquatic features on the site that could be affected by the proposed activity, based on the following information:

SUPPORTING DATA. Data reviewed for preliminary JD (check all that apply) - checked items should be included in case file and, where checked and requested, appropriately reference sources below):

☒ Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Cardno 31 OCT 19 .

☒ Data sheets prepared/submitted by or on behalf of the applicant/consultant.
- ☒ Office concurs with data sheets/delineation report.
- ☐ Office does not concur with data sheets/delineation report.

☐ Data sheets prepared by the Corps: .

☐ Corps navigable waters' study: .

☐ U.S. Geological Survey Hydrologic Atlas: .
- ☐ USGS NHD data.
- ☐ USGS 8 and 12 digit HUC maps.

☒ U.S. Geological Survey map(s). Cite scale & quad name: 2013 Hamptstead & Reisterstown 1:24,000 quads .

☒ USDA Natural Resources Conservation Service Soil Survey. Citation: NRCS. 2019. Web Soil Survey. Data for Baltimore County .

☒ National wetlands inventory map(s). Cite name: 2019. Seamless Wetlands Data by State - Maryland

☐ State/Local wetland inventory map(s): .

☒ FEMA/FIRM maps: 2015. FEMA Flood Hazard Layer

☐ 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929)

☐ Photographs: ☐ Aerial (Name & Date): .

or ☐ Other (Name & Date): .

☐ Previous determination(s). File no. and date of response letter: .

☐ Other information (please specify): .

IMPORTANT NOTE: The information recorded on this form has not necessarily been verified by the Corps and should not be relied upon for later jurisdictional determinations.

Signature and date of
Regulatory Project Manager
(REQUIRED)

Signature and date of
person requesting preliminary JD
(REQUIRED, unless obtaining
the signature is impracticable)

NAB-2019-00564

Site number	**Latitude**	**Longitude**	**Cowardin Class**	**Estimated amount of aquatic resource in review area**	**Class of aquatic resource**
1 – Wetland A	30° 30'07.40" N	-76° 50"16.71" W	PEM	~18,584 square feet (~0.43 acres)	Non-section 10 – wetland

October 31, 2019

Cardno

501 Butler Farm Road, Suite H
Hampton, VA 23666
USA

Phone: +1 757 594 1465
Fax: +1 757 594 1469

www.cardno.com

Kathy Anderson
Regulatory South Branch
U.S. Army Corps of Engineers
Baltimore District
2 Hopkins Plaza
Baltimore, MD 21201

Subject: Jurisdictional Wetland Delineation for the Proposed Marine Corps Reserve Training Center, Camp Fretterd Military Reservation, Baltimore County, MD

Dear Ms. Anderson:

Cardno is submitting the attached Jurisdictional Wetland Delineation on behalf of the United States Marine Corps, Marine Forces Reserve (MARFORRES).

MARFORRES is requesting confirmation of the attached Jurisdictional Wetland Delineation and they would like your office to coordinate directly with me if a site visit is required. I look forward to hearing from you.

Sincerely,

John Lowenthal, PWS, PWD
Senior Biologist
for Cardno, Government Services Division
Direct Line 757 690 2827; Cell 757 287 5605
Email: john.lowenthal@cardno-gs.com

UNITED STATES MARINE CORPS
MARINE FORCES RESERVE
2000 OPELOUSAS AVENUE
NEW ORLEANS, LOUISIANA 70114

IN REPLY REFER TO:
FAC
9 Oct 2019

From: United States Marine Corps Forces Reserve
Environmental and Energy Program Manager

To: Kathy Anderson
Regulatory South Branch
U.S. Army Corps of Engineers
Baltimore District
2 Hopkins Plaza
Baltimore, MD 21201

Subj: JURISDICTIONAL WETLAND DELINEATION FOR THE PROPOSED MARINE CORPS RESERVE CENTER, CAMP FRETTERD MILITARY RESERVATION, BALTIMORE COUNTY, MD

Encl: (1) Jurisdictional Wetland Delineation

Dear Ms. Anderson:

The United States Marine Corps, Marine Forces Reserve (MARFORRES) is proposing to construct and operate a Marine Corps Reserve Center located within the Camp Fretterd Military Reservation, in Baltimore County, Maryland. A Jurisdictional Wetland Delineation was conducted on the proposed project site and is submitted for your review and confirmation. Please find enclosed a copy of the wetland delineation report completed by our contractor. We request a confirmation of the delineation. Please coordinate directly with our contractor identified below if a site visit is required:

John Lowenthal
Cardno
501 Butler Farm Road, Suite H
Hampton, VA 23666
757-287-5605
John.lowenthal@cardno-gs.com

We appreciate your time and attention to this project.

Richard Godchaux
Environmental and Energy Program Manager
Marine Forces Reserve

Appendix 1 - REQUEST FOR CORPS JURISDICTIONAL DETERMINATION (JD)

To: Baltimore District

- I am requesting a JD on property located at: 5400 Rue Saint Lo Drive
  (Street Address)
  City/Township/Parish: Reisterstown County: Baltimore State: MD
  Acreage of Parcel/Review Area for JD: 21.1 acres
  Section: _____ Township: _____ Range: _____
  Latitude (decimal degrees): 30 degrees 30'07.40" N Longitude (decimal degrees): 76 Degrees 50' 16.71" W
  (For linear projects, please include the center point of the proposed alignment.)
- Please attach a survey/plat map and vicinity map identifying location and review area for the JD.
- ☐ I currently own this property. ☐ I plan to purchase this property.
  ☑ I am an agent/consultant acting on behalf of the requestor.
  ☐ Other (please explain): _____.
- Reason for request: (check as many as applicable)
  ☐ I intend to construct/develop a project or perform activities on this parcel which would be designed to avoid all aquatic resources.
  ☐ I intend to construct/develop a project or perform activities on this parcel which would be designed to avoid all jurisdictional aquatic resources under Corps authority.
  ☑ I intend to construct/develop a project or perform activities on this parcel which may require authorization from the Corps, and the JD would be used to avoid and minimize impacts to jurisdictional aquatic resources and as an initial step in a future permitting process.
  ☐ I intend to construct/develop a project or perform activities on this parcel which may require authorization from the Corps; this request is accompanied by my permit application and the JD is to be used in the permitting process.
  ☐ I intend to construct/develop a project or perform activities in a navigable water of the U.S. which is included on the district Section 10 list and/or is subject to the ebb and flow of the tide.
  ☐ A Corps JD is required in order to obtain my local/state authorization.
  ☐ I intend to contest jurisdiction over a particular aquatic resource and request the Corps confirm that jurisdiction does/does not exist over the aquatic resource on the parcel.
  ☐ I believe that the site may be comprised entirely of dry land.
  ☐ Other: _____
- Type of determination being requested:
  ☐ I am requesting an approved JD.
  ☑ I am requesting a preliminary JD.
  ☐ I am requesting a "no permit required" letter as I believe my proposed activity is not regulated.
  ☐ I am unclear as to which JD I would like to request and require additional information to inform my decision.

By signing below, you are indicating that you have the authority, or are acting as the duly authorized agent of a person or entity with such authority, to and do hereby grant Corps personnel right of entry to legally access the site if needed to perform the JD. Your signature shall be an affirmation that you possess the requisite property rights to request a JD on the subject property.

*Signature: ____ _____ Date: 10-31-19

- Typed or printed name: John Lowenthal

Company name: Cardno

Address: 501 Butler Farm Road, Suite H

Hampton, VA 23666

Daytime phone no.: 757-594-1465

Email address: john.lowenthal@cardno-gs.com

***Authorities:** Rivers and Harbors Act, Section 10, 33 USC 403; Clean Water Act, Section 404, 33 USC 1344; Marine Protection, Research, and Sanctuaries Act, Section 103, 33 USC 1413; Regulatory Program of the U.S. Army Corps of Engineers; Final Rule for 33 CFR Parts 320-332.
Principal Purpose: The information that you provide will be used in evaluating your request to determine whether there are any aquatic resources within the project area subject to federal jurisdiction under the regulatory authorities referenced above.
Routine Uses: This information may be shared with the Department of Justice and other federal, state, and local government agencies, and the public, and may be made available as part of a public notice as required by federal law. Your name and property location where federal jurisdiction is to be determined will be included in the approved jurisdictional determination (AJD), which will be made available to the public on the District's website and on the Headquarters USACE website.
Disclosure: Submission of requested information is voluntary; however, if information is not provided, the request for an AJD cannot be evaluated nor can an AJD be issued.

Marine Corps Reserve Center
Camp Fretterd Military Reservation
Baltimore County, Maryland
Jurisdictional Wetland Delineation

October 2019

1.0 Introduction

The United States (U.S.) Marine Corps Forces Reserve (MARFORRES) proposes to construct and operate a Marine Corps Reserve Center (MCRC) at the Camp Fretterd Military Reservation (CFMR) located in Reisterstown, Baltimore County, Maryland.

The mission of MARFORRES is to augment and reinforce the active Marine forces in times of war, national emergencies, or contingency operations; provide personnel and operational tempo (i.e., rate of activity) relief for the active forces in peacetime; and to provide a service to the community. As such, regularly scheduled drill training is crucial. The primary purpose of drills is to provide individual and/or unit level readiness of active and inactive reservists thereby ensuring that they are equipped and trained to the same standards as the active Marine forces.

The Baltimore MCRC training center and combat vehicle maintenance shop are structurally deficient and unable to support current operational training requirements of the 4th Combat Engineer Battalion 4th Marine Division. Under the proposed project, a new MCRC would be constructed at CFMR that would provide the facilities necessary to support MARFORRES training requirements within the greater Baltimore area. Marine reservists that are currently assigned and trained at the Baltimore MCRC would be reassigned to the CFMR MCRC to meet their operational training requirements.

2.0 Study Area, Methods and Background

The study area is located on Rue Saint Lo Drive across the street from the Maryland Emergency Management Agency at 5401 Rue Saint Lo Drive, Reisterstown, Maryland. The 21.1 acre site is primarily agricultural fields (currently corn) and a planted grove of white pine trees on the southeast side (see Figure 1 Vicinity Map, Appendix A).

A jurisdictional wetland delineation was conducted on the study area to identify the limits of wetlands and waters of the U.S. subject to jurisdiction using the Corps of Engineers Wetland Delineation Manual (1987) and the 2010 Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Atlantic and Gulf Coastal Plain Region. The limits of wetlands and streams were flagged and the flags were located by handheld global positioning system surveying equipment (processed to sub meter accuracy). The delineation report includes mapping and other exhibits, data sheets and a site narrative.

Prior to the initiation of field activities, a data review was conducted of available resources to include U.S. Geological Survey (USGS), Soils, National Wetland Inventory (NWI), and Federal Emergency Management Agency (FEMA) Flood Zone mapping.

The study area drains to an un-named tributary to the Northern Branch of the Patapsco River (see Figure 2 USGS Map, Appendix A).

The soils mapped in the study area are primarily loams and silt loams of various slopes including Glenelg loam 3-8% and 8-15% slopes, Manor Channery loam 15-25% slopes, and Glenville silt loam 3-8% slopes. These soils are characterized as moderately deep to deep and moderately well drained to very well drained soils on shallow, moderate and steep slopes. Baile silt loam 3-8% is considered a hydric soil and is mapped at the north east corner of the study area (see Figure 3 Soils Map, Appendix A).

The NWI mapping did not identify any lakes, ponds, streams or wetlands in the study area (see Figure 4 NWI Map, Appendix A).

The FEMA Flood Zones mapping identified the site in the 500 year flood plain (see Figure 5 FEMA Map, Appendix A).

3.0 Results

The field effort was conducted on September 4-5, 2019. Two small drainages were identified carrying stormwater flowing north. A data point was installed in each drainage. Data point one exhibited non-wetland/upland conditions. Data point two exhibited wetland conditions.

The small potential wetland (Wetland A) is located at the northeast corner of the study area where a drainage way collects water in a depressional area at the bottom of the slope (see Figure 6 Study Area Map, Appendix A).

Wetland A (18,584 square feet in study area) would be classified as primarily Palustrine Emergent and is dominated by herbaceous species including cattails (*Typha angustifolia*), sedges (*Carex stricta*) and rush (*Juncus effuses*). Black Willow (*Salix nigra*) and red maple (*Acer rubrum*) trees start to encroach into the wetland at the northern limits of the study area.

No other wetland or streams were identified within the study area.

4.0 Corps of Engineers Confirmation

The report will be submitted to the Corps of Engineers Baltimore District, Regulatory Branch, Southern Maryland Section for confirmation of the limits of wetlands and waters of the U.S.

APPENDIX A

FIGURES

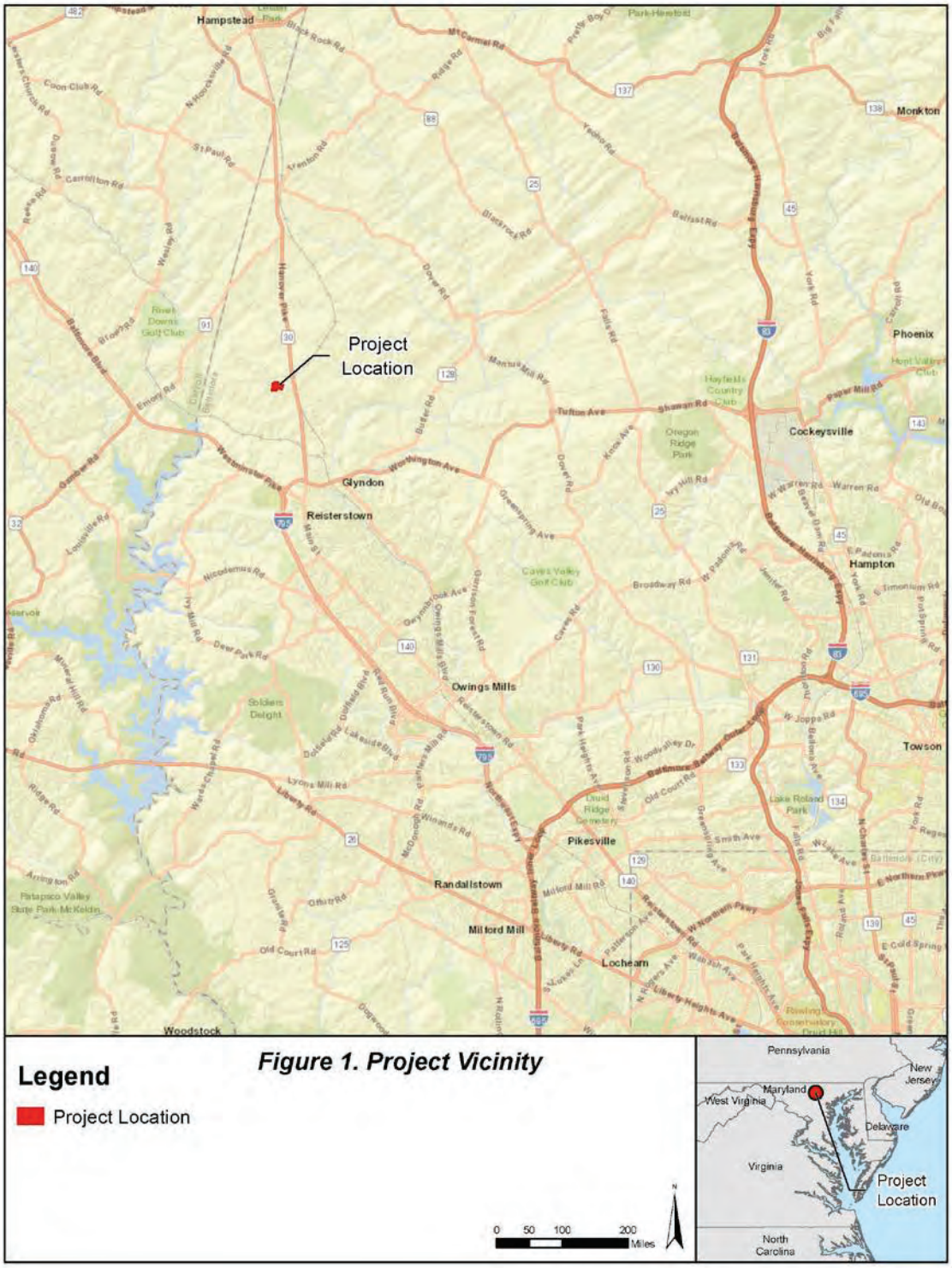

Figure 1. Project Vicinity

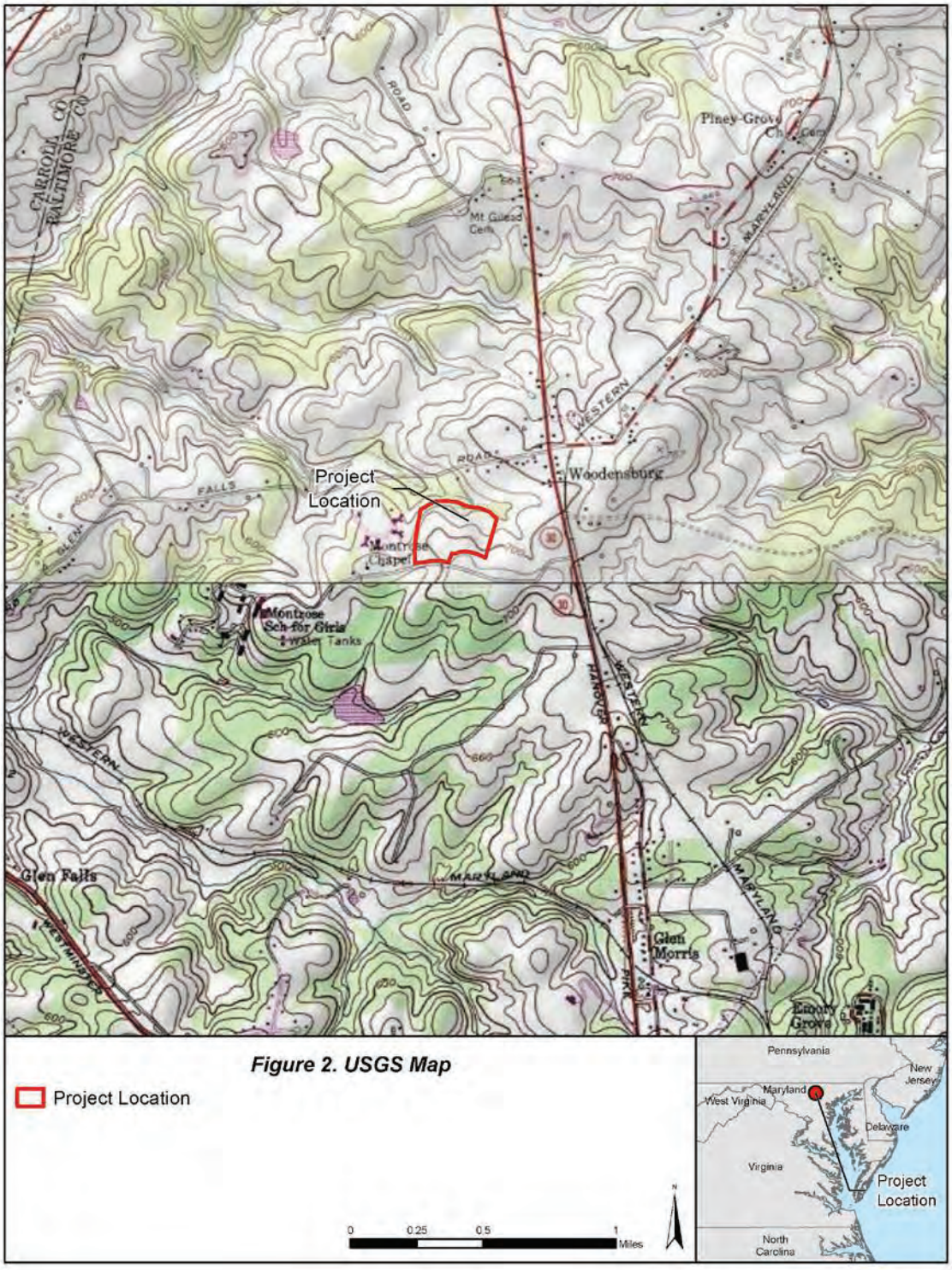

Figure 2. USGS Map

Project Location

Figure 3. Soils Map

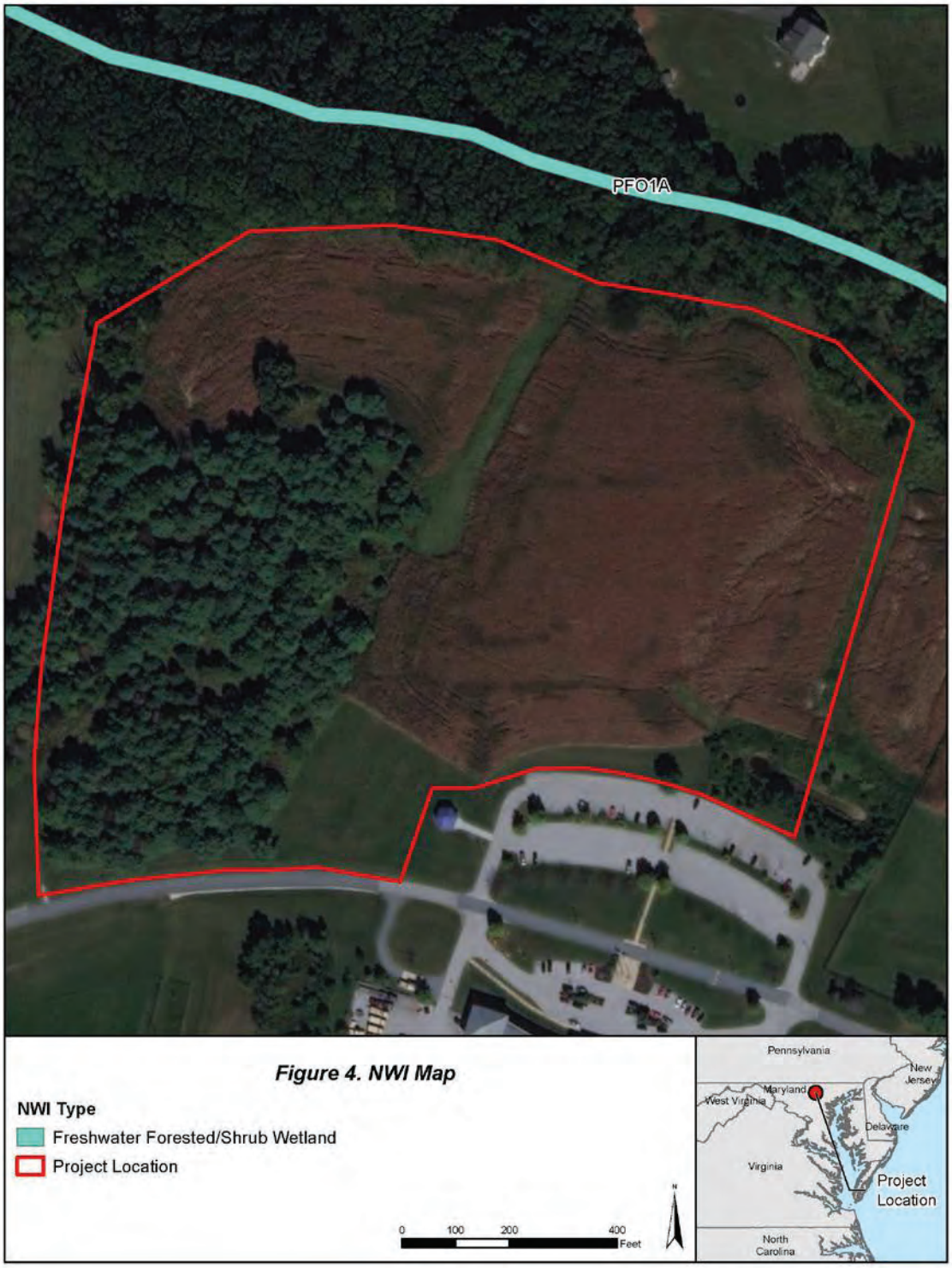
PFO1A
Figure 4. NWI Map
NWI Type
Freshwater Forested/Shrub Wetland
Project Location
0
100
200
400
Feet
N
Pennsylvania
New Jersey
Maryland
West Virginia
Delaware
Virginia
Project Location
North Carolina

Figure 5. FEMA Map

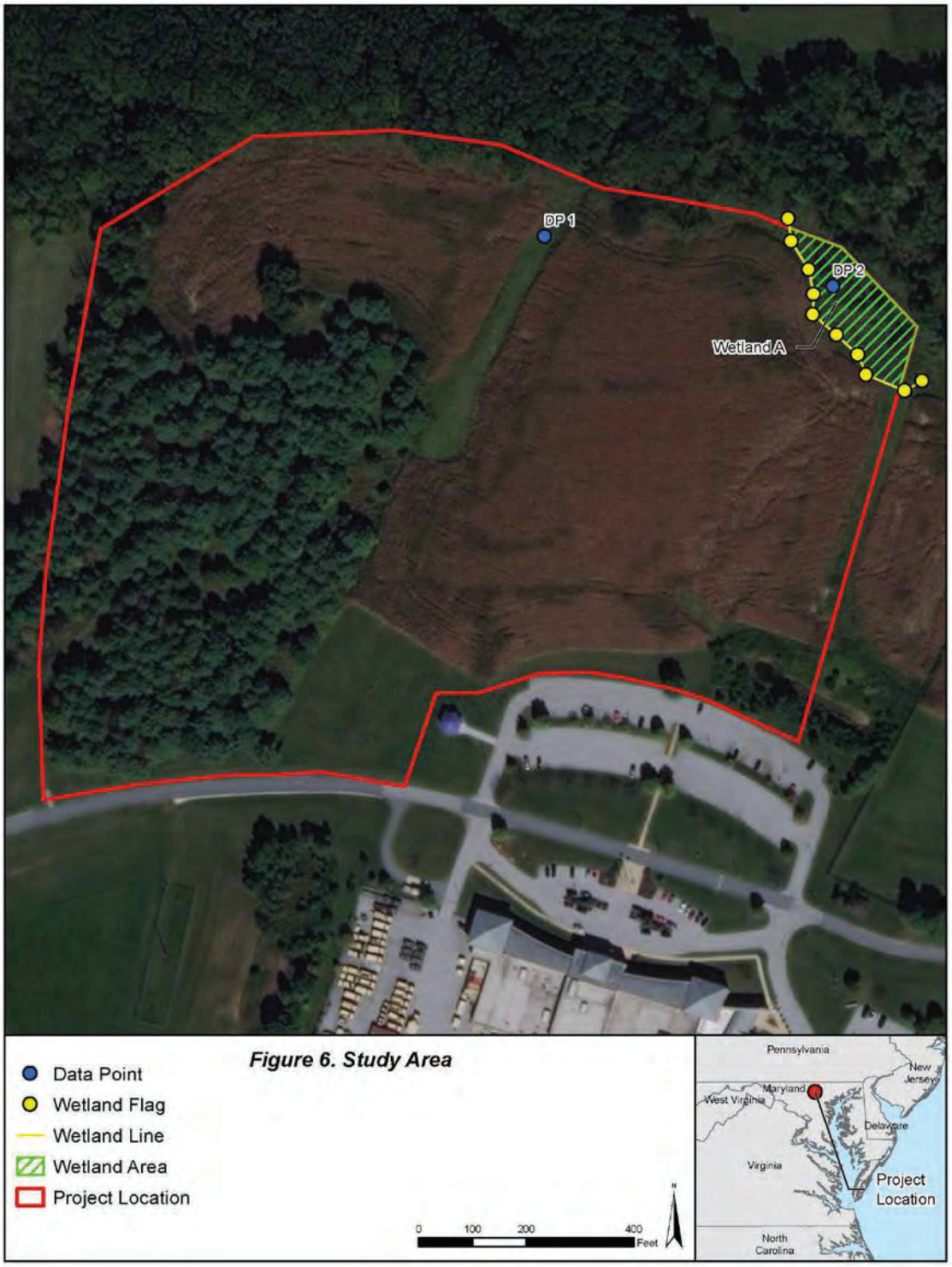

Figure 6. Study Area

APPENDIX B

DATA SHEETS

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: MARFORRES at Camp Fretterd City/County: Baltimore County Sampling Date: 9-4-19

Applicant/Owner: MARFORRES State: MD Sampling Point: DP1

Investigator(s): John Lowenthal and Michael Harrison Section, Township, Range: Reistertown

Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): _____ Slope (%): 5-10%

Subregion (LRR or MLRA): MLRA-149A Lat: 30 degrees 30'07.40" N Long: 76 Degrees 50' 16.71" W Datum: _____

Soil Map Unit Name: Glenville Silt Loam 3-8% slopes NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)

Are Vegetation N, Soil N, or Hydrology N significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

Are Vegetation N, Soil N, or Hydrology N naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____ No X	**Is the Sampled Area within a Wetland?** Yes _____ No X
Hydric Soil Present?	Yes _____ No X	
Wetland Hydrology Present?	Yes _____ No X	

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15) **(LRR U)**
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry-Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Sphagnum moss (D8) **(LRR T, U)**

Field Observations:

Surface Water Present?	Yes _____ No X	Depth (inches): _____
Water Table Present?	Yes _____ No X	Depth (inches): _____
Saturation Present? (includes capillary fringe)	Yes _____ No X	Depth (inches): _____

Wetland Hydrology Present? Yes _____ No N

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Drainage collecting runoff from agricultural field, no define bed and bank or other signs of hydrology.

VEGETATION (Four Strata) – Use scientific names of plants.

Sampling Point: DP1

Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status
1. None			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	= Total Cover		
50% of total cover:	20% of total cover:		
Sapling/Shrub Stratum (Plot size:)			
1. None			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	= Total Cover		
50% of total cover:	20% of total cover:		
Herb Stratum (Plot size:)			
1. Setaria faberi		y	FACU
2. Microstegium vimineum		y	FAC
3. Cersium arvense		y	FACU
4. Fescue sp.		y	FACU
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	= Total Cover		
50% of total cover:	20% of total cover:		
Woody Vine Stratum (Plot size:)			
1. none			
2.			
3.			
4.			
5.			
	= Total Cover		
50% of total cover:	20% of total cover:		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.25 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
OBL species	x 1 =	
FACW species	x 2 =	
FAC species	x 3 =	
FACU species	x 4 =	
UPL species	x 5 =	
Column Totals:	(A)	(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☐ 2 - Dominance Test is >50%
- ☐ 3 - Prevalence Index is ≤3.0[1]
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Four Vegetation Strata:

Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks: (If observed, list morphological adaptations below).

The drainage is located between 2 corn field and exhibits weedy species.

SOIL

Sampling Point: DP1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-14	2.5Y 5/4	100	None				loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Organic Bodies (A6) **(LRR P, T, U)**
- ☐ 5 cm Mucky Mineral (A7) **(LRR P, T, U)**
- ☐ Muck Presence (A8) **(LRR U)**
- ☐ 1 cm Muck (A9) **(LRR P, T)**
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Coast Prairie Redox (A16) **(MLRA 150A)**
- ☐ Sandy Mucky Mineral (S1) **(LRR O, S)**
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) **(LRR P, S, T, U)**
- ☐ Polyvalue Below Surface (S8) **(LRR S, T, U)**
- ☐ Thin Dark Surface (S9) **(LRR S, T, U)**
- ☐ Loamy Mucky Mineral (F1) **(LRR O)**
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Marl (F10) **(LRR U)**
- ☐ Depleted Ochric (F11) **(MLRA 151)**
- ☐ Iron-Manganese Masses (F12) **(LRR O, P, T)**
- ☐ Umbric Surface (F13) **(LRR P, T, U)**
- ☐ Delta Ochric (F17) **(MLRA 151)**
- ☐ Reduced Vertic (F18) **(MLRA 150A, 150B)**
- ☐ Piedmont Floodplain Soils (F19) **(MLRA 149A)**
- ☐ Anomalous Bright Loamy Soils (F20) **(MLRA 149A, 153C, 153D)**

Indicators for Problematic Hydric Soils[3]:

- ☐ 1 cm Muck (A9) **(LRR O)**
- ☐ 2 cm Muck (A10) **(LRR S)**
- ☐ Reduced Vertic (F18) **(outside MLRA 150A,B)**
- ☐ Piedmont Floodplain Soils (F19) **(LRR P, S, T)**
- ☐ Anomalous Bright Loamy Soils (F20) **(MLRA 153B)**
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: MARFORRES at Camp Fretterd City/County: Baltimore County Sampling Date: 9-4-19

Applicant/Owner: MARFORRES State: MD Sampling Point: DP2

Investigator(s): John Lowenthal and Michael Harrison Section, Township, Range: Reistertown

Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): _____ Slope (%): 0-5%

Subregion (LRR or MLRA): MLRA-149A Lat: 30 degrees 30'07.40" N Long: 76 Degrees 50' 16.71" W Datum: _____

Soil Map Unit Name: Baile Silt Loam 3-8% slopes NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)

Are Vegetation N, Soil N, or Hydrology N significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

Are Vegetation N, Soil N, or Hydrology N naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X No _____	**Is the Sampled Area within a Wetland?** Yes X No _____
Hydric Soil Present?	Yes X No _____	
Wetland Hydrology Present?	Yes X No _____	

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☑ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15) **(LRR U)**
- ☐ Hydrogen Sulfide Odor (C1)
- ☑ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry-Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Sphagnum moss (D8) **(LRR T, U)**

Field Observations:

Surface Water Present?	Yes _____	No X	Depth (inches): _____
Water Table Present?	Yes _____	No X	Depth (inches): _____
Saturation Present? (includes capillary fringe)	Yes X	No _____	Depth (inches): 2 in.

Wetland Hydrology Present? Yes _____ No N

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Drainage collecting runoff from agricultural field, topographic depression.

VEGETATION (Four Strata) – Use scientific names of plants.

Sampling Point: DP2

Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status
1. Salix nigra		Y	FACW
2. Acer rubrum		Y	FAC
3.			
4.			
5.			
6.			
7.			
8.			
	= Total Cover		
50% of total cover:	20% of total cover:		
Sapling/Shrub Stratum (Plot size:)			
1. None			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	= Total Cover		
50% of total cover:	20% of total cover:		
Herb Stratum (Plot size:)			
1. Typha angustifolia		Y	FACW
2. Juncus effusus		Y	FACW
3. Carex stricta		Y	OBL
4. Polygonum pennsylvanicum		Y	FACW
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	= Total Cover		
50% of total cover:	20% of total cover:		
Woody Vine Stratum (Plot size:)			
1. none			
2.			
3.			
4.			
5.			
	= Total Cover		
50% of total cover:	20% of total cover:		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 6 (A)

Total Number of Dominant Species Across All Strata: 6 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
OBL species	x 1 =	
FACW species	x 2 =	
FAC species	x 3 =	
FACU species	x 4 =	
UPL species	x 5 =	
Column Totals: (A)		(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☑ 2 - Dominance Test is >50%
- ☐ 3 - Prevalence Index is ≤3.0[1]
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Four Vegetation Strata:

Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes X No

Remarks: (If observed, list morphological adaptations below).

The drainage collects runoff from agricultural fields in a topographic depressal area.

SOIL

Sampling Point: DP2

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-14	2.5Y 4/1-2	90	2.5y 5/8	10	C	M	lsilt oam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
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- ☐ Organic Bodies (A6) **(LRR P, T, U)**
- ☐ 5 cm Mucky Mineral (A7) **(LRR P, T, U)**
- ☐ Muck Presence (A8) **(LRR U)**
- ☐ 1 cm Muck (A9) **(LRR P, T)**
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Coast Prairie Redox (A16) **(MLRA 150A)**
- ☐ Sandy Mucky Mineral (S1) **(LRR O, S)**
- ☐ Sandy Gleyed Matrix (S4)
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- ☐ Thin Dark Surface (S9) **(LRR S, T, U)**
- ☐ Loamy Mucky Mineral (F1) **(LRR O)**
- ☐ Loamy Gleyed Matrix (F2)
- ☑ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Marl (F10) **(LRR U)**
- ☐ Depleted Ochric (F11) **(MLRA 151)**
- ☐ Iron-Manganese Masses (F12) **(LRR O, P, T)**
- ☐ Umbric Surface (F13) **(LRR P, T, U)**
- ☐ Delta Ochric (F17) **(MLRA 151)**
- ☐ Reduced Vertic (F18) **(MLRA 150A, 150B)**
- ☑ Piedmont Floodplain Soils (F19) **(MLRA 149A)**
- ☐ Anomalous Bright Loamy Soils (F20) **(MLRA 149A, 153C, 153D)**

Indicators for Problematic Hydric Soils[3]:

- ☐ 1 cm Muck (A9) **(LRR O)**
- ☐ 2 cm Muck (A10) **(LRR S)**
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- ☐ Anomalous Bright Loamy Soils (F20) **(MLRA 153B)**
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: None

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:

Appendix D
Coastal Consistency Determination

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From: Heather Nelson -MDE-
To: Charee Hoffman; christopher.a.hurst@usmc.mil; Crouch CTR Diane E; Joseph Abe -DNR-
Subject: Re: Coastal Consistency - request for review
Date: Monday, November 2, 2020 3:55:29 PM

Good afternoon- Again, apologies for the delay. I am responding to the Coastal Consistency Determination request for the Marine Corps Forces Reserve (MARFORRES) project. MARFORRES is proposing to construct and operate an approximate 50,000 square foot Marine Corps Reserve Center (MCRC) at the Camp Fretterd Military Reservation (CFMR) in Reisterstown, Baltimore County, Maryland. The MCRC would be constructed within a designated 21-acre site at CFMR. Based on our review of the information provided, the above project is consistent with the enforceable coastal policies of the Maryland Coastal Zone Management Program to the maximum extent practicable. Please note that this determination does not obviate the applicant's responsibility to obtain any other State or local approvals that may be necessary for the project, including approvals and applicable requirements associated with the Forest Conservation Act.

On Wed, Aug 26, 2020 at 12:08 PM Charee Hoffman <Charee.Hoffman@cardno-gs.com> wrote:

> Hi Heather,
>
> I am a contractor assisting the Marine Corps Forces Reserve (MARFORRES) in the preparation of an environmental assessment (EA) and related documents. As such, I am submitting the attached Coastal Consistency request form and Coastal Consistency Determination on behalf of MARFORRES.
>
> MARFORRES is proposing to construct and operate an approximate 50,000 square foot Marine Corps Reserve Center (MCRC) at the Camp Fretterd Military Reservation (CFMR) in Reisterstown, Baltimore County, Maryland. The MCRC would be constructed within a designated 21-acre site at CFMR. MARFORRES has prepared an EA to evaluate the potential environmental impacts from the proposal to construct and operate the CFMR MCRC.
>
> A Coastal Consistency Determination has been completed and is attached to this email. Based upon data and analysis, and review and evaluation of Maryland's enforceable policies, MARFORRES finds that the proposed activities evaluated under the CFMR MCRC EA are consistent to the maximum extent practicable with the 19 enforceable policies of the

Maryland Coastal Resources Management Plan. MARFORRES is requesting concurrence of their determination.

I respectfully ask that the State's response be sent to:

Christopher Hurst, EA Project Manager
Marine Corps Forces Reserve

Building 1, Floor 2

Room 2W2140

New Orleans, Louisiana 70114

Email address: christopher.a.hurst@usmc.mil

Thank you,

Chareé

Charee Hoffman
SENIOR PROJECT MANAGER
CARDNO

Office (+1) 757-594-1465 Direct (+1) 757-690-2823
Address 501 Butler Farm Road, Suite H, Hampton, VA 23666
Email charee.hoffman@cardno-gs.com Web www.cardno.com

The health, wellbeing, and livelihoods of our people, families, clients, and communities is Cardno's key priority. Our teams are responding to COVID-19 with robust business continuity plans and we will continue to work closely with our people and clients to support them every day. *> LEARN MORE*

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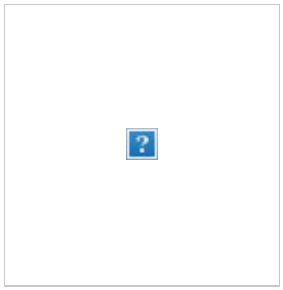
--

Because of the COVID-19 virus and the need for safety precautions, many state employees are working remotely.



Heather L. Nelson
Acting Program Manager
Wetlands and Waterways Program
Water and Science Administration
Maryland Department of the Environment
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Baltimore, Maryland 21230
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Website | Facebook | Twitter

Click here to complete a three question customer experience survey.

Click here to complete a three question customer experience survey.

COASTAL CONSISTENCY DETERMINATION
FOR THE
CAMP FRETTERED MILITARY RESERVATION
MARINE CORPS RESERVE CENTER
BALTIMORE COUNTY, MARYLAND

Introduction

The Marine Corps Forces Reserve (MARFORRES) has prepared an Environmental Assessment (EA) to evaluate the potential environmental impacts from the proposal to construct and operate a Marine Corps Reserve Center (MCRC) at the Camp Fretterd Military Reservation (CFMR) in Reisterstown, Baltimore County, Maryland. The CFMR MCRC EA was prepared in accordance with the requirements of the National Environmental Policy Act (NEPA), as implemented by the Council on Environmental Quality (CEQ) Regulations and Navy and Marine Corps regulations for implementing NEPA.

This document provides Maryland with MARFORRES's Consistency Determination under Section 307 of the Coastal Zone Management Act and Title 15 Code of Federal Regulations (CFR) Part 930, Subpart C, for implementation of the Proposed Action analyzed in the CFMR MCRC EA. The information in this Consistency Determination is provided pursuant to 15 CFR Section 930.39.

CFMR is located approximately 20 miles from the Chesapeake Bay and lies within Maryland's coastal zone. The Proposed Action would construct an approximate 50,000 square foot MCRC within a designated 21 acre site at CFMR. The MCRC would include an indoor armory and an outdoor covered weapons maintenance area, two parking areas would be constructed adjacent to and in front of the training center to accommodate up to 256 privately owned vehicles (POVs). An organizational parking area would be constructed behind the training center and adjacent to the vehicle maintenance facility. A covered, closed system vehicle wash platform and refueling station (comprised of an approximate 2,250 gallon aboveground tank filled with diesel/JP 8 fuel), would be located on the east edge of the organizational parking area. Two pads for placement of quadruple containers and hazardous storage and storage shed would be placed in the northeast corner of the site. Security fencing would be placed around the MCRC and a remotely controlled sliding gate would be installed to allow entry to the tactical vehicle parking area. Additional features of the MCRC include a site septic system, a concrete retaining wall, curbs, landscaping, and stormwater drainage. Fire suppression would be provided by an onsite aboveground water storage tank and pump house. The water storage tank and mechanical and electrical systems would be located within an enclosed utilities yard next to the training center. A natural gas powered backup generator would provide emergency backup power for the lift, pump and septic systems, lighting, and fire pump systems in the event of a power outage.

Effect to Resources

MARFORRES has determined that implementing the CFMR MCRC project as described in the EA would affect resources of Maryland in the following manner:

Air Quality – Potential for short term impacts to air quality during construction activities; criteria pollutant emissions would be less than significant. During the operational phase, vehicle emissions would be minimal and transient resulting in no significant impact to air quality or climate change.

Water Resources – Groundwater to the project site would be withdrawn via Permit Number BA1988G043 Expiration 10 31 2028; adherence to permit conditions would result in no significant impact. A Jurisdictional Wetland Delineation was conducted and confirmed by the U.S. Army Corps of

Engineers, Baltimore District. The wetland is located in the northeast corner of the 21 acre site; the project design includes a greater than 100 foot buffer around the wetland. Potential for minor, short term impacts to surface waters during construction; stormwater protection measures would be installed and no long term impacts anticipated. The project site is not located on or adjacent to 100 year or 500 year floodplains; as such, no impact to floodplains would occur.

Geological Resources – To accommodate an approximate 40 foot change in elevation from the high point to the low point and an approximately six percent slope at the site of proposed construction, grading would be required with retaining walls incorporated to help transition grades. Potential for short term impact to soils during the construction process; no long term impacts anticipated with installation of stormwater protection measures and best management practices.

Cultural Resources – No historic properties are located within the 21 acre site and no National Register of Historic Places eligible archaeological resources have been identified. MARFORRES consulted with the Maryland Historical Trust (MHT) in accordance with Section 106 of the National Historic Preservation Act. MHT concurred with the findings of MARFORRES that the proposed MCRC would result in no adverse effect on historic properties.

Biological Resources – Approximately 6 acres of pine grove would be removed representing a long term impact and the potential for removal of roosting habitat for protected bat species; however, large tracts of similar forest are nearby. Potential for minor, short term impacts to wildlife during construction; no short or long term impacts anticipated during operation of the MCRC. MARFORRES coordinated with the U.S. Fish and Wildlife Service and Maryland Department of Natural Resources regarding potential effects on federal and state listed species, respectively.

Infrastructure and Utilities – Potential for minor, short term disruption of utilities service connections during the construction phase. During the operational phase, potable water usage would be below daily permitted withdrawal levels. Wastewater treatment would be within permitted capacities.

Transportation – Potential impacts to traffic during construction would be short term in duration and would not be significant. Weekday traffic on the local area roads would increase slightly on a daily basis and would surge on drill weekends (representing less than 1 percent of the annual average daily volume of traffic); the long term impact would not be significant.

Cumulative Impacts – The resource identified as having the potential to experience minor short term adverse impacts by the cumulative effects of the Proposed Action is infrastructure and utilities from potable well water usage and waste water treatment. Potential impacts would occur if the permitted annual average flow capacity of 5,250 gallons per day of the existing waste water treatment systems was exceeded by operations at the Marine Corps Reserve Center.

Consistency Determination

Based upon the following information, data, and analysis, MARFORRES finds that the proposed activities evaluated under the CFMR MCRC EA are consistent to the maximum extent practicable with the 19 enforceable policies of the Maryland Coastal Resources Management Plan. The table below summarizes MARFORRES's analysis supporting this determination:

Maryland Policy	*Consistent?*	*Analysis*
General Policies		
Core Policies	Yes	The Proposed Action would be implemented utilizing best management practices (BMPs) adopted to reduce the environmental impacts of designated activities, functions, or processes. Low impact development would be incorporated as appropriate to minimize stormwater runoff and Maryland Department of the Environment low impact development guidelines requiring an approach of "quantity reduction and quality improvement" for stormwater runoff would be observed.
Water Quality	Yes	BMPs for controlling stormwater runoff would be incorporated into the MCRC facility design.
Flood Hazards	Yes	There are no 100 year or 500 year floodplains located within or adjacent to the project area.
Coastal Resources		
The Chesapeake and Atlantic Coastal Bays Critical Area	Yes	The Proposed Action would not occur near or affect the Chesapeake and Atlantic Coastal Bays Critical Area.
Tidal Wetlands	Yes	The Proposed Action would not affect tidal wetlands.
Non Tidal Wetlands	Yes	The Proposed Action would not affect non tidal wetlands.
Forests	Yes	Approximately 6 acres of the existing 9 acre pine grove would be cleared. However, if the site layout were to change and removal of the entire pine grove was required, a new buffer of trees would be replanted, as necessary, in keeping with the requirements of the Maryland Forest Conservation Act.
Historical and Archaeological Sites	Yes	No historical or archaeological sites are located in the area of the Proposed Action.
Living Aquatic Resources	Yes	The Proposed Action would not affect aquatic resources.
Coastal Uses		
Mineral Extraction	Yes	The Proposed Action would not involve mining activities.
Electrical Generation and Transmission	Yes	The Proposed Action would not involve the construction of a power plant or placement of transmission lines.
Tidal Shore Erosion Control	Yes	The Proposed Action would not be located near a beach or tidal shore.
Oil and Natural Gas Facilities	Yes	The Proposed Action would involve the use of an approximate 2,250 gallon aboveground storage tank filled with diesel/JP 8 fuel. BMPs to include leak detection of the fuel system and storage tank would be observed.
Dredging and Disposal of Dredged Material	Yes	The Proposed Action would not involve dredging or the disposal of dredged material.
Navigation	Yes	The Proposed Action would not be in proximity to navigable access points or channels.
Transportation	Yes	The Proposed Action would not alter access to or the use of Maryland's transportation systems or service.
Agriculture	Yes	The Proposed Action would not involve agricultural activity.
Development	Yes	The Proposed Action would use BMPs for to minimize soil erosion and transport. A National Pollutant Discharge Elimination System (NPDES) construction stormwater general permit would be obtained prior to any construction and a Stormwater Pollution Prevention Plan (SWPPP) would be prepared in accordance with the NPDES permit process.

Maryland Policy	*Consistent?*	*Analysis*
Sewage Treatment	Yes	Wastewater would be treated via connection to CFMR's wastewater treatment plant. This is a four stage membrane process which is designed to treat the permitted (State Ground Water Discharge) annual average flow capacity of 5,250 gallon per day. Treated wastewater would be discharged via absorption trenches to ground water of the state.

Pursuant to 15 CFR Section 930.41, the Maryland Coastal Resources Management Program has 60 days from the receipt of this letter in which to concur with or object to this Consistency Determination, or to request an extension under 15 CFR Section 930.41(b). Maryland's concurrence will be presumed if its response is not received by MARFORRES on the 60th day from receipt of this determination. The State's response should be sent to:

Christopher Hurst, EA Project Manager
Marine Corps Forces Reserve
Building 1, Floor 2
Room 2W2140
New Orleans, Louisiana 70114
Email address: christopher.a.hurst@usmc.mil

Coastal Consistency Request Form

This request document, under the authority of the Maryland Coastal Zone Management Program, initiates information sharing and state-federal-industry coordination to ensure projects or activities regulated under the Coastal Zone Management Act of 1972, as amended, and NOAA's Federal Consistency Regulations (15 C.F.R Part 930) are consistent to the maximum extent practicable with Maryland's enforceable policies. Federal agencies and other applicants for federal consistency are not required to use this form; it is provided to facilitate the submission and timely review of a Consistency Determination or Consistency Certification. In addition, federal agencies and applicants are only required to provide the information required by NOAA's Federal Consistency Regulations.

* Required

1. Name of Project or Activity * Camp Fretterd Military Reservation Marine Corps Reserve Center, F

2. Name of Person Submitting Request *

Chareé Hoffman (Cardno)

3. Federal Agency Contractor Name (if applicable)

4. Federal Agency *

Marine Corps Forces Reserve

5. County *

Baltimore County

6. Address *

501 Butler Farm Road, Suite

7. Email *

charee.hoffman@cardno-gs.c

8. Phone Number(s) *

757.594.1465

9. Please select the appropriate Federal Consistency Category: *Choose one**

- (●) **Federal Activity or Development Project (15 C.F.R. Part 930, Subpart C)**
- ( ) **Federal License or Permit Activity (15 C.F.R. Part 930, Subpart D)**
- ( ) **Outer Continental Shelf Plans: Exploration, Development & Production Activities (15 C.F.R. Part 930, Subpart E)**
- ( ) **Federal Financial Assistance to State & Local Governments (15 C.F.R. Part 930, Subpart F)**

10. Summary Description – Please describe the nature, areal extent and location of project or activity. Describe foreseeable effects on coastal resources and uses.

The Marine Corps Forces Reserve (MARFORRES) is proposing to construct and operate a Marine C

Coastal Consistency Request Form

11. Please select policy area checklists relevant to your project or activity:

Check all that apply:

- [x] **Core Policies (required for all projects and activities)**
- [ ] **The Chesapeake & Atlantic Coastal Bays Critical Area**
- [ ] **Tidal Wetlands**
- [x] **Forests**
- [ ] **Historical & Archaeological Site**
- [ ] **Living Aquatic Resources**
- [ ] **Mineral Extraction**
- [ ] **Electrical Generation & Transmission**
- [ ] **Tidal Shore Erosion**
- [ ] **Oil & Natural Gas Facilities**
- [ ] **Dredging & Disposal of Dredge Materials**
- [ ] **Navigation**
- [ ] **Transportation**
- [ ] **Agriculture**
- [x] **Development**
- [ ] **Sewage Treatment**

12. Supporting Documentation. Please list all maps, diagrams, reports, letters and other materials below:

A Coastal Consistency Determination for the subject project has been prepared and will be attached to

Appendix E
Section 106 Consultation

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Phase I Archaeological Survey

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UNITED STATES MARINE CORPS

MARINE FORCES RESERVE
2000 OPELOUSAS AVENUE
NEW ORLEANS, LOUISIANA 70114

RECEIVED
JAN 31 2020
By

F USMC

EJR/ ARA

IN REPLY REFER TO:
FAC
22 Jan 2020

From: United States Marine Corps Forces Reserve
Environmental and Energy Program Manager

To: Beth Cole
Administrator, Project Review and Compliance
Maryland Historical Trust
Maryland Department of Planning
100 Community Place
Crownsville, MD 21032

Subj: SECTION 106 COORDINATION FOR THE PROPOSED MARINE CORPS RESERVE CENTER, CAMP FRETTERED MILITARY RESERVATION, BALTIMORE COUNTY, MD

Encl: (1) PHASE I ARCHAEOLOGICAL SURVEY REPORT FOR U.S. MARINE CORPS FORCES RESERVE CENTER CAMP FRETTERD

Dear Ms. Cole:

The U.S. Marine Corps Marine Forces Reserve (MARFORRES) is proposing to construct and operate a Marine Corps Reserve Center (MCRC) within the perimeter of Camp Fretterd Military Reservation located northeast of Reisterstown, Maryland. The proposed MCRC will include a new training facility, a vehicle maintenance facility, a guard house, a storage shed, and privately owned vehicle and organizational parking areas.

In November 2019, a Phase I archaeological survey was performed by Cardno, Inc. The area of potential effects consists of approximately 21 acres on the north side of Rue Saint Lo Drive near the entrance to the Camp Fretterd Military Reservation from Maryland State Route 30. The 21-acre site includes wooded areas and leased farmland areas.

Based upon the results of this survey, MARFORRES has determined that the project will have no adverse effect on archaeological resources considered eligible or potentially eligible for listing in the National Register of Historic Places or Maryland Inventory of Historic Properties. MARFORRES invites you to concur with this finding in reply to this letter. MARFORRES requests review and comment on the report within 30 days after receipt. If you have any comments

HBE: 2nd ARA 3/3/2020 BA-3207
Archeo: IA BC 3/2/2020 A. I Ltr. No Sites Found

Subj: SECTION 106 COORDINATION FOR THE PROPOSED MARINE CORPS RESERVE CENTER, CAMP FRETTERED MILITARY RESERVATION, BALTIMORE COUNTY, MD

or questions pertaining to the report, please coordinate directly with our contractor identified below:

Steven Brann
Cardno
145 Limekiln Road, Suite 100
New Cumberland, PA 17070
717-547-6278
Steven.brann@cardno-gs.com

We appreciate your time and attention to this project.

Richard Godchaux
Environmental and Energy Program Manager
Marine Forces Reserve

MHT/MDSHPO concurs with USMC's determination of no adverse effect on historic properties, and accepts the archeology report as final.

The Maryland Historical Trust has determined that this undertaking will have no adverse effect on historic properties.

Beth Cole 3/3/2020
Date

cc: Steven Brann (Cardno)
Charles Hall (MHT)

Phase I Archaeological Survey Report

U.S. Marine Corps Forces Reserve Center Camp Fretterd

Baltimore County, Maryland

January 2020

Naval Facilities Engineering Command, Mid-Atlantic
9324 Virginia Avenue
Norfolk, VA 23511-3095

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Phase I Archaeological Survey Report

U.S. Marine Corps Forces Reserve Center Camp Fretterd

Baltimore County, Maryland

Prepared for:
Naval Facilities Engineering Command, Mid-Atlantic
9324 Virginia Ave.
Norfolk, VA 23511-3095

Prepared by:
Steven W. Brann, M.A., RPA
Katie Briscoe, M.A., M.S.
Cardno, Inc.
New Cumberland, Pennsylvania

January 2020

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ABSTRACT

Cardno, Inc. (Cardno), under contract to Naval Facilities Engineering Command, Mid-Atlantic, conducted a Phase I Archaeological Survey for the proposed construction of a new United States Marine Corps Forces Reserve (MARFORRES) Marine Corps Reserve Center (MCRC) at the Camp Fretterd Military Reservation (CFMR). The proposed site is within the Maryland Archaeological Research Unit 14, the Patapsco-Back-Middle Drainages. The purpose of the archaeological survey is to determine the presence or absence of potentially significant archaeological resources that may be located within the proposed project area.

The Area of Potential Effects (APE) for the Phase I Archaeological Survey consists of approximately 21 acres (8.5 hectares) on the north side of Rue Saint Lo Drive near the entrance to the CFMR from Maryland State Route 30 (Hanover Pike) that will be leased to MARFORRES. The proposed MCRC will include a new training facility, a vehicle maintenance facility, a guard house, a storage shed, and privately owned vehicle and organizational parking areas.

A total of 345 shovel test pits (STPs) were excavated in the proposed APE. One artifact, a porcelain sherd, was recovered in the northeast corner of the survey area. Radial STPs were excavated around the sherd and produced no additional artifacts. The soils in the area where the sherd was found appear to have been brought onto the area as fill and therefore the sherd is not likely in its original location. Because of the disturbed nature of the soils, the limited research value of the sherd, and the lack of additional artifacts, the sherd was discarded in Cardno's laboratory following consultation with Maryland Historical Trust reviewers.

The proposed MCRC will have no adverse effect on archaeological resources considered eligible or potentially eligible for listing in the National Register of Historic Places or Maryland Inventory of Historic Properties, and Cardno recommends no additional archaeological investigations for this project.

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ACRONYMS AND ABBREVIATIONS

APE	Area of Potential Effects
B.P.	Before Present
CFMR	Camp Fretterd Military Reservation
CFR	Code of Federal Regulation
ft	feet
m	meters
MARFORRES	Marine Corps Forces Reserve
MCRC	Marine Corps Reserve Center
MD	Maryland
MDARNG	Maryland Army National Guard
MEMA	Maryland Emergency Management Agency
MHRSP	Maryland Historical Records Survey Project
MHT	Maryland Historical Trust
MIHP	Maryland Inventory of Historic Properties
NAVFAC MIDLANT	Naval Engineering Command Mid-Atlantic
NRHP	National Register of Historic Places
POV	Privately Owned Vehicle
STP(s)	Shovel Test Pit(s)
U.S.	United States
USACE	U.S. Army Corps of Engineers
USDA	U.S. Department of Agriculture

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1.0 INTRODUCTION

In November 2019, under contract to Naval Facilities Engineering Command, Mid-Atlantic (NAVFAC MIDLANT), Cardno, Inc. (Cardno), conducted a Phase I Archaeological Survey for the proposed construction of a new United States (U.S.) Marine Corps Forces Reserve (MARFORRES) Marine Corp Reserve Center (MCRC) at the Camp Fretterd Military Reservation (CFMR) located northeast of Reisterstown, Maryland. The purpose of the investigation was to locate archaeological properties or resources that may be eligible for listing in the National Register of Historic Places (NRHP) or the Maryland Inventory of Historic Properties (MIHP).

The Area of Potential Effects (APE) for the Phase I Archaeological Survey consists of approximately 21 acres (8.5 hectares) on the north side of Rue Saint Lo Drive near the entrance to the CFMR from Maryland State Route 30 (Hanover Pike) that will be leased to MARFORRES. The proposed MCRC will include a new training facility, a vehicle maintenance facility, a guard house, a storage shed, and privately owned vehicle (POV) and organizational parking areas.

Phase I investigations were conducted in accordance with Section 106 of the National Historic Preservation Act, as amended, and its implementing regulations, 36 Code of Federal Regulations (CFR) 800: Protection of Historic Properties, the Archaeological and Historic Preservation Act of 1974, and the Maryland Historical Trust's (MHT) *Standards and Guidelines for Archaeological Investigations in Maryland* (Schaffer and Cole 1994). The work was conducted by Cardno staff members who meet the *Secretary of Interior's Professional Qualifications Standards for Archaeology* published in 36 CFR 61, Appendix A. Steven Brann, M.A., RPA, served as the Principal Investigator and Field Director (Appendix A). Field technicians included Katie Briscoe, M.A., M.S., Steven Gatski, and Ariel Kegel.

2.0 PROJECT DESCRIPTION AND SETTINGS

The proposed location of MCRC Camp Fretterd includes 21 acres located in Baltimore County, Maryland, approximately 2.25 miles north of Reisterstown, Maryland and 20 miles northwest of the city of Baltimore (Figure 1). The project area is located within the perimeter fence for the CFMR and includes wooded areas as well as areas that are currently being leased for use as farmland (Figure 2; Plates 1 through 3). Several manmade drainage ditches flow north from the POV parking area adjacent to Rue Saint Lo Drive (Plate 4). The proposed site is located within the Maryland Archaeological Research Unit 14, Patapsco-Back-Middle Drainages (Figure 3).

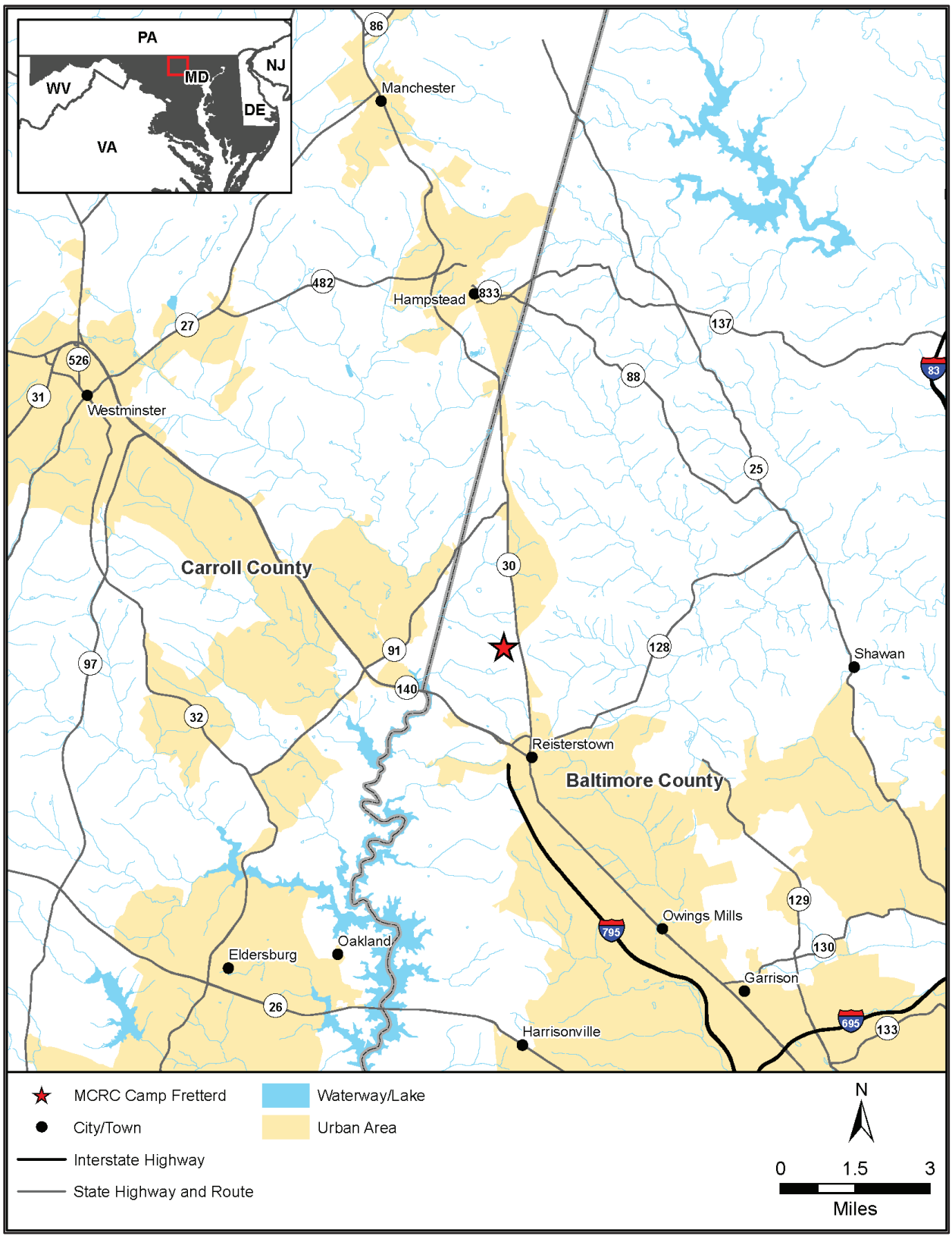


Figure 1. Location of Proposed MCRC Camp Fretterd

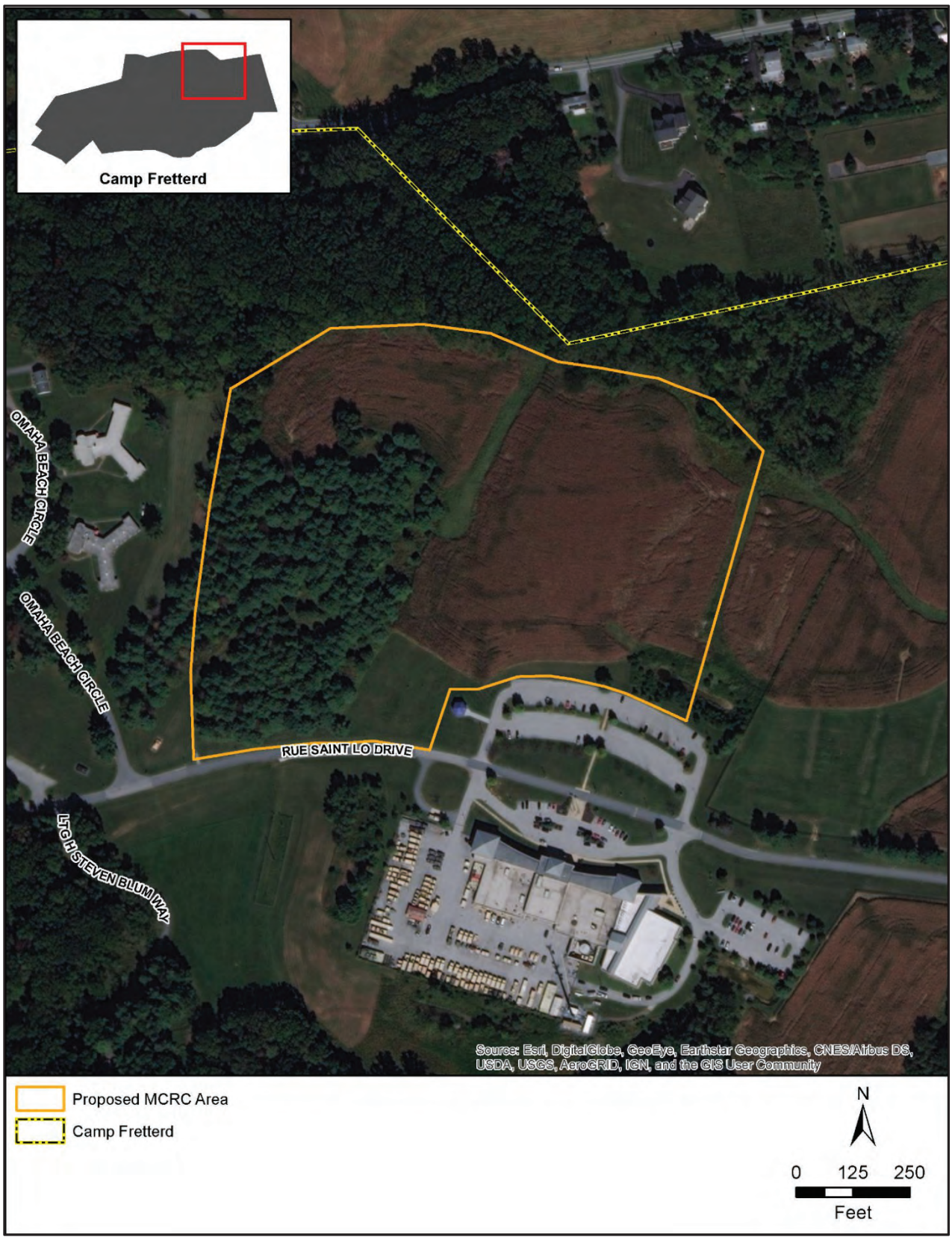


Figure 2. Aerial Image Showing Proposed MCRC Camp Fretterd Project Area

Plate 1. Pine Trees in West Portion of MCRC Camp Fretterd APE, Facing South

Plate 2. Hardwoods along North Boundary of Proposed MCRC Camp Fretterd, Facing South

Plate 3. Leased Agricultural Field in East Half of Proposed MCRC Camp Fretterd, Facing West

Plate 4. Manmade Drainage Ditch from Detention Pond, Facing South

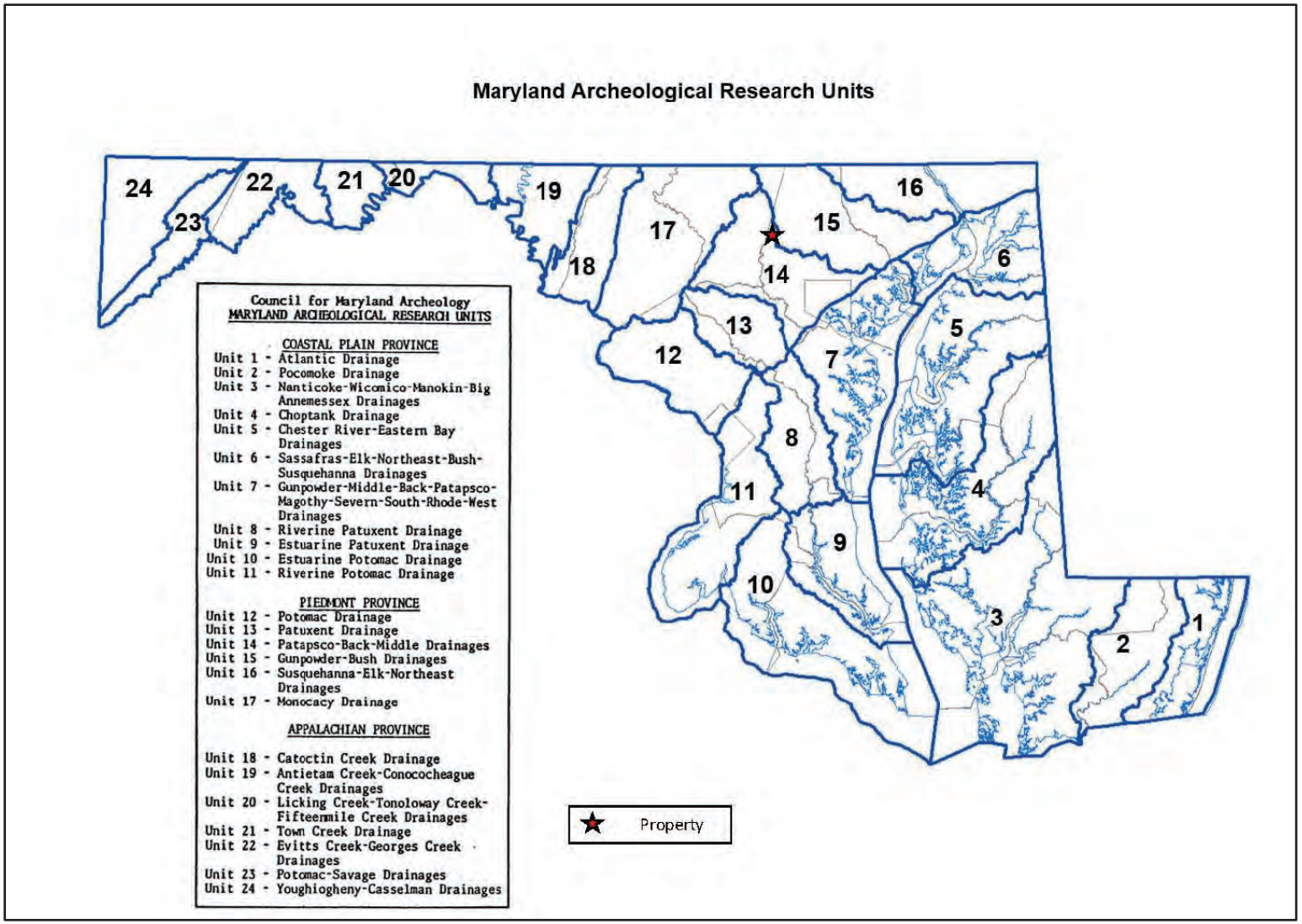


Figure 3. Location of Project APE within the Maryland Archaeological Research Units

3.0 RESEARCH DESIGN

3.1 Objectives

The objectives of the Phase I Archaeological Survey were to locate archaeological properties, sites, or resources within the APE that may be eligible for listing in the NRHP or the MIHP. In the event that such properties were located, Phase II field and archival research would be directed toward:

- Defining the horizontal and vertical limits of the site(s).
- Interpreting the site(s) in terms of activities, functions, chronology, and context.
- Investigating research issues that would provide information on the site(s) regional significance.

3.2 Shovel Test Pits

Phase I investigations focused on identifying the presence or absence of archaeological sites within the APE. Fieldwork for the Phase I Archaeological Survey consisted of subsurface testing through the use of shovel test pits (STPs). STPs were excavated in transects at 15 meters (m) (50 feet [ft]) testing intervals across the proposed site. Each STP measured 35 centimeters (14 inches) in diameter and was excavated no deeper than a maximum of 1 m (3.2 ft). Excavated soil was screened through ¼-inch hardware cloth. Where feasible, STPs were excavated following discernible stratigraphic levels. Recovered artifacts were collected and bagged separately by STP and excavation level. Artifacts less than 50 years old were noted in the field and discarded.

A description of each STP was recorded in the field. The description included the location of the STP within the APE and information pertaining to the local terrain. In addition, information about the color, texture, composition, and thickness of soil strata were recorded, and the presence or absence of cultural materials and/or features was indicated. After excavation and recordation, each STP was filled. The location of each STP was recorded using a Trimble Geo 7X handheld GPS unit with sub-meter post-processing accuracy.

Where cultural materials were recovered from an STP, additional STPs were excavated at 7.5 m (15 ft) intervals around the original STP in each radial direction. These radials were excavated to attempt to determine site boundaries or if the find was isolated in nature.

3.3 Laboratory Methods

Only one historic artifact, a porcelain sherd, was collected during the Phase I Archaeological Survey. In the lab, the historic ceramic was washed and characterized by paste, glaze, and decoration. Vessel function was inferred, based on vessel shape and size.

No other historic or Pre-Contact artifacts were collected during the field investigation. Modern objects resulting from recent discard were noted in the field, but not collected or analyzed in a laboratory setting.

3.4 Background Research Methods

Background research was undertaken for the project prior to commencement of fieldwork. The purpose of the research was to develop detailed cultural and environmental contexts for the project area. The research included review of archaeological files located at the MHT, archaeological journals, and previously submitted cultural resource reports. Relevant information on the environment was also examined, including topographic and geological maps, soil surveys, and data on climate, hydrology, and flora and fauna. Historic

maps and historic U.S. Geological Survey maps were consulted in order to determine former land use patterns.

4.0 ENVIRONMENTAL CONTEXT

4.1 Physiography

MCRC Camp Fretterd is located in the Piedmont Upland Section of the Piedmont Plateau Physiographic Province. The Piedmont Plateau roughly cuts the state in half, extending into Pennsylvania to the north and Virginia to the south, with the Blue Ridge Province to the west and the Atlantic Coastal Plain Province to the east. The Piedmont Plateau Section varies in elevation from 190 ft (58 m) above mean sea level (amsl) to over 1,100 ft(335 m) amsl. The section is made up of rolling hills cut by steep-sided valleys and gorges and it is primarily underlain by coarse grained quartz schists and finer grained mafic schists (Reger and Cleaves 2008).

Elevations within the APE range from over 700 ft (213 m) amsl in the southeast, near the existing parking lot, down to approximately 660 ft (201 m) amsl in the northwest corner near the small unnamed tributary.

4.2 Drainage

The APE is located within the Eastern Piedmont Metasedimentary Rocks and is underlain by Upper Cambrian to Lower Odovicaian rocks of the Wissahickon Formation (formerly believed to be Precambrian). The Wissahickon group has been broken up into subdivisions that consist of various schists, metagraywacke, metaconglomerate, and various types of gneiss (Maryland Geological Survey 2019). The surficial rock observed throughout the survey area during field investigations was primarily micaceous schist with smaller amounts of quartz and quartz schist.

4.3 Soils

Soils identified by the U.S. Department of Agriculture (USDA) Web Soil Survey in the APE are primarily Glenelg loams found on 3 to 8 percent slopes (GdB) and 8 to 15 percent slopes (GdC). Other soils found in the study area include Manor Chanery Loam found on 15 to 25 percent slopes (MbD), Glenville silt loam found on 2 to 8 percent slopes (GhB), and Baile silt loam found on 3 to 8 percent slopes (BaB) (USDA 2019). Table 1 lists the soils identified in the APE and provides a brief description.

Glenelg soils are described as well drained soils that are found on slopes and hilltops (or interfluves). Both Glenelg soils found in the study area are well suited to farming and are considered prime farmland or farmland of statewide importance. Their parent material is residuum weathered from mica schist and mica fragments can be found throughout the soil column (USDA 2019; Reybold and Matthews 1976).

Table 1. Soil Type Located in the APE

Soil Type	Description
Baile silt loam, 3 to 8 percent slopes (BaB)	Soils are not prime farmland. They are poorly drained and considered hydric soils.
Glenelg loam, 3 to 8 percent slopes (GdB)	Soils are prime farmland found on hillslopes, shoulders, side slopes. These soils are formed from residuum weathered from mica schist.
Glenelg loam, 8 to 15 percent slopes (GdC)	These are soils of statewide importance. They are deep, well drained, and found on hill shoulders and side slopes.
Glenville silt loam, 3 to 8 percent slopes (GhB)	Glenville soils are deep, well drained soils considered prime farmland. They are typically located on drainages and at the base of slope. They have a parent material of metamorphic rock over schist, gneiss, or phyllite residuum.
Manor channery loam, 15 to 25 percent slopes (MdD)	These soils are not considered prime farmland and are typically found on side slopes and shoulders of ridges. These soils are formed from loamy residuum derived from phyllite and/or schist.
Urban land-Udorthents complex, 0 to 8 percent (UuB)	Soils that have been cut away or covered in fill by construction or other non-farm uses.

5.0 CULTURAL CONTEXT

5.1 Results of Background Research

A review of the Maryland Archaeological Site Survey archaeological site files using the MHT's Medusa Cultural Resources Information System website indicated that no previously identified archaeological sites were present within the APE (MHT 2019).

A search of Medusa was performed on September 30, 2019. The study area for the search covered a 2 mile radius around the proposed MCRC Camp Fretterd. No previously recorded archaeological sites were identified within the APE. The records search identified two archaeological sites within 2 miles of the proposed location of MCRC Camp Fretterd; one site is identified as Pre-Contact and one is identified as Historic. None of the sites identified in the records search have been determined to be eligible for listing in the NRHP. The archaeological sites within 2 miles of the APE are detailed in Table 2.

The Medusa search showed that two previous investigations have taken place in the search area. The previous archaeological surveys in the 2 mile study area are described in Table 3.

The archaeological sites identified during the Medusa website search are located in topographic settings similar to that of the MCRC Camp Fretterd project area (hillslope, knoll, or terrace, near a water source). Additionally, portions of the study area are located in areas that are identified in the CFMR Sensitivity Model as having a high potential for Pre-Contact archaeological sites and there are areas of high potential that are adjacent to the access road (USACE 2007) (see Section 6.0).

Table 2. Archaeological Sites within Two Miles of the Proposed MCRC Camp Fretterd

Site#	Site Name	Site Type	NRHP Status
18BA0073	Glyndon	Late Archaic and Middle & Late Woodland short-term camps, possible base camp	Not Evaluated
18CR0241	Heise #274	19th century artifact concentration	Not Evaluated

In addition to the recorded archaeological sites, two archaeological surveys have been conducted within 2 miles the APE. These surveys are listed in Table 3.

Table 3. Previous Archaeological Surveys within Two Miles of the Proposed MCRC Camp Fretterd

Report #	Title	Author	Report Date	Type of Report
BA9A	Archeological Survey of the Northwest Transportation Corridor, Baltimore County, Maryland	Wayne E. Clark	1973	Phase I
MD1V3	The Maryland Department of Transportation Archaeological Resources Survey, Volume 3: Piedmont	Kit W. Wesler, Dennis J. Pogue, Aileen F. Button, Gordon J. Fine, Patricia A. Sternheimer, and E. Glyn Furgurson	1981	Phase I

5.2 Prehistoric Context

5.2.1 Paleoindian Period (11000-8000 B.C.)

Evidence for the earliest human occupation of North America is generally believed to have occurred with the Clovis peoples approximately 14,000 Before Present (B.P.) although indications of older, pre-Clovis occupations have been advanced in recent years. Meadowcroft Rockshelter in western Pennsylvania and other related sites in the Cross Creek drainage, as well as Cactus Hill in Virginia, have produced radiocarbon dates with ages of greater than 15,000 years B.P. (Adovasio 1993; Adovasio et.al. 1978, 1990, 1992; McAvoy and McAvoy 1997). Support for these dates is still considered controversial (Haynes 1980) and the Paleoindian Period is most generally regarded as being established by 13,000 years ago and as lasting until approximately 10,000 years ago. During this period, the slow warming of the environment and the gradual retreat of the glaciers caused an increase in the types and ranges of vegetation as well as animal species.

This period is distinguished by small groups of mobile hunter-gatherer people and the presence of sites with fluted Clovis projectile points. These lanceolate-shaped, basally-thinned points are found across the northeastern U.S. in association with plant and animal remains that suggest a variety of resources were

being utilized by these peoples (Funk 1967; Adovasio 1978 Gardner 1974, 1978). These types of points were found embedded in the ribs of an extinct form of bison (*Bison Antiquus)* near Folsom, New Mexico in the 1920s (Figgins 1927) and with mammoth remains at the Dent site in Colorado (Figgins 1933). These discoveries helped to provide direct evidence of human occupation in North America during the Late Pleistocene (Figgins 1927).

In the Delaware River Valley, the Shawnee Minisink site has been extensively studied. Carbonized plant remains including chenopod, blackberry, grape, hawthorn, goosefoot, plum, and hackberry have been found there, indicating a reliance on plant products (Dent and Kauffman 1985). Miller et al. (2007) notes that big game animals may have been a more important part of the Paleo-Indian diet than in later periods due to the more limited regional distribution of deciduous food-bearing species in the early Holocene, although evidence of small-game in the diet is also supported (Kauffman and Dent 1982).

Evidence of occupation in the Paleoindian Period is strong in the eastern U.S., represented by a number of large sites and surface finds of fluted spear points. Gardner (1976) indicates a number of different Paleoindian site types including quarry sites, quarry reduction stations, base camps, base camp maintenance stations, food procurement sites, and isolated point finds. Sites include single or multiple visit locations on upland ridge tops, such as the Shoop Site (Witthoft 1952) or the Flint Run Paleo-Complex excavated by Gardner (1974) and Carr (1975), as well as sites along floodplains, such as along the Susquehanna River and its major tributaries (Kinsey 1958). At the stratified Wallis Site, 36PE016, near Liverpool, Pennsylvania, Clovis and Crowfield points were recovered from a deposit dating to 10,280 +/- 100 B.P. (Miller et al. 2007). Anderson (1995) puts forth the argument that the earliest settlements occurred along major rivers and that the regional limits of certain floral species, and thus limited foraging ranges, lead to the creation of “subregional cultural traditions”. The predominance of sites near sources of high-quality lithic materials, such as chert or jasper, indicates the importance of these resources to the Paleo peoples. Gardner (1983) notes the distribution of Paleoindian sites near sources of high-quality lithic materials as a prerequisite for occupation of those areas.

The initial occupation of Maryland during the Paleoindian Period is evident in fluted point finds along the Potomac River and from the Coastal Plain. Evidence for the Paleoindian occupation of Maryland comes from over one hundred isolated stone tool finds, and a small number of recorded stratified sites (Read 1998). In Anne Arundel County, Ebright (1992) describes two quartz fluted basal fragments and three chert unifacial scrapers recovered from an undisturbed context at the Higgins site (18AN489). However, Wesler et al. (1981) cautioned that evidence of the period may be missing from certain environmental settings due to post-glacial sea level rise that might have submerged any potential occupied areas on the lower reaches of the Susquehanna River and the Atlantic coast (Kraft 1970).

5.2.2 Early Archaic Period (8000-6500 B.C.)

The Early Archaic Period is considered to be a continuation of the Paleoindian Period due to similarities in the lifestyles and technologies of the two time periods. The peoples of this period remained mobile hunter-gatherers and continued the use of high-quality local lithic materials for their tools (Gardner 1974). However, changes are apparent in the types of projectile points being used. Fluted points were being replaced by notched, stemmed, or serrated points, such as Kirk and Palmer types, that could potentially have been hafted for use with spear-throwers or detachable wooden foreshafts. This technological change may have reflected the environmental changes from more open grassland areas to pine and deciduous forests that occurred near the beginning of this period (Carbone 1976). As these changes occurred in the

environment, larger herd animals formerly found on the grasslands died off and were replaced with more dispersed solitary species, such as the white-tailed deer. Other points, including Warren, Kessel, Big Sandy, St. Albans, Kanawha, and LeCroy were also utilized during the Early Archaic and into the Middle Archaic Period.

The appearance of additional tools, such as stone celts used for woodworking, net sinkers, and nut and seed grinding stones may indicate a greater exploitation of the environment during this period. New tool types in the Early Archaic are represented by drills and perforators from Shawnee Minisink (McNett 1985) and utilized and retouched flakes, stone drills, adzes, and axes from the Fifty Site (Carr 1992; Gardner 1989). An increase has been noted in the variety of lithic materials contrasted to the Paleoindian Period, as is apparent in the use of rhyolite in the Susquehanna Valley. At Site 36PE16, located along the Susquehanna River, Early and Middle Archaic deposits yielded a tool assemblage of diverse materials and types. Microwear analysis on these assemblages revealed activities related to short-term camp occupations, including hide processing, wood and bone working, and butchery (Miller and Bibler 2003).

New site types, including food processing sites and sites located in a variety of settings and an increase in the number and types of plant and animal species utilized, are indicators of these new subsistence patterns (Gardner 1974; Meltzer and Smith 1986). Blackberry, cherry, ground cherry, grape, and pokeberry have been recovered from Early Archaic deposits at the Shawnee Minisink site in the Upper Delaware Valley (Dent and Kauffman 1985). Plants such as chenopodium, smartweed, amaranth, and possibly buckbean and acalypha also may have been collected by Early Archaic people.

Cultural changes from the Paleoindian Period include larger social group populations, increased sedentism (i.e., longer camp stays), and an increase in the number of activities taking place in camp (Gardner 1974). Stewart (1989a) interprets broad settlement patterns in the Hagerstown Valley of Maryland as suggesting a refocusing of hunter-gatherer strategies on new species during the Early Archaic. Meltzer and Smith (1986) cite an increase in the number of plant and animal species utilized, as well as the addition of less desirable resources such as riverine species. Such a pattern of changing strategies would be expected given the gradual yet significant changes in the environment throughout the period.

5.2.3 Middle Archaic Period (6800-3000 B.C.)

The Middle Archaic Period was characterized by the onset of the Atlantic climatic episode, which was warmer and drier than the climate of today. This climate change contributed to the spread of deciduous plants and trees with marked seasonal availability of fruits and nuts that could be utilized by Middle Archaic populations. Vegetation in the area was characterized by an oak-hemlock-hickory forest with deer becoming a dominant mammal. An increase in the human population and change in subsistence patterns is revealed in the number and diversity of site types. Although base camp sites were still generally located on floodplains of major drainages, an expansion into areas not previously utilized such as upland swamps and interior ridgetops (Gardner 1987), springheads (Stewart 1989a), ponds, and marshes is marked. In the Monocacy Valley, settlement patterns appear to have moved away from major water sources to the valley interior and smaller tributaries of the Monocacy River, indicating a resource base of greater magnitude and the development of a lifestyle based on foraging (Kavanagh 1982). An increase in the importance of plant materials and a variation of the diet can be seen in the addition of grinding stones, mortars and pestles, and mullers to the toolkit.

Another change in subsistence patterning is the use of more locally available lithic resources as opposed to the use of exotic materials in the Paleoindian and Early Archaic Periods. Kavanagh (1982) notes the high

use of locally available rhyolite in the manufacture of points recovered from the Monocacy Valley. A greater use of expedient tools instead of well-produced and curated tools of earlier periods is noted in the Middle Archaic Period (Gardner 1989); however, a greater number of specialized technologies is also evident in the variety of tool types being produced (Stewart and Cavallo 1991). The development of woodworking tools such as axes and adzes, and the use of netsinkers and atlatl weights for hunting and fishing indicate the importance of these subsistence activities.

Middle Archaic points include bifurcate base types such as LeCroy, St. Albans, and Kanawha as well as Morrow Mountain, Guilford, and to a lesser extent, Stanly points (Broyles 1971; Coe 1964; Ebright 1992). A LeCroy component was reported at the Higgins site in Anne Arundel County in association with hearth features. Groundstone tools including three pestles and a mano were recovered (Ebright 1992). Brewerton side and eared notched points appear near the end of the Middle Archaic Period.

5.2.4 Late Archaic Period (3000-1000 B.C.)

Significant changes in subsistence and settlement patterns as well as projectile point technology mark the Late Archaic Period. An increase in the number of sites as compared with earlier periods may be related to population increase. A consequence of this population increase would have been a decrease in foraging territory available to each band. In consequence, the continuing increase in the number and types of lithic materials utilized during this period suggests a greater dependence on locally available lithic materials (Kinsey 1971; Snethkamp et al. 1981).

Sites of this period are found in a variety of topographical settings, indicating a shift in settlement patterns. Rather than moving from resource to resource on a frequent basis, populations would have established base camps in productive areas and made logistical forays to procure specific, localized resources (Binford 1980; Custer and Wallace 1982). Site types may have included spring and summer camps for fishing and hunting in riverine settings and fall and winter camps in the Piedmont's uplands, hills, and valleys based on the procurement of bear, deer, and turkeys. These site types would have been located to assure the greatest return of high-quality food resources. Special purpose camps based on nut gathering, plant processing, and other procurement activities would result. Dietary data from the northeastern U.S. suggest that populations added wild seeds to their diet late in the Archaic Period and began selecting for larger seeds to increase the resource base. Researchers such as Custer (1984a) and Gardner (1979) argue that a decreased rate in the rise of sea level fostered the development of stable riverine and estuarine environments capable of supporting large populations of shellfish and anadromous fish.

Two examples of large base camps in the Piedmont include the Webb Site and the Minguannan Sites (Custer 1988; Custer and Wallace 1982). Such sites tend to be located near sinkhole complexes or swampy floodplains. Custer (1984b) concludes that the presence of these sites in the central Middle Atlantic region, some of which include pit houses, appears to represent a substantial increase in sedentism. Storage and processing facilities such as pits, ceramics, and platform hearths also indicate a less mobile lifestyle (Catlin et al. 1982). Specialized tool forms, including ground stone for plant food processing and woodworking, are found on these sites, representing technological adaptations to a more diverse resource base.

Diagnostic artifacts of the period included several types of broad bladed points such as the Savannah River, Halifax, and Susquehanna and Perkiomen Broadspear. The use of steatite vessels for cooking also became widespread. Several locally known outcrops of serpentine, known to contain veins of soapstone, are located in the immediate area of the proposed site (Brown 1980).

5.2.5 Early Woodland Period (1000-300 B.C.)

The Early Woodland Period is marked by the widespread use of ceramics and by the beginnings of cultigen use in the eastern U.S. In Maryland and the greater Chesapeake Bay region encompassing the Delmarva Peninsula, the flat-bottom steatite-tempered Marcey Creek series is considered the earliest ceramic ware. The use of steatite temper and its flat-bottom form suggest Marcey Creek ware evolved from flat-bottom steatite bowls of the Late Archaic Period. Marcey Creek ceramics were likely in use as from as early as 1200 B.C. at the Miller Field Site (Kraft 1970), where they are found with Orient fishtail points, to approximately 750 B.C. Subsequent wares include Accokeek Creek cordmarked, a sand-tempered ware with conoidal shape and cordmarked surfaces, first described by Stephenson (1963) at the Accokeek Creek site in Prince Georges County. Accokeek ceramics are associated with dates ranging from approximately 750-300 B.C., when net-impressed ceramics became prevalent (Gardner and McNett 1971). Accokeek ware has been found in association with the lobate base Picataway point at a several sites throughout the Mid-Atlantic such as the West Shore site in Anne Arundell County (Barse 1978) and the Woodburry Annex site in Gloucester County, New Jersey (Mournier and Cresson 1988; Barse 1990).

Subsistence data show a continuation of hunting, fishing, and gathering as main procurement strategies. Foraging practices of the Early Woodland Period seem to mimic those established in the preceding period. However, increased efficiency in the exploitation of available resources argues for an increase in seasonal sedentism. Gardner (1982) argues that, rather than breaking into smaller base camp units within freshwater fishing zones, large warm weather base camps were concentrated in anadromous fishing zones and moved as large base camp units toward brackish water zones in the winter months to exploit abundant shellfish populations.

5.2.6 Middle Woodland Period (400 B.C. – A.D. 800)

Although the Middle Woodland Period in the Piedmont is poorly represented, this period is characterized by a continuation of many of the trends that characterize the Early Woodland, including an increase in sedentism and in the intensity of plant food procurement and processing as well as the use of ceramics. Based on ceramic types, two phases are attributed to the Middle Woodland Period. A thick, net-impressed, sand- or quartz-tempered ceramic known as Popes Creek is characteristic of the early Middle Woodland Period, while shell-tempered net-impressed wares such as Mockley were in use in the later part of the Middle Woodland.

Projectile point types include Fox Creek, basal-notched, and Jack's Reef pentagonal and corner-notched types. Varieties such as the shouldered, contracting stemmed Rossville and the lobate base Piscataway are also present. An increase in the use of rhyolite from Pennsylvania and the Blue Ridge Province of Maryland is also seen in the Middle Woodland Period (Custer 1986). The presence of argillite and rhyolite at Early and Middle Woodland sites distant from their sources has been interpreted as evidence of exchange networks that increased in intensity between A.D. 200 and 800 (Custer 1996; Stewart 1989b, 1992).

5.2.7 Late Woodland Period (A.D. 1000-1600)

The Late Woodland Period saw an increase in sedentism and in reliance on horticulture as a subsistence system. These trends culminated into a well-defined pattern of floodplain communities and detached, but related, hamlets that relied on hunting, fishing, and the planting of native cultigens such as maize, squash and beans (Barse 1994).

Social organization likely involved changes that were responses to increased population density and an agricultural food base. Ethnographic analogy suggests that leadership was more formal than in earlier periods, involving either headmen or tribal councils (Heidenreich 1971). Societies likely existed which cross-cut kinship units and increased solidarity among the village members. Land was probably held in common by lineage members. The presence of stockaded villages suggests warfare became a necessary response to political and/or economic conflicts. Stewart (1989b, 1990) notes a paucity of evidence for trade and exchange throughout the Middle Atlantic after A.D. 1200, which may result from decreased subsistence risk resulting from the addition of agricultural produce to the resource base.

In terms of material culture, thin-bodied, sand-tempered Potomac Creek Ware and shell-tempered Townsend series ware are the predominant ceramic types (Fogel 1994). Small triangular projectile points such as the Levanna and Madison types appeared in the archeological record, possibly indicating the manufacture and use of the bow and arrow.

5.3 Historic Period

5.3.1 Contact and Settlement Period (A.D. 1570-1680)

Captain John Smith left the fledgling Virginia Colony of Jamestown in 1608 with the dual motive of locating food resources and to explore the northern Chesapeake Bay and associated waterways. Smith produced a detailed account of his travels documenting the location of several Indian villages and noting a plethora of natural resources in the area. The explorations of Smith brought him into contact with the native inhabitants of the Potomac Valley, leading to the introduction of new items and technology into the aboriginal material culture. At the Piscataway Creek site, Potomac Creek ceramics were recovered from an ossuary along with European trade goods (Ferguson and Stewart 1940). Ceramics from the Camden site in Virginia (MacCord 1969) are thought to reflect post-Contact changes in the manufacture of Potomac Creek wares (Steponaitis 1980). Similarly, Colono-Indian wares are thought to represent post-Contact changes in Townsend series ceramics (Noel-Hume 1962; Steponaitis 1980). One of the more unfortunate consequences of an increased European presence was the spread of disease which led to a rapid decline and dispersion of the native population. The decline of the native population was accelerated by pressure from other aboriginal groups such as the Susquehannocks to the north (Handsman and Hunter 1972; Feest 1978).

In 1632, King Charles I of England granted a charter to Cecil Calvert, the second Lord Baltimore, for the proprietary colony of Maryland (Walsh and Fox 1974). In 1634, the first official European settlement in Maryland was founded at St. Mary's City (Brooks and Rockel 1979). Settlers from Virginia had previously established outposts in the southern Chesapeake Bay area with tobacco dominating as the cash crop for the region. The early Maryland colonists also adopted an economic focus based on the subsistence of tobacco. By 1710, the colony's population totaled approximately 44,000 including large numbers of indentured servants and slaves (Chapelle et al. 1986).

Baltimore County was created in 1659 and was named in honor of Lord Baltimore. During the early seventeenth century, Baltimore County was composed of what are now Baltimore City, Anne Arundel, Carroll, Cecil, Harford, and Howard Counties (Brooks and Rockel 1979). Although increasing European settlement of the area had precipitated the removal of Indians further west, a native presence hindered further white encroachment and a small stockade called Fort Garrison was constructed near Woodlawn in 1693 (Brooks and Rockel 1979).

5.3.2 Rural Agrarian Intensification Period (A.D. 1680-1815)

Maryland's prosperity prompted inland exploration and settlement as the demand for land grew. Indentured servants who had repaid their obligations moved west to acquire their own homesteads, and wealthy landowners sought to expand their holdings. By the 1650s settlers had moved to the northern portions of the Chesapeake Bay and established themselves in and around Baltimore County. These settlements were primarily situated along coastal areas utilizing the bay for travel and commerce and were generally limited to the waterways that feed the Chesapeake Bay (Wesler et al. 1981).

As Maryland continued to grow, its economy diversified. Tobacco was the primary cash crop, and necessitated an improved transportation network. Many "rolling roads" were built to help transport tobacco and other important crops to market (Huttenhauer and Helwig 1962). Livestock and grain agriculture, lumber, and mining operations increased in response to new markets and demand. Maryland's first commercial ironworks was located on the Principio Creek in Cecil County. The ore for this iron was extracted from Whetstone Point, which now lies within the borders of Baltimore City (Brooks and Rockel 1979). The iron industry was specifically encouraged by Acts of the Maryland General Assembly in 1719, 1732, 1736, and 1750 and played a significant role in the development of economies in Carroll, Anne Arundel, Howard, Kent, and Baltimore (Brooks and Rockel 1979).

Other early industries were milling, textile manufacture, and the production of gunpowder and munitions (Wesler et al. 1981). By the mid-1700s, the production of tobacco in Maryland began to lag due to soil depletion and falling prices, and the farmers of Baltimore County started to produce more grain crops. At the same time, flour and textile mills began to appear in the landscape, including at Ellicott City, Owings Mills, and Milford Mills (Brooks and Rockel 1979).

In 1758, a German immigrant named John Reister purchased twenty acres of land south of present-day Cockeys Mill Road, founding a town called Reisterstown. The location of the town, though at that time heavily forested with limited trails and paths, was a convenient stopping place for travelers from western Maryland or Pennsylvania. More German immigrants settled in Reisterstown, opening inns, taverns, and blacksmith shops, which helped the town grow into a prosperous commercial center for surrounding farmlands and mills. In 1764, John Reister donated land to the community to be used for a non-denominational cemetery, church, and school. The church, a simple log building, was a pre-cursor to Trinity Lutheran Church which still stands at 109 Main Street. The log school building was eventually replaced with Franklin Academy, built in 1824. The adjacent Reisterstown Community Cemetery remains and is preserved as a Baltimore County Landmark (Blum 2010).

Although Marylanders participated in the American Revolution, no major battles were fought on Maryland soil. Prior to the Battle of Brandywine, the advance of the British fleet up the Chesapeake Bay alarmed residents of the Baltimore area. The county militia was mobilized and defensive preparations were made for the possibility of British ships docking in the area. As the fleet progressed up the Chesapeake, the Independent Company of the Baltimore County militia followed them into Cecil County. Here the Independent Company united with the Maryland Line contingent. When the British disembarked and started their advance toward Brandywine, the militia withdrew back to Baltimore County (Brooks and Rockel 1979).

Again in 1812, Marylanders faced the threat of war with Britain. Thousands of recruits were quickly gathered to meet the state's quota and fortifications around the city were made ready. Many of the Maryland recruits were sent to the Canadian frontier in the early plans for invasion of that country, but others were

sent to garrison forts in Annapolis and Fort McHenry in the Baltimore Harbor (Scharf 1881). Following a blockade of the city of Baltimore in 1813, defenses were greatly increased with the addition of troops and marines, as well as cannon, to the forts in and around Baltimore (Scharf 1881). In August 1814, the British routed the American forces in Bladensburg, Maryland and then moved into Washington, D.C. to burn and sack the city. By the 12th of September the British had moved against Baltimore, deploying troops on land and bombarding the city and Fort McHenry (Scharf 1881). By the morning of the 13th, the British troops had been repulsed and the Stars and Stripes still flying over the fort announced the failure of the British navy to claim its intended prize (Scharf 1881).

5.3.3 Agricultural – Industrial Transition (A.D. 1815-1870)

The period between the Revolutionary War and the Civil War saw considerable growth in urban areas and sporadic growth and decline in rural areas. This period also saw improvement and expansion of transportation infrastructure, which better served the rural corn and tobacco cash crop industry. After the Revolutionary War, the milling industry in Baltimore County expanded substantially. Joining previously established grist mills were saw, cotton, paper, powder, and merchant mills. By 1830, the B&O Railroad was carrying grain and flour from Ellicott Mills to western Maryland and other markets (Brooks and Rockel 1979).

In Reisterstown, one mile outside of the town proper, Main Street becomes Reisterstown Road. What is today Highways 30 and 140, Reisterstown Road begins in the northwestern corner of Baltimore and travels in a 35-mile diagonal path to reach the Pennsylvania border. This road, which began as a frontier trail in 1741 near a stream in Glyndon, became a wagon road in 1802 operated by a private toll company. Prior to the advent of railroads and the development of farmland beyond the Appalachian Mountains, most produce from central Maryland and Pennsylvania used this main thoroughfare to reach the Baltimore harbor (Arnett et al. 1999).

Due in part to its strategic location, Reisterstown continued its expansion as a commercial center in the area well into the 1800s. On Main Street, most structures were used as both commercial and residential spaces. In the 1780s John Beckley, son-in-law of John Reister, built 202 Main Street, where the Beckley family lived and operated a blacksmithing shop and wagon building/repair shop (Wollon et al. 1978). Because the land was at a premium, buildings were built closely together with no front yards separating them from the street. Many of these buildings are still standing in Reisterstown today (Blum 2010). For example, the structures at 237-239 Main Street were built circa 1830 to 1845. They originally housed the James Thomas Dry Goods store and the shop owners lived next door. The exterior of the building remains relatively unchanged (Wollon et. al 1978). In the 1890s, electric railways linked Baltimore to the surrounding countryside. Large country estates dotted the landscape along Reisterstown Road until World War I. After World Wars I and II, the distance between Reisterstown and Baltimore transformed with the construction of housing developments, shopping centers, and commercial structures (Arnett et al. 1999).

In the mid-1820s, William Patterson, a wealthy Baltimore merchant, built a mansion for his grandson, Napoleon Jerome Bonaparte as part of an estate 3 miles north of Reisterstown proper (MDARNG n.d.). N. Jerome Bonaparte was the son of Jerome Bonaparte, the exiled brother of French statesman and military leader Napoleon Bonaparte. The mansion, originally called “Mount Pleasant,” is a three-story house built of native bluestone in the Federal style with elements of Greek Revival style (McGrain 1990). N. Jerome Bonaparte lived in the mansion with his wife Susan and their two children, Jerome and Charles, from 1835 until 1843, when he sold the property as “Mount Rose” to Franklin Anderson.

In 1844, Anderson renamed the property "Montrose" and commissioned an Episcopalian chapel to be built on the property. The chapel, completed in 1855, is a rectangular stone structure with Greek Revival details and a three-story bell and entrance tower. A stone wall encloses the church yard and chapel. Throughout its history, the chapel remained privately owned and was never formally consecrated or connected with the Diocese of Maryland (Maryland Historical Records Survey Project [MHRSP] 1940). During the 1850s, the main house was modified with the addition of a large two-story wing on the east side of the building. Further additions of a mansard roof, a cupola, and bracketed cornices in the Second Empire style were added around 1880 (McGrain 1990).

5.3.4 Industrial –Urban Dominance (A.D. 1870-1930)

Following the Civil War and well into the twentieth century, agriculture remained a significant industry in Maryland and corn and wheat became a staple for farmers as tobacco production dropped. Growth of the dairying industry also increased, as growing urban populations led to greater demand for agricultural goods. After World War I, mechanization and increasing commodity prices greatly affected farming practices, and foreign markets made farming lucrative. However, rising taxes and expenses offset benefits, and the drought of 1930, along with the stock market crash in 1929 resulted in hundreds of foreclosures. New infrastructure projects, such as roads and railroads helped to open markets for agricultural goods and provided byways for accessing the cities of Baltimore and Washington, D.C.

Franklin Anderson died in 1866 and was buried in the chapel yard at Montrose Chapel. Anderson's wife lived in the mansion until 1879, when, after her death, the 535-acre property passed to her nephew Archibald Sterling (McGrain 1990). Though the Bonaparte family had not owned or lived in the Montrose Mansion since 1843, the family maintained an interest in the property. Charles Bonaparte, son of Jerome Bonaparte, purchased Montrose in 1887 but maintained ownership for less than a year. From 1887 to 1920, the Montrose property changed hands several times before it was sold by Frederick Gibson in 1920 to the Maryland Industrial Training School for Girls, a state-owned institution (McGrain 1990).

The Maryland Industrial School was founded in Baltimore in 1831 as the Maryland House of Refuge for Boys and Girls. In 1866, the school was renamed as the Maryland Industrial School for Girls. Though the school was renamed and re-incorporated ten times from 1866 to 1988, the overall purpose as a reform school for girls remained (Maryland.gov 2019).

5.3.5 Modern Period (A.D. 1930-Present)

In the 1920s, the mansion served as the main school building where the staff, cooks, and girls lived, worked, and studied. In the late 1920s and 1930s, new stone buildings were constructed in a quadrangle plan to be used as dormitories. The second campus of the Montrose School was built in 1963 which consisted of classrooms, an auditorium, gymnasium, and infirmary. From the 1930s until the school's closure in 1988, the Montrose Mansion was used as the school's administrative offices.

In 1989, the Montrose property was given to the National Guard by then Governor William Donald Schaefer. The 640-acre complex, given the name Montrose Military Reservation, had over forty fieldstone and brick buildings in various stages of use and condition. Since the property's transition to a National Guard facility, all but three buildings have been restored or are in the process of restoration. A new armory was constructed in 1999 which in addition to National Guard staff, is the home of the Maryland Emergency Management Agency (MEMA) (Erlandson 1995). In 1991, the military reservation was renamed as the CFMR to honor Adjutant General James F. Fretterd, who was Adjutant General from 1987 to 2003.

The proposed MCRC footprint overlaps with an Honor Grove of more than 800 pine trees planted as a memorial dedicated to the Maryland Army National Guard (MDARNG) Operation Desert Shield/Desert Storm veterans (Figure 4). The Honor Grove was dedicated by the U.S. National Guard Bureau's MDARNG Operation Desert Shield/Storm Program in 1991, and its dedication was also a part of the Maryland governor's TREEmenous Maryland program (MDARNG 1992) (see Figure 4).

In 1990, the National Guard nominated the Montrose Mansion and Chapel to the NRHP. Both structures were approved to the NRHP on March 19, 1990. In 2005, the Maryland National Guard under the leadership of Adjutant General Major General Bruce Tuxill, dedicated the Montrose Chapel to the memory of Father Eugene Patrick O'Grady. Father O'Grady was a military chaplain for the 29th Division of the National Guard U.S. Army unit during World War II, who provided support and buoyed the spirits of those around him (Balkoski n.d.). The National Guard has renovated Montrose Mansion while maintaining the building's historic character. The building is currently used for conferences and as a special event facility.

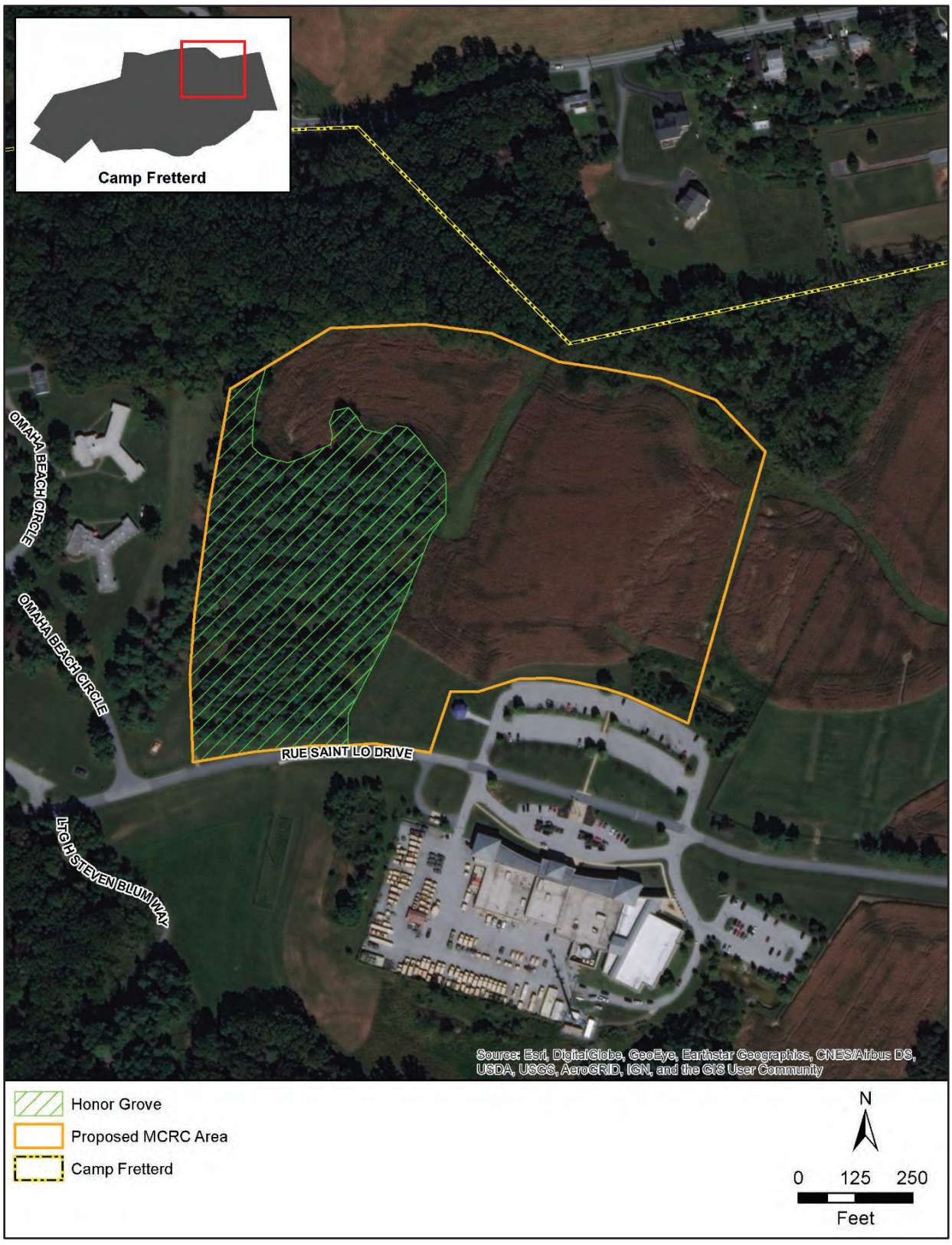


Figure 4. Location of MDARNG Operation Desert Shield/Storm Honor Grove within Proposed MCRC Camp Fretterd Property

6.0 CAMP FRETTERD MILITARY RESERVATION SENSITIVITY MODEL

In October 2007, an archaeological sensitivity model for the CFMR property was prepared by the USACE Baltimore District. The sensitivity model used several features of prehistoric sites within an 8-mile radius of CFMR to determine the potential for archaeological resources to be present within the CFMR property. The features included distance to water, soil type, slope, landform, and other characteristics of the sites. The historic background for CFMR and proximity to historic structures was also reviewed to determine the potential for historic sites. The sensitivity model was then applied to the CFMR property and high and low potential areas were identified (USACE 2007).

No areas of high probability for historic sites were identified within the proposed MCRC Camp Fretterd property. The proposed MCRC property contains approximately 3 acres that were identified as high probability for prehistoric archaeological sites by the sensitivity model (Figure 5). The majority of the area indicated as high probability for prehistoric sites is located in the Honor Grove in the west half of the proposed property, with a small area along the northern boundary.

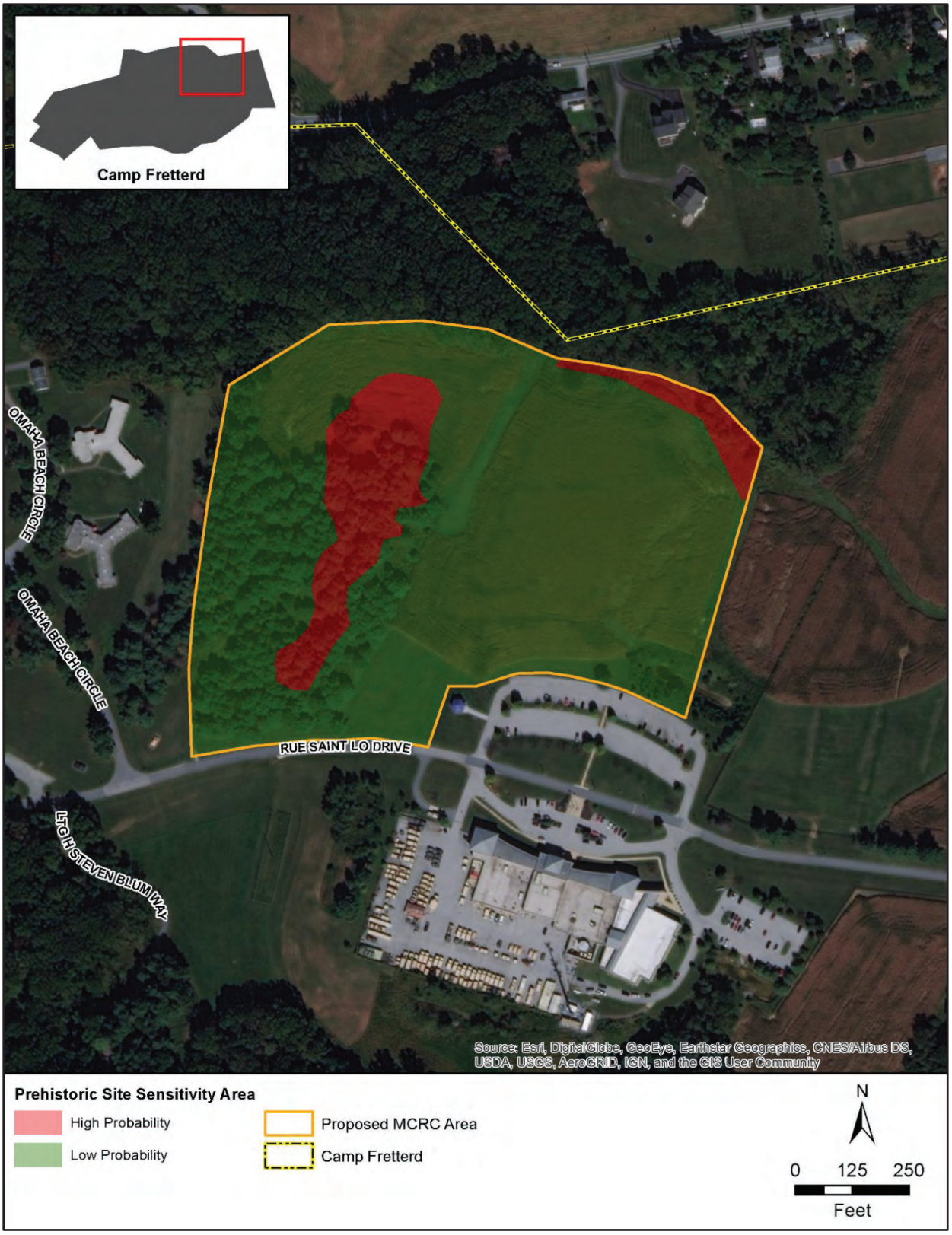


Figure 5. Areas Identified as Having a High Probability for Prehistoric Sites within the Proposed MCRC Property

7.0 RESULTS

7.1 Results of Archaeological Investigations

Field investigations were performed at the proposed MCRC Camp Fretterd between November 4th and November 13th, 2019. A total of 345 STPs were excavated on 25 transects placed within the APE on a 15 m (50 ft) grid aligned with true north (Figure 6). Transects were assigned letters starting with "A" in the west and ending at "Y" in the east and STPs were placed on each transect starting with number "1" in the south.

STPs were not excavated in areas that were steeply sloped (greater than 15 percent slope) or areas that have been disturbed by utility or construction activities. This included steeply sloped areas on the north ends of transects B and C, and the north ends of transects M, N, O, P, Q, and R. Areas that were not excavated due to modern disturbances included areas along Rue Saint Lo Drive, and areas in the southeast corner of the APE that had been surface graded during construction of the parking lot and as a rainwater runoff detention pond (see Figure 6; Plates 5 and 6).

Transect A began in the southwest corner on the west boundary of the APE, through the Honor Grove, and proceeded to the north into the fallow agricultural field along the north boundary (Plates 7 and 8). Soils throughout the APE were mapped by the Natural Resources Conservation Service Web Soil Survey as predominantly Glenelg series loams (USDA 2019). The soil survey for Baltimore County (Reybold and Matthews 1976) states that the typical soil profile for Glenelg series soils consists of an Ap horizon of dark yellowish brown (10YR4/4) silt loam from 0 to 7 inches (17.8 cm) below ground surface above a B2t horizon of strong brown (7.5YR5/6) silt loam from 7 to 20 inches (17.8 to 50.8 cm). A yellowish red (5YR4/6) B3 horizon is listed from 20 to 25 inches (51.8 to 63.5 cm) and a yellowish-red (5YR4/6) to dark yellowish brown (10YR3/4) C horizon is listed from 25 to 80 inches (63.5 cm to 203 cm).

The typical soil profile recorded of the STPs excavated in the Honor Grove was an Ap horizon of brown (10YR4/3) silt loam from 0 to between 3.9 inches (10 cm) and 14.9 inches (38 cm). Under the Ap horizon was typically a Bt horizon of strong brown (7.5YR4/6) clay loam (Figure 7). This soil profile closely matches the profile described in the Baltimore County Soil Survey and indicates that the soils in this portion of the APE are largely intact.

No cultural materials were recovered from shovel testing in the Honor Grove or the fallow agricultural field.

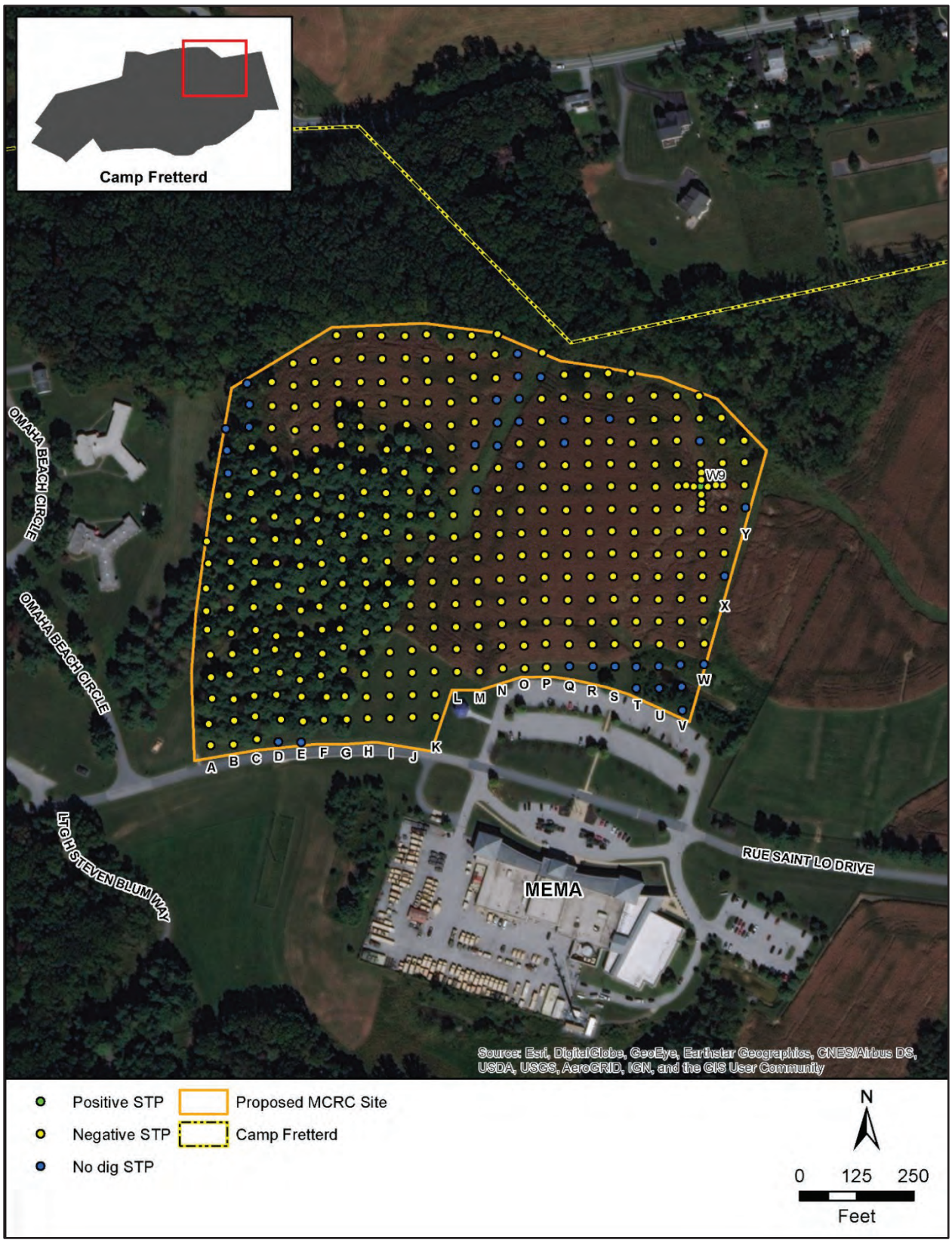


Figure 6. Aerial Image of Proposed MCRC Camp Fretterd Showing STP Locations

Plate 5. Area Along Rue Saint Lo Drive Showing Road Berm and Concrete Manhole for Utilities, Facing West

Plate 6. Area North of POV Parking Lot Showing Berm and Drainage Ditch, Facing East

Plate 7. Southwest Corner of MCRC Camp Fretterd APE, Facing North

Plate 8. Northwest Corner of MCRC Camp Fretterd APE Showing Fallow Agriculture Field, Facing West

1

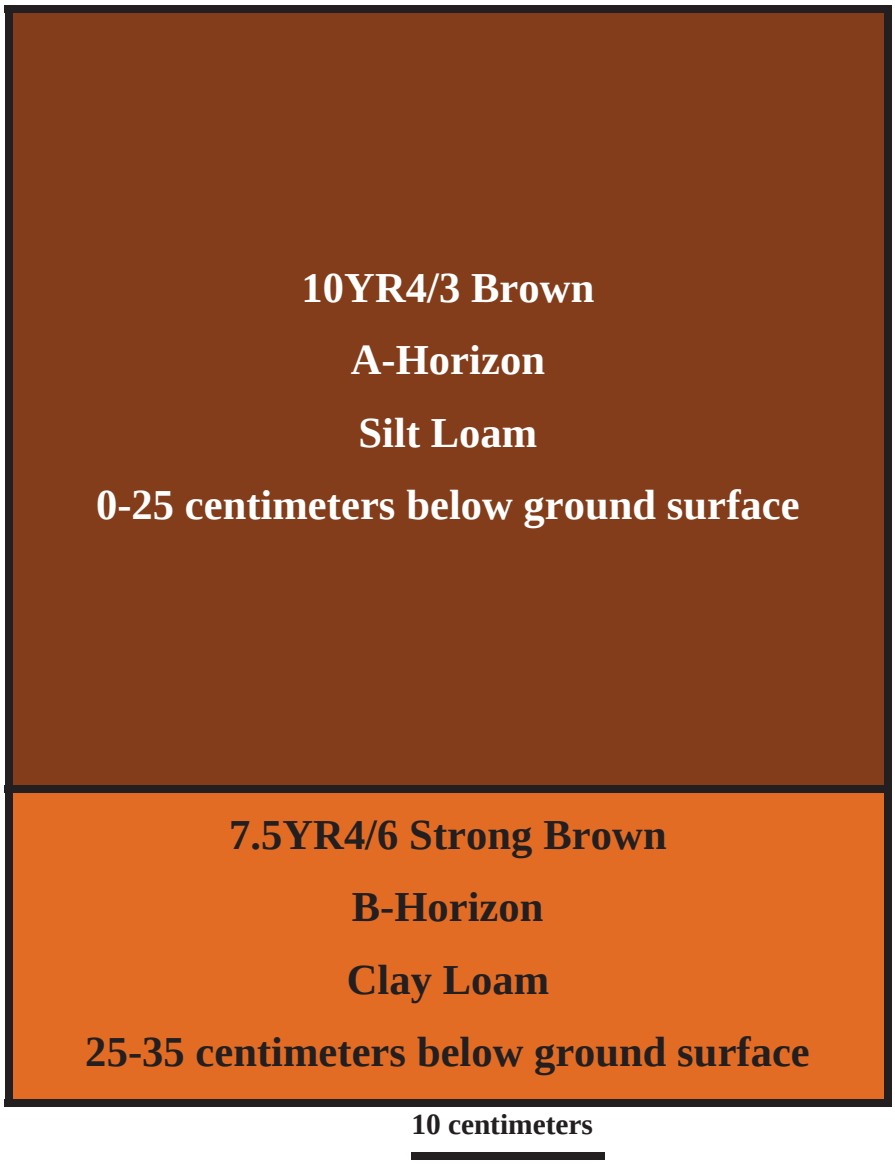


Figure 7. Typical Profile in the Honor Grove at the Proposed MCRC Camp Fretterd – STP C8

The soils in the area east of the Honor Grove are also primarily mapped by the Web Soil Survey as Glenelg series loams (USDA 2019). Soil profiles observed in STPs near the center of the property were similar to the profile described by the Baltimore County Soil Survey and to those observed in the Honor Grove (see Figures 6 and 8; Plate 9).

A drainage ran through the center of the APE and no STPs were placed in the drainage or on the steeply sloped sides (see Figure 6 and Plate 9). No archaeological materials were recovered from STPs placed near the center of the APE.

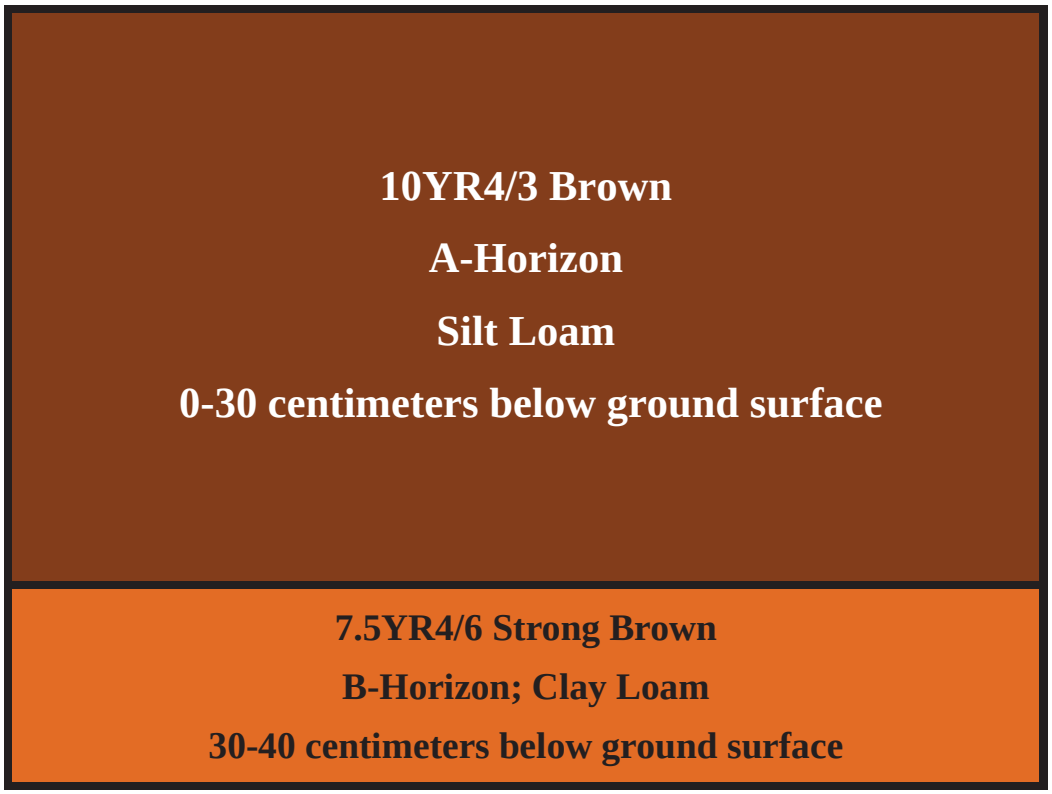


Figure 8. Typical Soil Profile Near Center of APE – STP N6

(Note: Different Vegetation in Manmade Field Drain)

Plate 9. Overview Near Center of MCRC Camp Fretterd APE, Facing North, Showing Honor Grove to West

Soil profiles observed in the STPs located in the eastern portion of the proposed MCRC Camp Fretterd property differed from what was described in the Baltimore County Soil Survey and may have been anthropogenic soils that were placed in the area during construction of the storm water detention pond in the southeast corner of the APE. Similar to the rest of the proposed MCRC Camp Fretterd, the soil survey shows the area mapped as Glenelg series soils, with an Ap horizon that typically has a 10YR hue. Various soil colors were recorded throughout much of the eastern part of the APE however they generally had a 7.5YR hue. The typical profile consisted of a dark brown (7.5YR3/2) to brown (7.5YR4/4) silt loam from the ground surface to between 7.8 and 23.6 in (20 and 60 cm) below ground surface. A strong brown (7.5YR5/4 to 7.5YR5/6) silty clay was observed from between 7.8 and 27.5 in (20 and 70 cm) below ground surface. A third layer of yellowish red (5YR4/6 to 5YR5/6) clay loam was occasionally observed between 13.8 and 39.4 in (35 and 100 cm) below ground surface (Figure 9, Plate 10).

A 1998 aerial photograph of the Camp Fretterd property showed what appeared to be construction disturbances in the eastern portion of the APE. It appears that the storm water detention pond located in the southeast corner of the APE was built during the construction of the MDARNG Camp Fretterd Armory and MEMA building and included drainage and surface grading north of the pond (Figure 10).

One sherd of blue and white porcelain was recovered from Stratum 1 of STP W9 in the eastern part of the APE. No additional artifacts were recovered from eight radial STPs that were placed at 5 m (16.4 ft) intervals in each cardinal direction around STP W9. During consultation with the MHT, it was determined that due to the sherd being recovered from soil that has likely been transported to the site, as well as the

sherd's limited research, education, and exhibit value, the sherd should be recorded in this report and discarded (see Figure 10) (Plates 11 and 12) (Cole 2019).

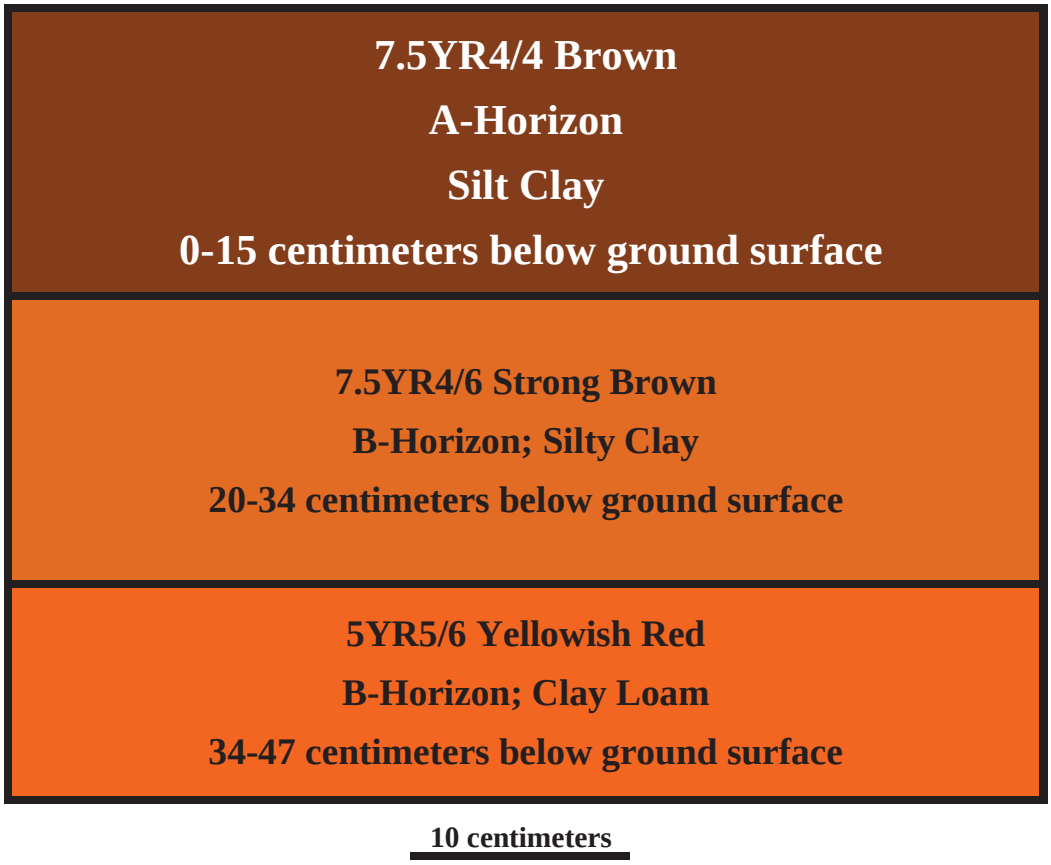
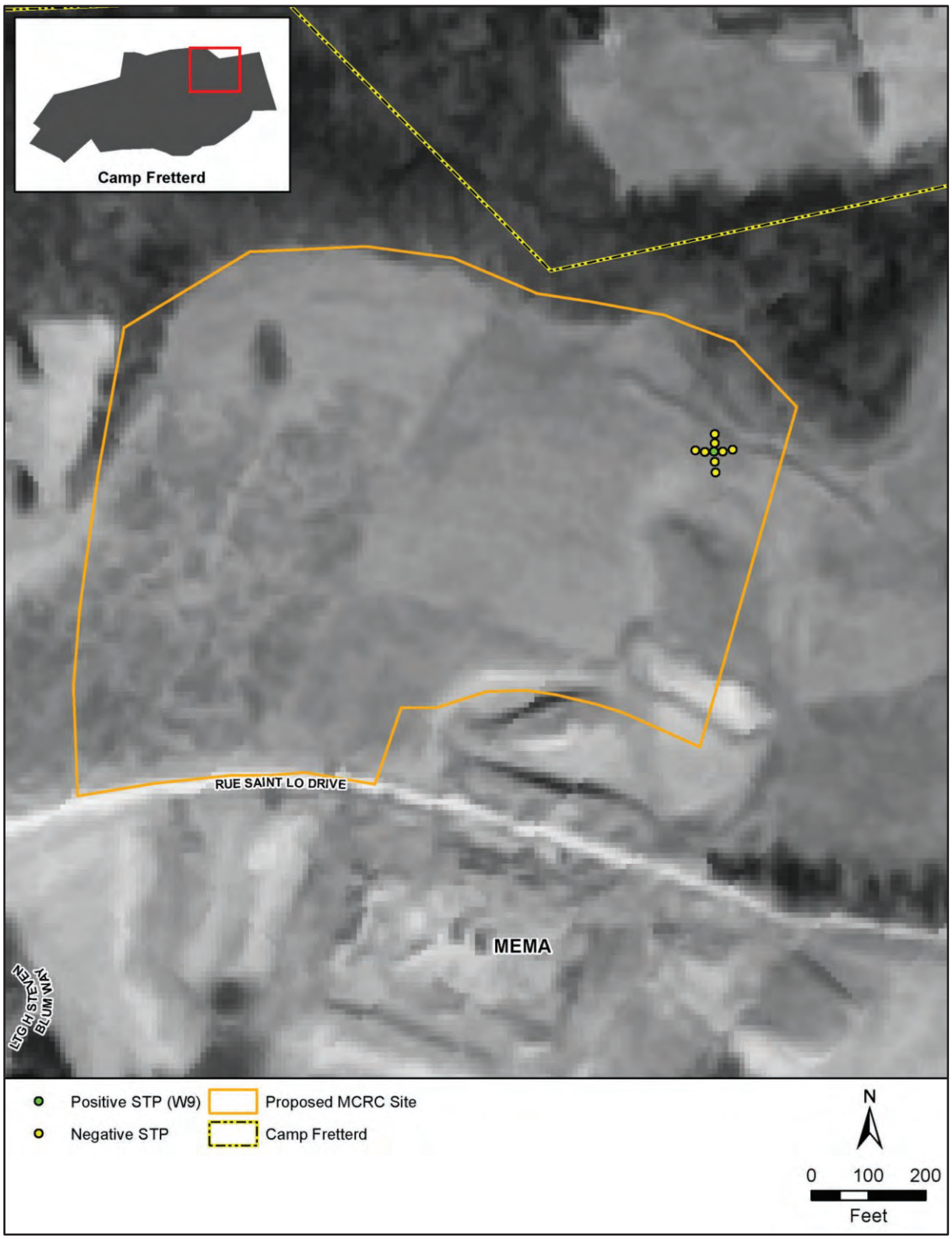


Figure 9. Typical Soil Profile in Eastern Part of APE – STP U6



Source: U.S. Geological Survey 2019.

Figure 10. Portion of 1998 Aerial Image Showing Construction of Storm Water Detention Pond and Surface Grading

Plate 10. Overview of Eastern Portion of Proposed MCRC Camp Fretterd Property, Facing North Showing Manmade Drainage Along East Boundary

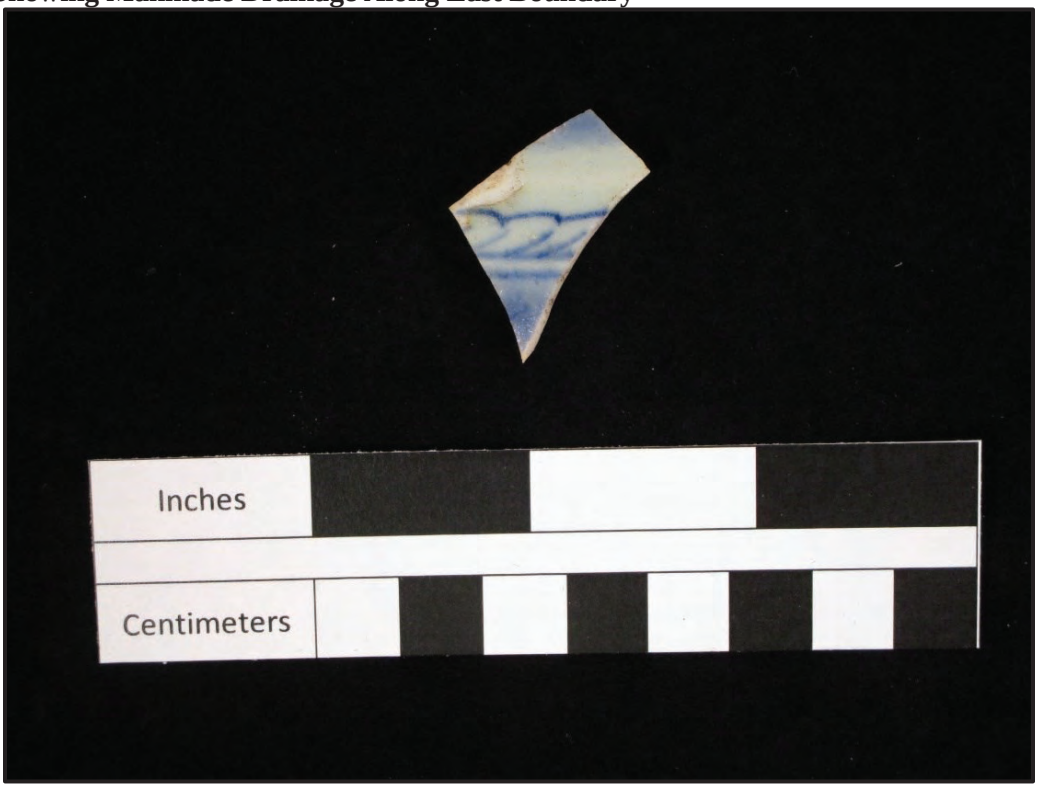


Plate 11. Blue and White Porcelain Sherd Recovered in STP W9

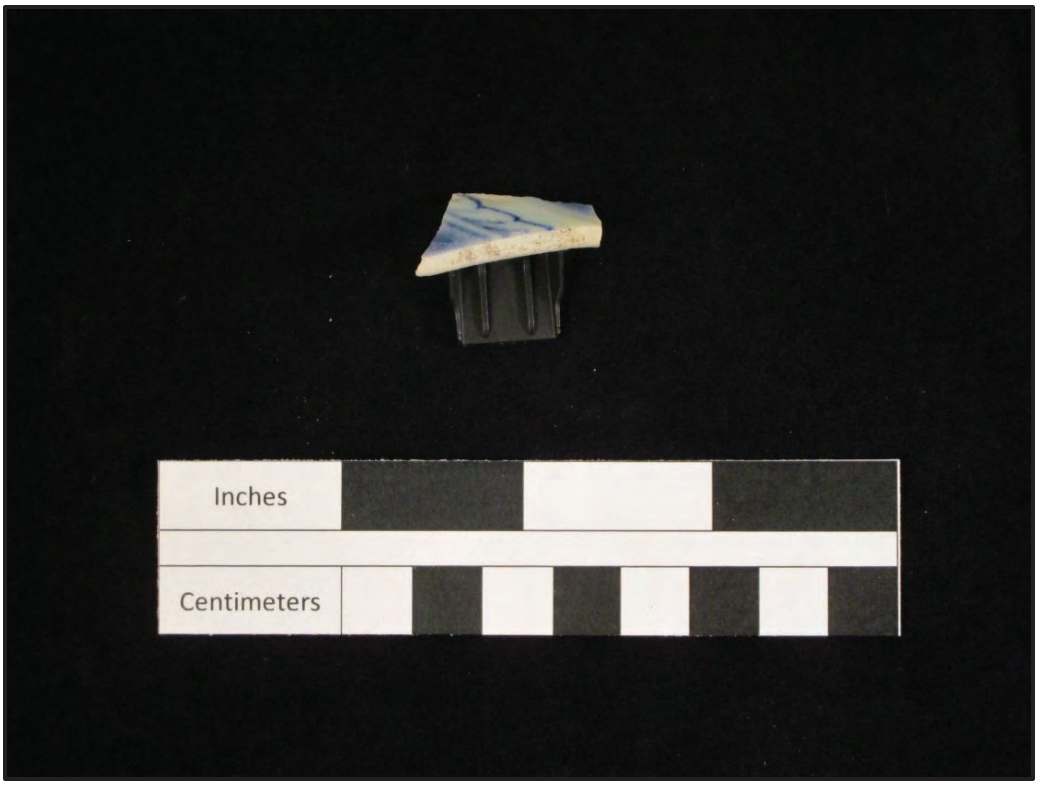


Plate 12. Blue and White Porcelain Sherd Recovered in STP W9 Showing Paste

8.0 SUMMARY AND CONCLUSION

A total of 345 STPs were excavated within the APE for the MCRC Camp Fretterd project. One blue on white porcelain ceramic sherd was recovered during shovel testing. Radial STPs placed around the porcelain sherd produced no additional artifacts. In consultation with the MHT, and in accordance with the MHT Guidelines for Archaeological Investigations, it was determined that the sherd did not warrant a new isolated find number and could therefore be recorded in this report and discarded.

No archaeological resources recommended eligible for listing in the NRHP or MIHP were encountered during this survey. The proposed undertaking would not affect any NRHP- or MIHP-eligible archaeological resources and no additional archaeological testing of the proposed property is recommended. However, if cultural materials, human remains, funerary objects, or Native American sacred objects are encountered during the course of construction activities, all work should cease in the area of the find until the significance of the resources can be determined through coordination with the MHT.

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APPENDIX A
RÉSUMÉS OF PREPARERS

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Steven Brann, MA, RPA

Current Position
Archaeologist

Discipline Area
Historic and Prehistoric Archaeology

Years' Experience:
16

Joined Cardno
2010

Education
2008 / MA / American Studies / Penn State University

2003 / BA / Anthropology, Archaeology / University of Pittsburgh

Professional Registrations
Registered Professional Archaeologist

Affiliations
Society of Pennsylvania Archaeologists

Continuing Education and Training
Historic Archaeology Field School at Ephrata Cloister, Lancaster County, PA 2003

Volunteer with Commonwealth Archaeology Program, Pennsylvania Historical and Museum Commission 2006, 2008

Summary of Experience

Steven Brann is an Archaeologist with 16 years of experience in cultural resource management. Mr. Brann has conducted and supervised historic and prehistoric archaeological investigations throughout the Northeast, Mid-Atlantic and Southeastern United States, including Phase I surveys, Phase II evaluations, and Phase III data recoveries. He has also led archaeological field surveys in New England and southern California. His experience includes laboratory processing and identification of both historic and prehistoric artifacts, processing flotation samples, database maintenance, and the curation of artifact collections according to state and federal standards. Using archaeological field methods extensively, he has completed numerous projects involving overhead electrical transmission line routes, military facilities, power plants, and natural gas transmission pipeline routes.

Recent Projects

Phase I Archaeological Survey for Proposed Expansion of Little Rock Air Force Base Airfield, Little Rock, Arkansas
Field Director for investigation of areas for proposed expansion of the airfield at Little Rock Air Force Base.
Year Completed: Ongoing

Phase I Archaeological Survey of Marine Corps Forces Reserve Local Training Area Access Road and Utility Right of Way, Clinton, Pennsylvania
Principal Investigator and Field Director for Phase I investigation of the proposed routes of a new access road and utilities ROW for a MARFORRES LTA near Clinton, PA.
Year Completed: Ongoing

Fort Brooke Estuary Cemetery Project, Tampa, Florida
Crew member for exhumation of human remains from Fort Brooke Cemetery. The Cemetery was established in the early 19th century and contained the remains of U.S. Army soldiers and Seminole Indians. The cemetery had been lost over time as Tampa grew on the land that was once Fort Brooke. Proposed construction uncovered the cemetery and the remains were relocated to other cemeteries in the area.
Year Completed: 2019

Bethel Cemetery Relocation Project at Indianapolis International Airport, Indianapolis, Indiana
Crew member for excavation and exhumation of human remains from Bethel Cemetery. The Cemetery was established in 1838 and was active into the early 20th century. The airport had been built around the cemetery and a new construction project to expand the deicing runoff ponds required that the cemetery be relocated.
Year Completed: 2018

National Parks Service, DOI LEARN Management Portal, "Managing Archeological Collections" Online Course 2008

Advanced Metal Detecting for the Archaeologist (AMDA) Training Course, Harrisburg, PA 2015

Federal Energy Regulatory Commission (FERC), Environmental Review and Compliance for Natural Gas Facilities Seminar, April 2015

National Center for Preservation Technology and Training, Archaeological Prospection in the 21st Century, Fort Casmir Site, DE, May 2019

Languages/Skills

Adult CPR/Standard First Aid

40-hours HAZWOPER

USACE Wetland Delineator Trained

Cultural Resources Survey of Navy Operational Support Centers in Cincinnati, Toledo, and Youngstown, Ohio and Louisville, Kentucky

Principal Investigator for cultural resources surveys of Navy Operational Support Centers (NOSCs) in Cincinnati, Toledo, and Youngstown, OH and Louisville, KY. Surveys included review of background information, including previous surveys, aerial images and historic maps, and archaeological site searches. Prepared reports for submittal to Navy personnel and to State Historic Preservation Offices. No new cultural resources were identified as a result of these surveys and the SHPOs concurred with the findings of each report.
Year Completed: 2018

Fort Pickett Oral History Project, Blackstone, VA

Team Member for preparation of an oral history of MTC Fort Pickett near Blackstone, VA. Responsibilities included community outreach, coordinating interviews, historic research, preparing historic context sections, and comparing oral accounts with known archaeological sites. Several historic sites were identified as those that were described in accounts given by former residents of what became MTC Fort Pickett.
Year Completed: 2018

Mountain Valley Pipeline Phase III Archaeology Monitoring, Roanoke, VA

On-Site Archaeological Monitor representing the Federal Energy Regulatory Commission(FERC). Coordinated with Mountain Valley Pipeline (MVP) archaeologists and FERC personnel to ensure compliance with an approved treatment plan for two sites determined eligible for listing on the NRHP. Duties included observing MVP archaeologists as they processed the sites according to the treatment plan, communicating with FERC archaeologists, and accompanying MVP personnel during the return of the artifact collection to the property owner.
Year Completed: 2018

Phase I Archaeological Survey and Metal Detecting for Southeastern Trail Pipeline, Manassas, VA

Project Manager and Team Member for Phase I investigation of proposed pipeline near Manassas, VA. Also completed metal detecting survey of portions of right of way that traveled through the boundaries of Civil War battlefields.
Year Completed: 2018

Environmental Impact Statement and Related Technical Studies, Federal Bureau of Prisons, Letcher County, KY

Principal Investigator and Field Director for additional archaeological and environmental surveys. Surveys included recordation of a historic cemetery that is near the proposed entrance. Completed field surveys and prepared report for submission to KY Office of State Archaeologist (OSA) and KY Heritage Council (KHC).
Year Completed: 2018

Phase I and Phase II Archaeological Investigation, Foreign Affairs Security Training Center, Blackstone, VA

Principal Investigator for additional Phase I and Phase II investigations at MTC Fort Pickett. Changes to the site plan and routing of utilities required additional investigations for the FASTC project. Phase II investigations of the site determined it to be not eligible for the NRHP. Phase II investigations at a second site determined that the site was partially eligible for listing and a mitigation plan was completed.
Year Completed: 2018

Katie Briscoe, MA, MS

Current Position
Architectural Historian / Archaeologist

Discipline Area

> Archaeology
> Architectural History

Years' Experience:
5

Joined Cardno
2019

Education
2012 / MS / Historic Preservation / University of Vermont

2010 / MA / Archaeology / University of Liverpool

2008 / BA / History / Old Dominion University

Continuing Education and Training
College of William & Mary, Williamsburg, VA / Post-baccalaureate program in Classical studies / August 2015 – May 2017

Software: Proficient in Microsoft Office Suite, Adobe Dreamweaver, ArcGIS, SketchUp and CAD

Languages/Skills
Ancient Greek, Advanced Spanish, Intermediate Italian, Intermediate Latin

Summary of Experience

Mrs. Briscoe is an Architectural Historian and Archaeologist with specialized knowledge in the archaeology of the Bronze Age Mediterranean. She has trained in the development and application of historic preservation law and regulations in various compliance situations, in primary research and report writing, chain of title research, writing National Register nominations and Rehabilitation Investment Tax Credit forms, and performing and compiling architectural conservation assessments.

Significant Projects

American Excavations at Morgantina: Contrada Agnese Project (CAP)
Excavation volunteer for the 6-week summer season in 2017. Morgantina, Sicily. Project Total Value: $0

Landscape Change Program, University of Vermont, VT
Intern for the Landscape Change Program (LCP), an NEH grant program with the University of Vermont Geology Department. Worked on the program's Interstate Project to understand how the construction of the Interstate Highway System from the 1950s to early 1980s altered the cultural and physical landscape of Vermont. Created and delivered public presentations, recorded oral histories, re-photographed twelve Vermont towns, created mobile posters to disseminate research throughout the state. Compiled a report and conference poster titled "A Changed Sense of Place: Documenting the Interstate in Windham County, Vermont" which cataloged all buildings demolished due to interstate highway construction from 1957 to 1964. Project Total Value: $0

Publications and Presentations

2012 – Speaker for Vermont Archaeology Month. "Looking Back: The Vermont Interstate System" (Co-presenter Ana Vang)

2008 – "Beat Writers of the 1950s", presented at the Phi Alpha Theta annual conference, Christopher Newport University

Employment History

Cardno, Charlottesville, VA, 2019 – Present
College of William and Mary, Williamsburg, VA, 2018
American Excavations at Morgantina: Contrada Agnese Project (CAP), Morgantina, Sicily, 2017
Virginia Wesleyan University, Norfolk, VA, 2014 - 2019
Tidewater Community College, Virginia Beach, VA, 2013 - 2015

Viewshed Analysis

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UNITED STATES MARINE CORPS
MARINE FORCES RESERVE
2000 OPELOUSAS AVENUE
NEW ORLEANS, LOUISIANA 70114

RECEIVED
APR 03 2020
By

IN REPLY REFER TO:
5090
FAC
19 Mar 2020

From: Marine Corps Reserve (MARFORRES), Environmental and Energy Program Manager
To: Amanda Apple
Preservation Officer, Review and Compliance
Maryland Historical Trust
100 Community Place, 3rd Floor
Crownsville, MD 21032-2023

Subj: SECTION 106 CONSULTATION FOR MARINE COPRS RESERVE CENTER AT CAMP FRETTERD MILITARY RESERVATION, REISTERSTOWN, MARYLAND

Encl: 1) Project Location Map
2) Site Plan of Proposed Reserve Center
3) Area of Potential Effects (APE) Map
4) List of References Cited
5) Draft Report, Proposed Marine Corps Reserve Center: Viewshed Analysis, Camp Frettered Military Reservation, Resiterstown, Maryland

Dear Ms. Apple:

The United States (U.S.) Marine Corps Forces Reserve (MARFORRES) is proposing to construct and operate a Marine Corps Reserve Center (MCRC) at Camp Fretterd Military Reservation (CFMR) in Baltimore County, Maryland. MCRC Camp Fretterd would ensure that reservists in the Baltimore area have the resources needed to meet Marine Corps current individual and/or unit level operational readiness training requirements.

The proposed project is an undertaking subject to Section 106 Consultation. As the lead agency for this project, MARFORRES is initiating consultation in accordance with Section 106 of the National Historic Preservation Act, as amended, and with 36 CFR § 800.3.

Project Background

The mission of MARFORRES is to augment and reinforce the active Marine forces in times of war, national emergencies, or contingency operations; provide personnel

and operational tempo (i.e., rate of activity) relief for the active forces in peacetime; and to provide a service to the community. MARFORRES comprises active and inactive reservists. Active reservists are required to drill one weekend a month and two weeks a year. Inactive reservists consist of previously active Marines or reservists that may be called back in to service at any time. As such, regularly scheduled drill training is crucial. The primary purpose of drills is to provide individual and/or unit level readiness of active and inactive reservists thereby ensuring that they are equipped and trained to the same standards as the active Marine forces.

The MCRC Baltimore and support shops are structurally deficient and unable to support current operational training requirements of the 4th Combat Engineer Battalion 4th Marine Division. Under the proposed undertaking, a new MCRC would be constructed at CFMR that would provide an adequately sized, multifunctional facility to train 4th Combat Engineer Battalion 4th Marine Division reservists. Marine reservists that are currently assigned and trained at MCRC Baltimore would be reassigned to MCRC Camp Fretterd to meet their operational training requirements. MCRC Camp Fretterd would be located within a 25-mile driving distance of MCRC Baltimore. Naval Facilities Engineering Command, Atlantic completed Section 110 cultural resource investigations of MCRC Baltimore in 2013. MARFORRES will consult with your office on the future disposition of MCRC Baltimore as a separate undertaking.

Proposed Undertaking

Under the proposed undertaking, a MARFORRES MCRC would be constructed within a designated 21-acre site at CFMR. Please refer to Enclosure (1) for an aerial map of CFMR showing the location of the proposed site of the MARFORRES MCRC and Enclosure (2) for the proposed site layout. The MCRC facilities would include a single-story Reserve Training Center and Armory (inside) of approximately 35,000 square feet [sq ft], vehicle maintenance facility (VMF) (approximately 11,000 sq ft), storage shed (approximately 4,000 sq ft), covered training area, vehicle wash platform,

privately owned and tactical vehicle parking areas, and several small support facilities. The design of the training center and VMF features concrete masonry unit load-bearing walls with decorative masonry exterior walls and gable roofs clad in standing seam metal. The color scheme of the buildings will be compatible with the adjacent buildings at CFMR. The training center would include a drill hall with clerestory windows topping its minimum 16-foot interior clear height. High bays for the six vehicle bays in the VMF would also have a 16-foot clear minimum height.

Two parking areas would be constructed adjacent to and in front of the training center to accommodate up to 256 privately owned vehicles (POVs). A tactical vehicle parking area would be constructed behind the training center and adjacent to the VMF. A right turn lane would be added to Rue Saint Lo Drive to provide entry/exit via two separate driveways. The first entrance would provide entry to the tactical vehicle parking area; the second to the POV parking area. A guard house would be constructed at the entrance to the POV parking area. Security fencing would be placed around the MCRC and a remotely controlled sliding gate would be installed to allow entry to the tactical vehicle parking area. Pedestrian sidewalks would be located along Rue Saint Lo Drive and around the POV parking areas leading to the training center entrances.

The site of proposed construction primarily consists of a pine grove to the south and west with agricultural land to the north and east. Site preparation would include clearing (tree removal), excavation (cut), and preparation for construction (fill, grade, and drainage). Under the current design, approximately 6 acres of the existing 9-acre pine grove would be cleared. If the design changes and the entire pine grove would be removed, then a new buffer of trees would be replanted as necessary along the west side of the site. The total area of ground disturbance for construction of the MCRC and associated features, described in the paragraphs that follow, would be approximately 15 acres within the 21-acre site.

Subj: SECTION 106 CONSULTATION FOR MARINE COPRS RESERVE CENTER AT CAMP FRETTERD MILITARY RESERVATION, REISTERSTOWN, MARYLAND

The site has an approximate 40-foot change in elevation from the high point to the low point on a south to north axis and an aggregate slope of approximately 6 percent. Due to the elevation at Ru Saint Lo Drive and the need to keep the driveway at a relatively gentle grade, a retaining wall would be needed immediately adjacent to the road. The retaining wall would be built of concrete, and would transition down to the elevation of the training center building. Additional site features of the MCRC include landscaping and stormwater drainage, including concrete curbs and gutters to direct the flow to drain inlets in parking areas and along driveways, and infiltration areas in parking lot islands in the POV parking areas and on the perimeter of the tactical vehicle parking area.

Natural gas and electrical service to the site would be provided by Baltimore Gas and Electric. To provide electrical service, an underground concrete duct bank would be extended approximately 750 feet from an electrical manhole located on the north side of Ru Saint Lo Drive to the building service area, where a transformer and switchgear would be installed. Natural gas may be provided via connection with an existing line located approximately 300 feet south of the proposed training center building. The telecommunications service provider at CFMR is Verizon. Telecommunication connections may be provided by extending the fiber optics duct bank located on the north side of Ru Saint Lo Drive.

Potable groundwater would be provided via connection to the existing water service line. A branch from this supply line would be connected to a pump that would supply water for up to six fire hydrants. A smaller supply line would supply water to the VMF, vehicle wash rack system, and a 75,000-gallon aboveground water storage tank, which would provide water for the fire pump system. The water storage tank, along with mechanical and electrical systems, would be located within an enclosed utilities yard next to the training center.

Sanitary sewer at the site would be provided by an on-site septic system utilizing a drain field north of the

proposed construction site. The system would consist of settling tanks, oil/grease separators, and an extensive, underground network of perforated pipes in a drain field. It is anticipated that this system would operate by gravity and would not require a pump.

The MCRC would provide MARFORRES personnel with individual and/or unit readiness training. The MCRC would be open weekdays from 7:30 a.m. to 4:30 p.m. and during drill weekends (Saturday and Sunday) from 7:30 a.m. to 4:30 p.m. MARFORRES anticipates 12 drill weekends annually with approximately one drill weekend occurring each month.

Up to 320 Marine personnel of the 4th Combat Engineer Battalion 4th Marine Division would be stationed at MCRC Camp Fretterd with approximately 10 percent relocating to the area. During weekdays, an average of 34 active Marines would be on site in support of administrative functions. During drill weekends, active Marines and up to 286 reserve Marines would train at MCRC Camp Fretterd. The majority of reservists would drive alone to the MCRC; however, approximately 20 percent would be expected to carpool. None of the Marines would stay at the CFMR dorms; roughly 50 percent would stay in local area hotels. Training would include classes, meetings, weapons maintenance, vehicle maintenance, and drill formations.

Tactical vehicles such as Humvees or cargo trucks would be maintained and stored at the MCRC. These vehicles would remain on existing roads; the vehicles would not be driven off road within CFMR. The tactical vehicles would be driven from MCRC Camp Fretterd to another training venue for off-road training purposes. Tactical vehicles driven off site would return to MCRC Camp Fretterd to be cleaned in the closed-loop vehicle wash rack prior to being stored. Minor maintenance of tactical vehicles would occur on site in the VMF.

Area of Potential Effects (APE)

In accordance with 36 CFR § 800.4(a)(1), MARFORRES has determined an APE in consideration of both potential direct and indirect effects to historic properties as a result of

implementing the proposed undertaking. MARFORRES has determined the APE encompasses the entire CFMR, and also extends to the east to include a 1-acre parcel with a dwelling at 13721 Hanover Pike (Enclosure (3)). This APE accounts for potential physical impacts on historic architectural properties within the project area from construction, and potential visual effects to the setting of historic properties from construction of permanent facilities at the project site and potential visual and auditory effects from POV and tactical vehicle operations. For archaeological resources, potential effects would be limited to the 21-acre project site within the APE where ground disturbance would occur.

Affected Archaeological Resources

MARFORRES' consultant, Cardno, Inc. (Cardno), conducted a Phase I archaeological survey of the 21-acre proposed site for MCRC Camp Fretterd to determine if archaeological deposits are present and eligible for the National Register of Historic Places (NRHP). The survey report titled "Phase I Archaeological Survey Report: U.S. Marine Corps Forces Reserve Center Camp Fretterd, Baltimore County, Maryland" was submitted to Ms. Beth Cole for review and comment on January 30, 2020. In summary, no archaeological sites were identified as a result of the survey. One artifact, a sherd of porcelain, was recovered in the northeast portion of the survey area. Radial shovel test pits excavated around the sherd did not produce additional artifacts. The sherd was found in an area where the soils were brought in as fill. Because of the limited research value of the sherd and the lack of additional artifacts, the sherd was discarded in Cardno's laboratory following consultation with your office on November 22, 2019.

Affected Architectural Resources

The 21-acre site of the proposed MCRC comprises leased agricultural fields and a pine grove; there are no existing buildings or structures on the proposed MCRC site. The pine grove, called the Honor Grove, was established by the

Subj: SECTION 106 CONSULTATION FOR MARINE COPRS RESERVE CENTER AT CAMP FRETTERD MILITARY RESERVATION, REISTERSTOWN, MARYLAND

Maryland Army National Guard (MDARNG) in 1992 with more than 800 white pines to memorialize the more than 800 Maryland National Guard soldiers and airmen who were activated for Operations Desert Shield and Desert Storm in the Persian Gulf in 1990 and 1991. The MDARNG dedicated "this honor grove" in May 1992 as "a living memorial" to these men and women (MDARNG 1992). The MDARNG has no objections to the alteration or removal of the Honor Grove for the proposed undertaking (MDARNG 2019).

The APE includes two historic properties: the Montrose Industrial School for Girls Historic District (BA-3207) and the Montrose Mansion and Chapel (NR# 0000354; BA-949 and BA-950). The site for the proposed undertaking is located within the northeastern portion of the Montrose Industrial School for Girls (MISG) Historic District. In 2006, the U.S. Army Corps of Engineers (USACE) inventoried and evaluated the NRHP eligibility of the MISG, which operated as a juvenile rehabilitation center from 1920 to 1988. The USACE recommended the MISG eligible as an historic district under Criterion A "as a physical representation of evolving, early twentieth century ideas regarding juvenile reform, education, and training;" and under Criterion C for "its eclectic architecture that combines elements of various traditional architectural styles" (Watson 2006). The inventory form nor National Register Eligibility Review form on the MISG, however, were not submitted to your office for review/concurrence on the eligibility of the property (MHT 2019). Nonetheless, the MDARNG considers and treats the MISG Historic District as an NRHP-eligible property (MDARNG 2016). The MISG Historic District includes 25 contributing and 28 non-contributing resources. The contributing resources include the Montrose Mansion and Chapel and associated late-nineteenth century buildings, and early- to mid-twentieth century (1920-1956) classrooms, dormitories, and farming buildings and structures. Noncontributing resources include post-1962 buildings and structures.

The Montrose Mansion and Chapel were built in the nineteenth century as part of a country estate near Reisterstown, and are now part of the CFMR. The stone mansion was initially built in 1826 as a two-story Neo-

Classical dwelling, and was expanded in the mid-nineteenth century, and then again in the late nineteenth century. Built in 1855, the chapel is a one-story, stone, Greek Revival building. A stone wall encloses the yard around the building and includes two marked graves to the east of the chapel. The buildings are significant for their Neoclassical, Second Empire, and Greek Revival architectural characteristics in Baltimore County during the period of significance of 1826 to 1885. The Montrose Mansion and Chapel were listed collectively in the NRHP on March 19, 1990, and are classified in the NRHP as "building(s)" rather than as a historic district. The NRHP boundaries surround each building; collectively, the property encompasses approximately 2 acres. The boundary of the Montrose Mansion includes two small domestic outbuildings, which are contributing resources of the NRHP property (McGrain 1989).

Impacts of MCRC Camp Fretterd Construction on Historic Properties

No individual historic properties or contributing resources of the MISG Historic District would be physically destroyed or damaged by the proposed undertaking, as no historic properties are located within the footprint of the 21-acre site. The Phase I archaeological survey did not identify any NRHP-eligible archaeological resources within the project site.

MARFORRES' consultant, Cardno, conducted a viewshed analysis to assess the potential visual effects on historic properties within the viewshed of the proposed construction of the MCRC at CFMR. The enclosed "Proposed Marine Corps Reserve Center: Viewshed Analysis, Camp Fretterd Military Reservation, Reisterstown, MD" presents a detailed analysis of the potential visual effect on the historic properties of the MISG Historic District and the Montrose Mansion and Chapel, as well as a residence at 13721 Hanover Pike, east of the CFMR. Although the residence is not documented in the Maryland Inventory of Historic Properties, it is within the viewshed of the proposed undertaking, and therefore, was included in the viewshed analysis. In summary, the viewshed analysis concluded that the proposed undertaking

would have no adverse visual effect on either of the two historic properties, as their significant features would not change from construction of the MCRC. Similarly, the analysis concluded that there would be no adverse visual effect on the residence at 13721 Hanover Pike, as views to the west of the residence would remain fairly consistent with current views so its overall setting would not significantly change.

Impacts of MCRC Camp Fretterd Operation on Historic Properties

MARFORRES has considered the potential visual and auditory effects from an increase in privately owned and tactical vehicle traffic when the new MCRC is open and operating. As indicated above, an average of 34 active Marines would be on site during weekdays, and up to 320 Marine personnel would train at MCRC Camp Fretterd during monthly drill weekends. MARFORRES estimates approximately 80 percent of reservists would drive alone to the MCRC, and approximately 20 percent would be expected to carpool.

A small increase in noise levels within the MISG Historic District would be expected as a result of the operation of POVs and tactical vehicles. Increased noise levels would be associated with Marine personnel arrivals and departures and, therefore, typically would be greatest in the morning and mid-afternoon, although these periods would be of relatively short duration. Additional occurrences of noise would occur during monthly drill weekends, when tactical vehicles would be driven from MCRC Camp Fretterd to another training venue for off-road training purposes. An increase in traffic and its associated noise would not be expected to substantially change the setting of the MISG Historic District, which currently includes intermittent traffic noise associated with operations at the CFMR by the MDARNG and the Maryland Emergency Management Agency (MEMA), whose headquarters are located south of the MARFORRES MCRC site, as well as day-long traffic noise along Hanover Pike (MD 30), a major north-south arterial road in this area. The site of the proposed MCRC is located in the eastern portion of the MISG Historic District, in an area containing only

noncontributing resources; all the contributing resources of the historic district are located farther to the west. No POVs or tactical vehicles associated with Marine operations would travel past the MCRC to other parts of the MISG Historic District. Therefore, no character-defining features important to conveying the historical and architectural significance of the MISG Historic District would change as a result of a small increase in traffic associated with the proposed undertaking. Consequently, operation of MCRC Camp Fretterd would have no adverse effect on the MISG Historic District, as an intermittent increase in vehicular traffic and noise levels from traffic would not diminish its integrity of setting or feeling.

There would be no effect to the Montrose Mansion and Chapel from operations of the MARFORRES MCRC. The mansion and chapel are located west of the MCRC site by 0.6 mile and 775 feet, respectively. As indicated above, no POVs or tactical vehicles associated with Marine operations would travel past the MCRC to other parts of the CFMR. Therefore, there would be no change to the integrity of setting or feeling of the Montrose Mansion and Chapel.

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Determination of Effect

In accordance with Section 106 of the National Historic Preservation Act and 36 CFR § 800.5(b), MARFORRES finds that the proposed construction and operation of the MCRC at CFMR will result in No Adverse Effect on any historic properties. Accordingly, MARFORRES is requesting your concurrence with our No Adverse Effect finding. If you have any comments or questions, please coordinate directly with our contractor: Lori Thursby, Cardno, Inc., 2496 Old Ivy Road, Suite 300, Charlottesville, VA 22903; phone (434) 295-4446; email lori.thursby@cardno-gs.com.

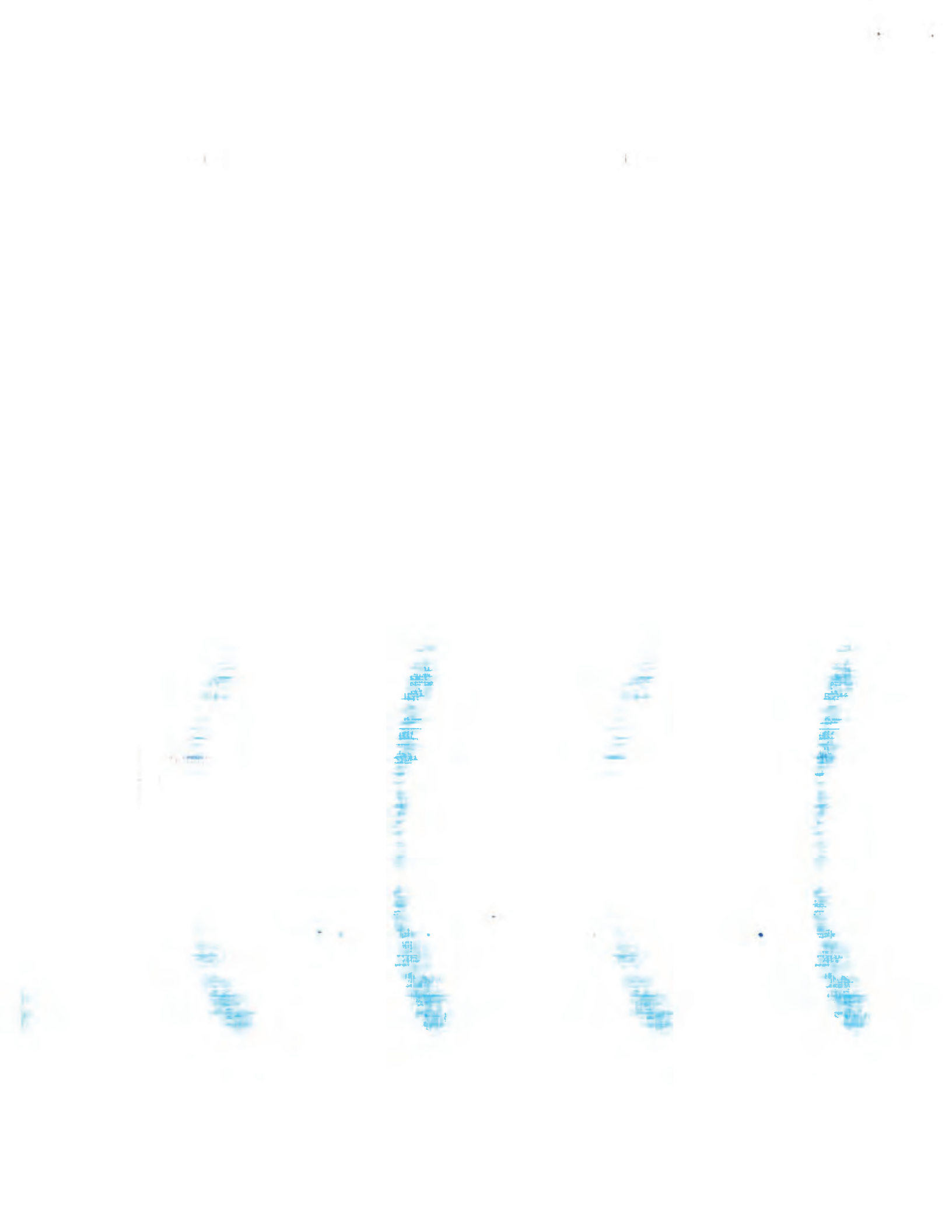
GODCHAUX.RICHARD.L.1230847602 Digitally signed by GODCHAUX.RICHARD.L.1230847602 Date: 2020.03.30 07:34:27 -05'00'

Godchaux, R.

Copy to:
Christopher Hurst, MARFORRES
Angela Peyton, NAVFAC Mid-Atlantic
Heather Robbins, NAVFAC Mid-Atlantic

The Maryland Historical Trust has determined that this undertaking will have no adverse effect on historic properties.

Date 5/6/2020



Proposed Marine Corps Reserve Center: Viewshed Analysis

Camp Fretterd Military Reservation, Reisterstown, MD

Prepared for
Marine Corps Forces Reserve
New Orleans, LA

February 2020

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ACRONYMS AND ABBREVIATIONS

APE	Area of Potential Effects
AT/FP	Antiterrorism/Force Protection
CFRM	Camp Fretterd Military Reservation
DoD	Department of Defense
EO	Executive Order
MARFORRES	Marine Forces Reserve
MCRC	Marine Corps Reserve Center
MDARNG	Maryland Army National Guard
MEMA	Maryland Emergency Management Agency
MHT	Maryland Historical Trust
MISG	Montrose Industrial School for Girls
NAVFAC	Naval Facilities Engineering Command
NRHP	National Register of Historic Places
sq ft	square feet
U.S.	United States
USACE	U.S. Army Corps of Engineers
VMF	Vehicle Maintenance Facility

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1.0 INTRODUCTION

The United States (U.S.) Marine Corps (Marine Corps), Marine Forces Reserve (MARFORRES) is proposing to construct and operate a Marine Corps Reserve Center (MCRC) at Camp Fretterd Military Reservation (CFMR) in Baltimore County, Maryland (Figure 1). The 21-acre site of the proposed MCRC comprises leased agricultural fields and a pine grove located in the northwestern portion of the 640-acre CFMR (Figure 2). There are no existing buildings or structures on the proposed MCRC site. However, CFMR was the location of the Montrose Industrial School for Girls (MISG), which is considered eligible for listing in the National Register of Historic Places (NRHP) as a historic district by the Maryland Army National Guard (MDARNG). In addition, CFMR contains the NRHP-listed Montrose Mansion and Chapel.

Cardno, Inc. was contracted to complete a viewshed analysis to determine if there will be any visual effect on historic properties within the viewshed of the proposed undertaking. The purpose of this analysis is to provide the MARFORRES with data for compliance with Section 106 of the National Historic Preservation Act (NHPA) of 1966, as amended, which mandates federal agencies take into account the effects of their projects on historic properties; i.e., historic district, site, building, structure, or object listed in or eligible for listing in the NRHP (36 Code of Federal Regulations [CFR] § 800.16(l)(1)). Cardno Senior Architectural Historian Lori Thursby, M.A.H., conducted the assessment, with contributions by Sonja Lengel, M.S., Architectural Historian (Appendix B).

1.1 PROJECT LOCATION

CFMR is located in Baltimore County, approximately 5 miles from Reisterstown, Maryland (Figure 1). CFMR is home to the MDARNG and the Maryland Emergency Management Agency (MEMA) headquarters. CFMR had been the location of the MISG between 1920 and 1962, and then served as a juvenile rehabilitation center until 1988 when the MDARNG acquired the 640-acre site from the State of Maryland following closure of the juvenile rehabilitation center. The MDARNG named the property after Lieutenant General James F. Fretterd, Maryland Military Division's adjutant general from 1987 to 2003. In 1997, MEMA, a component of the Maryland Military Division under the leadership of General Fretterd, became a tenant at CFMR.

CFMR is divided into three campus areas (upper, middle, and lower). The upper campus includes the main entry access point and MEMA Headquarters. The middle campus is comprised of a dining facility, auditorium, and billeting facilities. The lower campus includes various training facilities and warehouse spaces. Rue Saint Lo Drive bisects CFMR beginning at the main entry access point at the intersection with the Hanover Pike (MD Route 30). The site proposed for construction of the MARFORRES MCRC is located in the upper campus in the northeast quadrant of CFMR, across the street from MEMA Headquarters (Figure 2).

The proposed site is located on the north side of Rue Saint Lo Drive within an approximately 21-acre area that overlaps with a white pine grove (known as the Honor Grove) and leased farmland (Figure 3), which is currently planted in corn and hay grasses (Photos 1 and 2). Historically, the project site has been used as agricultural land.

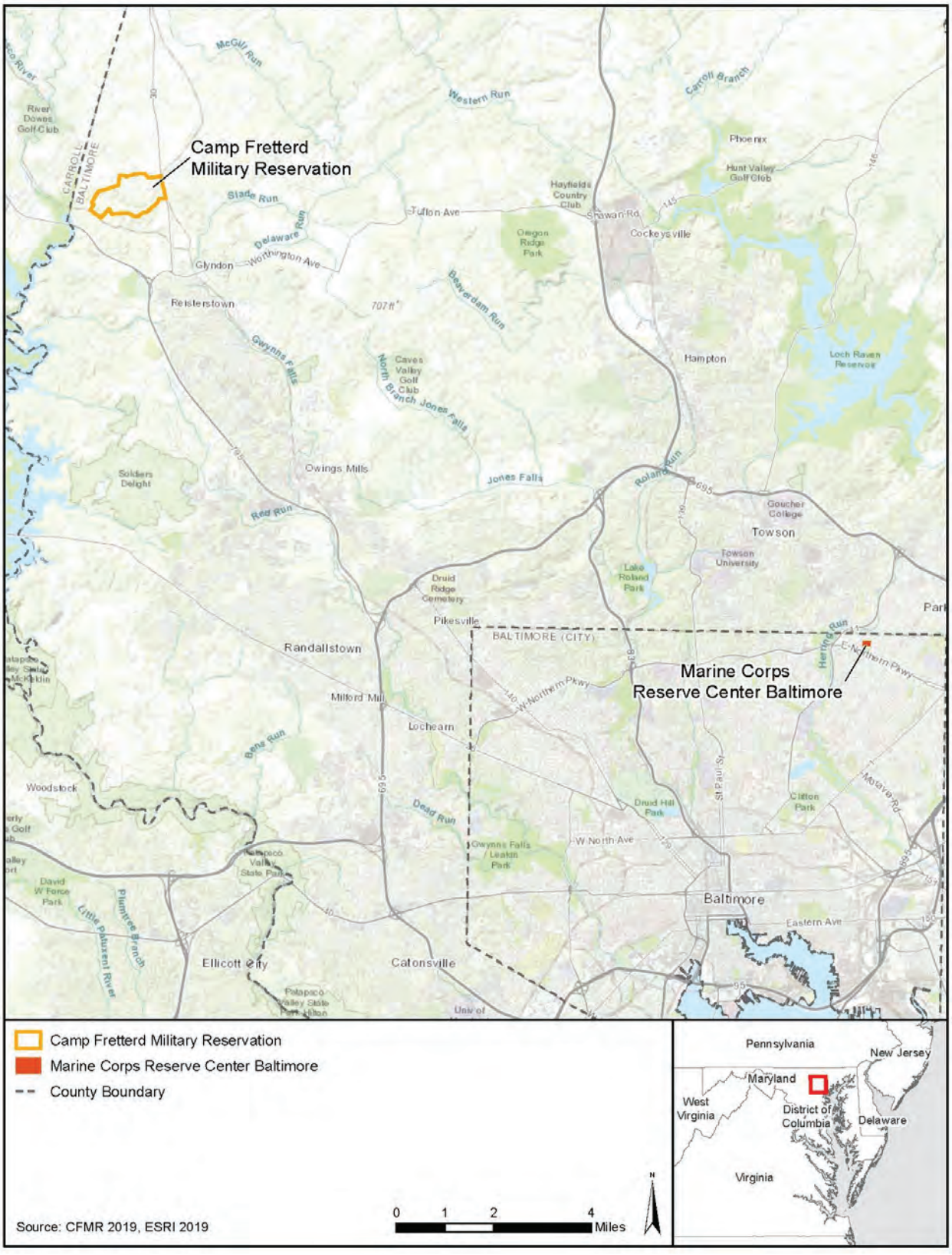

Figure 1. Regional Location of CFMR

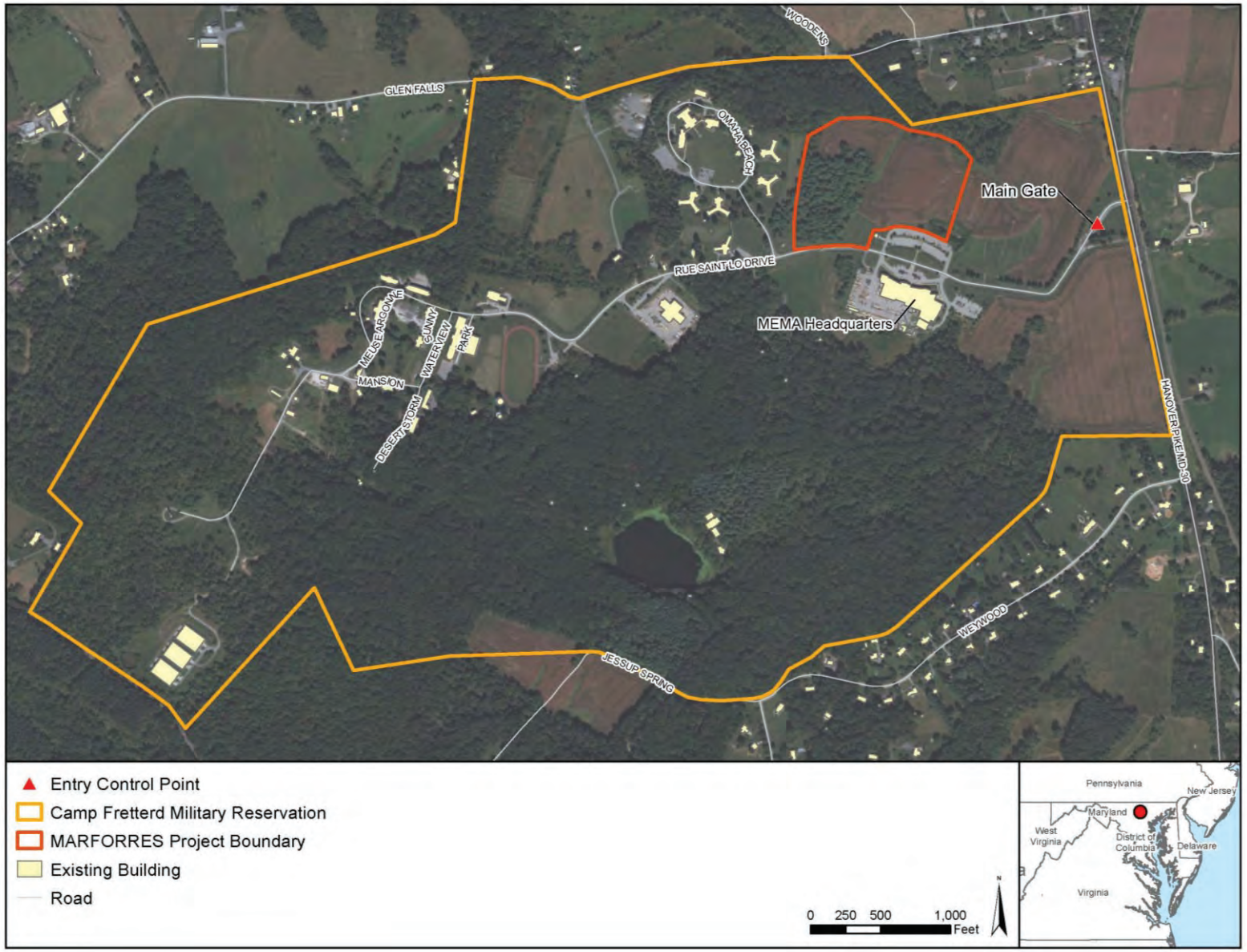

Figure 2. Location of the North Severn Complex

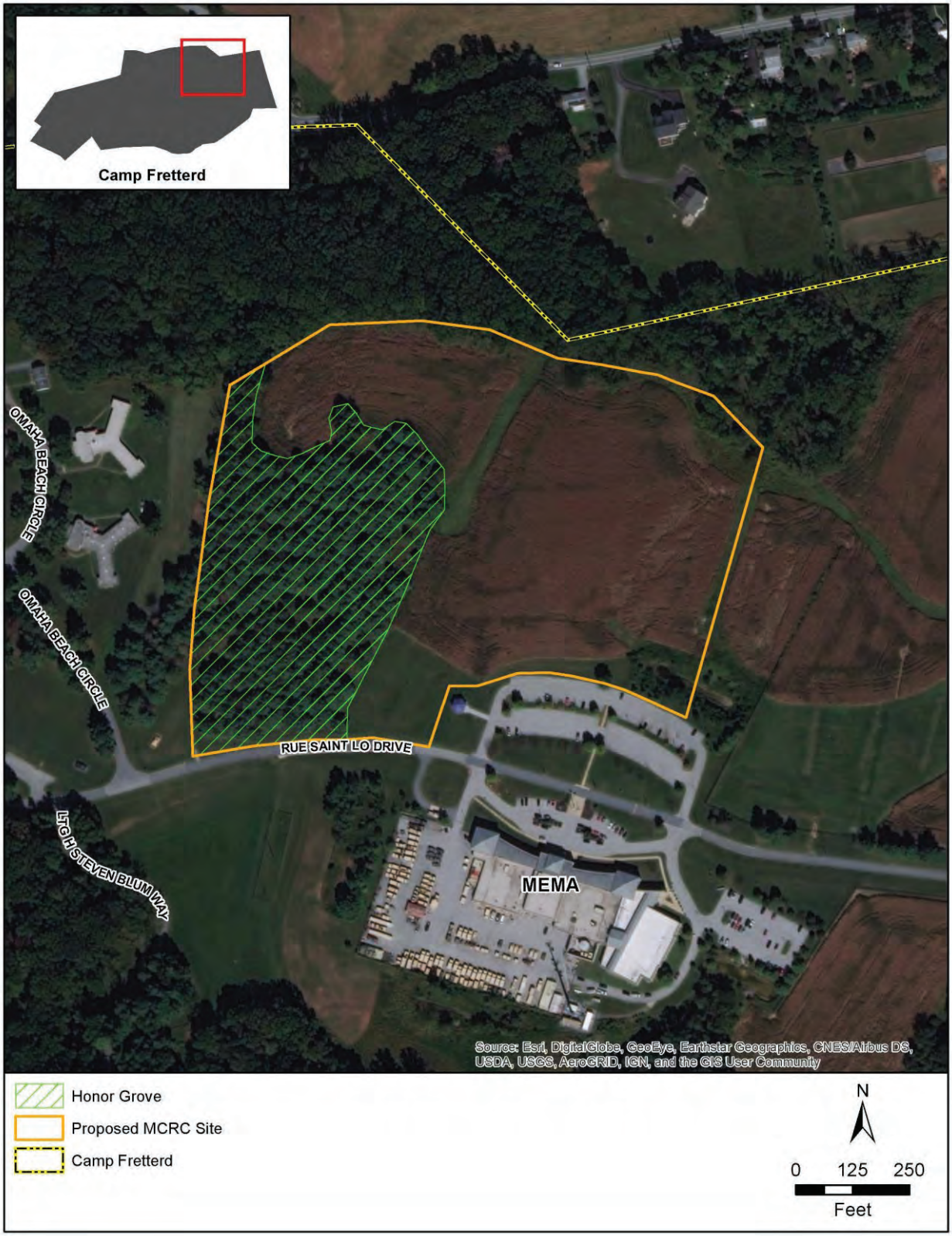

Figure 3. MCRC Site at CFMR

Photo 1. View Looking North of Agricultural Field at Project Site.

Photo 2. View Looking Northwest of Pine Grove at Project Site.

1.2 PROPOSED UNDERTAKING

Under the proposed undertaking, a new MCRC would be constructed at CFMR that would provide the facilities necessary to support MARFORRES training requirements within the greater Baltimore area. The MCRC Baltimore and combat vehicle maintenance shop are structurally deficient and unable to support current operational training requirements of the 4th Combat Engineer Battalion 4th Marine Division.

The CFMR MCRC would include a single-story Reserve Training Center and Armory (inside) of approximately 35,000 square feet (sq ft), vehicle maintenance facility (VMF) (approximately 11,000 sq ft), storage shed (approximately 4,000 sq ft), covered training area, vehicle wash platform, privately owned and tactical vehicle parking areas, and several small support facilities. The facilities would be enclosed within a secured, fence area with a guard house and security gate entry (Figures 4 and 5). The design of the Training Center and VMF features concrete masonry unit load-bearing walls with decorative masonry exterior walls and gable roofs clad in standing seam metal. The color scheme of the buildings will be compatible with the adjacent buildings at CFMR. The Training Center would include a drill hall with clerestory windows topping its minimum 16-ft interior clear height. High bays for the six vehicle bays in the VMF would also have a 16-ft clear minimum height (Naval Facilities Engineering Command [NAVFAC] Washington 2019).

Site preparation would include site clearing (tree removal), excavation (cut), and preparation for construction (fill, grade, and drainage). Under the current design, approximately 6 acres of the existing 9-acre pine grove would be cleared. If the design changes and the entire Honor Grove would be removed, then a new buffer of trees would be replanted as necessary along the west side of the site.

The site has an approximate 40-foot change in elevation from the high point to the low point on a south to north axis and an aggregate slope of approximately 6 percent. Due to the elevation at Ru Saint Lo Drive and the need to keep the driveway at a relatively gentle grade, a retaining wall would be needed immediately adjacent to the road that transitions down to the elevation of the training center building. Other site features of the MCRC would include concrete curbs and sidewalks and landscaping.

To provide electrical service to the MCRC, an underground concrete duct bank would be extended approximately 750 feet from an electrical manhole located on the north side of Ru Saint Lo Drive near the MEMA parking lot west entrance, to the building service area, where a transformer and switchgear would be installed. Natural gas may be provided via connection with an existing line located approximately 300 feet south of the proposed training center building. Telecommunication connections may be provided by extending the fiber optics duct bank located on the north side of Ru Saint Lo Drive near the MEMA parking lot east entrance. Potable groundwater would be provided via connection to the existing water service line. Additional infrastructure would include installation of an on-site septic system utilizing a drain field north of the proposed construction site (refer to Figure 4), a fire pump system with a 75,000-gallon aboveground water storage tank, and an emergency generator. Approximately 15 acres within the 21-acre site would be disturbed to implement the proposed action.[1]

Sustainable design principles would be included in the design and construction of the MCRC in accordance with Executive Order (EO) 13834, *Efficient Federal Operations*. Development and use of Low Impact Development methods per Department of Defense (DoD) Unified Facilities Criteria 3-210-10N, *Low Impact Development* would be incorporated as appropriate to minimize stormwater runoff. Stormwater drainage at the proposed MCRC site would be by sheet flow and open channels to the extent possible.

[1] The results of a Phase I archaeological survey of the 21-acre proposed site of the CFMR MCRC are presented in the report titled *Phase I Archaeological Survey Report U.S. Marine Corps Forces Reserve Center Camp Fretterd Baltimore County, Maryland* (U.S. Marine Corps 2020).

Source: NAVFAC Washington 2019.

Figure 4. Site plan of proposed MARFORRES MCRC

LEGEND

① MCRC TRAINING FACILITY
② VEHICLE MAINTENANCE FACILITY
③ POV PARKING
④ ORGANIZATIONAL PARKING
⑤ VEHICLE WASH PLATFORM
⑥ HAZMAT PAD + QUADCON STORAGE
⑦ GUARD HOUSE & SECURITY GATE ENTRY
⑧ SECURITY FENCING
⑨ NEW SIDEWALK
⑩ ORGANIC STORAGE SHED
⑪ COVERED WEAPONS CLEANING AREA
⑫ ENCLOSED UTILITIES YARD *
⑬ NEW RIGHT TURN LANE
⑭ REFUELING STATION

* UTILITIES YARD INCLUDES MECHANICAL, ELECTRICAL AND AT-GRADE WATER STORAGE TANK

Source: NAVFAC Washington 2019.
Note: The color scheme portrayed is for rendering purposes only. Actual colors will be compatible with the adjacent buildings at CFMR.

Figure 5. Conceptual Perspective Rendering of the MARFORRES MCRC

Curbs and gutters would be used in parking areas and along driveways to direct the flow to drain inlets, and infiltration areas would be incorporated into parking lot islands in the privately owned vehicle parking areas and on the perimeter of the tactical vehicle parking area, in keeping with Low Impact Development guidelines.

Antiterrorism/Force Protection (AT/FP) features would be incorporated in accordance with DoD Unified Facilities Criteria 4-010-01, *DoD Minimum Antiterrorism Standards for Buildings*. The intent of these building standards is to integrate greater resistance to a terrorist attack into all inhabited buildings. The MCRC site would be located within a controlled perimeter to meet minimum AT/FP standoff requirements. Within the controlled perimeter, the building force protection measures would include notification systems, emergency shutoffs for ventilation systems, laminated windows, emergency lighting and signage as required. Force protection measures outside the building would include a guardhouse, bollards, and vehicle barriers.

Up to 320 Marine reservists that are currently assigned and trained at MCRC Baltimore would be stationed at MCRC Camp Fretterd to meet their operational training requirements. Approximately 10 percent would relocate to the area. During weekdays, an average of 34 active Marines would be on site in support of administrative functions. During drill weekends, active Marines and up to 286 reserve Marines would train at MCRC Camp Fretterd. Training would include classes, meetings, weapons maintenance, vehicle maintenance, and drill formations.

Tactical vehicles would be anticipated to access and potentially be maintained and stored at the MCRC. These vehicles would remain on existing roads; the vehicles would not be driven off road within CFMR. The tactical vehicles would be driven from MCRC Camp Fretterd to another training venue for off-road training purposes.

The proposed undertaking is planned for Fiscal Year 2021.

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2.0 METHODOLOGY

The purpose of this study is to assess the potential visual effects on historic properties within the viewshed of the proposed undertaking. A combination of a records search and site visit was used to identify the viewshed for the proposed undertaking and the historic properties that may be visually affected by the proposed undertaking. The records search was completed on July 29, 2019, and the site visit was conducted on July 31, 2019.

The records search was directed toward identifying previously recorded architectural resources, including any known historic properties, within 1 mile of the site of the proposed MCRC (Figure 6). The 1-mile radius provided a starting point for identifying the geographic area within which visual effects from the proposed undertaking may occur, referred to in this study as the "viewshed." The records search included reviewing the online NRHP database, the Maryland Historical Trust's (MHT) online cultural resources database called Medusa, and available documents from the MDARNG. The site visit examined the physical relationship of each previously recorded property that was identified during the records search to the site of the proposed MCRC to determine whether the new MCRC could be visible from a historic property or could obscure a historic property from being seen at primary locations. The site visit also examined whether the viewshed of the proposed undertaking could extend beyond the CFMR installation by assessing the potential visibility of the proposed MCRC from areas adjacent to the CFMR and the previously inventoried properties that contain resources that are currently 50 years old or older. The age of properties that have not been documented in the Maryland Inventory of Historic Properties (MIHP) was determined during the site visit through visual inspection of a resource's style, building form, materials, and other physical features. Online Baltimore County Real Property records (Maryland Department of Assessments and Taxation 2019) were used to verify construction dates.

Field observations related to existing topography; types, materials, and heights of surrounding buildings; and natural features within the current viewshed of a historic property or property currently 50 years old or older to the proposed MCRC site were noted, and digital photographs were taken. This information was then used to determine the extent to which the MARFORRES MCRC would be visible to the surrounding area, and thus, define the viewshed, and ultimately the area of potential effects (APE), of the proposed undertaking. The viewshed analysis was based on the project's potential impact on the significant characteristics of any eligible or potentially eligible historic architectural properties within the identified viewshed. Specifically, the criteria of adverse effect in the NHPA Section 106 implementing regulations state that potential adverse effects from a proposed undertaking include "Introduction of visual, atmospheric or audible elements that diminish the integrity of the property's significant features" [36 CFR § 800.5(a)(2)(v)].

Visual effects of the proposed undertaking were evaluated in terms of impacts on any one of seven aspects of integrity of a historic property: location, workmanship, design, materials, setting, feeling, and association. The viewshed analysis considered the type of property (district, building, structure, site, or object) and the criteria for which the historic property is eligible (National Register Criteria for Evaluation, 36 CFR § 60.4). Impacts that negatively affect the characteristics of a historic property that qualify it for inclusion in or eligibility for the NRHP would be considered to have an adverse effect. Impacts that do not adversely affect the characteristics of a historic property that qualify it for the NRHP would be considered to have no adverse effect.

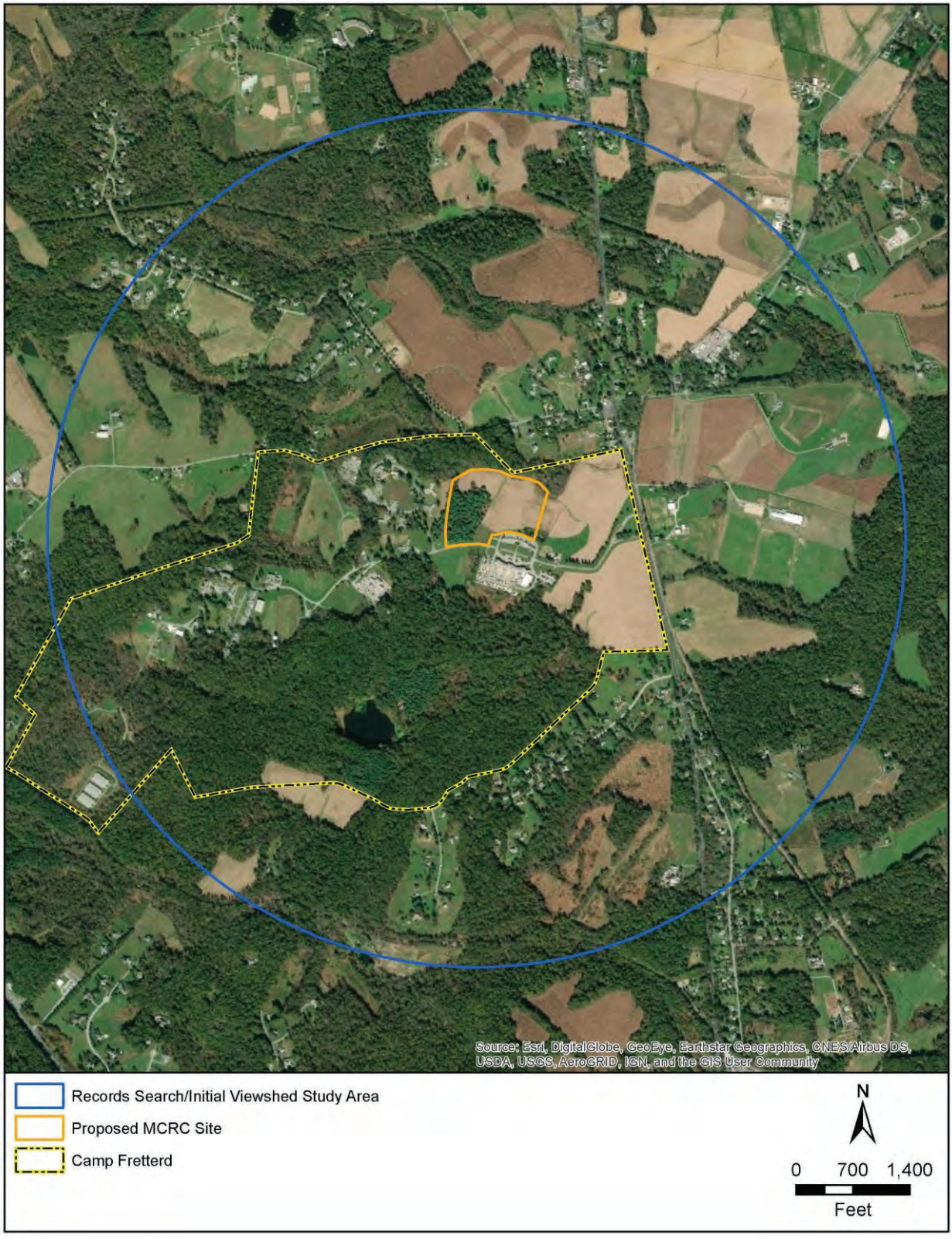

Figure 6. Aerial Map Showing 1-mile Radius Used for Records Search and Initial Viewshed Study Area

3.0 IDENTIFIED VIEWSHED AND HISTORIC PROPERTIES

3.1 PROJECT VIEWSHED

As indicated in Section 2 Methodology, a records search was conducted to identify previously recorded architectural resources and historic properties located within 1 mile of the proposed MCRC site. Table 1 and Figure 7 present the results of the records search.

Table 1. Previously Inventoried Properties within 1 Mile of the Proposed MCRC Site

Resource Name	MIHP Inventory Number(s)	Summary Description	NRHP Status
Montrose Mansion and Chapel	BA-949; BA-950	Mansion and chapel of former 19th century country estate	Listed (NR# 0000354)
Slade House and Barn, Site	BA-552	Site of mid-19th century house and barn (unknown period of construction)	No NRHP recommendation recorded (house and barn demolished)
Mt. Gilead United Methodist Church and Cemetery	BA-1168	Late 19th century frame church in Woodensburg	No NRHP recommendation recorded
Tollgate Keeper's House	BA-2302	Site of frame toll keeper's house in Woodensburg	Recommended Eligible (house later demolished)
Montrose Industrial School for Girls Historic District	BA-3207	1920–1988 juvenile rehabilitation center	Recommended Eligible
Slade House	BA-3210	Late-19th century Gothic Revival-style house	Recommended Eligible
The Cottage, Building 111	BA-3309	Altered ca. 1840 stone dwelling of former 19th century country estate	Not Individually Eligible; Contributing to MISG Historic District

Source: MHT 2019a
Note: MIHP = Maryland Inventory of Historic Properties, MISG = Montrose Industrial School for Girls.

The records search identified two historic properties: the NRHP-listed Montrose Mansion and Chapel (NR# 0000354; BA-949 and BA-950), which were part of the nineteenth-century Montrose estate, and the former MISG (BA-3207), which has not been formally evaluated for listing in the NRHP but is considered eligible as a historic district. Section 3.2 includes brief descriptions of each historic property and their respective history and significance. Appendix A contains a copy of the NRHP nomination form of the former and the MIHP form for the latter. The Montrose Mansion and Chapel are located within CFMR, and are contributing resources of the MISG Historic District, which shares the same boundary as CFMR (Figure 7). One other building in CFMR that was individually recorded is The Cottage, Building 111 (BA-3309), which was previously evaluated as part of the former Montrose estate. The evaluation determined that several alterations to The Cottage, Building 111 and changes to its setting had compromised its integrity. For these reasons, the building was excluded from the NRHP listing of the Montrose Mansion and Chapel (MHT 2019b) but is a contributing resource to the MISG Historic District (MDARNG 2016; USACE n.d.).

Four other previously inventoried properties are within 1 mile of the MCRC site. They include two domestic properties located east of CFMR, the Slade House (BA-3210) and the site of the demolished Slade House and Barn (BA-552), and two resources near the northeast corner of CFMR in the community of Woodensburg, the Mt. Gilead United Methodist Church and Cemetery (BA-1168) and the site of the Tollgate Keeper's House (BA-2302).

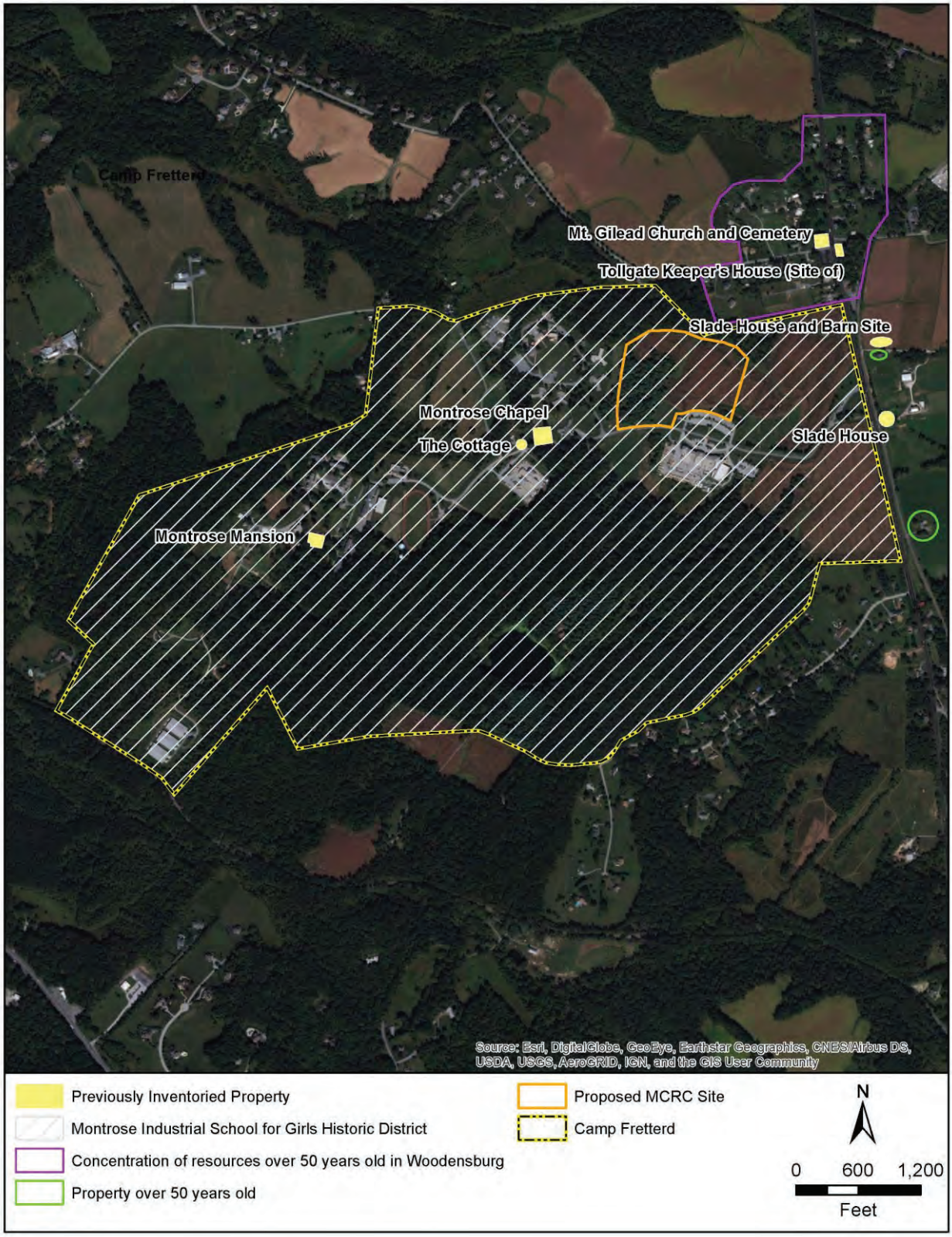

Figure 7. Aerial Map Showing Locations of Previously Inventoried Properties and Properties 50 Years Old or Older Not Currently Included in the MIHP

The MIHP documentation for both the Slade House and Barn Site (BA-552) and the Mt. Gilead United Methodist Church and Cemetery (BA-1168) is limited to a one-paragraph description and location maps; no NRHP eligibility recommendation is recorded and MHT's cultural resources database indicates there is no formal determination of eligibility for either property. A handwritten inventory form of the Tollgate Keeper's House (BA-2302) from 1992 recommended the house eligible for listing in the NRHP under Criteria A and B. However, no formal evaluation/determination of eligibility of this house, which has been demolished, was made. Although the Evaluation field on the MIHP form for the Slade House (BA-3210) is marked as "not evaluated," the significance section of the form states "the Slade House is significant as a representative example of a vernacular Gothic Revival-style house in Baltimore County" (E.H.T. Traceries 2003). However, MIHP records indicate there is no formal determination of eligibility on the Slade House (BA-3210).

Because construction activities associated with the proposed undertaking would occur within CFMR and the MISG Historic District, the viewshed of the proposed undertaking was defined as encompassing the entire historic district. A site visit was subsequently conducted to examine the physical features of the MCRC site and surrounding environment and photograph the sightlines from the two identified historic properties toward the proposed MCRC site. In addition, as explained in Section 2, Methodology, the site visit looked in areas adjacent to the CFMR for properties 50 years old or older to determine whether the viewshed of the proposed undertaking could extend beyond the CFMR installation. The site visit revealed a number of properties 50 years old or older are northeast of CFMR and the MCRC site in the community of Woodensburg, adjacent to Mt. Gilead Church and Cemetery (BA-1168) and the site of the Tollgate Keeper's House (BA-2302) (Figure 7). In addition, two other resources over 50 years old were identified east of the CFMR on Hanover Pike, north and south of the Slade House (BA-3210) (Figure 7). None of the resources near the southeast border of CFMR are over 50 years old; they consist of late 1970s to mid-1980s residences.

As observed during the site visit, dense woods cover the north and west perimeters of CFMR (refer to Figure 2), providing a vegetative buffer that obscures views from the MCRC site toward Mt. Gilead Church and Cemetery (BA-1168) and other properties over 50 years old that are adjacent to CFMR to the northeast in Woodensburg (Figures 7 and 8; Photos 3 and 4). Therefore, the community of Woodensburg is not within the viewshed of the proposed undertaking. The topographic high point of the MCRC site is near the southeast corner of the site. From here, views to the east consist of open areas of rolling, cultivated agricultural land, and include a distant view of a dwelling on the east side of Hanover Pike (State Route 30), between the previously inventoried properties of the Slade House (BA-3210) and the Slade House and Barn Site (BA-552) (Figures 7 and 8; Photo 5). This house, a Dormer Front Bungalow (Figure 8; Photo 6), is not documented in the MIHP. According to Baltimore County Real Property records, the house was built in 1948 and stands on a 1-acre parcel at 13721 Hanover Pike (Maryland Department of Assessments and Taxation 2019). While the residence at 13721 Hanover Pike is visible from the proposed MCRC, the site visit determined that the Slade House is not. Views between the Slade House and the MCRC site are blocked by trees and are further obscured by the terrain, as the topography gradually rises north and west of the Slade House (Figure 8; Photos 7 and 8). For the same reasons, a circa 1950s residence south of the Slade House (refer to Figure 7) is not visible from the MCRC site.

Based on the information gathered from the records search and observations made during the site visit, the viewshed for the proposed undertaking encompasses the CFMR, because the proposed construction of the MARFORRES MCRC would occur within the boundary of the MISG Historic District, which corresponds to the installation boundary. The viewshed also extends to the east to include the dwelling at 13721 Hanover Pike and its property (as indicated by Baltimore County Real Property records [Maryland Department of Assessments and Taxation 2019]). Figure 9 shows the viewshed/APE for the proposed undertaking.

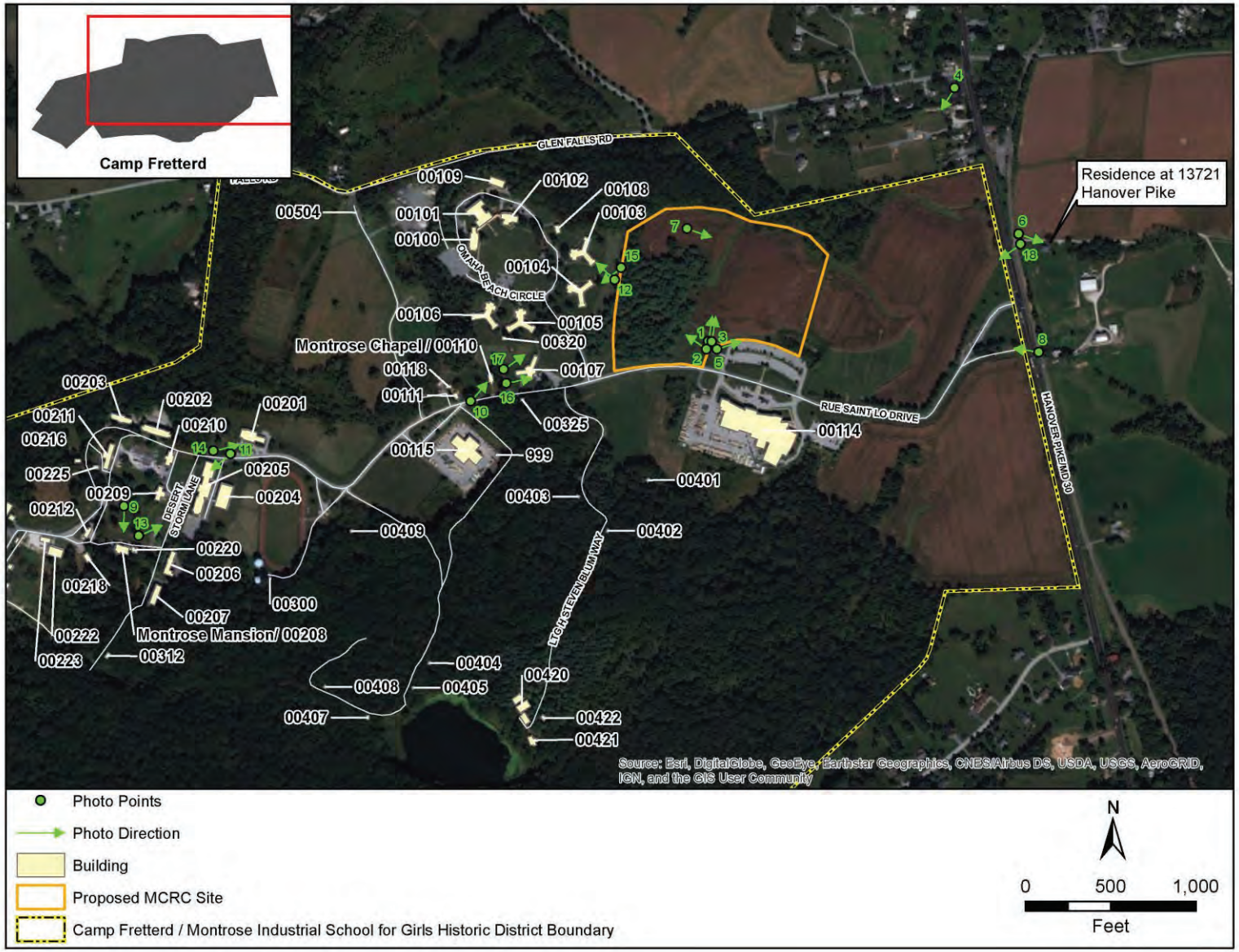

Figure 8. Aerial Map Showing Photo Locations

Note: dense woods in background would remain between CFMR and the community of Woodensburg

Photo 3. View Looking North from South-Central Part of Project Site.

Photo 4. View from a Parking Lot South of the Mt. Gilead Church, Looking Southwest Toward CFMR.

Photo 5. View Looking East-Northeast from South-Central Part of Project Site.

Photo 6. View Southeast of 13721 Hanover Pike.

Photo 7. View Looking East-Southeast from Northeast Part of Project Site.

Photo 8. View Looking West-Northwest from the Slade House (BA-3210) on Hanover Pike.

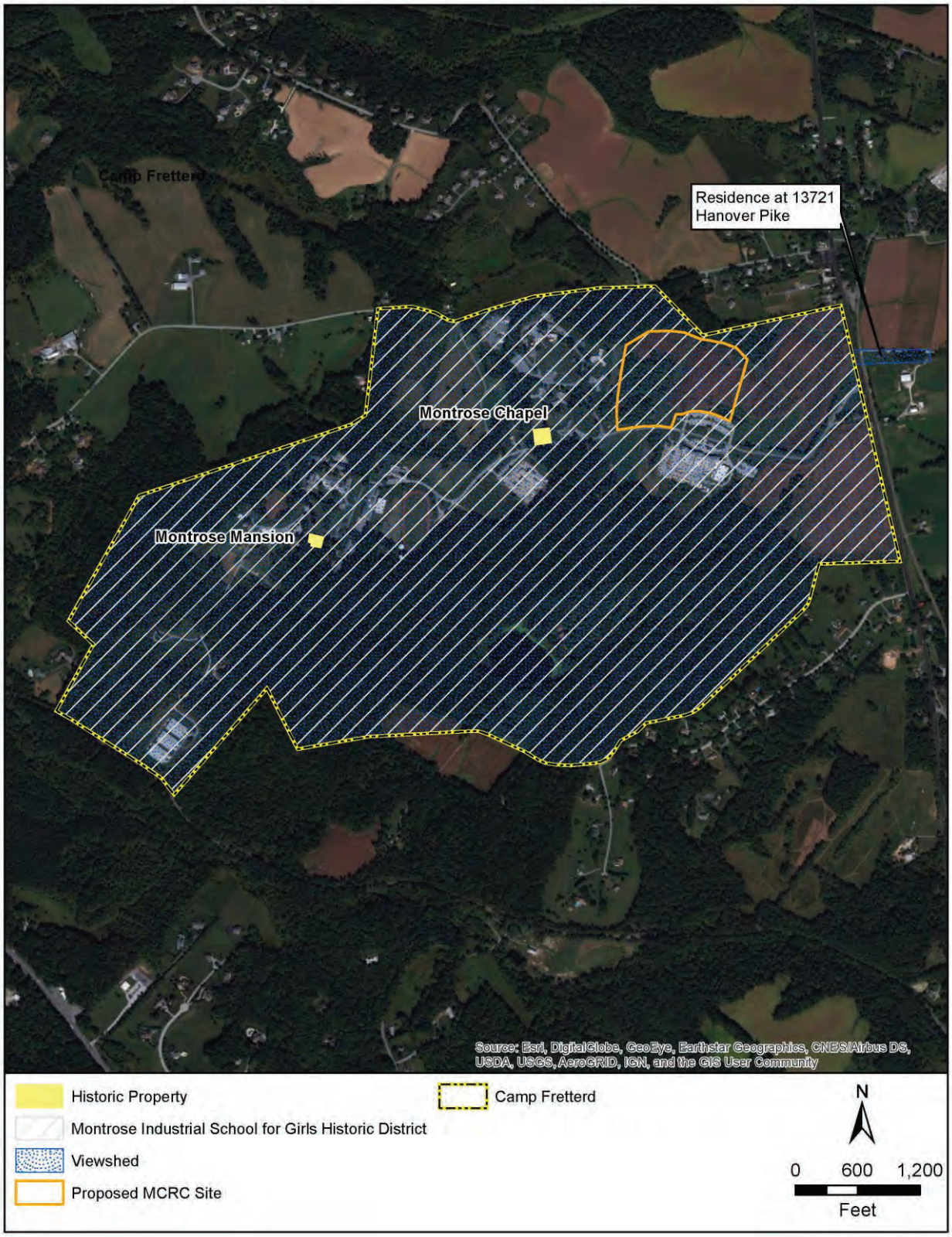

Figure 9. Aerial Map Showing the Viewshed of the Proposed Undertaking

3.2 HISTORIC PROPERTIES WITHIN PROJECT VIEWSHED

3.2.1 Montrose Mansion and Chapel

The Montrose Mansion and Chapel (documented in the MIHP as BA-949 and BA-950, respectively) were built in the nineteenth century as part of a country estate near Reisterstown, Maryland, and are now part of CFMR. The stone mansion was developed in three stages, and features an L-shaped footprint. It was initially built in 1826 as a two-story neo-classical dwelling and measured five bays wide (Figure 8; Photo 9). By the mid-nineteenth century, a two-story wing was added to the east facade, expanding the overall width of the building by an additional two bays. Around 1880, a mansard roof with round-top dormers, a cupola, and a bracketed cornice with pendants were added to the dwelling. A two-story frame addition was added at an unknown date as a servant's quarter, as well as a small brick addition. The interior floorplan is a four-over-four room arrangement with the principal and secondary staircases in the northeast rooms. The interior details include fluted neo-classical molding. The 1989 NRHP nomination mentions scored plasterwork in the interior (McGrain 1989).

Built in 1855, the chapel is a one-story, stone, Greek Revival building (Figure 8; Photo 10). The façade is dominated by a three-story entrance and bell tower. The chapel has a rectangular footprint and measures three bays deep. A gable roof with a boxed cornice and understated frieze cap the building. A stone wall encloses the yard around the building and includes two marked graves to the east of the chapel.

3.2.1.1 Historic Significance and Integrity

The Montrose Mansion and Chapel were listed collectively in the NRHP on March 19, 1990 for their locally significant architecture (Criterion C). Because the nominated property contains a religious building, the property is also listed under Criteria Consideration A (Religious Properties). The buildings are significant for their Neoclassical, Second Empire, and Greek Revival architectural characteristics in Baltimore County during the period of significance of 1826 to 1885. The Montrose Mansion is one of only two pre-Civil War grand country estates in the Reisterstown section of Baltimore County. The Montrose Chapel is notable since very few country estates in Baltimore County had a private chapel. The Historic Context for the NRHP nomination states the mansion is significant for its association with N. Jerome Bonaparte; however, the property is not listed in the NRHP under Criterion B (association with lives of significant persons in our past). The NRHP nomination notes the mansion and chapel retain integrity of materials except for the screened porch addition on the mansion's main façade (McGrain 1989); no other aspects of integrity are specifically addressed.

The Montrose Mansion and Chapel are classified in the NRHP as "building(s)" rather than as a historic district. The NRHP boundaries surround each building (Figure 7); collectively, the property encompasses approximately 2 acres. The boundary of the Montrose Mansion includes two small domestic outbuildings, which are contributing resources of the NRHP property (McGrain 1989).

Photo 9. Montrose Mansion (Building 208), View Looking South.

Photo 10. Montrose Chapel (Building 110), View Looking Northeast.

3.2.2 Montrose Industrial School for Girls Historic District

The MISG operated as a juvenile rehabilitation center from 1920 to 1988. The State of Maryland purchased approximately 486 acres of the former Montrose estate to establish a rehabilitation center for delinquent wayward girls. Initially, the school was for delinquent white females and operated as a self-sufficient farm and industrial complex. In 1962, the school merged with the Barrett School for Girls and shifted its focus from a training school to a detention center. Over time, MISG became both multiracial and co-educational (the latter occurred in 1973). The school closed in 1988 (Watson 2006). The Maryland National Guard acquired the land the following year for a training site for the MDARNG.

The original plan for the MISG integrated the ca. 1820s Montrose Mansion, 1855 Montrose Chapel and pastorage, and several late nineteenth and early-twentieth century agricultural buildings of the former Montrose estate with four new two-story stone classroom and dormitory buildings built in a rectangular plan. These "cottages," as they were named, featured Colonial Revival elements to compliment the Montrose Mansion. The Montrose Mansion was converted to an administrative center and industrial facility where the girls manufactured clothing. In the 1930s, an infirmary, another dormitory, and other buildings were added to the training school (Figure 8; Photo 11), as well as suitable infrastructure and utilities, including a sewage treatment plant, two water pump houses, and a water supply tank (USACE n.d.; Watson 2006). After the Montrose School merged with the Barrett School in 1962, a gym and five, one-story concrete block dormitories were built in a circular arrangement in an open field to the northeast of the original complex (Figure 8; Photo 12). These new buildings embodied a more austere and functional aesthetic (USACE n.d.; Watson 2006).

3.2.2.1 Historic Significance and Integrity

The U.S. Army Corps of Engineers (USACE) inventoried and evaluated the NRHP eligibility of the MISG in 2006; its site number is BA-3207. The USACE recommended the MISG eligible as an historic district under Criterion A "as a physical representation of evolving, early twentieth century ideas regarding juvenile reform, education, and training;" and under Criterion C for "its eclectic architecture that combines elements of various traditional architectural styles" (Watson 2006). The USACE did not submit the inventory form or NR Eligibility Review form on the MISG to the MHT for their review/concurrence on the eligibility on the property (MHT 2019c). However, according to its Integrated Cultural Resources Management Plan, the MDARNG considers and treats the MISG Historic District as an NRHP-eligible property (MDARNG 2016).

The MISG Historic District includes 25 contributing and 28 non-contributing resources. The contributing resources include the NRHP-listed Montrose Mansion and Chapel and associated late-nineteenth century buildings, and early- to mid-twentieth century (1920–1956) classrooms, dormitories, and farming buildings and structures. Noncontributing resources include post-1962 buildings and structures.

Photo 11. McComas Building (Building 205), Contributing Resource to MISG Historic District. Built in 1939 as a School Building.

Photo 12. Fleetwood Hall (Building 103), Noncontributing Resource to MISG Historic District. Built in 1962 as a Dormitory.

4.0 RESULTS OF VIEWSHED ANALYSIS

4.1 ANALYSIS

The identified viewshed for the proposed MARFORRES MCRC encompasses two historic properties: the NRHP-listed Montrose Mansion and Chapel and the NRHP-eligible MISG Historic District. Additionally, the viewshed includes the residence at 13721 Hanover Pike, which has not been previously inventoried in the MIHP, or evaluated for NRHP eligibility. Nonetheless, this viewshed analysis considers the potential visual effects of the proposed undertaking on this property.

The potential visual effects of the construction of the proposed MCRC at CFMR are assessed for each property in the sections that follow. The results of the viewshed analysis assisted MARFORRES in reaching an overall finding of effect for the project.

4.1.1 Montrose Mansion and Chapel

The construction of the MARFORRES MCRC would have the potential to affect the integrity of location, setting, and feeling of the Montrose Mansion and Chapel by introducing new visual elements within their setting. The Montrose Mansion and Chapel are listed collectively on the NRHP but are separated by approximately 0.4 mile. Each has an NRHP boundary immediately surrounding the building, and according to the NRHP nomination form, was "drawn to exclude the [MISG] school or institution buildings that stand near the historic buildings" (McGrain 1989).

The MCRC site is located approximately 0.6 mile northeast of the Montrose Mansion. The mansion stands at the south end of a quadrangle of open green space that is bordered on the other three sides by early- and mid-twentieth century buildings of the former MISG (nearly all are contributing to the historic district). Northeast views from the Montrose Mansion toward the MCRC site include Building 204 (noncontributing to MISG Historic District) and Building 205 (contributing to MISG Historic District) and hillsides (Figure 8; Photo 13). Because of the distance and hilly terrain, as well as other CFMR facilities and dense vegetation located between the two areas, the MCRC site would not be visible from the Montrose Mansion. In fact, it is worth noting that the Montrose Chapel is not visible from the Montrose Mansion or the quadrangle of buildings in that part of the CFMR (Figure 8; Photo 14).

Photo 13. View Looking Northeast Toward the MCRC Site from the Montrose Mansion (Building 208). Buildings 204 (*right*) and 205 (*center*) are in the Background.

Photo 14. View Looking East Toward Montrose Chapel from the North Side of Building 205. Building 201 is on the Left.

The MCRC site is located approximately 775 feet northeast of the Montrose Chapel. The NRHP boundary of the chapel includes the stone wall and yard that surround the building and two marked graves. Closest to the chapel are The Cottage, Building 111 (BA-3309; contributing to the MISG Historic District) and Building 118 (noncontributing to the MISG Historic District) to the west, and a former dormitory (one story) of the MISG (noncontributing) to the east. A group of early 1960s one-story dormitories built around an oval-shaped courtyard are north of the chapel. The dormitory complex is approximately 16–20 feet lower in elevation compared to the MCRC site adjacent to the east. Despite the higher elevation of the MCRC site, current views from the west side of the site to the southeast, toward the chapel, consist of the dormitories and dense vegetation; the Montrose Chapel is not visible (Figure 8; Photo 15). Similarly, current views from the Montrose Chapel looking east and northeast toward the MCRC site include the dormitories and dense vegetation (Figure 8; Photos 16 and 17). Although the project might include clearing the entire pine grove (Honor Grove) for development of the MCRC, a new buffer of trees would be replanted at the west edge of the site as needed. Privately owned vehicle parking would be closest to the vegetative border, with the reserve training center and the VMF and tactical vehicle parking farther to the east and northeast, respectively. The one-story reserve training center and VMF with high bays would not exceed the height of the white pines, which are upwards of 50 feet tall. As such, it is anticipated that the presence of a vegetative buffer along with the existing vegetation around the dormitories and the chapel itself, would obscure views of the reserve training center and related facilities from the Montrose Chapel.

Based on the assessment of potential visual effects described above, the construction of the MARFORRES MCRC would not diminish the integrity of location, setting, and feeling of the Montrose Mansion and Chapel. There would be no visual effect from construction of the MCRC due to the distance and existing development and dense vegetation between the historic property and the project site.

Photo 15. View Looking Southwest toward Montrose Chapel from the West Side of the MCRC site. Building 104 is in the Foreground.

Photo 16. View Looking East Toward MCRC Site from East Side of Montrose Chapel (Building 110). Building 107 is in the Foreground.

Photo 17. View Looking Northeast Toward the MCRC Site from Northeast Corner of Montrose Chapel (Building 110). Building 105 is at the left.

4.1.2 Montrose Industrial School for Girls Historic District

The MARFORRES MCRC site is located within the boundary of the NRHP-eligible MISG Historic District, on an undeveloped portion of the CFMR. This viewshed analysis evaluates the introduction of new visual elements by the construction of the MCRC on the integrity of setting and feeling of the MISG Historic District.

The proposed MCRC is sited in an area of the MISG Historic District that largely comprises noncontributing resources (Figure 10). Across the street of the MCRC site, on the south side of Rue Saint Lo Drive, is MEMA Headquarters (Building 114), a two-story building constructed in 1997. Adjacent to the west is the complex of one-story dormitories, dining hall, gym, and school (Buildings 100–109) originally associated with the expansion of the MISG in the early 1960s. Of the 25 contributing resources in the historic district, the closest are the Montrose Chapel and The Cottage, Building 111, which are approximately 775 feet and 1,000 feet west of the project site, respectively. As described in the preceding section, vegetative buffers would shield potential views of the MCRC from the Montrose Chapel; therefore, the setting of the chapel as well as The Cottage would not be expected to change after construction of the MCRC. The other 23 contributing resources are located in the west-central part of the historic district, approximately 0.5 mile from the MCRC site (Figure 10). The significant physical features and characteristics of the historic district are concentrated in this area, which is highlighted in the determination of eligibility for its "rectilinear plan of buildings surrounding a center quadrangle" (USACE n.d.). As described in the preceding section, the MCRC would not be visible from this part of the historic district.

As views from the Montrose Chapel, the contributing resource closest to the project site, would not change after construction of the MCRC, and the new facilities are sited in an area of the historic district largely comprising noncontributing resources, the addition of the MCRC facilities to the MISG Historic District would not diminish its integrity of setting or feeling.

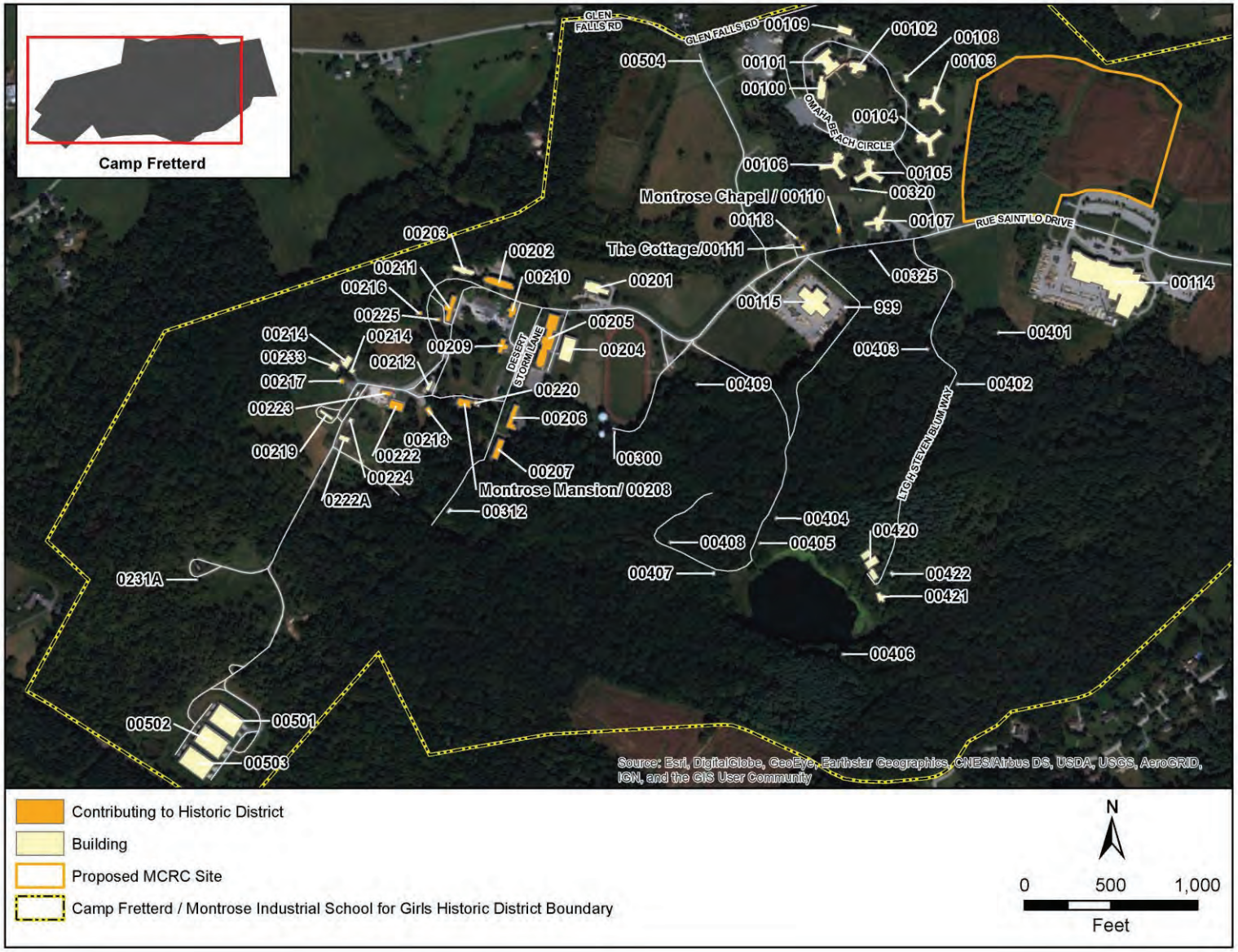

Figure 10. Location of MCRC Site in Relation to Contributing Resources of the MISG Historic District

4.1.3 Residence at 13721 Hanover Pike

This residence is located on the east side of Hanover Pike. The residence is accessed by a gravel farm lane that extends from Hanover Pike along its north side. The house is set back approximately 175 feet from Hanover Pike. The MCRC site is approximately 0.4 mile west of the residence. Views west from the residence toward the CFMR predominately consist of agricultural fields; the two-story MEMA Headquarters (Building 114) building is visible in the distance (Figure 8; Photo 18).

The proposed MCRC may be visible from the residence at 13721 Hanover Pike. The MCRC facilities would be one story, with high bays incorporated into the reserve training center and VMF. Although the MCRC facilities, even with the high bays, would not be as tall as the MEMA Headquarters (Building 114), there are open views across the agricultural field to the site. The MCRC, however, like the MEMA Headquarters, would appear small in scale on the landscape given the 0.4-mile distance between the MCRC site and the residence (Figure 8; Photo 18). Thus, the construction of the MCRC would have minimal visual effect on the residence at 13721 Hanover Pike, as views to the west of the residence would remain fairly consistent with current views. Should the residence at 13721 Hanover Pike be evaluated in the near future, it is anticipated that there would be no significant changes to the overall setting of the property resulting from construction of the MARFORRES MCRC.

Photo 18. View Looking Southwest toward the MCRC Site from the West End of the Farm Lane to the Residence at 13721 Hanover Pike. MEMA Headquarters is in the Center Background.

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5.0 SUMMARY AND CONCLUSIONS

This viewshed analysis assessed the potential visual effect on historic properties within the viewshed of the proposed construction of a MARFORRES MCRC at CFMR. The proposed MCRC would include a reserve training center, VMF, storage shed, covered training area, vehicle wash platform, privately owned and tactical vehicle parking areas, and associated site improvements and infrastructure on a 21-acre site on the north side of Rue Saint Lo Drive, in the northeast quadrant of CFMR. The site currently comprises leased farmland and the Honor Grove of white pines.

Based on the results of a records search and site visit, the viewshed identified for the proposed undertaking comprises the CFMR and a residence at 13721 Hanover Pike. The historic properties that may be visually affected by the proposed undertaking include the NRHP-listed Montrose Mansion and Chapel, and the NRHP-eligible MISG Historic District, which has the same boundary as the CFMR installation. The residence at 13721 Hanover Pike, which has a distant view of the MCRC site, is a 1948 Dormer Front Bungalow; it has not been previously inventoried or evaluated for NRHP eligibility.

As a result of the assessment of visual effects documented in this report, construction of the MARFORRES MCRC would not diminish the integrity of location, setting, or feeling of either the Montrose Mansion and Chapel or the MISG Historic District, and therefore, would have no adverse visual effect. For both these historic properties, their views, and their significant features, would not change after construction of the MCRC, largely because of the distance and the existing development and dense vegetation that is between them and the project site. It is anticipated that construction of the MARFORRES MCRC would not result in significant changes to the overall setting of the residence at 13721 Hanover Pike, as views to the west of the residence would remain fairly consistent with current views. Therefore, the proposed undertaking would have no adverse visual effect on the residence at 13721 Hanover Pike.

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6.0 REFERENCES

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MHT
2019a Medusa, Maryland's Cultural Resource Information System. https://mht.maryland.gov/secure/medusa/. Online database accessed 29 July.

2019b Records on BA-3309, The Cottage, Building 111. Accessed from Medusa, Maryland's Cultural Resource Information System, https://mht.maryland.gov/secure/medusa/, on 29 July.

2019c Information concerning Montrose Industrial School for Girls. Personal communication via e-mail from M.K. Mansius, Inventory Registrar, MHT, Crownsville, MD to Brian Ostahowski, NEPA Coordinator, Marine Forces Reserve Headquarters, New Orleans, LA, 26 August.

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2020 Phase I Archaeological Survey Report U.S. Marine Corps Forces Reserve Center Camp Fretterd Baltimore County, Maryland. Prepared for NAVFAC Mid-Atlantic, Norfolk, VA by Cardno, Inc., New Cumberland, PA. January.

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APPENDIX A
HISTORIC PROPERTIES DOCUMENTATION FORMS

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United States Department of the Interior
National Park Service

National Register of Historic Places Continuation Sheet

Section number ______ Page ______

SUPPLEMENTARY LISTING RECORD

NRIS Reference Number: 90000354 **Date Listed:** 3/19/90

Montrose Mansion and Chapel	Baltimore	MD
Property Name	**County**	**State**

____
Multiple Name

This property is listed in the National Register of Historic Places in accordance with the attached nomination documentation subject to the following exceptions, exclusions, or amendments, notwithstanding the National Park Service certification included in the nomination documentation.

for Patrick W. Andrus — **Signature of the Keeper**

3/19/90 — **Date of Action**

Amended Items in Nomination:

This nomination contains a religious building, but Criteria Consideration A (Religious Property) was not checked on the nomination form. Ron Andrews with the MD SHPO agrees that it applies to this property. The form is now officially amended to include Criteria Consideration A.

DISTRIBUTION:
National Register property file
Nominating Authority (without nomination attachment)

NPS Form 10-900
(Rev. 8-86)

OMB No. 1024-0018

United States Department of the Interior
National Park Service

National Register of Historic Places Registration Form

This form is for use in nominating or requesting determinations of eligibility for individual properties or districts. See instructions in *Guidelines for Completing National Register Forms* (National Register Bulletin 16). Complete each item by marking "x" in the appropriate box or by entering the requested information. If an item does not apply to the property being documented, enter "N/A" for "not applicable." For functions, styles, materials, and areas of significance, enter only the categories and subcategories listed in the instructions. For additional space use continuation sheets (Form 10-900a). Type all entries.

1. Name of Property

historic name: Montrose Mansion and Chapel (preferred)

other names/site number: Maryland Industrial Training School For Girls — BA-949 & 950

2. Location

street & number: 13700 Hanover Road — [N/A] not for publication

city, town: Reisterstown — [ ] vicinity

state: Maryland — code: MD — county: Baltimore — code: 005 — zip code: 21136

3. Classification

Ownership of Property	Category of Property	Number of Resources within Property	
		Contributing	Noncontributing
[ ] private	[X] building(s)	4	0 buildings
[ ] public-local	[ ] district	0	0 sites
[X] public-State	[ ] site	0	0 structures
[ ] public-Federal	[ ] structure	0	0 objects
	[ ] object	4	0 Total

ame of related multiple property listing: N/A

Number of contributing resources previously listed in the National Register: 0

4. State/Federal Agency Certification

As the designated authority under the National Historic Preservation Act of 1966, as amended, I hereby certify that this [X] nomination [ ] request for determination of eligibility meets the documentation standards for registering properties in the National Register of Historic Places and meets the procedural and professional requirements set forth in 36 CFR Part 60. In my opinion, the property [X] meets [ ] does not meet the National Register criteria. [ ] See continuation sheet.

Signature of certifying official — Date: 1/30/90

STATE HISTORIC PRESERVATION OFFICER

State or Federal agency and bureau

In my opinion, the property [ ] meets [ ] does not meet the National Register criteria. [ ] See continuation sheet.

Signature of commenting or other official — Date

State or Federal agency and bureau

5. National Park Service Certification

I, hereby, certify that this property is:

[ ] entered in the National Register.
[ ] See continuation sheet.

[ ] determined eligible for the National Register. [ ] See continuation sheet.

[ ] determined not eligible for the National Register.

[ ] removed from the National Register.

[ ] other, (explain:) _____

Signature of the Keeper — Date of Action

6. Function or Use

Historic Functions (enter categories from instructions)	Current Functions (enter categories from instructions)
DOMESTIC/single dwelling	vacant/not in use
RELIGION/religious structure	
EDUCATION/school	

7. Description

Architectural Classification (enter categories from instructions)	Materials (enter categories from instructions)
Federal	foundation stone
Greek Revival	walls stone
Second Empire	roof slate
	other wood

Describe present and historic physical appearance.

DESCRIPTION SUMMARY:

Montrose Mansion and Chapel and the two small domestic outbuildings located near the mansion are nineteenth century structures built as part of a country estate. The property was acquired by the state in the 1920's for use as a juvenile educational institution. The nineteenth century buildings border the twentieth century campus structures. The mansion is an early second quarter nineteenth century two story neo-classical stone house with symmetrical fluted moldings and a variation of a Georgian plan. By the middle of the century, a large two story wing was built on the east side. A mansard roof with round-top dormers, a cupola, and a bracketed cornice with pendants was added about 1880. The chapel, completed in 1855, is a rectangular structure of stone with Greek Revival decorative detailing, a three story bell and entrance tower, a stone wall enclosing the yard, and two marked graves to the south of the chapel. Attached to the east end of the house is a small two story gable roofed frame domestic structure with frame appendages to the south. Two free-standing stone domestic outbuildings, one with hip roofed topped with a square ventilator and the other with a gable roof sit a couple of feet farther to the east. The gable roofed building is stuccoed. Neither the house nor the hip roofed structure are presently stuccoed. The east end of the main portion of the house is built of brick which is now painted. The present landscaping feature of the house site appears to date from the institution period of the property's history.

[X] See continuation sheet for GENERAL DESCRIPTION

8. Statement of Significance BA-949 & BA-950

Certifying official has considered the significance of this property in relation to other properties:
☐ nationally ☐ statewide ☒ locally

Applicable National Register Criteria ☐ A ☐ B ☒ C ☐ D

Criteria Considerations (Exceptions) ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G

Areas of Significance (enter categories from instructions)
architecture

Period of Significance
c. 1826-1885

Significant Dates
N/A

Cultural Affiliation
N/A

Significant Person
N/A

Architect/Builder
unknown

State significance of property, and justify criteria, criteria considerations, and areas and periods of significance noted above.

SIGNIFICANCE SUMMARY

The significance of Montrose Mansion and Chapel is derived from the architectural character of the buildings. The mansion, developed in three principal stages, embodies distinctive characteristics of neo-classical and Second Empire architecture as found in nineteenth century Baltimmore County. Important neo-classical features evident here are the projecting bays on the principal elevation, fluted symmetrical molding, and the proportions and arrangement of the internal spaces of the main block. Significant Second Empire features are the mansard roof and cupola with round top dormers and bracketed cornice with pendents. Of further interest is the scored decorative plaster work on the interior walls. Montrose Mansion is one of only two grand houses of pretention in size and decoration from the pre-Civil War period in the Reisterstown section of Baltimore County. Grand houses of this type and the Victorian country estate into which it was transferred by the close of the century are types of properties found predominantly in the lower portion of the county relatively near the City of Baltimore. Few country estates in Baltimore County had private chapels as does the Montrose estate. Built in the 1850s, this chapel is Greek Revival in character. The other notable example is the third quarter nineteenth century wooden Gothic chapel on the Crimea estate, now in Baltimore city.

☒ See continuation sheet for HISTORIC CONTEXT and MARYLAND COMPREHENSIVE HISTORIC PRESERVATION PLAN data.

GENERAL DESCRIPTION:

Montrose Mansion and Chapel are located west of Hanover Road, south of Glen Falls Road, and north of the Western Maryland Railway tracks in western Baltimore County near Reisterstown. They are part of Montrose School, an institution of the Maryland Department of Juvenile Services.

MONTROSE MANSION is a two-story, "L"-shaped stone house with a mansard roof, cupola, and Italianate bracketings. The main block is five bays long on the north and south facades. The wing, located at the east end of the building, widens it by two bays; it extends five feet further to the north than the main block, giving the structure its "L" shape. On the south, the facades of the wing and main block are not quite flush, with the wing set back about ten inches. The central three bays of the south elevation projects out a few inches.

The mansard roof is covered with slate shingles with several rows of imbrication. It is capped with a deep wooden molding. Beneath the roof is a wooden cornice of brackets decorated with pendants. The house has three interior brick chimneys, one located in the west end and one in the east end of the main block and one in the center of the wing. All have multiple flues, which were originally sheltered by brick arches. The west chimney, however, has been raised and now has a level top.

The cupola is located in the center of the main block. It is of frame construction and square with a heavy mansard roof with one dormer on each facade and a bracketed cornice. Each facade of the cupola has two tall, narrow windows with double-hung sash flanked by pilasters. The upper sash are round-arched. There are five dormers spaced evenly across the north and south facades of the building and two dormers on each end facade. These have round-arched sash and round-arched hoods decorated with pendants, and match the small dormers in the cupola.

The principal walls of the house are laid in uncoursed stone with granite lintels over all the windows. A 1930's Jeffersonian article described the building material as native bluestone. The east end is constructed of brick which is now painted.

The main entrance is located in the central bay of the south facade. A 1906 photograph shows a one-story pedimented portico with Doric columns over the three central bays. This has been replaced by a one story, flat-roofed, screened porch. The main entrance consists of a fanlight about double doors with glass panels.

See Continuation Sheet No. 7.2

GENERAL DESCRIPTION

The five windows on the second floor and two on each side of the entrance on the south facade of the main block all contain 9/9 sash. The entrance on this facade is like that on the south. On this facade of the wing there are two windows on each floor; those on the first story contain 9/9 sash and the same size windows on the second have 12/12 sash.

The north facade has two 12/12 sash windows on each story of the wing. The main block has the entrance, which is like that on the south facade in the central bay and 12/12 sash windows in all other openings. There is a one-story, screened porch across the five bays of the main block.

The west end of the building has no openings except the dormers. The east facade of the wing is of painted brick and has two windows with 6/6 sash in the center of the second floor and one with 12/12 sash on the first floor. On the south side of this end is a small brick addition of a shorter two stories than the house, with a 4/4 sash window in its east face; spring water was once pumped to its second floor of this utility wing. Also on the east end is a one-story, frame and stone hyphen connecting the house to a two-story frame house. This is a two-bay square structure with gable roof that was described as "servants' apartments." Next to this is a one-story brick washhouse or utility building with a hipped roof topped with a louvered ventilator with pyramidal roof. Both the house and the outbuilding have standing seam metal roofs.

The 1918 tax ledger gave the dimensions of the main house as 36' x 76', and 14' x 16' and valued it at $4,109.

The interior of the mansion consists of a central passage with a four over four room arrangement except that the northeast rooms on both floors have the principal and secondary staircases. The decorative detailing consists primarily of symmetrical fluted neo-classical molding with corner blocks around the window and door openings, plain baseboard, architrave, chair rail, and six panel doors with raised panels. The passage on the first floor is divided into spaces by an arch supported by fluted round pilasters. The arch opening and the fan lights above the outside entrances are trim with architrave molding.

The principal staircase is open string with three flights around an open well. It is decorated with scroll end brackets and "round handrail, balusters, and newel." The under area is enclosed with raised panels. The staircase rises to the third floor and crosses windows on the first and second floors. The secondary staircase is open from the basement to the top floor and also has three flights per floor with round balustrade parts.

The mantels on the first floor are marble. The mantels on the second floor are wood. The marble mantels are relatively simple with flat panels. The wood mantels have attached round columns supporting paneled entabulatures and wide shelves.

See Continuation Sheet No. 7.3

GENERAL DESCRIPTION

The walls throughout the main block have smooth plaster except for those in the central passages and stair halls. Here the walls are decorated with floral motifs worked into the plaster. The designs are shallow but distinctly form flowers, vines, and sword-shaped leaves. The most heavily decorated areas are those below the chair rail on the first and second floors. Above the chair rail, the decoration is concentrated along the edges of the walls forming wide borders. This decoration probably dates from the last quarter of the nineteenth century.

The ceilings of the first floor rooms have decorative plaster work. The west rooms have intricate borders and swirls of floral motifs. The room in the southeast corner has a ceiling of geometric design with boldly raised molding above a wide floral scroll cornice border. These ceiling decorations may also date from the last quarter of the nineteenth century.

The wing is divided into two large principal spaces ont he first floor and three small sleeping chambers and bathroom on the second floor. The first floor rooms, most recently used as dining room and kitchen, have the same symmetrical fluted neo-classical trim as found in the main block of the house. The mantel in the south room is marble with Gothic tracing. The mantel in the north room is marble and simple Greek in influence. The trim in the second floor spaces is flat and devoid of decoration other than plain corner blocks. The doors are six-paneled with raised panels but no molding surrounding the panels. The mantel in the largest room is elaborate by comparison to the other trim in this section of the house. It is identical to that found in the second floor of the main block.

The third floor under the mansard is finished with a mix of four and six panel doors. The sid panel doors match those of the first and second floors of the main block. Trim on this floor is generally simple.

Most of the door hardware is late nineteenth century through shadows of earlier hardware are evident on some doors. Several handles for service bells are extant.

MONTROSE CHAPEL, completed in 1855, is a one-story fieldstone structure with a square, three-story entrance and bell tower at its south end. The nave measures 45' x 30' and is three bays long with tall windows containing 9/9 sash. the windows here and in the tower have wooden cornices. The church has a gable roof and the tower a pyramidal one. Both have boxed cornices with simple frieze. The cornice returns at the gable ends and is repeated under the gable eaves. The bell in the tower is marked "Meneelys/West Troy, New York/1854."

See Continuation Sheet No. 7.4

GENERAL DESCRIPTION

The tower has louvered shuttered openings on the belfry level (third story), on three sides. Those on the sides are narrower. On the south facade there is a three-part window above the doorway, which consists of two four-panel leaves, a five-light transom, and a surround of plain pilasters with deep cornice trimmed with a row of dentils. There is a 4/4 sash window on the east and west first story facades of the tower. The building is laid in uncoursed fieldstone with large stones at the corners. It is surrounded with a stone wall with decorative iron gate.

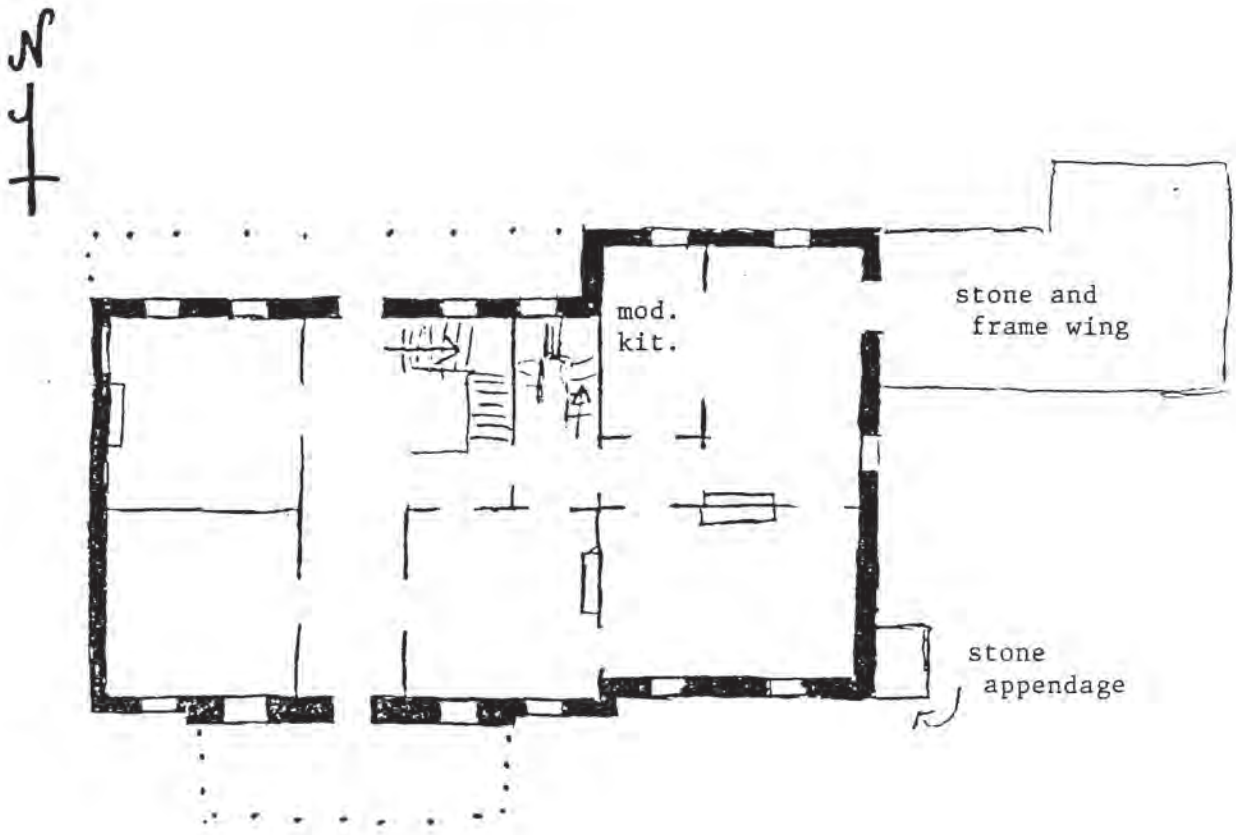
The interior is plain, and in recent years composition panels have been used to lower the ceiling. There are no "denominational" decorations. The pews are straight and hard, enameled in bright white. A balcony in the back above the entrance is supported by ribbed cast-iron columns. A very narrow stair leads from the choir loft to the belfry.

A stone wall encloses the chapel yard. The yard has no particular distinctive landscape features except for two grave sites along the east side. These sites are marked: one by a small stone, the other a large masonry monument. The monument is the burial site of Franklin Anderson. The stone is for a Stirling.

See Continuation Sheet No. 7.5

sketch floor plan, 1989

not to scale



HISTORIC CONTEXT:

MARYLAND COMPREHENSIVE HISTORIC PRESERVATION PLAN DATA

Geographic Organization: Piedmont

Chronological/Developmental Period(s):

Agricultural-Industrial Transition A.D. 1815-1870

Industrial/Urban Dominance A.D. 1870-1930

Prehistoric/Historic Period Theme(s):

Architecture, Landscape Architecture and Community Planning

Resource Type:

Category: building

Historic Environment: rural

Historic Function(s) and Use(s): DOMESTIC/single dwelling
RELIGION/religious structure
EDUCATION/school

Known Design Source: none

HISTORIC CONTEXT

Montrose Mansion is a significant landmark in Baltimore County largely due to its connection with N. Jerome Bonaparte, son of Napoleon's exiled brother, Jerome. Bonaparte's father-in-law, William Patterson, built this house for Bonaparte's son, N. Jerome Bonaparte. All the records of payments for the construction of the house have survived, specifically dating its construction.

The house presently is a combination of the 1820s when it was constructed and the Victorian era, probably the 1880s, when it was altered. As such it reflects the taste of two eras in American life as practiced by those who had the means to build in the latest styles.

Montrose School stands on a tract that was sold in 1779 by John and Robert Carter to Baltimore merchant prince, William Patterson; the original surveys were called Carter's Regulation, Matthew's Fancy, and White Oak Bottom.[1]

The 1783 tax list for Soldiers' Delight Hundred does not survive, but the 1798 tax list shows Patterson with 300 acres of Williams Resurveyed "and other tracts"; the only dwelling was occupied by John Banks; it was a hew'd log dwelling house, two stories, 28 x 18, with a log kitchen, one story, 20 x 16, valued along with a smokehouse at a total of $150.

In 1803 Patterson's daughter, Elizabeth, met and soon married Jerome Bonaparte, brother of the First Consul of the French Republic to America; he and his bride supposedly honeymooned at Montrose, although a 28 x 18 foot log house hardly seems the style to which either the Pattersons or Bonapartes were accustomed.[2] The legend is made even more insupportable by the 1804 Assessment book, which shows no taxable improvements and no household furniture on the Patterson 300 acres.

Other local sources hold that the couple resided at "Homestead," a Patterson estate west of present Clifton Park[4] (where there is now a rowhouse street called Bonaparte Avenue).

Napoleon, who had become emperor in 1804, was violently opposed to the marriage of his younger brother, and although Pope Pius VII refused to annul the union (officiated at by Baltimore's Bishop John Carroll), the Emperor and his government declared this contract, fully legal under Maryland statutes, as void. Mrs. Bonaparte was not allowed to return to France with Jerome, and in 1807 Napoleon

See Continuation Sheet No. 8.3

HISTORIC CONTEXT

arranged for Jerome to become the first king of Westphalia, a new state assembled from conquered and allied German territory. In 1812 Mrs. Bonaparte petitioned the State of Maryland for divorce from her husband,[5] who had in the meantime married Princess Catherine of Wertemburg.[5] The divorce was granted by the Maryland General Assembly in December of the same year.[6]

The one offspring of the brief Patterson-Bonaparte marriage was Jerome Napoleon Bonaparte, born 1805. At age 25, the young Bonaparte's grandfather, William Patterson, conveyed to him by deed of gift the 300 acres he had acquired from the Carters some 51 years before.[7]

A series of Assessment Books in the Hall of Records helps bracket the development of the property. The log house of the 1798 tax list had dropped off the tax rolls by 1804. The 1818 assessment of the Old Seventh District showed William Patterson owner of Mount Pleasant and but $60 worth of improvements. The 1823 book showed Patterson still calling the place Mount Pleasant; improvements were down to $50, and there were neither slaves nor livestock enumerated. In 1833 N. Jerome Bonaparte had Mount Pleasant and $5000 worth of improvements.[8]

What had taken place after the 1823 tax list is explained by a receipt book in which William Patterson collected signatures from all his suppliers and contractors. The first clue is a receipt signed January 14, 1826, "on account of purchase Pork for the use of the people who may be employed to build a house at the Mount Pleasant Plantation." On December 22 the partner with the illegible signature mentioned total expenditures of $1,417.03 and named his associate as Benjamin Forrister. A year later, in December of 1827, there is a receipt showing that William Wheeler had hauled 5300 feet of inch pine boards to Patterson's place near Reisterstown." In February 1828 John Johnson was paid "for shedding his barn at his Reisterstown Place."

In August 1829 there is a $13.50 receipt, payment in full to John Slade for payment "in full for mason's work at his new house near Reisterstown." Through 1830, work was still in progress, with receipts for carpentry from John Johnson, for "filt ornamental sashes" from John Martin, for "carpenter's work both parlors" from John Milbourn, and "on account of painting at his New House at Mount Pleasant." William Barker & Son signed for 36 window weights, and the last entry was December 15, 1830, for "14,500 laths for his new house near Reisterstown," signed by the firm of House and Wollen.[9]

See Continuation Sheet No. 8.4

HISTORIC CONTEXT

Letters written by William Patterson show that he wanted his grandson to lead an American life and avoid the social climbing of Europe which his mother considered the most desirable stage for his name and talents. Patterson arranged details for his grandson's marriage to Miss Susan Williams of Baltimore and gave him a number of income-producing lots and warehouses in the port area. Miss Williams' own capital contribution would produce an annual income of $6000. Patterson summed up his arrangements in a letter to Bonaparte, stating that the properties offered therein would "put him on a footing with Miss Susan Williams," and added in a postscript:

> My Mount Pleasant Plantation near Reisterstown which I promised you for a summer residence, if accepted on those terms, I will convey to you at once or when you think proper.[10]

In 1843 Bonaparte and his wife, Susan M., listed in the deed as residents of Baltimore City, sold all the original tracts plus adjoining property they had acquired to Franklin Anderson. As early as 1839, Anderson had executed a bond of conveyance with Bonaparte's attorney, and when the 1841 Tax Assessor's Field Book was made out, Franklin Anderson was already in residence, shown as owner of "Mount Rose" and $6000 worth of improvements, $3000 worth of furniture, one carriage, two gold watches, and two Negro Slaves."

The evidence found in these tax lists, letters, and account books thoroughly explodes the story that Betsy Patterson and her father constructed a dwelling for King Jerome using French government funds. By the time the house was under construction, King Jerome's marriage had been annulled by the General Assembly and his Kingdom had been toppled by the anti-Napoleon coalition of Allies. The legends published in 1906 even record a dispute between Mrs. Bonaparte and the builders, who took umbrage and locked her out of the unfinished palace for a year -- all that revealed by then-living persons "who learned them from those who were participants." Mrs. Bonaparte was in fact living in France during her father's building program."[12]

Franklin Anderson, usually referred to as "Colonel," appears in print in an unidentified clipping, an ad, of 1815:

> ANDERSON, FRANKLIN, Attorney at Law, Has Opened and Office in the corner of the Square, near Messrs. John & Joseph M'Ilhenny's Store.
> Hagerstown, February 3, 1815.[13]

See Continuation Sheet No. 8.5

HISTORIC CONTEXT

In 1825 Anderson was a delegate from Washington County to an "internal improvements" meeting held in Baltimore.[14] In 1831 Anderson was married to Elizabeth, daughter of the late James Stirling, by the Rev. Mr. Nevin.[15]

Anderson called his place Montrose,[16] and the name appears on the outside of a letter sent there in 1844. The version "Rosemont" appears in print under an 1855 dateline. That year, the Andersons completed their private chapel (treated here in a separate section).

Colonel Anderson's death occurred at Montrose on April 28, 1866, in his 75th year.[17] The property passed to Mrs. Elizabeth Anderson under a will dated 1859. Mrs. Anderson was remembered by her "impecunious neighbors" for "generous liberality" and "innumerous acts of benevolence."[18] Mrs. Anderson died in 1879,[19] leaving Montrose and 535 acres to her nephew, Archibald Stirling. It was said of Stirling that:

> During his occupancy there was no diminution in the lavish entertainment of the guests at Montrose; on the contrary, the sumptuous feasts provided, were if possible, on a more extravagant scale than had ever before been witnessed within those halls.[20]

The property passed back into the Bonaparte family for little more than a month in 1890. In 1887 Stirling had borrowed $8000 from Charles Joseph Bonaparte, son of the prior owner and grandson of the deposed King of Westphalia. Stirling was unable to pay off the mortgage, and Bonaparte, then a Baltimore attorney and prominent reformer, filed suit and purchased the property at public auction. The advertisement in the Sun described "Montrose":

> The improvements are a fine stone dwelling house, a good frame dwelling house, a frame tenant house, a stone and frame barn, a frame stable and other outbuildings.[21] A considerable portion of it is in fine woodland.

The next month, C. J. Bonaparte sold to Richard B. and James A. Clark.[22] In 1893 the Clarks sold to Elizabeth A. K. Mankin.[23] A 1906 magazine article described Miss Macklin (sec) as "a maiden lady who, with a favorite niece, lived in retirement until 1903."[24]

Miss Mankin mortgaged the property to "The Corporation for the Relief of the Clergy of the Protestant Episcopal Church in Maryland" and to "The Church Home, etc." On default of mortgage the property

See Continuation Sheet No. 8.6

HISTORIC CONTEXT

was offered at public sale by assignees on May 9, 1903:

> Mortgagee's Sale of Montrose Estate . . . Highly improved Containing about 535 acres, on the Western Maryland Railroad, about 3-1/2 miles from Reisterstown . . . Montrose . . . The Estate has a large orchard upon it, in a good condition, and the land is in a high state of cultivation. A considerable portion of the estate is in valuable wood land. The improvements are:
>
> A large Three-Story Stone Mansion, (slate roof) with modern conveniences, in excellent order; a beautiful stone chapel, and 2-1/2 story frame overseer's House; large Bank Barn (130 feet by 70 feet); Wagon House; Corn House, Coach Stable; Carriage House; three Two-story Frame Tenant Houses; a large conservatory or greenhouse; all necessary Outhouses, and other desirable improvements . . . Of this land about 23 or 30 acres are in wheat . . .[25]

Dr. Adam M. Kalbach, a retired physician of Lancaster, Pennsylvania made the highest offer, bidding $20,000.[26] Dr. Kalbach had a townhouse in Lancaster, but spent his summers at Montrose with his wife and "five charming daughters":

> With their democratic and hospitable manners, they are fast making warm friends in this section.[27]

The 1911 Tax Ledger of District 4 charged Dr. Kalbach with 550 acres, and in 1916 added "New 2 Saw Mills & 2 Engines $800."[28] The property was Anna Mary Kalbach's in a ledger entry of 1920,[29] and on March 17 of that year, she sold to Frederick P. Gibson,[30]

The following August, Gibson and wife sold to the Maryland Industrial Training School for Girls.[31] The tax ledger in 1921 removed $29,910 from the rolls with the note: "Abate: State owned institution." The school that moved to Montrose had already enjoyed a long institutional history, having begun in 1831 as the Maryland House of Refuge for boys and girls; in 1866 it was reincorporated as the Industrial School for Girls, managed entirely by women until 1898.[32]

The mansion served as an all-purpose main building while the State was developing the grounds as a correctional facility for girls. The staff, cooks, and inmates lived, worked, ate, and studied in the great stone house until suitable buildings were constructed.

See Continuation Sheet No. 8.7

HISTORIC CONTEXT

The Sun reported in 1923 that the boxwood had been sold by the State to wealthy collectors on Long Island and around Philadelphia by that time, an estimated 75% of old Southern box had been snapped up by appreciative Northern horticulturists.[33]

Before 1939 the mansion was the administration building, and a set of complementary stone dormitories were built in a quadrangle plan as attractive as any Ivy League campus.

In the mid-1930s, a movie was shot on location here: Divided Hearts, a romantic treatment of the Betsy Patterson-Jerome Bonaparte alliance. One might ask what misguided desire for visual accuracy could have brought Warner Brothers to produce a First Empire saga on the grounds of what by then was an unmistakably Second Empire villa.[34]

The script, which was based on the play Glorious Betsy by Rida Johnson Young, got Mr. Patterson's name wrong and distorted the facts; in the opinion of the Times film critic, it was the "year's most disappointing picture." Director was Frank Borzage and stars were Marion Davies, Dick Powell, Claude Raines (as Napoleon), Hattie McDaniel (as "Mammy"), Arthur Treacher, Charles Ruggles,[35] and Edward Everett Horton (chuckle-headed Senators from Maryland).

In recent years, the mansion has become the home of the school superintendent, and the present holder of that post, Leonard F. Gmeiner, is the first full-time resident there. The Gardner administration building of 1939 forms the anchor of the quad at the end of the lawn opposite the mansion. The school now takes boys as well as girls, remanded there by the courts as a deterrent to more serious legal transgressions.

MONTROSE CHAPEL

There is no mystery about the private chapel on the Montrose estate. The idea for an Episcopal church in this western fringe of the county had been germinating as early as 1844 as revealed in a letter from Bishop William Rollinson Whittingham to John H. Alexander, sent to "Montrose" care of Colonel Franklin Anderson. Alexander was a prominent layman in that church and was a guest of Colonel Anderson's while Mrs. Alexander was recuperating there from an illness:

See Continuation Sheet No. 8.8

HISTORIC CONTEXT

> . . . Will you pardon me if I try to turn your pleasure to account for my business, and beg you to use whatever influence you may have with your excellent host to strengthen and confirm in him his yet very feeble resolve about doing what certainly ought to be done -- erecting a small near church in this neglected village -- where I greatly deceive myself if much might not be done for the Church by a faithful zealous minister, having a suitable place in which statedly to officiate and gather together the few scattered sheep now straying for want of a shepherd & pasture. Forgive my trying to use you but believe that I take the liberty because I am sure how reciprocal is the confidence and affection with which I am ever yours, W. R. Whittingham.[36]

This idea eventually came to fruition. Colonel Anderson was also an active Episcopalian, and until his resignation in 1849, had been a trustee of Hannah More Academy.[37]

In June of 1855, Anderson wrote to Bishop Whittingham:

> The chapel Mrs. Anderson and myself are erecting on our farm in Baltimore County is nearly finished. It is designed as a house for the public worship of God, where his Holy word shall be read and preached and where the services shall be performed, and the rites and ordinances administered, according to the forms and regulations of the Episcopal Church. We shall take especial care, in the disposition of our property that this chapel shall never be diverted from the sacred purpose to which it is dedicated. The officiating Minister will be a clergyman of the Protestant Episcopal Church appointed by ourselves, who will of course have to obtain the sanction and express permission of the Rector of Western Run Parish,[38] within the limits of which the Chapel is situated.

Anderson suggested July 4 as the date for a consecration or suitable ceremony for "opening of the chapel."

The owner of Montrose must have been disappointed by the Bishop's reply. In sum the Bishop's letter, by no means unappreciative, stated that under the terms set forth by Colonel Anderson, he could not within the existing regulations consecrate the building:

See Continuation Sheet No. 8.9

HISTORIC CONTEXT

> I can not solemnly recognize as a Protestant Episcopal Church a building of which I have no security that it may not be next year a Romish Mass house or a Baptist Meeting House.[39]

In fact the Bishop's schedule did not allow for any additional events in July.

The Anderson chapel did see service, however, and the Rector of St. John's Western Run Parish (Worthington Valley) reported to the annual convention of 1855:

> About 5 miles west from St. John's Church in the Valley, Franklin Anderson, Esq., of Rosemont, has erected at his own expense, a beautiful stone chapel, 45 x 30, having a tower and bell weighing 800 lbs., and a fine instrument of music. It will be completed for services, it is expected in June. The Rev. John Atkinson has been employed by Mr. Anderson as its minister, with the consent of the Rector.[40]

Providing a regular rector or curate seemed to be a problem at Montrose. The Rev. John Atkinson, ordained in 1855 by Bishop Lee of Delaware, "became chaplain in Montrose Chapel, Western Run Parish, Baltimore County," but by 1856[41] he had assumed the rectorship of North Sassafras, Cecil County.

Shortly after the Civil War, Colonel Anderson wrote to Bishop Whittingham saying he would like to have the chapel reopened.[42] A 1906 magazine article stated that the chapel "was for many years the place of worship for the family, who were joined by certain neighbors, specifically invited to worship with them."[43]

After Colonel Anderson died, his widow continued on the premises, and in 1874 the Rev. Arthur John Rich, headmaster of Hannah More Academy and rector of St. Michael's Chapel on the school grounds, wrote to Bishop Whittingham about reopening Montrose:

> In the meantime, I have been for some weeks in communication with Mrs. Anderson, of Montrose Chapel. She has been led to desire earnestly the opening of her Chapel. She is lonely & needs a protector. She has been drawn towards Mr. & Mrs. Pryse. She offers them a home with her, will give them board, &c., will provide them with a horse & a buggy if necessary, will give what she can thro' the offertory if they will live with her, and if he will supply service in the Chapel every Sunday morning . . .

See Continuation Sheet No. 8.10

HISTORIC CONTEXT

Mr. Pryse will be able to influence Mrs. Anderson so as to get the Chapel property under authority of the Diocese.[44]

The Rev. John Thomas Pryse accepted the post, but as early as 1875, wrote to the Bishop, requesting another assignment. Mr. Pryse had been ordained in 1851, and in 1855 had removed to Georgia. Ill health had put him out of service for some 18 years, but at Montrose he had been strenuously trying to build a neighborhood church. His letter reflects the internal struggle in his denomination between "high church" and "low church," and he even mentions accusations of heresy." Mr. Pryse stated that Mrs. Anderson was adhering to her late husband's "low church sentiments." He noted that during his last years, Colonel Anderson had been a "very violent partisan" of the low church point of view.[45, 46]

Mr. Anderson's low church sentiments, if such they were, may well have been demonstrated in the style of architecture he selected. Although the 1906 history of Montrose estate describes the chapel as "Gothic," it is anything but that, and Scharf's county history of 1881 called it "Grecian style of architecture, with tower and bell."[47]

The colonel's taste was certainly at odds with that of his bishop, who was well known as a proponent of Gothic Revival buildings and a partisan to some degree of the theory of "ecclesiology" which led to such different Gothic Revival monuments as Hannah More Chapel in Reisterstown and Grace and St. Peter's in Baltimore.[48]

The 1877 atlas showed an "Episcopal Church" on the Franklin estate, but the 1906 account stated that, "Long years of disuse has, to some extent, impaired the interior of this chapel, but it is being renovated and soon again the 'music of the bells' will summon the worshippers for Divine Service . . . ."[49]

The 1940 inventory of Maryland church records stated that Montrose Chapel had been devised to his wife by Colonel Anderson and noted that the structure was "Never officially connected with the Diocese."[50] Under state ownership the chapel has been and still is used for Sunday services by various church bodies. The interior now presents a nondenominational appearance.

Archibald Stirling, Jr., who acquired the estate from his aunt, Mrs. Anderson, following her death in 1879, was a lawyer and politician. He studied law under J. H. B. La Trobe. He was admitted

See Continuation Sheet No. 8.11

HISTORIC CONTEXT

to the bar in 1854. From 1858 to 1863 Stirling was city councelor for Baltimore. This position was followed by state's attorney for the city from 1863 to 1864. He also served as U.S. District Attorney for the state and terms in both the Maryland house and senate.[51]

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[1] Baltimore County Deed WG#5/24.

[2] "Montrose -- Once the Home of a King -- A Palatial Residence," Maryland Monthly Magazine, Reisterstown, 1 (September, 1906): 1 (hereafter cited as MMM).

[3] (Text for this removed.)

[4] Clayton C. Hall, ed., Baltimore: Its History and Its People (New York, 1912), 1:80.

[5] Baltimore American, December 17, 1812, p. 3.

[6] Acts of November, 1812, Chapter 130.

[7] Balt. Co. Deed WG#210/39.

[8] Assessments and Assessor's Field Books, 1804, 1818, 1823, 1833, 1841; Hall of Records, Accession Nos. 8258, 8269, 8275, 8279, 8246.

[9] William Patterson Account Books, Maryland Historical Society, (MHS), Ms 904, Vol. 4 (unpaged).

[10] Patterson Letters, MHS, Ms.. 145; William Patterson to J. N. Bonaparte, July 20, 1829; other letters Patterson to Betsy Patterson Bonaparte.

[11] Baltimore Co. Deed TK#329/371; J. N. Bonaparte owned two other suburban places; the 1850 Sidney Map shows him at the northeast corner of Charles and Lake Avenues; in the last years of his life, he bought a place on Evans Chapel Road (now Roland Avenue) at Deepdene, 1869.

[12] MMM, p.3

[13] Unidentified clipping, Diehlman file, MHS.

See Continuation Sheet No. 8.12

Footnotes (continued)

[14] J. T. Scharf, Chronicles of Baltimore (Baltimore, 1874), p. 419.

[15] Baltimore American, November 12, 1831.

[16] In Maryland Diocesan Archives, on deposit in MHS (hereafter cited as MDA).

[17] Baltimore Sun, May 1, 1866.

[18] Baltimore Co. Will JLR#3/116, MMM, p.4.

[19] Balt. Co. Will JMB#6/255.

[20] MMM, p. 5.

[21] Judicial Records, JWS#127/167, 173.

[22] Balt. Co. Deed JWS#184/33.

[23] Balt. Co. Deed LMB#201/164.

[24] MMM, p. 5.

[25] Judicial Records, NBM#193/26.

[26] Balt. Co. Deed NBM#267/514.

[27] MMM, p. 9.

[28] District 4 Tax Ledger, 1911, f. 245.

[29] District 4 Tax Ledger, 1918, f. 281.

[30] Balt. Co. Deed WPC#523/215.

[31] Balt. Co. Deed WPC#526/542.

[32] WPA Maryland Writers' Project, Maryland: A Guide to the Old Line State (New York, 1940), p. 561.

[33] Felix Miles, "Romance Lingers," Sunday Sun, November 11, 1923.

[34] WPA Project, Maryland: A Guide, p. 561.

See Continuation Sheet No. 8.13

Footnotes (continued)

[35] New York Times, June 13, 1936, 13:1.

[36] MDA, W. R. Whittingham to J. H. Alexander, August 28, 1844.

[37] MDA, Franklin Anderson to W. R. Whittingham, September 28, 1849.

[38] MDA, Anderson to W. R. Whittingham, June 9, 1855.

[39] MDA, W. R. Whittingham to Anderson, n.d.

[40] Journal of the Convention of Maryland (Baltimore, 1855), p. 74.

[41] Ethan Allen, DD., Clergy in Maryland of the Protestant Episcopal Church Baltimore, 1860), p. 80.

[42] MDA, Anderson to W.R. Whittingham, July 25, 1865.

[43] MMM, p. 6.

[44] MDA, Arthur J. Rich to. W. R. Whittingham, September 3, 1874.

[45] MDA, John T. Pryse to W. R. Whittingham, February 18, 1875.

[46] Allen, p. 74.

[47] T. J. Scharf, History of Baltimore City and County (Philadelphia, 1881), p. 867.

[48] Phoebe B. Stanton, The Gothic Revival and American Church Architecture (Baltimore, 1968).

[49] MMM, p. 6.

[50] Inventory of the Church Archives of Maryland-Protestant Episcopal Church (Baltimore, 1940), p. 263.

[51] Howard, George W. The Monumental City (Baltimore: M. Curlander, 1889), p. 534 and Scharf, History of Baltimore City and County pp. 719 and 866.

9. Major Bibliographical References

BA-949 & BA-950

Maryland Inventory of Historic Properties: Baltimore County, Maryland Historical Trust, Annapolis, MD.

See end notes under Section 8.

[X] See continuation sheet

Previous documentation on file (NPS):

- [ ] preliminary determination of individual listing (36 CFR 67) has been requested
- [ ] previously listed in the National Register
- [ ] previously determined eligible by the National Register
- [ ] designated a National Historic Landmark
- [ ] recorded by Historic American Buildings Survey # _____
- [ ] recorded by Historic American Engineering Record # _____

Primary location of additional data:

- [X] State historic preservation office
- [ ] Other State agency
- [ ] Federal agency
- [X] Local government
- [ ] University
- [ ] Other

Specify repository:
Baltimore County Landmarks Commission

10. Geographical Data

creage of property approximately 2 acres

USGS quads Hampstead and Reisterstown, MD

UTM References

	Zone	Easting	Northing	
A	18	340720	4373450	mansion
B	18	341410	4375770	chapel
C				
D				

[X] See continuation sheet 10.2

Verbal Boundary Description

[X] See continuation sheet No. 10.1

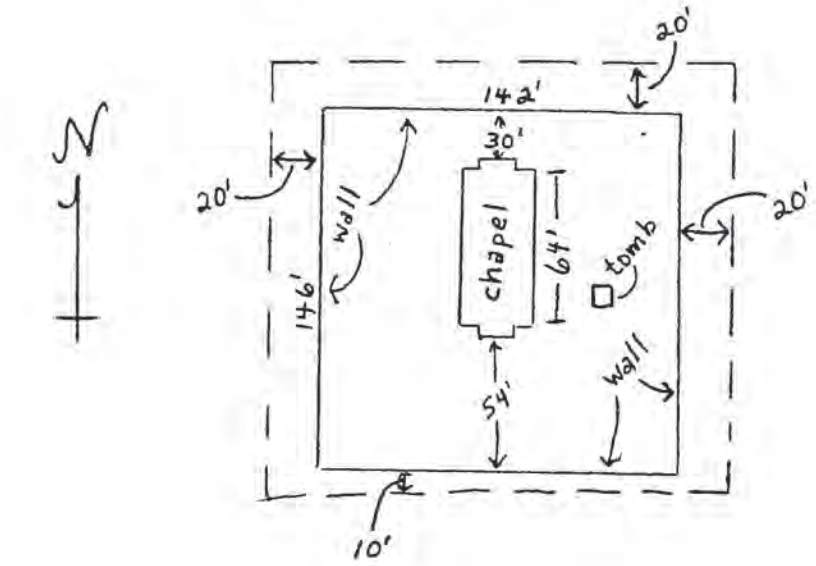
Boundary Justification

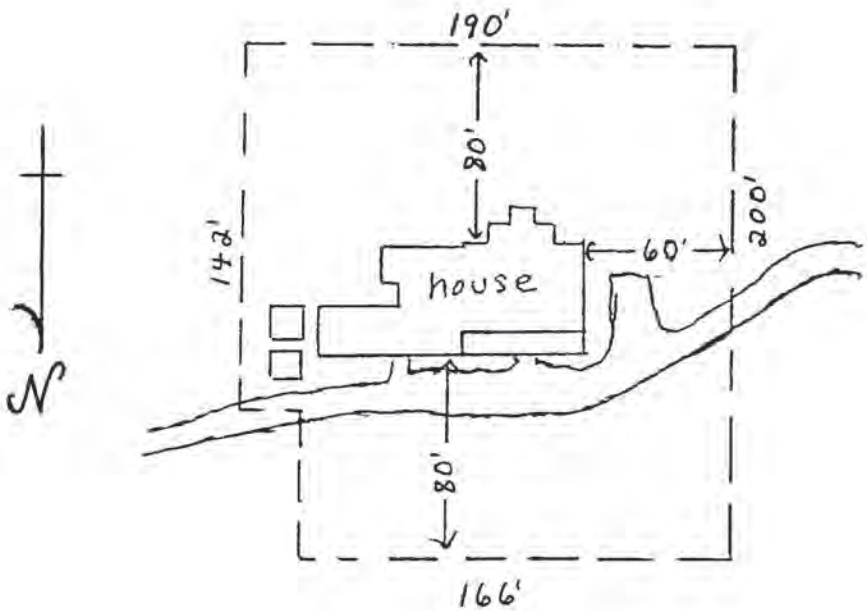
The boundaries are drawn to exclude the school or institution buildings that stand near the historic buildings.

[ ] See continuation sheet

11. Form Prepared By

name/title John W. McGrain
organization Baltimore County Landmarks Commission date 1989
street & number 401 Bosley Avenue telephone (301) 887-3495
city or town Towson state Maryland zip code 21204





boundaries , 1989

UTM References:

MANSION:

Reisterstown, MD quad

18/340 720/437350

CHAPEL:

Hampstead, MD quad

18/341 410/4375770

Maryland Historical Trust
Maryland Inventory of
Historic Properties Form

Inventory No. BA-3207

1. Name of Property (indicate preferred name)

historic Montrose Industrial School for Girls (preferred)

other Montrose School for Girls; Maryland Army National Guard Camp Fretterd

2. Location

street and number Rue Saint Lo Drive, Omaha Beach Cir., Desert Storm Lane, Meuse Argonne Cir. __ not for publication

city, town Reisterstown __ vicinity

county Baltimore

3. Owner of Property (give names and mailing addresses of all owners)

name Maryland Army National Guard Camp Fretterd

street and number Rue Saint Lo Drive telephone (410) 702-9774

city, town Reisterstown state MD zip code 21136

4. Location of Legal Description

courthouse, registry of deeds, etc. Baltimore County Court House, Towson, MD liber 8312 folio 339

city, town Towson tax map 39 tax parcel 68 tax ID number 0419071650

5. Primary Location of Additional Data

_____ Contributing Resource in National Register District
_____ Contributing Resource in Local Historic District
_____ Determined Eligible for the National Register/Maryland Register
_____ Determined Ineligible for the National Register/Maryland Register
_____ Recorded by HABS/HAER
_____ Historic Structure Report or Research Report at MHT
__x__ Other: MIHP #BA-949 and #BA-950

6. Classification

Category	Ownership	Current Function		Resource Count	
__x__ district	__x__ public	_____ agriculture	_____ landscape	Contributing	Noncontributing
_____ building(s)	_____ private	_____ commerce/trade	_____ recreation/culture	25	28 buildings
_____ structure	_____ both	__x__ defense	_____ religion	_____	_____ sites
_____ site		_____ domestic	_____ social	_____	_____ structures
_____ object		_____ education	_____ transportation	_____	_____ objects
		_____ funerary	_____ work in progress	_____	_____ Total
		_____ government	_____ unknown		
		_____ health care	_____ vacant/not in use		
		_____ industry	_____ other:		

Number of Contributing Resources previously listed in the Inventory

4

7. Description

Inventory No. BA-3207

Condition

x excellent	___ deteriorated
___ good	___ ruins
___ fair	___ altered

Prepare both a one paragraph summary and a comprehensive description of the resource and its various elements as it exists today.

SUMMARY

The Montrose Industrial School for Girls, located on the grounds of the 19th century Montrose estate, operated as a juvenile rehabilitation center from 1920 to 1988. The architecture of the 1920-1956 period of the Montrose Industrial School for Girls consists of a combination of comparatively elegant stone buildings surrounding a grassy quadrangle intended to blend with the existing Montrose Mansion, and more purely functional farming and maintenance structures. The original design of the school was intended to provide underprivileged white females a bucolic setting and a working environment in the hopes of training the girls to become useful citizens in society. Period photographs and descriptions reflect a character more closely resembling a boarding school than a correctional facility of the time. It was only after 1950, and especially after the Montrose School merged with the Barrett School for Girls in 1962, that new facilities built at the school began to take on a more functional appearance. The school closed in 1988 and is now the Maryland Army National Guard (MDARNG) Camp Fretterd.

ARCHITECTURAL DESCRIPTIONS

Maps showing the location of the Montrose Industrial School for Girls buildings are enclosed. Building numbers used below are those assigned by the Maryland Army National Guard.

The original Montrose Estate contained the ca. 1820s Montrose Mansion (Building 208), the 1855 Montrose Chapel (Building 110) and pastorage (Building 111), and a number of late 19th--early 20th century agricultural buildings (Buildings 215-217, 221-223, and 225-227) that were on the property when it was purchased in 1920 for a girl's school. The original plan for the Montrose Industrial School for Girls focused upon the construction of four two-story stone classroom/dormitory buildings arranged in a rectilinear plan. The first dormitory built for the school was Wilson Cottage (Building 211), built in 1921, which was followed by Meyer Cottage (Building 207), built in 1923. These buildings were followed by Putts Cottage (Building 210) and Bond Cottage (Building 211) which were built in the late 1920s. All of the four main stone buildings of the school followed the same general concept, having a first-floor for classrooms, offices and communal areas, and the second floor for dwelling spaces. The exception was the Meyer Cottage, which had a psychopathic hospital and infirmary on the second floor. In the 1930s, a new infirmary was built, the Gardiner Building (Building 201), and the second floor of Meyer was converted to living spaces similar to the other three buildings. The Guttmacher Building (Building 206) was added in 1932 to provide for increased dormitory needs. Although these buildings have had the interiors modified several times to provide for differing space requirements, they still retain their original massing and most of their exterior elements such as Greek Revival columned porches with undecorated pediment, and decorative moldings. They were originally constructed with open porches on the ends, but these open porches were enclosed in the 1930s to provide additional interior space. Because the building interiors have been repeatedly modified, and due to MDARNG security concerns, they were not were not described or photographed for this form.

Following the conversion of the property from a privately owned estate to a training school, there was a need to provide for a suitable infrastructure. The two main components were a sewage treatment plant and a water supply system. Both of these facilities were located in rather close proximity to each other to the south of the school. The sewage treatment plant, built before 1936, consisted of a pump house and several settling tanks (Buildings 300). The water supply system, built and completed in 1930, consisted of two pump houses (Buildings 302 and 302C) adjacent to a small reservoir, and a water supply tank located on a hill above the school (Building 206A).

The Montrose Mansion was converted into an industrial facility, where the girls manufactured clothing. Additionally, the Montrose Mansion served as the administrative center for the school. In 1939, the Montrose School received funds to construct the Field Building (Building #205), which served as a centralized education and administrative building.

Although there were some support structures on the property when it was purchased, the school operated as a self-sufficient farm, and some of the farm buildings were converted to residences for the instructors in the 1940s. Additionally, the School frequently

petitioned the Board of Public Works for funds to replace or enlarge the agricultural buildings. A number of other agricultural buildings, shown on a plan of the school from 1939, no longer exist, including barns, chicken houses, a carpenter shop, dairies, a spring house, and a green house. A rebuilding of the farm complex during the late 1940s – early 1950s resulted in the replacement of the pasteurization barn (Building 213), Dairy Barn and Silo (Building 214), Slaughter House (Building 219) and several storage sheds with more modern, cinderblock structures.

After the addition of the Barrett School to the complex in 1962, a second group of buildings was constructed in an open field to the east of the original complex. These buildings included the Gill Gym (Building 100), the Residence # 2 (Building 101), the Tawes Building (Building 102), Williams Cottage (Building 103), Lother Cottage (Building 104), and Sanford Cottage (Building 105). These structures are one-story, austere dormitories with much less romanticism used in their design, with smaller rooms more suitable for close confinement. The Barrett School buildings are situated in a circular fashion around an open courtyard.

Following the conversion of the former school into a National Guard facility, additional construction has included a Gate house (MDARNG Building 113), Armory (MDARNG Building 114), automotive repair shop (MDARNG Building 115), and Rappelling Tower (MDARNG Building 231).

The Montrose Mansion is one of the oldest campus buildings. The Mansion's most striking exterior feature is its second-empire style Mansard roof. The front façade of the Mansion is constructed of uncut and rough cut stone masonry set in an irregular course. There are sections of the Mansion that have a partially exposed stone basement-story. These sections were originally open areas that were enclosed with white plain board to provide greater interior space.

When the Montrose Industrial School for Girls campus was built, the aforementioned cottages were designed to be compatible with the Mansion's distinctive style. The architect wanted to maintain homogeny by complimenting the Mansion without imitating the second-empire style, or distracting from it. This was accomplished through the use of a plain eclectic style that used similar construction methods and materials.

All of the cottages and the field house use the same uncut and rough cut stone masonry laid in an irregular course. They all have Colonial Revival features, but the buildings lack some of the characteristics that would make Colonial Revival the over-riding style.

The Meyer and Guttmacher Cottages are almost identical. They have a cross-gabled roofline, are symmetrical, and have an ornamental entablature above the door. Meyer Cottage has stone jack arches above the windows, and Guttmacher Cottage has a string course.

Wilson Cottage is similar to the Meyer and Guttmacher Cottages. It has a side-gabled main façade with cross-gabled wings, is symmetrical, and has stone jack arches above the windows. Unlike Meyer and Guttmacher, Wilson Cottage has gabled dormers and a blind arch over several windows. It also has a shed porch with a pediment that is supported by four square piers. The pediment adds to the eclectic nature of the cottages by recalling a Greek temple front. Also, like the Mansion, the Wilson cottage had open areas that were enclosed with white plain board to increase interior space.

The Putts and Bond Cottages are very similar to Wilson Cottage, and are identical to each other. They are both side-gabled with dormers, symmetrical, have stone jack and blind arches, and a pediment supported by four square piers. The Cottages differ from Wilson Cottage because the pediment is broken in the center by an arch, recalling the silhouette of a Palladian window, as well as neoclassical architecture. Both Cottages also have a ramp, probably added later, and some wooden detailing on the porch that recalls the half-timbering of the Tudor Revival style. Bond cottage also has an area that was later enclosed to increase interior space.

The Field House is the largest and most complex campus building. It is also the most dissimilar. It has changing rooflines, the largest windows, and a sprawling, asymmetrical layout. However, it does share features such as materials, stone jack arches, and window style.

The following section provides detailed architectural descriptions of the major buildings at the Montrose Industrial School for Girls. For a description of the Montrose Mansion and Montrose Chapel, please refer to their respective MIHP forms (BA-949 and BA-950).

Wilson Cottage

The Wilson Cottage is two stories and has a partially exposed basement. The six-bay, side-gabled main section is cross-gabled at both ends. The cross gables are three bays in length. The cottage also has a two-story, three-bay ell perpendicular to the center rear of the main section. Gabled dormers adorn the roof of the front façade of the cottage's main section and ell. The dormers align with the second story windows.

The cottage is constructed with uncut and rough-cut stone masonry set in an irregular course. The main entrance to the cottage is through a door located at the center of the main section. A shed roof porch fronts the main entrance; it stretches one and a half bays on each side of the cottage's centerline. The porch has a gabled pediment that extends slightly over the porch stairs. The pediment is supported by four square, wooden piers placed evenly beneath the horizontal cornice. The shed porch is supported by similar piers.

The second story windows of the main section are symmetrical in the pattern of A A B C B A A. The center line of the cottage bisects C. The first story windows align with the second story windows except under the porch, where the pattern is interrupted by the placement of the front door. The door is bisected by the centerline (it is directly below window C).

All first story windows (6\6) and basement story windows are crowned with a stone jack arch, as is the door. Molding separates the second story windows of the main section and the roofline. The second story windows of the cross-gabled sections are alternately topped with a stone jack arch and a blind arch (A B A).

On each end of the cottage there are small, white plain board sections. These sections are two stories and side-gabled. Both have partially exposed stone basements that are similar to the rest of the cottage. A one story, white plain board section is built at the rear of the ell. Four stone chimneys are placed between the masonry and white plain board sections.

Putts Cottage

The Putts Cottage has two stories and a partially exposed basement. The side-gabled main section is center-gabled at the rear. The changing roof styles divide the cottage into three bays. The building is constructed with uncut\rough-cut stone masonry set in an irregular course.

The main entrance to the cottage is through a door located at the center of the front (west) facade. A gabled porch fronts the main entrance; the porch stretches one half bay on each side of the cottage's centerline. The pediment is broken at the base; the silhouette of an arch is cut out of the wood. A blind arch that is the same size as the cut-out in the pediment, crowns the front door. The broken pediment is supported in the front by four square piers. The porch is also supported by similar square piers along the porch railing leading back toward the cottage. A wooden ramp that runs parallel to the front façade and intersects the porch was added after the cottage's original construction.

Five gabled dormers adorn the roof of the front facade, and two adorn the rear (east). The first-story windows of the east and west elevations are topped with a stone jack arch or a blind arch; the basement-story windows are topped with a stone jack arch. The first and second story windows alternate paired windows and single windows with a slight asymmetrical pattern in front (due to the placement of the door) and harsh symmetry in the rear (A B A C C chimney C C A B A). All windows are 6/6 or 4/4.

The north elevation has three rows and three columns of identical windows all topped by a stone jack arch (the basement story is almost completely exposed). The gable on that elevation is decorated with a blind arch. The south elevation has two rows of windows exposed. They alternate in size with 6/6 on the outside and 4/4 on the inside. A chimney bisects the south wall. The inside windows are on the chimney; they are crowned with blind arches. The building has two chimneys, one at the center east elevation, and the other at the center south elevation.

Guttmacher Cottage

The Guttmacher Cottage is two stories with a partially exposed basement. There is a string course that delineates the two stories. The building is constructed with uncut\rough-cut stone masonry set in an irregular course. The main section is center-gabled and has side-gabled wings.

The main entrance to the cottage is through a door located at the center of the front (north) facade. The door has an ornamental entablature and a decorative lamp above the doorway. The entablature is not supported by pilasters. There is also no porch or pediment that extends over the entry way, as found in the other school buildings. The windows of the cottage are topped by lentils, horizontal stones that extend past the span of the window, instead of stone jack arches. The windows are a combination of paired 6/6 and single 4/4 windows. The east elevation has a single 8/8 window and a side entrance. The windows are arranged so that all of the facades are symmetrical.

Bond Cottage

The Bond Cottage has two stories and a partially exposed basement. The side-gabled main section has a two story perpendicular ell to the center rear. The changing roof styles divide the cottage into three bays. Five gabled dormers adorn the roof of the front façade. Two dormers adorn the rear, one along each side of the ell.

The main entrance to the cottage is through a door located at the center of the front (west) facade. A gabled porch fronts the main entrance; the porch stretches one half bay on each side of the cottage's centerline. The pediment is broken at the base; the silhouette of an arch is cut out of the wood. A blind arch, that is the same size as the cut-out in the pediment, crowns the front door. The broken pediment is supported in the front by four square piers. The porch is also supported by similar square piers along the outside of the porch railing leading back toward the cottage. A wooden ramp that runs parallel to the front façade and intersects the porch was added after the cottage's original construction.

The building is constructed with uncut\rough-cut stone masonry set in an irregular course. All first-story, front facade windows (6\6) are topped with a stone jack arch or a blind arch; basement story windows (4\4 or 6\6 alternating) are topped with a stone jack arch. The first and second story alternate paired and single windows in a symmetrical pattern.

The building has three chimneys, two along the ell (one centered at its far end and the other just before the cross-gable) and one centered on the south elevation. The windows (6\6) on the ell's first story are paired. The second story windows are partially filled-in. A shed porch extends off of the east elevation. Half of the porch is closed-in, half is open air with a railing and a back entrance offset to the right.

The north and south elevations have metal staircases that access doors on the second story. The south elevation also has a staircase for an access door on the first story; most of the basement story is exposed on that side. The gable on the north elevation is decorated with a blind arch.

Meyer Cottage

The Meyer Cottage has two stories and 11 bays. The building is center-gabled, and is constructed of uncut\rough-cut stone masonry set in an irregular course. The front door has decorative entablature not supported by pilasters. There are decorative lamps on each side of the door. The center-gabled main section has a 6/6 window with two 4/4 windows on either side directly above the door. In the two neighboring bays on either side of the door there is one 4/4 window on each second story bay. Below those bays, on the first story, there is a stone jack arch sized for a 4/4 window, but it is filled-in with stone. All first story windows (6\6) are topped with a stone jack arch. All second story windows not in the center-gable are 6/6 and reach the roofline.

The last bay on both ends of the cottage have a rectangular section that encompasses the first and second story windows, about 6 inches to the right and left of the windows, and a foot below the sill of the first story window. The rectangle appears to be a smooth, white surface that contrasts with the uncut stone.

Field House

The Field House has a center-gabled, one story main section with a partially exposed basement. The building has hip-roofed wings on both sides. The Field House was constructed with uncut\rough-cut stone masonry set in an irregular course. The front door is topped by a fanlight and has a sidelight on one side. The windows are mostly (12/12) and grouped in sets of three or four. Basement story doors and windows are topped with a stone jack arch.

8. Significance

Inventory No. BA-3207

Period	Areas of Significance	Check and justify below		
__ 1600-1699	__ agriculture	__ economics	__ health/medicine	__ performing arts
__ 1700-1799	__ archeology	_x_ education	__ industry	__ philosophy
__ 1800-1899	_x_ architecture	__ engineering	__ invention	__ politics/government
_x_ 1900-1999	__ art	__ entertainment/ recreation	_x_ landscape architecture	__ religion
__ 2000-	__ commerce		__ law	__ science
	__ communications	__ ethnic heritage	__ literature	_x_ social history
	__ community planning	__ exploration/ settlement	__ maritime history	__ transportation
	__ conservation		__ military	__ other: _____

Specific dates 1920 to 1988 **Architect/Builder** Unknown

Construction dates 1920 to 1956

Evaluation for:

_x_ National Register _____Maryland Register _____not evaluated

Prepare a one-paragraph summary statement of significance addressing applicable criteria, followed by a narrative discussion of the history of the resource and its context. (For compliance projects, complete evaluation on a DOE Form – see manual.)

SUMMARY OF SIGNIFICANCE

The Montrose Industrial School for Girls operated as a juvenile rehabilitation center from 1920 to 1988. Initially intended as a correctional facility for delinquent white females, over time it expanded to be both a multi-racial and co-educational facility. The school was originally operated as a self-sufficient farm and industrial complex, but after the Montrose School joined with the Barrett School in 1962, the school was increasingly used more for detention and less for reformation. The architecture on the property is reflective of these two main periods in the site's history: a pre-1962 collection of stone residences, classrooms, and farming structures, and a post-1962 area of clustered housing units. The pre-1962 Montrose Industrial School for Girls is eligible for inclusion in the National Register of Historic Places as a historic district under Criteria A, as a physical representation of evolving, early 20th century ideas regarding juvenile reform, education, and training; and under Criteria C, for its eclectic architecture that combines elements of various traditional architectural styles.

BACKGROUND OF JUVENILE REFORM IN MARYLAND

In the colonial period in Maryland, children who turned to crime, begging, or vagrancy could be jailed with hardened criminals or, by the end of the eighteenth century, committed to an almshouse. County courts and local trustees of the poor also could bind out such children to learn a trade and prevent them from becoming financial burdens on the county. As Maryland built its first prison in 1811, the idea came into vogue that the State ultimately could save money by stopping children from embarking on a life of crime. Children would be separated from adults in places of detention and given a home, education, and training for a trade.

In 1830, the Maryland State legislature passed "An Act to establish a House of Refuge for Juvenile Delinquents" (Chapter 64, Acts of 1830). A private corporation supported by member subscriptions, the House of Refuge nevertheless had ties to the State. Of its twenty-four managers, eight were appointed by the Governor and Council, eight by the membership, and eight by the Mayor and City Council of Baltimore. The House of Refuge buildings and grounds were exempted from taxes.

The managers were to report annually to the legislature. The managers were authorized to receive minor children of either sex who were arrested for begging in the streets of Baltimore, convicted of any criminal charge in the courts of Baltimore City or County, found too refractory by almshouse trustees, convicted by any county court of an offense punishable by imprisonment in the penitentiary, or arrested and awaiting trial in either Baltimore City or County. Instead of granting an outright appropriation to the fledgling institution, the General Assembly designated up to $5,000 annually for its support, the funding coming from the profits of the State Penitentiary for a period of five years. Financial difficulties were encountered; in 1841, the managers sought to return to contributors the monies collected to build the House of Refuge (Chapter 3, Acts of 1841). In 1849, however, the original Act of 1830 was further supplemented and modes of admission clarified (Chapter 374, Acts of 1849).

In 1852, a select committee of the House of Delegates recommended State aid for the House of Refuge. The committee noted that, although the House of Refuge had been contemplated for thirty-eight years, and had received $20,000 from the City of Baltimore and $22,000 from private subscriptions, it had received no money from the State. The aid was granted, and the House of Refuge opened in December of 1855. A year later, another select committee visited and found it "a grand and noble institution," and the General Assembly appropriated $10,000 annually to its support for five years (Chapter 288, Acts of 1856). By 1867, according to the annual report, the House of Refuge had housed 1,638 children, including 1,394 boys and 244 girls.

Meanwhile, private charitable institutions for children proliferated, especially in Baltimore City. They included orphanages and reformatories. The Home of the Friendless was incorporated in 1854, followed by the Children's Aid Society in 1862, the House of the Good Shepherd in 1864, and St. Joseph's House of Industry and St. Mary's Industrial School for Boys in 1865. With State appointees on their governing boards and fairly regular legislative appropriations, these institutions became quasi-public in nature and received children committed by courts, magistrates, justices of the peace, or parents and guardians. Of the quasi-public reformatories established in the last half of the nineteenth century, a number ultimately became State institutions. The first was the Maryland Industrial School for Girls, incorporated in 1866 for the "care, reformation and instruction of such girls as are not admitted into either the House of Refuge, the Home of the Friendless, or the Children's Aid Society, but who need the care of some public reformatory institution" (Chapter 156, Acts of 1866). Initially, directors of this school were chosen from the membership or appointed by the Mayor of Baltimore; the school received no State aid but its property was tax-exempt. By 1870, however, the Governor appointed ten out of thirty directors, who were given all the powers and duties in regard to female juvenile delinquents as formerly belonged to the directors of the House of Refuge (Chapter 391, Acts of 1870). The School was renamed the Female House of Refuge in 1880 (Chapter 173, Acts of 1880).

Reformatory institutions for youth established after the Civil War were segregated by race and gender. Perhaps in response to the "Memorial of the Grand Jury of Baltimore City Praying that a Place of Punishment may be Provided for Minor Colored Children" (House Documents, X, February 5, 1867), the House of Reformation and Instruction for Colored Children was incorporated (Chapter 392, Acts of 1870). The Governor appointed two of sixteen managers, and the buildings and grounds were tax-free. A report to the General Assembly was required, and an appropriation of $5,000 annually for two years was included, provided that the managers could raise $30,000 from private subscription. In 1882, the Industrial Home for Colored Girls was established, with the Governor appointing two out of eleven managers, and granting tax-exempt status to the institution (Chapter 291, Acts of 1882).

As private corporations, the above-mentioned institutions carried out their public role as caretakers for the State's youthful offenders. However, in 1918, two of them became public agencies of the State. The former House of Refuge, then known as the Maryland School for Boys, became the Maryland Training School for Boys, the State's reformatory institution for white boys (Chapter 300, Acts of 1918). Its counterpart for white girls, formerly the Maryland Industrial School for Girls and later called the Female House of Refuge, was designated as the Maryland Industrial Training School for Girls (Chapter 303, Acts of 1918). In an executive reorganization in 1922, both training schools, together with the Maryland School for the Deaf, were placed under the jurisdiction of the Department of Education (Chapter 29, Acts of 1922). The school for girls was moved and renamed the Montrose Industrial School for Girls. When Maryland established the Maryland Training School for Colored Girls as its reformatory institution for black girls, superseding the Industrial Home for Colored Girls, it too was placed under the supervision of the State Superintendent of Schools (Chapter 367, Acts of 1931). The State completed its acquisition of private reformatory institutions by taking over the House of Reformation at Cheltenham to be its reformatory for black boys, renaming it Cheltenham School for Boys (Chapter 70, Acts of 1937).

In 1943, the State Department of Public Welfare was given specific supervisory authority over both public and private institutions "having the care, custody or control of dependent, delinquent, abandoned or neglected children" (Chapter 797, Acts of 1943). Under the Department's Bureau of Child Welfare, a Division of Institutions oversaw the State's training schools for delinquent children,

including the Maryland Training School for Boys, the Montrose Industrial School for Girls, the Cheltenham School for Boys, and the Maryland Training School for Colored Girls.

The Department of Juvenile Services originated as an agency in 1966 (Chapter 126, Acts of 1966). In 1967, that department assumed administrative responsibilities for all State juvenile training schools, children's centers, and boys' forestry camps that previously had been overseen by the State Department of Public Welfare. At the same time, the Department of Juvenile Services initiated a single statewide program for juvenile probation and aftercare services. These services were formerly provided by the Counties, Baltimore City, the State Department of Public Welfare, and the State Department of Parole and Probation. In 1969, the Department of Juvenile Services, then known as the Juvenile Services Administration, was placed within the Department of Health and Mental Hygiene (Chapter 77, Acts of 1969). It became an independent agency named the Juvenile Services Agency in 1987 (Chapter 290, Acts of 1987). The Agency was restructured as a principal department of State government in 1989 (Chapter 539, Acts of 1989). The department serves as the coordinating administrative agency for juvenile detention authorization, investigation, probation, protective supervision, and after-care services. It certifies the operation of state public and private institutions, organizations, and agencies dealing with juvenile delinquency. It supervises the Charles H. Hickey, Jr. School and oversees detentions centers and youth centers.

MONTROSE SCHOOL

In their 1979 History of Baltimore County[i], Brooks and Rockel provide an overview of the history of Montrose before the purchase of the property by the State of Maryland. The Montrose Mansion was built by William Patterson ca. 1830. Patterson gave the mansion to his daughter, Elizabeth (Betsy) Patterson, former wife of Jerome Bonaparte, youngest brother of the Emperor Napoleon Bonaparte. Patterson and Bonaparte's marriage was annulled in 1812, although the union produced a son, Jerome Napoleon Bonaparte. Upon completion of the mansion, Jerome N. Bonaparte resided there until 1840. The estate was sold in 1843 to Colonel Franklin Anderson, a prominent Baltimore attorney. Anderson constructed the Montrose Chapel on the property in 1855. Upon the death of Franklin's wife in 1879, the estate was inherited by her nephew, Archibald Stirling. From 1887 to 1903, the estate passed through a succession of owners, until it was purchased at public sale by Dr. Adam M. Kalbach of Lancaster, Pennsylvania. In 1920 Dr. Kalbach sold the property to Frederick P. Gibson, the last private owner of Montrose, who in turn sold the property to the Maryland Industrial Training School for Girls in that same year.

Montrose Mansion, in 1923

The City of Baltimore desired to find a suitable location in the country for the reformation of delinquent wayward girls. When the Montrose Estate became available, then Governor Ritchie championed the purchase of the property for that purpose. In May, 1918, the property occupied by the school at Carey and Baker Streets was sold to the City of Baltimore for $100,000. This transaction provided the means and opportunity of moving the institution to its acquired property at Montrose in Baltimore County. The new site consisted of approximately 486 acres of land, and was ideally located for the rural, agrarian character desired by school administrators.

The Maryland Industrial School for Girls was renamed the Montrose Industrial Training School for Girls, and served as "a reformatory institution of the State of Maryland for the care and training of white female minors committed thereto, and to provide for the management thereof, and for the maintenance thereof, and for the levying of a per capita charge upon the respective Counties and the City of Baltimore for girls committed to its care." [ii] The proposed name for the National Register eligible historic district reflects the original name of the institution at Montrose.

The Montrose Mansion served as the school's focal point, and was converted into an administration building, with the upper stories used for the students. Infrastructure at the school, including water supply, sewage disposal, a well for drinking water, and associated plumbing to the different buildings, was constructed at a total cost of $11,217.

Students and staff on the grounds behind the Montrose Mansion, 1922.

Girls Playing Basketball in Front of Wilson Cottage, 1922

In 1920, the Wilson Cottage was constructed, the first of a series of buildings erected at the school. The Wilson Cottage had classrooms on the first floor and dormitory rooms on the second floor.

Beginning in 1921, the students of the Industrial School were taken to Montrose to help with all of the many tasks involved in preparing the property for occupancy. The annual report described the earliest days of the Girls School:

> "The Montrose Farm consists of 486 acres, facing on the Hanover Turnpike about twenty miles from Baltimore, 300 acres having been previously under cultivation, existing buildings were capable of improvement and good sites available for others. Owing to the necessary additions and road making, the final move was not accomplished until February, 1922, though many happy parties of girls and teachers had spent there a week at a time, throughout the foregoing months, They cleaned the buildings, gathered and canned fruit, worked in the garden, and picked the flowers which were sent to market for sale. On cool evenings they would gather around a bright fire, talking with anticipation of the much-desired new home. Then came the move, economy being again remembered, everything and everybody was conveyed in their own big truck. Not a girl was lost, and the regular work of the school and factory never interrupted." [iii]

In 1922, the school was renamed again, becoming the Montrose School for Girls.[iv] The Montrose School for Girls began a large rebuilding and renovation program at this time. A new cottage was ordered built in 1923, at the cost of $15,000.[v]

Second Cottage, Under Construction, 1923

Initially, the Montrose Mansion was used for garment manufacture, a vocational training at the time. The 1855 Montrose Chapel continued to be used for religious services.

Students sewing garments in the Mansion, 1923

The Montrose Chapel, 1923

In 1926, then Governor Ritchie appropriated funds in the amount of $35,000 for two new buildings and a water supply system. "[vi] A letter from Clarence Tucker, Treasurer of the Montrose School, to J. D. McCusker, Department of Public Works, requested funds. Funding was received in 1929 to complete the water works and to erect water tanks.[vii]

Wilson Cottage ca. 1930

Appropriations for 1931 included funding for the construction of a school building and new cottage, as well as roads.[viii] At the same time, the issue of a residence for the superintendent of the school became an important topic. Carrie Smith, writing to the Board of Public Works, complained that "the superintendent does not even have an apartment. The only thing she has is one crowded room with a make-shift bath. It certainly does not seem unreasonable that she should desire some place where she could have privacy and quiet when not actually on duty."[ix] The state provided the funds for the request, and in 1933 a contract was let to the construction firm of John F. Hardy for the construction of a farm house, with a 26-foot front. The building was mentioned as "now under construction" in January of 1934.[x]

In 1935, the condition of the Meyer Cottage became the next major objective in the renovation program. The condition of the structure was discussed in a letter from the State Budget Director to the Board of Public Works.[xi] The Meyer Cottage was originally constructed for the psychiatric care of the students, although in 1935, the superintendent stated that she had never used the facility as such. Funds were therefore acquired to convert the hospital portion of the cottage to a normal dormitory, doubling its residential capacity from 15 or 16 girls to 25 or 30. In another action, funds were requested for "the building of a chicken house, the purchase of a tractor, and for repairs to our buildings."[xii]

The next major issue was the construction of a building specifically designed for vocational education. In 1939, Governor Herbert R. O'Connor III provided $75,000 for the building, which was completed in the spring of 1941. Vocational classrooms located in other buildings were consolidated in the new facility, named the Vocational Building, and the old vocational classrooms were converted to living quarters, kitchens, and dining rooms.[xiii]

The new Vocational Building, with Girls Playing Field Hockey (Board of Corrections, 1948)

In 1944, the Montrose School provided the Board of Public Works with a laundry list of work needed to be done to the school, with the request to provide funds for as many of the individual projects as possible. Included was an addition to the vocation building & equipment, remodeling the Montrose Mansion, construction of a superintendent's cottage, and addition of a cold storage facility, swimming pool, and more roads. Other improvements included constriction of a hog house; a new dairy barn, silo and dairy; construction of an engineer's house, construction of a dormitory and equipment for 28 girls, an addition to the school building, and renovation of existing quarters and bathrooms at the Putts and Bond Cottages. Funding for these initiatives was obtained in December 1944.[xiv] Additional fund were approved in September of 1946 for replacing the wooden steps in the rear of the Montrose Mansion with concrete steps, and for replacing the gutters and recaulking the windows.[xv]

Most of the work conducted at the school after World War II focused on the farming structures. The firm of J. R. Rimbey was awarded $3,250 for construction of a new hog house and slaughter house in February 1947;[xvi] funds were provided for the construction of a new silo in August of the same year.[xvii] A contract was awarded to J. R. Rimbey in the same month for $2,980 for construction of an Employees Apartment within the "Factory Building" (i.e., the Montrose Mansion), and for $6,836 for miscellaneous plumbing work to J. H. Lawrence;[xviii] an addition to the vocational building awarded to the Mullen Contracting Company for $50,000 in August of 1949;[xix] and an award of $2,791 to Blair Brothers in December of 1949 for the construction of a fruit storage building.[xx]

By the mid-1940's, the school has abandoned its intensive use of the labor for garment manufacturing, and had adopted a more well-rounded training, including typing, cooking, and cosmetology.

Beauty School Training (Board of Corrections, 1948)

Kitchen Training (Board of Corrections, 1948)

Typing School (Board of Corrections, 1948)

Until the 1950s, the Montrose School for Girls was more reminiscent of a school for young ladies than a penal institution. In 1948, it boasted a well-stocked library and cozy dining rooms, although the dormitory rooms themselves were still small and spartan.

The Montrose School Library (Board of Corrections, 1948)

Dining Room (Board of Corrections, 1948)

A Typical Bedroom at Montrose (Board of Corrections, 1948)

In 1950, the State of Maryland appropriated $175,000 for a new girls dormitory; $7,000 for a pasteurization, refrigeration and fruit storage building; and $80,000 for the vocational building addition.[xxi] In 1951 funds were provided for alterations to the campus, including electric service; alterations to the farm house; and installation of a laundry extractor, silo, and dairy and pasteurization equipment. Improvements were also made to the administration building and water treatment plant and distribution system. A sewage treatment plant was constructed at this time.[xxii]

Appropriations were made to the school in 1956 for new heating plants for the Wilson and Bond Cottages and Brown House; construction of a carpentry, plumbing, and paint shop; and a new heating plant for chapel.[xxiii] In 1958 the first floor of the Gardner Building was converted to administrative offices.[xxiv]

The Barrett School for Girls, located on York Road in Timonium, Maryland, merged with the Montrose School for Girls in 1962 (Chapter 37, Acts of 1962). In the 1960s, the Montrose School for Girls was set up to care for and train delinquent girls either committed by the courts or sent for a detention period, pending study and investigation. Providing vocational and educational training, Montrose prepared students to return to the community.[xxv] At the time of the merger with the Barrett School, the State of Maryland appropriated funds for the expansion of the property through the acquisition of adjacent properties in the amount of approximately 85 acres on the southwest side of the campus.[xxvi]

New appropriations were authorized by Governor J. Millard Tawes in 1962 to construct a new 25-bed cottage, and to obtain additional property to safeguard the school's existing water source.[xxvii] This new cottage, named the Tawes Building in honor of the governor, was dedicated by Tawes in 1963. At the dedication ceremony, Tawes evoked the philosophy of the school, stating:

> "…that buildings alone cannot guide boys and girls back to good citizenship. The thousands of boys and girls who are admitted to our State juvenile institutions present severe problems and

> needs that are more of a social and psychological nature than they are physical. These buildings, then, represent an essential element in the total rehabilitative process and must be safe and properly designed. But it is only through the creative use of these buildings, by the personnel of the Montrose School, that the girls who are committed here can be trained and prepared for return to their communities as responsible young Americans, ready to live in conformity with the laws and customs of our society and to make their contributions to a better Maryland. I stated earlier that there is every reason for optimism as the Montrose School for Girls embarks upon a new and expanded program of service to the children of our State. I am sure that as you tour the grounds here today and inspect the new buildings on the campus you will understand more clearly the reasons for my optimism."

Montrose School became coeducational in 1973 and provided services to delinquent girls and boys under the age of fifteen. The school closed on March 18, 1988.[xxviii]

Construction of the Montrose School marked the culmination of the State's change in philosophy regarding juvenile justice and reform, and is clearly associated with this historic event. The campus-like layout of the school, with a rectilinear plan of buildings surrounding a center quadrangle, resembles a boarding school more than a correctional facility. The campus contained no walls, high fences, or guard towers. The architectural style further emphasized the college-like atmosphere of the facility, which has been described as being as attractive "as any Ivy League campus" (MIHP BA-949, 1990). The buildings of the Montrose School embody the characteristics of an eclectic architectural style.

The Montrose School's landscaping plan is a reflection of the move away from the punishment and warehousing of juvenile delinquents to their education and vocational training. Diverse educational opportunities were offered, that included not only the typical trades of that era for women, such as typing, sewing, food preparation, and cosmetology, but manufacturing and agricultural instruction as well. The Maryland Board of Corrections was pleased with the direction that juvenile reform had taken, as indicated in the series of photographs taken in 1948 (and included in this report) showing glimpses of life at the Montrose School. Those same photographs also remind us that attendance at the Montrose School was not voluntary…all of the students in the photographs have their backs to the camera, presumably to preserve their anonymity.

By maintaining and utilizing an existing farm, the Montrose School achieved a degree of self-sufficiency and self-reliance, which was no doubt imbued in the students. The bucolic, pastoral setting of the school also provided a separation and isolation of the students from the outside world. While serving as a deterrent to escape, this separation also provided an environment free from distractions and corrupting influences. The extant campus of the former Montrose Industrial School for Girls retains that setting and feeling today.

9. Major Bibliographical References

Inventory No. BA-3207

Board of Corrections, Montrose School for Girls, Annual Report of 1923, Enoch Pratt Library, Special Collections.
Board of Corrections, Montrose School for Girls, Annual Report of 1948, Enoch Pratt Library, Special Collections.
Board of Public Works, Record Group 542-154, 1/9/2/84, "General File – Montrose School"
Bromley Atlas of Baltimore County, 1915
Brooks, Neal A. and Eric G. Rockel, 1979 History of Baltimore County. Friends of Towson Library, Towson
Maryland Code, Chapters 53, 63, 80, 127, 128, 132, 215, 303, and 500
Maryland Army National Guard, 5th Regiment Armory, Environmental Office, Camp Fretterd files
Montrose Mansion and Chapel National Register Nomination, NRIS Reference Number: 90000354, 3/19/90
MIHP Forms BA-949 and BA-950

10. Geographical Data

Acreage of surveyed property	571		
Acreage of historical setting	571		
Quadrangle name	Hampstead and Reisterstown, MD	Quadrangle scale:	1:24,000

Verbal boundary description and justification

The Montrose Industrial Schools for Girls is bounded on the east by Hanover Pike. The southern boundary gererally follows Weywood Road, and then continues west in an irregular manner to the railroad tracks. The boundary follows the tracks in a northwesterly direction before turning northeast to Glen Falls Road. The boundary follows Glen Falls Road back to Hanover Pike.

The proposed boundary includes all the property now maintained as Camp Fretterd by the Maryland National Guard. This entire property was formerly the extent of the Montrose Industrial School for Girls, and its successor, the Montrose School. Although a small portion of the property contains structures currently eligible, the remaining portions of the property contain later facilities associated with the reformatory which may be considered historically significant when they reach 50 years of age.

11. Form Prepared by

name/title	Scott C. Watson, Cultural Resources Program Manager		
organization	U.S. Army Corps of Engineers, Baltimore District	date	17 June 2006
street & number	P.O. Box 1715	telephone	(410) 962-9500
city or town	Baltimore	state	MD

The Maryland Inventory of Historic Properties was officially created by an Act of the Maryland Legislature to be found in the Annotated Code of Maryland, Article 41, Section 181 KA, 1974 supplement.

The survey and inventory are being prepared for information and record purposes only and do not constitute any infringement of individual property rights.

return to: Maryland Historical Trust
DHCD/DHCP
100 Community Place
Crownsville, MD 21032-2023
410-514-7600

Maryland Historical Trust
Maryland Inventory of
Historic Properties Form

Inventory No. BA-3207

Name
Continuation Sheet

Number 9 Page 1

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[i] Brooks and Rockel, 1979:312.
[ii] Maryland Code, Chapter 303, Acts of 1918.
[iii] Board of Corrections, 1923, page 1.
[iv] Maryland Code, Chapter 215, Acts of 1922
[v] Maryland Code, Chapter 500, Acts of 1922.
[vi] Maryland Code, Chapter 132, Acts of 1929.
[vii] Letter of Tucker to McCusker, dated March 12, 1930, Board of Public Works, Record Group 542-154, 1/9/2/84, "General File – Montrose School"
[viii] Letter of D. P. Campbell, State Roads Commission to Montrose School, November 30, 1932, BPW, ibid.
[ix] Carrie Smith, Montrose School to BPW, dated June 6, 1932, BPW, ibid.
[x] John F. Hardy to Montrose School, letter dated November 22, 1933; Clarence Tucker to J. D. McCusker, letter of January 16, 1934, BPW, ibid.
[xi] Letter of W. A. Blakeman to Board of Public Works, July 25, 1935, BPW, ibid.
[xii] Letter of Clarence Tucker to Board of Public Works, October 8, 1935; Letter of Isaac Field, President of Montrose School, to Board of Public Works, April 21, 1936, BPW, ibid.
[xiii] Letter from Edith Gardner, Superintendent, Montrose School to Board of Public Works, May 10, 1941, BPW, ibid.
[xiv] Letter of Montrose School to Board of Public Works, October 7, 1944; Letter of Lucius White, Architect to Montrose School, December 14, 1944; Board of Public Works to Montrose School, August 8, 1945, BPW, ibid.
[xv] Letter of Board of Public Works to Montrose School, September 6, 1947.
[xvi] Letter of February 6, 1947, J. R. Rimbey to Montrose School, BPW, ibid.
[xvii] Letter of Board of Public Works to Montrose School, August 11, 1947, BPW, ibid.
[xviii] Board of Public Works to Montrose School, October 121, 1947, BPW, ibid.
[xix] Board of Public Works to Montrose School, August 16, 1949, BPW, ibid.
[xx] Board of Public Works to Montrose School, December 29, 1949, BPW, ibid.
[xxi] Maryland Code, Chapter 53, Acts of 1950.
[xxii] Maryland Code, Chapter 53, Acts of 1952
[xxiii] Maryland Code, Chapter 63, Acts of 1956.
[xxiv] Maryland Code, Chapter 80, Acts of 1958.

[xxv] Http://www.mdarchives.state.md.us/msa/refserv/staghist/html/sh197.html

[xxvi] Maryland Code, Chapter 127, Acts of 1962
[xxvii] Maryland Code, Chapter 128, Acts of 1962.

[xxviii] Http://www.mdarchives.state.md.us/msa/refserv/staghist/html/sh197.html

APPENDIX B
RÉSUMÉS

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Lori Thursby

Current Position
Senior Architectural Historian

Discipline Area

> Cultural Resources Management and Compliance

> Environmental Management/ Planning:

Years' Experience:
23

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2006

Education
1999 / MArch History / Architectural History and Historic Preservation / University of Virginia

1993 / Bachelor's / Environmental Design in Architecture / Miami University

Affiliations
National Trust for Historic Preservation

Continuing Education and Training
Advanced Section 4(f) Workshop, Federal Highway Administration Resource Center

Summary of Experience

Ms. Thursby is a highly experienced architectural historian. As a Project Manager and Principal Investigator, she has successfully conducted and directed historical and architectural resource surveys in compliance with Section 106 and Section 110 of the National Historic Preservation Act for federal and state agencies and private clients. She has completed numerous historical inventories, determinations of eligibility, and assessments of effect on a diverse range of property types. Ms. Thursby has prepared several Memoranda of Agreement and mitigation projects, including Historic American Buildings Survey (HABS) and Historic American Engineering Record (HAER) documentations. Ms. Thursby's technical experience also includes National Environmental Policy Act (NEPA) project management and impact analysis. She has had primary responsibility for preparing Section 4(f) determinations and evaluations and guiding and supporting clients in the Section 106 consultation process. Ms. Thursby has also served as a technical editor and quality assurance/quality control (QA/QC) reviewer.

Significant Projects

Community Integrated Master Plan Phase III, Marine Barracks Washington, DC
Cultural resources lead for an EIS that analyzed the proposed implementation of several construction, repair, and renovation projects at or proximate to Marine Barracks Washington, Washington, DC. The principal project analyzed in this EIS was a land acquisition and construction project to replace a Bachelor Enlisted Quarters (BEQ) Complex currently housed in Building 20 at the Main Post. Analyzed the potential impacts of four action alternatives and the No Action Alternative on two National Historic Landmark districts, two National Register districts, nine individual National Register properties, and one National Register-eligible structure.

Community Integrated Master Plan Support, HQ Marine Corps and Marine Barracks Washington, Washington, DC
As Architectural Historian, assisted the planning team on Section 106 National Historic Preservation Act (NHPA) activities for the Community Integrated Master Plan (CIMP) for Marine Barracks Washington. The CIMP supporting studies included Basic Facilities Requirements and Master Plan analysis for the Marine Barracks Washington Main Post and Annex Properties, baseline conditions and feasibility analysis for potential sites for the needed Bachelor Enlisted Quarters complex, and reuse of a 1.56-acre site in southeast Washington, DC. Provided Section 106 NHPA analysis and consultation regarding the numerous historic properties within the study area, including National Historic Landmarks and National Register of Historic Places districts and individual buildings.

Cultural Resources Evaluations of 10 USMC Reserve Centers, Nationwide
Project Manager for updates of archaeological and architectural resource

FERC Environmental Review and Compliance for Natural Gas Facilities Seminar

Native American Consultation for Environmental Professionals Webinar, National Association of Environmental Professionals

Section 106 Training Workshop, Ohio Department of Transportation, Columbus, OH

Section 4(f) Training Workshop, Ohio Department of Transportation, Columbus, OH

Victorian Society Summer School, Newport, RI

evaluations at 10 Marine Corps Reserve Centers (MCRCs) located in 10 different states: AL, CA, FL, IL, MD, OH, PA, TN, TX, and WA. Nine of the 10 MCRCs had been previously surveyed, but consultation with the respective State Historic Preservation Offices on the results of the surveys had not been completed. Conducted research to enhance the existing historic context of the Marine Corps Reserve during the Cold War and add the more recent role of the Reserve in the Global War on Terror. Conducted the architectural survey at MCRC Berea, OH, and wrote the report, which was used as the template for the other nine MCRCs. Responsible for completing the survey and report s for the MCRC s in CA and WA. Managed and reviewed the survey reports of the other seven MCRCs.

Environmental Due Diligence for Public Health and Safety Communications Facility, New Market, MD
Senior Architectural Historian for the cultural resources survey for the proposed construction and operation of an emergency services tower and facilities, which would be part of a network of State-owned radio towers to support current operations for various state and Federal government radio systems. Delineated the APE to account for direct effects associated with construction of the tower and indirect, or visual, effects to the setting of historic properties. Conducted background research and a reconnaissance survey to identify historic properties within the APE. Documented the results of the survey and determination of effect in a Section 106 consultation package that was submitted to the Maryland Historical Trust, Maryland's SHPO, for review and comment. Incorporated the results of the cultural resources survey into the EA.

Environmental Due Diligence, NEPA, and Cultural Resource Studies for Proposed Social Security Administration Site (Lexington Rd.), Woodlawn, MD
Senior Architectural Historian for a cultural resources survey of a 1-acre site proposed for acquisition for the Social Security Administration in Baltimore County, MD. Completed a Determination of Eligibility for an early nineteenth century residence located on the proposed site. A technical report detailed the results of the DOE and a Phase IA archaeological investigation. In accordance with Maryland Historical Trust (MHT) guidelines, both a Maryland Inventory of Historic Properties form and a DOE form were prepared on the property. MHT concurred with the results and recommendations of the survey.

Environmental Due Diligence, NEPA, and Cultural Resource Studies for Proposed Social Security Administration Site, (Colonial Rd.), Woodlawn, MD
Senior Architectural Historian for a cultural resources survey of a 1-acre site proposed for acquisition for the Social Security Administration in Baltimore County, MD. Completed a Determination of Eligibility for an early twentieth century residence and garage located on the proposed site. A technical report detailed the results of the DOE and a Phase IA archaeological investigation. In accordance with Maryland Historical Trust (MHT) guidelines, both a Maryland Inventory of Historic Properties form and a DOE form were prepared on the property. MHT concurred with the results and recommendations of the survey.

Environmental Impact Statement, U. S. Department of State Foreign Affairs Security Training Center, Fort Pickett, VA
Senior Architectural Historian on a team of environmental specialists that prepared an Environmental Impact Statement (EIS) with the General Services Administration for a new Foreign Affairs Security Training Center for the Department of State at Fort Pickett, VA. Technical studies for the EIS included conducting surveys and evaluation of architectural resources within the APE. Also completed the analysis of

potential impacts to three historic architectural resources from the land acquisition, development, and operation of the new 1,500 acre campus for training up to 10,000 Bureau of Diplomatic Security personnel per year.

Supplemental Environmental Impact Statement, Foreign Affairs Security Training Center, Blackstone, VA
Senior Architectural Historian on a team of environmental specialists that prepared a supplement to the 2012 Draft EIS for a new Foreign Affairs Security Training Center (FASTC) for the Department of State at Fort Pickett, VA. The Supplement EIS was prepared subsequent to the modification of the previous build alternatives and the reduction of the proposed FASTC development. Prepared a Section 106 effects finding documentation package for consultation with the VA SHPO, and wrote the cultural resources sections of the Supplemental EIS.

Phase I and Phase II Archaeological Investigation, Foreign Affairs Security Training Center, Blackstone, VA
Senior Architectural Historian. Completed the assessment of effects of the proposed installation of new utilities and re-routing or removal of existing utilities for FASTC on a historic district at Fort Pickett. Assessed whether the installation of a new electrical line with utility poles 5 to 10 feet taller than the existing line may have potential adverse visual effects to the integrity of the historic district. Included several photos of existing views from the historic district to the existing electrical line to support the No Adverse Effect finding. The VA SHPO concurred with the finding.

Environmental Impact Statement, SpaceX Launch Site, Cameron County, TX
Senior Cultural Resources Specialist on an interdisciplinary team for an EIS for the Federal Aviation Administration (FAA) that analyzed the potential environmental impacts of issuing launch licenses and/or experimental permits to Space Exploration Technologies Corp. to launch the Falcon program of orbital vertical launch vehicles. Conducted an architectural survey to identify historic properties within the 5-mile radius APE, which was determined to include a National Historic Landmark. Prepared the cultural resources and Section 4(f) sections of the EIS, and assisted on the visual resources section. Prepared the Section 106 consultation documentation and the Section 4(f) determination. Supported the FAA in the development of the Programmatic Agreement to govern the implementation of a program for the continued assessment of effects on, and the resolution of adverse effects to, historic properties.

Cultural Resources Surveys, Pittsburgh, Hancock Field, and Atlantic City Air National Guard Bases
Principal Investigator for the Section 110 surveys of ANG installations at Hancock Field, Syracuse, NY and Atlantic City International Airport, NJ, and Principal Investigator and lead surveyor of the ANG installation at Pittsburgh International Airport, PA. All buildings, structures, and objects built before the end of the Cold War (pre-1990) at each installation were inventoried and evaluated for National Register of Historic Places eligibility. The resources were evaluated within a historic context of the Air National Guard. Real property records, unit histories, and as-built drawings were reviewed to develop the context and chronicle the physical evolution of each particular installation. A technical report detailing the survey methods, results, and conclusions was completed for each installation, and submitted to the respective State Historic Preservation Office for review and concurrence.

Historic Resources Survey and Evaluation, Assessment of Effects, Memorandum of Agreement Preparation, and HAER Documentation, Kent, OH

Principal Investigator of the cultural resources studies for the Middle Cuyahoga River Restoration Project in Kent, Ohio. The project involved removing or modifying historic structures in the Cuyahoga River in order for this portion of the river to meet the water quality standards of the Clean Water Act. Directed the historic and archaeological surveys to identify historic properties in the Area of Potential Effects and to evaluate the effects of removing an historic canal lock and modifying a ca. 1830 stone arch dam. Assisted in Section 106 consultation and MOA preparation among the City of Kent, the Ohio Historic Preservation Office, the U.S. Environmental Protection Agency, and the U.S. Army Corps of Engineers, Buffalo District, with the latter serving as the lead Federal agency. Completed the large format photography for the HAER documentation of the dam and canal lock, and directed the preparation of the written and graphic portions of the narrative format HAER report.

Section 106 Consultation and Request for Determination of Eligibility for National Register of Historic Places, 158th Fighter Wing, Burlington, VT
Assisted the National Guard Bureau (NGB) in preparing documentation to submit to the Keeper of the NRHP for a federal Determination of Eligibility for Building 130 at the Burlington International Airport. Gathered information on Building 130, a mid-1950s alert aircraft ready shelter, within the historic context of Cold War air defense infrastructure, and used it to adequately evaluate the historic integrity of the building. Wrote a narrative of the findings, which supported the NGB's recommendation that Building 130 was not eligible. Upon review of the documentation, the Keeper also determined the property was not eligible.

Environmental Documentation for Environmental Assessment and Section 106 Compliance for PPV Navy Family Housing, Naval District Washington, Washington, DC
Senior Architectural Historian on an interdisciplinary team that assisted the Navy in fulfilling its NEPA and NHPA Section 106 compliance obligations for implementation of a Public-Private Venture (PPV) housing initiative at 11 locations within Naval District Washington. The project involved privatization of 269 Navy family housing units, many of which are in National Historic Landmark districts or NRHP-eligible districts. Prepared a Section 106 consultation letter to each SHPO (DC, MD, and VA) that presented the proposed action, the area of potential effects of each site in their respective state, the efforts to identify historic properties, and the findings of effect. Conducted additional research and documentation of the housing units at two of the Maryland sites. Wrote the cultural resources sections of the EA.

Building Preservation Plan Fallon Federal Office Building, Baltimore, MD
Senior Architectural Historian. Prepared the History and Documentation section of a Building Preservation Plan (BPP) for GSA. This section comprised a statement of significance, a history of the design, construction, and use, and documentation on building alterations over time. The project team prepared the BPP using GSA's internet-based BPP database. The purpose of the BPP was to provide GSA with comprehensive information on the National Register-eligible Fallon Federal Building to guide appropriate maintenance, repair, rehabilitation, and reinvestment.

Sonja Lengel

Current Position
Architectural Historian

Discipline Area

> Cultural Resources Management

Years' Experience:
11

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2018

Education
2016 / MS / Historic Preservation / The University of Pennsylvania

2004 / BFA / Interior Design / Rochester Institute of Technology

Professional Registrations
2008 /National Council for Interior Design Qualification

Continuing Education and Training
2016/MS/Historic Preservation/The University of Pennsylvania

2004/BFA/Interior Design/Rochester Institute of Technology

Summary of Experience

Ms. Lengel is an Architectural Historian with 10 years of experience completing intensive-level and reconnaissance-level surveys for Section 106 compliance of the National Historic Preservation Act for New Jersey agencies. She has completed historical inventories, determinations of eligibility, and assessments of effect on a diverse range of property types. She has four years of experience as an interior designer in space planning, design development, finish selection, and construction documents.

Significant Projects

Building Preservation Plan Fallon Federal Office Building, Baltimore, MD
Ms. Lengel researched architectural changes to the building through primary and secondary sources. She was responsible for selecting images and documents that exhibited those changes through time.

Environmental Impact Statement for F-35A Operational Beddown, 5th and 6th Main Operating Bases
Architectural Historian on a team that conducted architectural surveys of resources constructed after the end of the Cold War to 2016. The project required Section 106 compliance. Ms. Lengel was responsible for writing the letter reports, including the historic contexts and intensive level survey forms, for installations in Michigan and Idaho.

Master Service Agreement - Historical Architectural Services
Architectural Historian on a team that conducted a reconnaissance level survey of historic buildings within a six-mile radius of the project area. The survey identified 49 potentially eligible resources for the National Register of Historic Places (NRHP). Ms. Lengel evaluated the resources according to the seven aspects of integrity of the NRHP.

Historic Architectural Resource Building Survey (HARBS) Hudson Tunnel Project, Hudson County, NJ
Architectural Historian on a team that conducted an intensive-level survey of the properties within the Area of Potential Effects for Historic Architecture of the proposed Hudson Tunnel project in accordance with Section 106 compliance. The survey was part of a larger Effects Assessment and Archaeology report. The survey examined 31 previously surveyed or newly identified resources more than 50 years in age. The project recommended two buildings eligible for the NRHP and received NJSHPO concurrence. Ms. Lengel recommended 320-324 Mountain Road, Union City individually eligible for the NRHP under Criterion B for its association with sculptor and inventor Robert Treat Paine and architectural sculptors Frank and Raphael Menconi.

Architectural and Interior Renovation of Ben Franklin Hall, Bloomsburg University, Bloomsburg, PA
Interior Designer for the interior renovations of Ben Franklin Hall. The building was built in 1930 and required renovations to the exterior and interior for the Office of Technology, Departments of Mathematics, Computer Science, and Statistics. Incorporated intact historic interior elements with contemporary finishes and details. Coordinated the interior design portions of the project with the architectural. Drew details and selected finishes and contributed to the set of construction documents.

Reconnaissance-Level Historic Architectural and Archaeological Survey for the Replacement of Centerton Road Bridge, Burlington County, NJ
Principal Investigator of architecture for the reconnaissance-level architectural survey for the replacement of an early twentieth century swing bridge. The report was incorporated into a larger feasibility study. The architectural survey identified ten previously undocumented resources more than 50 years in age and recommended five for intensive-level survey to better assess the impact of the proposed project on their significance and setting.

Intensive-Level Historic Architectural Survey Greenville Bus Garage, City of Jersey City, NJ
Architectural Historian on a team that conducted an intensive-level survey for the proposed installation of a natural gas-fired generator set and solar panels at the Greenville Bus Garage. The project required Section 106 and National Environmental Policy Act (NEPA) compliance. The project identified and surveyed 26 properties more than 50 years in age within the Area of Potential Effects for Historic Architecture. As a result of the survey, none of the surveyed properties were recommended eligible for the NRHP. The team expedited the work to meet the client's short timeline.

Government-to-Government Consultation

MARFORRES consulted with the Maryland Historical Trust on March 30, 2020 regarding potential effects of the proposed action on historic properties in accordance with Section 106 of the National Historic Preservation Act. Section 106 also requires agencies to consult with federally recognized Indian tribes that attach religious and cultural significance to historic properties that may be affected by an undertaking. In accordance with the National Historic Preservation Act (36 CFR 800.3(f)(2)) and Executive Order 13175 (*Consultation and Coordination with Indian Tribal Governments*), MARFORRES consulted with federally recognized Native American tribes regarding the environmental impact analysis and Maryland Historical Trust's determination that the proposed action would result in no adverse effect on historic properties.

MARFORRES contacted each of the Native American Tribes presented below to obtain an addressee and preferred method of receiving a consultation letter. As indicated, letters were sent via the United States Postal Service or via email.

Native American Tribe	**Addressee**	**Delivery**
Cayuga Nation of New York	Sharon Leroy	USPS
Delaware Nation	Erin Paden	email
Delaware Tribe of Indians	Susan Bachor	email
Eastern Shawnee	Brett Barnes	USPS
Oneida Nation of New York	Ray Halbritter	USPS
Oneida Nation of Wisconsin	not provided	USPS
Onondaga Nation of New York	not provided	email
Saint Regis Mohawk Tribe, New York	Darren Bonaparte	email
Seneca Cayuga Nation	William Tarrant	USPS
Stockbridge Munsee Community, Wisconsin	Shannon Holsey	USPS
Tuscarora Nation	Leo Henry	USPS

Following is a representative letter sent to all the tribes and the response received from The Oneida Indian Nation. No other responses were received.

UNITED STATES MARINE CORPS

MARINE FORCES RESERVE
2000 OPELOUSAS AVENUE
NEW ORLEANS, LOUISIANA 70114

IN REPLY REFER TO:
FAC
31 Mar 2021

From: United States Marine Corps Forces Reserve
Environmental and Energy Program Manager

To: Ray Halbritter
Oneida Nation of New York
2037 Dream Catcher Plaza
Oneida, NY 13421

Subj: PROPOSED CONSTRUCTION AND OPERATION OF A MARINE CORPS RESERVE CENTER (MCRC) AT CAMP FRETTERD MILITARY RESERVATION (CFMR), MARYLAND

Encl: (1) Location of CFMR; (2) Location of Proposed MCRC at CFMR

The United States Marine Corps Forces Reserve (MARFORRES) is proposing to construct and operate a multi-functional Marine Corps Reserve Center (MCRC) within a 21-acre site at Camp Fretterd Military Reservation (CFMR) located in Reisterstown, Baltimore County, Maryland.

MARFORRES has prepared an Environmental Assessment (EA) under the National Environmental Policy Act (NEPA) of 1969, as amended, and complied with Section 106 of the National Historic Preservation Act (NHPA). MARFORRES consulted with the Maryland Historical Trust (MHT) on March 30, 2020 regarding potential effects of the Proposed Action on historic properties in accordance with Section 106 of the NHPA (36 Code of Federal Regulations [CFR] Part 800.4). MHT concurred with the findings of MARFORRES on May 7, 2020 stating that the proposed MCRC would result in no adverse effect on historic properties per 36 CFR 800.4(d)(1). A review of the Maryland archaeological site files indicated that no previously identified archaeological sites are present within the area of potential effect. Appendix E of the EA provides the archaeological survey and correspondence with MHT.

In accordance with the NHPA (36 CFR 800.3(f)(2)) and Executive Order 13175 (Consultation and Coordination with Indian Tribal Governments), this letter initiates

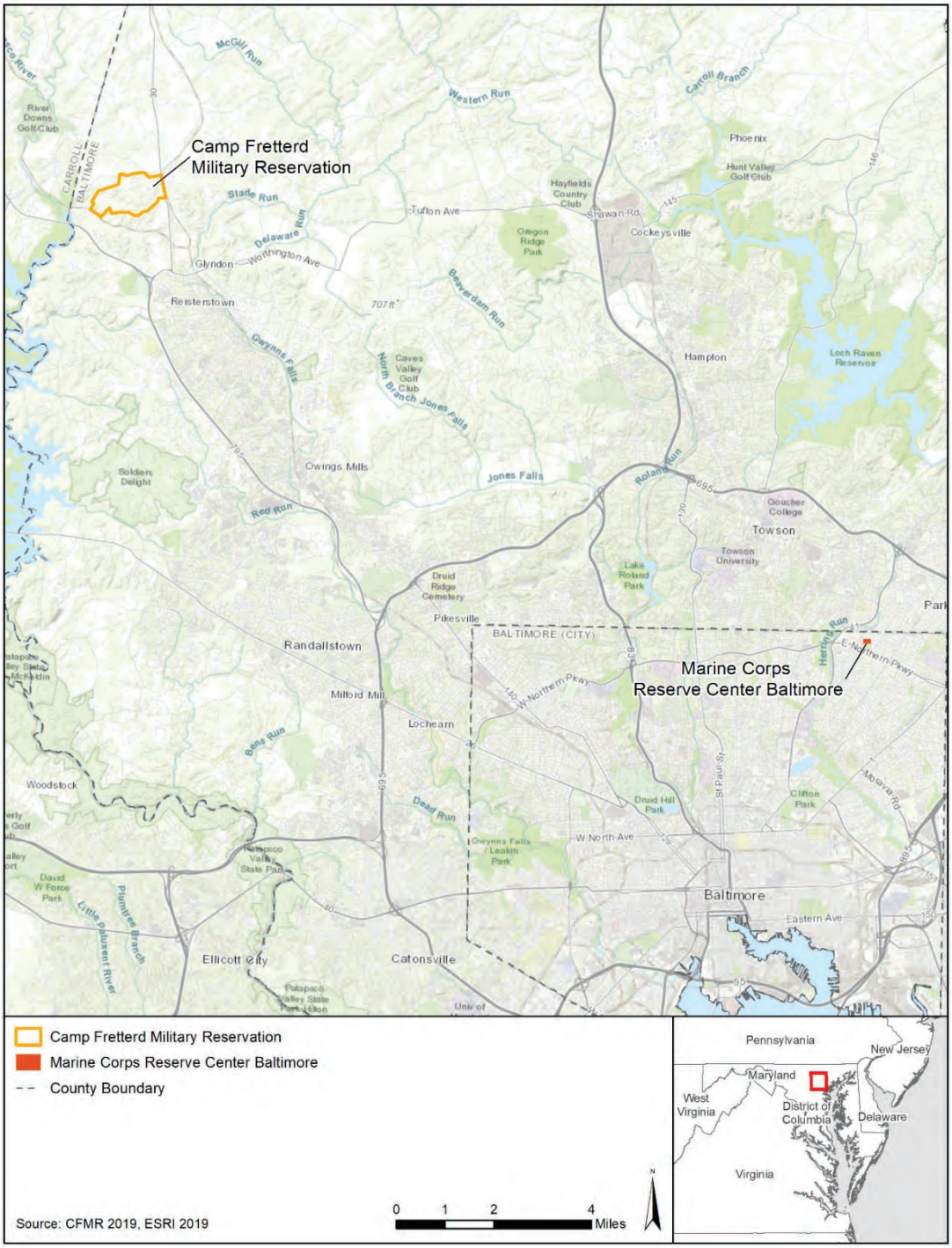
government-to-government consultation with Oneida Nation of New York and constitutes a request for your input in identifying any issues or areas of concern you feel regarding the environmental impact analysis and MHT's determination of effects under Section 106.

The preliminary final EA is available on the following public website: https://www.navfac.navy.mil/navfac_worldwide/atlantic/fecs/mid-atlantic/about_us/environmental_norfolk/environmental_planning_and_conservation.html

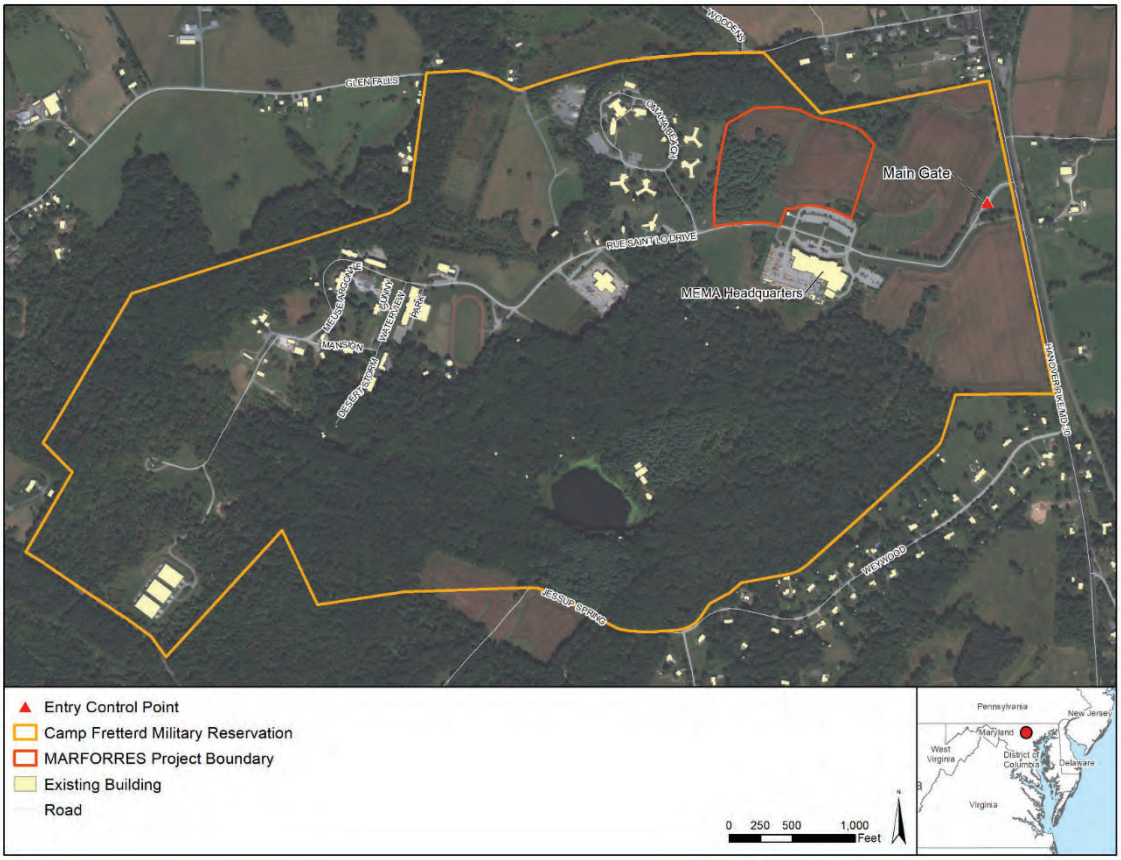
Please provide your written questions or comments at your earliest convenience, but no later than 45 days from receipt of this correspondence. Address all questions and comments to Mr. Christopher Hurst, MARFORRES Environmental proponent, by email to christopher.a.hurst@usmc.mil. For further information, please call Mr. Hurst at (504) 697-9892.

R. GODCHAUX

Enclosure 1: Location of Camp Fretterd Military Reservation, Reisterstown, Maryland



Enclosure 2: Location of Proposed MCRC at Camp Fretterd Military Reservation, Reisterstown, Maryland



Charee Hoffman

From: Peyton, Angela V CIV USN NAVFAC MIDLANT NOR (USA) <angela.peyton@navy.mil>
Sent: Tuesday, April 27, 2021 4:55 PM
To: Hurst CIV Christopher; Ostahowski CTR Brian E; Crouch CTR Diane E
Cc: Charee Hoffman; Heath, Charles L CIV USN NAVFAC MIDLANT NOR (USA); Robbins, Heather L CIV USN NAVFAC MIDLANT NOR (USA)
Subject: RE: Proposed Construction and Operation of a Marine Corps Reserve Center at Camp Fretterd Military Reservation
Signed By: angela.peyton@navy.mil

Thanks, Chris.

Charee – For the EA and NEPA Admin Record.
v/r
ap

From: Hurst CIV Christopher <christopher.a.hurst@usmc.mil>
Sent: Tuesday, April 27, 2021 3:44 PM
To: Ostahowski CTR Brian E <brian.ostahowski.ctr@usmc.mil>; Crouch CTR Diane E <diane.crouch.ctr@usmc.mil>; Peyton, Angela V CIV USN NAVFAC MIDLANT NOR (USA) <angela.peyton@navy.mil>
Subject: FW: Proposed Construction and Operation of a Marine Corps Reserve Center at Camp Fretterd Military Reservation

FYI

Chris Hurst
Environmental Management Systems
Environmental and Energy;
REM/CEA/CSEM/CESCO

Marine Forces Reserve HQ
Marine Corps Support Facility
2000 Opelousas Ave.
New Orleans, LA. 70114
Office: (504) 697-9892
"Focus forward on solutions"

From: Jesse Bergevin <jbergevin@oneida nation.org>
Sent: Tuesday, April 27, 2021 11:30 AM
To: Hurst CIV Christopher <christopher.a.hurst@usmc.mil>
Subject: [Non DoD Source] Proposed Construction and Operation of a Marine Corps Reserve Center at Camp Fretterd Military Reservation

Mr. Hurst,

The Oneida Indian Nation (the "Nation") received a letter, dated March 31, 2021, from the United States Marine Corps Forces Reserve Environmental and Energy Program Manager regarding the proposed construction and operation of a Marine Corps Reserve Center (the "Project") at Camp Fretterd Military Reservation in Maryland. The Nation has

reviewed the information associated with the Project and does not anticipate the project will affect historic properties related to Oneida ancestors.

Please let me know if there are any questions.

Best Regards,

JESSE BERGEVIN
Historical Resources Specialist

ONEIDA INDIAN NATION

P: 315.829.8463
2037 Dream Catcher Plaza
Oneida, NY 13421

Appendix F
U.S. Fish and Wildlife Service and Maryland Department of Natural Resources Coordination

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United States Department of the Interior
U.S. Fish & Wildlife Service
Chesapeake Bay Field Office
177 Admiral Cochrane Drive
Annapolis, MD 21401
410/573 4575

Online Certification Letter

Today's date: November 17, 2020

Project: Proposed Construction and Operation of a Marine Corps Reserve Center at Camp Fretterd Military Reservation in Reistertown, MD

Dear Applicant for online certification:

Thank you for using the U.S. Fish and Wildlife Service (Service) Chesapeake Bay Field Office 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 referenced project 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.

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

This response relates only to federally protected threatened or endangered species under our jurisdiction. For additional information on threatened or endangered species in Maryland, you should contact the Maryland Wildlife and Heritage Division at (410) 260-8573. For information in Delaware you should contact the Delaware Division of Fish and Wildlife, Wildlife Species Conservation and Research Program at (302) 735-8658. For information in the District of Columbia, you should contact the National Park Service at (202) 339-8309.

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

We appreciate the opportunity to provide information relative to fish and wildlife issues, and thank you for your interest in these resources. If you have any questions or need further assistance, please contact Chesapeake Bay Field Office Threatened and Endangered Species program at (410) 573-4527.

Sincerely,

Genevieve LaRouche
Field Supervisor

UNITED STATES MARINE CORPS
MARINE FORCES RESERVE
2000 OPELOUSAS AVENUE
NEW ORLEANS, LOUISIANA 70114

IN REPLY REFER TO:
5090
FAC
29 Jun 2020

From: Marine Corps Reserve (MARFORRES), Environmental and Energy Program Manager

To: U.S. Fish and Wildlife Service
Chesapeake Bay Ecological Services Field Office
177 Admiral Cochrane Drive
Annapolis, MD 21401-7307

Subj: U.S. FISH AND WILDLIFE SERVICE (USFWS) ENDANGERED SPECIES ACT SECTION 7 CONSULTATION FOR MILITARY CONSTRUCTION (MILCON) OF MARINE CORPS RESERVE CENTER (MCRC) CAMP FRETTERD MILIITARY RESERVATION, MARYLAND

Encl: 1) IPac Consultation Code: 05E2CB00-2020-SLI-0691

Dear Sir of Ma'am:

The United States Marine Forces Reserve (MARFORRES) is proposing to construct and operate a Marine Corps Reserve Center (MCRC) at Camp Fretterd Military Reservation (CFMR) located in Reisterstown, Maryland (MD).

The MARFORRES project would include construction of an approximate 50,000 square foot MCRC within a designated 21-acre site at CFMR. The MCRC would be comprised of a training center building, two parking areas adjacent to and in front of the training center to accommodate up to 256 privately owned vehicles, and a tactical vehicle parking area behind the training center. A vehicle maintenance facility, vehicle wash platform, two pads for placement of quadruple containers and hazardous storage, a storage shed, and a refueling station comprised of an approximate 2,250 gallon aboveground tank filled with diesel/JP-8 fuel would border the tactical vehicle parking area. Additional features include a guard house and security fencing around the MCRC, site septic system, a concrete retaining wall, curbs, landscaping, stormwater drainage, and mechanical and electrical systems that would be located in an enclosed utilities yard next to the training center. An approximate 9-acre pine grove would be cleared. The total area of ground disturbance for construction of the MCRC and

Subj: U.S. FISH AND WILDLIFE SERVICE (USFWS) ENDANGERED SPECIES ACT SECTION 7 CONSULTATION FOR MILITARY CONSTRUCTION (MILCON) OF MARINE CORPS RESERVE CENTER (MCRC) CAMP FRETTERD MILIITARY RESERVATION, MARYLAND

associated features would be approximately 15 acres within the 21-acre site.

The USFWS Information for Planning and Consultation (IPaC) results indicate the northern long-eared bat is listed as potentially occurring within this site (USFWS IPaC Consultation Code: 05E2CB00-2020-SLI-0691). MARFORRES is requesting coordination with your office regarding the results of the IPaC survey for the listed species

Godchaux, R.

Enclosure (1): IPac Consultation Code: 05E2CB00-2020-SLI-0691

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Chesapeake Bay Ecological Services Field Office
177 Admiral Cochrane Drive
Annapolis, MD 21401-7307
Phone: (410) 573-4599 Fax: (410) 266-9127
http://www.fws.gov/chesapeakebay/
http://www.fws.gov/chesapeakebay/endsppweb/ProjectReview/Index.html

In Reply Refer To: June 09, 2020
Consultation Code: 05E2CB00-2020-SLI-0691
Event Code: 05E2CB00-2020-E-03574
Project Name: MARFORRES CAMP FRETTERD

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. This 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.*).

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
- Wetlands

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:

Chesapeake Bay Ecological Services Field Office
177 Admiral Cochrane Drive
Annapolis, MD 21401-7307
(410) 573-4599

Project Summary

Consultation Code: 05E2CB00-2020-SLI-0691

Event Code: 05E2CB00-2020-E-03574

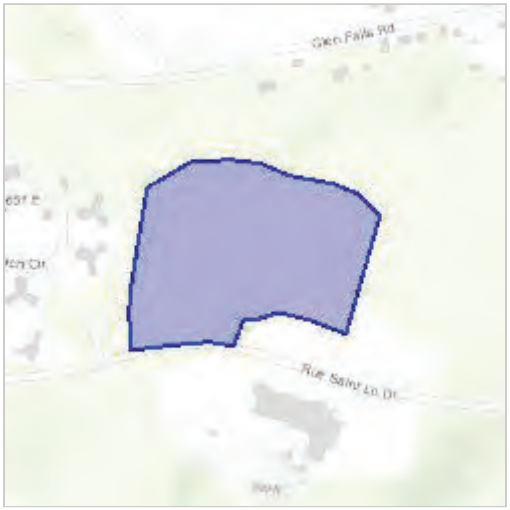
Project Name: MARFORRES CAMP FRETTERD

Project Type: DEVELOPMENT

Project Description: Marine Forces Reserve (MARFORRES) proposes to construct an approximate 50,000 square foot training center at Camp Fretterd Military Reservation. Construction would include two parking areas adjacent to and in front of the training center to accommodate up to 256 privately owned vehicles, a tactical vehicle parking area behind the training center, and a vehicle maintenance facility. Additional features include security fencing around the training center, site septic tanks, a concrete retaining wall, curbs, landscaping, stormwater drainage, and mechanical and electrical systems that would be in an enclosed utilities yard next to the training center. An approximate 9-acre pine grove would be cleared. The total area of ground disturbance for construction of the training center and associated features would be approximately 15 acres within the 21-acre site.

Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/place/39.502173980529776N76.8393653977535W



Counties: Baltimore, MD

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. Note that 1 of these species should be considered only under certain conditions.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], 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 *Myotis septentrionalis*	Threatened

No critical habitat has been designated for this species.

This species only needs to be considered under the following conditions:

- Projects with a federal nexus that have tree clearing = to or > 15 acres: 1. REQUEST A SPECIES LIST 2. NEXT STEP: EVALUATE DETERMINATION KEYS 3. SELECT EVALUATE under the Northern Long-Eared Bat (NLEB) Consultation and 4(d) Rule Consistency key

Species profile: https://ecos.fws.gov/ecp/species/9045

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.

Wetlands

Impacts to NWI wetlands and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

THERE ARE NO WETLANDS WITHIN YOUR PROJECT AREA.

MARYLAND
DEPARTMENT OF
NATURAL RESOURCES

Larry Hogan, Governor
Boyd Rutherford, Lt. Governor
Jeannie Haddaway-Riccio, Secretary

July 23, 2020

Ms. Charee Hoffman
Cardno Government Services
501 Butler Farm Road
Suite H
Hampton, VA 23666

RE: Environmental Review for United States Marine Forces Reserve (MARFORRES), Construction of Marine Corps Reserve Center (MCRC) within Camp Fretterd Military Reservation (CFMR), Reisterstown, Baltimore County, Maryland

Dear Ms. Hoffman:

The Wildlife and Heritage Service has determined that there are no official State or Federal records for listed plant or animal species within the delineated area shown on the map provided. As a result, we have no specific concerns regarding potential impacts or recommendations for protection measures at this time. Please let us know however if the limits of proposed disturbance or overall site boundaries change and we will provide you with an updated evaluation.

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

Sincerely,

Lori A. Byrne

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

ER# 2020.1062.ba

June 22, 2020

To: Lori Byrne
Department of Natural Resources, Wildlife & Heritage Service
580 Taylor Ave.
Tawes Office Bldg. E-1
Annapolis, MD 21401

Subj: Environmental Review

Dear Ms. Byrne:

The United States Marine Forces Reserve (MARFORRES) is proposing to construct and operate a Marine Corps Reserve Center (MCRC) within a designated 21-acre site at Camp Fretterd Military Reservation (CFMR) located in Reisterstown, Maryland (MD) (**Figure 1, Location of MCRC at CFMR**).

The MARFORRES project would include construction of an approximate 50,000 square foot MCRC as illustrated in **Figure 2, MCRC Site Layout**. The MCRC would be comprised of a training center building; two privately owned vehicles (POV) parking areas; a tactical vehicle parking area; storage shed; vehicle wash platform; refueling station; and a vehicle maintenance facility. Additional features include security fencing around the training center, site septic tanks, a concrete retaining wall, curbs, landscaping, stormwater drainage, and mechanical and electrical systems that would be located in an enclosed utilities yard next to the training center. A right turn lane would be added to Rue Saint Lo Drive to provide entry/exit via two separate driveways. The first entrance would provide entry to the tactical vehicle parking area; the second to the POV parking area. A guard house would be constructed at the entrance to the POV parking area. An approximate 9-acre pine grove would be cleared. The total area of ground disturbance for construction of the MCRC and associated features would be approximately 15 acres within the 21-acre site.

A Jurisdictional Wetland Delineation was conducted in September 2019. The U.S. Army Corps of Engineers, Baltimore District conducted a field survey on January 23, 2020 and issued a Preliminary Jurisdictional Determination on May 21, 2020 (**Attachment 1**).

On behalf of MARFORRES, I am requesting an environmental review for listed species that may be found within the project area.

Chareé Hoffman
Senior Project Manager
Cardno Government Services

Figure 1
Location of MCRC at CFMR

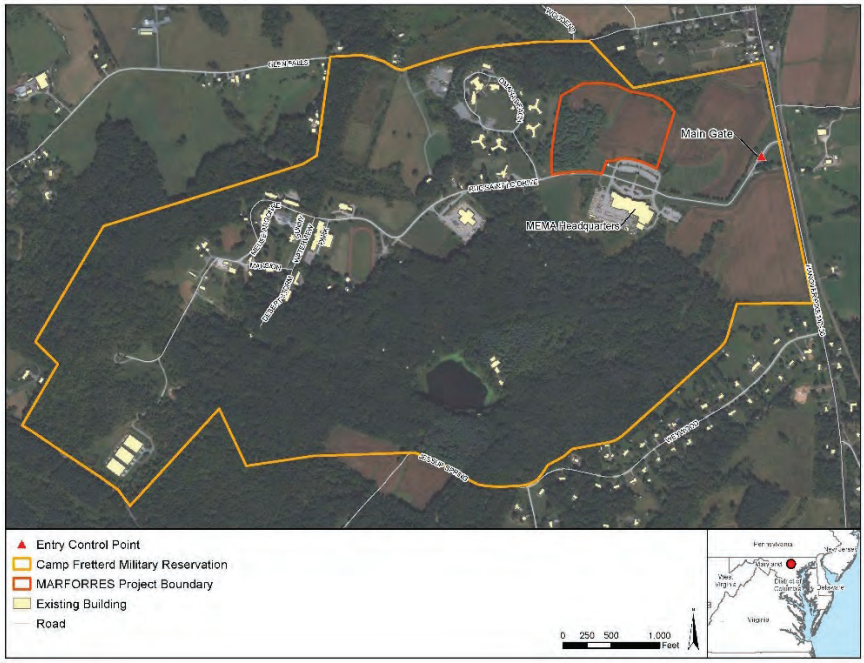


Figure 2
MCRC Site Layout

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, BALTIMORE DISTRICT
2 HOPKINS PLAZA
BALTIMORE, MD 21201-2930

May 21, 2020

Operations Division

Mr. John Lowenthal
Cardno
501 Butler Farm Road, Suite H
Hampton, Virginia 23666

Dear Mr. Lowenthal:

This is in response to your letter submitted on behalf of the United States Marine Corps, Marine Forces Reserve, dated October 31, 2019, requesting a preliminary determination of the presence or indications of the approximate location(s) of waters of the United States, including wetlands on Camp Fretterd Military Reservation, off Rue Saint Lo Drive, near Reisterstown, Baltimore County, Maryland. Your project has been assigned the file name, **NAB-2019-00564 (Marine Corps Reserve Center/Camp Fretterd/Pre-app/Preliminary JD)**.

A field inspection was conducted on January 23, 2020. This preliminary jurisdictional determination finds that there "may be" waters of the United States, including wetlands within the review area as indicated by the approximate location(s) of waters of the United States, including wetlands within the review area on the enclosed drawing dated October 31, 2019, and prepared by Cardno for the approximately 21.1 acre property and identifies all potential jurisdictional waters and wetlands within the review area. These areas may be regulated by this office pursuant to Section 10 of the Rivers and Harbors Act of 1899 and/or Section 404 of the Clean Water Act.

This preliminary jurisdictional determination is based on the information included on the enclosed Preliminary Jurisdictional Determination Form and is not appealable. If you do not agree with the extent of waters or wetlands and this preliminary JD, you are hereby advised of your option to request and obtain an approved JD from this office at the address above. An approved JD is an official, written Corps determination stating the presence or absence of jurisdictional waters of the United States and identifies the limits of waters of the Unites States on a project site. An approved JD can be relied upon for a period of 5 years and can be appealed through the Corps' administrative appeal process set out at 33 CFR Part 331.

You are reminded that any grading or filling of waters of the United States, including wetlands, is subject to Department of the Army authorization. State and local authorizations may be required to conduct activities in these locations. Wetlands under the jurisdiction of the Maryland Department of the Environment (MDE) may be located

on the parcel. You may contact the MDE for information regarding jurisdiction and permitting requirements at (410) 537-3768. In addition, the Interstate Land Sales Full Disclosure Act may require that prospective buyers be made aware, by the seller, of the Federal authority over any waters of the United States, including wetlands, being purchased.

In future correspondence regarding this parcel, please include the file number located in the first paragraph of this letter.

A copy of this letter will be furnished to MDE for informational purposes. If you have any questions concerning this matter, please contact the undersigned at (410) 962-4501 or maria.teresi@usace.army.mil

Sincerely,

TERESI.MARIA.NICOLE.1229421979

Digitally signed by TERESI.MARIA.NICOLE.1229421979
Date: 2020.05.21 18:14:30 -04'00'

Maria N. Teresi
Biologist, Maryland North Section

Enclosures

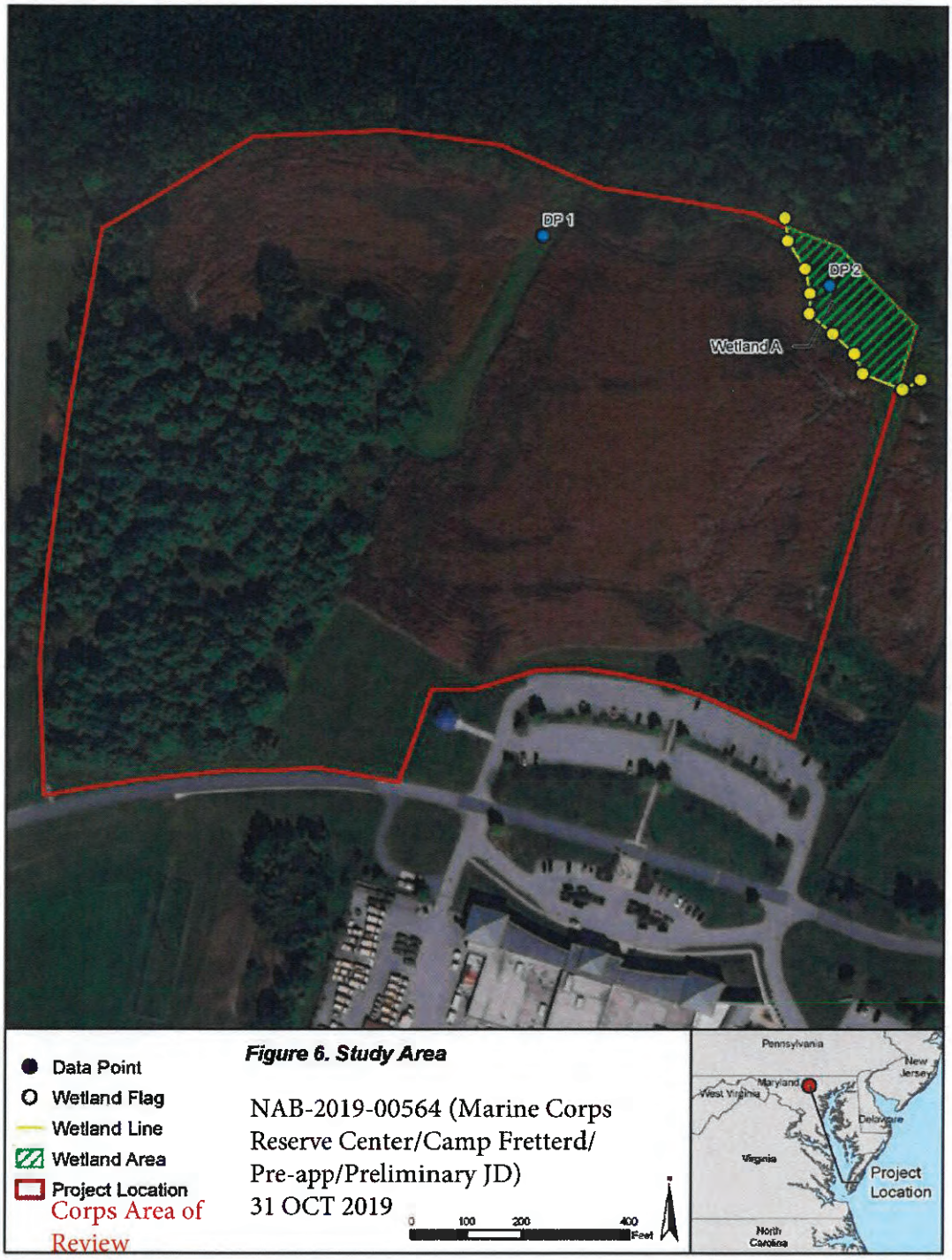


Figure 6. Study Area

NAB-2019-00564 (Marine Corps Reserve Center/Camp Fretterd/ Pre-app/Preliminary JD)
31 OCT 2019

ATTACHMENT

PRELIMINARY JURISDICTIONAL DETERMINATION FORM

BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR PRELIMINARY JURISDICTIONAL DETERMINATION (JD): 21 MAY 2020

B. NAME AND ADDRESS OF PERSON REQUESTING PRELIMINARY JD:

Mr. John Lowenthal
Cardno
501 Butler Farm Road, Suite H
Hampton, Virginia 23666

C. DISTRICT OFFICE, FILE NAME, AND NUMBER: NAB-2019-00564

(Marine Corps Reserve Center/Camp Fretterd/Pre-app/Preliminary JD

D. PROJECT LOCATION(S) AND BACKGROUND INFORMATION:
(USE THE ATTACHED TABLE TO DOCUMENT MULTIPLE WATERBODIES AT DIFFERENT SITES)

State: MD County/parish/borough: Baltimore City:
Center coordinates of site (lat/long in degree decimal format):
Lat. 30° 30'07.40" N **Pick List**, Long. -76°50"16.71" W **Pick List**.
Universal Transverse Mercator:
Name of nearest waterbody: Northern Branch of the Patapsco River

Identify (estimate) amount of waters in the review area:

Non-wetland waters: linear feet: width (ft) and/or acres.
Cowardin Class:
Stream Flow:
Wetlands: ~18,584 square feet (~0.43 acres)
Cowardin Class: PEM

Name of any water bodies on the site that have been identified as Section 10 waters:

Tidal:

Non-Tidal:

NOTIFICATION OF ADMINISTRATIVE APPEAL OPTIONS AND PROCESS AND REQUEST FOR APPEAL

Applicant: Marine Corps Reserve Center/Camp Fretterd/Pre-app/Preliminary JD	File Number: 2019-00564	Date: 21 MAY 2020
Attached is:		See Section below
	INITIAL PROFFERED PERMIT (Standard Permit or Letter of permission)	A
	PROFFERED PERMIT (Standard Permit or Letter of permission)	B
	PERMIT DENIAL	C
	APPROVED JURISDICTIONAL DETERMINATION	D
X	PRELIMINARY JURISDICTIONAL DETERMINATION	E

SECTION I - The following identifies your rights and options regarding an administrative appeal of the above decision. Additional information may be found at http://www.usace.army.mil/Missions/CivilWorks/RegulatoryProgramandPermits/appeals.aspx or Corps regulations at 33 CFR Part 331.

A: INITIAL PROFFERED PERMIT: You may accept or object to the permit.

- ACCEPT: If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
- OBJECT: If you object to the permit (Standard or LOP) because of certain terms and conditions therein, you may request that the permit be modified accordingly. You must complete Section II of this form and return the form to the district engineer. Your objections must be received by the district engineer within 60 days of the date of this notice, or you will forfeit your right to appeal the permit in the future. Upon receipt of your letter, the district engineer will evaluate your objections and may: (a) modify the permit to address all of your concerns, (b) modify the permit to address some of your objections, or (c) not modify the permit having determined that the permit should be issued as previously written. After evaluating your objections, the district engineer will send you a proffered permit for your reconsideration, as indicated in Section B below.

B: PROFFERED PERMIT: You may accept or appeal the permit

- ACCEPT: If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
- APPEAL: If you choose to decline the proffered permit (Standard or LOP) because of certain terms and conditions therein, you may appeal the declined permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

C: PERMIT DENIAL: You may appeal the denial of a permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

D: APPROVED JURISDICTIONAL DETERMINATION: You may accept or appeal the approved JD or provide new information.

- ACCEPT: You do not need to notify the Corps to accept an approved JD. Failure to notify the Corps within 60 days of the date of this notice, means that you accept the approved JD in its entirety, and waive all rights to appeal the approved JD.
- APPEAL: If you disagree with the approved JD, you may appeal the approved JD under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

E: PRELIMINARY JURISDICTIONAL DETERMINATION: You do not need to respond to the Corps regarding the preliminary JD. The Preliminary JD is not appealable. If you wish, you may request an approved JD (which may be appealed), by contacting the Corps district for further instruction. Also you may provide new information for further consideration by the Corps to reevaluate the JD.

SECTION II - REQUEST FOR APPEAL or OBJECTIONS TO AN INITIAL PROFFERED PERMIT

REASONS FOR APPEAL OR OBJECTIONS: (Describe your reasons for appealing the decision or your objections to an initial proffered permit in clear concise statements. You may attach additional information to this form to clarify where your reasons or objections are addressed in the administrative record.)

ADDITIONAL INFORMATION: The appeal is limited to a review of the administrative record, the Corps memorandum for the record of the appeal conference or meeting, and any supplemental information that the review officer has determined is needed to clarify the administrative record. Neither the appellant nor the Corps may add new information or analyses to the record. However, you may provide additional information to clarify the location of information that is already in the administrative record.

POINT OF CONTACT FOR QUESTIONS OR INFORMATION:

If you have questions regarding this decision and/or the appeal process you may contact:
Mr. Frank Plewa, Appeals Coordinator
Telephone: (717) 249-2522
U.S. Army Corps of Engineers
Regulatory Branch, Baltimore District
2 Hopkins Plaza
Baltimore, Maryland 21201
General Number: 410-962-3670
Email: nab-regulatory@usace.army.mil

If you only have questions regarding the appeal process you may also contact:
Regulatory Program Manager (CENAD-PD-OR)
U.S. Army Corps of Engineers
Fort Hamilton Military Community
301 General Lee Avenue
Brooklyn, New York 11252-6700
General Number: 347-370-4550

RIGHT OF ENTRY: Your signature below grants the right of entry to Corps of Engineers personnel, and any government consultants, to conduct investigations of the project site during the course of the appeal process. You will be provided a 15 day notice of any site investigation, and will have the opportunity to participate in all site investigations.

Signature of appellant or agent.	Date: 5-26-2020	Telephone number: 757-594-1465

E. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):

☒ Office (Desk) Determination. Date: 24 JAN 2020

☒ Field Determination. Date(s): 23 JAN 2020

1. The Corps of Engineers believes that there may be jurisdictional waters of the United States on the subject site, and the permit applicant or other affected party who requested this preliminary JD is hereby advised of his or her option to request and obtain an approved jurisdictional determination (JD) for that site. Nevertheless, the permit applicant or other person who requested this preliminary JD has declined to exercise the option to obtain an approved JD in this instance and at this time.

2. In any circumstance where a permit applicant obtains an individual permit, or a Nationwide General Permit (NWP) or other general permit verification requiring "pre-construction notification" (PCN), or requests verification for a non-reporting NWP or other general permit, and the permit applicant has not requested an approved JD for the activity, the permit applicant is hereby made aware of the following: (1) the permit applicant has elected to seek a permit authorization based on a preliminary JD, which does not make an official determination of jurisdictional waters; (2) that the applicant has the option to request an approved JD before accepting the terms and conditions of the permit authorization, and that basing a permit authorization on an approved JD could possibly result in less compensatory mitigation being required or different special conditions; (3) that the applicant has the right to request an individual permit rather than accepting the terms and conditions of the NWP or other general permit authorization; (4) that the applicant can accept a permit authorization and thereby agree to comply with all the terms and conditions of that permit, including whatever mitigation requirements the Corps has determined to be necessary; (5) that undertaking any activity in reliance upon the subject permit authorization without requesting an approved JD constitutes the applicant's acceptance of the use of the preliminary JD, but that either form of JD will be processed as soon as is practicable; (6) accepting a permit authorization (e.g., signing a proffered individual permit) or undertaking any activity in reliance on any form of Corps permit authorization based on a preliminary JD constitutes agreement that all wetlands and other water bodies on the site affected in any way by that activity are jurisdictional waters of the United States, and precludes any challenge to such jurisdiction in any administrative or judicial compliance or enforcement action, or in any administrative appeal or in any Federal court; and (7) whether the applicant elects to use either an approved JD or a preliminary JD, that JD will be processed as soon as is practicable. Further, an approved JD, a proffered individual permit (and all terms and conditions contained therein), or individual permit denial can be administratively appealed pursuant to 33 C.F.R. Part 331, and that in any administrative appeal, jurisdictional issues can be raised (see 33 C.F.R. 331.5(a)(2)). If, during that administrative appeal, it becomes necessary to make an official determination whether CWA jurisdiction exists over a site, or

to provide an official delineation of jurisdictional waters on the site, the Corps will provide an approved JD to accomplish that result, as soon as is practicable. This preliminary JD finds that there *"may be"* waters of the United States on the subject project site, and identifies all aquatic features on the site that could be affected by the proposed activity, based on the following information:

SUPPORTING DATA. Data reviewed for preliminary JD (check all that apply) - checked items should be included in case file and, where checked and requested, appropriately reference sources below):

☒ Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Cardno 31 OCT 19 .

☒ Data sheets prepared/submitted by or on behalf of the applicant/consultant.
- ☒ Office concurs with data sheets/delineation report.
- ☐ Office does not concur with data sheets/delineation report.

☐ Data sheets prepared by the Corps: .

☐ Corps navigable waters' study: .

☐ U.S. Geological Survey Hydrologic Atlas: .
- ☐ USGS NHD data.
- ☐ USGS 8 and 12 digit HUC maps.

☒ U.S. Geological Survey map(s). Cite scale & quad name: 2013 Hamptstead & Reisterstown 1:24,000 quads .

☒ USDA Natural Resources Conservation Service Soil Survey. Citation: NRCS. 2019. Web Soil Survey. Data for Baltimore County .

☒ National wetlands inventory map(s). Cite name: 2019. Seamless Wetlands Data by State - Maryland

☐ State/Local wetland inventory map(s): .

☒ FEMA/FIRM maps: 2015. FEMA Flood Hazard Layer

☐ 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929)

☐ Photographs: ☐ Aerial (Name & Date): .

or ☐ Other (Name & Date): .

☐ Previous determination(s). File no. and date of response letter: .

☐ Other information (please specify): .

IMPORTANT NOTE: The information recorded on this form has not necessarily been verified by the Corps and should not be relied upon for later jurisdictional determinations.

Signature and date of
Regulatory Project Manager
(REQUIRED)

Signature and date of
person requesting preliminary JD
(REQUIRED, unless obtaining
the signature is impracticable)

NAB-2019-00564

Site number	**Latitude**	**Longitude**	**Cowardin Class**	**Estimated amount of aquatic resource in review area**	**Class of aquatic resource**
1 – Wetland A	30° 30'07.40" N	-76° 50"16.71" W	PEM	~18,584 square feet (~0.43 acres)	Non-section 10 – wetland

From:	Charee Hoffman
To:	lori.byrne@maryland.gov
Subject:	Environmental Review Request
Date:	Monday, June 22, 2020 11:07:54 AM
Attachments:	MD DNR Environmental Review Request 22Jun2020.pdf

Ms. Byrne,

Attached is a request for environmental review for a project proposed at Camp Fretterd Military Reservation located in Reisterstown, Baltimore County, Maryland.

Please let me know if additional information is required.

Thank you,
Chareé Hoffman

Charee Hoffman
SENIOR PROJECT MANAGER
CARDNO

Office (+1) 757-594-1465 Direct (+1) 757-690-2823
Address 501 Butler Farm Road, Suite H, Hampton, VA 23666
Email charee.hoffman@cardno-gs.com Web www.cardno.com

The health, wellbeing, and livelihoods of our people, families, clients, and communities is Cardno's key priority. Our teams are responding to COVID-19 with robust business continuity plans and we will continue to work closely with our people and clients to support them every day. *> LEARN MORE*

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