Beltsville Agricultural Research Center
Environmental Assessment

Proposed Relocation of Two Poultry Quarantine Houses and the Wildlife Staff Office

Prepared for:
U.S. Department of Agriculture

Prepared by:
U.S. Army Corps of Engineers
Baltimore District

December 2020

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FINDING OF NO SIGNIFICANT IMPACT
ENVIRONMENTAL ASSESSMENT
PROPOSED RELOCATION OF TWO POULTRY QUARANTINE HOUSES AND THE WILDLIFE STAFF OFFICE

U.S. Department of Agriculture
Beltsville Agricultural Research Center, Prince George's County, Maryland

Name of Action:

Proposed relocation of two poultry quarantine houses (PQH) and the Wildlife Staff Office (WSO) for the U.S. Department of Agriculture (USDA) at the Beltsville Agricultural Research Center (BARC) in Prince George's County, Maryland.

Purpose and Need:

The purpose of the Proposed Action is to relocate the WSO and the two PQH from their current dilapidated buildings along Poultry Road to other locations on BARC that would support safer, more efficient operations through minor construction improvements.

The Proposed Action is needed in order to provide safe, adequate and appropriate facilities to continue operation of the WSO and poultry quarantine programs at BARC. The current locations are aging, in need of renovations, and do not allow for sustained, year-round operations. The Proposed Action would utilize existing BARC buildings, in accordance with the 2015 Reduce the Footprint Policy mandates to reduce the footprint of Federal government properties, while providing updated space for the poultry quarantine program and the WSO.

Description of Proposed Action:

The Proposed Action includes the relocation of two PQH (Buildings 277 and 278) to Building 434 and the WSO (Building 253A) to a new modular office facility off of Beaver Dam Road near Building 513. Under the Proposed Action, the existing PQH buildings and the existing WSO would be vacated, and no changes would be made to these buildings until USDA determines the buildings' future use.

The existing Building 434 would be renovated to accommodate its use for poultry quarantine, and two additions would be attached to the original building. Upon project completion, any and all poultry being housed at Buildings 277 and 278 would be transferred into the new poultry quarantine facility. Renovations would include exterior and interior renovations such as roof replacement, veneer repairs, stucco addition and repair, removal of goat gates, exterior wall removal, and mold removal. The existing water service lines, sanitary and septic lines, gas meter, concrete slabs, overhead electrical and obstructive vegetation would be moved or removed, as needed to accommodate the renovated building design and function.

The WSO proposed site is located in a developed area adjacent to Building 513. Upon project completion, two wildlife office staff members would be transferred into the new modular office space.

The WSO proposed site is currently home to a gravel parking lot, with a family cemetery located south of the proposed limits of disturbance. The modular office building would be placed directly south of the gravel parking lot. Project construction would include paving two parking lot spaces in compliance with the American with Disabilities Act (ADA) of 1990, installing a concrete foundation pad for the modular building, tapping into the existing water line, creating a stormwater management feature, and installing a septic system and drain field.

Alternatives Evaluated: An Environmental Assessment (EA) has been prepared to evaluate the potential environmental, cultural, transportation and socioeconomic effects associated with the Proposed Action. Three other alternatives were considered, but were eliminated from consideration because they were financially infeasible, contrary to BARC policy, and/or would fail to meet the purpose and need of the project.

National Environmental Policy Act (NEPA) regulations refer to the continuation of the present course of action without the implementation of, or in the absence of, the Proposed Action, as the "No Action Alternative." Inclusion of the No Action Alternative is the baseline against which Federal actions are evaluated, and is prescribed by the Council of Environmental Quality (CEQ) regulations.

Under the No Action Alternative, current conditions at both Building 434 and the WSO proposed site would remain unchanged for the foreseeable future. Building 434 would remain vacant. The WSO proposed site would remain an unused field and vacant gravel parking lot and Building 513 would remain unutilized and unmaintained.

Anticipated Impacts: The analysis within this EA concluded that there would be:

***No, or negligible, expected impacts to*:** land use; prime farmland; groundwater and floodplains; vegetation; cultural resources (with mitigation); socioeconomics; solid waste, wastewater, and natural gas (during operations); hazardous and toxic materials and waste; visual resources and aesthetics (with mitigation); air quality; or health and public safety.

Minor adverse impacts to: topography, geology, and soils; stormwater, surface water and wetlands; rare, threatened, or endangered species; transportation; electricity; solid waste, wastewater, and natural gas (during construction); noise; and cumulative impacts.

Public Involvement: Agency consultation letters were sent out on 16 April 2020 to interested parties to initiate the NEPA process.

The Draft EA and Draft Finding of No Significant Impact (FNSI) were made available for public review for 30 days starting on 23 July 2020 via the USDA website https://www.ars.usda.gov/northeast-area/docs/draft-environmental-assessment/, and with hard copies available upon request. A Notice of Availability of the Draft EA and Draft FNSI were published in the *Greenbelt News Review*, and were mailed to interested agencies/parties. All received comments were reviewed, and responses to comments received were addressed in Appendix F of the Final EA.

Finding of No Significant Impact: After careful review of the EA, which is attached hereto and incorporated by reference into this FNSI, the evaluation of concerns expressed during the public review period, and the USDA's intent to follow prescribed regulations, acquire required permits, and implement the mitigation measures identified, I have concluded that implementation of the Proposed Action will not generate significant controversy or have a significant direct, indirect, or cumulative impact on the quality of the human or natural environment. This analysis fulfills the requirements of Section 102(2)(c) of NEPA and the CEQ regulations. An Environmental Impact Statement (EIS) is not required and will not be prepared.

DARIUSZ SWIETLIK
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Dr. Dariusz Swietlik
Northeast Area Director, ARS
U.S. Department of Agriculture

Date

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EXECUTIVE SUMMARY

The U.S. Department of Agriculture (USDA), Agricultural Research Service (ARS) is proposing to relocate two poultry quarantine houses (PQH) and the Wildlife Staff Office (WSO) at the Beltsville Agricultural Research Center (BARC) in Beltsville, Prince George's County, Maryland. The Proposed Action would utilize existing BARC buildings, in accordance with the 2015 Reduce the Footprint Policy mandates to reduce the footprint of Federal government properties, while providing updated space for the poultry quarantine program and the WSO.

This Environmental Assessment (EA) was prepared in accordance with the National Environmental Policy Act (NEPA), as amended (42 United States Code [U.S.C.] § 4321, et seq.); Executive Orders (EOs) 11514, 12144, and 13807; 34 FR 4247, as amended by EO 119911; 42 Federal Regulation (FR) 26927; 44 FR 11957; 5 U.S.C. 301; and 40 Code of Federal Regulations (CFR) Parts 1500-1508 (51 FR 34191, 1986). The purpose of a NEPA EA is to assess whether the Proposed Action would pose a potential significant impact on the environment and to determine whether an Environmental Impact Statement (EIS) or a Finding of No Significant Impact (FNSI) is required for the Proposed Action. The specific needs and purpose of the Proposed Action evaluated in this EA are described in Section 1.2.

The purpose of this EA is to inform decision makers and the public of the likely environmental consequences of the action proposed at BARC. This EA identifies, documents, and evaluates the potential impacts of the renovation and expansion of Building 434, and the installation of a modular office building adjacent to Building 513 to be used as the new WSO.

The Proposed Action and No Action alternatives are evaluated to determine the direct, indirect, and cumulative impacts or changes that may occur on both people and the environment because of the proposed renovation and development. Other alternatives involving the renovation of Building 513 for use as the WSO, and the construction of two new PQH were reviewed and eliminated because they do not satisfy the identified needs and purpose.

The direct and indirect impacts of the Proposed Action would be minor and primarily short-term associated with construction-related activities; however, some minor long-term impacts could be expected as well. These long-term impacts would be mitigated to the extent feasible. Building 434 was identified as a contributing feature of the BARC Historic District, and there is a historic cemetery associated with Building 513 adjacent to the WSO proposed site. Through mitigation measures and avoidance, impacts to these sites were determined to be negligible. The Maryland Historic Trust concurred with these recommendations and determined that neither the renovation of Building 434 nor the installation of the proposed WSO adjacent to Building 513 would have an adverse effect on historic properties under Section 106 of the National Historic Preservation Act.

The Proposed Action would also not result in significant cumulative impacts when considered with the impacts of past, present, and reasonably foreseeable actions at BARC and in the vicinity of BARC.

Careful design, the use of good engineering and best management practices, and the implementation of certain operational procedures would avoid, minimize, or mitigate these minor potential adverse impacts presented in the EA to a less than significant level. Implementation of the mitigation measures described in the EA would reduce the potential impacts of the Proposed Action, resulting in no significant adverse impacts to the environment. Therefore, preparation of an EIS is not required.

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Acronyms and Abbreviations

ABBL	Animal Biosciences and Biotechnology Laboratory
ACHP	Advisory Council on Historic Preservation
ADA	Americans with Disabilities Act Of 1990
AIRFA	American Indian Religious Freedom Act
AOC	Area Of Concern
APE	Area of Potential Effect
ARPA	Archaeological Resource Protection Act
ARS	Agricultural Research Service
BAI	Bureau of Animal Industry
BARC	Beltsville Agricultural Research Center
BEP	Bureau of Engraving and Printing
BGEPA	Bald and Golden Eagle Protection Act
bgs	below ground surface
BMP	Best Management Practice
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
COVID-19	Coronavirus Disease of 2019
CWA	Clean Water Act
dB	Decibels
dBA	"A-Weighted" Decibels
DEHP	Di (2-Ethylhexyl) Phthalate
EA	Environmental Assessment
EIS	Environmental Impact Statement
EISA	Energy Independence and Security Act
EMFSL	Environmental Microbial and Food Safety Laboratory
EO	Executive Order
ESA	Endangered Species Act
ESD	Environmental Site Design
FEMA	Federal Emergency Management Agency
FIRM	Flood Insurance Rate Map
FNSI	Finding of No Significant Impact
LBP	Lead-Based Paint
LOD	Limit Of Disturbance
LQG	Large Quantity Generator
MARC	Maryland Area Regional Commuter
MBTA	Migratory Bird Treaty Act
MDE	Maryland Department of Environment
MDNR	Maryland Department of Natural Resources
MEDUSA	Maryland's Cultural Resources Information System

MHT	Maryland Historical Trust
MNCPPC	Maryland National Capital Park and Planning Commission
MSL	Mean Sea Level
NAGPRA	Native American Graves Protection And Repatriation Act
NEPA	National Environmental Policy Act of 1969
NFPA	National Fire Protection Association
NFIP	National Flood Insurance Program
NLEB	Northern-Long Eared Bat
NMFS	National Marine Fisheries Service
NOA	Notice Of Availability
NOI	Notice Of Intent
NPL	National Priority List
NRCS	USDA Natural Resources Conservation Service
NHPA	National Historic Preservation Act
NPDES	National Pollutant Discharge Elimination System
NRHP	National Register of Historic Places
OSHA	Occupational Safety and Health Administration
PCB	Polychlorinated Biphenyl
PQH	Poultry Quarantine Houses
RCRA	Resource Conservation And Recovery Act
ROI	Region Of Influence
RTA	Regional Transportation Agency
RTE	Rare, Threatened, or Endangered
SHPO	State Historic Preservation Office
TSCA	Toxic Substances Control Act
USACE	U.S. Army Corps of Engineers
USC	United States Code
USDA	U.S. Department of Agriculture
USDT	U.S. Department of Treasury
USEPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish And Wildlife Service
USGS	U.S. Geological Survey
WMATA	Washington Metropolitan Area Transit Authority
WSO	Wildlife Staff Office
WWTP	Wastewater Treatment Plant

1 Introduction

1.1 Project Background

The U.S. Army Corps of Engineers (USACE) was retained by the U.S. Department of Agriculture (USDA) to complete an Environmental Assessment (EA) for a proposed action at the Beltsville Agricultural Research Center (BARC) in Beltsville, Maryland. This EA discusses the proposed rehabilitation of Building 434, an existing unused goat barn, for use as a poultry quarantine facility, including the construction of two wing additions in the rear of the barn. The EA also discusses the placement of a modular structure, which would be used as a Wildlife Staff Office (WSO), off of Beaver Dam Road near Building 513. The analysis in this EA has been performed to determine if the Proposed Action would have any adverse impacts on BARC or the surrounding community.

BARC, which was established in 1910, is located northeast of Washington, D.C., in Prince George's County, Maryland, and encompasses 6,582 acres (Figure 1-1). BARC's mission is to perform research on human nutrition and agricultural-related products. To this end, BARC laboratories, specifically the Animal Biosciences & Biotechnology Laboratory (ABBL) and Environmental Microbial & Food Safety Laboratory (EMFSL), conduct multi-disciplinary basic science and applied human nutrition research. This work is important to scientists, food producers, policy-makers, educators, and consumers in better understanding the relationship between diet and health.

BARC is currently proposing to transfer approximately 105 acres along Poultry Road to the U.S. Department of the Treasury (USDT) for construction of a new currency production facility for its Bureau of Engraving and Printing (BEP). While the existing poultry quarantine houses (PQH) and WSO, which are part of the Proposed Action, are currently located in buildings within this 105-acre site (Figure 1-2), the Proposed Action is an entirely separate action from the proposed land transfer to USDT. The Proposed Action will occur whether or not the 105-acre site along Poultry Road is transferred to USDT. The proposed construction of a new currency production facility is being evaluated by BEP in an Environmental Impact Statement (EIS), in accordance with National Environmental Policy Act of 1969 (NEPA), as amended (42 United States Code [U.S.C.] § 4321, et seq.); Executive Orders (EOs) 11514, 12144, and 13807; 34 FR 4247, as amended by EO 119911; 42 Federal Regulation (FR) 26927; 44 FR 11957; 5 U.S.C. 301; and 40 Code of Federal Regulations (CFR) Parts 1500-1508 (51 FR 34191, 1986).

Poultry Quarantine Facility

BARC proposes to move the poultry quarantine function to Building 434, located on the Central Farm of BARC (Figure 1-3). Building 434 is a historic goat barn that was designed and operated for the Bureau of Animal Industry (BAI), which is the largest bureau at the agricultural research facility, and its division of Animal Husbandry. While not individually eligible for listing in the National Register of Historic Places (NRHP), Building 434 is a contributing structure to the BARC Historic District, which was deemed eligible for the NRHP in 1997 as a result of its historic role as the most diversified agricultural research complex in the world. Scientists made significant contributions to foundational science and applied science through research associated with the goat barn. The building also embodies the distinctive characteristics of a type, period, and method of construction with purpose driven agricultural architecture. Building 434 has been unoccupied since 2008.

Figure 1-1: BARC Proposed Site Location Map

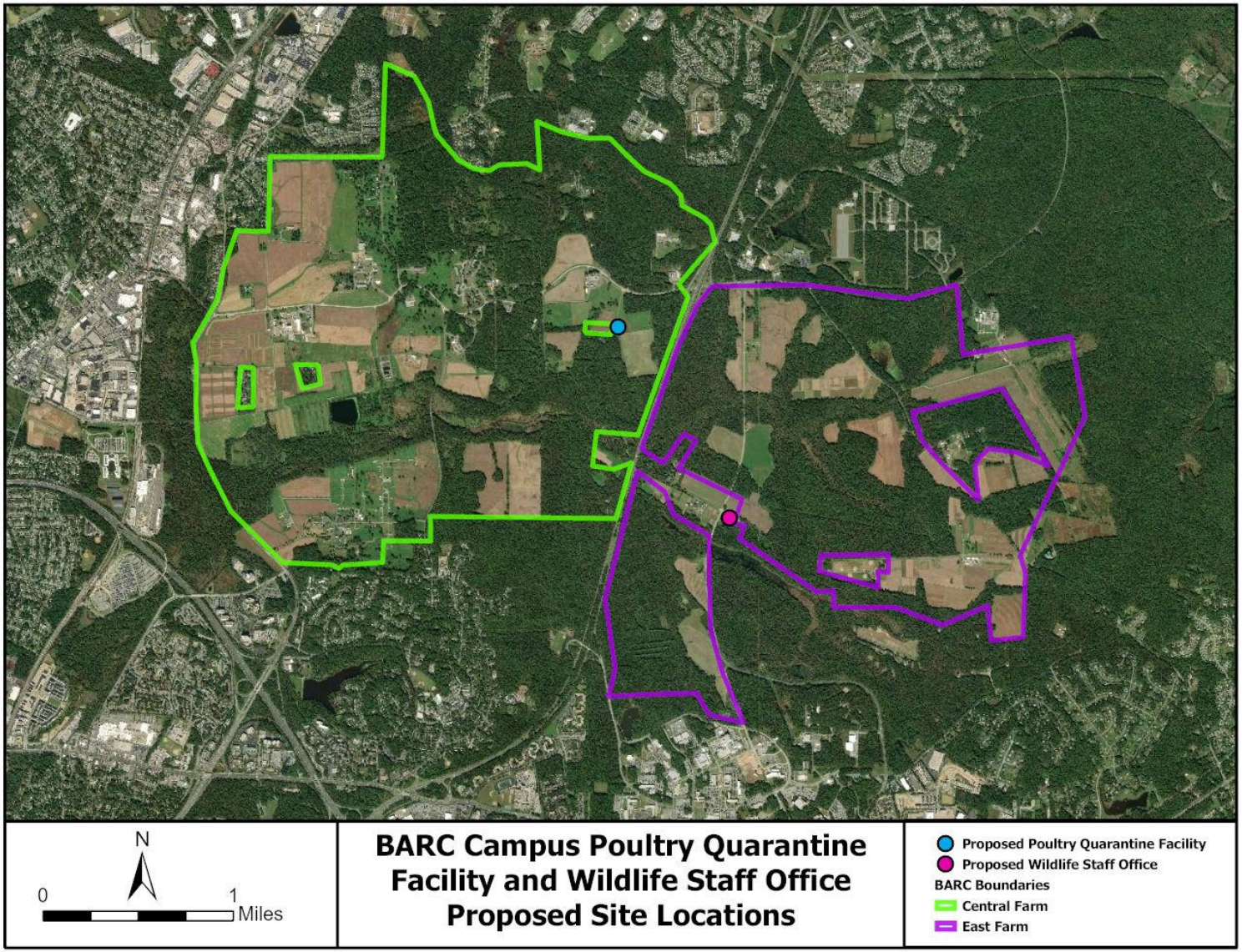


Figure 1-2: Current Wildlife Staff Office and Poultry Quarantine House Locations

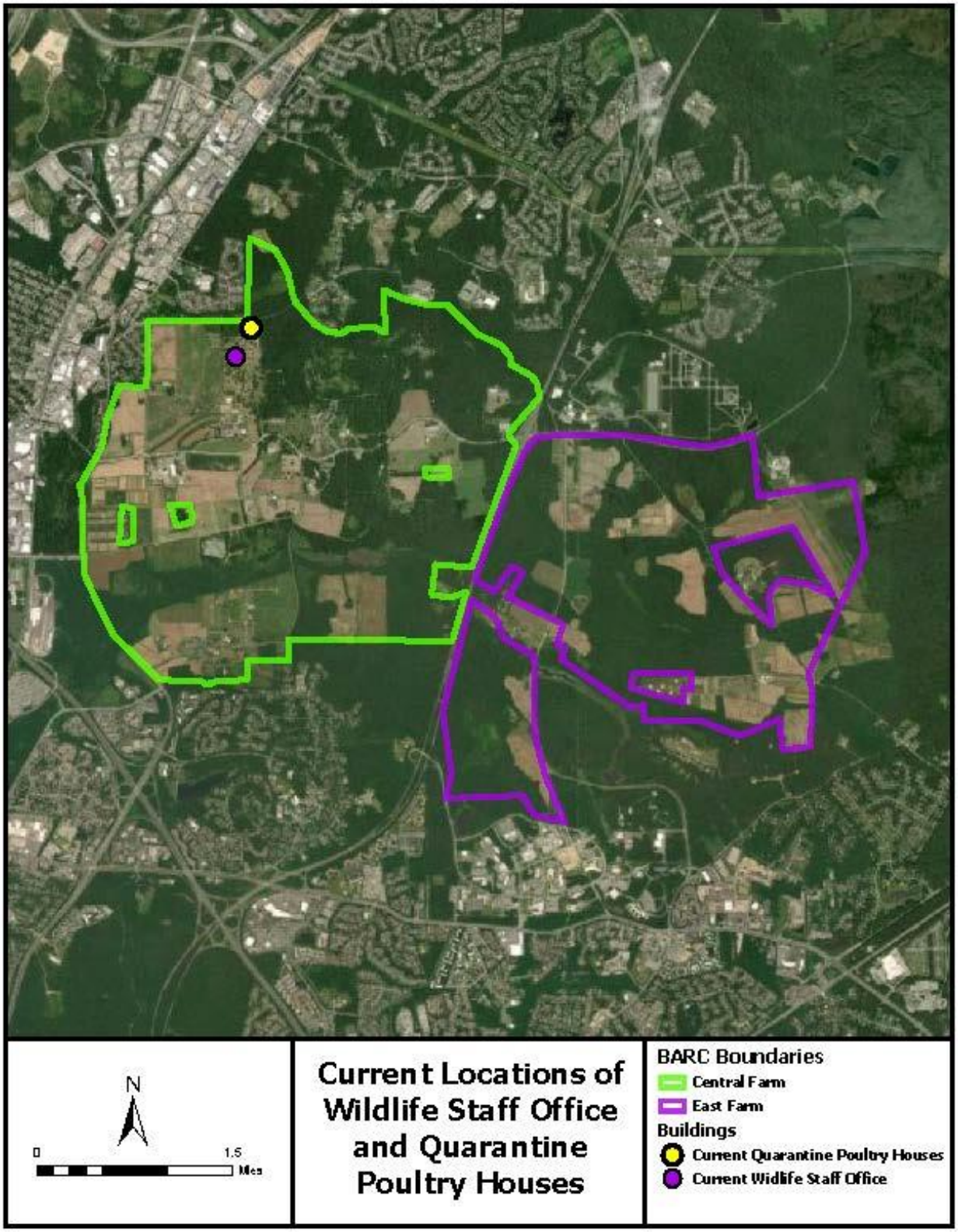
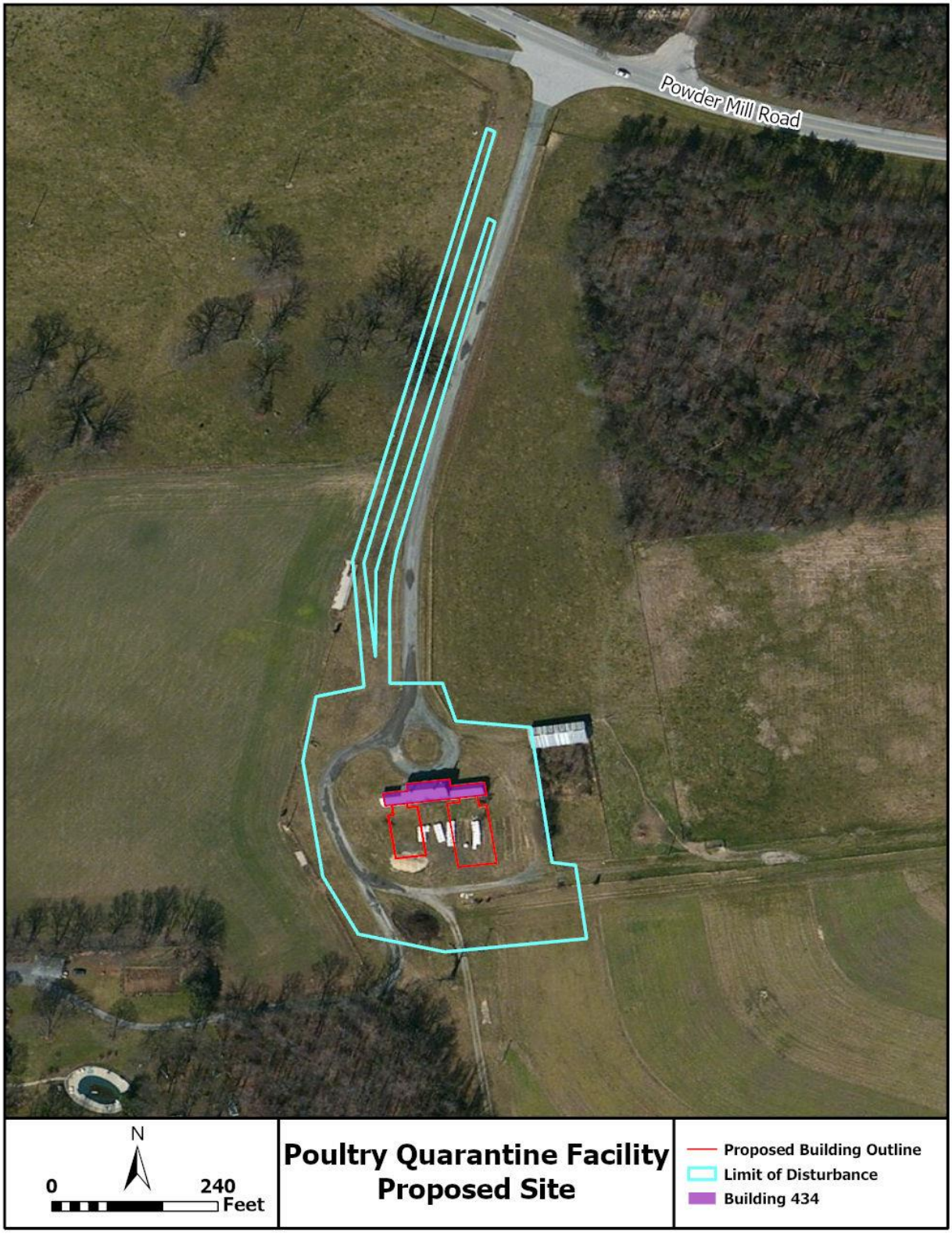


Figure 1-3: Proposed Action Location- Building 434



The poultry quarantine program provides an essential step in BARC's research by assuring the health of the research flock housed on BARC. The PQH are not used every day, but rather are utilized when out-of-industry poultry are selected for addition to the general research flock, which typically occurs a few times a year. The PQH are areas to quarantine poultry until they are cleared for entry into the general flock. Poultry are only added to the general research flock once they are proven to be free of any threatening pathogens. This function is currently conducted in Buildings 277 and 278, located off Poultry Road within the Central Farm of BARC. Historically, Buildings 277 and 278 were used as experimental laying houses for poultry breeding.

Wildlife Staff Office

BARC is proposing to move the WSO into a new modular building that would be placed in an open field adjacent to a gravel parking lot that serves Building 513 (Figure 1-4), located off of Beaver Dam Road on the East Farm of BARC. This proposed site is currently owned by the Natural Resources Conservation Service (NRCS). The WSO proposed site sits directly west of BARC's Building 513, which was previously utilized as a Wildlife Office/Hunter Check-In, though it was vacated due to structural concerns in 2018. Building 513, originally the residence of the Hall family and built circa 1860, is individually eligible for listing on the NRHP for its association with local Beltsville history and the locally prominent Hall family. It is also a contributing factor to the larger BARC Historic District. Building 513 would not be disturbed under the Proposed Action.

The WSO is a two-person operation, primarily focused on supporting the hunting program within BARC boundaries. Wildlife staff are responsible for checking hunters in and directing them to their hunting grounds for the day. Wildlife staff instruct hunters to hunt in areas where deer are a nuisance in order to regulate their populations. Wildlife staff also enforce hunting curfews for the day and oversee any kill donations that occur. The employees primarily operate out of their office during the hunting season; however, this is subject to change given the new office space afforded by the WSO proposed site.

Figure 1-4: Proposed Action Location- New Wildlife Staff Office

1.2 Purpose and Need for the Proposed Action

The purpose of the Proposed Action is to relocate the WSO and the poultry quarantine operations from their current buildings to other locations on BARC. The Proposed Action is needed in order to provide adequate and appropriate facilities to continue operation of the Wildlife Office and poultry quarantine programs at BARC. The PQH and WSO serve critical functions at BARC, but the existing buildings are outdated and inadequate.

1.3 Scope of the Environmental Assessment

The purpose of this EA is to evaluate the direct and indirect impacts associated with the Proposed Action in accordance with NEPA. This document identifies and evaluates the potential environmental, cultural resources, and socioeconomic effects associated with the Proposed Action, as well as the No Action Alternative, both of which are defined in Section 2.0. Section 3.0 describes the existing conditions of, and potential impacts of, the Proposed Action and No Action Alternative on environmental, cultural, and socioeconomic resources.

The EA focuses on impacts likely to occur within the proposed areas of development, which include Building 434 and the proposed location of the WSO modular building. As the existing PQH and WSO in Buildings 253A, 277 and 278 would be vacated under the Proposed Action, there would be no anticipated impacts to these buildings. USDA would determine the buildings' future uses at a later time. The document analyzes direct effects (those resulting from the alternatives and occurring at the same time and place) and indirect effects (those distant or occurring at a future date). The potential for cumulative impacts as defined by 40 CFR Part 1508.7 is also addressed. Compliance with applicable Federal statutes, standards, and directives pertinent to the Proposed Action was considered during the preparation of this EA.

Under the guidance provided in NEPA and in 7 CFR Part 1b, either an EIS or an EA must be prepared for most Federal actions. Actions that are emergencies, categorically excluded, or determined to be exempt by law do not require the preparation of an EA or EIS. If an action may significantly affect the environment, an EIS would be prepared. An EA provides sufficient evidence and analysis for determining whether or not to prepare an EIS. The contents of an EA include the need for the Proposed Action, alternatives to the Proposed Action, environmental impacts of the Proposed Action and alternatives considered for implementation, and documentation of agency and public coordination.

An evaluation of the environmental consequences of the Proposed Action and the No Action Alternative includes direct, indirect, and cumulative effects, as well as qualitative and quantitative (where possible) assessment of the level of significance of these effects. The EA results in either a Finding of No Significant Impact (FNSI) or a Notice of Intent (NOI) to prepare an EIS. If USDA determines that this Proposed Action may have a significant impact on the quality of the natural or human environment, an EIS would be prepared.

1.4 Public Involvement

Under NEPA regulation 40 CFR Part 1506.6, BARC will encourage public and relevant agency involvement in the process of preparing this EA. Coordination letters were provided to U.S. Fish and Wildlife Service (USFWS), U.S. Environmental Protection Agency (EPA), Maryland

Clearinghouse, Maryland Department of the Environment (MDE), Maryland Department of Natural Resources (MDNR), National Capital Planning Commission (NCPC), and Maryland-National Capital Park and Planning Commission (MNCPPC). Additionally, the Maryland State Historic Preservation Office (SHPO), the Advisory Council on Historic Preservation (ACHP), Maryland Historical Trust (MHT), and federally recognized Native American Tribes listed in Appendix A were invited to consult under Section 106 of the National Historic Preservation Act (NHPA). The Tribes were identified based on their geographic association with the area. All correspondence with these parties has been incorporated into this EA and included in Appendix A.

A Notice of Availability (NOA) was published in the local newspaper - the *Greenbelt News Review* - as well as distributed to Federal, state, and local agencies via letter on 23 July 2020. The NOA and publication announced the availability of the Draft EA and Draft FNSI, and requested comments from the general public and Federal, state, and local agencies. Private residents in the immediate vicinity of the project areas were notified as well. The Draft EA and Draft FNSI were made available to the public for 30 days, starting on 23 July 2020. Due to COVID-19 restrictions, hard copies were not placed in local libraries as they usually would be. Instead, the Draft EA and Draft FNSI were available on USDA's website https://www.ars.usda.gov/northeast-area/docs/draft-environmental-assessment/, and hard copies were made available upon individual request.

Comments received during the 30-day public review period have been compiled and addressed in a matrix in Appendix F, and are documented in the text of the Final EA, as appropriate. It is anticipated that the Proposed Action would not result in significant impacts and preparation of an EIS is not needed.

1.5 Environmental Laws and Regulations

This EA has been prepared in accordance with the NEPA, as amended (Title 42 U.S.C. §4321 et seq.), NEPA-implementing regulations of the CEQ (40 CFR Parts 1500–1508), and USDA's NEPA-implementing regulations (7 CFR Part 1b).

USDA decisions that affect environmental resources and conditions occur within the framework of numerous laws, regulations, and EOs. Some of these authorities prescribe standards for compliance while others require specific planning and management actions to protect environmental values potentially affected by USDA actions. Key provisions of appropriate statutes and EOs are described in more detail throughout the text of this EA.

2 Description of the Proposed Action and Alternatives

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

2.1 Proposed Action

Poultry Quarantine Facility

The Proposed Action would move the function of the two PQH into a combined facility located within Building 434. This Proposed Action would include the construction of two one-story wings on the rear of the building; the renovation of the interior of Building 434 to include office, shower, and decontamination spaces; the repair of Building 434's exterior features, including replacing the roof with in-kind materials; the addition of parking spaces on the front of the building; the addition of appropriate exterior stormwater features and site grading; the updating of all of Building 434's utilities; and the repair and reconfiguration of the building's circular drive (Figure 2-1). A vegetative buffer would be placed along the western side of the building to decrease visual impacts, and a black chain link fence would be installed around the building to provide appropriate biosecurity measures. Four silos, two on either side of the building, would also be added to the site to store and distribute feed for the poultry. The structural and aesthetic upgrades to the building would be designed to preserve the building's historic characteristics to the extent practicable (Figure 2-2).

Under the Proposed Action, the existing two PQH would be vacated, and no changes would be made to these buildings until USDA determines the buildings' future use.

Wildlife Staff Office

The Proposed Action would move the WSO into a new modular building on BARC, to be placed next to an existing gravel parking lot off of Beaver Dam Road that previously served Building 513. A large cooler would be moved from the existing WSO along Poultry Road to the WSO proposed site, and would be placed next to the modular structure on its own concrete pad. The Proposed Action includes routing utilities to the modular building; construction of a stormwater management feature; installation of a septic tank and its associated drain field; and construction of an appropriate foundational base for the building and its associated cooler structure, including any necessary grading (Figure 2-3). A vegetative buffer would be placed along the western edge of the site, and the modular building would have a residential look, both of which would help to minimize any visual impacts to the BARC Historic District or any individually eligible historic structures. The Proposed Action would also include features to make the modular building Americans with Disabilities Act (ADA) compliant, including the construction of a handicap ramp and the paving of two handicap accessible parking spots within the parking lot.

Under the Proposed Action, the existing WSO would be vacated, and no changes would be made to the building until USDA determines the building's future use.

Figure 2-1: Preliminary Site Plan for Building 434

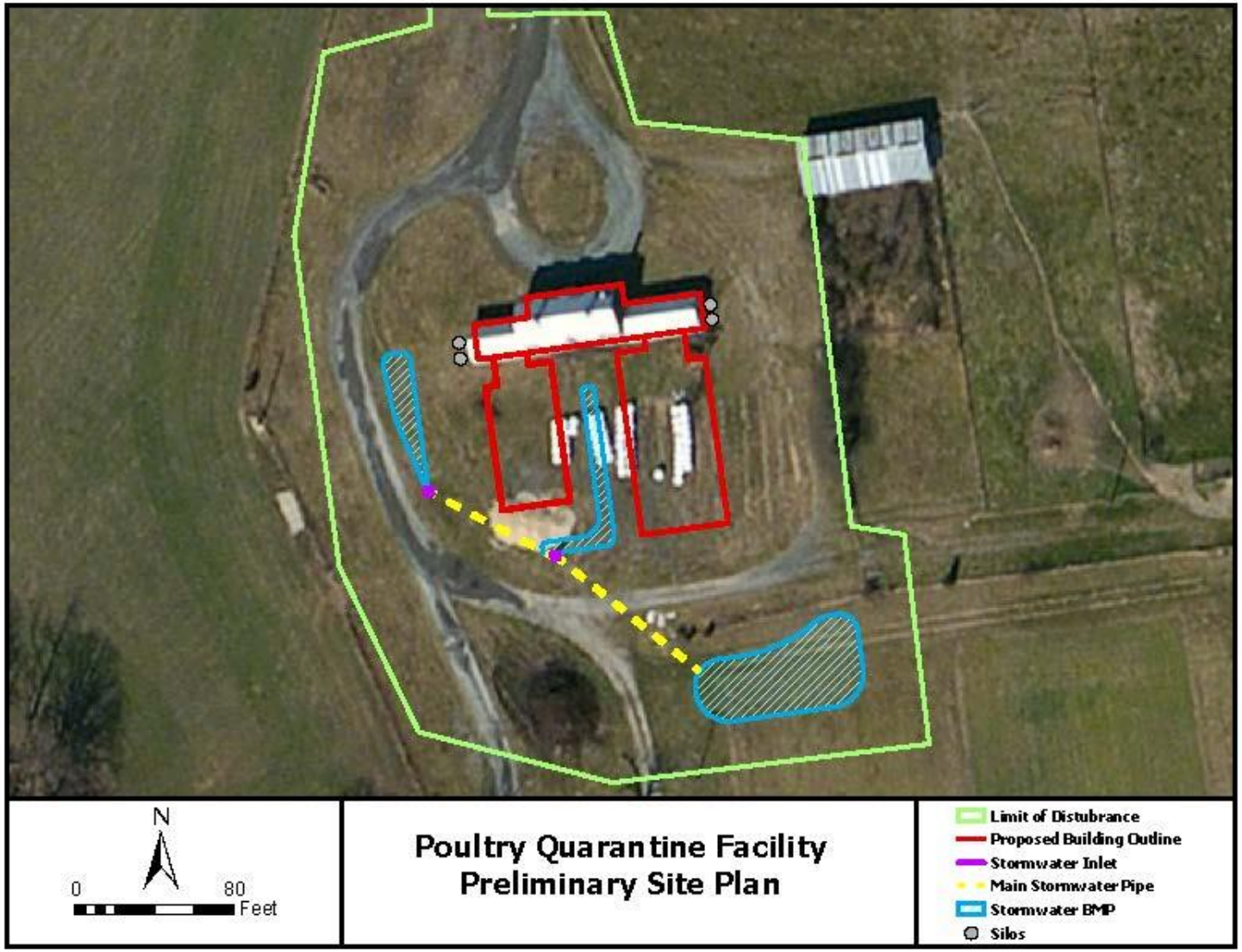
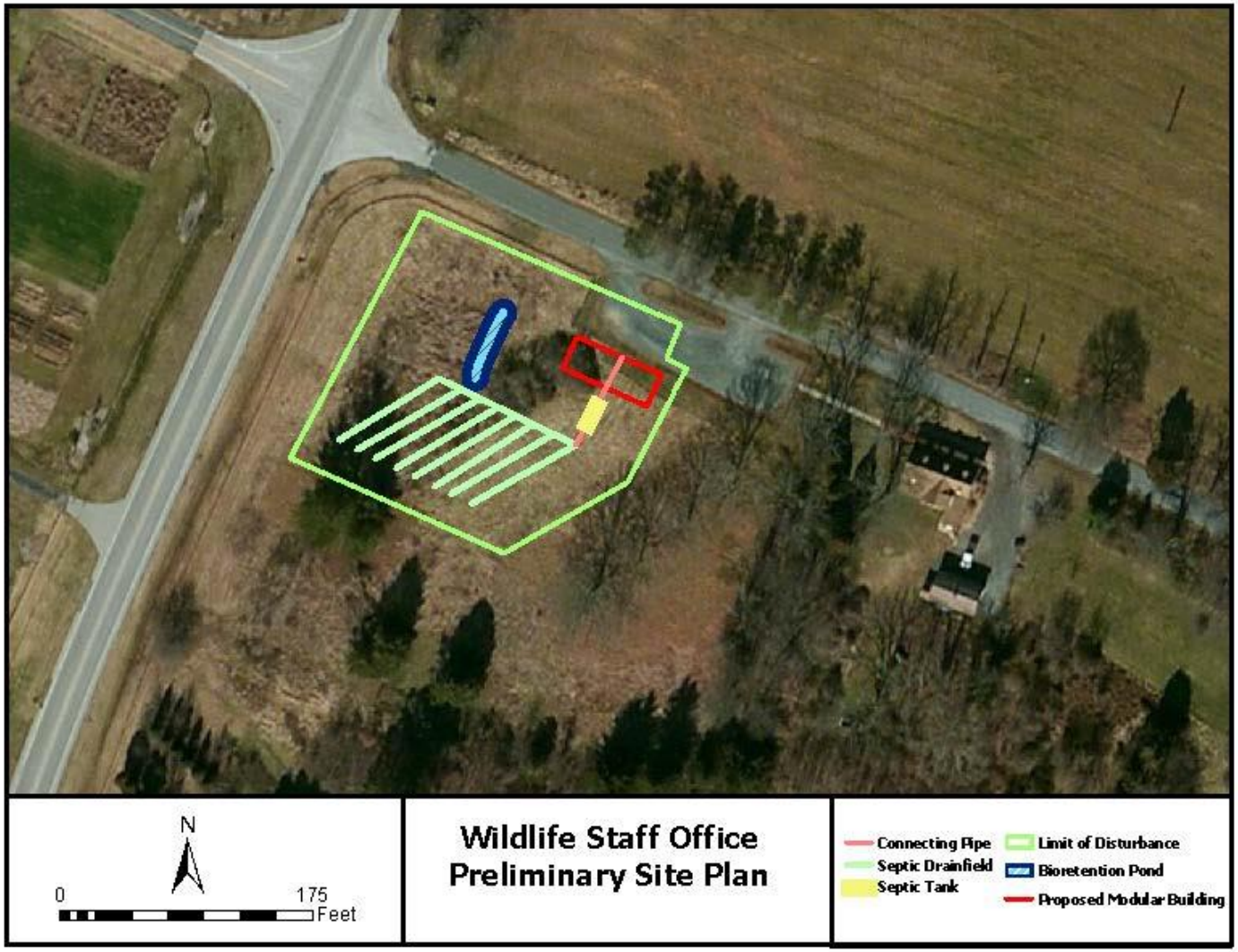


Figure 2-2: Sketch of Building 434

Figure 2-3: Preliminary Site Plan for Wildlife Staff Office



2.2 No Action Alternative

NEPA regulations refer to the continuation of the present course of action without the implementation of, or in the absence of, the Proposed Action, as the No Action Alternative. Inclusion of the No Action Alternative is the baseline against which Federal actions are evaluated, and is prescribed by 40 CFR Part 1502.14 and 7 CFR Part 1b.

Poultry Quarantine Houses

Under the No Action Alternative, Building 434 would remain unchanged for the foreseeable future. Many of the unused buildings at BARC are slowly degrading and deteriorating as nature overtakes once-maintained facilities and landscapes. This is a possibility with Building 434. The barn has been unused since 2008 and shows signs of degradation. Although not significant, this degradation would likely continue under a No Action Alternative. Under the No Action Alternative, the two PQH would remain in their current locations in Buildings 277 and 278. This alternative fails to meet the project purpose of providing safe, efficient and appropriate conditions for the Poultry Quarantine program.

Wildlife Staff Office

Under the No Action Alternative, an improved, safer, and ADA-compliant facility would not be established on the land adjacent to Building 513 and the WSO would remain in its current location in Building 253A. Building 253A is located within a relatively isolated area away from the primary access points of BARC, preventing optimization of the Wildlife Office's function of implementing the hunting program.

USDA has no alternative plans to utilize the property adjacent to Building 513, and under the No Action Alternative, this site would remain NRCS property.

2.3 Alternatives Eliminated from Further Study

In addition to the Proposed Action and the No Action Alternative, the following three alternatives were discussed early in the planning process, but eliminated from consideration because they were infeasible and/or do not meet the project purpose and need. Accordingly, these additional alternatives did not require further detailed evaluation in this EA.

2.3.1 Renovation and Repair of Building 513 for use as the Wildlife Office

BARC is a distinguished research facility in operation since the early 20th century. Over the years, the campus function has changed and on-site research staff numbers have decreased, leaving many buildings empty across the property. This excess of square footage requires BARC to use existing buildings where practicable. Building 513 was considered as a new location for the WSO to utilize some of the unused space. The renovation and repair of Building 513 was considered as an alternative but was dismissed due its financial and structural infeasibility. The cost of renovating Building 513 was beyond the budget of BARC as a result of the historic status of the building, requiring extensive code updates as well as costly renovations specific to historic housing regulations. BARC is solely responsible for the upkeep of Building 513 and would have to eventually demolish the building if renovations could not be afforded. Renovations would be required to follow SHPO guidelines, resulting in a higher renovation cost than originally intended.

Additionally, initial investigations revealed architectural issues caused by deterioration over time, which potentially made its repurposing unsafe and extremely costly.

2.3.2 Construction of Two New Poultry Quarantine Houses

Excess square footage requires BARC to use existing buildings where practicable. For this reason, the clearance of a new site and construction of two new PQH was eliminated as an alternative, in favor of renovating one of BARC's existing historic buildings.

3 Environmental Impacts of the Proposed Project

Chapter 3 describes existing resources at BARC that may be affected by the Proposed Action and the No Action Alternative. Photos of existing conditions on the sites are located in Appendix B.

Management measures, which would minimize potentially adverse impacts on the environment due to the Proposed Action and No Action Alternative if implemented, have been developed and specified. Management measures are described within each resource area, as appropriate within this chapter.

As the existing PQH and WSO in Buildings 253A, 277 and 278 would be vacated under the Proposed Action, there would be no anticipated impacts to these buildings. USDA would determine the buildings' future uses at a later time. Since there are no anticipated impacts related to the three vacated buildings, these buildings will not be further discussed in each of the following resource area sections as part of the Proposed Action.

3.1 Land Use

3.1.1 Existing Conditions

Buildings 434 and the WSO proposed site are located within the Maryland National Capital Park and Planning Commission (MNCPPC) Prince George's County Sub-region I and the Langley Park/College Park/Greenbelt Master Plans. The MNCPPC has recognized the importance of BARC as a scenic, low-density agricultural property that has, by function, been spared from development pressures. Existing buildings at the proposed sites are institutional, research laboratory, and office structures associated with BARC functions.

Poultry Quarantine Facility

Building 434 is located 1,060 feet south of Powder Mill Road, 1,787 feet west of the Baltimore-Washington Parkway, and 2,067 feet east of Biocontrol Road. Entrance to the site is via an unnamed road off of Powder Mill Road. The entrance road circles existing Building 434, and appears to have been paved with asphalt in the past; however, the surface has degraded to gravel in some areas. The unnamed road also connects to a private residence driveway southwest of Building 434 and the Dairy Barn (Building 435A) to the northeast. The site is surrounded by maintained agricultural and dairy fields. Existing Building 434 is a historic brick and concrete block building. The land use is categorized as agricultural (Maryland-National Capital Park and Planning Commission [MNCPPC], 1989; MNCPPC, 2010), historically serving as a goat barn. However, it was vacated in 2008, leaving it empty and nonoperational in the present day.

Wildlife Staff Office

The WSO proposed site is currently on unused NRCS property, 205 feet east of Soil Conservation Road, 55 feet south of Beaver Dam Road, and 230 feet west of Building 513. This site is also classified as agricultural land use (MNCPPC 2010). Entrance to the site is via Beaver Dam Road, on a gravel parking pad. The site is surrounded by maintained agricultural fields to the north and west, Building 513 to the east, and forested area to the south. The area is approximately 185 feet

north of a cemetery once used to bury Hall family members circa 1860. The cemetery has been inactive for a minimum of 87 years.

3.1.2 Anticipated Impacts

3.1.2.1 Proposed Action

Land use in the vicinity of Buildings 434 and the WSO proposed site would remain as it currently exists. Existing buildings at the proposed sites are institutional, research laboratory, and office structures associated with BARC functions. Thus, there would be no adverse impacts to land use at Buildings 434 or the WSO proposed site.

Poultry Quarantine Facility

Building 434 is an agricultural site, and will remain so under the Proposed Action. Proposed renovations and activities for the site, such as the addition of wings to separate chickens and turkeys in quarantine, would be consistent with the existing land use.

Wildlife Staff Office

The WSO proposed site does not have any structures on it currently; however, the land and the areas immediately surrounding it are classified as agricultural. The addition of a modular WSO to support wildlife management operations at BARC would be consistent with this designation.

3.1.2.2 No Action Alternative

Poultry Quarantine Facility

Under the No Action Alternative, no adverse impacts would occur to Building 434. Land use at the site is currently designated as agricultural. The site would remain unused under this alternative, foregoing any land use impacts.

Wildlife Staff Office

The WSO proposed site is surrounded by agricultural fields and research facilities owned by the USDA. Its land use would remain the same (currently unutilized) with adjacent lands serving an agricultural function. No adverse impacts would occur to land use under the No Action Alternative.

3.2 Topography, Geology and Soils

3.2.1 Existing Conditions

3.2.1.1 Topography

The BARC campus is located in a rolling land environment in the Coastal Plain physiographic province of Maryland. Located in the western corner of Prince George's County, Maryland, the

BARC property covers 6,582 acres north and east of Interstate 495. Building 434 is located on the Central Farm, while the WSO proposed site is located on the East Farm area of BARC.

Poultry Quarantine Facility

Building 434 is located at an elevation of approximately 160 feet above mean sea level (MSL) according to a review of the United States Geological Survey 7.5 minute topographic maps for the Beltsville-and-Laurel, Maryland Quadrangles (Figure 3-1). The building is on a high point of the site. The site gently slopes downward to the north along the entrance road, from 169 feet above MSL at the building to 162 feet above MSL at Powder Mill Road. To the south, the site falls slightly steeper from 169 feet above MSL to 163 feet above MSL at the loop road, at approximately a 4 percent slope.

Wildlife Staff Office

The WSO proposed site is located at approximately 140 feet above MSL. The site slopes slightly downward to the south, sloping into the cemetery at 100 feet above MSL. To the east of the WSO proposed site there is a gentle upward slope to a hill at 150 feet above MSL on which Building 513 resides (Figure 3-2). The western portion of the site slopes slightly downhill, with the terminus of Soil Conservation Road at 132 feet above MSL.

3.2.1.2 Geology and Soils

A review of the site soil and survey maps for Prince George's County indicates that both sites are located in the Coastal Plain Province of Maryland. The Coastal Plain is underlain by a southeastward thickening wedge of sediments that reaches thicknesses greater than 1,500 feet in the southeastern portion of the Washington, D.C., metropolitan area. The Coastal Plain sediments are approximately 200 to 350 feet thick and overlie a crystalline base. The surface is directly underlain by Quaternary river terrace deposits (10 to 20 feet thick), which overlie the Cretaceous Arundel Clay (3 to 10 feet thick), which overlies the Cretaceous sands and clays of the Patuxent Formation (150 to 250 feet thick), which overlies crystalline bedrock (U.S. Department of Agriculture [USDA], 2020b).

The surface soils found at Building 434 are classified as Russett-Christiana complex, 0 to 2 percent slopes (soil type RcA); Beltsville silt loam, 2 to 5 percent slopes (soil type BaB); and Christiana-Downer complex, 10 to 15 percent slopes (soil type CcD) (Figure 3-3). This soil is characterized as having a coarse and loose physical composition. The Russett-Christiana complex is moderately well-drained and typically located in swales or hill slopes. Beltsville silt loams are classified as moderately well-drained and are a typically located in broad interstream divides. Christiana-Downer complex soils are also moderately well-drained and are typically located in swales or hillslopes. The Russett-Christiana and Beltsville silt loam complexes are prime farmland soils due to their drainage and silt loam texture; however, the Christiana-Downer complex soils are not considered prime farmland (USDA, 2020b). The soils reports for both Building 434 and the WSO proposed site are located in Appendix C.

The surface soils found at the WSO proposed site are classified as Downer-Hammonton complex, 2 to 5 percent slopes (soil type DoB) (Figure 3-4). This soil is characterized as having a coarse and loose

physical composition, is well drained, and typically located on knolls or interfluves. This complex is considered prime farmland due to its drainage and loamy sand texture (USDA, 2020b).

3.2.2 Anticipated Impacts

3.2.2.1 Proposed Action

The area around Building 434 proposed for renovation and construction is currently developed, so minimal undeveloped land would be impacted during the renovation of Building 434. The WSO proposed site is currently undeveloped, and has been largely undisturbed in recent years; however, the planned modular building would not require substantial soil disturbance. Both sites are expected to need minimal grading under the Proposed Action, so impacts to topography would be minor. Both sites are also expected to need stormwater management features, which would require minimal soil excavation. While the exact designs of the stormwater management features have not yet been finalized, stormwater best management practices (BMPs) implemented would be designed in accordance with the Maryland Department of the Environment (MDE) *Stormwater Design Manual Volumes I & II*, revised in 2009 with Environmental Site Design (ESD) requirements, the *Maryland Stormwater Management Guidelines for State and Federal Projects*, all of MDE's applicable Technical Memoranda, and the Energy Independence and Security Act (EISA) Section 438. Minor adverse impacts to topography, geology, and soils would be expected under the Proposed Action.

<u>Poultry Quarantine Facility</u>

Some fill would be required to maintain the finished floor elevation in the poultry wings to match the existing building at approximately 169 feet above MSL finished floor elevation. Other minor grading would provide proper slope away from the building. Soil movement and disturbances at Building 434 would be mitigated by the use of sediment and erosion controls that would be implemented during renovation and construction activities. BMPs would be put in place to prevent erosion.

During construction, the project would be required to comply with the MDE *Standards and Specifications for Soil Erosion and Sediment Control* and the *Maryland Stormwater Management and Erosion Control Guidelines for State and Federal Projects*. The project is anticipated to require stabilized construction entrances, silt and super silt fencing, earth dikes, rock outlet protection, and slope stabilization, as well as the addition of stormwater drainage.

<u>Wildlife Staff Office</u>

Since the new WSO would be a modular structure, no soil disturbance would be needed to dig and pour a building foundation; however, some fill would be needed for grading of the concrete pads for the modular WSO and its associated cooler. Additionally, the septic tank and its associated drain fields would require excavation of the majority of the field south of the proposed site. Impacts of soil disturbances would be minimized using sediment and erosion control BMPs in accordance with MDE standards.

Figure 3-1: Topographic Map for Building 434

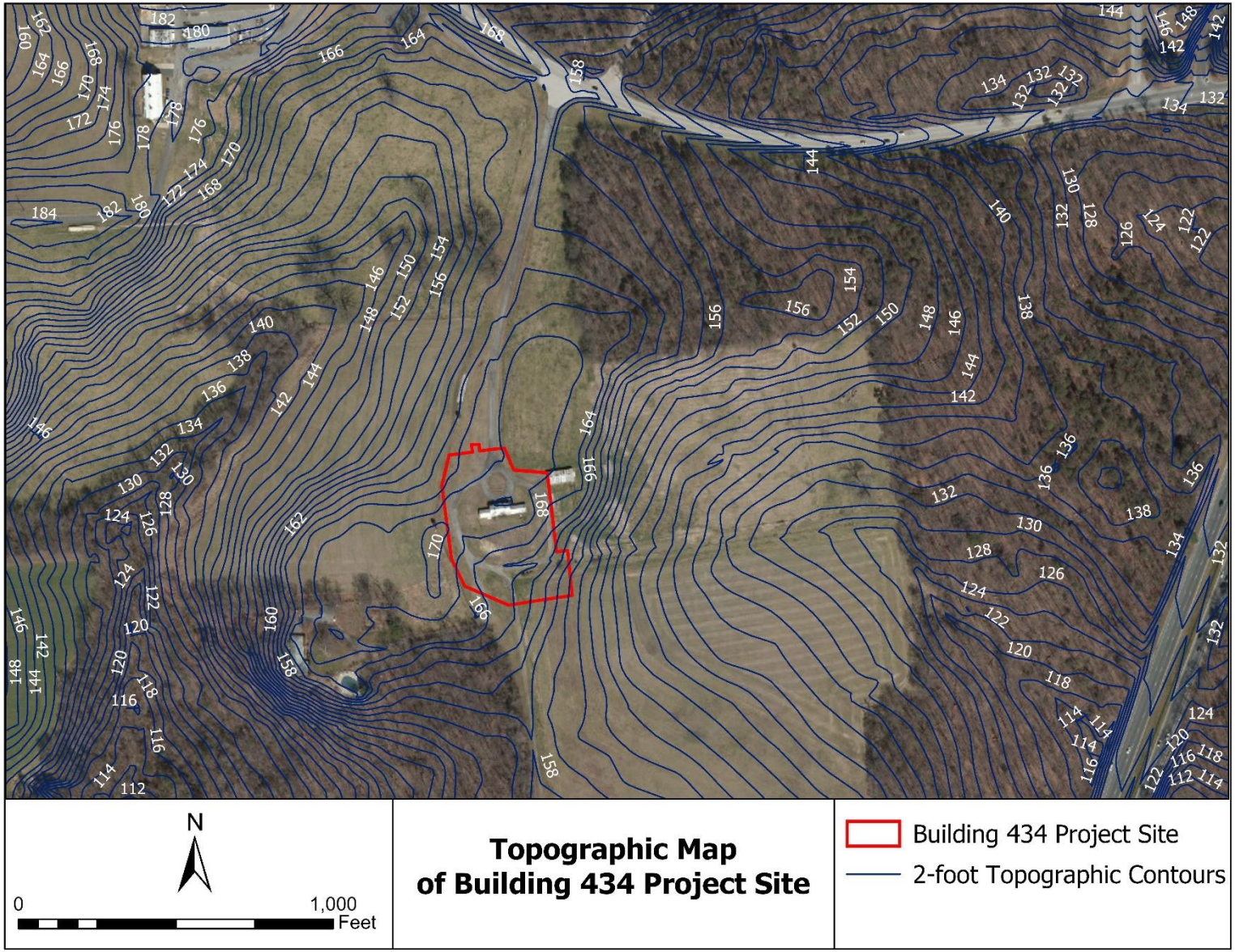


Figure 3-2: Topographic Map for Wildlife Staff Office Proposed Site

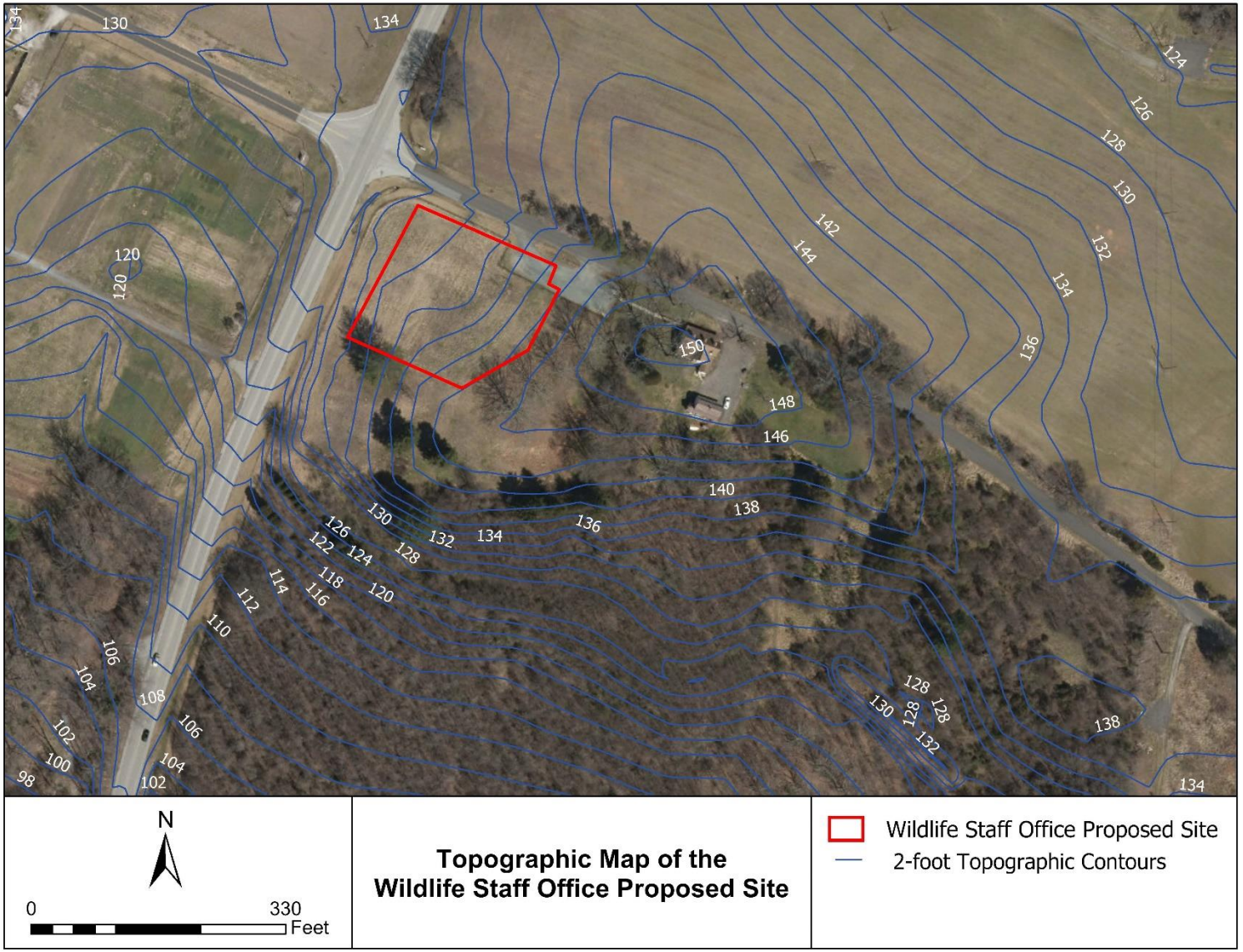


Figure 3-3: Building 434 Soil Profile

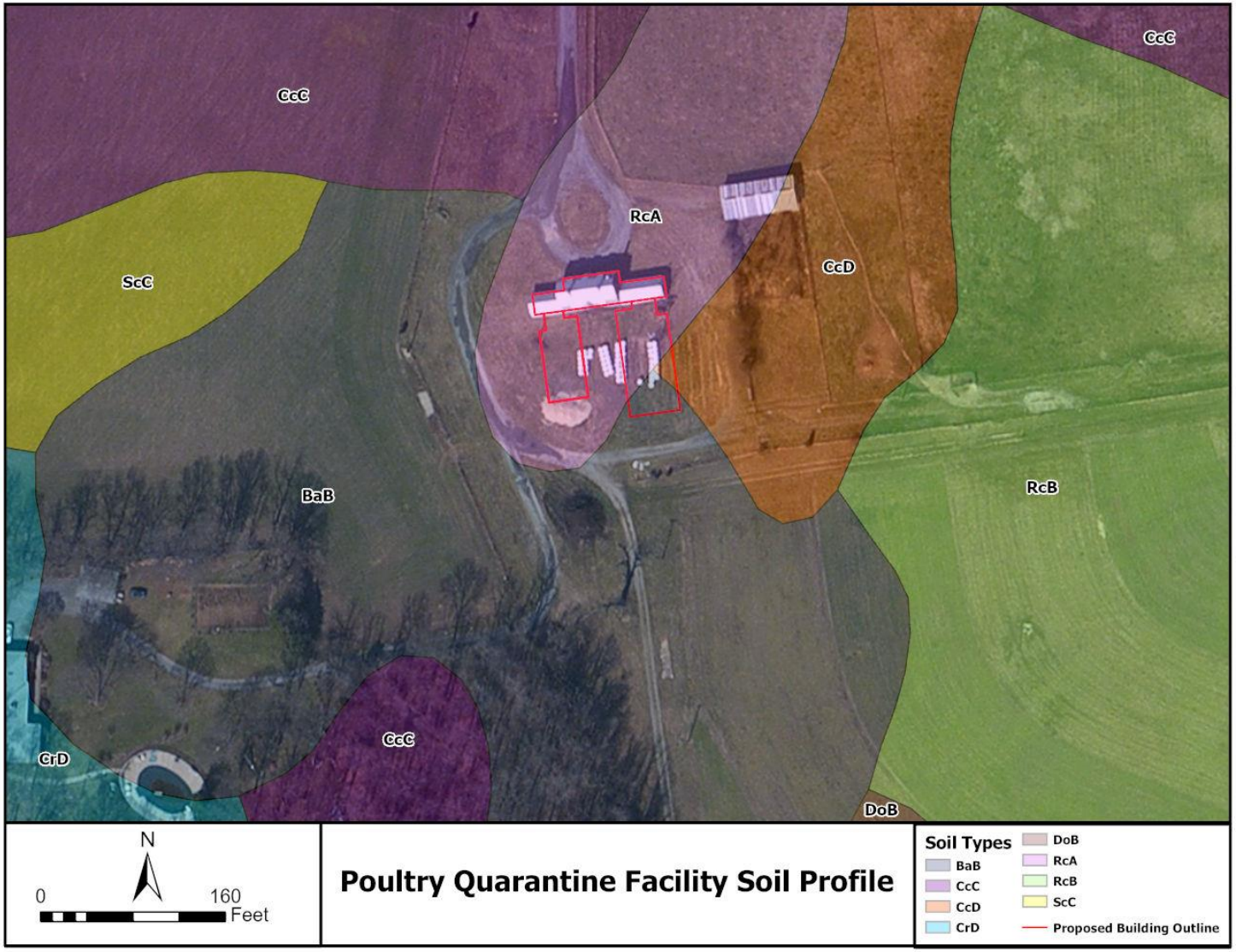
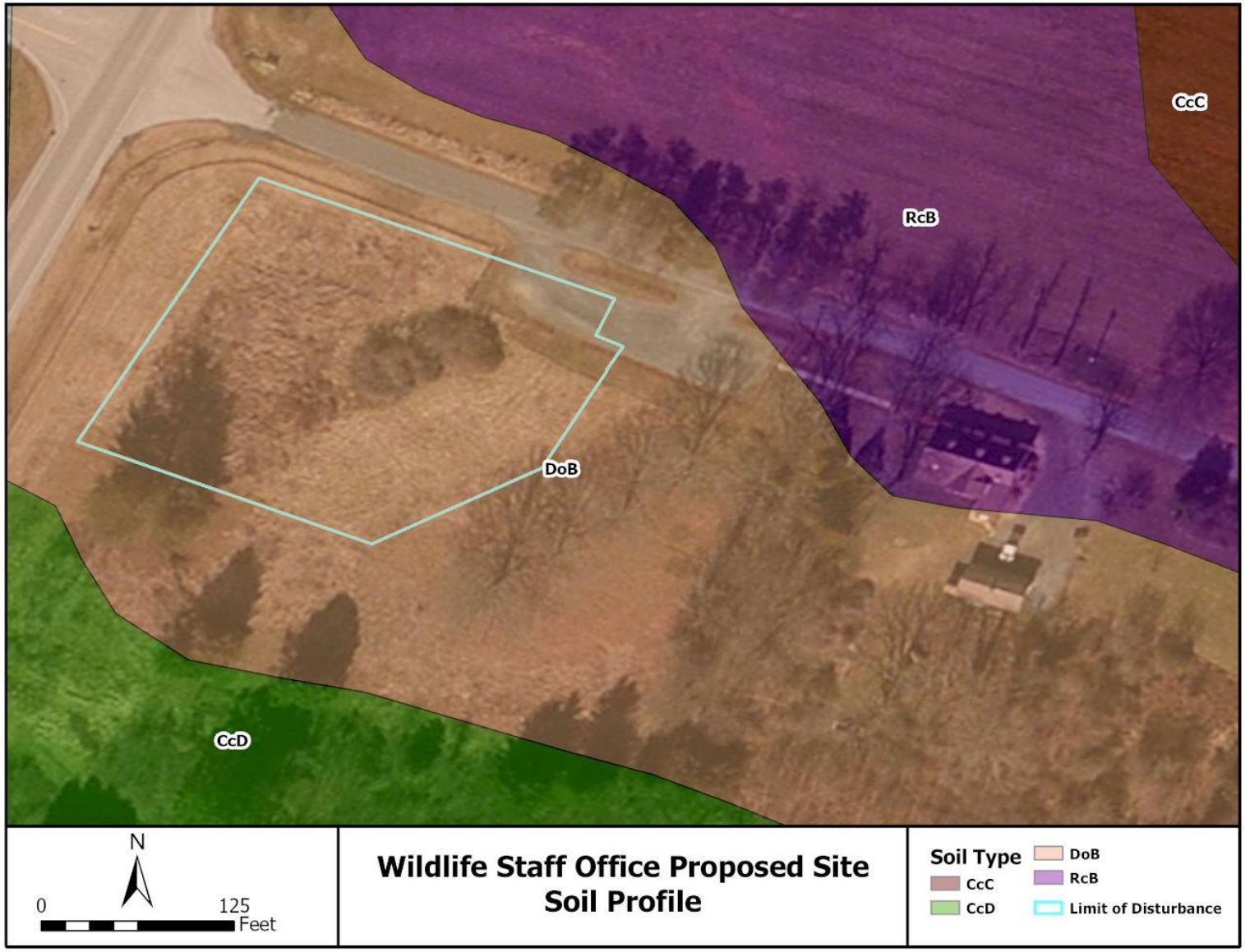


Figure 3-4: Wildlife Staff Office Proposed Site Soil Profile



During construction, the project would be required to comply with the MDE *Standards and Specifications for Soil Erosion and Sediment Control*. Soils would be disturbed to connect electrical lines; install the drain field for the septic system; install stormwater management features including a small bioretention pond, roof drains, and underdrain for bioretention; and prepare the site for the concrete slab that would support the modular building and its associated cooler. The septic tank and leach field would be placed five to six inches below soil surface and would disturb the majority of field south of the WSO proposed site.

3.2.2.2 No Action Alternative

Poultry Quarantine Facility

Under the No Action Alternative, Building 434 would remain in its current state. Soils would not be disturbed, and no grading or fill would occur at the site. No changes to topography, soils, or geology would result; therefore, no adverse impacts would occur.

Wildlife Staff Office

Under the No Action Alternative, there would be no expected impacts to topography, soils, or geology. Current conditions would continue under this alternative, so no impacts would occur.

3.3 Prime Farmland

3.3.1 Existing Conditions

Prime farmlands include all those soils in Land Capability Class I and selected soils from Land Capability Class II. These USDA land capability classes are defined below.

Land Capability Class I: Soils have slight limitations that restrict their use.

Land Capability Class II: Soils have moderate limitations that reduce the choice of plants or require moderate conservation practices.

Land Capability Classifications are defined as a system of grouping land in various classes based on inherent limitation imposed on sustained use by soil attributes, topography, drainage and climate. Prime farmland is ideal land to cultivate under this classification system (USDA, n.d.).

Prime farmland is land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops, and is also available for these uses. It has the soil quality, growing season, and moisture supply needed to produce economically sustained high yields of crops when treated and managed according to acceptable farming methods, including water management. In general, prime farmlands have an adequate and dependable water supply from precipitation or irrigation, a favorable temperature and growing season, acceptable acidity or alkalinity, acceptable salt and sodium content, and few or no rocks. They are permeable to water and air. Prime farmlands are not excessively erodible or saturated with water for extended periods of time, and they either do not flood frequently or are protected from flooding (USDA, 1993).

According to NRCS mapping, BARC contains 56 distinct mapped soil units, including 10 soil unit types identified as prime farmland. Forty of these mapped soil units occur within the North and Central Farms. Approximately 2,850 acres, or 44 percent, of BARC's approximate 6,500 total acres is identified as prime farmland. An additional 1,265 acres of BARC is designated as farmland of statewide importance (USDA, 2020b).

The loamy soils of the Mid-Atlantic Coastal Plain ecoregion (USEPA, 2018), in which BARC is located, are naturally low in nutrients, compared to the more nutrient-rich Piedmont soils. Though the region does include prime farmland, most require liming and fertilizing to be productive for agricultural crops. The well-drained, rolling, open hills, and comparatively less forested character of the region has made it an attractive location for general farming and livestock production (Woods et al., 1999).

Poultry Quarantine Facility

Building 434 sits atop Russett-Christiana soil complex and Beltsville silt loam, both of which are labeled by the NRCS as prime farmland. The land surrounding Building 434 is known to be prime farmland as well. However, the land on which Building 434 resides and the area directly surrounding it is not being utilized as farmland and has likely become compacted over time. Soil compaction is a primary factor in whether or not land is used for agriculture. Compacted soils do not allow plants roots to penetrate the ground, therefore becoming useless as farmland unless tilled.

Wildlife Staff Office

The WSO proposed site sits atop the Downer-Hammonton soil complex, which is designated as a prime farmland soil. This site is a former residential farm area. Although the entirety of the site is not compacted from infrastructure and was likely previously used for agriculture, it is likely compacted from adjacent development and activity. There are no plans to use the site as agricultural land given its restrictions with a cemetery and historic buildings within close proximity.

3.3.2 Anticipated Impacts

3.3.2.1 Proposed Action

Most soils located at Buildings 434 and the WSO proposed site were identified as prime farmland by the NRCS; however, these soils are not used for farming and are not intended to be used as farmland by the USDA or BARC in the future. Farming practices and crops harvested on BARC are intended for research animals, research crops, and crops for retail. BARC owns a sufficient amount of farmland for their mission. No adverse impacts are expected to occur to prime farmland as a result of the Proposed Action.

Poultry Quarantine Facility

Prime farmland soils surround Building 434; however, this land is not used for farming purposes, nor would it be under the Proposed Action. The soils near Building 434 have compacted from usage

as a goat facility and are currently unfit for farming; therefore, while the soil types may be designated as prime farmland, the soils on the site are not in an ideal state for farming.

Wildlife Staff Office

Prime farmland soils surround the WSO proposed site; however, this land is not used for farming purposes, nor would it be under the Proposed Action. The soils near WSO proposed site have been compacted from usage as a residential area, and the cemetery just south of the WSO proposed site prevents this land from being used a farmland.

3.3.2.2 No Action Alternative

No impacts to prime farmland would be expected under the No Action Alternative. The proposed sites all reside on prime farmland; however, they are all in disturbed, developed areas and are unsuited for farming in their given state.

Poultry Quarantine Facility

Under the No Action Alternative, no adverse impacts would occur to the prime farmland at Building 434. The building would remain vacant and free from future disturbance, as BARC does not have plans to renovate or construct near the building.

Wildlife Staff Office

Under the No Action Alternative, no adverse impacts would occur to the prime farmland at the WSO Proposed Site. The area is currently vacant and would remain vacant, as the USDA does not have plans to place any structures on the site. No disturbance would occur to the farmland.

3.4 Water Resources

3.4.1 Existing Conditions

BARC lies in the eastern-central portion of the Anacostia River Watershed, which encompasses approximately 178 square miles. This watershed includes portions of Prince George's and Montgomery Counties in Maryland and the District of Columbia. The watershed spans both the Piedmont and Atlantic Coastal Plain ecoregions (U.S. Geological Survey [USGS], 2017). Surface water runoff from the BARC campus feeds into surface water bodies via natural drainage patterns. Numerous water features are mapped across the BARC facility ranging from small, unnamed headwater tributaries that originate on the facility to long stretches of named creeks that receive and transport water off-site. Named streams include Beaver Dam Creek, Indian Creek, Little Paint Creek, and Paint Branch. Figures 3-5 and 3-6 depict surface water in the vicinity of Building 434 and the WSO Proposed Site, respectively.

3.4.1.1 Surface Water and Stormwater

Neither site contains surface water bodies, nor do they contain any existing stormwater management systems. In accordance with the Clean Water Act's National Pollutant Discharge

Elimination System (NPDES) requirements, BARC is currently evaluating and pursuing options to reduce impervious surfaces.

Poultry Quarantine Facility

Building 434 has no surface water bodies present on-site (Figure 3-5). It is approximately 0.5 miles northeast of Beaver Dam Creek, which flows into the Northeast Branch of the Anacostia River. There are also no stormwater management structures at Building 434. The existing site drains by surface flow with no known storm drain infrastructure. Existing Building 434's roof is drained via disconnected downspouts.

Wildlife Staff Office

There are no surface water bodies at the WSO proposed site. There is a small pond (Alter Pond) approximately 0.10 miles directly south of Building 513 (Figure 3-6). Alter Pond discharges to Beck Branch, which is the closest stream to Building 513, and is located approximately 0.18 miles to the south. This stream eventually feeds into the Anacostia River. There are no stormwater management structures in the general area.

3.4.1.2 Groundwater Resources

BARC is within the Patuxent Aquifer system, part of the larger Coastal Plain Aquifer system that underlies Prince George's County. The Patuxent Aquifer is capped by an extensive clay layer in the subsurface. The deepest water production wells (depth of 2,400 feet) in Maryland produce from the Patuxent Aquifer system and are located at the southern tip of Prince George's County. Karst features within Maryland are limited to the northern region of the state and are not present within Prince George's County (Adreasen et al., 2013). An unconfined portion of the Patuxent Aquifer recharges the western portion of BARC. Shallow groundwater in the area of both sites is at approximately 10 feet below ground surface (bgs) (U.S. Army Corps of Engineers [USACE], 2020).

BARC pumps and treats its own well-water used for all operational purposes, including potable, laboratory, sanitary, fire suppression, and irrigation. This system includes the water treatment plant wells, storage tanks, and distribution piping. This system supplies an average daily demand of approximately 2,780 liters (735 gallons) per minute to both the Central Farm and East Farm sections of BARC (Froehling & Roberston, Inc., 2019).

Poultry Quarantine Facility

Building 434 receives its water from the current BARC water system.

Wildlife Staff Office

The WSO proposed site does not have a direct water connection. Building 513 is connected to the BARC water system, and adheres to the same output as mentioned above.

Figure 3-5: Surface Waters in Vicinity of Building 434

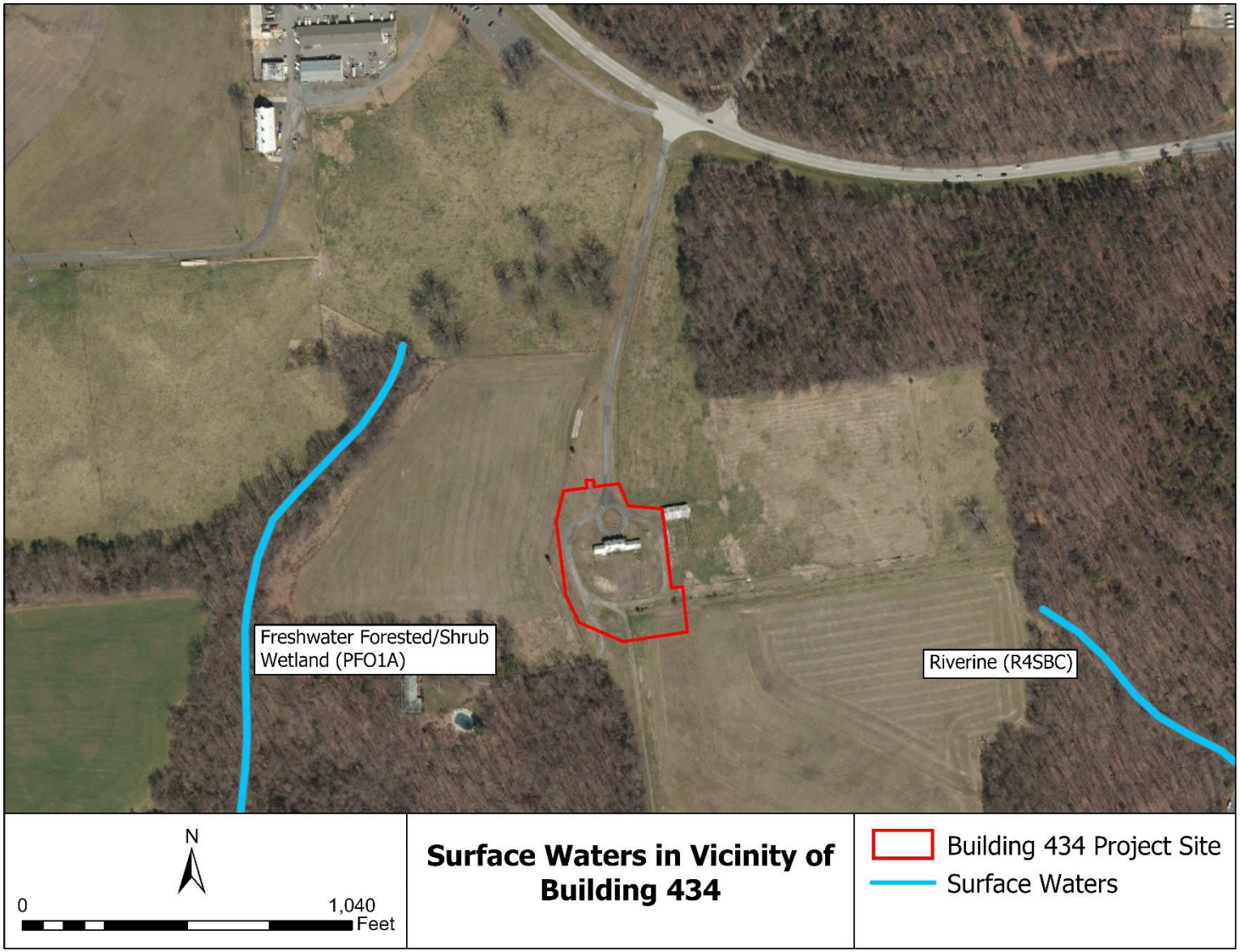
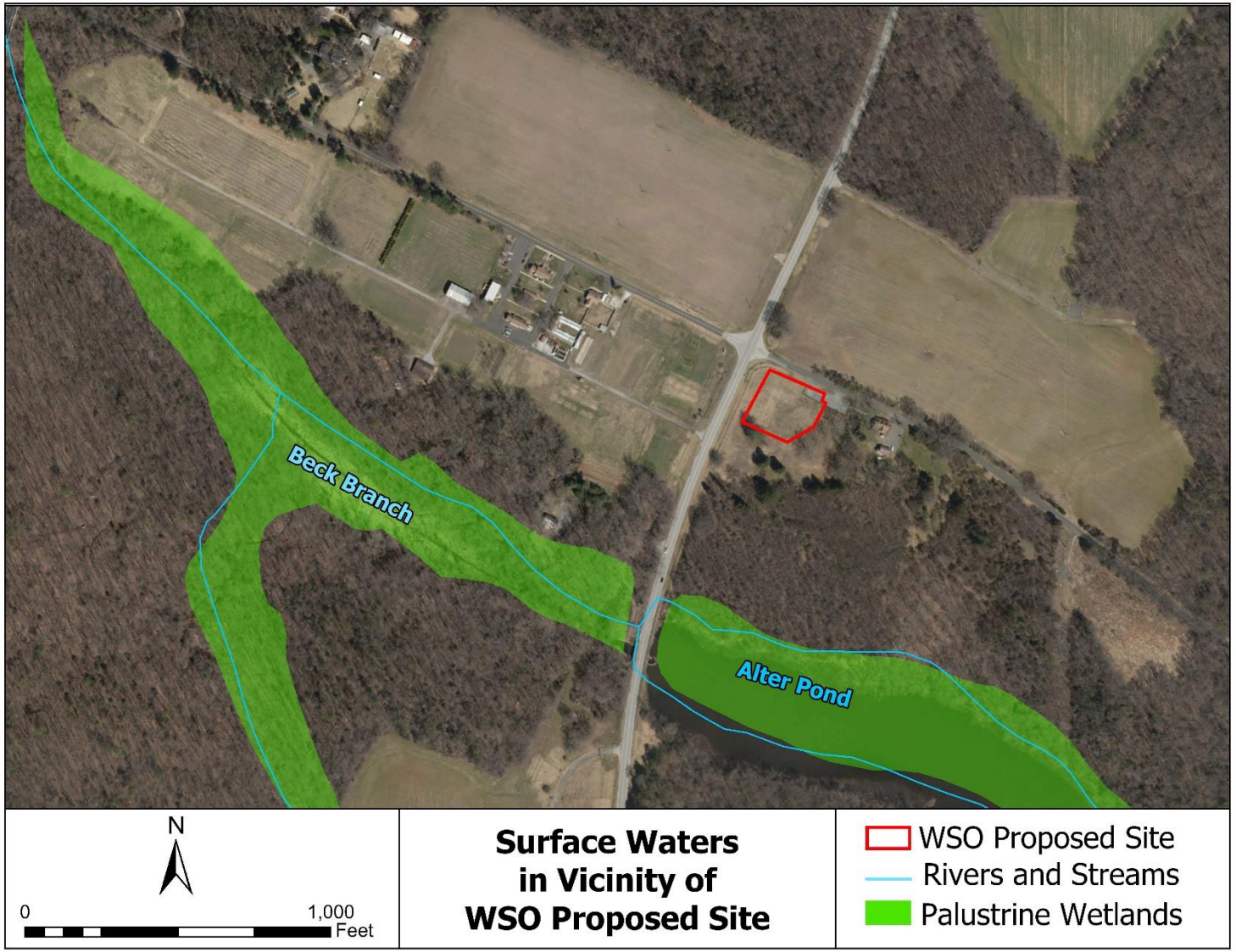


Figure 3-6: Surface Waters in Vicinity of WSO Proposed Site



3.4.1.3 Wetlands and Floodplains

Executive Order (EO) 11988, *Floodplain Management*, requires Federal agencies to avoid direct or indirect support of development within the 100-year floodplain whenever there is a practicable alternative. The Federal Emergency Management Agency (FEMA) uses Flood Insurance Rate Maps (FIRMs) to identify the regulatory 100-year floodplain for the National Flood Insurance Program (NFIP).

EO 11990, *Protection of Wetlands*, requires Federal agencies to avoid or minimize adverse impacts to wetlands. Construction in jurisdictional wetlands and streams is regulated by USACE pursuant to Section 404 of the Clean Water Act (CWA), as implemented in regulations contained in 33 CFR Parts 320–330.

Wetlands are broadly defined in the CWA as 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. The *1987 Corps of Engineers Wetlands Delineation Manual and Regional Supplements* requires the presence of wetland vegetation, soils, and hydrologic indicators for an area to be considered a wetland. Wetlands exist where all three parameters reflect persistent hydrology during the growing season.

Poultry Quarantine Facility

Building 434 is within Zone X, an area determined to be outside the 1% (100-year floodplain) and the 0.2% (500-year floodplain) annual chance of floods, according to a review of the FIRM Community-Panel Number 24033C0065E revised September 16, 2016 (Federal Emergency Management Agency [FEMA], 2020).

There are no wetlands within the Building 434 project site, according to the USFWS Wetlands Mapper. The closest wetland lies approximately 0.15 miles to the west. This 0.96-acre Freshwater Forested/Shrub Wetland habitat is classified as a PFO1A by the USFWS Wetland Mapper. The wetland is a small, creek-like sliver of wetland running north to south. There is also a small wetland 0.81-acre in size, approximately 0.2 miles to the east of Building 434, and classified as Riverine (R4SBC) (U.S. Fish and Wildlife Service [USFWS], 2020b).

Wildlife Staff Office

The WSO proposed site is within Zone X according to a review of the FIRM Map Community-Panel Number 24033C0065E revised September 16, 2016 (FEMA, 2020).

There are no wetlands within the WSO proposed site, according to the USFWS Wetland Mapper. The closest wetland lies approximately 0.15 miles to the south. This 14.09-acre Freshwater Pond habitat is classified as a PABHh (USFWS, 2020b).

3.4.2 Anticipated Impacts

3.4.2.1 Proposed Action

The Proposed Action would have minor expected adverse impacts on stormwater, surface water and wetlands, but no expected impacts to groundwater or floodplains. While no surface water bodies or wetlands are within the limits of disturbance (LODs) for either proposed site, there is the potential for minor impacts to surface water, wetlands, and stormwater due to runoff during construction. Construction activities typically result in clearing of vegetation, disturbance of soils, and stockpiling of construction materials, thus increasing the potential for runoff and sedimentation downstream. The implementation of stormwater BMPs would greatly minimize any offsite pollution to surface water, wetlands, and stormwater; however, any temporary, minor, adverse impacts resulting from construction would be addressed through the applicable permitting process. All Federal and state requirements for stormwater management would be met, including implementing stormwater management systems at both Building 434 and the WSO proposed site.

During the proposed renovation, all water service to Building 434 and in the vicinity of the WSO proposed site would be temporarily stopped to allow for safe renovation and construction activities to take place. Stormwater runoff during construction would be controlled through use of BMPs and all temporarily disturbed areas would be graded and re-vegetated upon completion of construction, in accordance with a construction general permit for stormwater. Standard erosion and sediment control techniques to protect surface water resources would be applied.

The projects would comply with state and Federal stormwater management requirements, including those related to water quality and quantity control. The stormwater BMPs implemented would be designed in accordance with the MDE *Stormwater Design Manual Volumes I & II*, revised in 2009 with ESD requirements, the *Maryland Stormwater Management Guidelines for State and Federal Projects*, all of MDE's applicable Technical Memoranda, and EISA Section 438, which instructs Federal agencies to "use site planning, design, construction, and maintenance strategies for the property to maintain or restore, to the maximum extent technically feasible, the predevelopment hydrology of the property" for any project with a footprint that exceeds 5,000 SF. The Proposed Action is larger than 5,000 SF and, once engineering plans are refined, will comply with the regulation. BARC is also currently evaluating and pursuing options to reduce impervious surfaces pursuant to the Clean Water Act's NPDES requirements, and as part of this effort, BARC would account for any increases in impervious surfaces under the Proposed Action.

Given the distance of the water treatment plant from Buildings 434 and the WSO proposed site and the depth of the groundwater, the planned development at Building 434 and the WSO proposed site are not anticipated to have any impact on wells at BARC. Shallow groundwater in the vicinity of the Proposed Project is approximately 10 feet bgs. Construction of the foundation, stormwater features, and utilities are only expected to disturb surface soils at a depth of less than 10 ft bgs. Therefore, it is not anticipated to require excavation at a depth that would possibly intersect shallow groundwater or impede any shallow groundwater movement. The additional water demands created by the transfer of staff and poultry to Buildings 434 and the WSO proposed site are expected to be negligible (when compared with present water use on the BARC Campus). Water use at Building 434 would be comparable to the water usage at the two existing PQH, thus the expected impacts would be negligible. Water usage at the WSO proposed site would also be negligible, as the proposed modular building is comparable to the building in which the WSO currently resides. Because water

usage at both proposed buildings would be comparable to current usage, and because water conservation measures required under EO 13834, *Efficient Federal Operations*, would be met, no adverse impacts are expected to occur.

After renovation is complete, all construction-related groundwater usage would stop. The use of potable water at BARC would remain essentially unchanged, as no new personnel would be added to the property; rather, they would be relocated to new locations on BARC. No adverse impacts to the groundwater are anticipated.

Poultry Quarantine Facility

Two small stormwater BMPs are proposed in the green space between the poultry additions and west of the chicken quarantine wing (Figure 3-7). A larger stormwater BMP is proposed southeast of the building, which is shown in the footprint of the agricultural crop field due to site constraints.

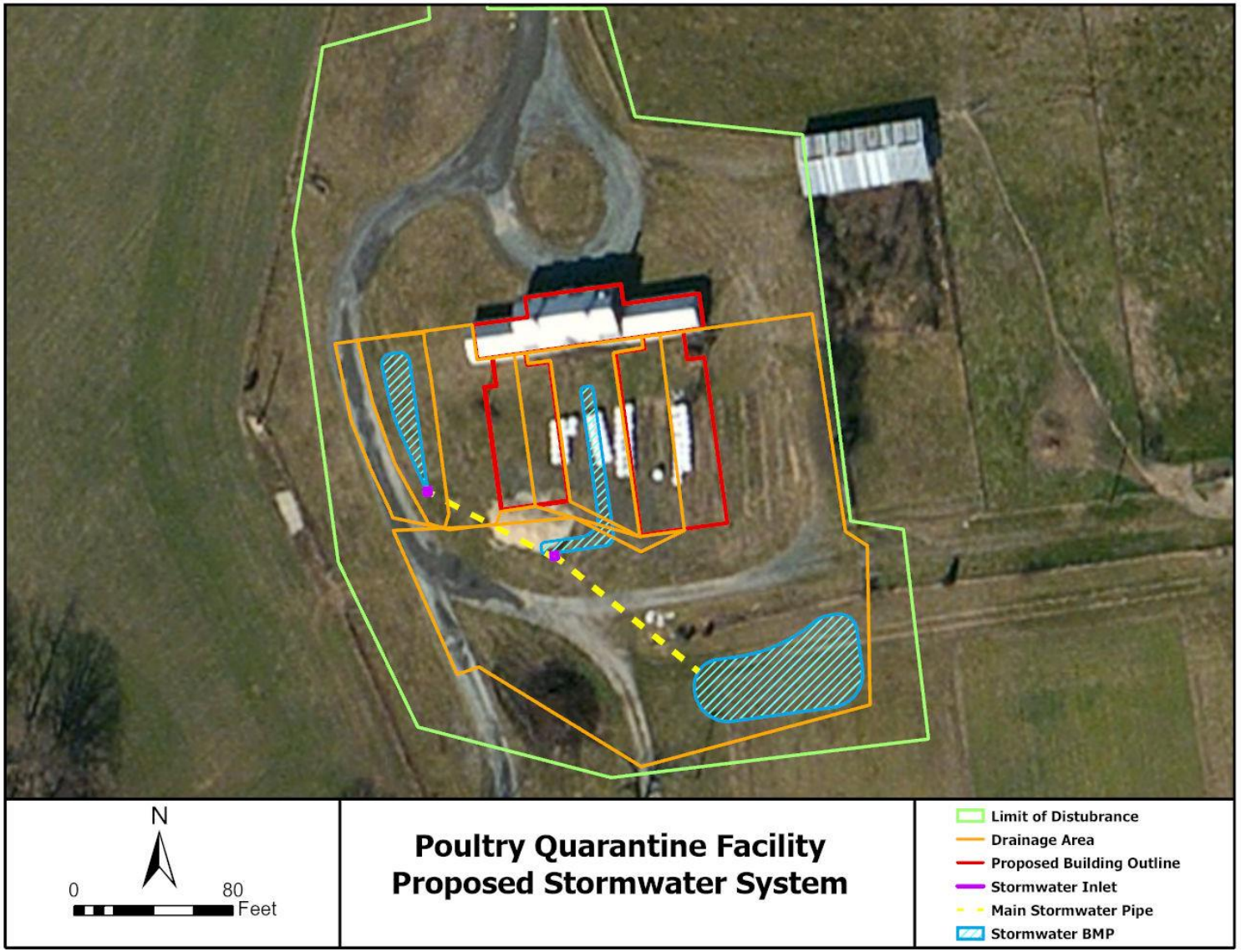
These stormwater BMPs, along with any foundation and utilities associated with the new poultry quarantine facility, would require excavation of less than 10 feet bgs, so there would not be any expected impacts to shallow groundwater.

To satisfy water quality requirements, the impervious area of the site (pavement and roof) would drain via surface flow and storm drains to the three bioretention ponds. The bioretentions would consist of well-draining engineered soil media over a volume of open graded drainage gravel. Runoff would infiltrate to the underlying soils if in-situ soil conditions allow, or drain through and underdrain to daylight downgrade. For larger storm events, an overflow inlet or weir spillway would be provided. The design would attenuate the 10-year, 24-hour storm, maintaining the post-project peak discharge rate equal to or less than the pre-project discharge rate. Quantity volume would be provided in the surface storage or bioretention.

Storm drains will be designed for the 10-year, 5-minute storm. The site would be drained by a combination of the surface flow and piped storm drains. Roof drains would convey underground and connect to the storm drain pipe that outfalls to the bioretention.

While these stormwater BMPs and erosion and sediment control measures would minimize impacts to stormwater, wetlands, and surface water, there is still the potential for minor adverse impacts to these resources, particularly during construction. There would be no expected impacts to groundwater or floodplains.

Figure 3-7: Proposed Stormwater Features at Building 434



Wildlife Staff Office

During construction, the project would be required to comply with the MDE *Standards and Specifications for Soil Erosion and Sediment Control*. The site would require a stabilized construction entrance, silt and super silt fencing, earth dikes or diversion fencing, rock outlet protection, and slope stabilization.

To satisfy water quality requirements, the site would drain via surface flow to a micro-bioretention area west of the new modular structure (Figure 3-8). The bioretention area would consist of well-draining engineered soil media over a volume of open graded drainage gravel. Runoff can infiltrate to the underlying soils if in-situ soil conditions allow, or drain through an underdrain to daylight downgrade. For larger storm events, an overflow weir spillway would be provided.

This stormwater BMP, along with the septic system and any other utilities associated with the new WSO, would require excavation of less than 10 feet bgs, so there would not be any expected impacts to shallow groundwater.

To satisfy water quantity requirements, the design would attenuate the 10-year, 24-hour storm, maintaining the post-project peak discharge rate equal to or less than the pre-project discharge rate. Quantity volume would be provided in the surface storage of the bioretention area. No new storm drain infrastructure would be required for this development. Roof drains for the modular structure would be designed for the 10-year, 5-minute storm. Roof drains would disconnect to the lawn where possible.

While these stormwater BMPs and erosion and sediment control measures would minimize impacts to stormwater, wetlands, and surface water, there is still the potential for minor adverse impacts to these resources, particularly during construction. There would be no expected impacts to groundwater or floodplains.

3.4.2.2 No Action Alternative

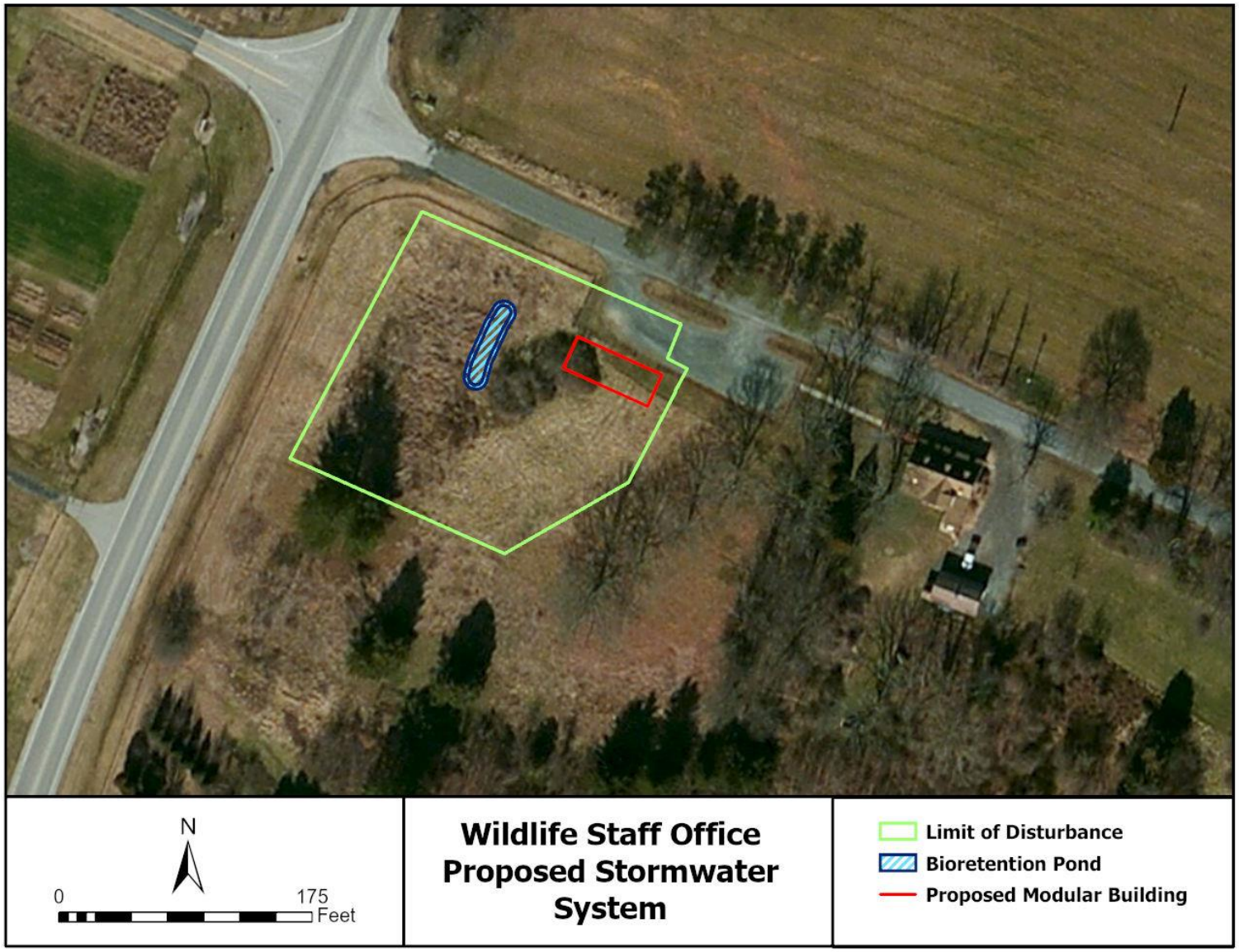
Poultry Quarantine Facility

Under the No Action Alternative, water resources at Building 434 would not be impacted. Building 434 is not currently operational, and BARC has no future plans to renovate or develop the area. The site, built prior to Federal and state regulations requiring stormwater management when developing a building design, also has no stormwater management features that would potentially degrade over time; therefore, no water resources are expected to be impacted.

Wildlife Staff Office

Under the No Action Alternative, water resources are not expected to be impacted at the WSO proposed site. This alternative would leave the WSO proposed site undeveloped. The USDA has no plans to develop the site, meaning no changes would occur to surface water, groundwater, stormwater, wetlands, or floodplains. The WSO proposed site also does not have stormwater management infrastructure that would degrade without maintenance.

Figure 3-8: Proposed Stormwater Features at the Wildlife Staff Office Proposed Site



3.5 Biological Resources

3.5.1 Existing Conditions

3.5.1.1 Vegetation

BARC is a part of the Piedmont Upland region of Maryland, which typically consists of Oak/Hickory forest and occupies the foothills west of the coastal plains. It encompasses approximately 6,582 acres, with a mixture of forest, pasture, farmland, buildings, and wetlands. The Central Farm is primarily composed of forests and farmland, with scattered buildings and development present. The forests on the Central Farm are predominantly Oak/Hickory and Maple/Cherry old growth or mature stands. The Piedmont region was farmed heavily upon the colonization of the United States, and consequently, has few remaining old growth forest stands. BARC, consisting primarily of prime farmland, was converted to agricultural fields and most forest stands are secondary growth forests that have reached maturity after their agricultural purpose was served. The East Farm contains the same types of forest, with smaller amounts of developed area.

Numerous agricultural fields and pasturelands are bordered by drainages and areas currently unused and in various stages of vegetative succession. Native hardwood and bottomland forest areas are present across the facility. Dominant upland tree species on and near BARC include oaks (*Quercus* spp.), maples (*Acer* spp.), Virginia pine (*Pinus virginiana),* and black cherry (*Prunus serotina*). Lesser stands of American holly (*Ilex opaca*), black gum (*Nyssa sylvatica*), sweet gum (*Liquidambar styraciflua*), beech (*Fagus* spp.), and sassafras (*Sassafras* spp.) occur in the uplands. Along the many drainageways that cross the facility, bottomland forests include willow oak (*Quercus phellos*), sweet gum, river birch (*Betula nigra*), and red maple (*Acer rubrum*), with Northern Spicebush (*Lindera benzoin*), buttonbush (*Cephalanthus* spp.), fetterbush (*Pieris* spp.), pepperbush (*Croton* spp.), and tussock sedge (*Carex stricta*) commonly found in the shrub layer.

Poultry Quarantine Facility

The area immediately surrounding Building 434 has no vegetation present except for routinely mowed turf grass encircled by a gravel road. Farmland occupies the majority of the area adjacent to the gravel road, with the exception of a gravel driveway which leads to a house surrounded by forest southeast of Building 434. The Proposed Action would only affect the immediate area surrounding Building 434, where no vegetation is present.

Wildlife Staff Office

The WSO proposed site is characterized by the existing gravel parking lot surrounded by an area maintained as a grassy field through routine mowing. Forested land surrounds the field to the south, with scattered trees to the east, adjacent to forest land.

3.5.1.2 Rare, Threatened and Endangered Species

The Endangered Species Act (ESA) of 1973 (16 U.S.C. 1531-1544) provides a program for the conservation of rare, threatened and endangered (RTE) plants and animals and their habitats.

Under Section 7 of the ESA, Federal agencies, in consultation with the USFWS and/or the National Marine Fisheries Service (NMFS), are required to ensure that actions they authorize, fund, or carry out are not likely to jeopardize the continued existence of any special status species of fish, wildlife, or plants, and their habitats. Special status species include those that are candidates for, proposed as, or listed as sensitive, threatened, or endangered.

Most avian species native to the United States are protected under the Migratory Bird Treaty Act (MBTA) and bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (BGEPA). The MBTA authorizes Federal regulation of the take of migratory birds and is a primary instrument in migratory bird conservation and protection in the United States. Protection under the MBTA and BGEPA includes protection of nests. One bald eagle nest is known to occur within the vicinity of the Proposed Action site (Maryland Bird Conservation Partnership, 2020). It is located approximately 1.25 miles from Building 434, and approximately 2 miles from the proposed WSO site.

An IPAC report was generated in accordance with USFWS guidance for both Building 434 and the WSO proposed site (Appendix D). No RTE species have been documented at either site, but both sites contain northern long-eared bat (NLEB) habitat. The NLEB is federally endangered. It should be noted that inclusion in this list does not necessarily mean that a species is known to occur within the BARC facility, but only acknowledges the potential for its occurrence based on historic records, known ranges, and presence of habitat (USFWS, 2020a).

The NLEB can be found across much of the eastern and north central United States and all Canadian provinces from the Atlantic coast west to the southern Northwest Territories and eastern British Columbia. NLEBs are colonial hibernators, entering their winter hibernacula in late August or September. After spring emergence, bats migrate to summer roosting and foraging grounds. In summer, the species is often associated with forested habitats where the bats make use of tree roosts, especially near water sources (USFWS, 2020a). Loose bark, broken tree limbs, cavities, and cracks in a tree can all be used by bats as roosting sites. Most frequently, they are found hanging singly or in small groups (Minnesota Department of Natural Resources [MDNR], 2017). NLEBs forage for insects over water, in forest clearings, and under tree canopies, using echolocation to catch prey and to navigate. They may also glean insects off leaves and other surfaces, a behavior that may be aided by their unusually large ears (USFWS, 2020a).

The IPAC Report generated a list of 13 migratory birds within the Building 434 project site (Appendix D). This list does not necessarily include all possible migratory birds within each project site. Bald eagles are listed as possible migratory inhabitants of the area. These birds are specifically protected under the BGEPA. The other 12 migratory birds species include: Black-billed Cuckoo (*Coccyzus erythropthalmus*), Bobolink (*Dolichonyx oryzivorus*), Canada Warbler (*Cardellina canadensis*), Dunlin (*Calidris alpina arcticola*), Golden-winged Warbler (Vermivora chrysoptera), Lesser Yellowlegs (*Tringa flavipes*), Prairie Warbler (*Dendroica discolor*), Prothonotary Warbler (*Protonotaria citrea*), Red-headed Woodpecker (*Melanerpes erythrocephalus*), Rusty Blackbird (*Euphagus carolinus*), Semi-palmated Sandpiper *(Calidris pusilla*), and Wood Thrush (*Hylocichla mustelina*).

There are 20 migratory birds listed as potentially occurring within the WSO proposed site, inclusive of those at the Building 434 site with the addition of the following: Cerulean Warbler (*Dendroica cerulea*), Eastern Whip-poor-will (*Antrostomus vociferus*), Kentucky Warbler (*Oporornis formosus*), King Rail (*Rallus elegans*), Least Tern (*Sterna antillarum*), Nelson's Sparrow (*Ammodramus nelsoni*), and Willet (*Tringa semipalmata*). Further details can be found in Appendix D.

Poultry Quarantine Facility

Building 434 is immediately surrounded by farmland, with sections of forest adjacent to the farmland. The proposed site is a developed area with very little vegetation, as the surrounding forested areas are not within the LOD for the site. No NLEBs have been documented within the proposed site, and there are no mature trees, nor forested areas within the LOD for NLEBs to roost.

Wildlife Staff Office

The WSO proposed site is surrounded by farmland and forested area. The area has been previously disturbed, with a gravel parking lot remaining adjacent to Beaver Dam Road. The undisturbed natural areas surrounding the WSO proposed site are not within the LOD for the site. Both during and after construction of the Proposed Action, all forested areas surrounding the site would remain undisturbed. Given the large wetland and lake south of the WSO proposed site, NLEB could exist on the property, although, none have been documented. The site itself is unlikely to provide roosting for NLEBs, as they prefer mature trees in forested areas. The WSO proposed site and its LOD are not forested.

3.5.2 Anticipated Impacts

3.5.2.1 Proposed Action

No impacts to vegetation would be expected to occur under the Proposed Action. No tree removal would occur at either Building 434 or the WSO proposed site, and the surrounding forested areas would not be disturbed. Any grasses disturbed during construction would be replanted with native grasses, so impacts would be negligible.

Any required tree clearing would be subject to time of year restrictions to avoid adverse impacts to roosting bats. To avoid prohibited incidental take of NLEBs during the pup season, the USFWS avoidance measure prohibits any tree removal from June 1 to July 31. Tree removal is defined as cutting down, harvesting, destroying, trimming, or manipulating trees, saplings, or snags. This seasonal restriction on tree removal is not required when removing hazardous trees for the protection of human life and property, as incidental take resulting from hazardous tree removal is exempted by the USFWS's 4(d) rule (USFWS, 2020a). Projects that incorporate this USFWS avoidance measure do not require further coordination with the USFWS regarding RTE species and/or special concern species and resources under the ESA (87 Stat. 884, as amended; 16 U.S.C. 1531 *et seq.).*

All project activities that could result in migratory bird take outside the maximum migratory bird nesting season (mid-March through mid-August) would be avoided to the greatest extent possible. If this is not possible, then any habitat alteration, removal, or destruction during the primary nesting

season for migratory birds (May through August) would be avoided; although, nesting seasons vary by species.

Minor adverse impacts to RTE species could occur at either site due to potential wildlife disturbance from operating equipment noise during construction. These impacts would be temporary and any wildlife that is disturbed by increased human activity and noise levels from heavy equipment during construction would return once construction is complete and additional personnel and machines needed for construction have left. There are no mature forest stands on either site that would be good for NLEBs; however, time of year restrictions would be observed, as appropriate to minimize potential impacts. No adverse impacts to nesting eagles are anticipated, as Building 434 is approximately 1.25 miles from, and the WSO project site is approximately 2 miles from, the nest area described, and these are both well outside of the distance buffers recommended by USFWS (USFWS, 2007).

Poultry Quarantine Facility

Building 434 and its surrounding areas are previously disturbed due to farming activities and previous construction of the goat barn and its associated out-buildings. Any areas with removed or disturbed soil would be reseeded with native grass, and several native privacy shrubs would be planted along the western edge of the property to minimize visual impacts. There are no existing mature trees within the LOD for the Proposed Action, so there is little potential for RTE species within the site, and any occurrence would be expected to be limited to foraging. However, construction activities could temporarily disturb RTE or migratory bird species near the site. These impacts would be temporary and any wildlife that is disturbed during construction would return once construction is complete. The nearest bald eagle nest is approximately 1.25 miles from the proposed Building 434 site. According to the USFWS National Bald Eagle Management Guidelines, distance buffers should be implemented around any known bald eagle nests. These guidelines recommend buffers of 660 feet for any projects that are visible from the nest, and 330 feet for any projects not visible from the nest. Building 434 is well outside of those buffer areas, so no impacts are expected to that bald eagle nest (USFWS, 2007). Therefore, there are no expected impacts to vegetation and potential minor adverse impacts to RTE species during construction.

Wildlife Staff Office

The WSO proposed site is surrounded by farmland and forested areas, and was previously disturbed for farming and residential purposes. Any areas with removed or disturbed soil would be reseeded with native grass, and several native privacy shrubs would be planted along the western edge of the property to minimize visual impacts. There are no existing mature trees within the project site, but the forested area just south of the site provides the potential for NLEB and migratory birds to exist on the property, although none have been documented. However, construction activities could temporarily disturb RTE species near the site. These impacts would be temporary and any wildlife that is disturbed during construction would return once construction is complete. The nearest bald eagle nest is approximately 2 miles from the proposed WSO site. According to the USFWS National Bald Eagle Management Guidelines, distance buffers should be implemented around any known bald eagle nests. These guidelines recommend buffers of 660 feet for any projects that are visible from the nest, and 330 feet for any projects not visible from the nest. The proposed WSO site is well

outside of those buffer areas, so no impacts are expected to that bald eagle nest (USFWS, 2007). Therefore, there are no expected impacts to vegetation and potential minor adverse impacts to RTE species during construction.

3.5.2.2 No Action Alternative

Under the No Action Alternative, there would be no changes to biological resources. Thus, no impacts would occur to either proposed site.

Poultry Quarantine Facility

No adverse impacts would occur to biological resources at Building 434 under the No Action Alternative. The site would remain unused, it would be mowed and maintained as it currently is, and no vegetation or RTE species would be impacted.

Wildlife Staff Office

No adverse impacts would occur to biological resources at the WSO proposed site under the No Action Alternative. The site is currently undeveloped, and would remain so under the No Action Alternative. The site would be mowed and maintained as it currently is, and no vegetation or RTE species would be impacted.

3.6 Cultural Resources

3.6.1 Existing Conditions

Cultural resources include "historic properties" as defined by the NHPA of 1966, "cultural items" as defined by the Native American Graves Protection and Repatriation Act of 1979 (NAGPRA), "archaeological resources" as defined by the Archaeological Resource Protection Act of 1979 (ARPA), "sacred sites" as defined by EO 13007 to which access is afforded under the American Indian Religious Freedom Act (AIRFA) of 1987, and collections and associated records as defined in 36 CFR Part 79.

Archaeological resources consist of locations where prehistoric or historic activity measurably altered the earth or produced deposits of physical remains. Architectural resources include standing buildings, districts, bridges, dams, and other structures of historic significance. Traditional cultural properties include locations of historic occupations and events, historic and contemporary sacred and ceremonial areas, prominent topographical areas that have cultural significance, traditional hunting and gathering areas, and other resources that Native Americans or other groups consider essential for the persistence of their traditional culture.

Several Federal laws and regulations—including the NHPA of 1966, the Archaeological and Historic Preservation Act of 1974, the AIRFA of 1978, the ARPA of 1979, and the NAGPRA of 1990—have been established to manage cultural resources. In order for a cultural resource to be considered significant, it must meet one or more of the following criteria from 36 CFR Part 60.4 *Criteria for evaluation* for inclusion on the NRHP:

The quality of significance in American history, architecture, archaeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association and

1) Are associated with events that have made a significant contribution to the broad patterns of our history;

2) Are associated with the lives of persons significant in our past;

3) Embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or

4) Have yielded, or may be likely to yield, information important in prehistory or history.

An undertaking is any Federal action with the potential to affect historic properties. In order to identify historic properties with the potential to be affected by an undertaking, Federal agencies must define the area of potential effect (APE). The APE, defined by 36 CFR Part 800.16 is the geographic area in which an undertaking may directly or indirectly cause changes in the use or character of a historic property. The APEs for Building 434 and the WSO proposed site include the limits of the proposed ground disturbance and those areas from which the Proposed Action is visible. Figures 3-9 and 3-10 show a 0.5 mile buffer around the Proposed Action locations.

3.6.1.1 Architectural Resources

Building 434 is located within the bounds of BARC's Central Farm, and the WSO proposed site is located within the bounds of BARC's East Farm. The Central Farm is the largest and oldest section of BARC, encompassing 2,980 acres. The Central Farm was acquired in stages between 1910 and 1939, with most of the buildings being constructed between 1911 and 1934. The East Farm encompasses approximately 2,253 acres, with the majority of the buildings constructed between 1933 and 1942.

The entire BARC facility, including the Central and East Farms, is a historic district, Maryland Inventory of Historic Places (MIHP) PG: 62-14, determined eligible for inclusion in the NRHP in 1998 (Maryland Historical Trust [MHT], 1998). BARC is eligible under Criterion A as an important site which reflects the development of a national center for agricultural experimentation and testing. It is the main research facility of the USDA and is the leading and most diversified agricultural research complex in the world.

BARC is also eligible under Criterion C. Because the mission of the facility has remained constant over the years, the landscape of open agricultural fields and clusters of Georgian Revival Style research buildings reflects a strong level of integrity. The physical appearance of BARC was strongly influenced in the 1930s by the planning team of A.D. Taylor, landscape architect, and Delos Smith, architect. The Civilian Conservation Corps and the individual bureaus at BARC also played important roles in shaping the landscape (MIHP, 2020).

Figure 3-9: APE for Proposed Poultry Quarantine Facility

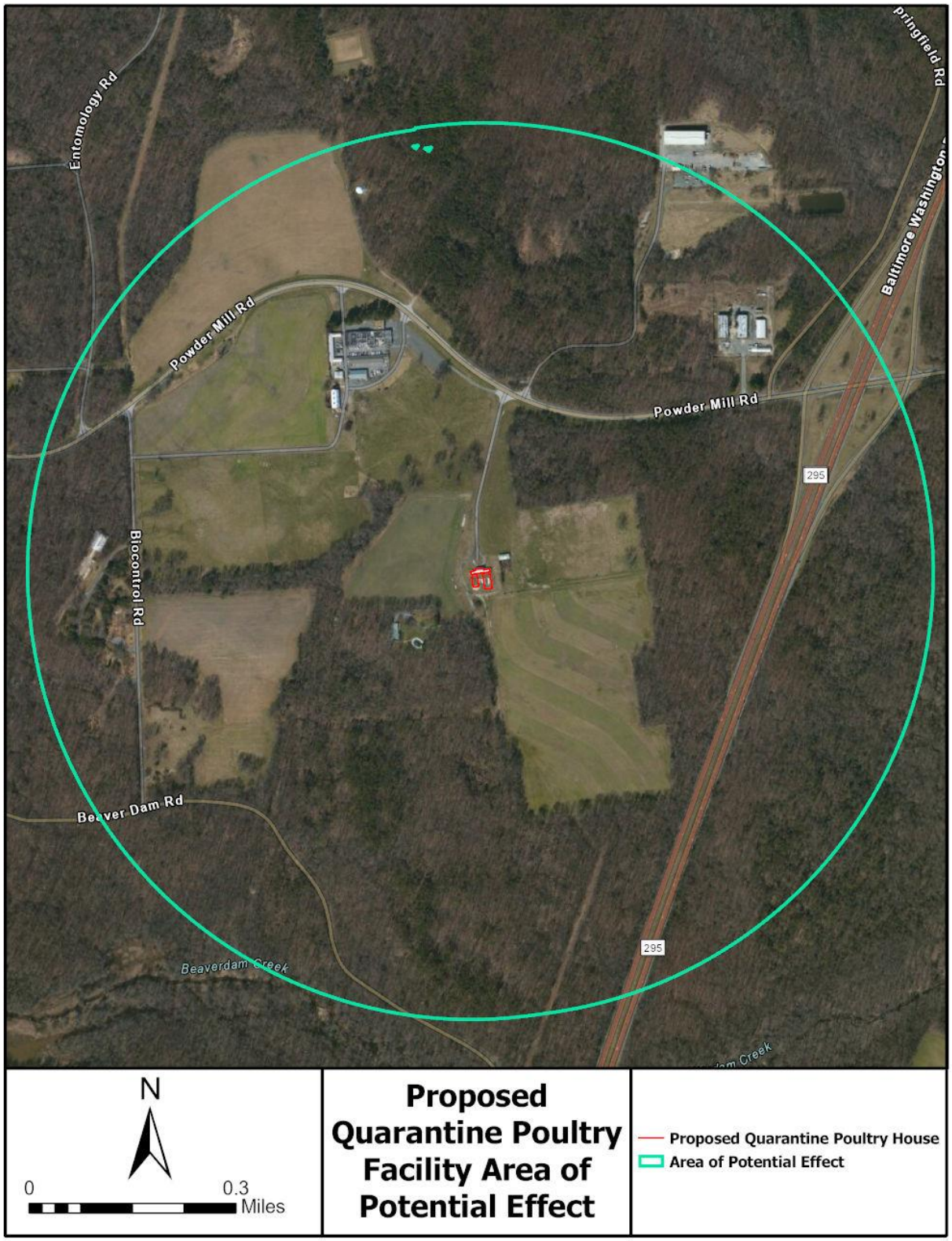
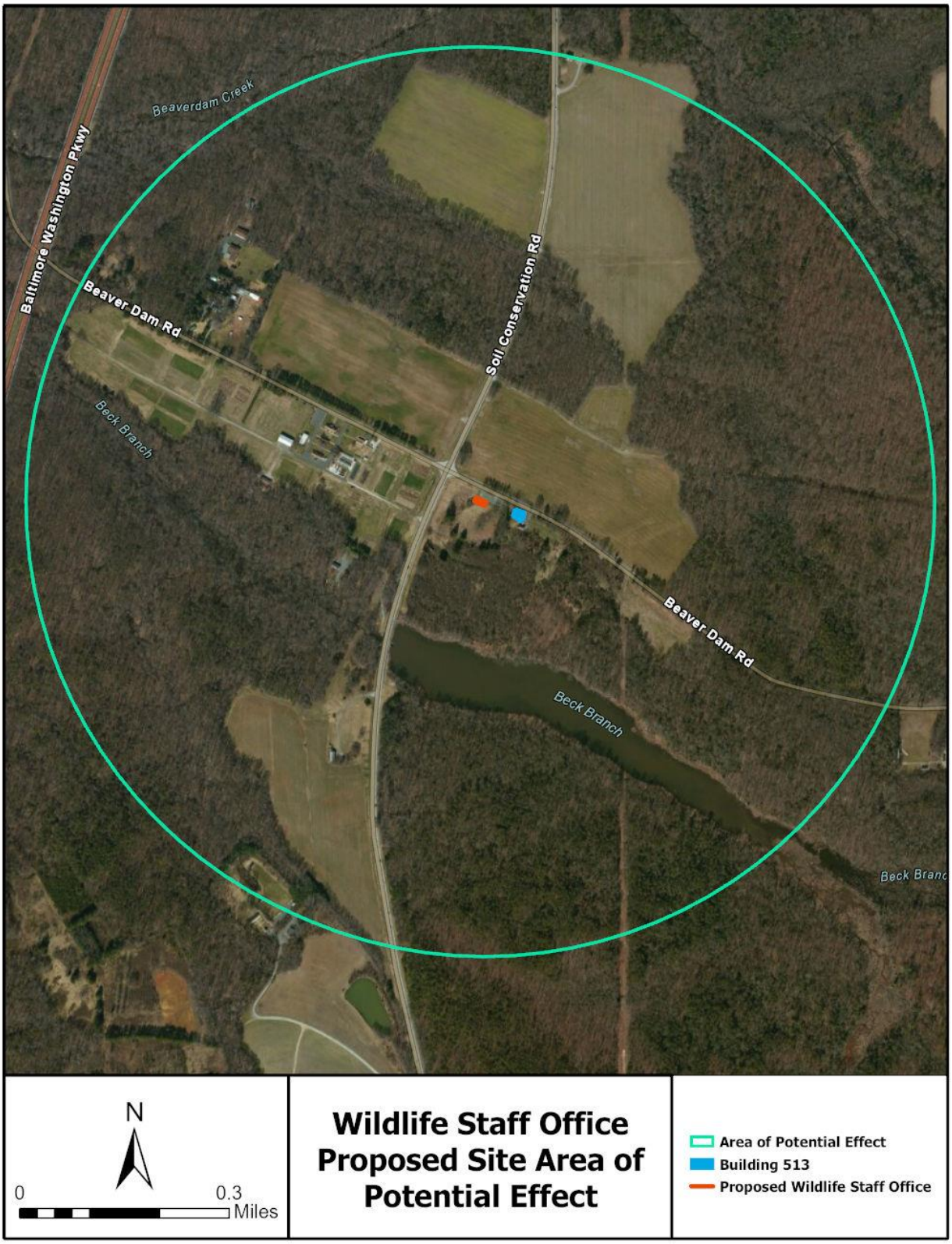


Figure 3-10: APE for the Proposed Wildlife Staff Office



Poultry Quarantine Facility

According to MIHP form (PG 67-48) prepared in 2017 (MIHP, 2017a), Building 434 is a contributing element to the larger NRHP eligible BARC Historic District under Criteria A and C. While Building 434 is not individually significant, it contributes to the overall significance of BARC. The history and development of the agricultural research facility reflects New Deal policies and programs, and contains notable landscape architecture, Georgian Revival architecture, and experimental agricultural architecture (MIHP, 2017a).

Built in 1934, Building 434 was used as a goat barn within an area used by the BAI Division of Animal Husbandry. The rectangular building faces north towards Powder Mill Road on an east-west axis, and is three bays deep. It is approximately eleven bays in total width, arranged in a tripartite plan, with two wings (one with four bays, the other with five) intersecting a central seven bay building. Design drawings for the building indicate the two-story central brick pavilion was designed first, beginning in 1933. The design was revised around the same time that plans for the one-story wings were drawn in January 1934. Plans for the central block denote the outline of the east and west wings with the annotation, "future construction" (MIHP, 2017a).

Wildlife Staff Office

The WSO proposed site is located approximately 95 feet to the west of the Hall House, Building 513. Building 513 was purchased by the Federal government in 1933 during a time when the USDA was expanding its land holdings through the acquisition of multiple privately-owned farms that would eventually form the East Farm. The BAI purchased 1,811 acres of property in 1933. It is believed that Building 513 and the WSO proposed site were among the many properties it purchased that year. Building 513 was formerly a residence constructed in 1885. However, the 1861 Martenet's Map and the 1878 Hopkins Atlas depict a building in the same location as Building 513, indicating the building's construction date potentially closer to circa 1860. This property was owned by William Hall, believed to be the brother of Richard Hall, owner of the nearby Walnut Grange Plantation (Building 209). Hall descendants sold the Walnut Grange Plantation with 375 acres to the USDA in 1910 which would become part of the Central Farm (Pearl, 1990). Further supporting that Building 513 is associated with the Hall family is a nearby historic cemetery to the southwest, between Building 513 and Soil Conservation Road (MIHP, 2017b). This family cemetery includes two marked graves belonging to Edward Hall (1778-1834) and Rebecca Hall (1794-1829).

Building 513 was used by the BAI, the earliest of the USDA research bureaus at BARC, from 1933 to 1964. The property would then be transferred to the Soil Conservation Service until it was returned to BARC in 2001 (MIHP, 2017b).

Under Criteria A and C, Building 513 contributes to the larger BARC Historic District and is also individually eligible for the NRHP under Criteria A and C for its association with the local Beltsville history during the second half of the nineteenth century. The building is associated with the Hall family, a prominent Beltsville family that was a large property owner during the late eighteenth and nineteenth centuries (MIHP, 2017b).

3.6.1.2 Archaeological Resources

Several archaeological surveys have been conducted across the BARC property over the years. Of the 35 archaeological sites identified on BARC, 25 are prehistoric, eight are historic-age, and one has both prehistoric and historic-age components. Two sites have been determined eligible for NRHP inclusion, 13 have been determined ineligible, and 19 have unknown/undetermined eligibility.

Poultry Quarantine Facility

No archaeological surveys have been conducted within the Building 434 project APE, and no archaeological sites have been previously identified.

Wildlife Staff Office

The WSO proposed site is approximately 167 feet to north of the Hall family cemetery, which contains the two marked graves dated 1829 and 1834. The possibility of other unmarked graves adjacent to these marked graves is high. In 1990, John Milner & Associates, Inc. completed a Phase I archaeological survey within the WSO APE, and identified a late 19th century artifact scatter, site 18PR394, associated with the Hall House. The 1990 survey concluded that while additional investigations were recommended to locate unmarked graves associated with the cemetery, no further survey work would be required associated with the historic artifact scatter (John Milner Associates, 1990).

3.6.2 Anticipated Impacts

3.6.2.1 Proposed Action

Minor, adverse and beneficial impacts would occur to cultural resources under the Proposed Action. USDA is working with consulting parties, per Section 106 of the NHPA, to avoid, minimize, and mitigate potential adverse effects to historic properties. These expected impacts will be reduced to negligible levels through mitigation measures.

Poultry Quarantine Facility

Minor adverse impacts, which would be mitigated to a negligible level, would occur to cultural resources under the Proposed Action.

The repurposing of Building 434 will result in the long term preservation of this historic property and would prevent an adverse effect through neglect. Building 434's continued use as an agricultural research facility is in keeping with the historic significance of the District. While the interior of Building 434 would be completely renovated and repurposed, exterior character-defining features would be retained. The Georgian Revival style would continue to be visible through the building's white trim, brick veneer and cladding, side gabled roof, centered front door, fenestration pattern, and the symmetrical layout and massing of the original parts of the building. Though the building would no longer be specifically designed or operated as a 'goat barn,' Building 434 would retain its location, setting, feeling, and association within an agricultural research complex.

Proposed alterations that would adversely impact the historic building are the removal of portions of the rear walls of the historic additions to connect the new quarantine poultry additions, the addition of black chain link fence around the sides and rear of the building for biosecurity, and the addition of the four exterior feed storage tanks that would be installed on the eastern and western ends of the historic additions. The historic fabric of the building would be punctured underneath the windows on the eastern and western ends of the building to allow for augers to pass feed from the exterior tanks to the interior feed delivery system.

Proposed ground disturbance around the building and along the access road would take place in areas that have been previously disturbed and have a low potential to contain significant archaeological resources. The proposed rear poultry house additions have been scaled, so their rooflines are only slightly visible from the front of Building 434, minimizing their visual intrusion on the historic approach to the site. The designs also include vegetative screening along the western boundary to minimize the appearance of the exterior poultry additions. The MHT has *concurred* via correspondence dated 16 June 2020, that there would be no adverse impacts to historic resources and no further investigations are warranted. Should any archaeological resources be inadvertently discovered during construction, these construction activities would be halted, the appropriate agencies and Tribes would be contacted, and an archaeological investigation would be conducted, as appropriate.

Wildlife Staff Office

Minor adverse impacts, which would be mitigated to a negligible level, would occur to cultural resources under the Proposed Action.

While an existing tree line separates Building 513 from the parking lot, the modular unit will be visible from Building 513, as well as the National Plant Materials Center, Building 509, located to the west along Beaver Dam Road. USDA is proposing to add a dense vegetative buffer of fast growing evergreen trees along the western side of the mobile home to visually obscure the modular unit from Soil Conservation Road. The single-story, 24-foot by 60-foot modular building would have a muted color scheme and low profile to minimize impacts to the visual character of the area (Figure 3-11). Vegetative screening and the unit's residential appearance will minimize the proposed action's visual intrusion on the surrounding agricultural setting.

Figure 3-11: Color Scheme for Modular Building

To minimize ground disturbance, water will be brought to the modular unit along a previously disturbed existing utility corridor parallel to Beaver Dam Road to the west of the parking lot. Electrical will also be brought to the unit via existing lines and overhead poles. Proposed land disturbance with the potential to affect archaeological resources would consist of excavation, cut and fill, to create the level concrete slab on grade for the modular unit's footprint and the installation of a new septic tank and leach field sized according to county specifications. The MHT has *concurred* via correspondence dated 16 June 2020, that there would be no adverse impacts to historic resources and no further archaeological investigations are warranted. Should any archaeological resources be inadvertently discovered during construction, these construction activities would be halted, the appropriate agencies and Tribes would be contacted, and an archaeological investigation would be conducted, as appropriate, to determine the full extent of the resources and whether the Proposed Action must be modified.

Due to concerns regarding the potential presence of unmarked graves associated with the Hall Family Cemetery, a minimum 100 foot buffer of the existing graves has been applied to any proposed land disturbance to avoid potential impacts. At its closest point, the LOD would be 167 feet north of the cemetery, so the LOD would be entirely outside of the required buffer.

3.6.2.2 No Action Alternative

Under the No Alternative Action, minor adverse impacts would occur at Building 434 due to continued deterioration. No adverse impacts would occur at the WSO proposed site, as there are no resources on the site, and the viewshed of Buildings 513 would not be impacted by new construction.

Poultry Quarantine Facility

Under the No Action Alternative, Building 434 would not be renovated in any way. Building 434 is a contributing factor to the BARC Historic District. The building is currently unoccupied and unmaintained. If the Proposed Action is not executed, the building will continue to deteriorate. The historic and architectural integrity of the building would decrease with the physical deterioration of the building.

Wildlife Staff Office

There would be no adverse impacts to the WSO proposed site under the No Action Alternative. There would be no ground disturbance, so there would be no change or disturbance of any archaeological resources. There would also be no viewshed impacts to Buildings 513, which is a contributing resource to the BARC Historic District.

3.7 Socioeconomics

3.7.1 Existing Conditions

Socioeconomic factors are defined by the interaction or combination of social and economic factors. The relevant factors related to BARC include population, employment, environmental justice, and protection of children.

3.7.1.1 Population and Employment

During 2018, BARC employed approximately 540 people, including scientists, professional staff, administrative and facilities support, and visiting scientists and students (USDA, 2018a). This workforce represents a relatively small portion of the 2018 Prince George's County Maryland estimated population of 909,308 (U.S. Census Bureau, 2018) and 2018 average estimated labor force of 504,423 (U.S. Department of Labor, 2019).

The population of Maryland increased by 4.7 percent from 2010 to 2018. The population growth rates of Prince George's County and Beltsville were higher than the statewide average over the same period, at 5.3 percent and 6.7 percent, respectively. However, the population of Prince George's County is projected to grow at an average annual rate of 0.4 percent from 2018 to 2030, slower than the projected state population growth rate of 0.7 percent annually over that same period.

The 2018 estimated resident population in the Beltsville area was approximately 16,772. The median age of the local population is 36 years. Of these residents, age, 25 and over, 82.6 percent had completed high school and 33.7 percent had completed at least four years of college, which is above the national average of 29.8 percent (U.S. Census Bureau, 2018).

The 2018 U.S. Census Bureau data showed an estimated labor force in Greenbelt and Beltsville of 16,087 out of a group of 20,962 residents of ages 16 years and over. This showed a participation rate of 69 percent with a 6.5 percent unemployment rate. This participation rate is higher than the national average of 63.3 percent. The distribution of employment is as follows: private sector 80.5 percent; government 13.4 percent; and self- employed 5.9 percent. The median household income is $61,937; the mean is $87,864. Approximately 11.5 percent of the households were considered below the poverty income level (U.S. Census Bureau, 2018).

3.7.1.2 Environmental Justice and Protection of Children

Environmental justice addresses the race, ethnicity, and poverty status of populations within the Region of Influence (ROI). The ROI for socioeconomic characteristics encompasses Prince George's County, Maryland. This ROI includes BARC and the immediately surrounding communities that have direct and indirect socioeconomic relationships with BARC. On 11 February 1994, President Clinton issued EO 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations,* to focus the attention of Federal agencies on the human health and environmental conditions in minority and low-income communities. Environmental justice analyses are performed to identify potential disproportionate adverse effects from proposed actions and to identify alternatives that might mitigate these effects.

The term minority refers to people who classified themselves as American Indian or Alaskan Native; Asian or Pacific Islander; African Americans or Black, not of Hispanic origin; or Hispanic. Minority populations are defined as areas where racial minorities comprise 50 percent or more of the total population (Council on Environmental Quality [CEQ], 2016). Because CEQ guidance does not establish a threshold for low-income communities, a low-income population is one with at least 25 percent or greater of its population living in poverty for the purposes of this EA.

On 21 April 1997, President Clinton issued EO 13045, *Protection of Children from Environmental Health Risks and Safety Risks*, directing each Federal agency to ensure that its policies, programs, activities, and standards address disproportionate environmental health or safety risks to children that may result from the agency's actions. EO 13045 recognizes that a growing body of scientific knowledge demonstrates that children may suffer disproportionately from environmental health and safety risks due to still developing neurological, immunological, physiological, and behavioral systems. Examples of risks to children include increased traffic volumes and industrial- or production-oriented activities that would generate substances or pollutants that children could come into contact with and ingest. Historically, children have not been present as students, residents, or frequent visitors at BARC.

3.7.2 Anticipated Impacts

3.7.2.1 Proposed Action

There would be no increase in the population or workforce of BARC due to the Proposed Action. There would not be any expected adverse impacts to environmental justice, as even though approximately 76 percent of the population in the Beltsville area are racial minorities, the Proposed Action would take place on Federal property away from all but a handful of residences or facilities that are used by the general public. Additionally, the Proposed Action is not within the vicinity of a child development center or school, so there are no areas where children would be disproportionately affected by construction impacts. Implementation of the Proposed Action would not result in a direct or indirect significant beneficial or adverse impact on socioeconomics.

Construction would require the temporary employment (by the construction contractor) of skilled laborers. Additionally, construction would require the purchase of supplies and materials (aggregate, masonry, landscape plantings) from local and regional vendors. The temporary increase in employment and spending on materials would have a short-term, minor beneficial impact on the local companies that this funding would support, but only a negligible impact on the regional socioeconomic conditions. These construction-related beneficial impacts would end once construction is completed.

3.7.2.2 No Action Alternative

No impacts to socioeconomic conditions would occur under the No Action Alternative. The workforce at BARC would remain as it is currently if the Proposed Action were not to be carried out.

3.8 Transportation

3.8.1 Existing Conditions

The BARC facility is approximately 15 miles (by road) northwest of Washington, D.C. It is accessible from several major highways running adjacent to or through the facility, including I-94/I-495 (the Capital Beltway), U.S. 1 (Baltimore Avenue), and MD 295 (Baltimore-Washington Parkway). Numerous minor paved roads provide direct access to buildings and building clusters for the public and personnel. Multiple transit systems provide access directly to the BARC facility and destinations within the surrounding area. Parking is provided within most building complexes accessible to employees and visitors at no cost (USDA, 2018a).

The northern terminus of the Washington Metropolitan Area Transit Authority (WMATA) green and yellow metrorail lines (collocated) is located at the WMATA Greenbelt Station, which is located south of I-495, between the intersections with Rhode Island Avenue and Cherrywood Lane, near the southern boundary of the Linkage Farm. The green and yellow metrorail lines provide access south into Washington, D.C. The Maryland Area Regional Commuter (MARC) train provides regional service to the area, with two stops outside the BARC facility, at the Greenbelt Station just south of the Linkage Farm and the Muirkirk Station north of the Central Farm (Maryland Department of Transportation [MDOT], 2019).

WMATA and the Regional Transportation Agency (RTA) of Central Maryland provide bus services near BARC, and have multiple routes that cross and run adjacent to the BARC facility. These routes provide access to the Central, Linkage, and North Farms (Washington Metropolitan Area Transit Authority [WMATA], 2018). The USDA also provides a limited shuttle service for BARC employees that connects to the WMATA Greenbelt Metro Station and makes stops at several BARC building locations (USDA, 2016).

Poultry Quarantine Facility

Powder Mill Road is the major east-west public roadway across the facility and provides multiple access points to the Central Farm. It bisects the Central Farm and serves as the northern boundary of the East Farm. This road is often used as a conduit for public through traffic, particularly to and from MD 295, along with traffic associated with facility personnel. This is the road used to access Building 434.

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Beaver Dam Road is also an east-west connector running through the Central Farm and East Farm south of Powder Mill Road. Beaver Dam Road generally serves facility personnel and is not a conduit for public through traffic. Beaver Dam Road provides access to the Central and East Farms from MD 295. This is the road used to access the WSO proposed site. Soil Conservation Road, which runs north-south and connects Greenbelt Road to Powder Mill Road, intersects Beaver Dam Road to the west of the WSO proposed site, is a conduit for public through traffic and would serve facility personnel and hunters.

3.8.2 Anticipated Impacts

3.8.2.1 Proposed Action

The Proposed Action would have no impact on the main roadway system providing access across the BARC facility. No impact would occur on the WMATA bus service or the BARC employee shuttle service that operates on BARC roadways. Similarly, no impacts would occur on the off-BARC metrorail or commuter train service or infrastructure.

In the short term, minor impacts on traffic traveling on the local roads would occur due to the temporary increase in vehicles and large equipment accessing the BARC facility and travelling within the facility during construction and renovation activities. Increased vehicle and heavy equipment traffic could cause minor disruptions to traffic flow during peak travel times. Minor long-term impacts on localized traffic may also occur because of the increase in vehicle traffic in the

vicinity of Building 434 or the WSO proposed site. The physical condition of the existing roads (e.g., pavement) would be assessed prior to initiating project activities. Roadway maintenance would continue, and damage caused by heavy equipment would be repaired as quickly as possible.

Poultry Quarantine Facility

Traffic increases would be seen at Building 434 during construction and renovation of the building, and heavy equipment would be needed for construction. Construction equipment would be temporary and would cause minimal traffic issues, as the area is not often frequented by BARC staff. After construction is finished, traffic would be permanently increased by the BARC workers who would be regularly visiting the poultry quarantine facility for routine maintenance and job operations. This increase in traffic would be minimal, as there are only one to two BARC workers working at the poultry quarantine facility at any given time. There would also be minimal anticipated impacts to the private residents that share an entrance road with Building 434. BARC would ensure that access to the private residence remains available throughout the construction and renovation process, and that any disturbances would be minimized and coordinated with the residents.

Wildlife Staff Office

The roads surrounding the WSO proposed site would experience an increase in traffic during construction and subsequent operation of the WSO facility. Construction equipment would be temporary and would cause minimal traffic issues, as the area is not often frequented by BARC staff or the public. The traffic associated with operation of the facility post-construction would be minimal, as there are only two WSO workers. Minimal traffic would also be expected from hunters and other members of the public that visit the WSO for recreational purposes.

3.8.2.2 No Action Alternative

Under the No Action Alternative, no adverse impacts would occur to traffic and transportation.

Poultry Quarantine Facility

Building 434 currently has no traffic from BARC workers because it is not operational. The only consistent traffic is from the private residence that shares an entrance road with Building 434. Under the No Action Alternative, the building would remain non-operational and no increase to traffic would occur.

Wildlife Staff Office

The WSO proposed site has minimal traffic from BARC workers, as there are no structures on the WSO proposed site and Building 513 is currently non-operational. Under the No Action Alternative, these conditions would remain and no increase in traffic would occur.

3.9 Utilities

3.9.1 Existing Conditions

3.9.1.1 Wastewater Treatment Facilities

BARC operates and maintains two wastewater treatment plants (WWTP), one located on the west campus and one located on the east campus. The BARC-East WWTP serves the Central Farm area which includes Building 434. The entirety of the South and East Farms (including Building 513), as well as some isolated structures across BARC such as residences, former airport buildings, and University of Maryland facilities, use septic tanks and drain fields for wastewater management (USDA, 1996).

3.9.1.2 Solid Waste Disposal

Non-hazardous solid waste (e.g., standard office waste and non-hazardous laboratory wastes) generated by operations at BARC are disposed of off-site. Each active building or site that generates waste has a waste management and disposal protocol in place, including recycling of several material types. For long-term projects, such as building renovations, that are not part of ongoing typical operations, project-specific waste management plans are developed. The former airport site on the BARC property is utilized for management of animal wastes and wastewater treatment sludge by land application.

3.9.1.3 Electricity

Poultry Quarantine Facility

Building 434 has existing electric lines running to it, primarily via an overhead line running in an east-west direction just south of the building. Two utility poles will need to be removed for construction of the new East and West Wings. One of these poles supports a system of three 13.2kV to 208Y/120V 15 kVA transformers connected to electric panels in Building 434 and 435A. The 208Y/120V panel in Building 434 has a 3-pole, 150 amp main circuit breaker, and 42 poles, the majority of which are used. Only 8 poles are not used. The circuit breakers are in fair condition but the rest of the panel board is rusted, the panel schedule is faded and illegible, and there are no manufacturer nameplates. Building 434 does not have lightning protection on the roof, telecom availability, or a standby generator.

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While there are no existing structures on the WSO proposed site, there is an existing electric line that runs to Building 513, just east of the proposed project site. Electricity is supplied to Building 513 by overhead electrical lines running along the north side of Beaver Dam Road. The electricity travels across the street and connects to a power pole near the building, where it then travels into a 200-amp 240/120V panel. This 200-amp panel powers all loads in Building 513. There is an existing parking lot light fixture fed from Building 513 and mounted on a wooden pole.

3.9.1.4 Natural Gas

Poultry Quarantine Facility

Building 434 has natural gas service via an existing line that runs north-south from Powder Mill Road.

Wildlife Staff Office

No natural gas infrastructure exists on the site, either within the parking lot or Building 513.

3.9.2 Anticipated Impacts

3.9.2.1 Proposed Action

Overall, there would be expected minor impacts to electricity, and to solid waste, wastewater, and natural gas during construction only. Impacts to solid waste and natural gas during operation of the facilities are expected to be negligible.

Under the Proposed Action, there would be a negligible change in wastewater released to the treatment facility. The renovations at Building 434 would require tying into an existing 6-inch sewer main that runs east-west along Powder Mill Road. However, that sewer main has sufficient capacity to be able to receive additional wastewater from the proposed poultry quarantine facility, so no significant impacts are anticipated. The proposed WSO site does not currently tie into the wastewater system on BARC, and the Proposed Action includes the implementation of a new septic tank and leach field to convey wastewater from the WSO proposed site. Thus no adverse impacts would be expected to occur regarding wastewater treatment or wastewater removal at the BARC-East WWTP.

During the proposed renovation and construction projects, construction waste dumpsters would be temporarily located on site. These dumpsters would receive construction waste and would be covered during non-working hours. When the dumpsters are full, they would be removed from the site and their contents taken to an approved disposal facility permitted to receive construction debris. Construction debris would be sorted by material and placed in dumpsters specifically designated as construction waste receptacles. The dumpsters would be removed from the site once all disposal activities have been completed. Thus, no adverse impacts would be expected to occur regarding the disposal of solid wastes at this site during construction.

Because operations of the poultry quarantine facility and WSO would remain the same under the Proposed Action, any solid waste generated by these facilities would be handled in the same manner as it is currently handled. As these facilities are not increasing in size, there are no expected adverse impacts to solid waste during operation.

Overall, minor changes in electricity usage would be expected, as the size and extent of the electrical systems is planned to increase under the Proposed Action. Under the Proposed Action, the existing overhead electric lines just south of Building 434 would be removed, and replaced with underground lines running to the west of the proposed chicken wing (West Wing) and to the east of the proposed turkey wing (East Wing). Additionally, an emergency generator is proposed to support the poultry quarantine operations in the event of a power outage. Overall, the electrical capacity at Building 434 is expected to triple as a result of upgrades related to the Proposed Action.

To accommodate for new loads generated by construction of the East and West Wings, including a system of 250-watt plug-in heat lamps, the existing pole-mounted transformers will need to be replaced with a 150 kVA, 208Y/120V, pad-mounted transformer. This will feed a new main distribution panel located in the new electric room. Existing fluorescent light fixtures will be

replaced with LED lighting with new low voltage toggle switches installed in each room. The existing overhead line feeding Building 435A will be removed and demolished. The electrical work will to conform to the current versions of the following National Fire Protection Association (NFPA) Regulations: National Electric Code, Life Safety, and Standard for the Installation of Lightning Protection Systems.

At the WSO proposed site, there will be an overhead line run just north of Beaver Dam Road, which will cross under the road and go directly to the WSO proposed site. The upgrades to be made at the WSO proposed site are not expected to require any increase in electrical capacity. The existing overhead electrical lines feeding into Building 513 will be removed. Therefore, only minor adverse impacts on the electrical system are expected as a result of the Proposed Action.

There is currently a natural gas line that runs in a north-south direction from Powder Mill Road to Building 434. Under the Proposed Action, this line would remain, although the gas meter may need to be moved due to the proposed location of feed silos. It is expected that the existing gas line at Building 434 will support the renovations and new construction associated with the Proposed Action. Natural gas service is required to feed the hot water boiler for the radiant heating system and the domestic hot water heater. A gas shutoff switch and valve would be included at the service entry. No natural gas lines exist in the vicinity of Building 513 or the WSO proposed site, and there are no plans for natural gas at the WSO proposed site as part of the Proposed Action. Therefore, no adverse impacts on the natural gas supply at BARC would be expected.

3.9.2.2 No Action Alternative

Under the No Action Alternative, there would be no anticipated impacts to either proposed site. All utilities would remain in the current state with no disturbances.

3.10 Hazardous and Toxic Materials and Waste

3.10.1 Existing Conditions

Under 40 CFR Part 261, a large quantity generator (LQG) of hazardous waste is defined as an entity or operation that generates 1,000 kilograms or more of hazardous waste monthly, or more than one kilogram per month of acutely hazardous waste (U.S. Environmental Protection Agency [USEPA], 2019). Based on this definition, BARC is categorized as a LQG (USEPA Number: MD5123510732), and as such, must operate as an LQG under the State of Maryland's regulations pursuant to the Federal Resource Conservation and Recovery Act (RCRA). Hazardous wastes currently generated at BARC are primarily categorized as non-halogen solvents, analytical wastes, electrical devices, and compressed gases (USDA, 2018a).

BARC is a Superfund Site, listed on the National Priority List (NPL) in 1994 and entered into a Federal Facility Agreement in 1998, both of which govern the area's cleanup. BARC is addressing all areas of concern (AOCs) through the Site Screening Process and the Remedial Investigation and Feasibility Study process that results in a Record of Decision. There are a number of AOCs being addressed at BARC. Sixty-three AOCs were determined to require investigation after the Preliminary Assessment/Site Inspection and site-screening process was completed (Figure 3-12). The AOCs include several former landfills, chemical disposal pits, and open storage areas with contaminated soil, groundwater, and surface water with hazardous chemicals.

There are currently no known underground storage tanks located in the vicinity of Building 434 or the WSO proposed site.

Poultry Quarantine Facility

Building 434 has several AOCs within a mile of the site. BARC 32 is an AOC approximately 0.32 miles away. This site is still pending further investigations for treatment and remediation. Sites BARC 31, BARC 11, ENTECH R2, and EPIC 39 are also within a mile but have been investigated and require no further action (Figure 3-12).

Wildlife Staff Office

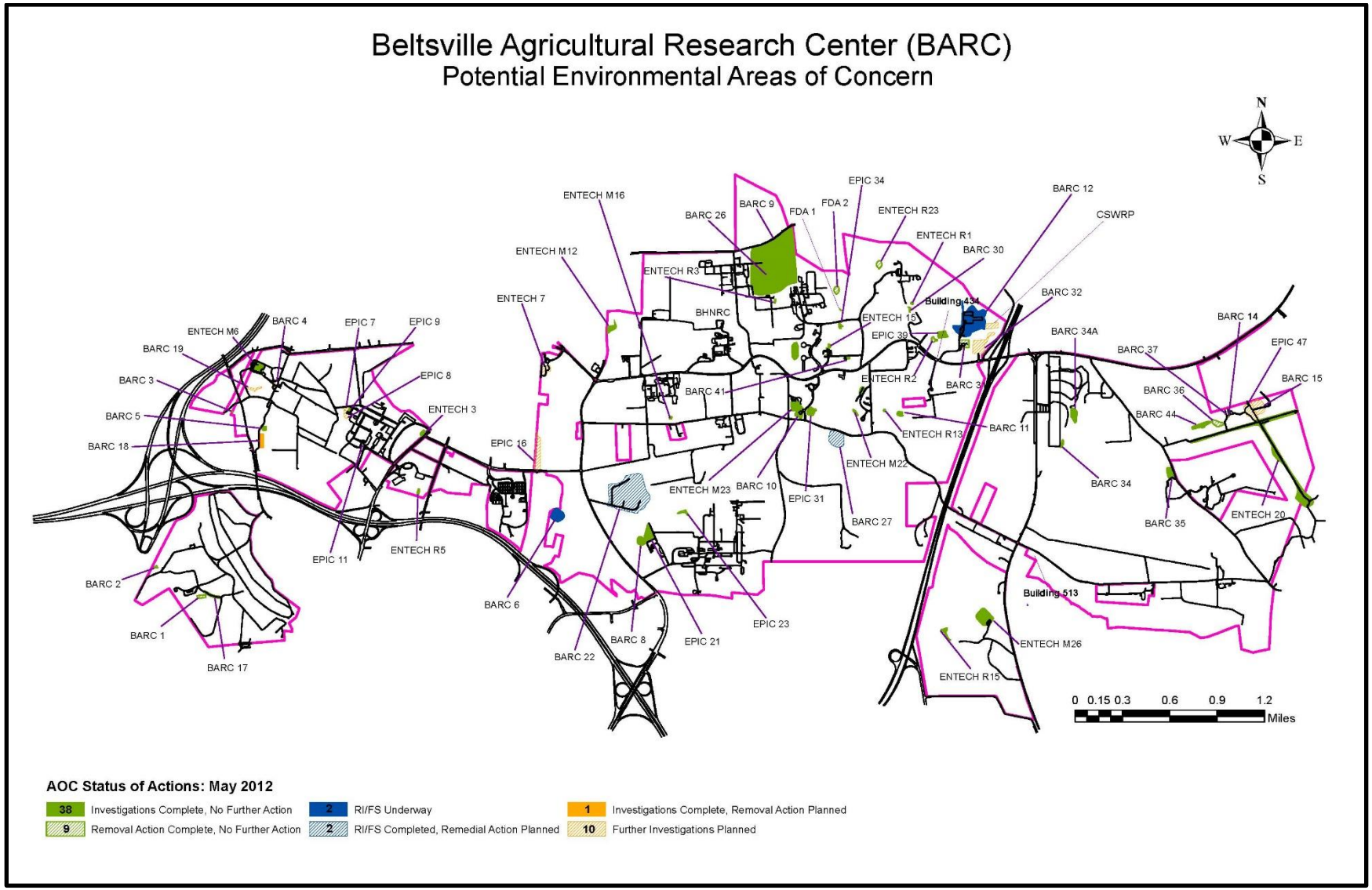
The WSO proposed site has fewer AOCs nearby, although they are not active. The closest AOC, ENTECH M26, is over a half mile south and is a site that has been investigated and requires no further action (Figure 3-12). The WSO proposed site is vacant and solid waste is not currently generated there. Hazardous wastes are not currently generated at the building site.

3.10.1.1 Light Ballasts, Lamps and Other Non-Construction Wastes

Given the age of Building 434, there are likely electrical fixtures and lamps currently in the building that may contain hazardous substances requiring special handling methods. Fluorescent lamps and electrical fixtures are regulated under the USEPA Universal Waste regulations due to small amounts of mercury and possibly lead. Prior to 1980, light ballasts and starters contained small amounts of polychlorinated biphenyls (PCBs). For a short period after 1980, PCBs were replaced with di (2-ethylhexyl) phthalate (DEHP), but both must be managed and disposed of as hazardous waste. There are light ballasts and lamp recycling services available to properly recycle or reuse these items. These items (if found in the building) must be accumulated and disposed of in accordance with COMAR 26.13.02.19, 40 CFR Part 760.60, and the Toxic Substances Control Act (TSCA).

Also, due to age there is likely lead-based paint (LBP) present in Building 434. Prior to 1978, paint was commonly lead-based. After 1978 LBP was replaced by a white zinc and titanium white base. The disposal of LBP is addressed in the TSCA and the Maryland Lead Paint Abatement Regulations (COMAR 26.02.07). The TSCA outlines the proper disposal of LBP, specifying that non-residential sites possibly contaminated with LBP and LBP waste must be treated as hazardous waste unless it is proven that the percent of lead is below the hazard threshold. The hazard threshold can be determined by either calculating the weight of the lead content in milligrams of lead per kilogram of waste or parts per million in the waste or having a sample of waste tested by an accredited testing laboratory. Samples with less than 100 milligrams of lead per kilogram (or 100 parts per million) of waste is considered non-hazardous and can be disposed of in a municipal waste landfill.

Figure 3-12: BARC Hazardous Waste Areas of Concern



3.10.2 Anticipated Impacts

3.10.2.1 Proposed Action

Overall, there would be negligible impacts from hazardous and toxic materials and waste at Building 434 under the Proposed Action. Building 434 is in the vicinity of one "active" site, defined as a site which site assessment, removal, remedial, enforcement cost recovery, or oversight activities are being planned or conducted under the Superfund program. This is site BARC 32, which has further investigation planned; however, it is approximately 0.32 miles away from Building 434. Construction would not be impacted. The WSO proposed site is in the vicinity of one "active" site – BARC 12. This site is approximately 0.5 miles away from the WSO proposed site and is currently in the process of a combined Remedial Investigation/Feasibility Study. Construction and operation of the WSO would not be impacted.

As such, the proposed renovation and construction projects would not adversely impact the activities associated with BARC AOCs that are currently active or open. Additionally, because of the distance between Buildings 434 and the WSO Proposed Site and the nearest active/open AOC, no adverse impacts are anticipated with regard to worker safety or health as they relate to the AOCs being addressed at BARC.

Prior to the initiation of this project, a Hazardous Materials (HAZMAT) Assessment of the building would be completed. This would identify all potentially hazardous/regulated materials that must be managed prior to construction/renovation activities commencing. Any identified concerns would be managed in accordance with all applicable Federal and state regulations. Hazardous and non-hazardous waste are managed under RCRA, passed in 1976, and Chapter 26, Subtitle 13 of the COMAR, Disposal of Controlled Hazardous Substances, which reflects the US EPA delegation of the Federal RCRA program to Maryland. Materials regulated by RCRA are known as "solid wastes." Only materials that meet the definition of solid waste under RCRA can be classified as hazardous wastes. PCBs (light ballasts, transformer, hydraulic fluid, window caulking, DEHP (light ballast)) and asbestos, LBP, etc. are managed under TSCA and COMAR 26.13.02.19. Mercury, commonly found in switches, thermostats and fluorescent light tubes and batteries, is managed as Universal Waste. During the proposed renovation and construction projects, any light ballast and light bulbs would be removed intact and labeled for recycling at a licensed waste facility in accordance with 40 CFR Part 761. If soils in exceedance of established thresholds are encountered, remediation plans would be established to ensure proper containment and disposal. If asbestos is found during the proposed renovation and construction, it would be removed in accordance with COMAR 26.11.21. Mercury-containing items would be removed intact and placed into approved containers. They would then be transported for recycling at a licensed waste facility. Light ballasts or transformers containing PCBs would be removed and recycled at a licensed recycling facility in accordance with 40 CFR Part 761. LBP would be disposed of according to TSCA guidelines, meaning they would either be brought to a municipal landfill if under 100mg or disposed of at a hazardous waste site if over regulation standard for non-hazardous waste. These procedures would minimize adverse impacts at Building 434 regarding the management and disposal of toxic wastes, hazardous wastes, and/or Universal Wastes. Therefore, negligible impacts from hazardous and toxic materials and wastes would be expected.

3.10.2.2 No Action Alternative

Building 434 was built in the late 19th century and may contain toxic substances such as LBPs and mercury-containing light bulbs. The building is unoccupied and deteriorating further over time. The WSO proposed site contains no existing buildings, which removes the potential for potential toxic building materials, and no AOCs. Therefore, only minor impacts would be expected to occur under a No Action Alternative from the deterioration of Building 434.

3.11 Aesthetics and Visual Resources

3.11.1 Existing Conditions

Visual resources consist of elements in both the natural environment and human-made structures. Natural environment features include water bodies, vegetation, and mountains, and human-made structures including buildings and support infrastructure. These resources impact view planes and influence the general appearance and aesthetic feel of the immediate and surrounding environments. Visual resources are analyzed to determine land use compatibility for new construction projects and the protection of important vistas and view planes.

Poultry Quarantine Facility

Building 434 is currently a deteriorating building once used as a goat barn. Although historic, the building is unkempt and in poor condition with sign of wear on the walls and overgrown vegetation.

Wildlife Staff Office

The WSO proposed site is any empty field off of Beaver Dam Road with a concrete parking lot. There are no visual or aesthetic features attributed to structures or natural features on the site. Building 513 is a historic building which has been unoccupied since 2018 and is within the viewshed of the WSO proposed site. Building 513 itself is structurally unsound and is unmaintained, outside of mowing, since it was vacated. The building shows signs of weathering and deterioration. It has overgrown vegetation as well.

3.11.2 Anticipated Impacts

3.11.2.1 Proposed Action

The Proposed Action would have overall negligible impacts to aesthetics and visual resources. While there would be some expected minor impacts to aesthetics and visual resources, these would be minimized through the implementation of vegetative buffers and the inclusion of design elements that would maintain the overall setting and feeling of the original viewshed.

Poultry Quarantine Facility

The condition of Building 434 would be visually improved under the Proposed Action and it would provide long-term preservation of the historic building. The Proposed Action would retain exterior character-defining features of the Georgian Revival style of the building, including: the white trim, brick veneer and cladding, side gabled roof, centered front door, fenestration pattern, and the

symmetrical layout and massing of the original parts of the building. However, the Proposed Action would also alter the aesthetics of the building by adding elements that do not contribute to its historic façade. Proposed alterations that would adversely impact the historic building are the removal of portions of the rear walls of the historic additions to connect the new quarantine poultry additions, the addition of a black chain link fence around the sides and rear of the building for biosecurity, and the addition of the four exterior feed storage tanks that would be installed on the eastern and western ends of the historic additions.

These minor impacts would be minimized to negligible levels through the planting of evergreen shrubs to provide privacy and viewshed screening to the western side of the site, and through the scaling of the poultry wings to minimize viewshed impacts from Powder Mill Road.

Wildlife Staff Office

The WSO proposed site does not currently have any structures; however, it is within the viewshed of two historic buildings – Building 513 and Building 509. The Proposed Action would add a modular building to the site as well as a stormwater management area. The modular building would have a residential appearance, including vinyl siding, shutters, and an asphalt shingle roof, in addition to a covered front entry porch and wooden ADA accessible ramp. These design elements, along with the planned vegetative buffer along the western edge of the proposed site, would minimize the minor impacts to viewshed of the historic buildings and Soil Conservation Road, to negligible levels.

3.11.2.2 No Action Alternative

The No Action Alternative would have minor, adverse impacts on aesthetics and visual resources, due to the unkempt state and ongoing deterioration of Building 434. This process is slow and will likely take a significant amount of time before adverse impacts were to occur. No impacts would occur to the WSO site.

Poultry Quarantine Facility

Building 434 is not currently maintained, other than occasional mowing. Under the No Action Alternative, the building would continue to deteriorate and become further overrun with vegetation. The No Action Alternative does not provide an avenue for the building to have maintenance done, and there are no plans to renovate the building.

Wildlife Staff Office

The WSO proposed site is an empty field. No changes would occur to this site under the No Action Alternative; therefore, there would be no impacts to the site or its viewshed (e.g., Building 513).

3.12 Air Quality

3.12.1 Existing Conditions

3.12.1.1 National Ambient Air Quality Standards and Attainment Status

The U.S. Environmental Protection Agency (USEPA) Region 3 and MDE regulate air quality in Maryland. The Clean Air Act (CAA) (42 U.S.C. §7401–7671q), as amended, gives USEPA the

responsibility to establish the primary and secondary National Ambient Air Quality Standards (NAAQS) (40 CFR Part 50) acceptable concentration levels for seven criteria pollutants: particulate matter less than 10 microns (PM_{10}), particulate matter less than 2.5 microns ($PM_{2.5}$), sulfur dioxide (SO_2), carbon monoxide (CO), nitrogen dioxide (NO_2), ozone (O_3), and lead. Short-term standards (i.e., 1-, 8-, and 24-hour periods) have been established for pollutants that contribute to acute health effects, while long-term standards (i.e., annual averages) have been established for pollutants that contribute to chronic health effects. These standards identify the maximum allowable concentrations of criteria pollutants that regulatory agencies consider safe, with an additional adequate margin of safety to protect human health and welfare. Each state has the authority to adopt standards stricter than those established under the Federal program. MDE has adopted the NAAQS and is responsible for maintaining air quality standards for the State of Maryland.

Primary and secondary NAAQS for the aforementioned criteria are described in Table 3-1. The attainment status of Prince George's County, where all project activities occur, is included. Areas that exceed the NAAQS ambient concentration are labeled as nonattainment areas and are designated by Federal regulations. According to the severity of the pollution problem, areas exceeding the established NAAQS are categorized as marginal, moderate, serious, severe, or extreme nonattainment or maintenance areas. BARC is within the National Capital Interstate Air Quality Control Region and the region is in marginal nonattainment for the 2015 8-hour O_3 standards (USEPA, 2020). Also, the County has an approved maintenance plan for the 1971 CO NAAQS. Additionally, Prince George's County is within the O_3 transport region that includes 28 states and Washington, D.C.

Table 3-1: National Ambient Air Quality Standards

Pollutant	Standard	Averaging Time	Ambient Concentration	Prince George's County Attainment Status
CO	Primary	1-hour[a] (ppm)	35	Maintenance
		8-hour[a] (ppm)	9	
NO_2	Primary	1-hour[b] (ppm)	100	Attainment
	Primary and Secondary	Annual[c] (ppm)	53	
O_3	Primary and Secondary	8-hour[d](ppm)	0.070	Nonattainment
SO_2	Primary	1-hour[e] (ppb)	75	Attainment
	Secondary	3-hour[a] (ppm)	0.5	
$PM_{2.5}$	Primary and Secondary	24-hour[f] ($\mu g/m^3$)	35	Attainment
	Primary	Annual arithmetic mean[g] ($\mu g/m^3$)	12	

Pollutant	Standard	Averaging Time	Ambient Concentration	Prince George's County Attainment Status
	Secondary	Annual arithmetic mean[g] ($\mu g/m^3$)	15	
PM_{10}	Primary and Secondary	24-Hour[h] ($\mu g/m^3$)	150	Attainment

Source: 40 CFR Part 50.1-50.12; USEPA, 2020
CO = carbon monoxide; $\mu g/m_3$ = micrograms per cubic meter; NAAQS = National Ambient Air Quality Standards; NO_2 = nitrogen dioxide; O_3 = ozone; ppb = parts per billion; ppm = parts per million; $PM_{2.5}$ = particulate matter less than 2.5 microns; PM_{10} = particulate matter less than 10 microns; SO_2 = sulfur dioxide
a Not to be exceeded more than once per year.
b 98th percentile, averaged over 3 years.
c Annual mean.
d Annual fourth highest daily maximum 8-hour average O_3 concentrations, averaged over 3 years.
e The 3-year average of the 99th percentile of 1-hour daily maximum concentrations.
f The 3-year average of the 98th percentile of 24-hour concentrations.
g The 3-year average of the weighted annual mean.
h Not to be exceeded more than once per year, on average over 3 years.

MDE develops air quality plans, referred to as State Implementation Plans (SIPs), which are designed to attain and maintain the NAAQS, and to prevent significant deterioration of air quality in areas that meet NAAQS standards. Maryland has individual SIPs for various pollutants, including NO_2, $PM_{2.5}$, 8-hour O_3, regional haze, lead, etc. Federal agencies must ensure that their actions conform to the SIP in a nonattainment area, and do not contribute to new violations of ambient air quality standards or an increase in the frequency or severity of existing violations, or a delay in timely state and/or regional attainment standards.

BARC holds a synthetic minor air operating permit (permit number 033-0667) which expires on August 31, 2022 (MDE, 2019). The permit includes applicable regulations and compliance requirements for the following permitted emissions sources at BARC: 27 boilers, 2 pathological incinerators, and 4 gasoline storage tanks. The operating permit includes a limitation of 25 tons per year of NO_x emissions for the facility to remain a synthetic minor source with respect to Title V regulations. In order to demonstrate compliance with this requirement, BARC is required to calculate and record the 12-month rolling NO_x emissions from all the fuel burning equipment at the facility on a monthly basis. The facility-wide emissions reported to MDE for the year 2018 are provided in Table 3-2. Any new regulated air emission activity that would be conducted at the facility will require an air permit to construct and a modification to the facility's existing permit.

Table 3-2: 2018 Criteria Pollutant Emissions for Beltsville Agricultural Research Center

NO_x	SO_2	$PM/PM_{10}/PM_{2.5}$	CO	VOC
(tons per year)				
18.82	0.067	0.21	9.43	0.62

NOx = nitrogen oxides; SO2 = sulfur dioxide; PM_{10} = particulate matter less than 10 microns; $PM_{2.5}$ = particulate matter less than 2.5 microns; CO = carbon monoxide; VOC = volatile organic compound
Source: Beltsville Agricultural Research Center [BARC], 2018

Under the Clean Air Act, project proponents must consider fugitive emissions, including fugitive dust, when considering air quality impacts. Fugitive dust is particulate matter that is generated from the "mechanical disturbance of granular material exposed to the air" (USEPA, 1995). Fugitive dust is predominantly comprised of coarse particulate matter (PM_{10} or larger), but can also contain fine particulate matter ($PM_{2.5}$).

3.12.1.2 Regulatory Requirements for Hazardous Air Pollutants

In addition to criteria pollutant standards, the USEPA also regulates hazardous air pollutant (HAP) emissions for each state. HAPs differ from criteria pollutants for they are known or suspected to cause cancer and other diseases or have adverse environmental impacts. The National Emission Standards for HAPs (NESHAP) found in 40 CFR Part 63 regulate 187 HAPs that are known or suspected to cause cancer or other serious health effects, such as reproductive effects or birth defects, or adverse environmental effects. NESHAP requires application of technology-based emissions standards referred to as Maximum Achievable Control Technology (MACT).

Sources of HAP emissions at BARC include the boilers, incinerators, and fuel storage tanks. BARC is an existing minor source of HAP, meaning total annual emissions of any single HAP are less than 10 tpy and annual emissions of combined HAP are less than 25 tpy.

3.12.1.3 Clean Air Act Conformity

The 1990 amendments to the CAA require Federal agencies to ensure that their actions conform to the SIP in a nonattainment area. The purpose of the General Conformity Rule is to ensure that:

- Federal activities do not cause or contribute to new violations of NAAQS;
- actions do not worsen existing violations of the NAAQS; and
- attainment of the NAAQS is not delayed.

USEPA has developed two distinctive sets of conformity regulations: one for transportation projects and one for non-transportation projects. Non-transportation projects are governed by general conformity regulations (40 CFR Part 93). Pursuant to 40 CFR Part 93.153(b), a conformity determination is required for each criteria pollutant or precursor where the total of direct and indirect emissions of the criteria pollutant or precursor in a nonattainment or maintenance area caused by a Federal action would equal or exceed threshold emissions levels provided under 40 CFR Part 93.153 (b)(1) or (2).

The Proposed Action is a non-transportation project within an O_3 nonattainment area. Due to the proximity to the urbanized east coast of the United States, Prince George's County is considered an Ozone Transport Region. Because ozone formation is driven by other direct emissions, the air quality analyses focus on ozone precursors that include VOCs and NO_X. For an area in marginal nonattainment for the 8-hour O_3 NAAQS within the O_3 transport region, the applicability criteria are 100 tpy for NO_x and 50 tpy for VOCs (40 CFR Part 93.153). Prince George's County is in maintenance for CO, and the applicability criteria for CO in maintenance areas is 100 tpy. Also, routine operation of facilities, mobile assets and equipment are exempt from the General Conformity Rule in accordance with 40 CFR Part 93.153(c)(2)(xiii). Therefore, operational emissions from BARC need not be included in the applicability analysis.

The General Conformity Rule also prohibits any department, agency, or instrumentality of the Federal Government from engaging in, providing financial assistance for, approving, or supporting any activity that does not conform to applicable SIP designated for areas being in nonattainment of established NAAQS.

3.12.1.4 Asbestos Laws and Regulations

The most commonly found asbestos in the United States are chrysolite, amosite, and crocidolite. The short, thin asbestos fibers released into the air are a hazard to people who inhale these fibers. There is no known safe level of exposure for persons working with asbestos or near the same area as an asbestos project, therefore the CAA has defined NESHAPs, including asbestos (a HAP with CAS No. 1332-21-4).

Under Section 112 of the CAA, the asbestos NESHAP standards can be found under 40 CFR Part 61, Subpart M. The asbestos standards have been amended several times, most comprehensively in November 1990 and again in 1995 when the rule was amended to correct cross-reference citations to Occupational Safety and Health Administration (OSHA), Department of Transportation, and other USEPA rules governing asbestos.

Asbestos work practices for demolitions and renovations of all facilities, including, but not limited to, structures, installations, and buildings is covered in the CAA. The regulations require a thorough inspection where the demolition or renovation operation will occur. The regulations also require the owner or the operator of the renovation or demolition operation to notify the appropriate delegated entity (MDE) before any demolition, or before any renovations of buildings that contain a certain threshold amount of regulated asbestos-containing material. The rule requires work practice standards that control asbestos emissions. Work practices often involve removing all asbestos-containing materials, adequately wetting all regulated asbestos-containing materials, sealing the material in leak tight containers and disposing of the asbestos-containing waste material as expediently as practicable, as the regulation explains in greater detail.

On the state level, Maryland regulates how persons will work with asbestos and regulates those who train persons to work with asbestos. MDE requires authorized workers to carry the Maryland Photo Identification Card containing accredited credentials for persons who perform activities with asbestos and is valid for 1-year following the training date. On the Federal level, the EPA regulates the asbestos abatement contractors and licenses, asbestos training providers, persons accredited to perform asbestos work, and the asbestos in school's program.

3.12.1.5 Greenhouse Gas Emissions

Greenhouse gases (GHGs) are a particular group of gases that have the ability to trap heat by absorbing infrared radiation in the atmosphere. Scientific evidence indicates a trend of increasing global temperature over the past century which may be due to an increase in GHG emissions from human-based activities. The most common GHGs emitted from natural processes and human activities include carbon dioxide (CO_2), methane (CH_4), and nitrous oxide. The main source of GHGs from human activities is the combustion of fossil fuels, including natural gas, gasoline, diesel fuel, crude oil and coal. Other examples of GHGs created and emitted primarily through human-based activities include fluorinated gases (hydrofluorocarbons and perfluorocarbons) and sulfur hexafluoride.

Each GHG is assigned a global warming potential (GWP). The GWP is the ability of a gas or aerosol to trap heat in the atmosphere. The GWP rating system is standardized to CO_2, which has a value of one. For example, CH_4 has a GWP of 25, which means that it has a global warming effect 25 times greater than CO_2 on an equal-mass basis.

To simplify GHG analyses, total GHG emissions from a source are often expressed as a CO_2 equivalent (CO_2e). The CO_2e is calculated by multiplying the emissions of each GHG by its GWP and adding the results together to produce a single, combined emission rate representing all GHGs. While CH_4 and nitrous oxide have much higher GWPs than CO_2, CO_2 is emitted in such higher quantities that it is the overwhelming contributor to CO_2e from both natural processes and human activities.

3.12.1.6 Regulatory Review and Permitting

Currently the USEPA has two primary GHG regulations for regulated stationary emission sources: 1) 40 CFR Part 98 - requires annual GHG emissions reporting and applies to fossil fuel suppliers and industrial gas suppliers, facilities that inject CO_2 underground for sequestration or other reasons, direct GHG emitters, and manufacturers of heavy-duty and off-road vehicles and engines. The rule does not require control of GHGs, rather it requires only that sources above certain threshold levels monitor and report emissions, and 2) GHG emission limits in 40 CFR Parts 51, 52, 60, 70 and 71 – establishes CO_2 emission limits to be addressed in Prevention of Significant Deterioration (PSD) and Title V permits required for electric utility generating units that are major stationary sources for regulated pollutants other than GHG. A 75,000 tpy threshold is used by EPA as a de minimis value to determine whether a PSD permit must include an emission limitation for CO_2 and a 100,000 tpy threshold is applied for Title V permits.

Based on the synthetic minor air permit for the facility, BARC is not a PSD major source (single criteria pollutant emissions at or above 250 tpy) and the facility-wide GHG emissions are well-below 75,000 tpy, so the facility has not triggered PSD requirements for GHG emissions. Based on the 2018 emissions certification report submitted to MDE, BARC reported 13,472.15 tons per year CO_2, 0.24 tons per year nitrous oxide, and 0.26 tons per year methane emissions from regulated stationary emission sources. This is an estimated 12,292.5 metric tons per year of CO_2e.

The Council on Environmental Quality (CEQ) provides guidance to Federal agencies on how to evaluate GHGs for Federal actions under NEPA. The current CEQ guidance is a draft document issued on June 21, 2019 titled “Draft NEPA Guidance on Consideration of GHG Emissions” that proposes a much more streamlined approach to analyzing the impacts of GHGs under NEPA. The draft guidance notes (CEQ, 2019):

- Agencies should quantify a project’s projected direct and reasonably foreseeable indirect GHG emissions when emissions are “substantial enough to warrant quantification,” and when it is “practical” to do so using available data and GHG quantification tools. The guidance stresses that agencies should consider whether quantification of GHG emissions “would be overly speculative” or where necessary information is “not of high quality.”
- The guidance does not address what “substantial” means, however it notes that following the “rule of reason,” there must be a close causal relationship between potential impact and anticipated GHG emissions to include GHG emissions in the analysis.

- Agencies are not required to prepare separate cumulative effects analyses, nor undertake new research or analysis of climate effects.
- Although NEPA requires agencies to consider reasonable alternatives to the proposed action, they are not required to adopt mitigation measures.
- Finally, the 2019 draft guidance clarifies that Federal agencies are not required to monetize the cost and benefit of a proposed project, and specifically, the social cost of carbon (SCC) need not be considered.

3.12.1.7 Executive Orders and Federal Laws

In April 2007, the U.S. Supreme Court determined that the USEPA has the regulatory authority to list GHGs as pollutants under the Federal CAA (USEPA, 2007). Additionally, federal agencies address emissions of GHGs by reporting and meeting reductions mandated in laws, executive orders, and policies. Relevant to GHGs is EO 13834, *Efficient Federal Operations,* of May 17, 2018. The Energy Policy Act of 2005, Energy Independence and Security Act of 2007, and EO 13834 require an installation to adhere to specific energy improvements, which address waste reduction and improvements in efficiency.

3.12.2 Anticipated Impacts

3.12.2.1 Proposed Action

A General Conformity Applicability Analysis was performed for the Proposed Action, which estimated the level of potential NO_x, VOC, and CO air emissions from construction activities. The analysis is only required for nonattainment and maintenance pollutants. Prince George's County is in attainment for the SO_2, $PM_{2.5}$, PM_{10}, and lead NAAQS, so these pollutants are not required to be included in the analysis. Table 3-3 below shows the estimated NO_x, VOC, and CO emissions for a 12-month period from construction emissions associated with the Proposed Action. Calculations were derived from estimated combustion equipment activities in one fiscal year. As demonstrated in the table below, the estimated emissions are well below the de minimis thresholds. Therefore, the Proposed Action is not anticipated to result in any adverse impacts to air quality. Anticipated impacts to air quality under the Proposed Action would be expected to be negligible.

Table 3-3: Estimated Annual Construction Emissions from Proposed Action

Pollutants	**VOC**	**NOx**	**CO**
Proposed Action Emissions (tons/year)	5.0	47.5	37.6
De minimis threshold (tons/year)[1]	50	100	100
Exceeds de minimis thresholds?	No	No	No

[1] Prince George's County is in marginal nonattainment for 8-hour O_3 NAAQS (VOCs and NO_x are precursors to the formation of O_3) and is in maintenance for CO. *De minimis* thresholds are defined in 40 CFR Part 93 Section 153. VOC and NOx *de minimis* established for nonattainment areas located in an O_3 transport area.

Routine operation of facilities, mobile assets and equipment are exempt from the General Conformity Rule. Therefore, operational emissions from BARC were not included in the General Conformity Applicability Analysis.

The Proposed Action would result in temporary, localized changes to air quality as a result of fugitive dust emissions from the construction equipment, worker transport, and highway traffic from equipment delivery. Criteria and hazardous air pollutant emissions from the operation of

construction vehicles would be temporary and localized. The Proposed Action would be undertaken in compliance with state and Federal standards for air quality. Control methods and technologies, including limiting vehicle speeds on project site access roads, applying water to exposed soil, and adding vegetative cover, will be implemented as needed to minimize fugitive dust emissions. Applicable NEPA considerations would be made and the resulting documentation (if any) would be kept on file.

A HAZMAT evaluation would be conducted prior to any construction work, and any hazardous materials would be handled in accordance with the regulations discussed in Section 3.10. Any asbestos found during the proposed renovation and construction would be handled and disposed of in accordance with COMAR 26.11.21 to prevent the release and/or dispersal of asbestos fibers.

The CO_2e emissions from the Proposed Action construction activities are estimated to be 6,602 metric tons per year. It is anticipated that the Proposed Action would not cause a perceivable impact because the increase in GHG emissions will be temporary and will not contribute long-term to BARC's overall CO_2e emissions. Mitigation efforts to reduce GHGs can be implemented by maintaining emission control technology on construction equipment.

3.12.2.2 No Action Alternative

While Building 434 would continue to deteriorate under the No Action Alternative, no activities would take place and general emissions would stay at their current rate. BARC would remain compliant with applicable air quality regulations as mentioned in Section 3.12.2. There would be no adverse impacts to air quality.

3.13 Noise

3.13.1 Existing Conditions

The Noise Control Act of 1972 (42 U.S.C. 4901 *et seq*.) directs Federal agencies to comply with applicable Federal, state, interstate, and local noise control regulations. Noise is considered to be undesirable sound that interferes with normal activities or otherwise diminishes the quality of the environment. It may be intermittent or continuous, steady or impulsive, stationary or transient. Sound varies by intensity and frequency and the human ear responds differently to different frequencies. Sound pressure level is described in decibels (dB) and is used to quantify sound intensity. Hertz is used to quantify sound frequency. "A-weighted" decibels (dBA) approximate the perception of sound by humans and describe steady noise levels, though few noises are constant.

A change of a few dBA in noise level is barely perceptible to most people; however, a 10 dBA change is considered a substantial change, and these thresholds are used to estimate a person's likelihood of perceiving a change in noise levels (Tables 3-4 and 3-5). Construction noise can result in relatively high noise levels during day-time periods and within several hundred feet of the construction activity. The zone of relatively high construction noise typically extends to distances of 400 to 800 feet from the operating equipment. Locations more than 1,000 feet from construction sites experience little disturbance from noise.

Table 3-4: Common Noise Levels

Source	Decibel Level	Exposure Concern
Soft Whisper	30	Normal safe levels.
Quiet Office	40	
Average Home	50	
Conversational Speech	65	
Highway Traffic	75	May affect hearing in some individuals depending. on sensitivity, exposure length, etc.
Noisy Restaurant	80	
Average Factory	80-90	
Pneumatic Drill	100	
Automobile Horn	120	
Jet Plane	140	Above 140 dB may cause pain.
Gunshot Blast	140	

Table 3-5: Typical Noise levels of Construction Equipment (Noise Level in dBA at 50 Feet)

Construction Vehicle Type	dBA
Bulldozers	80
Backhoe	72-93
Bobcat	72-93
Jack Hammer	81-98
Crane	75-77
Pick-Up Truck	83-94
Dump Truck	83-94

Source: USEPA, 1986

Although BARC is located in the vicinity of a major urban area, the area near the proposed renovation and construction site is not largely developed. There are various other lab/office buildings, nearby housing, and various business activities conducted by the USDA. No ambient noise measurements have been conducted on the facility.

Poultry Quarantine Facility

Building 434 is almost entirely surrounded by forest and farmland. There is one noise receptor to the southwest of the building, a residential home. The main source of noise pollution is traffic from Powder Mill Road and surrounding highways. Traffic on Powder Mill Road is moderate, as the road is primarily used by BARC employees and locals. Occasionally, farming activities (planting and harvesting) will also produce noise; however, these are infrequent, only occurring a few times a year.

Wildlife Staff Office

The WSO proposed site is also enclosed by farmland and forest. Noise pollution is limited to traffic from infrequent BARC employees on Beaver Dam Road and the occasional farming activity. Soil

Conservation Road is also not a highly trafficked road and primarily is used by BARC employees. There is a cluster of buildings to the west of the WSO proposed site that could act as a noise receptor.

3.13.2 Anticipated Impacts

3.13.2.1 Proposed Action

Minor adverse impacts would be expected to occur from noise under the Proposed Action. The areas immediately surrounding Buildings 434 and the WSO proposed site are forested and farmland areas. Other than the limited government employees working near Buildings 434 and the WSO proposed site and a single residence, there are no noise receptors located in the area. Currently, the noise created by vehicular traffic and farm equipment is the only noise in the area of the proposed sites. This traffic consists of workers and contractors coming to and from work, although the area is frequented by locals as well. During construction, a temporary increase in the vehicular traffic would occur as workers, building materials, equipment, construction and demolition debris/wastes are transported to and from the site. When the proposed building renovation and construction is complete, construction-related noise would cease.

Poultry Quarantine Facility

Under the Proposed Action, minor adverse impacts are expected to occur during the construction period. These impacts would include temporary increases in noise levels resulting from heavy equipment and machinery that could affect people sensitive to noise during the construction phase. Affected populations include those living in the residence to the southwest of Building 434. To minimize any impacts to residents from noise, construction would primarily be conducted during standard daylight working hours and on weekdays. Noise levels during operation of the Proposed Action are expected to be consistent with operation of a poultry house within an agricultural setting once construction is complete, so impacts from operational noise would be negligible. The noise levels produced from standard operations of a PQH, including staff noise, poultry noises, and minimal facility operation noises such as general heating and cooling, are a slight increase for the neighboring residents. These noises are negligible and are well within the typical operational noises of an agricultural area.

Wildlife Staff Office

Under the Proposed Action, an increased noise level at the WSO proposed site would occur during construction due to worker traffic and construction equipment. Once construction is complete, there would also be a minor increase in noise levels due to operation of the WSO. Some of these noises are common in the operation of a modular office building (i.e., air conditioning). There would also be an increase in noise levels due to the increase in the total number of workers in the area. The two WSO employees would be permanently housed in the new building. Additionally, hunters would be frequenting the area during hunting season to check in and out for the day. This would result in minor impacts from noise during both the construction and operational phases of the Proposed Action.

3.13.2.2 No Action Alternative

Under the No Action Alternative, there would be no changes to the local noise environment. No impacts would occur. Both Building 434 and the WSO Proposed Site would remain vacant, producing no increase or decrease in noise pollution.

3.14 Health and Public Safety

3.14.1 Existing Conditions

BARC has Safety and Occupational Health staff, including an Emergency Preparedness Specialist, to coordinate emergency services and to oversee health and safety measures throughout the facility. There are currently no health and public safety concerns at Building 434 or the WSO proposed site, since there are no operations currently ongoing at these sites.

3.14.2 Anticipated Impacts

The sites for the proposed project would require coordination between the BARC Emergency Preparedness Specialist and the 911 dispatcher and the Emergency Medical Services. All services are sent to Building 003 where they are then provided escort to the building by their number (Froehling & Robertson, Inc., 2019). The WSO proposed site would require a temporary address created for emergency responses. The company awarded the building renovation and construction project would be required to implement a site-specific health and safety plan in accordance with their corporate health and safety plan that covers all OSHA regulations. This plan would be reviewed by the BARC Safety and Occupational Health and Environmental staff for adequacy. The approved plan would be strictly followed during the proposed construction project. All efforts would be focused on reducing job hazards on the site for all construction activities. The minimum worker safety Personal Protective Equipment ensemble would require hard hat, safety glasses, work gloves, and steel-toed boots to enter the construction area. Additional safety gear may be required based on work activities.

However, in the event of an injury or accident, the health and safety plan would include procedures specifying actions to be taken. These procedures would be provided to all health care organizations that would receive patients in the event of an injury/accident. The injuries would be categorized as serious, non-serious, and minor. Serious injuries would be transported to the Prince George's County Medical Center. Minor injuries would be treated on the scene. The Emergency Medical Technicians called to the scene would determine which type of injury has occurred. If the Prince George's County Medical Center is incapable of providing proper care because of unforeseen circumstances, patients with both serious and non-serious injuries would be transferred to Holy Cross Hospital. With these standard operating procedures in place, the project's effects on worker safety would not be significant.

During the proposed renovation and construction project, areas being displaced would be temporarily blocked off to prevent unauthorized pedestrians and vehicles from entering the construction zone. During the proposed construction, there would be times when the areas nearby would be blocked to allow for proper operation of construction equipment. Traffic cones and signs would also be posted at and around Buildings 434 and the WSO Proposed Site to direct traffic away from the construction zones. When the proposed renovation and construction is complete, traffic patterns would revert to the same configuration as they were prior to the project. There is currently minimal traffic near these buildings because the buildings are non-operational.

3.14.2.1 Proposed Action

BARC has its own security force that is on call 24-hours a day. The transfer of employees from their current offices to the proposed sites would not adversely affect the current demand for security

services at BARC because they would come from other locations already within BARC. No adverse impacts on health and public safety at BARC would be expected.

3.14.2.2 No Action Alternative

Under the No Action Alternative, no adverse impacts are expected to occur to health and public safety. Both proposed sites are vacant and would incur no changes under this alternative. The buildings will remain unoccupied under the No Action Alternative; therefore they pose no threat to human health and safety.

3.15 Cumulative Impacts

3.15.1 Existing Conditions

This section addresses the cumulative impacts of the Proposed Action. Cumulative impacts are defined by the CEQ in 40 CFR Part 1508.7 as "impacts on the environment which result from the incremental impact of the action when added to other past, present and reasonably foreseeable future actions regardless of what agency (Federal or Non-Federal) or person undertakes such other actions."

Evaluations of cumulative impacts include consideration of the Proposed Action with past and present actions, as well as reasonably foreseeable future actions. Table 3-6 describes all of these actions.

Past Actions – actions that may contribute to cumulative impacts in one or more of the analyzed resource topic areas include: previous clearing of land for agricultural development and construction, construction of roadways, utility lines, and other infrastructure. Past actions also include agricultural research activities previously conducted by USDA-ARS.

Present Actions – actions that may contribute to cumulative impacts in one or more of the analyzed resource topic areas include: traffic on nearby roadways and any activities associated with adjacent public or private properties, and population growth. USDA-ARS prepared an EA for the installation of Solar Array on BARC in 2018. Solar arrays would be installed at 60 sites across the BARC facility. The arrays would be leased to an Independent Power Producer [Energy Savings Performance Contract] to help USDA-ARS meet various Federal sustainability goals and maximize renewable energy production to support ongoing operations at the BARC facility.

Future Actions – BARC is planning to transfer a 105-acre parcel of land to the BEP to create a currency production facility. This action would create changes in traffic patterns, energy usage, socioeconomics, utility infrastructure, biological resources, air quality, geography, topography, and soils. The 105- acre parcel is not within a close proximity to either proposed site and will have minimal impact on any of the areas listed above with the exception of traffic patterns and air quality.

Reasonably foreseeable future actions external to the BARC facility include continuation of all present actions and future actions that may include planned future land development and development of the proposed MAGLEV high speed rail corridor between Baltimore and Washington, D.C.

Table 3-6: Past, Present, and Future Actions

Project Name	Project Proponent	Type of Project	Project Status	Description of Project
Purple Line	MDOT, Maryland Transit Administration, Purple Line Transit Partners	Transportation	Under Construction	Build a 16-mile, 21-station light rail transit line that will connect several communities in Maryland, from Bethesda in Montgomery County to New Carrollton in Prince George's County. The project will include five major activity center stations (Bethesda, Silver Spring, Takoma-Langley Park, College Park, and New Carrollton).
Route 201	MDOT	Transportation	Proposed	Road improvements are proposed for RT 201 from the Beltway to the Intercounty Connector. This route currently follows parts of Old Baltimore Pike and Edmonston Road.
High-Speed Superconducting Magnetic Levitation (MAGLEV) System	Federal Railroad Administration (FRA), MDOT	Transportation	Proposed	FRA and MDOT are proposing a high-speed ground transportation line between Baltimore, MD and Washington, DC, with an intermediate stop at Baltimore Washington International (BWI) Thurgood Marshall Airport.
MD-212 Pine Street to US-1	MDOT State Highway Administration	Transportation	Approved	Implement roadway widening, resurfacing, drainage improvements, curb and gutter installations, and new bicycle lanes and sidewalks.
Sunnyside Avenue Bridge Replacement over Indian Creek	Prince George's County DPW&T	Transportation	Under Construction	Replace Sunnyside Avenue Bridge over Indian Creek and widen the roadway west of the CSX crossing to Kenilworth Avenue.
Emission Reductions Projects	Treasury	Industrial	Proposed	Treasury plans to implement emission reduction efforts including evaluating alternatives to chromium plating, installing new low-VOC press for printing money bands, using electricity from renewable energy sources, and continuing to conduct comprehensive air emission and GHG analyses.

Konterra Town Center	KLNB	Mixed-Use	Proposed	Construct a $1.75 billion mixed-use development on 2,200 acres of retail, research, and technology campuses including 1.4 million square feet (SF) of building space, more than 1,000 residential units, and 348 acres reserved for a governmental, educational, or corporate facility.
BARC Solar Array Development	USDA	Infrastructure	Proposed	Solar arrays would be installed at 60 sites across the BARC facility.
Beltsville Agricultural Research Center (BARC) Demolition	USDA	Institutional	Proposed	Demolish 22 buildings and associated infrastructure at BARC.
FY20 and FY 21 Industrial Improvements at BARC	USDA	Industrial	Under Construction	Repair and improve industrial systems at BARC including: replace Chillers 1 and 2 at Building #004, Chillers 1 and 2 at Building #007, 250-ton chillers at Building #001, 300-ton chillers at Building #010A; repair the water treatment PH control system and the chlorine production and injection system for Building #310.
FY20 and FY 21 Infrastructure Improvements at BARC	USDA	Industrial	Under Construction	Infrastructure improvements proposed at BARC include: repair the patio walkway at Buildings #010A and #010B; replace the roof of Building #209; replace the roof and gutters of Building #007, replace guardrails along Powder Mill and Soil Conservation Road; and repave roads in the Dairy Area Wastewater treatment filter system for Building #218.
FY20 and FY 21 Utility Repair at BARC	USDA	Industrial	Under Construction	Repair utility systems at BARC including: heating water system pipelines in Range 10 greenhouses; water infiltration in Building #005; chilled water pipes in Building #161; rooftop heating and air conditioning units in Building #177C; air handling units in Building #003; electrical wires for East Campus; Building #010A cooling tower; water plant filter replacement; and electrical substation on West Campus.
BEP Currency Facility	Treasury	Industrial	Proposed	Currency production facility to be built on a 105-acre parcel of BARC.

3.15.2 Anticipated Impacts

3.15.2.1 Proposed Action

Topography, Geology, and Soils

Topography, geology, and soil impacts are site-specific and not affected by cumulative development in an area, except where soil erosion may contribute to degradation of water quality. With the implementation of soil erosion and sediment control measures, the Proposed Action alternative would likely result in negligible to minor adverse soils impacts from the implementation of the Proposed Action and would not incrementally cause a significant impact, regardless of other actions.

Land Use

The generalized pattern of land use at BARC is anticipated to undergo little change with implementation of current and reasonably foreseeable future actions to be undertaken by the USDA. The area around BARC has changed little in the past 10 to 15 years, but may be under pressure to develop as growth continues in the region over time. The potential development of a 105-acre parcel of land into a currency production facility, along with commuter rail services and the proposed MAGLEV, would change a large portion of BARC's land use (though this land would no longer be BARC property). While these potential projects may have impacts on land use, the Proposed Action would be consistent with existing land use categories on BARC, so the Proposed Action would have no contribution to cumulative land use impacts at BARC.

Prime Farmland

BARC is an agricultural facility, in the middle of developed land, that has largely escaped development because of its mission as a research facility. The Proposed Action would not affect prime farmland, but some other proposed projects, including the MAGLEV, could have impacts to farmland. The BEP and MAGLEV projects are undergoing their own NEPA reviews, and the lead agencies of those projects would comply with the Farmland Protection Policy Act, as appropriate. Because the Proposed Action will not affect prime farmland, it will not contribute to any prime farmland cumulative impacts at BARC.

Water Resources

Continued livestock and agricultural research could result in adverse impacts to water resources if not managed properly, as the amount of sediment and stormwater entering the facility streams and wetlands could increase as a result of construction activities. The resources currently filter surface water flows before they reach the Anacostia River and eventually the Chesapeake Bay. Increased development on the facility would increase the demand for groundwater and the amount of impervious surface on the facility, potentially increasing stormwater flows. New development may have to include pervious pavement, filter strips, and green roofs to support the goal of achieving the 20 percent reduction in impervious surface on the facility by 2025. In the context of current and reasonably foreseeable actions on the facility, the Proposed Action is not anticipated to incrementally cause adverse impacts on water resources in the area.

Biological Resources

Through contact with state and Federal agencies, BARC has no known listings of RTE species in or adjacent to the proposed sites. However, BARC would minimize and avoid impacts to biological resources under the Proposed Action. Construction activities associated with the Proposed Action are not anticipated to impact native habitats or protected species present on the facility. It is anticipated that the Patuxent Research Refuge, Greenbelt Park, and other area open spaces would be protected from development and continue to provide habitats that support the biological diversity of the area. Therefore, in the context of current and reasonably foreseeable actions on the facility, the Proposed Action is not anticipated to incrementally cause adverse impacts to biological resources in the area. Any impacts would be expected to be minor.

Cultural Resources

As a large portion of BARC is part of the BARC Historic District, it is likely that current and reasonably foreseeable future projects may impact cultural resources. While some historic structures or archaeological sites may be disturbed or demolished as a result of the Proposed Action and other reasonably foreseeable actions, it is expected that all projects would comply with Section 106 consultation and mitigation requirements of the NHPA, thereby maintaining overall impacts to cultural resources at minor levels.

Socioeconomics

The Proposed Action and other current and reasonably foreseeable actions would not adversely impact the socioeconomic setting of the BARC facility. Temporary employment would increase from any construction projects within the Beltsville area, having minor beneficial impacts. Employment on the facility is based on the types of research present. Future redevelopment near BARC could spawn additional short-term and long-term employment opportunities as new businesses are developed, resulting in minor beneficial impacts. However, the overall socioeconomic characteristics of the community would be unlikely to change from identified past, present, and future actions.

Transportation

The Proposed Action, present, and reasonably foreseeable future actions would possibly expand or improve the existing roadway network on BARC. A currency production facility developed on the 105-acre parcel of BARC could significantly alter traffic patterns, and this is being studied under the scope of the EIS evaluating the BEP proposed project. Any significant transportation impacts would be expected to be mitigated through appropriate roadway and public transportation improvements in consultation with local planning authorities.

Implementation of the proposed MAGLEV connection between Baltimore and Washington, D.C. would occur largely outside of BARC, but two alignments of the proposed MAGLEV project would include the construction of a train maintenance facility in the vicinity of part of the Proposed Action. One train maintenance facility alignment would construct the facility near Entomology Road, which

is in the vicinity of Building 434. Another alignment would construct the facility near Springfield Road, which is in the vicinity of the proposed WSO site. The proposed MAGLEV project could significantly alter traffic patterns, and this is being studied under its own NEPA action.

The Proposed Action would not alter any transportation infrastructure and would only increase traffic very minimally considering the few personnel that would operate the facilities. Therefore, its contribution to cumulative impacts would be minimal.

Utilities

Under the Proposed Action and other current and reasonably foreseeable future projects on BARC, minor improvements are expected to be needed to infrastructure. The existing utility capacities on BARC are expected to be sufficient to support the planned projects, and any necessary upgrades would be coordinated with the local utility companies to minimize impacts. The proposed solar array project would also support future sustainability of the facility leading to greater improved energy efficiency that could in turn support replacement of existing facility utilities. As the Proposed Action is merely relocating existing operations on BARC, there would be negligible contributions to cumulative utility impacts.

Hazardous and Toxic Materials and Waste

Implementation of the Proposed Action would involve the removal of hazardous or toxic materials from Building 434. As stated in Section 3.10, these materials would be handled and disposed of in accordance with state and Federal regulations, which would minimize any impacts from hazardous and toxic materials and waste. There would be no expected hazardous materials at the WSO proposed site. Buildings that pose a health threat in similar states of disrepair have been removed at BARC during the past five to ten years and will be removed in the near future through a phased approach. Current and reasonably foreseeable future projects, including installation of solar arrays at BARC, the demolition of 22 buildings, and possible 105-acre parcel development would be implemented following current industry design requirements and safety standards. Because of the measures that will be taken in accordance with COMAR 26.13 under the Proposed Action, the Proposed Action's contributions to cumulative impacts to hazardous and toxic materials and waste would be minor.

Aesthetics and Visual Resources

The aesthetics of BARC may be affected with the possible demolition and construction of buildings from various projects. If any of these buildings are contributing to the BARC Historic District, or are in the viewshed of any historic buildings, there would be expected impacts to visual resources and aesthetics. However, it is expected that any impacts would be minimized through the use of vegetative buffers, design elements, or other mitigation measures identified during the Section 106 consultation process. As stated in Section 3.11.2, impacts from the Proposed Action are expected to be negligible, so there would be negligible contributions to cumulative aesthetic and visual resources impacts.

Air Quality

The cumulative impacts on air quality from implementation of the Proposed Action would be minor. In accordance with the CAA, a General Conformity Analysis has been prepared concurrently with this EA and demonstrates that implementation of the Proposed Action will not result in emissions above the thresholds for NOx, VOCs and CO. Short-term and fugitive dust emissions from construction activities would impact air quality temporarily and the impact would cease after construction is completed. Appropriate control measures would be implemented to minimize fugitive dust emissions. This would be similar for most planned projects, and these construction projects would not be going on in the same vicinity at the same time. The Proposed Action's contribution to cumulative air quality impacts would be minor.

Noise

Overall development of the BARC facility is limited due to the requirements of the MS4 permit and the goal to reduce impervious area by 2025. Short-term noise impacts would continue to occur at BARC associated with the Proposed Action, the construction of the solar arrays, and other ongoing activities at the facility. Traffic noise is anticipated to increase with the development of the 105-acre parcel, if the BEP project is implemented. As the Proposed Action is only anticipated to generate construction noise and noise associated with accessing and operating Building 434 and the WSO (which is already occurring at their current locations), it is not anticipated that the Proposed Action in combination with any present or reasonably foreseeable future actions would create events that would trigger high, long-term, non-abatable noise levels on the facility. The Proposed Action's contributions to cumulative noise impacts would be negligible.

Health and Public Safety

Implementation of the Proposed Action move existing operations to other locations within the BARC property, so operationally, there would be no expected contributions to health and public safety impacts. The Proposed Action, along with current and reasonably foreseeable future projects, including the demolition of 22 buildings, possible 105-acre parcel development, and possible MAGLEV development would be implemented following current industry design requirements and safety standards. These potential projects and the Proposed Action would be constructed in the same service area for emergencies, but the emergency response systems in place are adequate to handle these projects. The Proposed Action's contributions to the cumulative health and public safety impacts would be negligible.

3.15.2.2 No Action Alternative

Under the No Action Alternative, Building 434 and the WSO proposed site would remain in their current states. Building 434 would continue to be unused, which may lead it to deteriorate in place. Any deterioration could cause minimal impacts to cultural resources, hazardous and toxic materials and waste, and aesthetics and visual resources. The WSO proposed site would remain an unused open field and gravel parking lot. Other current and foreseeable future projects would continue as planned, so the overall cumulative impacts of the No Action Alternative would be negligible.

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4 Conclusion

The Proposed Action intends to transfer the current poultry quarantine operations and WSO into updated buildings so that those operations can continue in adequate workspaces. While renovating Building 434 and installing the new WSO building on the proposed site, impacts to natural and cultural resources would be minimized to the maximum extent possible.

Table 4-1 summarizes the potential consequences that the Proposed Action and the No Action Alternative would be expected to have on environmental resources.

Table 4-1: Summary of Potential Environmental Consequences on Environmental Resources

Resource	Proposed Action	No Action Alternative
Land Use	No expected impacts	No expected impacts
Topography, Geology, and Soils	Minor adverse impacts	No expected impacts
Prime Farmland	No expected impacts	No expected impacts
Water Resources	Minor adverse impacts to stormwater, surface water, and wetlands; no expected impacts to groundwater and floodplains	No expected impacts
Biological Resources	Minor adverse impacts to RTE species; negligible impacts to vegetation	No expected impacts
Cultural Resources	Negligible with mitigation	Minor adverse impacts from Building 434 deterioration
Socioeconomics	Negligible impacts	No expected impacts
Transportation	Minor adverse impacts	No expected impacts
Utilities	Minor adverse impacts to electricity; minor adverse impacts to solid waste, wastewater, and natural gas during construction only; negligible impacts to solid waste, wastewater, and natural gas during operation	No expected impacts
Hazardous and Toxic Material and Waste	Negligible impacts	Minor adverse impacts from Building 434 deterioration
Aesthetic and Visual Resources	Negligible impacts with mitigation	Minor adverse impacts from Building 434 deterioration
Air Quality	Negligible impacts	No expected impacts
Noise	Minor adverse impacts	No expected impacts
Health and Public Safety	No expected impacts	No expected impacts
Cumulative Impacts	Minor adverse impacts	Negligible impacts

The conclusion of this EA is that there would be no significant impacts as a result of the proposed renovation and construction associated with Building 434 and the WSO proposed site. As a result, a Finding of No Significant Impact for implementation of the preferred alternative, renovation and construction associated with Building 434 and the WSO proposed site, is the conclusion of this assessment.

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Appendix A

CORRESPONDENCE

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DEPARTMENT OF THE ARMY
BALTIMORE DISTRICT, CORPS OF ENGINEERS
2 HOPKINS PLAZA
BALTIMORE, MARYLAND 21201

September 12, 2019

Project Review and Compliance
Advisory Council on Historic Preservation
401 F Street NW
Suite 308
Washington, D.C., 20001

To the Project Review Team,

In accordance with Section 106 of the National Historic Preservation Act, as amended, the U.S. Department of Agriculture (USDA) would like to initiate consultation for a new proposed undertaking at the Beltsville Agricultural Research Center (BARC) property in Prince George's County, Maryland. USDA is proposing to repair and renovate two buildings, Building 513 and Building 434 (Enclosure 1). USDA is also inviting the Maryland Historical Trust and other consulting parties to participate in the Section 106 process for this undertaking.

Building 513:

Constructed ca. 1860, Building 513, also known as the Hall House, predates the BARC Historic District's architectural period of significance (Enclosure 2). A Maryland Inventory of Historic Places (MIHP) form (PG 64-23) was completed for Building 513 and its garage 513A in 2017, concluding the farmhouse was eligible under Criterion A as a contributing resource to larger BARC Historic District and individually eligible for its association with local Beltsville history and the locally prominent Hall family.

Building 513 has been vacant since 2018 when the Wildlife Office was temporarily relocated because of suspected structural concerns. Leaving Building 513 vacant places the building at risk of deterioration and vulnerable to pests. USDA proposes to renovate and repair the house, and once again operate the Wildlife Office within the building. USDA would seek to avoid or minimize any potential adverse effects to the historic property by following the S*ecretary of Interior's Standards for the Treatment of Historic Properties* to the extent possible.

Building 434:

According to a MIHP form (PG 67-48) prepared for Building 434 in 2017, it is a contributing element to the larger NRHP eligible BARC Historic District under Criteria A and C (Enclosure 3). While Building 434 is not individually significant, it contributes to the overall significance of BARC. The history and development of the agricultural research facility reflects New Deal policies and programs, and contains notable landscape architecture, Georgian Revival architecture, and experimental agricultural architecture.

Under Criterion A, Building 434 was specifically designed and operated as a Goat Barn for the Bureau of Animal Industry (BAI), the largest bureau at the agricultural research facility and its Division of Animal Husbandry. BARC scientists and researchers made valuable scientific contributions, both in foundational and applicable science. Under Criterion C, Building 434 is a contributing property within BARC, as it embodies the distinctive characteristics of a type, period, and method of construction. The physical appearance of BARC was strongly influenced in the 1930s by the planning team of A.D. Taylor, landscape architect, and Delos Smith, architect. Building 434, while relatively modest in design, represents an example of the experimental, and purpose-driven agricultural architecture trends for which BARC is significant, and contributes to the overall landscape.

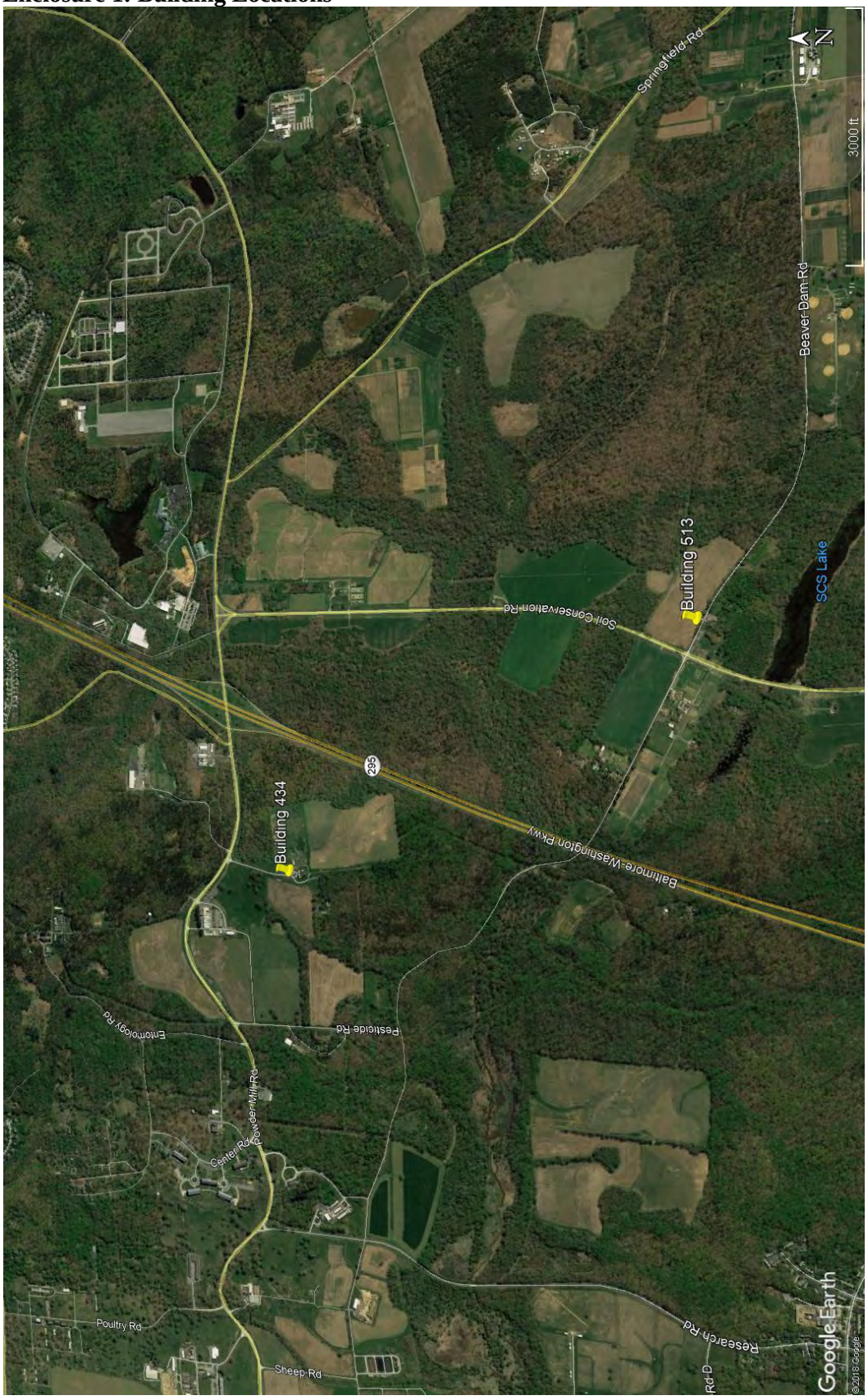
Building 434 has been vacant since 2008. While it is in relatively good condition, the building is vulnerable to deterioration the longer it remains vacant. In the spirit of continuing Building 434's association with BARC's agricultural research mission, USDA is proposing to repurpose the building by using it to house in-take quarantined turkeys and chickens before those birds are introduced into BARC's larger research flock. Through the renovation design, USDA will seek to avoid and minimize potential adverse effects to historic properties. USDA is exploring possible alternatives, including maintaining the original roofline, replacing the current metal roof with the original shingle roof design, removing and replacing in-kind windows that have been boarded up, potentially restoring the first floor fenestration pattern in the front, and preserving the exterior historic façade of the front of the building.

USDA is in the early scoping stage for designing the building renovations and looks forward to consulting with your office on this undertaking. USDA has requested the assistance of the U.S. Army Corps of Engineers, Baltimore District (USACE) in conducting the appropriate National Environmental Policy Act (NEPA) actions and with facilitating Section 106 (Enclosure 4). If you have any questions or comments please contact Harvey Johnson, USACE Project Manager, at 410-962-7961 or by email at Harvey.L.Johnson@usace.army.mil. Questions can also be addressed to Eva Falls, USACE Cultural Resources Specialist, at 410-962-4458 or by email at Eva.E.Falls@usace.army.mil.

Harvey L. Johnson
Program Manager
USACE Programs and Project Management

ENCLOSURES

Enclosure 1: Building Locations



Enclosure 2: Building 513

Enclosure 3: Building 434

Enclosure 4: Memo

USDA
United States Department of Agriculture

Research, Education, and Economics
Agricultural Research Service
Beltsville Agricultural Research Center

August 22, 2019

MEMORANDUM FOR RECORD

SUBJECT: Agency Coordination for the Renovation and Repair of two Buildings (Building 424 and Building 513) at the Beltsville Agricultural Research Center, Beltsville, Maryland

1. The U.S. Department of Agriculture (USDA) is initiating agency coordination for a new proposed action at USDA's Beltsville Agricultural Research Center (BARC) in Beltsville, Maryland. The proposed action consists of the repair and renovation of two historic buildings (Building 424 and Building 513). The agency will complete coordination in accordance with Section 106 of the National Historic Preservation Act (NHPA) and the National Environmental Policy Act (NEPA).

2. USDA has requested the assistance of the U.S. Army Corps of Engineers, Baltimore District (USACE) in conducting the appropriate NEPA and Section 106 processes. USACE is authorized to prepare and send agency correspondence, collect and compile responses from such correspondence, and to arrange phone calls, meetings, and site visits as necessary.

3. Chris Bentley is the primary point of contact for BARC. Interested parties may direct questions or comments to him at 301-504-5534 or by email at christopher.bentley@usda.gov. Harvey L. Johnson is the primary point of contact for USACE. He is available at 410-962-7961 or by email at harvey.l.johnson@usace.army.mil.

Christopher S. Bentley
Senior Advisor, Director's Office
BARC, ARS/USDA

DEPARTMENT OF THE ARMY
BALTIMORE DISTRICT, CORPS OF ENGINEERS
2 HOPKINS PLAZA
BALTIMORE, MARYLAND 21201

September 12, 2019

Dennis Doster
Anacostia Trails Heritage Area Inc.
Maryland Milestones Heritage Center
4318 Gallatin Street
Hyattsville, MD 20781

Mr. Doster,

In accordance with Section 106 of the National Historic Preservation Act, as amended, the U.S. Department of Agriculture (USDA) would like to initiate consultation for a new proposed undertaking at the Beltsville Agricultural Research Center (BARC) property in Prince George's County, Maryland. USDA is proposing to repair and renovate two buildings, Building 513 and Building 434 (Enclosure 1).

Building 513:

Constructed ca. 1860, Building 513, also known as the Hall House, predates the BARC Historic District's architectural period of significance (Enclosure 2). A Maryland Inventory of Historic Places (MIHP) form (PG 64-23) was completed for Building 513 and its garage 513A in 2017, concluding the farmhouse was eligible under Criterion A as a contributing resource to larger BARC Historic District and individually eligible for its association with local Beltsville history and the locally prominent Hall family.

Building 513 has been vacant since 2018 when the Wildlife Office was temporarily relocated because of suspected structural concerns. Leaving Building 513 vacant places the building at risk of deterioration and vulnerable to pests. USDA proposes to renovate and repair the house, and once again operate the Wildlife Office within the building. USDA would seek to avoid or minimize any potential adverse effects to the historic property by following the S*ecretary of Interior's Standards for the Treatment of Historic Properties* to the extent possible.

Building 434:

According to a MIHP form (PG 67-48) prepared for Building 434 in 2017, it is a contributing element to the larger NRHP eligible BARC Historic District under Criteria A and C (Enclosure 3). While Building 434 is not individually significant, it contributes to the overall significance of BARC. The history and development of the agricultural research facility reflects New Deal policies and programs, and contains notable landscape architecture, Georgian Revival architecture, and experimental agricultural architecture.

Under Criterion A, Building 434 was specifically designed and operated as a Goat Barn for the Bureau of Animal Industry (BAI), the largest bureau at the agricultural research facility and its Division of Animal Husbandry. BARC scientists and researchers made valuable scientific contributions, both in foundational and applicable science. Under Criterion C, Building 434 is a contributing property within BARC, as it embodies the distinctive characteristics of a type, period, and method of construction. The physical appearance of BARC was strongly influenced in the 1930s by the planning team of A.D. Taylor, landscape architect, and Delos Smith, architect. Building 434, while relatively modest in design, represents an example of the experimental, and purpose-driven agricultural architecture trends for which BARC is significant, and contributes to the overall landscape.

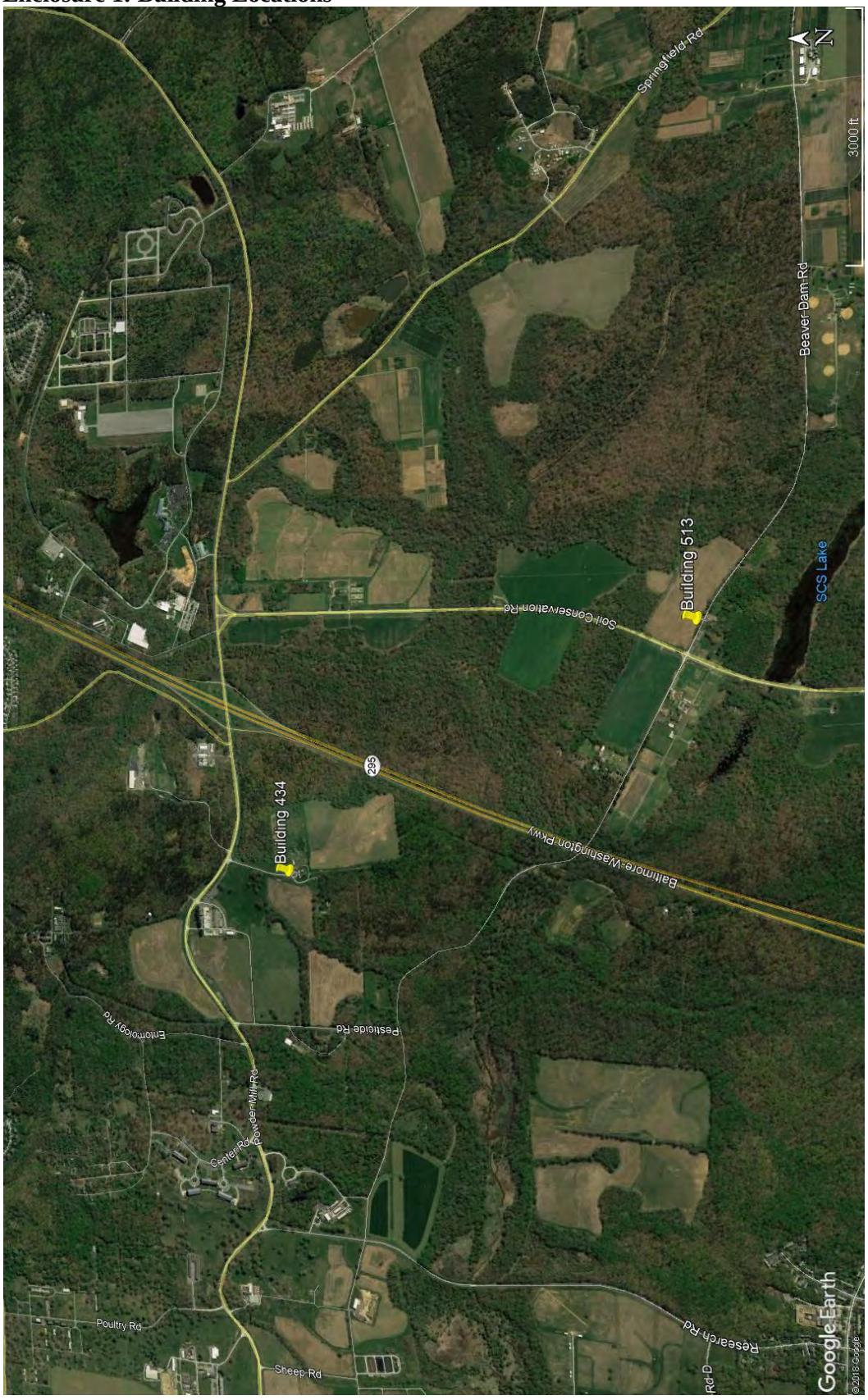
Building 434 has been vacant since 2008. While it is in relatively good condition, the building is vulnerable to deterioration the longer it remains vacant. In the spirit of continuing Building 434's association with BARC's agricultural research mission, USDA is proposing to repurpose the building by using it to house in-take quarantined turkeys and chickens before those birds are introduced into BARC's larger research flock. Through the renovation design, USDA will seek to avoid and minimize potential adverse effects to historic properties. USDA is exploring possible alternatives, including maintaining the original roofline, replacing the current metal roof with the original shingle roof design, removing and replacing in-kind windows that have been boarded up, potentially restoring the first floor fenestration pattern in the front, and preserving the exterior historic façade of the front of the building.

USDA is in the early scoping stage for designing the building renovations and looks forward to consulting with your office on this undertaking. USDA has requested the assistance of the U.S. Army Corps of Engineers, Baltimore District (USACE) in conducting the appropriate National Environmental Policy Act (NEPA) actions and with facilitating Section 106 (Enclosure 4). If you have any questions or comments please contact Harvey Johnson, USACE Project Manager, at 410-962-7961 or by email at Harvey.L.Johnson@usace.army.mil. Questions can also be addressed to Eva Falls, USACE Cultural Resources Specialist, at 410-962-4458 or by email at Eva.E.Falls@usace.army.mil.

Harvey L. Johnson
Program Manager
USACE Programs and Project Management

ENCLOSURES

Enclosure 1: Building Locations



Enclosure 2: Building 513

Enclosure 3: Building 434

Enclosure 4: Memo

USDA
United States Department of Agriculture

Research, Education, and Economics
Agricultural Research Service
Beltsville Agricultural Research Center

August 22, 2019

MEMORANDUM FOR RECORD

SUBJECT: Agency Coordination for the Renovation and Repair of two Buildings (Building 424 and Building 513) at the Beltsville Agricultural Research Center, Beltsville, Maryland

1. The U.S. Department of Agriculture (USDA) is initiating agency coordination for a new proposed action at USDA's Beltsville Agricultural Research Center (BARC) in Beltsville, Maryland. The proposed action consists of the repair and renovation of two historic buildings (Building 424 and Building 513). The agency will complete coordination in accordance with Section 106 of the National Historic Preservation Act (NHPA) and the National Environmental Policy Act (NEPA).

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Christopher S. Bentley
Senior Advisor, Director's Office
BARC, ARS/USDA

DEPARTMENT OF THE ARMY
BALTIMORE DISTRICT, CORPS OF ENGINEERS
2 HOPKINS PLAZA
BALTIMORE, MARYLAND 21201

September 12, 2019

Kimberly Penrod
Director of Cultural Resources & Section 106
Delaware Nation
PO Box 825
Anadarko, OR 73005

Ms. Penrod,

In accordance with Section 106 of the National Historic Preservation Act, as amended, the U.S. Department of Agriculture (USDA) would like to initiate consultation for a new proposed undertaking at the Beltsville Agricultural Research Center (BARC) property in Prince George's County, Maryland. USDA is proposing to repair and renovate two buildings, Building 513 and Building 434 (Enclosure 1).

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Harvey L. Johnson
Program Manager
USACE Programs and Project Management

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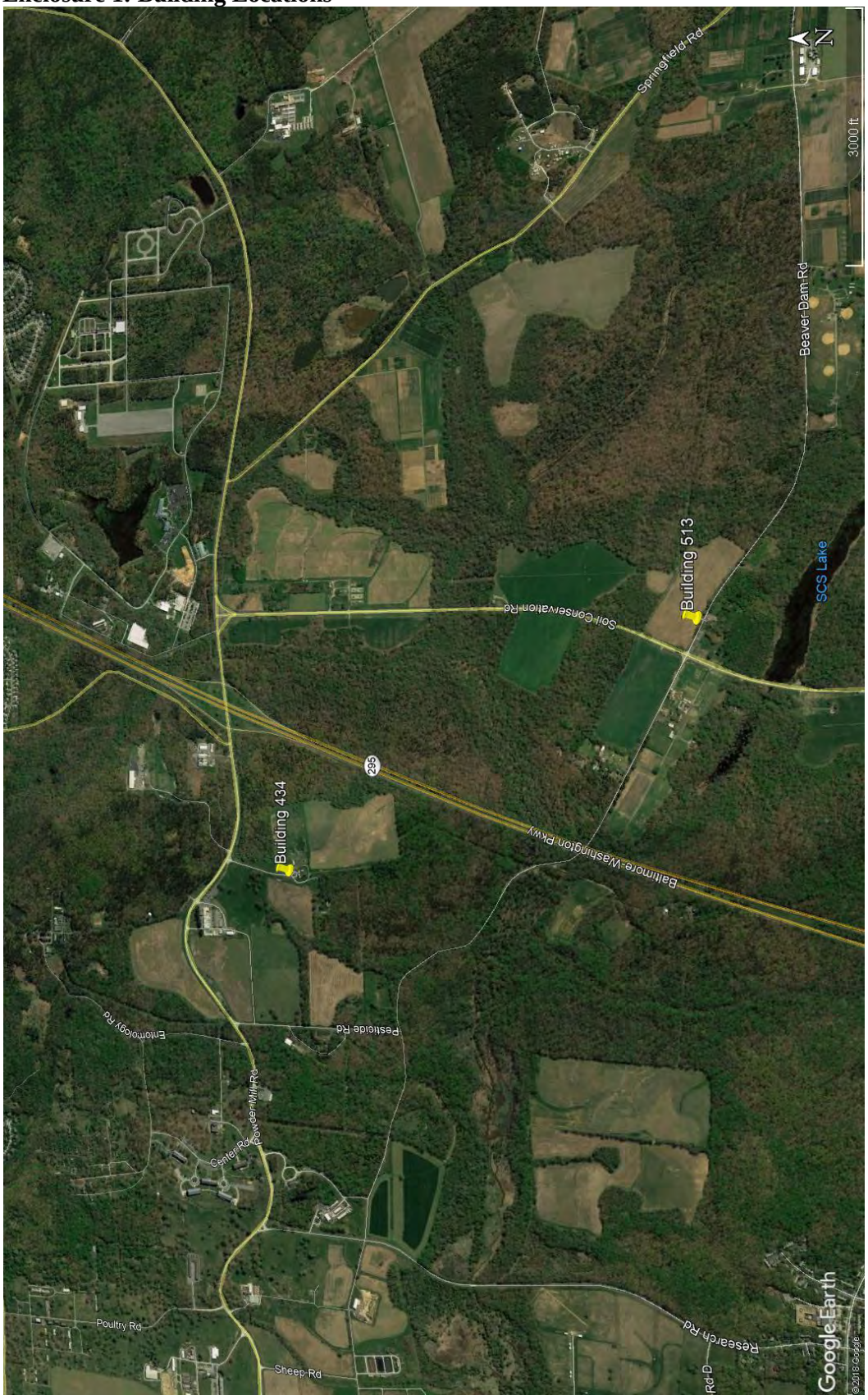
Enclosure 1: Building Locations



Enclosure 2: Building 513

Enclosure 3: Building 434

Enclosure 4: Memo

USDA
United States Department of Agriculture

Research, Education, and Economics
Agricultural Research Service
Beltsville Agricultural Research Center

August 22, 2019

MEMORANDUM FOR RECORD

SUBJECT: Agency Coordination for the Renovation and Repair of two Buildings (Building 424 and Building 513) at the Beltsville Agricultural Research Center, Beltsville, Maryland

1. The U.S. Department of Agriculture (USDA) is initiating agency coordination for a new proposed action at USDA's Beltsville Agricultural Research Center (BARC) in Beltsville, Maryland. The proposed action consists of the repair and renovation of two historic buildings (Building 424 and Building 513). The agency will complete coordination in accordance with Section 106 of the National Historic Preservation Act (NHPA) and the National Environmental Policy Act (NEPA).

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Christopher S. Bentley
Senior Advisor, Director's Office
BARC, ARS/USDA

DEPARTMENT OF THE ARMY
BALTIMORE DISTRICT, CORPS OF ENGINEERS
2 HOPKINS PLAZA
BALTIMORE, MARYLAND 21201

September 12, 2019

Susan Bachor
Preservation Representative
Delaware Tribe of Indians
P.O. Box 64
Pocono Lake, PA 18347

Ms. Bachor,

In accordance with Section 106 of the National Historic Preservation Act, as amended, the U.S. Department of Agriculture (USDA) would like to initiate consultation for a new proposed undertaking at the Beltsville Agricultural Research Center (BARC) property in Prince George's County, Maryland. USDA is proposing to repair and renovate two buildings, Building 513 and Building 434 (Enclosure 1).

Building 513:

Constructed ca. 1860, Building 513, also known as the Hall House, predates the BARC Historic District's architectural period of significance (Enclosure 2). A Maryland Inventory of Historic Places (MIHP) form (PG 64-23) was completed for Building 513 and its garage 513A in 2017, concluding the farmhouse was eligible under Criterion A as a contributing resource to larger BARC Historic District and individually eligible for its association with local Beltsville history and the locally prominent Hall family.

Building 513 has been vacant since 2018 when the Wildlife Office was temporarily relocated because of suspected structural concerns. Leaving Building 513 vacant places the building at risk of deterioration and vulnerable to pests. USDA proposes to renovate and repair the house, and once again operate the Wildlife Office within the building. USDA would seek to avoid or minimize any potential adverse effects to the historic property by following the S*ecretary of Interior's Standards for the Treatment of Historic Properties* to the extent possible.

Building 434:

According to a MIHP form (PG 67-48) prepared for Building 434 in 2017, it is a contributing element to the larger NRHP eligible BARC Historic District under Criteria A and C (Enclosure 3). While Building 434 is not individually significant, it contributes to the overall significance of BARC. The history and development of the agricultural research facility reflects New Deal policies and programs, and contains notable landscape architecture, Georgian Revival architecture, and experimental agricultural architecture.

Under Criterion A, Building 434 was specifically designed and operated as a Goat Barn for the Bureau of Animal Industry (BAI), the largest bureau at the agricultural research facility and its Division of Animal Husbandry. BARC scientists and researchers made valuable scientific contributions, both in foundational and applicable science. Under Criterion C, Building 434 is a contributing property within BARC, as it embodies the distinctive characteristics of a type, period, and method of construction. The physical appearance of BARC was strongly influenced in the 1930s by the planning team of A.D. Taylor, landscape architect, and Delos Smith, architect. Building 434, while relatively modest in design, represents an example of the experimental, and purpose-driven agricultural architecture trends for which BARC is significant, and contributes to the overall landscape.

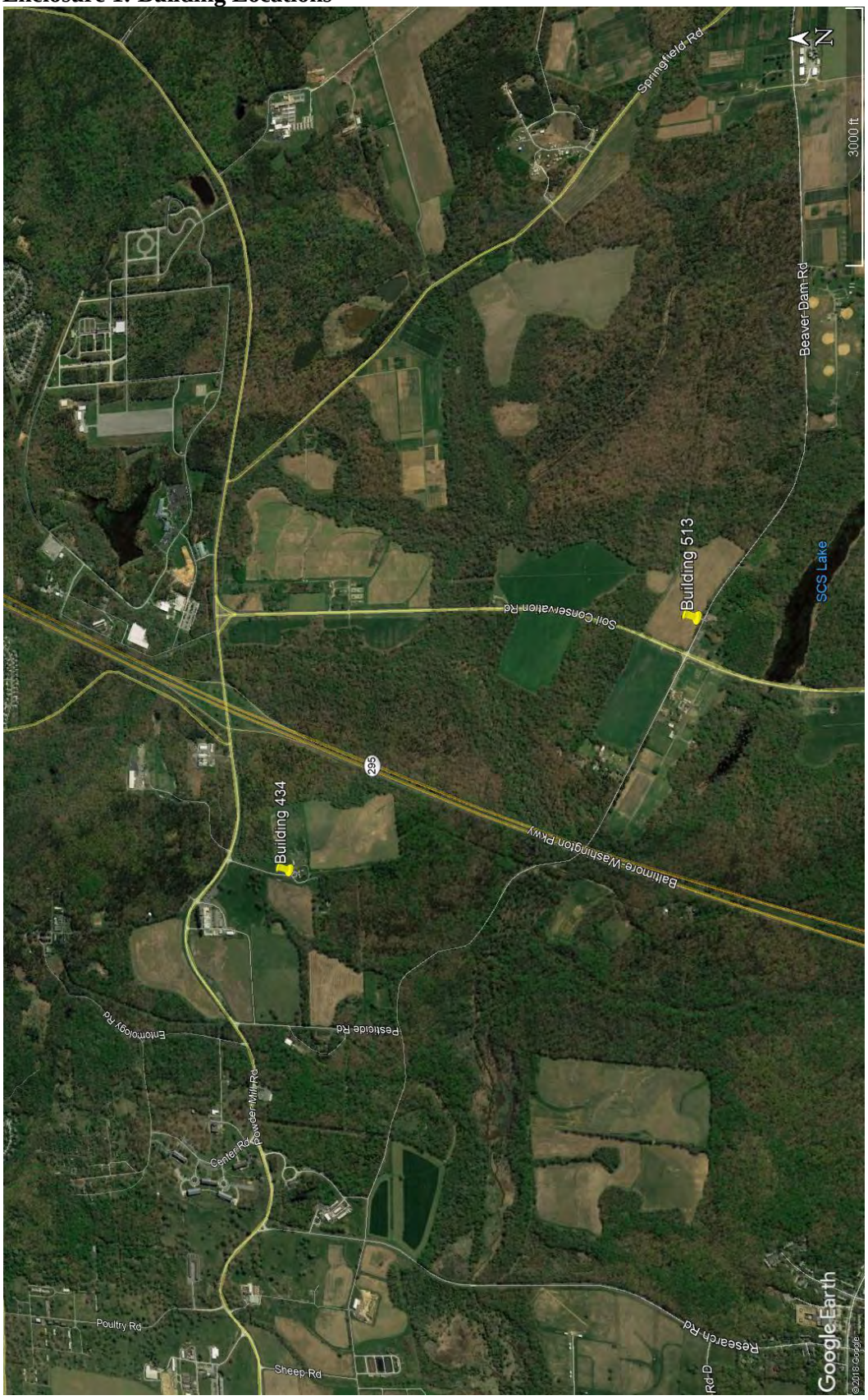
Building 434 has been vacant since 2008. While it is in relatively good condition, the building is vulnerable to deterioration the longer it remains vacant. In the spirit of continuing Building 434's association with BARC's agricultural research mission, USDA is proposing to repurpose the building by using it to house in-take quarantined turkeys and chickens before those birds are introduced into BARC's larger research flock. Through the renovation design, USDA will seek to avoid and minimize potential adverse effects to historic properties. USDA is exploring possible alternatives, including maintaining the original roofline, replacing the current metal roof with the original shingle roof design, removing and replacing in-kind windows that have been boarded up, potentially restoring the first floor fenestration pattern in the front, and preserving the exterior historic façade of the front of the building.

USDA is in the early scoping stage for designing the building renovations and looks forward to consulting with your office on this undertaking. USDA has requested the assistance of the U.S. Army Corps of Engineers, Baltimore District (USACE) in conducting the appropriate National Environmental Policy Act (NEPA) actions and with facilitating Section 106 (Enclosure 4). If you have any questions or comments please contact Harvey Johnson, USACE Project Manager, at 410-962-7961 or by email at Harvey.L.Johnson@usace.army.mil. Questions can also be addressed to Eva Falls, USACE Cultural Resources Specialist, at 410-962-4458 or by email at Eva.E.Falls@usace.army.mil.

Harvey L. Johnson
Program Manager
USACE Programs and Project Management

ENCLOSURES

Enclosure 1: Building Locations



Enclosure 2: Building 513

Enclosure 3: Building 434

Enclosure 4: Memo

USDA
United States Department of Agriculture

Research, Education, and Economics
Agricultural Research Service
Beltsville Agricultural Research Center

August 22, 2019

MEMORANDUM FOR RECORD

SUBJECT: Agency Coordination for the Renovation and Repair of two Buildings (Building 424 and Building 513) at the Beltsville Agricultural Research Center, Beltsville, Maryland

1. The U.S. Department of Agriculture (USDA) is initiating agency coordination for a new proposed action at USDA's Beltsville Agricultural Research Center (BARC) in Beltsville, Maryland. The proposed action consists of the repair and renovation of two historic buildings (Building 424 and Building 513). The agency will complete coordination in accordance with Section 106 of the National Historic Preservation Act (NHPA) and the National Environmental Policy Act (NEPA).

2. USDA has requested the assistance of the U.S. Army Corps of Engineers, Baltimore District (USACE) in conducting the appropriate NEPA and Section 106 processes. USACE is authorized to prepare and send agency correspondence, collect and compile responses from such correspondence, and to arrange phone calls, meetings, and site visits as necessary.

3. Chris Bentley is the primary point of contact for BARC. Interested parties may direct questions or comments to him at 301-504-5534 or by email at christopher.bentley@usda.gov. Harvey L. Johnson is the primary point of contact for USACE. He is available at 410-962-7961 or by email at harvey.l.johnson@usace.army.mil.

Christopher S. Bentley
Senior Advisor, Director's Office
BARC, ARS/USDA

DEPARTMENT OF THE ARMY
BALTIMORE DISTRICT, CORPS OF ENGINEERS
2 HOPKINS PLAZA
BALTIMORE, MARYLAND 21201

September 12, 2019

Crystal Hancock
Acting Supervisor
Prince George's County Planning Department
Countywide Planning Division- Special Projects Section
Maryland-National Capital Park & Planning Commission
14741 Governor Oden Bowie Drive
Upper Marlboro, Maryland, MD 20772

Ms. Hancock,

In accordance with Section 106 of the National Historic Preservation Act, as amended, the U.S. Department of Agriculture (USDA) would like to initiate consultation for a new proposed undertaking at the Beltsville Agricultural Research Center (BARC) property in Prince George's County, Maryland. USDA is proposing to repair and renovate two buildings, Building 513 and Building 434 (Enclosure 1).

Building 513:

Constructed ca. 1860, Building 513, also known as the Hall House, predates the BARC Historic District's architectural period of significance (Enclosure 2). A Maryland Inventory of Historic Places (MIHP) form (PG 64-23) was completed for Building 513 and its garage 513A in 2017, concluding the farmhouse was eligible under Criterion A as a contributing resource to larger BARC Historic District and individually eligible for its association with local Beltsville history and the locally prominent Hall family.

Building 513 has been vacant since 2018 when the Wildlife Office was temporarily relocated because of suspected structural concerns. Leaving Building 513 vacant places the building at risk of deterioration and vulnerable to pests. USDA proposes to renovate and repair the house, and once again operate the Wildlife Office within the building. USDA would seek to avoid or minimize any potential adverse effects to the historic property by following the S*ecretary of Interior's Standards for the Treatment of Historic Properties* to the extent possible.

Building 434:

According to a MIHP form (PG 67-48) prepared for Building 434 in 2017, it is a contributing element to the larger NRHP eligible BARC Historic District under Criteria A and C (Enclosure 3). While Building 434 is not individually significant, it contributes to the overall significance of BARC. The history and development of the agricultural research facility reflects New Deal policies and programs, and contains notable landscape architecture, Georgian Revival architecture, and experimental agricultural architecture.

Under Criterion A, Building 434 was specifically designed and operated as a Goat Barn for the Bureau of Animal Industry (BAI), the largest bureau at the agricultural research facility and its Division of Animal Husbandry. BARC scientists and researchers made valuable scientific contributions, both in foundational and applicable science. Under Criterion C, Building 434 is a contributing property within BARC, as it embodies the distinctive characteristics of a type, period, and method of construction. The physical appearance of BARC was strongly influenced in the 1930s by the planning team of A.D. Taylor, landscape architect, and Delos Smith, architect. Building 434, while relatively modest in design, represents an example of the experimental, and purpose-driven agricultural architecture trends for which BARC is significant, and contributes to the overall landscape.

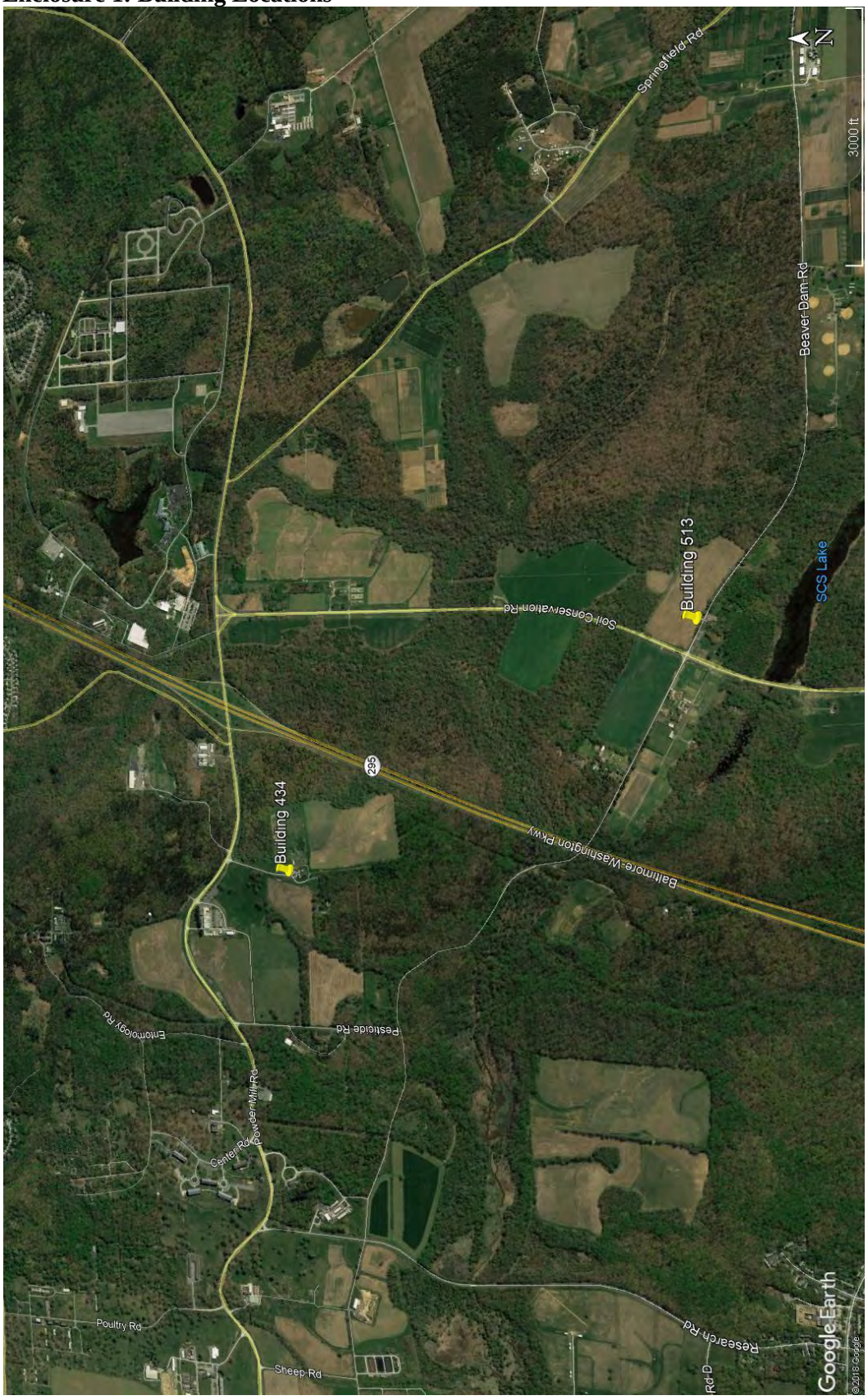
Building 434 has been vacant since 2008. While it is in relatively good condition, the building is vulnerable to deterioration the longer it remains vacant. In the spirit of continuing Building 434's association with BARC's agricultural research mission, USDA is proposing to repurpose the building by using it to house in-take quarantined turkeys and chickens before those birds are introduced into BARC's larger research flock. Through the renovation design, USDA will seek to avoid and minimize potential adverse effects to historic properties. USDA is exploring possible alternatives, including maintaining the original roofline, replacing the current metal roof with the original shingle roof design, removing and replacing in-kind windows that have been boarded up, potentially restoring the first floor fenestration pattern in the front, and preserving the exterior historic façade of the front of the building.

USDA is in the early scoping stage for designing the building renovations and looks forward to consulting with your office on this undertaking. USDA has requested the assistance of the U.S. Army Corps of Engineers, Baltimore District (USACE) in conducting the appropriate National Environmental Policy Act (NEPA) actions and with facilitating Section 106 (Enclosure 4). If you have any questions or comments please contact Harvey Johnson, USACE Project Manager, at 410-962-7961 or by email at Harvey.L.Johnson@usace.army.mil. Questions can also be addressed to Eva Falls, USACE Cultural Resources Specialist, at 410-962-4458 or by email at Eva.E.Falls@usace.army.mil.

Harvey L. Johnson
Program Manager
USACE Programs and Project Management

ENCLOSURES

Enclosure 1: Building Locations



Enclosure 2: Building 513

Enclosure 3: Building 434

Enclosure 4: Memo

USDA
United States Department of Agriculture

Research, Education, and Economics
Agricultural Research Service
Beltsville Agricultural Research Center

August 22, 2019

MEMORANDUM FOR RECORD

SUBJECT: Agency Coordination for the Renovation and Repair of two Buildings (Building 424 and Building 513) at the Beltsville Agricultural Research Center, Beltsville, Maryland

1. The U.S. Department of Agriculture (USDA) is initiating agency coordination for a new proposed action at USDA's Beltsville Agricultural Research Center (BARC) in Beltsville, Maryland. The proposed action consists of the repair and renovation of two historic buildings (Building 424 and Building 513). The agency will complete coordination in accordance with Section 106 of the National Historic Preservation Act (NHPA) and the National Environmental Policy Act (NEPA).

2. USDA has requested the assistance of the U.S. Army Corps of Engineers, Baltimore District (USACE) in conducting the appropriate NEPA and Section 106 processes. USACE is authorized to prepare and send agency correspondence, collect and compile responses from such correspondence, and to arrange phone calls, meetings, and site visits as necessary.

3. Chris Bentley is the primary point of contact for BARC. Interested parties may direct questions or comments to him at 301-504-5534 or by email at christopher.bentley@usda.gov. Harvey L. Johnson is the primary point of contact for USACE. He is available at 410-962-7961 or by email at harvey.l.johnson@usace.army.mil.

Christopher S. Bentley
Senior Advisor, Director's Office
BARC, ARS/USDA

DEPARTMENT OF THE ARMY
BALTIMORE DISTRICT, CORPS OF ENGINEERS
2 HOPKINS PLAZA
BALTIMORE, MARYLAND 21201

September 12, 2019

Matthew Flis
Senior Urban Designer
National Capital Planning Commission
North Lobby, Suite 500
401 9th Street, NW
Washington, DC 20576

Mr. Flis,

In accordance with Section 106 of the National Historic Preservation Act, as amended, the U.S. Department of Agriculture (USDA) would like to initiate consultation for a new proposed undertaking at the Beltsville Agricultural Research Center (BARC) property in Prince George's County, Maryland. USDA is proposing to repair and renovate two buildings, Building 513 and Building 434 (Enclosure 1).

Building 513:

Constructed ca. 1860, Building 513, also known as the Hall House, predates the BARC Historic District's architectural period of significance (Enclosure 2). A Maryland Inventory of Historic Places (MIHP) form (PG 64-23) was completed for Building 513 and its garage 513A in 2017, concluding the farmhouse was eligible under Criterion A as a contributing resource to larger BARC Historic District and individually eligible for its association with local Beltsville history and the locally prominent Hall family.

Building 513 has been vacant since 2018 when the Wildlife Office was temporarily relocated because of suspected structural concerns. Leaving Building 513 vacant places the building at risk of deterioration and vulnerable to pests. USDA proposes to renovate and repair the house, and once again operate the Wildlife Office within the building. USDA would seek to avoid or minimize any potential adverse effects to the historic property by following the S*ecretary of Interior's Standards for the Treatment of Historic Properties* to the extent possible.

Building 434:

According to a MIHP form (PG 67-48) prepared for Building 434 in 2017, it is a contributing element to the larger NRHP eligible BARC Historic District under Criteria A and C (Enclosure 3). While Building 434 is not individually significant, it contributes to the overall significance of BARC. The history and development of the agricultural research facility reflects New Deal policies and programs, and contains notable landscape architecture, Georgian Revival architecture, and experimental agricultural architecture.

Under Criterion A, Building 434 was specifically designed and operated as a Goat Barn for the Bureau of Animal Industry (BAI), the largest bureau at the agricultural research facility and its Division of Animal Husbandry. BARC scientists and researchers made valuable scientific contributions, both in foundational and applicable science. Under Criterion C, Building 434 is a contributing property within BARC, as it embodies the distinctive characteristics of a type, period, and method of construction. The physical appearance of BARC was strongly influenced in the 1930s by the planning team of A.D. Taylor, landscape architect, and Delos Smith, architect. Building 434, while relatively modest in design, represents an example of the experimental, and purpose-driven agricultural architecture trends for which BARC is significant, and contributes to the overall landscape.

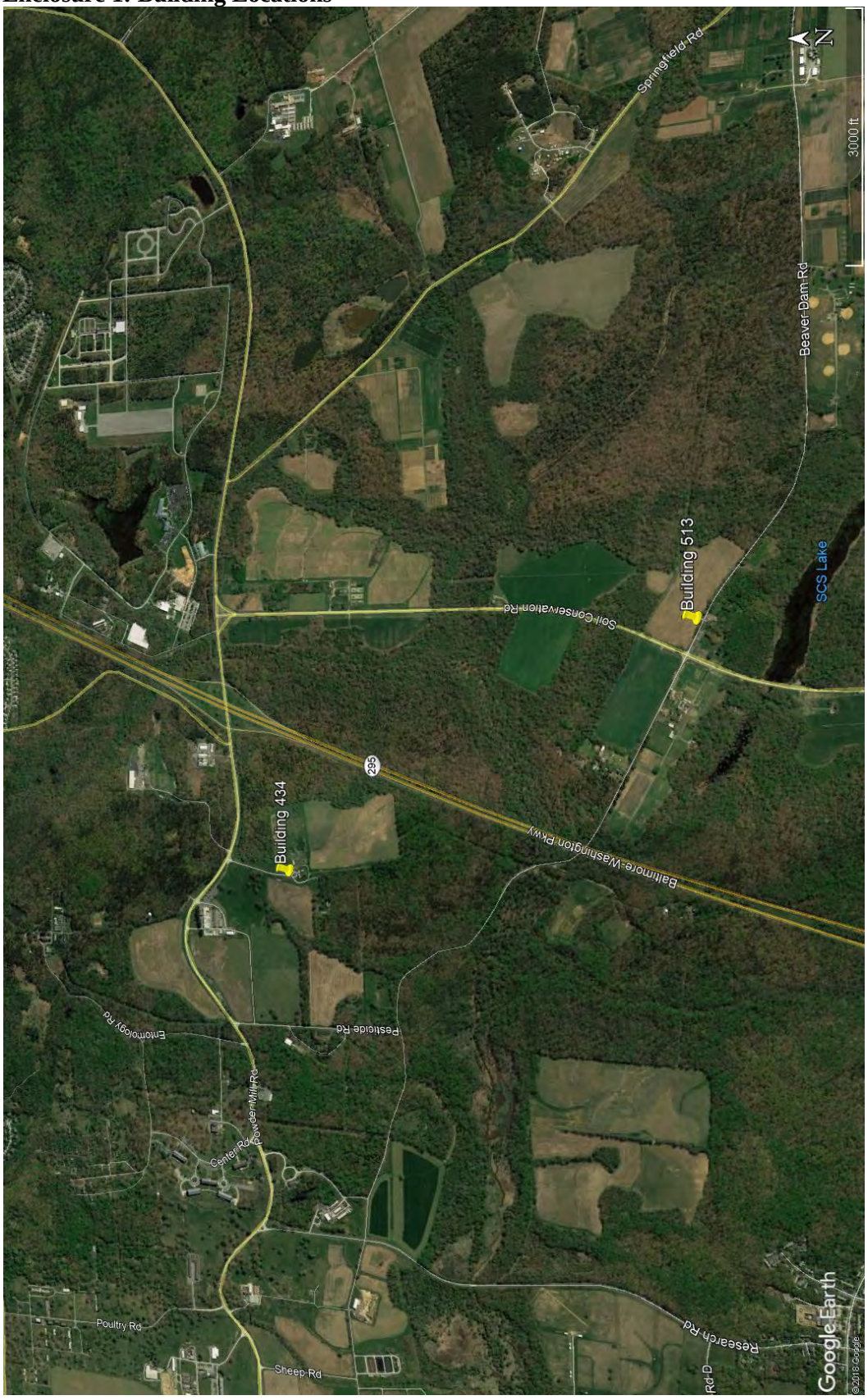
Building 434 has been vacant since 2008. While it is in relatively good condition, the building is vulnerable to deterioration the longer it remains vacant. In the spirit of continuing Building 434's association with BARC's agricultural research mission, USDA is proposing to repurpose the building by using it to house in-take quarantined turkeys and chickens before those birds are introduced into BARC's larger research flock. Through the renovation design, USDA will seek to avoid and minimize potential adverse effects to historic properties. USDA is exploring possible alternatives, including maintaining the original roofline, replacing the current metal roof with the original shingle roof design, removing and replacing in-kind windows that have been boarded up, potentially restoring the first floor fenestration pattern in the front, and preserving the exterior historic façade of the front of the building.

USDA is in the early scoping stage for designing the building renovations and looks forward to consulting with your office on this undertaking. USDA has requested the assistance of the U.S. Army Corps of Engineers, Baltimore District (USACE) in conducting the appropriate National Environmental Policy Act (NEPA) actions and with facilitating Section 106 (Enclosure 4). If you have any questions or comments please contact Harvey Johnson, USACE Project Manager, at 410-962-7961 or by email at Harvey.L.Johnson@usace.army.mil. Questions can also be addressed to Eva Falls, USACE Cultural Resources Specialist, at 410-962-4458 or by email at Eva.E.Falls@usace.army.mil.

Harvey L. Johnson
Program Manager
USACE Programs and Project Management

ENCLOSURES

Enclosure 1: Building Locations



Enclosure 2: Building 513

Enclosure 3: Building 434

Enclosure 4: Memo

USDA
United States Department of Agriculture

Research, Education, and Economics
Agricultural Research Service
Beltsville Agricultural Research Center

August 22, 2019

MEMORANDUM FOR RECORD

SUBJECT: Agency Coordination for the Renovation and Repair of two Buildings (Building 424 and Building 513) at the Beltsville Agricultural Research Center, Beltsville, Maryland

1. The U.S. Department of Agriculture (USDA) is initiating agency coordination for a new proposed action at USDA's Beltsville Agricultural Research Center (BARC) in Beltsville, Maryland. The proposed action consists of the repair and renovation of two historic buildings (Building 424 and Building 513). The agency will complete coordination in accordance with Section 106 of the National Historic Preservation Act (NHPA) and the National Environmental Policy Act (NEPA).

2. USDA has requested the assistance of the U.S. Army Corps of Engineers, Baltimore District (USACE) in conducting the appropriate NEPA and Section 106 processes. USACE is authorized to prepare and send agency correspondence, collect and compile responses from such correspondence, and to arrange phone calls, meetings, and site visits as necessary.

3. Chris Bentley is the primary point of contact for BARC. Interested parties may direct questions or comments to him at 301-504-5534 or by email at christopher.bentley@usda.gov. Harvey L. Johnson is the primary point of contact for USACE. He is available at 410-962-7961 or by email at harvey.l.johnson@usace.army.mil.

Christopher S. Bentley
Senior Advisor, Director's Office
BARC, ARS/USDA

Preserving America's Heritage

September 26, 2019

Mr. Howard Zhang
Director
Beltsville Agricultural Research Center
10300 Baltimore Avenue
Bldg. 003, Rm. 231, BARC-West
Beltsville, MD 20705

Ref: *Proposed Repair and Renovation of Building 513 and 434 at the Beltsville Agricultural Research Center*
Prince George County, Maryland

Dear Mr. Zhang:

The Advisory Council on Historic Preservation (ACHP) has received your notification of adverse effect for the referenced undertaking that was submitted in accordance with Section 800.6(a)(1) of our regulations, "Protection of Historic Properties" (36 CFR Part 800). The background documentation included with your submission does not meet the specifications in Section 800.11(e) of the ACHP's regulations. We, therefore, are unable to determine whether Appendix A of the regulations, *Criteria for Council Involvement in Reviewing Individual Section 106* Cases, applies to this undertaking. Accordingly, we request that you submit the following additional information so that we can determine whether our participation in the consultation to resolve adverse effects is warranted.

- An explanation of why the criteria of adverse effect were found applicable or inapplicable, including any conditions or future actions to avoid, minimize, or mitigate adverse effects;
- Copies or summaries of any views provided by consulting parties, the public, and the Maryland State Historic Preservation Officer.
- Copies or summaries of any views or comments provided by any affected Indian tribe.

Upon receipt of the additional information, we will notify you within 15 days of our decision.

If you have any questions, please contact Christopher Daniel at 202-517-0223 or via e-mail at cdaniel@achp.gov.

Sincerely,

Artisha Thompson
Historic Preservation Technician
Office of Federal Agency Programs

October 1, 2019

Mr. Harvey Johnson
USACE Project Manager
2 Hopkins Plaza
Baltimore, MD 21201

Re: USDA Beltsville Agricultural Research Center – Buildings 434 and 513
Prince George's County, Maryland

Dear Mr. Johnson:

Thank for your recent letter initiating consultation with the Maryland Historical Trust (Trust), Maryland's State Historic Preservation Office, under Section 106 of the National Historic Preservation Act for the above-referenced undertaking. Trust staff appreciated the opportunity to meet with the Corps of Engineers and USDA BARC staff and visit the sites on August 15, 2019. The discussion and tour provided us with a good understanding of the project's scope, current conditions of the structures, historic resources, and design considerations. Below are our preliminary comments regarding the undertaking's effects on historic properties.

According to the letter, the project will entail two projects: 1.) The renovation of Building 513 (MIHP No. PG:64-23), also known as Hall House, which is eligible for listing in National Register of Historic Places; and 2.) The rehabilitation of Building 434 (MIHP No. PG:67-48), originally constructed as a Goat Barn and a contributing element to the BARC Historic District, which is eligible for listing on the National Register. As project planning proceeds, we encourage the Corps to seeks ways to avoid or minimize any potential adverse effects on the historic properties.

We look forward to further consultation as project planning proceeds and to successfully completing the undertaking's Section 106 review. If you have questions or require further assistance, please contact Beth Cole at 410-697-9541 or beth.cole@maryland.gov. Thank you for providing us this opportunity to comment.

Sincerely,

Natalie Loukianoff
Project Review & Compliance
Maryland Historical Trust

BC/NSL/201904593-4

CC: Eva Falls (COE, eva.e.falls@usace.army.mil)

THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION

14741 Governor Oden Bowie Drive
Upper Marlboro, Maryland 20772
TTY: (301) 952-4366
www.mncppc.org/pgco

October 9, 2019

Mr. Harvey L. Johnson
Program Manager
USACE Programs and Project Management
2 Hopkins Plaza
Baltimore, Maryland 21201

RE: Section 106 Review
United States Dept. of Agriculture (USDA)
Buildings 434 and 513
Beltsville Agricultural Research Center (BARC)
Beltsville, Maryland 20705

Dear Mr. Johnson:

Historic Preservation Commission staff received your letter dated September 12, 2019 regarding the proposed repair and renovation of Building 434 and Building 513, both located within the BARC property. Through the repair and renovation of each building, the USDA will seek to avoid or minimize any potential adverse effects to historic properties. Historic Preservation Section staff would like to confirm that the following Prince George's County Historic Sites and Resources are located within a one-mile radius of the subject site: BARC (Historic Resource 62-014, undefined boundary) and CCC Lodge (Historic Site 67-008).

Historic Preservation Section staff believes that the proposed project will have no effect on Prince George's County Historic Sites and Resources (please consult the enclosed map).

If you have additional questions, please feel free to contact me. Thank you.

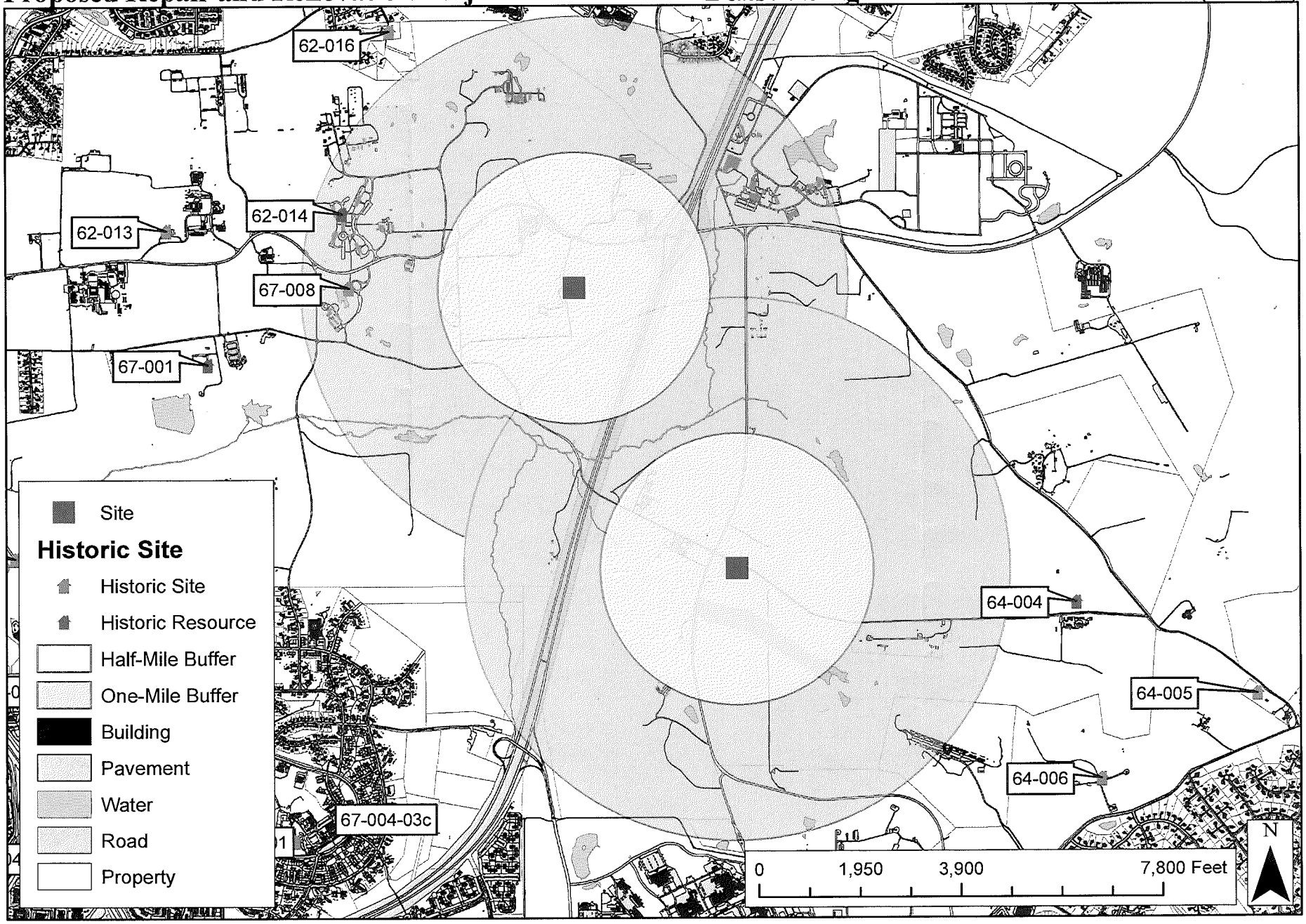
Sincerely,

Ashley S. Hall
Principal Planning Technician
Historic Preservation Section
301-952-5395
ashley.hall@ppd.mncppc.org

Enclosure: Map

Buildings 434 and 513
Proposed Repair and Renovation Project

United States Department of Agriculture (USDA)
Beltsville Agricultural Research Center (BARC)



DEPARTMENT OF THE ARMY
BALTIMORE DISTRICT, CORPS OF ENGINEERS
2 HOPKINS PLAZA
BALTIMORE, MARYLAND 21201

January 13, 2020

Beth Cole
Administrator
Office of Review and Compliance
Maryland Historical Trust
100 Community Place
Crownsville, Maryland 21032

Ms. Cole,

In accordance with Section 106 of the National Historic Preservation Act, as amended, the U.S. Department of Agriculture (USDA) would like to continue consultation for the proposed undertaking concerning Buildings 434 and 513 at the Beltsville Agricultural Research Center (BARC) property in Prince George's County, Maryland.

Attached please find the 35% draft designs for alterations to the Building 434 site for your review and comment (Enclosure 1). USDA is proposing the addition of two poultry house wings to the south façade of Building 434, upgrades to the approach road, and the addition of stormwater features. While the interior of Building 434 will be altered, most exterior features will be preserved including the building layout, roofline, fenestration pattern, and materials. The second floor hayloft will be repurposed as utility space and the first floor interior will be used for shower decontamination and as office space. The repurposing of Building 434 will result in the long term preservation of this historic property and will prevent an adverse effect through neglect.

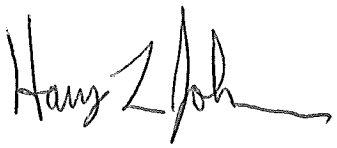
Unfortunately during the conditions assessment by a multi-disciplinary team of engineers, repair of Building 513 was determined to be in such poor condition as to be cost prohibitive. It was determined repairs would require completely 'stripping the building down to the studs' due to severe mold issues, needed alterations for life safety concerns, and structural concerns with the foundation. USDA has determined that the renovation of Building 513 is no longer a feasible alternative for this undertaking.

The new proposed alternative for the Wildlife Office is to install a 24 by 64 foot modular office unit directly south of the existing parking lot to the west of Building 513 (Enclosure 2). USDA would continue to use and maintain the associated Garage, Building 513A, for the Wildlife Office's use. The design team is currently evaluating utility and stormwater control needs for this alternative.

USDA is in the process of identifying historic properties that could be affected by this new Wildlife Office alternative. While an existing tree line separates Building 513 from the parking lot, the modular building would be visible from the Hall House, as well as the National Plant Materials Center, Building 509, located to the west along Beaver Dam Road. An archaeological survey of the field to the south of the Building 513 parking lot was completed by John Milner & Associates, Inc. in 1990 (PR106) which identified site 18PR394: Hall Farm and Cemetery.

Site18PR394 includes a historic artifact scatter and the Hall family cemetery, which dates to the 1830's. The cemetery includes two marked graves and potentially several unmarked graves in the field approximately 275 feet to the south of the parking lot. John Milner & Associates, Inc. recommended that the historic artifact scatter was not eligible for the National Register of Historic Places and that no further investigations were needed. The placement of the proposed office unit close to the existing parking lot would limit ground disturbance and possible effects to the majority of this site. Enclosure 3 includes photos of the site as of January 9, 2020.

We look forward to your feedback. If you have any questions or comments please contact Harvey Johnson, USACE Project Manager, at 410-962-7961 or by email at Harvey.L.Johnson@usace.army.mil. Questions can also be addressed to Eva Falls, USACE Cultural Resources Specialist, at 410-962-4458 or by email at Eva.E.Falls@usace.army.mil.



Harvey L. Johnson
Program Manager
USACE Programs and Project Management

ENCLOSURES

enclosure 1

PLAN NORTH

EXISTING CONDITIONS NOTES:

1. THE MAPPING ON THIS DRAWING WAS CREATED FROM A COMBINATION OF FIELD TOPOGRAPHIC SURVEY COMPLETED BY PRECISION MEASUREMENTS, INC. IN OCTOBER 2019, BARC GIS DATA, AND BARC 1996 MASTER PLANS.

SCALE: 1 IN.=60 FT.

60 0 60 120

US Army Corps of Engineers ®

DATE	DESCRIPTION	MARK

DESIGNED BY: EMC
DRAWN BY: RRC
CHECKED BY: BTW
SUBMITTED BY: EMC
ANSI 'D'
ISSUE DATE: NOV 2019
SOLICITATION NO.:
CONTRACT NO.:
FILE NUMBER:
FILE NAME: 38VF101_BLDG434.DWG

US ARMY CORPS OF ENGINEERS
BALTIMORE DISTRICT
BALTIMORE, MARYLAND

USACE BALTIMORE DISTRICT
ENGINEERING DIVISION
MILITARY DESIGN BRANCH

USDA BARC

MARYLAND

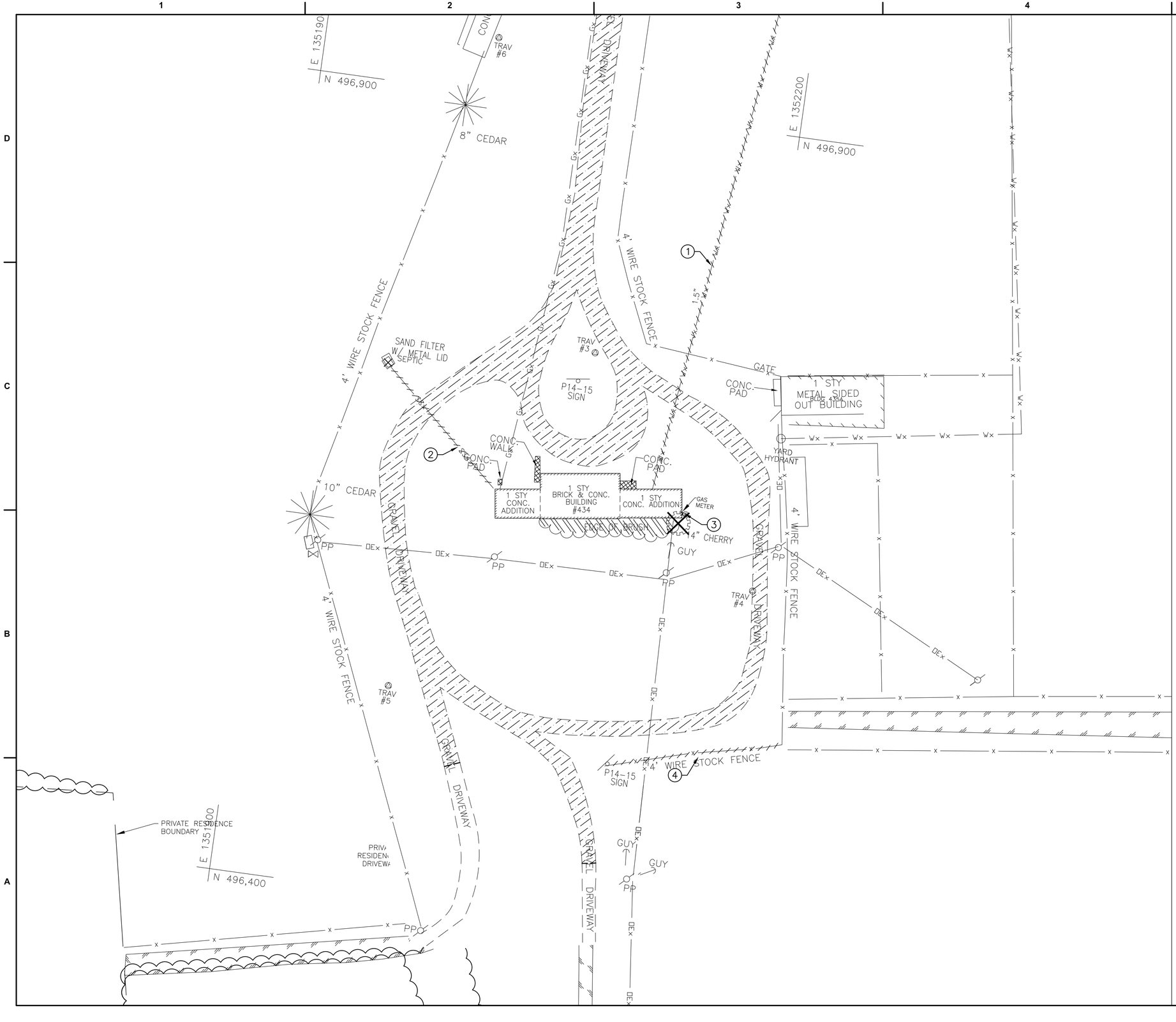
RENOVATE BLDG 434

EXISTING CONDITIONS PLAN

SHEET

VF101

PARAMETRIC DESIGN



PLAN NORTH

DEMOLITION LEGEND

- REMOVE ASPHALT AND 8" AGGREGATE BASE COURSE
- REMOVE CONCRETE SIDEWALK
- CLEAR TREES AND SHRUBS
- TRENCH THROUGH ASPHALT PAVEMENT
- SAW CUT
- REMOVE UTILITY
- REMOVE UTILITY STRUCTURE
- CAP OR PLUG UTILITY
- REMOVE FENCE
- REMOVE TREE

DEMOLITION KEYED NOTES:

1. REMOVE 1.5" WATER SERVICE LINE AND REPLACE WITH NEW MAIN PER SITE PLAN.
2. REMOVE 4" SANITARY PIPE AND SEPTIC DISTRIBUTION BOX.
3. REMOVE AND REPLACE GAS METER. COORDINATE WITH WASHINGTON GAS.
4. REMOVE WIRE FENCE.

GENERAL DEMOLITION NOTES:

1. FOR ELECTRICAL DEMOLITION ITEMS, SEE ELECTRICAL DRAWINGS.

SCALE: 1 IN.=30 FT.

30 0 30 60

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

ISSUE DATE: NOV 2019
SOLICITATION NO.:
CONTRACT NO.:
FILE NUMBER:

DESIGNED BY: EMC
DRAWN BY: RRC
CHECKED BY: BTW
SUBMITTED BY: EMC
SIZE: ANSI 'D'
FILE NAME: 354CD101_BLDG434.DWG

US ARMY CORPS OF ENGINEERS
BALTIMORE DISTRICT
BALTIMORE, MARYLAND

USACE BALTIMORE DISTRICT
ENGINEERING DIVISION
MILITARY DESIGN BRANCH

USDA BARC

MARYLAND

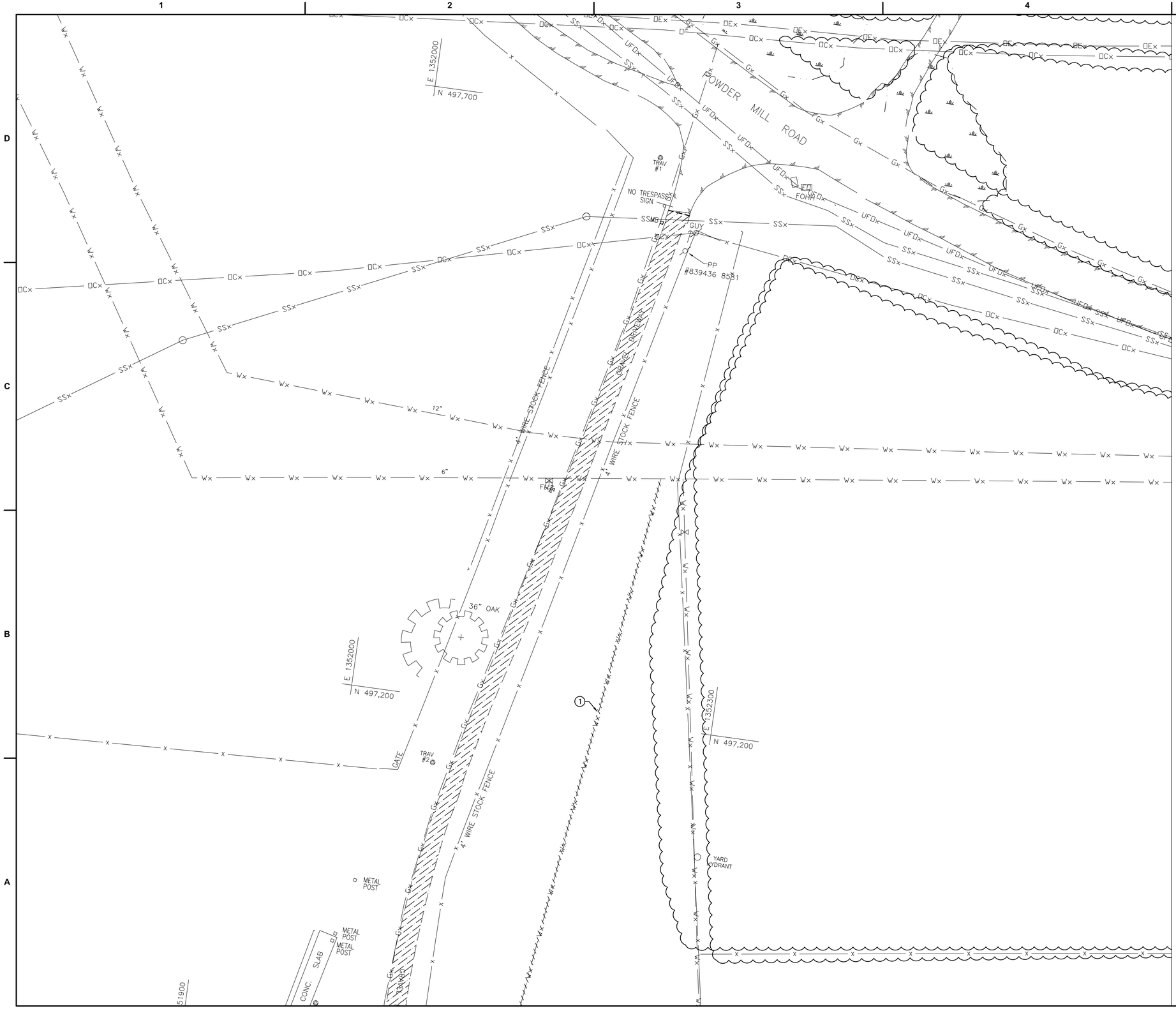
RENOVATE BLDG 434

DEMOLITION PLAN

SHEET

CD101

PARAMETRIC DESIGN



PLAN NORTH

DEMOLITION LEGEND

- REMOVE ASPHALT AND 8" AGGREGATE BASE COURSE
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- SAW CUT
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- REMOVE UTILITY STRUCTURE
- CAP OR PLUG UTILITY
- REMOVE FENCE

DEMOLITION KEYED NOTES:

1. REMOVE 1.5" WATER SERVICE LINE AND REPLACE WITH NEW MAIN PER SITE PLAN.
2. REMOVE 4" SANITARY PIPE AND SEPTIC DISTRIBUTION BOX.
3. REMOVE AND REPLACE GAS METER. COORDINATE WITH WASHINGTON GAS.
4. REMOVE WIRE FENCE.

SCALE: 1 IN.=40 FT.

40 0 40 80

US Army Corps of Engineers ®

DESCRIPTION	DATE	MARK

DESIGNED BY: EMC
DRAWN BY: RRC
CHECKED BY: BTW
SUBMITTED BY: EMC
SIZE: ANSI 'D'
ISSUE DATE: NOV 2019
SOLICITATION NO.:
CONTRACT NO.:
FILE NUMBER:
FILE NAME: 384CD101_BLDG434.DWG

US ARMY CORPS OF ENGINEERS
BALTIMORE DISTRICT
BALTIMORE, MARYLAND

USACE BALTIMORE DISTRICT
ENGINEERING DIVISION
MILITARY DESIGN BRANCH

USDA BARC

MARYLAND

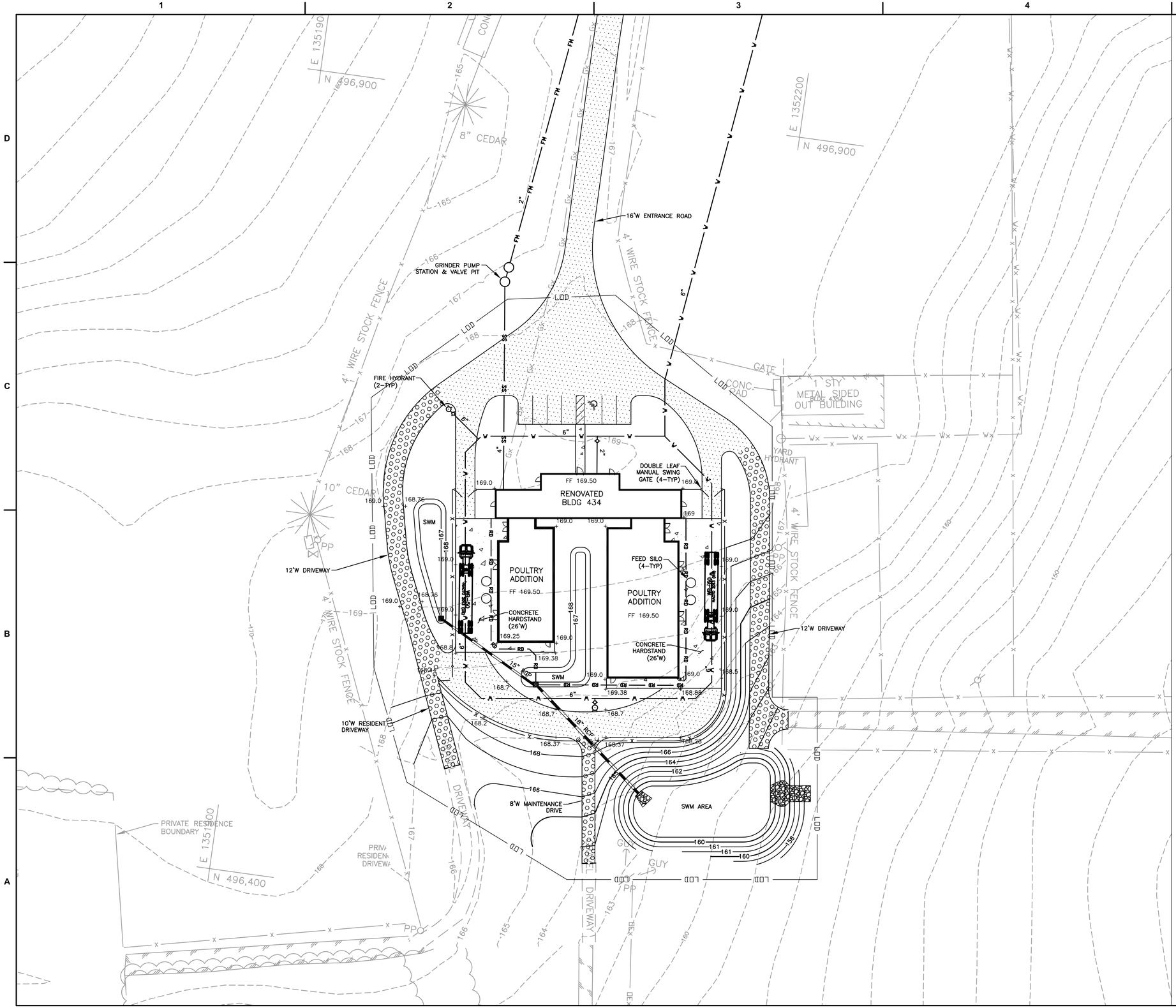
RENOVATE BLDG 434

DEMOLITION PLAN

SHEET

CD102

PARAMETRIC DESIGN



PLAN NORTH

PAVEMENT LEGEND

- BITUMINOUS ASPHALT PAVEMENT
- GRAVEL PAVEMENT
- CONCRETE PAVEMENT

GENERAL NOTES

1. FOR NEW ELECTRICAL AND COMMUNICATION UTILITIES, SEE ELECTRICAL DRAWINGS.

SCALE: 1 IN.=30 FT.

30 0 30 60

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

ISSUE DATE: NOV 2019
SOLICITATION NO.:
CONTRACT NO.:
FILE NUMBER:

DESIGNED BY: EMC
DRAWN BY: RRC
CHECKED BY: BTW
SUBMITTED BY: EMC
SIZE: ANSI 'D'
FILE NAME: 3845S101_BLDG434.DWG

US ARMY CORPS OF ENGINEERS
BALTIMORE DISTRICT
BALTIMORE, MARYLAND

USACE BALTIMORE DISTRICT
ENGINEERING DIVISION
MILITARY DESIGN BRANCH

USDA BARC

RENOVATE BLDG 434

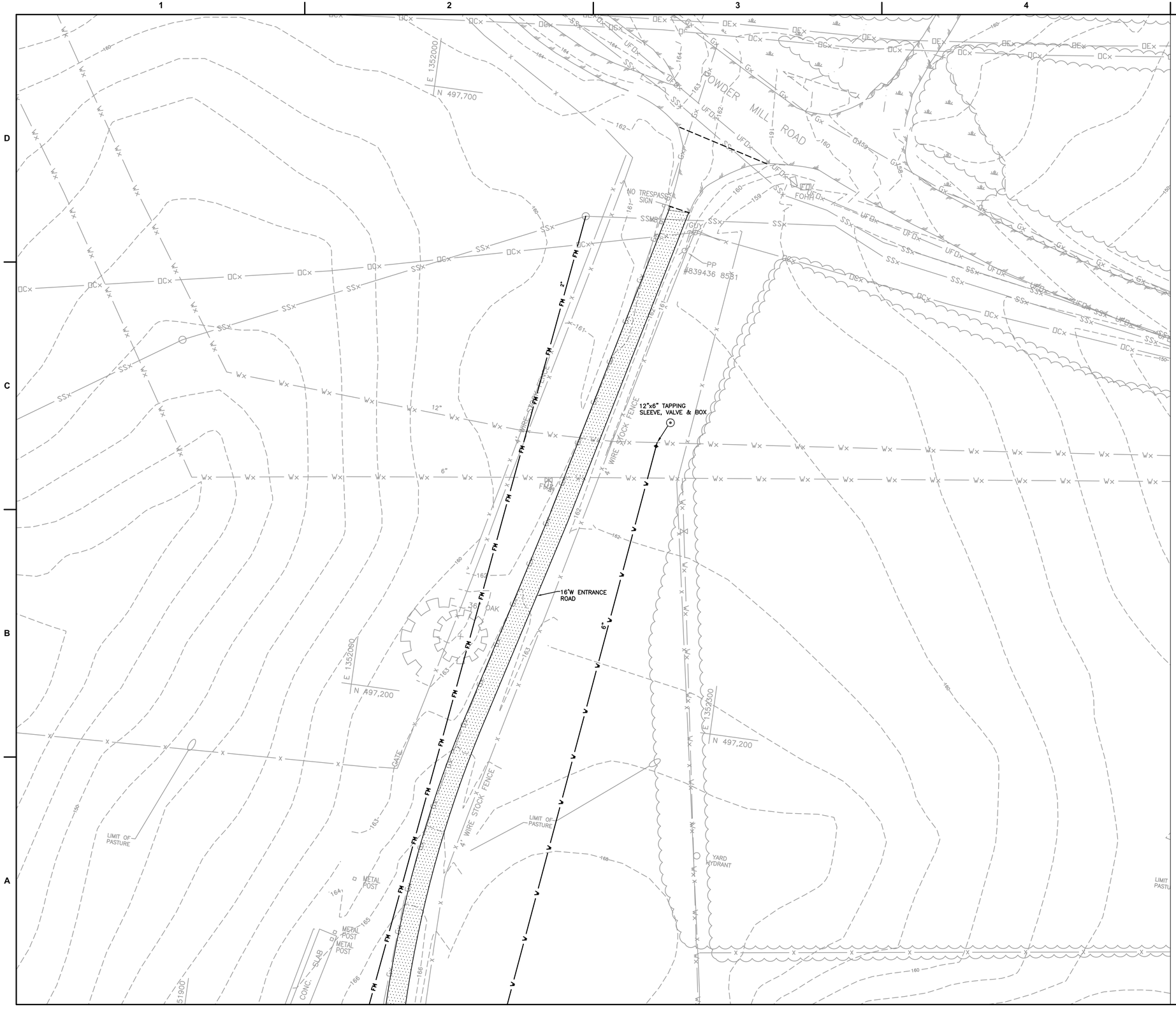
MARYLAND

SITE PLAN

SHEET

CS101

PARAMETRIC DESIGN



PLAN NORTH

PAVEMENT LEGEND

- BITUMINOUS ASPHALT PAVEMENT
- GRAVEL PAVEMENT
- CONCRETE PAVEMENT

GENERAL NOTES

1. FOR NEW ELECTRICAL AND COMMUNICATION UTILITIES, SEE ELECTRICAL DRAWINGS.

SCALE: 1 IN.=40 FT.

40 0 40 80

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

DESIGNED BY: EMC
DRAWN BY: RRC
CHECKED BY: BTW
SUBMITTED BY: EMC
SIZE: ANSI 'D'
ISSUE DATE: NOV 2019
SOLICITATION NO.:
CONTRACT NO.:
FILE NUMBER:
FILE NAME: 38-C5101_BLDG434.DWG

US ARMY CORPS OF ENGINEERS
BALTIMORE DISTRICT
BALTIMORE, MARYLAND

USACE BALTIMORE DISTRICT
ENGINEERING DIVISION
MILITARY DESIGN BRANCH

USDA BARC

RENOVATE BLDG 434

MARYLAND

SITE PLAN

SHEET

CS102

PARAMETRIC DESIGN

PLAN NORTH

DEMOLITION LEGEND

REMOVE UTILITY

REMOVE UTILITY STRUCTURE

DEMOLITION KEYED NOTES:

1. RELOCATE OVERHEAD ELECTRIC LINES.
2. REMOVE OVERHEAD ELECTRIC LINES.
3. REMOVE ELECTRIC UTILITY POLE.
4. EXISTING UTILITY POLE SHALL BE ABANDONED IN PLACE. POLE CONSISTS OF A SQUARE D BOX MOUNTED ON IT WITH A SINGLE POLE 15 AMP CIRCUIT BREAKER.
5. EXISTING UTILITY POLE SHALL BE ABANDONED IN PLACE.
6. EXISTING UTILITY POLE SHALL BE ABANDONED IN PLACE. POLE CONSISTS OF A SQUARE D BOX MOUNTED ON IT WITH A SINGLE POLE 20 AMP CIRCUIT BREAKER.

SCALE: 1 IN.=30 FT.

30 0 30 60

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

DESIGNED BY: SH
DRAWN BY: SH
CHECKED BY: MG
SUBMITTED BY: SH
SIZE: ANSI D
ISSUE DATE: NOV 2019
SOLICITATION NO.:
CONTRACT NO.:
FILE NUMBER:
FILE NAME: 38HED01_BLDG434.DWG

US ARMY CORPS OF ENGINEERS
BALTIMORE DISTRICT
BALTIMORE, MARYLAND

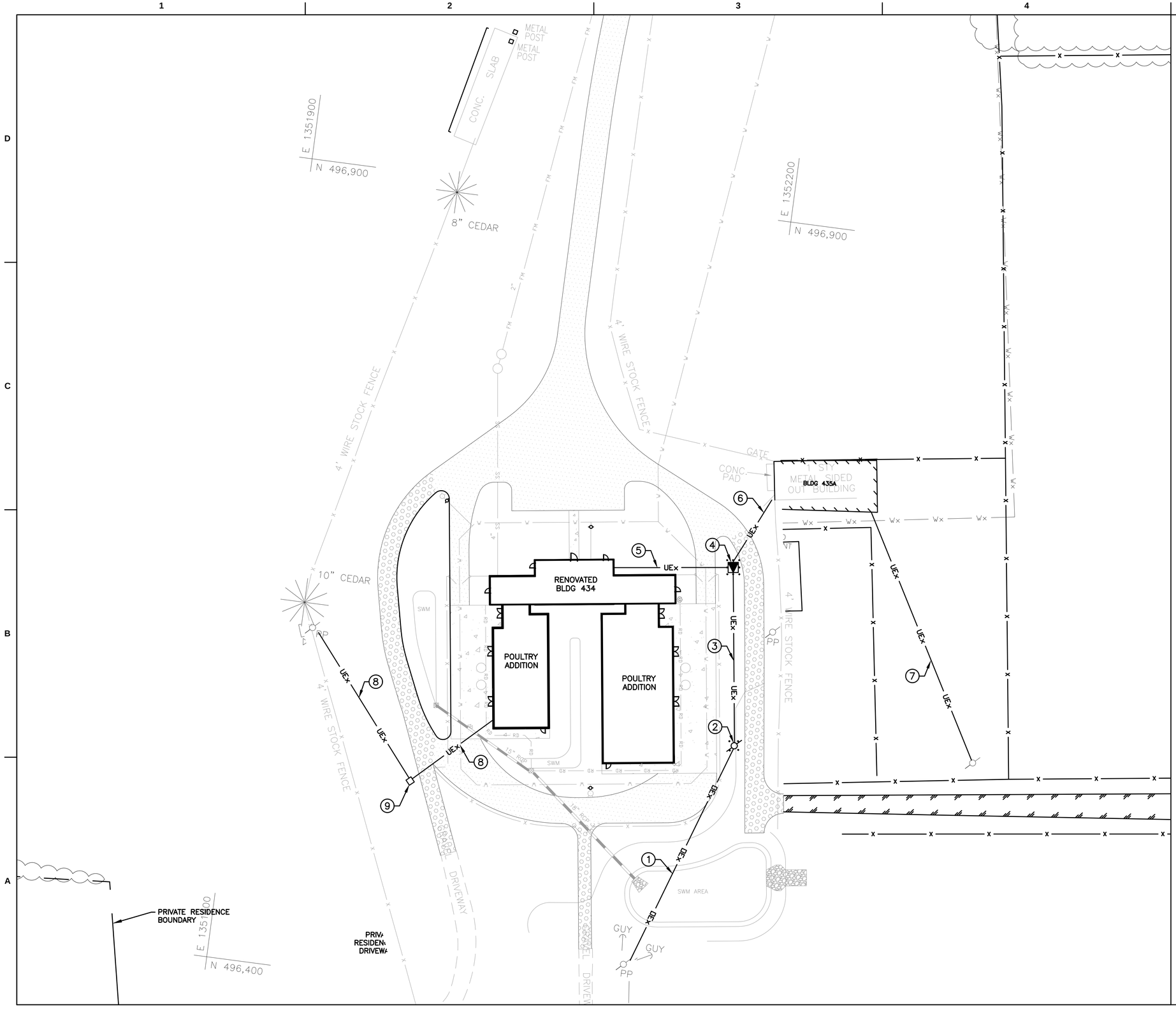
USACE BALTIMORE DISTRICT
ENGINEERING DIVISION
MILITARY DESIGN BRANCH

USDA BARC
RENOVATE BLDG 434
MARYLAND

ELECTRICAL DEMOLITION PLAN

SHEET
ED101

PARAMETRIC DESIGN



PLAN NORTH

KEYED NOTES:

1. RE–ROUTE EXISTING UTILITY LINE TO NEW UTILITY POLE (DRAWING NOTE 2)
2. INSTALL A NEW POWER UTILITY POLE AND BOLLARDS AROUND THE POLE.
3. ROUTE MEDIUM VOLTAGE CONDUCTORS IN 2–WAY 2 INCH CONCRETE ENCASED DUCTBANK
4. INSTALL A 13.2kV TO 208Y/120V, 112.5kVA TRANSFORMER. PROVIDE CONCRETE PAD AND BOLLARDS FOR THE TRANSFORMER.
5. ROUTE (3) 600–AWG COPPER CONDUCTORS AND (1) #3–AWG–COPPER GROUND IN A 2–WAY 4 INCH CONCRETE ENCASED DUCTBANK.
6. ROUTE (2) #1–AWG COPPER CONDUCTORS AND (1) #8–AWG–COPPER GROUND IN A 2–WAY 2 INCH CONCRETE ENCASED DUCTBANK. CONDUCTORS SHALL FEED THE EXISTING 240/120V 100 AMP PANELBOARD IN BUILDING 435A.
7. ROUTE (2) #12–AWG COPPER CONDUCTORS AND (1) #12–AWG COPPER GROUND IN A 1" SCHEDULE 80 DIRECT BURIED CONDUIT FROM A SPARE 20 AMP CIRCUIT IN THE EXISTING PANELBOARD IN BUILDING 435A. CONDUCTORS SHALL FEED EXISTING SQUARE D BOX MOUNTED ON THE EXISTING UTILITY POLE WITH A SINGLE POLE 20 AMP CIRCUIT BREAKER.
8. ROUTE (2) #12–AWG COPPER CONDUCTORS AND (1) #12–AWG COPPER GROUND IN A 1" SCHEDULE 80 DIRECT BURIED CONDUIT FROM A 15 AMP CIRCUIT IN THE NEW PANELBOARD IN BUILDING 435. CONDUCTORS SHALL FEED INTO EXISTING SQUARE D BOX MOUNTED ON THE EXISTING UTILITY POLE WITH A SINGLE POLE 15 AMP CIRCUIT BREAKER.
9. PROVIDE HANDHOLE

SCALE: 1 IN.=30 FT.
30 0 30 60

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

ISSUE DATE: NOV 2019
SOLICITATION NO.:
CONTRACT NO.:
FILE NUMBER:
DESIGNED BY: SH
DRAWN BY: SH
CHECKED BY: MG
SUBMITTED BY: SH
SIZE: ANSI D
FILE NAME: 38HES101_BLDG434.DWG

US ARMY CORPS OF ENGINEERS
BALTIMORE DISTRICT
BALTIMORE, MARYLAND

USACE BALTIMORE DISTRICT
ENGINEERING DIVISION
MILITARY DESIGN BRANCH

USDA BARC
RENOVATE BLDG 434
MARYLAND

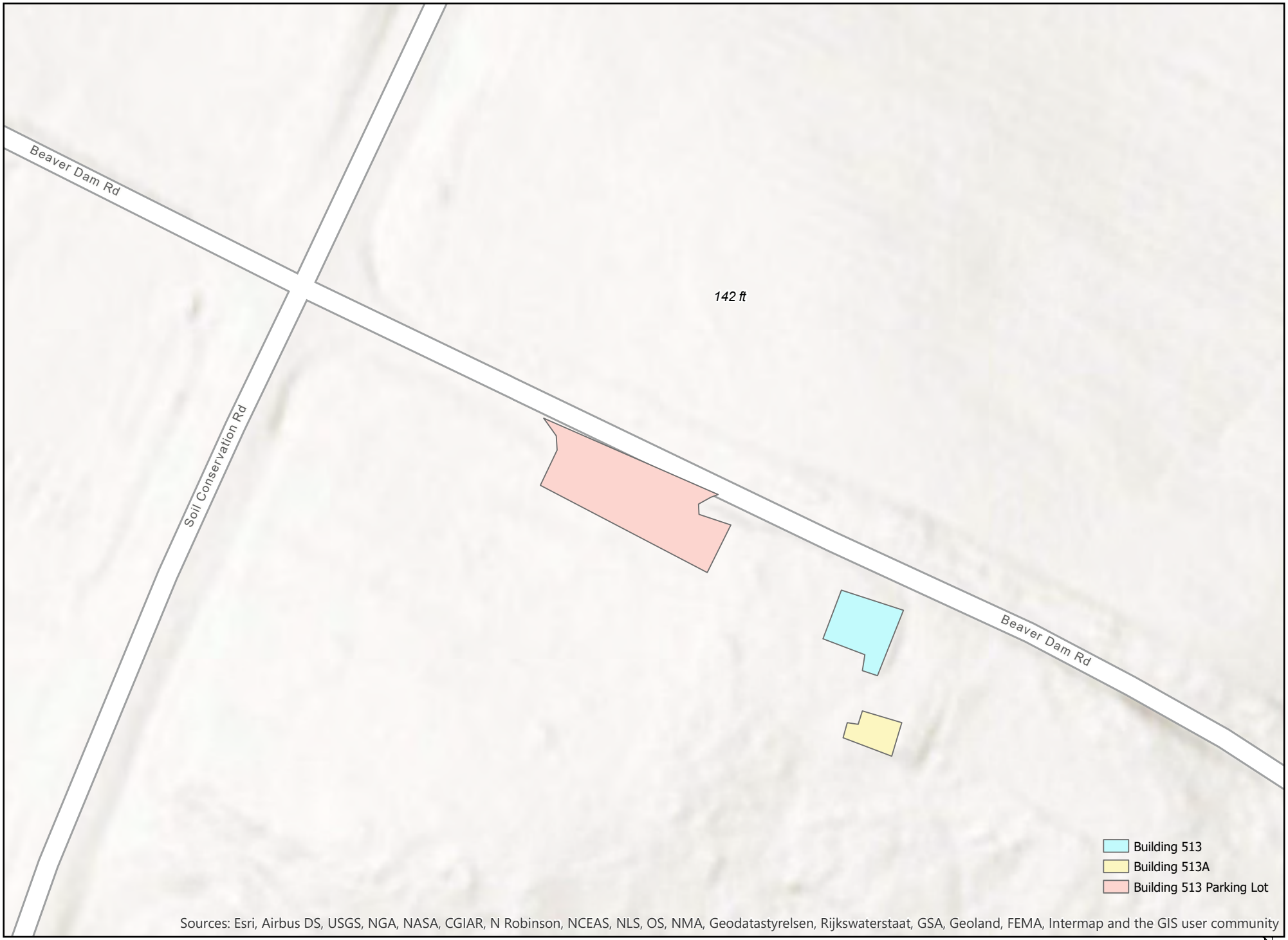
ELECTRICAL SITE PLAN

SHEET
ES101

PARAMETRIC DESIGN

Enclosure 2


National Plant Materials Center
Soil Conservation Rd
Building 513 Parking Lot
Building 513, Hall House
Building 513A, Garage
Hall Family Cemetery
Beaver Dam Rd
Google Earth
©2019 Google
N
500 ft



Enclosure 2: Building 513 Parking Lot Location

Enclosure 3

Marked Graves in the Hall Family Cemetery

Fence around the marked graves

Enclosure 3

Hall Family Cemetery looking south

View of the parking lot looking north from the Hall Family Cemetery

Enclosure 3

Fence around the marked graves looking east

View of Hall House looking northeast, view is from west of the Hall Family Cemetery

Enclosure 3

View of Hall House from parking lot

View of Hall House from parking lot

View to the west from parking lot

View to the west from parking lot

January 9, 2020 Photos

Enclosure 3

View of the parking lot looking northwest

View looking east from Building 509

January 9, 2020 Photos

From:	Beth Cole - MHT
To:	Falls, Eva E CIV (USA)
Cc:	Johnson, Harvey L CIV USARMY CENAB (USA); Davis Charles (Charles.Davis@bep.gov); Bentley, Christopher - ARS (christopher.bentley@usda.gov)
Subject:	[Non-DoD Source] Re: USDA BARC- Building 434 and Building 513 Project update
Date:	Tuesday, February 11, 2020 3:52:29 PM

Eva,

Thank you for your recent letter continuing consultation, pursuant to Section 106 of the National Historic Preservation Act, regarding the proposed projects at Buildings 434 and 513 on the BARC campus in Prince George's County, The Trust reviewed the submitted materials and we request additional information/details in order to provide informed comments regarding the proposed undertakings and their possible effects on historic properties. Please provide us with the requested materials for review, when available, as outlined below:

Building 434 (MIHP #PG: 67-48): The project entails the rehabilitation and adaptive reuse of the historic Goat Barn for a new poultry facility. We appreciate USDA/BARC's efforts to find viable new uses for this historic building which has been vacant for several years. The Trust will need to review the following details of the planned rehabilitation and new construction to ensure that it is sympathetic to the historic character and qualities of the former Goat Barn:

* preliminary design concepts and elevations for the project;
* detailed description of the planned improvements including heights of the new construction; materials (including those slated for retention/repair as well as replacement) for roofing, siding, windows, etc.; proposed alterations to exterior and interior of the Goat Barn; rationale for any proposed removal of historic materials.

Buildling 513 (MIHP #PG: 64-23) / New Wildlife Office: We understand USDA/BARC is considering a new alternative for its Wildlife Office involving installation of a modular office unit situated immediately south of the prking lot west of Building 513, instead of rehabilitating the historic building for this purpose. We would encourage USDA to continue to seek partnerships that would enable the adaptive reuse of the historic property for viable purposes. As noted in your letter, inventoried archeological site 18PR394 (Hall farm and cemetery) is situated west of Building 513 and south of the parking lot area. Originally identified in 1990, the site has never been officially evaluated for its eligibility in the Naitonal Register of Historic Places. Limited remote sensing investigations conducted in 1991 did not yield definitive evidence of the cemetery's extent. The 1990 survey included testing that may coincide with the location of the new alternative. While it is unlikely that additional archeological investigations will be needed for the modular office project, the potential for unmarked burials increases the sensitivity of this locale. We will need to see the following information:

* preliminary site plan for the design and layout of the modular office unit, including possible utility line placement and related stormwater management facilities, and elevation of the modular unit;
* information on the proposed treatment of Building 513 (i.e. will continue to be vacant, mothballed, etc.).

We recognize that project planning is still underway for both of these undertakings and that some of the information we requested may not yet be available. We encourage you to continue to provide information in the preliminary and conceptual stages of development so that we may provide appropriate feedback. We look forward to ongoing consultation with the Corps and other involved parties to successfully complete. Thank you for providing us this opportunity to comment. Have a good day,

Beth

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Beth Cole

Administrator, Project Review and Compliance

Maryland Historical Trust
Maryland Department of Planning

100 Community Place
Crownsville, MD 21032

beth.cole@maryland.gov <mailto:beth.cole@maryland.gov> / 410-697-9541
MHT.Maryland.gov <Blockedhttp://mht.maryland.gov/>

Please take our customer service surve <Blockedhttp://www.doit.state.md.us/selectsurvey/TakeSurvey.aspx?agencycode=MDP&SurveyID=86M2956#> y

*Please note that due to a current staff vacancy in Review & Compliance, the review period for submittals is approximately 45-60 days. To check on the status of a submittal, please use our online search: Blockedhttps://mht.maryland.gov/compliancelog/ComplianceLogSearch.aspx.

On Mon, Jan 13, 2020 at 4:31 PM Falls, Eva E CIV (USA) <Eva.E.Falls@usace.army.mil <mailto:Eva.E.Falls@usace.army.mil> > wrote:

Good afternoon,

Attached, please find the latest project update on USDA's undertaking at Building 434 and Building 513 at the Beltsville Agricultural Research Center.

We look forward to your comments and continued consultation on this undertaking.

Thank you,

Eva

Eva Falls, MA, RPA
Cultural Resources
U.S. Army Corps of Engineers
Baltimore District, Planning Division
Installation Support Branch
Eva.E.Falls@usace.army.mil <mailto:Eva.E.Falls@usace.army.mil>
410-962-4458 (Office)
443-326-2660 (Mobile)

From: Beth Cole - MHT
To: Falls, Eva E CIV (USA)
Subject: [Non-DoD Source] Re: USDA BARC- Building 434 and Building 513 Project update- Proposed March Meeting
Date: Wednesday, February 26, 2020 3:48:12 PM

Hi Eva,

Sorry I did not get back to you sooner. Given our current staff situation, we would want to wait for the additional information before agreeing to any meetings. Our recruitment process is underway and I'm hopeful we'll have our new person on board later this spring. Right now we are just trying to keep up with the flow of project reviews and limiting our involvement in meetings/site visits. Thanks for your understanding. Let me know if you have questions or need further assistance.

Beth

<Blockedhttps://mht.maryland.gov/images/logo-for-email-small.png>

Beth Cole
Administrator, Project Review and Compliance

Maryland Historical Trust
Maryland Department of Planning

100 Community Place
Crownsville, MD 21032

beth.cole@maryland.gov <mailto:beth.cole@maryland.gov> / 410-697-9541
MHT.Maryland.gov <Blockedhttp://mht.maryland.gov/>

Please take our customer service surve <Blockedhttp://www.doit.state.md.us/selectsurvey/TakeSurvey.aspx?agencycode=MDP&SurveyID=86M2956#> y

*Please note that due to a current staff vacancy in Review & Compliance, the review period for submittals is approximately 45-60 days. To check on the status of a submittal, please use our online search: Blockedhttps://mht.maryland.gov/compliancelog/ComplianceLogSearch.aspx.

On Tue, Feb 18, 2020 at 1:06 PM Falls, Eva E CIV (USA) <Eva.E.Falls@usace.army.mil <mailto:Eva.E.Falls@usace.army.mil> > wrote:

Good afternoon Beth,

Thank you for your comments; the team is putting together the requested information.

Would you be available for a meeting in March to discuss the proposed designs in detail? Perhaps the week of the 9th or the 23rd? We would like to discuss ways to avoid and minimize potential adverse effects to historic properties for this undertaking. The team would be happy to come to your offices in Crownsville.

Looking forward to continued consultation,

Eva

Eva Falls, MA, RPA
Cultural Resources
U.S. Army Corps of Engineers
Baltimore District, Planning Division
Installation Support Branch
Eva.E.Falls@usace.army.mil <mailto:Eva.E.Falls@usace.army.mil>
410-962-4458 (Office)
443-326-2660 (Mobile)

-----Original Message-----
From: Beth Cole - MHT [mailto:beth.cole@maryland.gov <mailto:beth.cole@maryland.gov>]
Sent: Tuesday, February 11, 2020 3:51 PM
To: Falls, Eva E CIV (USA) <Eva.E.Falls@usace.army.mil <mailto:Eva.E.Falls@usace.army.mil> >
Cc: Johnson, Harvey L CIV USARMY CENAB (USA) <Harvey.L.Johnson@usace.army.mil <mailto:Harvey.L.Johnson@usace.army.mil> >; Davis Charles (Charles.Davis@bep.gov <mailto:Charles.Davis@bep.gov>) <Charles.Davis@bep.gov <mailto:Charles.Davis@bep.gov> >; Bentley, Christopher - ARS (christopher.bentley@usda.gov <mailto:christopher.bentley@usda.gov>) <christopher.bentley@usda.gov <mailto:christopher.bentley@usda.gov> >
Subject: [Non-DoD Source] Re: USDA BARC- Building 434 and Building 513 Project update

Eva,

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Beth

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Beth Cole
Administrator, Project Review and Compliance

Maryland Historical Trust
Maryland Department of Planning

100 Community Place
Crownsville, MD 21032

beth.cole@maryland.gov <mailto:beth.cole@maryland.gov> <mailto:beth.cole@maryland.gov > > / 410-697-9541 MHT.Maryland.gov <Blockedhttp://MHT.Maryland.gov> <Blockedhttp://mht.maryland.gov/ <Blockedhttp://mht.maryland.gov/> >

Please take our customer service surve <Blockedhttp://Blockedwww.doit.state.md.us/selectsurvey/TakeSurvey.aspx?agencycode=MDP&SurveyID=86M2956# <Blockedhttp://www.doit.state.md.us/selectsurvey/TakeSurvey.aspx?agencycode=MDP&SurveyID=86M2956#> > y

*Please note that due to a current staff vacancy in Review & Compliance, the review period for submittals is approximately 45-60 days. To check on the status of a submittal, please use our online search: Blockedhttps://mht.maryland.gov/compliancelog/ComplianceLogSearch.aspx <Blockedhttp://mht.maryland.gov/compliancelog/ComplianceLogSearch.aspx> .

On Mon, Jan 13, 2020 at 4:31 PM Falls, Eva E CIV (USA) <Eva.E.Falls@usace.army.mil <mailto:Eva.E.Falls@usace.army.mil> <mailto:Eva.E.Falls@usace.army.mil > > > wrote:

Good afternoon,

Attached, please find the latest project update on USDA's undertaking at Building 434 and Building 513 at

the Beltsville Agricultural Research Center.

We look forward to your comments and continued consultation on this undertaking.

Thank you,

Eva

Eva Falls, MA, RPA
Cultural Resources
U.S. Army Corps of Engineers
Baltimore District, Planning Division
Installation Support Branch
Eva.E.Falls@usace.army.mil <mailto:Eva.E.Falls@usace.army.mil>
<mailto:Eva.E.Falls@usace.army.mil > >
410-962-4458 (Office)
443-326-2660 (Mobile)

United States Department of Agriculture

Research, Education, and Economics
Agricultural Research Service

16 April 2020

MEMORANDUM FOR SEE DISTRIBUTION

FROM: Beltsville Agricultural Research Center
10300 Baltimore Avenue
Bldg 003, BARC-West
Beltsville, MD 20705

SUBJECT: Initiating Agency Coordination for the Renovation of Building 434 and the Installation of a new Wildlife Office at the Beltsville Agricultural Research Center, Beltsville, Maryland

1. The U.S. Department of Agriculture (USDA) is initiating agency coordination for a new proposed action at the Beltsville Agricultural Research Center (BARC) in Beltsville, MD. The proposed action consists of the renovation of one historic building, Building 434, and the installation of a new Wildlife Office near Building 513. Agency coordination will be completed in accordance with the National Environmental Policy Act (NEPA) and Section 106 of the National Historic Preservation Act (NHPA).

2. USDA has requested the assistance of the U.S. Army Corps of Engineers, Baltimore District (USACE) in conducting the appropriate NEPA and Section 106 processes. USACE is authorized to prepare and send agency correspondence, collect and compile responses from such correspondence, and to arrange phone calls, meetings, and site visits as necessary.

3. This Environmental Assessment (EA) will be prepared in accordance with the National Environmental Policy Act of 1969 (42 *United States Code* [USC] 4321-4347), Council on Environmental Quality (CEQ) Regulations for Implementing the Procedural Provisions of NEPA (40 *Code of Federal Regulations* [CFR] Sections 1500-1508), and 32 CFR 989, *et. seq.*

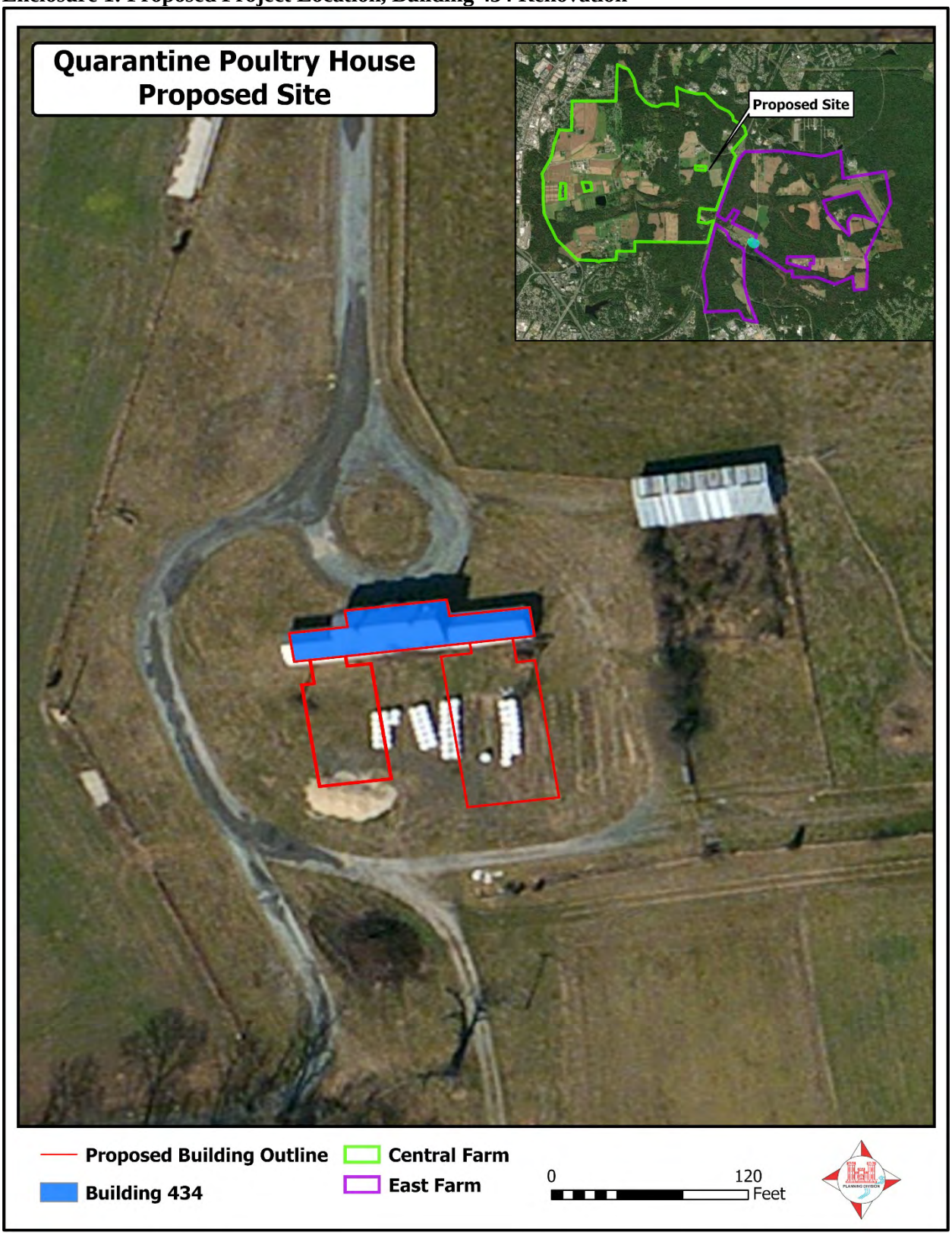
4. Planning for the proposed undertaking is in its early stages, and we look forward to consulting with your office. Questions or comments may directed to Chizo Irechukwu at 301-440-1413 or by email at Chizo.Irechukwu@usda.gov. Marisa Wetmore is the primary point of contact at USACE for this NEPA action. She can be reached at 410-962-9500 or by email at Marisa.L.Wetmore@usace.army.mil.

Sincerely,

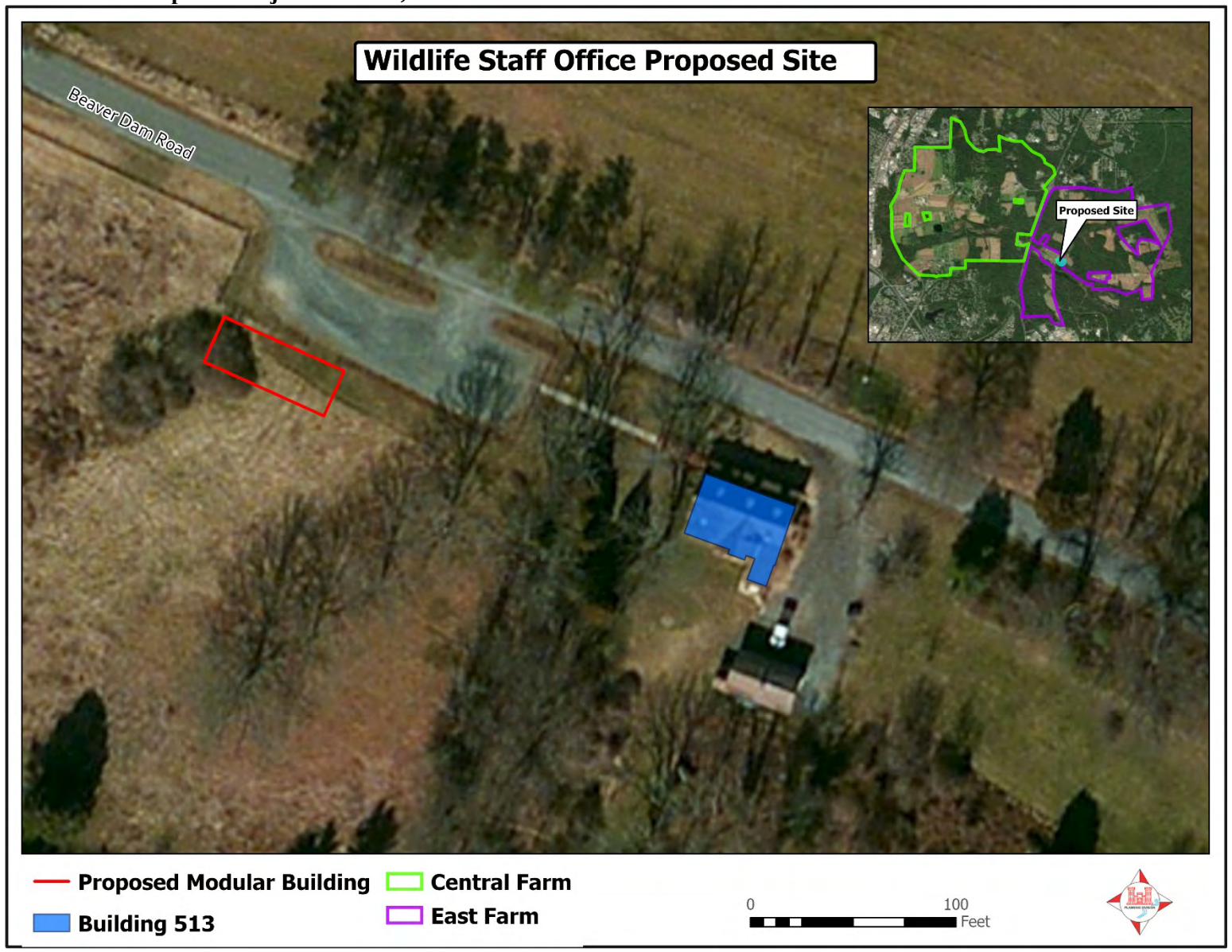
Chizo Irechukwu
Asset and Facilities Manager

ENCLOSURES

Enclosure 1: Proposed Project Location, Building 434 Renovation



Enclosure 2: Proposed Project Location, Installation of new Wildlife Office



Enclosure 3: Agency Mailing List

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

Ms. Joanne Muller
Maryland Department of the Environment
Clearinghouse Coordinator
1800 Washington Boulevard
Baltimore, MD 21230

Ms. Linda C. Janey
Maryland State Clearinghouse
Maryland Office of Planning, Suite 1101
301 West Preston Street
Baltimore, MD 21201-2365

Mr. Luke Marcek
Maryland DNR – Forest Service
The Bhaduri Building
Maple Avenue
P.O. Box 2746
La Plata, MD 20646

Ms. Barbara Rudnick
U.S. Environmental Protection Agency, Region 3
Office of Environmental Programs (3EA30)
1650 Arch Street
Philadelphia, PA 19103-2029

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

Ms. Beth Cole
Maryland Historical Trust
Project Review and Compliance
100 Community Place
Crownsville, MD 21032

Mr. Carlton Hart
National Capital Planning Commission
North Lobby, Suite 500
401 9th Street, NW
Washington, DC 20576

Ms. Crystal Hancock
Maryland-National Capital Park & Planning Commission
14741 Governor Oden Bowie Drive
Upper Marlboro, MD 20772

April 20, 2020

Ms. Marisa Wetmore, Biologist
U.S. Army Corps of Engineers, Baltimore District
Planning Division
2 Hopkins Plaza, 10-B-01
Baltimore, MD 21201

STATE CLEARINGHOUSE REVIEW PROCESS

State Application Identifier: **MD20200417-0291**
Reviewer Comments Due By: May 22, 2020
Project Description: Pre-Environmental Assessment (EA) Agency Coordination: Proposed Action Includes Renovation of One Historical Building, Building 434 and the Installation of a New Wildlife Office Near Building 513 at the Beltsville Agricultural Research Center (BARC), Beltsville, Maryland
Project Address: 10300 Baltimore Avenue, Beltsville, MD 20705
Project Location: Prince George's County
Clearinghouse Contact: Sylvia Mosser

Dear Ms. Wetmore:

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 Transportation, the Environment, Natural Resources, General Services, and Agriculture; Prince George's County; the Maryland-National Capital Park and Planning Commission in Prince George's; 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.

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: Chizo.Irechukwu@usda.gov

20-0291_NFP.NEW.docx

From:	Beth Cole - MHT
To:	Wetmore, Marisa L CIV USARMY CENAB (USA); chizo.irechukwu@ars.usda.gov
Cc:	Falls, Eva E CIV (USA)
Subject:	[Non-DoD Source] BARC renovation of Building 434 and Installation of a New Wildlife Office
Date:	Wednesday, May 6, 2020 10:48:47 AM

Hi Chiza and Marisa,

Thank you for your recent notice, dated April 16, 2020, initiating agency coordination for the above-referenced projects at BARC. We are aware of the projects and the Corps has initiated its consultation with the Trust pursuant to Section 106 of the National Historic Preservation Act. We await further coordination with the Corps and BARC to successfully complete the Section 106 review and assess the projects' effects on historic properties.

We appreciate your early coordination on these projects. Have a good day,

Beth

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

beth.cole@maryland.gov / **410-697-9541**
MHT.Maryland.gov
Please take our customer service survey

***Please note that due to a current staff vacancy in Review & Compliance, the review period for submittals is approximately 45-60 days. To check on the status of a submittal, please use our online search:** https://mht.maryland.gov/compliancelog/ComplianceLogSearch.aspx**.**

From: Lori Byrne -DNR-
To: Wetmore, Marisa L CIV USARMY CENAB (USA)
Subject: [Non-DoD Source] Re: Initial NEPA Consultation for USDA Bldg 434 & Wildlife Office EA
Date: Wednesday, May 13, 2020 7:17:13 PM

Dear Ms. Wetmore,
The Wildlife and Heritage Service has no comments regarding impacts to RT&E species from the project as proposed. Thank you for the opportunity to review and comment. Please let me know if you require an official letter rather than email for your files.
Lori Byrne

MD Logo.png

dnr.maryland.gov

Lori A. Byrne
Environmental Review Coordinator
Wildlife and Heritage Service
Department of Natural Resources
580 Taylor Avenue, E-1
Annapolis, MD 21401
410-260-8573 (office)
410-260-8596 (FAX)
lori.byrne@maryland.gov

On Fri, Apr 17, 2020 at 11:19 AM Wetmore, Marisa L CIV USARMY CENAB (USA) <Marisa.L.Wetmore@usace.army.mil> wrote:

> Good morning,
>
> On behalf of the U.S. Department of Agriculture, the U.S. Army Corps of Engineers, Baltimore District, will be preparing an Environmental Assessment for the renovation of Bldg 434 and the installation of a new Wildlife Office at the Beltsville Agricultural Research Center. As part of this effort, we would like to initiate agency coordination regarding this proposed action.
>
> Please find attached the initial NEPA consultation letter. While we would normally send this via hard copy in the mail, we are sending it via email due to COVID-19 working arrangements. We would appreciate any comments or questions within 30 days of receipt of this letter.
>
> Thank you,
>
> Marisa Wetmore
> Biologist
> USACE Baltimore District, Planning Division
> Work: 667-203-0149
> Cell: 410-710-8378

DEPARTMENT OF THE ARMY
U.S. ARMY CORPS OF ENGINEERS, BALTIMORE DISTRICT
2 HOPKINS PLAZA
BALTIMORE, MARYLAND 21201-2930

May 15, 2020

Beth Cole
Administrator
Office of Review and Compliance
Maryland Historical Trust
100 Community Place
Crownsville, Maryland 21032

Ms. Cole,

In accordance with Section 106 of the National Historic Preservation Act, as amended, the U.S. Department of Agriculture (USDA) would like to continue consultation for the proposed undertaking concerning Buildings 434 and 513 at the Beltsville Agricultural Research Center (BARC) property in Prince George's County, Maryland. This letter is in response to the 11 February 2020 email received from your office.

Building 434

Attached please find the draft site designs and renderings for alterations to the Building 434 site for your review and comment (Enclosure 1). The repurposing of Building 434 will result in the long term preservation of this historic property and will prevent an adverse effect through neglect. Building 434 contributes to the BARC Historic District under Criterion A, which is eligible for making significant contributions to the broad pattern of our history with agricultural experimentation. BARC scientists and researchers made and continue to make valuable scientific contributions, both in foundational and applicable science. Building 434's continued use as an agricultural research facility is in keeping with the historic significance of the District.

Site work will include grading, new concrete hardstands, adjustments to and repaving of the entrance and loop roads, erosion and sediment control, stormwater management features, and minor landscaping. Water for the building already exists, but sanitary will have to be brought to the site. Alterations of note are the removal of portions of the rear walls of the historic additions to connect the new quarantine poultry additions, the addition of black chain link fence around the sides and rear of the building for biosecurity, and the addition of four exterior feed storage tanks that will be installed on the eastern and western ends of the historic additions. The historic fabric of the building will be punctured underneath the windows on the eastern and western ends of the building to allow for augers to pass feed from the exterior tanks to the interior feed delivery system.

While the interior of Building 434 will be completely renovated and repurposed, exterior character-defining features will be retained. The Georgian Revival style will continue to be visible through the building's white trim, brick veneer and cladding, side gabled roof, centered front door, fenestration pattern, and the symmetrical layout and massing of the original parts of the building. Though the building will no longer be specifically designed or operated as a 'Goat Barn,' Building 434 will retain its location, setting, feeling, and association within an agricultural research complex.

Wildlife Office

Enclosure 2 includes the proposed site design of the 24 by 60 foot modular office unit for the Wildlife Office. While no final decisions have been made as to the color or appearance of the modular unit, it will include a covered front entry porch and wooden ADA accessible ramp. USDA intends to purchase a mobile 'double wide' home that has a residential appearance, with vinyl siding, shutters, and an asphalt shingle roof. Enclosure 2 shows possible options for form and earth tone coloration.

While an existing tree line separates Building 513 from the parking lot, the modular unit will be visible from the Hall House, as well as the National Plant Materials Center, Building 509, located to the west along Beaver Dam Road. USDA is proposing to add a dense vegetative buffer of fast growing evergreen trees along the western side of the mobile home to block it from Soil Conservation Road. Vegetative screening and the unit's residential appearance will minimize the proposed action's visual intrusion on the surrounding agricultural setting.

Building 513 will be mothballed and will remain vacant until USDA can assess its future use. As previously stated, USDA will continue to use and maintain the associated Garage, Building 513A, for the Wildlife Office's use. A gravel pathway will be constructed from the new office to the garage.

Water will be brought to the modular unit along a previously disturbed existing utility corridor parallel to Beaver Dam Road to the west of the parking lot. Electrical will also be brought to the unit via existing lines and overhead poles. Land disturbance of note will consist of excavation, cut and fill, to create a level concrete slab on grade for the modular unit's footprint and the installation of a new septic tank and leach field sized according to county specifications (Enclosure 2). USDA acknowledges the potential presence of unmarked graves associated with the Hall Family Cemetery. Therefore, a minimum 100 foot buffer of the existing graves has been applied to any land disturbance to avoid potential impacts.

Effect Determination

Based on the current proposed designs, USDA has determined the repurposing of Building 434 and the placement of a new Wildlife Office will have no adverse effect on historic properties. We look forward to your feedback on USDA's preliminary effect determinations and continued consultation. Additional design details will continue to be provided to your office. If you have any questions or comments please contact Harvey Johnson, USACE Project Manager, at 410-962-7961 or by email at Harvey.L.Johnson@usace.army.mil. Questions can also be addressed to Eva Falls, USACE Cultural Resources Specialist, at 410-962-4458 or by email at Eva.E.Falls@usace.army.mil.

Harvey L. Johnson
Program Manager
USACE Programs and Project Management

ENCLOSURES

Enclosure 1: Renderings and Current Designs of the Proposed Action at Building 434

Work Summary:

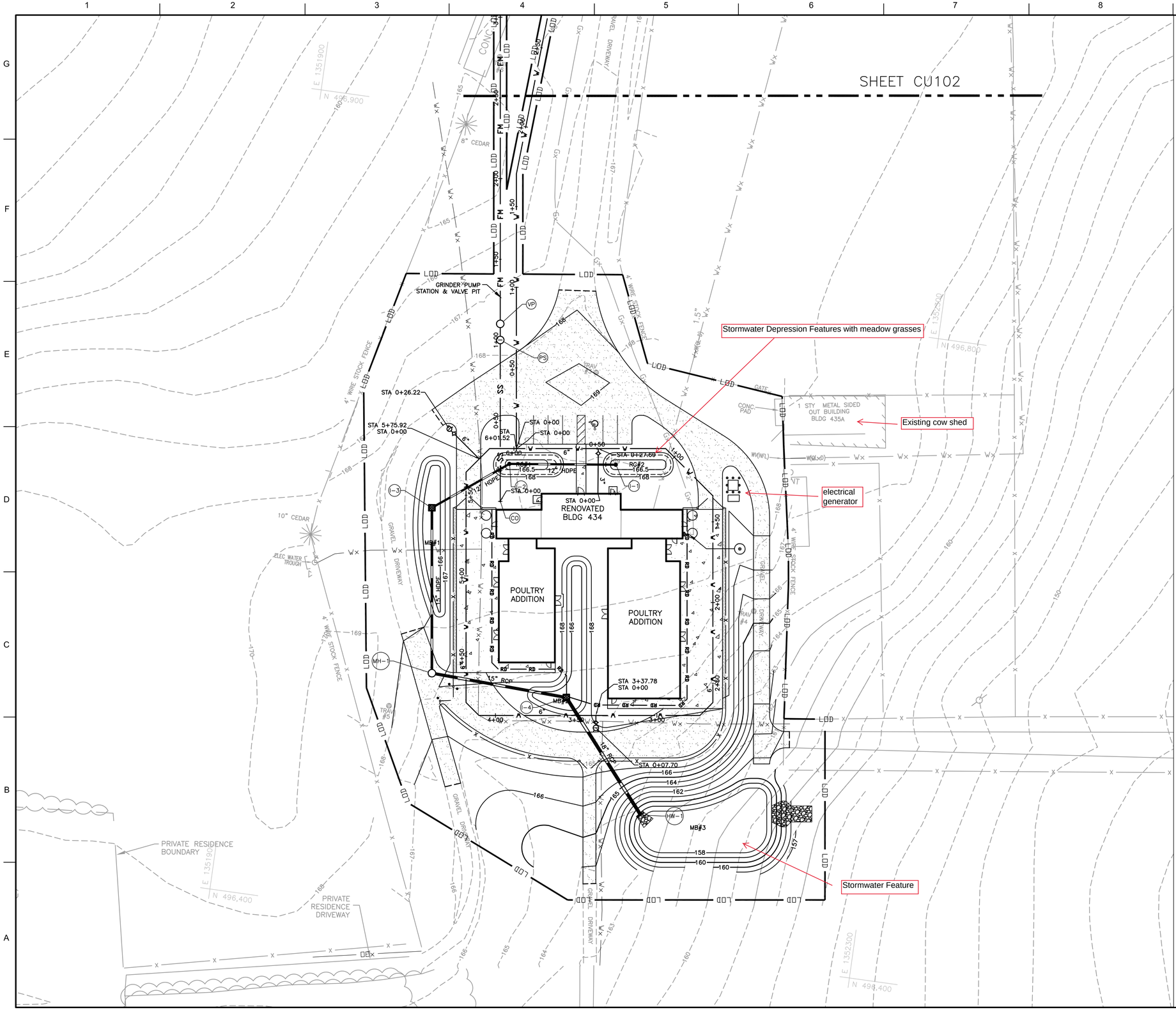
Renovation at Building 434 includes;

1. Clean, sanitize, and repair exposed structure and walls throughout.
2. Repoint & repair original Masonry & stucco throughout.
3. New metal roofing
4. Replacement in kind of roof, windows and doors.
5. New concrete slab on grade with floor drains as required.
6. New ship-ladder access to unoccupied second floor hayloft.
7. New mechanical HVAC equipment, at unoccupied second floor hayloft.
8. New ceilings with insulation throughout first floor.
9. New interior nonbearing Metal stud framed wallboard walls.
10. Wall furring of exterior walls with insulation, metal stud, & wallboard.

The current square footage and footprint cannot function as a poultry quarantine house, so two additions will be added on the rear of the building in order to hold roughly 300 turkeys and 400 chickens in separate areas. The additions will be clad in metal panel siding, feature a standing seam metal gable roof, and be simple in nature. A black chain link fence will surround the rear of the building and enclose the new additions.

New additions and site work for Building 434 includes;

1. Two constructed additions providing 2,800 sf & 4,400 sf respectively at rear of building
2. Four new silos feed equipment
3. Louvers & ventilation systems.
4. Wallboard ceilings with plywood underlayment to facilitate hanging of equipment.
5. Concrete slab on grade with slopes to floor drains.
6. New roadway around structure serving functional access by trucks.
7. Storm water management.
8. New utility connections (water, gas, sanitary and electrical).
9. Black chain link fence around rear of building



PLAN NORTH

GENERAL NOTES

1. FOR NEW ELECTRICAL AND COMMUNICATION UTILITIES, SEE ELECTRICAL DRAWINGS.

SCALE: 1 IN.=30 FT.

30 0 30 60

US Army Corps OF Engineers ®

MARK	DESCRIPTION	DATE

ISSUE DATE: APR 2020
SOLICITATION NO.: W912DR-XX-X-XXXX
CONTRACT NO.: W912DR-XX-X-XXXX
FILE NUMBER: F-XXX-XX-XXX

DESIGN BY: EMC
DRAWN BY: RRC
CHECKED BY: EMC
SUBMITTED BY: BMW
SIZE: ANSI D
FILE NAME: 384CU101.dwg

US ARMY CORPS OF ENGINEERS BALTIMORE DISTRICT 2 HOPKINS PLAZA BALTIMORE, MARYLAND 21201

US ARMY ENGINEER DISTRICT, BALTIMORE ENGINEERING DIVISION MILITARY DESIGN BRANCH

BELTSVILLE AGRICULTURAL RESEARCH CENTER MARYLAND

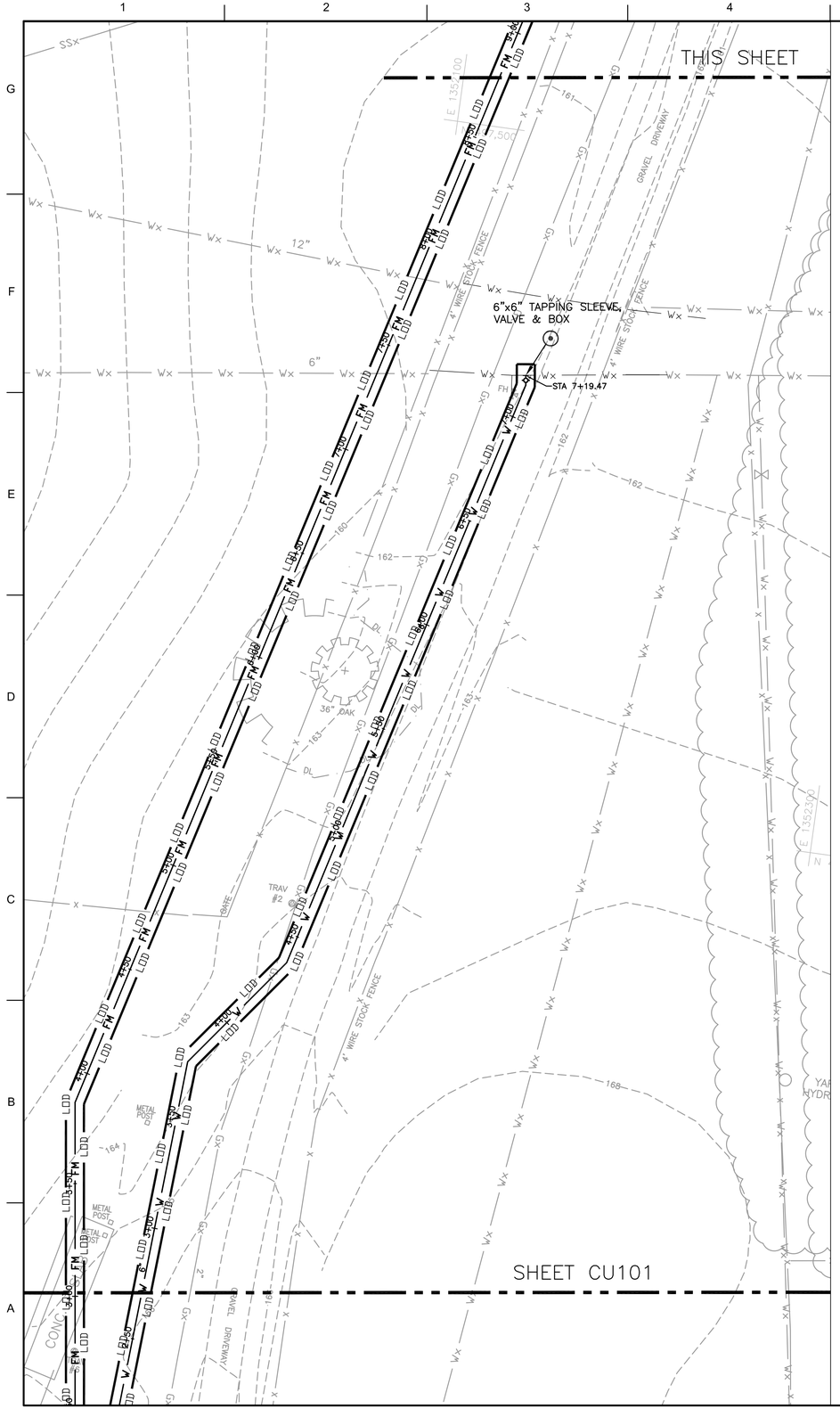
RENOVATE BUILDING 434

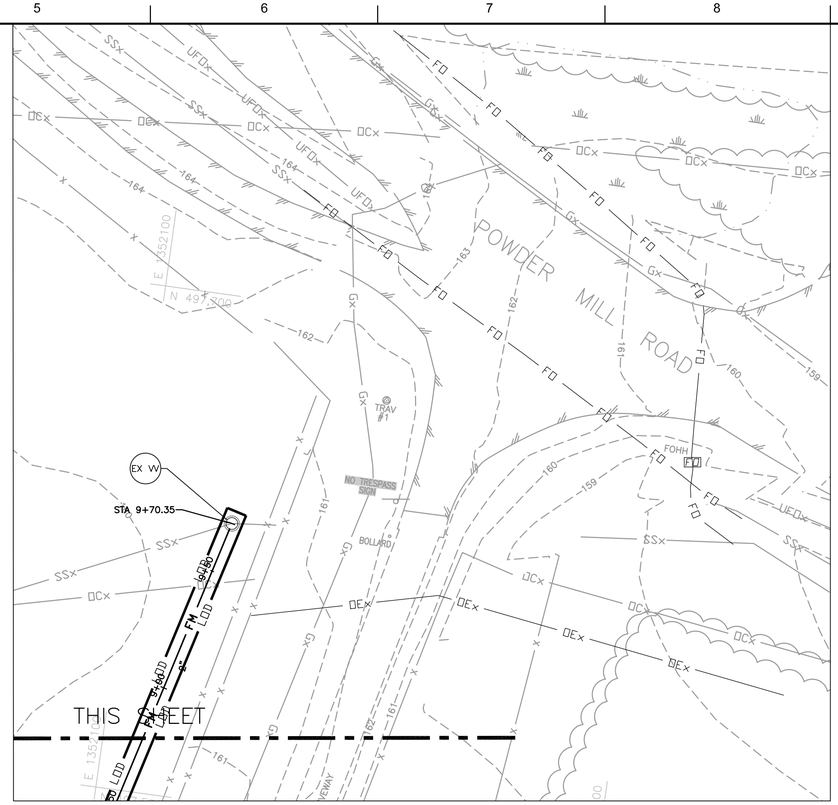
UTILITY PLAN

SHEET

CU101

PRELIMINARY DESIGN





PLAN NORTH

GENERAL NOTES

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SCALE: 1 IN.=30 FT.

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US Army Corps OF Engineers ®

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DRAWN BY: RRC
CHECKED BY: EMC
SUBMITTED BY: EMC
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SOLICITATION NO.: W912DR-XX-X-XXXX
CONTRACT NO.: W912DR-XX-X-XXXX
FILE NUMBER: F-XXX-XX-XXX
SIZE: ANSI D
FILE NAME: 1344CU101.dwg

US ARMY CORPS OF ENGINEERS
BALTIMORE DISTRICT
2 HOPKINS PLAZA
BALTIMORE, MARYLAND 21201

US ARMY ENGINEER DISTRICT, BALTIMORE
ENGINEERING DIVISION
MILITARY DESIGN BRANCH

BELTSVILLE AGRICULTURAL RESEARCH CENTER MARYLAND

RENOVATE BUILDING 434

UTILITY PLAN

SHEET

CU102

PRELIMINARY DESIGN

Aerial View Looking South-West

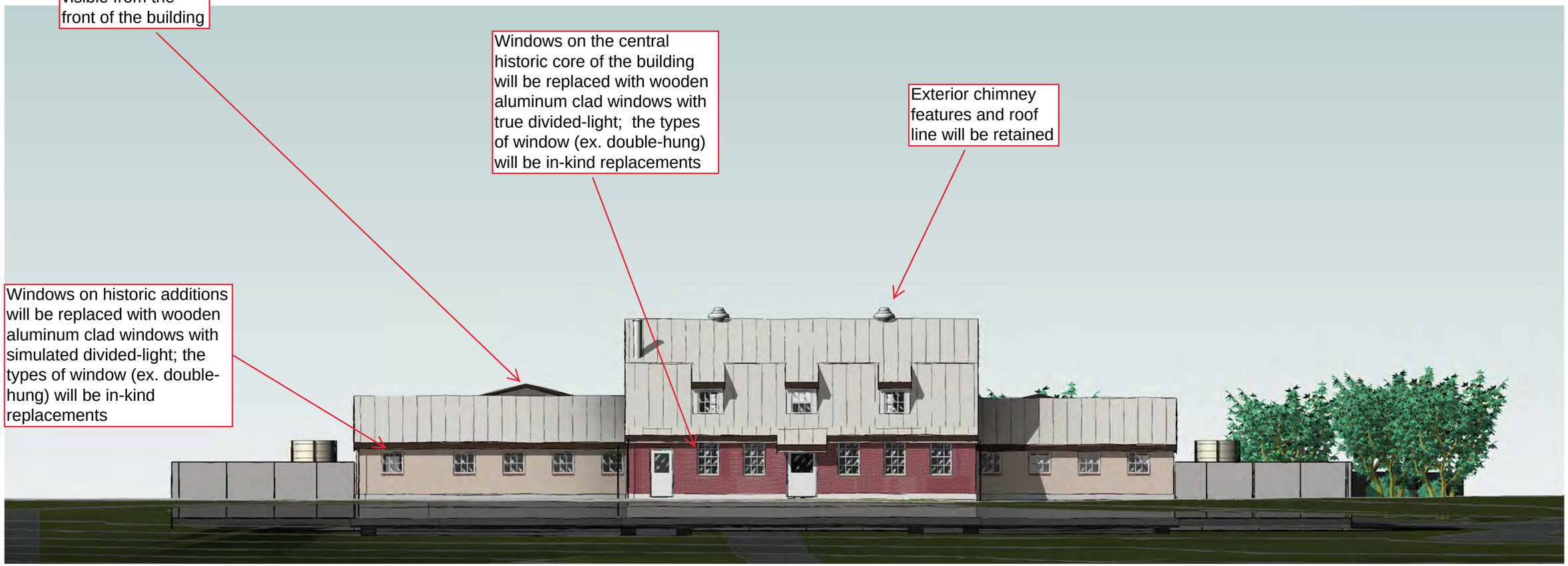
While the original design drawings indicated the building would have a shingle roof, there is no evidence the building ever had a shingle roof or when/if it was replaced. Therefore, the roof will be replaced in kind with a standing seam metal roof. The roof is currently unpainted. The replacement roof will be painted gray to cut down on long term maintenance needs.

The roof lines of the rear additions will be slightly visible from the front of the building

Windows on the central historic core of the building will be replaced with wooden aluminum clad windows with true divided-light; the types of window (ex. double-hung) will be in-kind replacements

Exterior chimney features and roof line will be retained

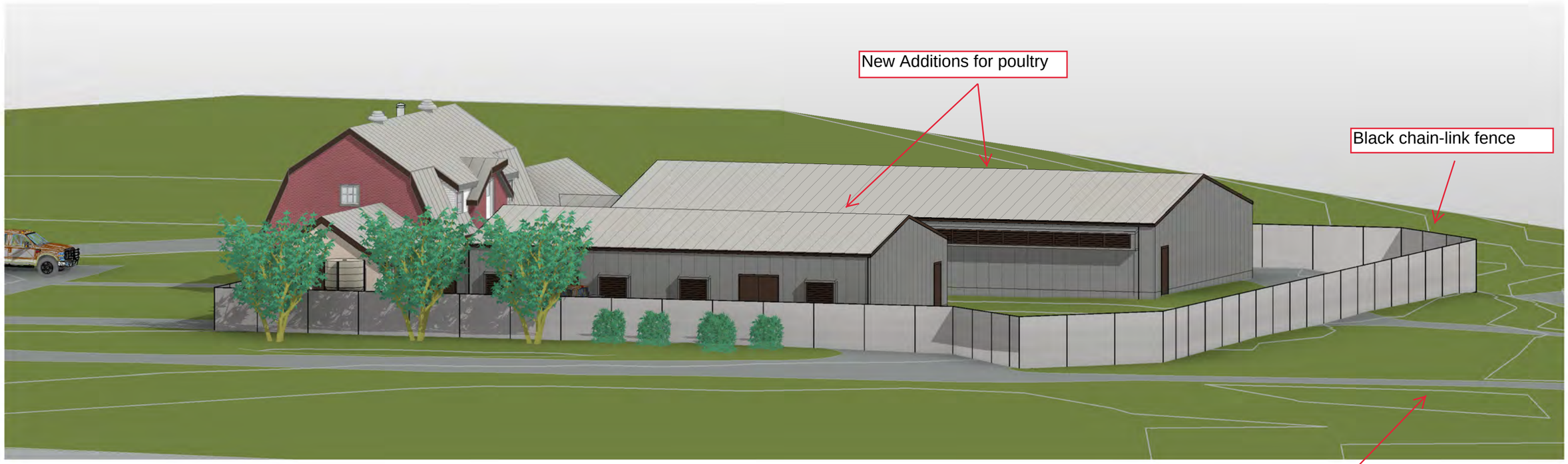
Windows on historic additions will be replaced with wooden aluminum clad windows with simulated divided-light; the types of window (ex. double-hung) will be in-kind replacements



Doors will be replaced in kind

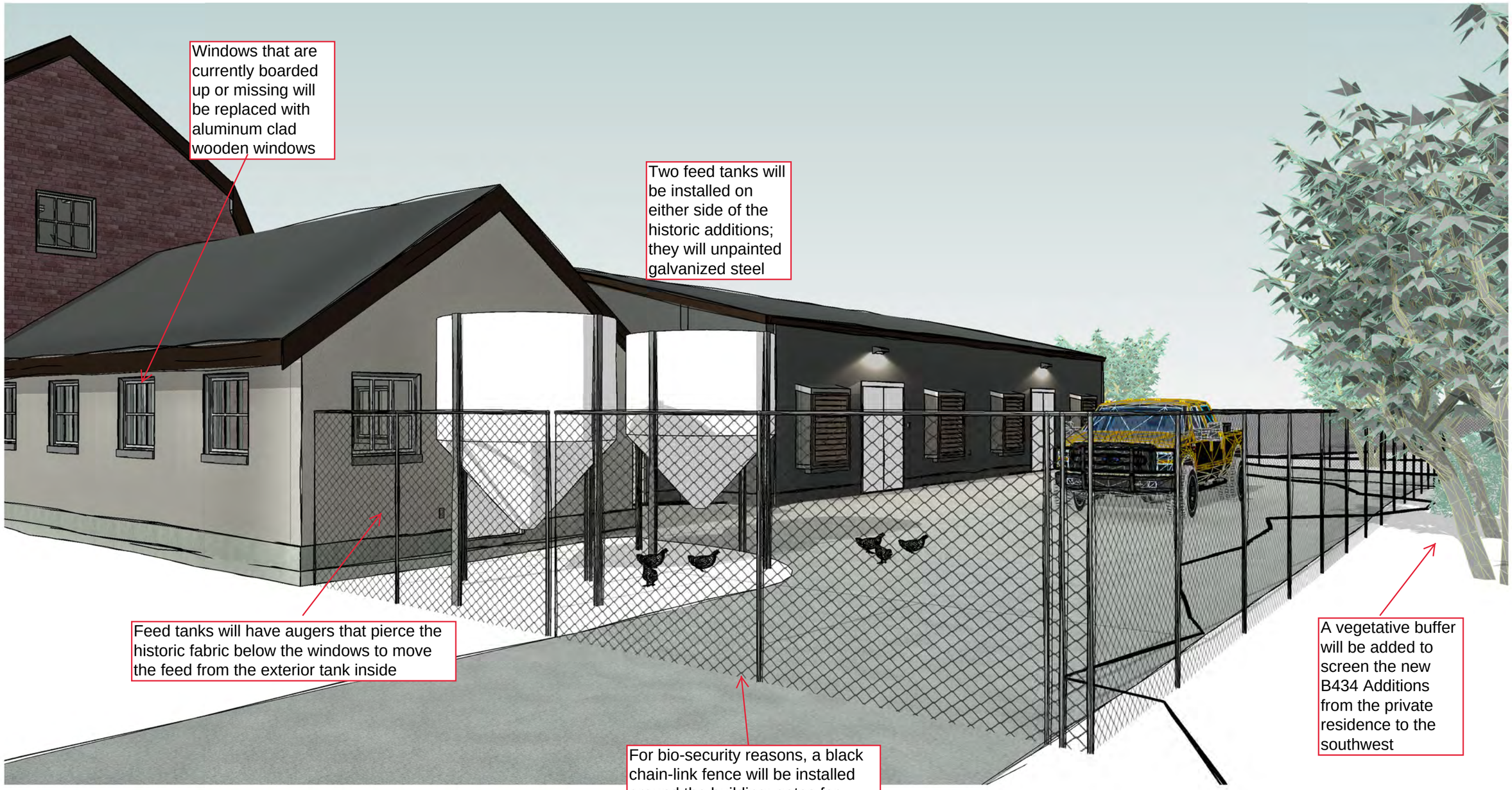
Aluminum clad windows will be used instead of painted wooden windows to cut down on long term maintenance needs

Approximate view from driveway entrance at Powder Mill Road



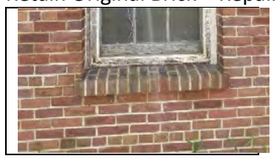
View of the western side of B434

Driveway that goes to the private residence to the southwest



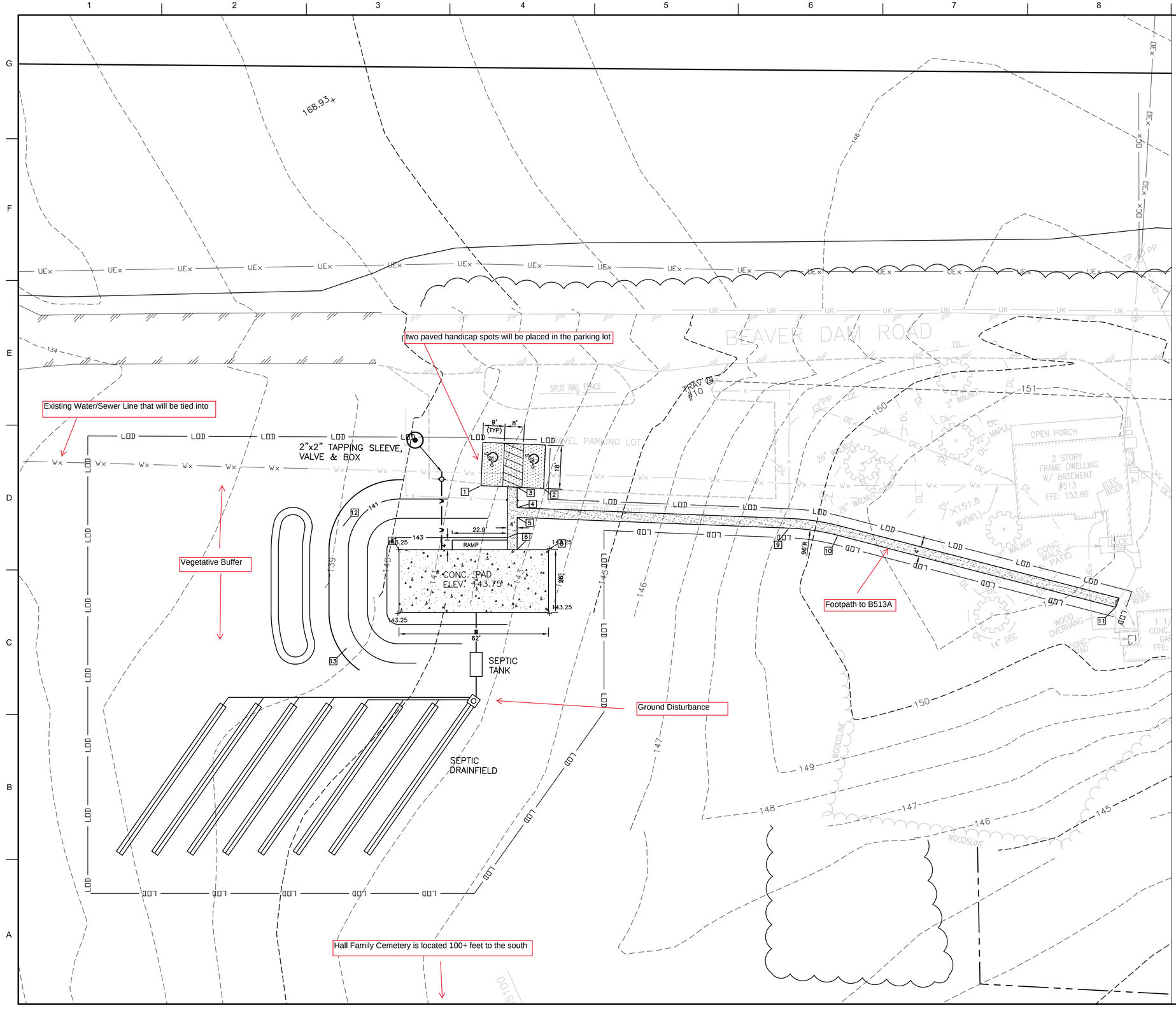
[Chickens provided for scale]

EXTERIOR FINISHES at BUILDING 434

Item	Original finish	**Restored** and/or **New Finish**	FINISHES OF NEW ADDITIONS
ROOF – Dormered Gambrel & Gable roofs	Original drawings identify Asbestos Shingles. No other known reference to shingles. Current Existing roof is: Unpainted Galvanized Standing Seam Metal Ribs 16” O.C.	Prefinished Standing Seam Metal Roofing - Galvalume Steel - Kynar 500®  Color - Zinc-Coat	Prefinished Insulated Metal Roofing - Galvalume Steel - Kynar 500® Color - Zinc-Coat
Main Exterior façade Center	Load Bering Red Brick Common American Bond	Retain Original Brick – Repair, Repoint And Clean 	Exterior façade – Metal Panel Siding Color - Cityscape
Exterior facade Wings	Load Bering 8” Cinder Block 3/4” Stucco Painted Finish	Retain Original Stucco – Cut, Patch, Repair, Clean & Repaint  Paint Finish Sherwin Williams – Ibis White R: 242 / G: 236 / B: 230	Stucco - Not Used
Dormer Enclosures	Wood Clapboard / Lap Siding Painted	Repair Dormers & Refinish With Cementitious Siding – Factory Baked Color Paint Finish Paint Finish Sherwin Williams – Silverplate R: 194 / G: 192 / B: 186	Dormers – Not Applicable
Exterior trim Fascia, Soffits, Rake edges,	Wood – Painted white	Aluminum &/or Cementitious Trim Fiber Cement – Factory Baked Color Paint Finish Paint Finish Sherwin Williams – Silverplate R: 194 / G: 192 / B: 186	Prefinished Metal Trim Color - Zinc-Coat
Gutters & Downspouts		Prefinished Aluminum 5” Gutters & Downspouts Factory Finish – Dark Bronze	Prefinished Aluminum 5” Gutters & Downspouts Factory Finish – Dark Bronze
Windows & Doors	Colonial w/ Muntins Style & Rail Raised Panels Wood – Painted white	Wood Windows & Doors – Replicate Original Windows Factory Finish Baked Enamel - White	Prefinished Metal Doors Color - Zinc-Coat

Notes:
- Existing Snow Guard System to be reused
- Two existing roof ventilators replaced in kind – Finish Matching Metal Roof
- Existing Metal Chimney Replace in kind – Finish Black

Enclosure 2: Current Designs of the Proposed Action at the Wildlife Office



PLAN NORTH

PAVEMENT LEGEND

- BITUMINOUS PAVEMENT FULL SECTION
- CONCRETE
- GRAVEL PAVEMENT

Point Table			
Point #	Raw Description	Northing	Easting
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2	PL	491405.36	1355196.66
3	PL	491410.36	1355186.86
4	PL	491402.65	1355183.34
5	PL	491399.01	1355181.68
6	PL	491386.80	1355176.10
7	PL	491407.15	1355131.53
8	PL	491381.40	1355187.93
9	PC	491348.14	1355282.35
10	PT	491337.01	1355299.54
11	PL	491262.03	1355391.96
12	PL	491425.53	1355114.12
13	PL	491379.21	1355095.29

SCALE: 1 IN.=20 FT.

20 0 20 40

US Army Corps OF Engineers ®

DATE | DESCRIPTION | MARK

ISSUE DATE: APR 2020
SOLICITATION NO.: W912DR-XX-X-XXXX
CONTRACT NO.: W912DR-XX-X-XXXX
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US ARMY CORPS OF ENGINEERS BALTIMORE DISTRICT 2 HOPKINS PLAZA BALTIMORE, MARYLAND 21201

US ARMY ENGINEER DISTRICT, BALTIMORE ENGINEERING DIVISION MILITARY DESIGN BRANCH

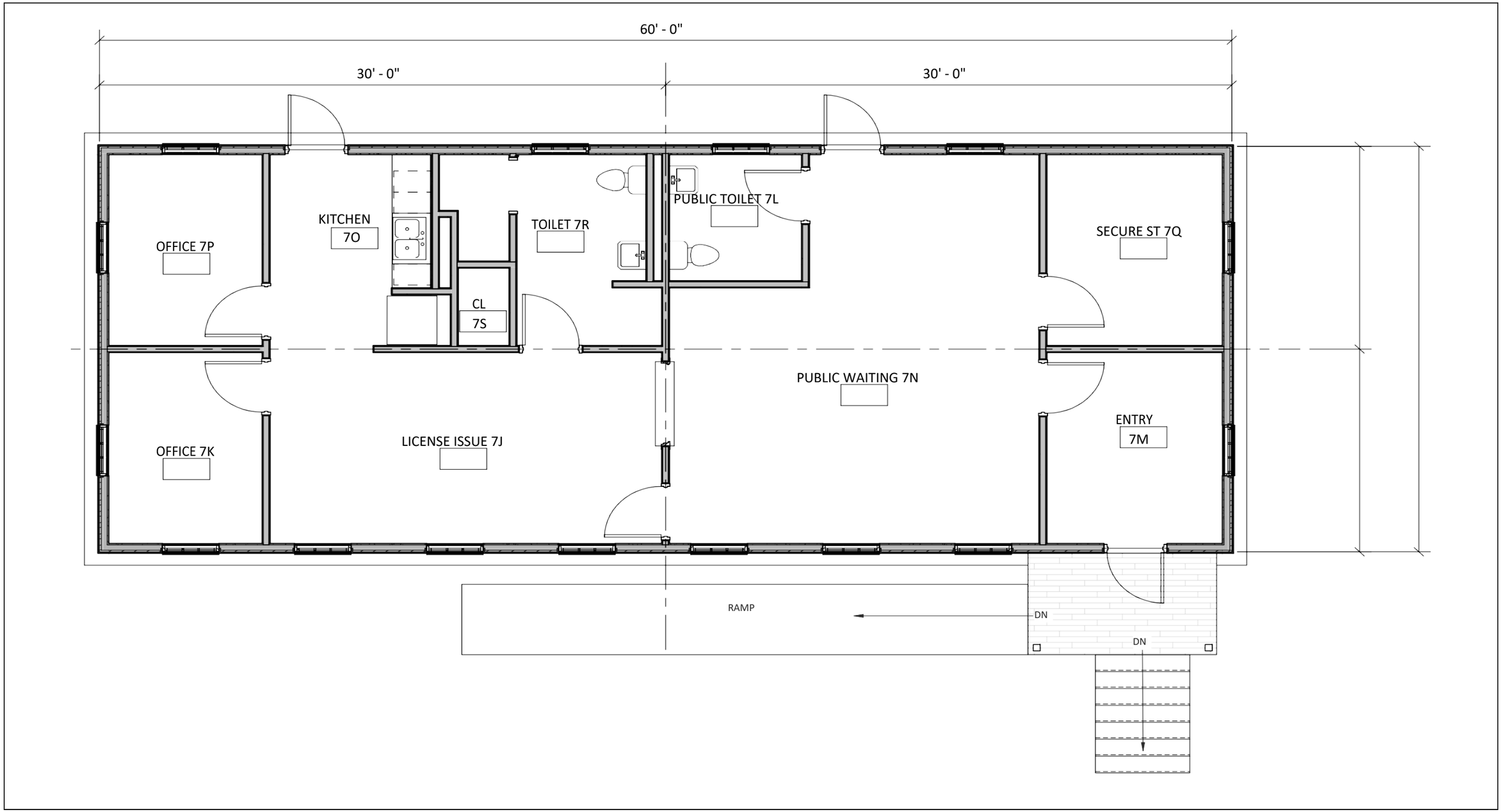
BELTSVILLE AGRICULTURAL RESEARCH CENTER — WILDLIFE OFFICE — MARYLAND

SITE PLAN

SHEET

CS101

PRELIMINARY DESIGN



Potential Interior Layout of the modular unit

EXTERIOR FINISHES for WILDLIFE OFFICE

Item	FINISHES OF NEW ADDITIONS
ROOF – Gable roofs	Asphalt shingles 3/12 slope 
Exterior façade	Exterior façade – Vinyl Siding  Color – Clay
Exterior trim Fascia, Soffits, Rake edges,	Prefinished Metal Trim Factory Finish – White
Gutters & Downspouts	Prefinished Aluminum 5” Gutters & Downspouts Factory Finish – White
Windows & Doors **Shutter Options**	Aluminum Factory Finish – White   

Approximation of the modular office unit's form and sizing

From:	Traver, Carrie
To:	Wetmore, Marisa L CIV USARMY CENAB (USA)
Cc:	Chizo.Irechukwu@usda.gov; Rudnick, Barbara
Subject:	[Non-DoD Source] FW: Initial NEPA Consultation for USDA Bldg 434 & Wildlife Office EA
Date:	Friday, May 15, 2020 2:25:51 PM

Dear Ms. Wetmore:

The U.S. Environmental Protection Agency (EPA) received your email and the memorandum dated April 16, 2020 in which the Department of Agriculture (USDA) indicated that it is initiating agency coordination for renovation of Building 434 and the installation of a new Wildlife Office near Building 513 at the Beltsville Agricultural Research Center (BARC) in Beltsville, MD. The U.S. Army Corps of Engineers, Baltimore District (USACE) is assisting USDA in preparation of an Environmental Assessment (EA or Study).
Thank you for providing this notice. In response, we have recommendations for your consideration in the development of the EA in compliance the National Environmental Policy Act (NEPA) of 1969, the CEQ regulations implementing NEPA (40 CFR 1500-1508) and Section 309 of the Clean Air Act.

Background and Need

We recommend that the EA explain the background and need for the project, including the existing conditions, proposed conditions, and how the proposed changes will support the needs of the USDA and BARC.

Cultural Resources

The Memorandum indicates that Agency coordination will be completed in accordance with Section 106 of the National Historic Preservation Act. We support early engagement with the State Historic Preservation Office (SHPO) to avoid and minimize potential adverse effects from any of the proposed activities on historic resources, including Building 434 and/or viewsheds.

Overall, we recommend that the EA identify whether impacts to historic resources may occur from any of the proposed activities, identify mitigative measures that may be taken to avoid or reduce such impacts, and document coordination with the SHPO.

Hazardous Materials and Wastes

We recommend that the Study describe known hazardous materials located within the study area, including:

- The EA should indicate if hazardous materials such as lead paint and asbestos are known to be present or anticipated to be present in Building 434 and what types of best management practices will be utilized to minimize potential impacts. If unknown, we suggest that the EA include discussion of the plan for testing for hazardous materials.
- We recommend that the EA include a discussion of any known or likely soil or water contamination in the vicinity of the project areas, including any completed or ongoing remedial efforts and the potential of any impacts from the proposed activities.

- The EA should also include a discussion of the disposal of hazardous and nonhazardous materials from the activities.

Sustainability, Low Impact Development, and Green Infrastructure

EPA encourages and promotes principles of sustainable design, which considers and incorporates factors such as energy management, resource use, and waste prevention to improve building performance and the health and comfort of building occupants while reducing negative environmental impacts.

- We recommend that options to limit environmental impacts and enhance building efficiency be evaluated for the construction of the Wildlife Office and renovation of Building 434.
- Renovating and updating infrastructure is an opportunity to consider more energy-efficient systems and buildings. EPA encourages incorporating energy-efficiency into building systems such as lighting, heating and air conditioning and components such as windows and insulation. Please consider recommendations such as those included in the LEED (Leadership in Energy and Environmental Design) Green Building Rating System.
- EPA recommends the incorporation of green infrastructure practices and low impact development (LID) design features where possible for building design, parking, paving, landscaping, and stormwater management to reduce runoff volume and improve water quality. Please consider assessing the current stormwater management for the project areas and identify any opportunities for improvement, particularly if impervious areas are increased.
- Guidance and resources can be found at the following sites:
    - Blockedhttp://www.usgbc.org/leed
    - Blockedhttps://19january2017snapshot.epa.gov/sites/production/files/2015-09/documents/eisa-438.pdf
    - Blockedwww.epa.gov/greeninfrastructure
    - Blockedwww.epa.gov/nps/lid
    - Blockedwww.epa.gov/smartgrowth
    - Blockedhttp://www.bmpdatabase.org

Biological impacts

It would be helpful if the EA included a discussion of any potential impacts to wildlife during construction and operation of the buildings, including lighting, noise, and vegetation removal.

Utilities

The Study would benefit from a discussion of any additional utilities or utility upgrades that will be required for the Project (electric, water, sewer, etc.).

Community Impacts

We recommend that impacts on the local communities from the project be evaluated:

- The Study should address traffic and transportation, including any potential increases in traffic from both construction and the completed project.
- We recommend that the EA include an evaluation of issues such as noise, emissions, and safety during construction and renovation activities as well as a description of best management practice that will be employed. Impacts from the construction and renovation to nearby residences or sensitive receptors should be fully evaluated.

We also suggest that you reach out to the surrounding community that may be potentially impacted by the project to get feedback on potential concerns. Further, we suggest that the EA include a discussion of whether any Environmental Justice (EJ) communities may be affected by the project, whether those impacts are disproportionate, and whether any outreach efforts should be tailored to potential communities of concern. Please consider application of a tool developed by EPA to help users to identify areas with EJ populations: Blockedhttps://www.epa.gov/ejscreen.

Socioeconomic Impacts

The Study should include a discussion of the community and socioeconomic impacts of the Project, including the number of people, employees and/or jobs impacted as a result of the Project.

Cumulative impacts

We recommend the discussion of cumulative effects include past projects at BARC along with foreseeable future impacts from proposed projects and other projects in the vicinity.

Again, thank you for providing us with notice to provide comments for your consideration in the development of the Study. If you have any questions or would like to discuss, please don't hesitate to contact me.

Thank you,
Carrie

Carrie Traver
Life Scientist
Office of Communities, Tribes, & Environmental Assessment
U.S. Environmental Protection Agency, Region 3
1650 Arch Street – 3RA10
Philadelphia, PA 19103
215-814-2772
traver.carrie@epa.gov

-----Original Message-----
From: Wetmore, Marisa L CIV USARMY CENAB (USA) <Marisa.L.Wetmore@usace.army.mil>
Sent: Friday, April 17, 2020 11:19 AM
Subject: Initial NEPA Consultation for USDA Bldg 434 & Wildlife Office EA

Good morning,

On behalf of the U.S. Department of Agriculture, the U.S. Army Corps of Engineers, Baltimore District, will be preparing an Environmental Assessment for the renovation of Bldg 434 and the installation of a new Wildlife Office at the Beltsville Agricultural Research Center. As part of this effort, we would like to initiate agency coordination regarding this proposed action.

Please find attached the initial NEPA consultation letter. While we would normally send this via hard copy in the mail, we are sending it via email due to COVID-19 working arrangements. We would appreciate any comments or questions within 30 days of receipt of this letter.

Thank you,

Marisa Wetmore
Biologist
USACE Baltimore District, Planning Division
Work: 667-203-0149
Cell: 410-710-8378

May 28, 2020

Ms. Marisa Wetmore, Biologist, Planning
U.S. Army Corps of Engineers, Baltimore District
2 Hopkins Plaza, 10-B-01
Baltimore, MD 21201

STATE CLEARINGHOUSE RECOMMENDATION

State Application Identifier: MD20200417-0291
Applicant: U.S. Army Corps of Engineers, Baltimore District
Project Description: Pre-Environmental Assessment (EA) Agency Coordination: Proposed Action Includes Renovation of One Historical Building, Building 434 and the Installation of a New Wildlife Office Near Building 513 at the Beltsville Agricultural Research Center (BARC), Beltsville, Maryland
Project Address: 10300 Baltimore Avenue, Beltsville, MD 20705
Project Location: Prince George's County
Recommendation: Consistent with Qualifying Comments and Contingent Upon Certain Actions

Dear Ms. Wetmore:

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 Agriculture, General Services, Natural Resources, Transportation, and the Environment; Prince George's County; the Maryland National Capital Parks and Planning Commission - Prince George's County; and the Maryland Department of Planning, including the Maryland Historical Trust.

The Maryland Departments of General Services, Natural Resources, Transportation, and Agriculture; and the Maryland National Capital Parks and Planning Commission - Prince George's County (MNCPPC) found this project to be consistent with their plans, programs, and objectives.

The Maryland Historical Trust stated that their finding of consistency is contingent upon the applicant's completion of the review process required under Section 106 of the National Historic Preservation Act, and included the following comments: “The Maryland Historical Trust awaits further consultation with USDA [United States Department of Agriculture] to complete the review of the proposed projects for their effects on historic properties, pursuant to Section 106 of the National Historic Preservation Act, as project planning continues.”

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

1. "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 and Materials Administration in accordance with COMAR 26.10. Contact the Oil Control Program at (410) 537-3442 for additional information.

2. 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.

3. 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 Resource Management Program at (410) 537-3314 for additional information regarding recycling activities.

4. The Resource Management Program should be contacted directly at (410) 537-3314 by those facilities which generate or propose to generate or handle hazardous wastes to ensure these activities are being conducted in compliance with applicable State and federal laws and regulations. The Program should also be contacted prior to construction activities to ensure that the treatment, storage or disposal of hazardous wastes and low-level radioactive wastes at the facility will be conducted in compliance with applicable State and federal laws and regulations.

5. Any contract specifying 'lead paint abatement' must comply with Code of Maryland Regulations (COMAR) 26.16.01 - Accreditation and Training for Lead Paint Abatement Services. If a property was built before 1978 and will be used as rental housing, then compliance with COMAR 26.16.02 - Reduction of Lead Risk in Housing; and Environment Article Title 6, Subtitle 8, is required. Additional guidance regarding projects where lead paint may be encountered can be obtained by contacting the Environmental Lead Division at (410) 537-3825.

6. The proposed project may involve rehabilitation, redevelopment, revitalization, or property acquisition of commercial, industrial property. Accordingly, MDE's Brownfields Site Assessment and Voluntary Cleanup Programs (VCP) may provide valuable assistance to you in this project. These programs involve environmental site assessment in accordance with accepted industry and financial institution standards for property transfer. For specific information about these programs and eligibility, please Land Restoration Program at (410) 537-3437.

7. The project may cause contaminated runoff from an animal feeding operation (AFO). Please contact the AFO Division at (410) 537-4423 to determine if this AFO will require registration under the General Discharge Permit for Animal Feeding Operations.

8. The project will result in increased numbers of confined animals at this animal feeding operation (AFO) and therefore necessitate registration under the General Discharge Permit for Animal Feeding Operations. Please contact the AFO Division at (410) 537-4423 to determine if this AFO will require registration under this permit.

9. 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."

Prince George's County's finding of consistency is contingent upon the applicant taking the following actions: "Site 1 (Bldg. 434) and Site 2 (Bldg. 513) [are] out of the Special Flood Hazard Area (SFHA) shown on the effective Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRMs), panel 24033C0065E dated September 16, 2016 (attachments 24033C0065E will be forwarded). The site plans should be reviewed by the Prince George's County Department of Permitting, Inspections, and Enforcement (DPIE) and all regulatory floodplain questions should be directed to DPIE."

MNCPPCP provided the following comments regarding their finding of consistency:

> "The site is within the 2010 Approved Subregion 1 Master Plan and zoned R-O-S (Reserved Open Space), located approximately 0.5 miles north of the Capital Beltway (I-495). The adjacent properties are zoned residential and commercial shopping center. The subject site is impacted by master plan facilities, including planned bicycle lanes and side paths along Baltimore Avenue, which it fronts, Sellman Road to the north, and Cherry Hill Road to the south, per the Approved Countywide Master Plan of Transportation, November 2009. All work related to this project should remain out of the right of ways along the Capital Beltway (I-495), Baltimore Avenue and Sellman Road."

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
cc: Chizo.Irechukwu@usda.gov
Tony Redman - DNR
Amanda Redmiles - MDE
Ian Beam - MDOT
Wendy Scott-Napier - DGS
Denise Burrell - MDA
Kathleen Herbert - PGEO
Jay Mangalvedhe - MNCPPCP
Joseph Griffiths - MDPL
Beth Cole - MHT

20-0291_CRR.CLS.docx

DEPARTMENT OF THE ARMY
U.S. ARMY CORPS OF ENGINEERS, BALTIMORE DISTRICT
2 HOPKINS PLAZA
BALTIMORE, MARYLAND 21201-2930

F
COE
BARC

EJC

May 15, 2020

RECEIVED
MAY 18 2020
By

Beth Cole
Administrator
Office of Review and Compliance
Maryland Historical Trust
100 Community Place
Crownsville, Maryland 21032

Ms. Cole,

In accordance with Section 106 of the National Historic Preservation Act, as amended, the U.S. Department of Agriculture (USDA) would like to continue consultation for the proposed undertaking concerning Buildings 434 and 513 at the Beltsville Agricultural Research Center (BARC) property in Prince George's County, Maryland. This letter is in response to the 11 February 2020 email received from your office.

1) Building 434 2020002488

Attached please find the draft site designs and renderings for alterations to the Building 434 site for your review and comment (Enclosure 1). The repurposing of Building 434 will result in the long term preservation of this historic property and will prevent an adverse effect through neglect. Building 434 contributes to the BARC Historic District under Criterion A, which is eligible for making significant contributions to the broad pattern of our history with agricultural experimentation. BARC scientists and researchers made and continue to make valuable scientific contributions, both in foundational and applicable science. Building 434's continued use as an agricultural research facility is in keeping with the historic significance of the District.

#2nd BC 6/16/2020 PG: 67-48

Site work will include grading, new concrete hardstands, adjustments to and repaving of the entrance and loop roads, erosion and sediment control, stormwater management features, and minor landscaping. Water for the building already exists, but sanitary will have to be brought to the site. Alterations of note are the removal of portions of the rear walls of the historic additions to connect the new quarantine poultry additions, the addition of black chain link fence around the sides and rear of the building for biosecurity, and the addition of four exterior feed storage tanks that will be installed on the eastern and western ends of the historic additions. The historic fabric of the building will be punctured underneath the windows on the eastern and western ends of the building to allow for augers to pass feed from the exterior tanks to the interior feed delivery system.

While the interior of Building 434 will be completely renovated and repurposed, exterior character-defining features will be retained. The Georgian Revival style will continue to be visible through the building's white trim, brick veneer and cladding, side gabled roof, centered front door, fenestration pattern, and the symmetrical layout and massing of the original parts of the building. Though the building will no longer be specifically designed or operated as a 'Goat Barn,' Building 434 will retain its location, setting, feeling, and association within an agricultural research complex.

2) Wildlife Office 2020002489

Enclosure 2 includes the proposed site design of the 24 by 60 foot modular office unit for the Wildlife Office. While no final decisions have been made as to the color or appearance of the modular unit, it will include a covered front entry porch and wooden ADA accessible ramp. USDA intends to purchase a mobile 'double wide' home that has a residential appearance, with vinyl siding, shutters, and an asphalt shingle roof. Enclosure 2 shows possible options for form and earth tone coloration.

#2nd 6/16/2020 PG: 64-23 voids 18PR394

While an existing tree line separates Building 513 from the parking lot, the modular unit will be visible from the Hall House, as well as the National Plant Materials Center, Building 509, located to the west along Beaver Dam Road. USDA is proposing to add a dense vegetative buffer of fast growing evergreen trees along the western side of the mobile home to block it from Soil Conservation Road. Vegetative screening and the unit's residential appearance will minimize the proposed action's visual intrusion on the surrounding agricultural setting.

Building 513 will be mothballed and will remain vacant until USDA can assess its future use. As previously stated, USDA will continue to use and maintain the associated Garage, Building 513A, for the Wildlife Office's use. A gravel pathway will be constructed from the new office to the garage.

Water will be brought to the modular unit along a previously disturbed existing utility corridor parallel to Beaver Dam Road to the west of the parking lot. Electrical will also be brought to the unit via existing lines and overhead poles. Land disturbance of note will consist of excavation, cut and fill, to create a level concrete slab on grade for the modular unit's footprint and the installation of a new septic tank and leach field sized according to county specifications (Enclosure 2). USDA acknowledges the potential presence of unmarked graves associated with the Hall Family Cemetery. Therefore, a minimum 100 foot buffer of the existing graves has been applied to any land disturbance to avoid potential impacts.

Effect Determination

Based on the current proposed designs, USDA has determined the repurposing of Building 434 and the placement of a new Wildlife Office will have no adverse effect on historic properties. We look forward to your feedback on USDA's preliminary effect determinations and continued consultation. Additional design details will continue to be provided to your office. If you have any questions or comments please contact Harvey Johnson, USACE Project Manager, at 410-962-7961 or by email at Harvey.L.Johnson@usace.army.mil. Questions can also be addressed to Eva Falls, USACE Cultural Resources Specialist, at 410-962-4458 or by email at Eva.E.Falls@usace.army.mil.

JOHNSON.HARVEY.L.1229425958 Digitally signed by JOHNSON.HARVEY.L.1229425958 Date: 2020.05.14 17:26:09 -04'00'

Harvey L. Johnson
Program Manager
USACE Programs and Project Management

ENCLOSURES

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

Beth Cole 6/16/2020

Date

United States Department of Agriculture

Research, Education, and Economics
Agricultural Research Service

DATE: 7/14/20

SUBJECT: Invitation to Review the Draft Environmental Assessment for the Proposed Relocation of Two Poultry Quarantine Houses and the Wildlife Staff Office at the Beltsville Agricultural Research Center, Beltsville, Maryland

Dear Sir/Madam,

On behalf of the U.S. Department of Agriculture (USDA), the U.S. Army Corps of Engineers (USACE), Baltimore District, has prepared an Environmental Assessment (EA) to evaluate the potential environmental, cultural, transportation, and socioeconomic impacts of the proposed relocation of two poultry quarantine houses and the Wildlife Staff Office to alternate locations at the Beltsville Agricultural Research Center (BARC), Beltsville, Maryland. This proposed action consists of the renovation of one historic building, building 434, which would be used to accommodate the poultry quarantine program, and the installation of a new modular building near Building 513, which would house the Wildlife Staff Office.

This EA has been prepared in accordance with the National Environmental Policy Act (NEPA) of 1969 (42 *United States Code* [USC] 4321-4347), Council on Environmental Quality (CEQ) Regulations for Implementing the Procedural Provisions of NEPA (40 *Code of Federal Regulations* [CFR] Sections 1500-1508), and 32 CFR 989, *et. seq.*

The draft EA and draft Finding of No Significant Impact (FNSI) are available for review at https://www.ars.usda.gov/northeast-area/docs/draft-environmental-assessment/ . For those who do not have ready access to a computer or the internet, the materials posted to the website will be made available upon request by contacting Ms. Chizo Irechukwu, Facilities Division, USDA-ARS, by mail at 10300 Baltimore Avenue, Bldg. 426 BARC-East, Room 108, Beltsville, MD 20705, or by email at Chizo.Irechukwu@usda.gov.

Your assistance in providing information is greatly appreciated. Please provide written comments by close of the public comment period to Ms. Chizo Irechukwu, at the addresses provided above. If you need further information, please contact Ms. Irechukwu at 301-440-1413. Public comments will be received from July 23, 2020 to August 22, 2020.

Sincerely,

Howard Zhang,
Director, BARC
USDA/ARS/NEA

Enclosure

Enclosure: Agency & Tribal Government Mailing List

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

Ms. Amanda Redmiles
Maryland Department of the Environment
Interdepartmental Information Liaison
Office of Communications
1800 Washington Boulevard
Baltimore, MD 21230

Ms. Linda C. Janey
Maryland State Clearinghouse
Maryland Office of Planning, Suite 1101
301 West Preston Street
Baltimore, MD 21201-2365

Mr. Luke Marcek
Maryland DNR – Forest Service
The Bhaduri Building
Maple Avenue
P.O. Box 2746
La Plata, MD 20646

Ms. Barbara Rudnick
U.S. Environmental Protection Agency,
Region 3
Office of Environmental Programs (3EA30)
1650 Arch Street
Philadelphia, PA 19103-2029

Ms. Genevieve LaRouche
U.S. Department of the Interior
Fish & Wildlife Service
Chesapeake Bay Field Office
177 Admiral Cochrane Drive
Annapolis, MD 21401

Ms. Beth Cole
Maryland Historical Trust
Project Review and Compliance
100 Community Place
Crownsville, MD 21032

Mr. Carlton Hart
National Capital Planning Commission
North Lobby, Suite 500
401 9th Street, NW
Washington, DC 20576

Ms. Crystal Hancock
Maryland-National Capital Park & Planning Commission
14741 Governor Oden Bowie Drive
Upper Marlboro, MD 20772

Mr. Chester Brooks
Chief, Delaware Tribe of Indians
5100 Tuxedo Boulevard
Bartlesville, OK 74006

Dr. Brice Obermeyer
Director, Historic Preservation
Delaware Tribe of Indians
Roosevelt Hall, Rm 212,
1200 Commercial Street
Emporia, KS 66801

Ms. Susan Bachor
Preservation Representative (East Coast)
Delaware Tribe Historic Preservation,
Pennsylvania Office,
P.O. Box 64,
Pocono Lake, PA 18347

Ms. Deborah Dotson
President, Delaware Nation
P.O. Box 825
Anadarko, OK 73005

Ms. Nekole Alligood
Director of NAGPRA
Delaware Nation
P.O. Box 825
Anadarko, OK 73005

Enclosure 2: Elected Officials List

Ms. Angela D. Alsobrooks
Prince George's County Executive
1301 McCormick Drive
Suite 4000
Largo, MD 20774
countyexecutive@co.pg.md.us

Ms. Nicole Ard
Greenbelt City Manager
25 Crescent Road
Greenbelt, MD 20770
nard@greenbeltmd.gov

Honorable Benjamin S. Barnes
Delegate, 21st District
House Office Building, Room 151
6 Bladen Street
Annapolis, MD 21401
ben.barnes@house.state.md.us

Mr. P.J. Brennan
College Park Councilmember, District 2
c/o 8400 Baltimore Avenue, Suite 375
College Park, MD 20740
pbrennan@collegeparkmd.gov

Mr. David J. Brown, CIH, CHMM
United States Secret Service
SAF/Safety, Health and Environmental
Programs Division
david.brown@usss.dhs.gov

Honorable Colin A. Byrd
Mayor of Greenbelt
25 Crescent Road
Greenbelt, MD 20770
colinabyrd@greenbeltmd.gov
Mayor Pro Tem, Emmett Jordan
ejordan@greenbeltmd.gov

U.S. Senator Ben Cardin
10201 Martin Luther King Jr. Hwy, Ste 210
Bowie, MD 20720
https://www.cardin.senate.gov/contact/

Mr. Mark M. Daly
Assistant Chief of Operations
Goddard Space Flight Center
Greenbelt, MD 20771
mark.m.daly@nasa.gov

Mr. Robert W. Day, Sr.
College Park Councilmember, District 3
7410 Baylor Avenue
College Park, MD 20740
rday@collegeparkmd.gov

Mr. Monroe S. Dennis
College Park Councilmember, District 2
8117 51st Avenue
College Park, MD 20740
mdennis@collegeparkmd.gov

Honorable Thomas E. Dernoga
Prince George's County Councilmember
County Administration Building, 2nd floor
14741 Governor Oden Bowie Drive, Upper
Marlboro, MD 20772 – 3070
TEDernoga@co.pg.md.us
Chief of Staff, Ms. Michelle Garcia
MJGarcia@co.pg.md.us

U.S. Congressman Steny Hoyer
U.S. District Courthouse
6500 Cherrywood Lane, Suite 310
Greenbelt, MD 20770
https://hoyer.house.gov/email-steny/

Mr. Bradley Jewitt
Chief, Facilities Management Division
Goddard Space Flight Center
Greenbelt, MD 20771
bradley.s.jewitt@nasa.gov

Mr. S.M. Fazlul Kabir
College Park Councilmember, District 1
9817 53rd Avenue
College Park, MD 20740
fkabir@collegeparkmd.gov

Ms. Kate Kennedy
College Park Councilmember, District 1
9730 51st Avenue
College Park, MD 20740
kkennedy@collegeparkmd.gov

Mr. Brad Knudsen
Refuge Manager
Patuxent National Wildlife Visitor Center
10901 Scarlet Tanger Loop
Laurel, MD 20708
Brad_Knudsen@fws.gov

Honorable Mary Lehman
Delegate, 21st District
House Office Building, Room 317
6 Bladen Street
Annapolis, MD 21401
mary.lehman@house.state.md.us

Ms. Maria E. Mackie
College Park Councilmember, District 4
9242 St. Andrews Place
College Park, MD 20740
mmackie@collegeparkmd.gov

Ms. Denise C. Mitchell
College Park Councilmember, District 4
c/o 8400 Baltimore Avenue, Suite 375
College Park, MD 20740
dmitchell@collegeparkmd.gov

Honorable Craig A. Moe
Mayor of Laurel
8103 Sandy Spring Road
Laurel, MD 20707
laurelmayor@laurel.md.us

Honorable Joseline A. Pena-Melnyk
21st District Delegation
House Office Building, Room 241
6 Bladen Street
Annapolis, MD 21401
joseline.pena.melnyk@house.state.md.us

Ms. Janeen S. Miller
College Park City Clerk
8400 Baltimore Avenue, Suite 375
College Park, MD 20740
cityclerkoffice@collegeparkmd.gov

Ms. Lisa D. Quiveors
Department of Homeland Security
Sustainability and Environmental Programs
Lisa.quiveors@hq.dhs.gov

Mr. John Rigg
College Park Councilmember, District 3
c/o 8400 Baltimore Avenue, Suite 375
College Park, MD 20740
jrigg@collegeparkmd.gov

Honorable James C. Rosapepe
Senator, 21st District
James Senate Office Building, Room 101
11 Bladen Street
Annapolis, MD 21401
jim.rosapepe@senate.state.md.us

Mr. Jeffrey Sheckels
Director, Safety, Sustainability and
Emergency Operations Division
Office of Operations
United States Department of Agriculture
1400 Independence Ave., Suite 1433
Washington, D.C. 20250
Jeffrey.Sheckels@usda.gov

Mr. Scott Somers
City Manager of College Park
8400 Baltimore Avenue, Suite 375
College Park, MD 20740
citymanager@collegeparkmd.gov

Honorable Todd M. Turner
Prince George's County Councilmember
14741 Gov. Oden Bowie Drive
County Council, 2nd Floor
Upper Marlboro, MD 20772
District4@co.pg.md.us
Chief of Staff, Ms. Tomeka C. Bumbry
TCBumbry@co.pg.md.us

U.S. Senator Chris Van Hollen
1101 Mercantile Lane, Suite 210
Largo, MD 20774
https://www.vanhollen.senate.gov/contact

Mayor Patrick Wojahn
Mayor of College Park
5015 Lackawanna Street
College Park, MD 20740
pwojahn@collegeparkmd.gov

July 23, 2020

Ms. Chizo Irechukwu
Agricultural Research Services
U. S. Department of Agriculture
10300 Baltimore Avenue
Building 426 BARC-East, Room 108
Beltsville, MD 20705

Ms. Marisa Wetmore, Biologist
U.S. Army Corps of Engineers, Baltimore District
2 Hopkins Plaza, 10-B-01
Baltimore, MD 21201

STATE CLEARINGHOUSE REVIEW PROCESS

State Application Identifier: **MD20200723-0635**
Reviewer Comments Due By: August 19, 2020
Project Description: Draft Environmental Assessment (EA) and Finding of No Significant Impact (FNSI): Proposed Action Includes Relocation of Two Poultry Quarantine Houses and the Wildlife Staff Office at the Beltsville Agricultural Research Center Via Renovation of Building 434 and the Installation of a New Modular Building
Project Address: Beltsville Agricultural Research Center, 10300 Baltimore Avenue, Beltsville, MD 20705
Project Location: Prince George's County
Clearinghouse Contact: Sylvia Mosser

Dear Ms. Irechukwu and Ms. Wetmore:

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, General Services, Agriculture; Prince George's County; the Maryland-National Capital Park and Planning Commission in Prince George's 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.

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

20-0635_NFP.NEW.docx

From: Lori Byrne -DNR-
To: Wetmore, Marisa L CIV USARMY CENAB (USA)
Cc: Chizo Irechukwu (chizo.irechukwu@usda.gov)
Subject: [Non-DoD Source] Re: Invitation to Review Draft EA and FNSI for the Beltsville Agricultural Research Center
Date: Wednesday, August 12, 2020 3:36:21 PM

Dear Ms. Irechukwu,
The Wildlife and Heritage Service has no comments regarding impacts to rare, threatened or endangered species from the proposed project. Thank you for the opportunity to review and comment.
Lori Byrne

<Blockedhttp://www.maryland.gov/>

<Blockedhttps://www.facebook.com/MarylandDNR/> <Blockedhttps://twitter.com/MarylandDNR>

dnr.maryland.gov <Blockedhttp://dnr.maryland.gov/>

Lori A. Byrne

Environmental Review Coordinator

Wildlife and Heritage Service

Department of Natural Resources

580 Taylor Avenue, E-1

Annapolis, MD 21401

410-260-8573 (office)

410-260-8596 (FAX)

lori.byrne@maryland.gov <mailto:lori.byrne@maryland.gov>

On Wed, Jul 22, 2020 at 5:32 PM Wetmore, Marisa L CIV USARMY CENAB (USA) <Marisa.L.Wetmore@usace.army.mil <mailto:Marisa.L.Wetmore@usace.army.mil> > wrote:

Good evening,

On behalf of the U.S. Department of Agriculture, the U.S. Army Corps of Engineers, Baltimore District, has prepared a Draft Environmental Assessment (EA) and Draft Finding of No Significant Impact (FNSI) for the proposed relocation of two poultry quarantine houses and the Wildlife Staff Office at the Beltsville Agricultural Research Center. As part of this effort, we invite you to review and comment on the Draft EA and FNSI during the public comment period, which will run from 23 July 2020 to 22 August 2020.

Please find attached the stakeholder letter for this project, which includes the location of the Draft EA and FNSI for review. While we would normally send this via hard copy in the mail, we are sending it via email due to COVID-19 working arrangements. We would appreciate any comments or questions within 30 days of receipt of

this letter (22 August 2020).

Please direct any questions or comments to Ms. Chizo Irechukwu, who is cc'ed on this email and whose contact information can be found in the attached stakeholder letter.

Thank you,

Marisa Wetmore
Biologist
USACE Baltimore District, Planning Division
Work: 667-203-0149
Cell: 410-710-8378

From: Irechukwu, Chizo
To: Wetmore, Marisa L CIV USARMY CENAB (USA)
Subject: [Non-DoD Source] Fwd: Draft Environmental Assessment and Finding of No Significant Impact
Date: Thursday, August 13, 2020 11:42:24 AM
Attachments: Comments on Environmental Assessment.docx

Hi Marisa,

Please see attached.

Thanks.

Chizo Irechukwu
Asset and Facilities Manager
USDA/NEA/BARC/FS
10300 Baltimore Avenue
Bldg 426A Room 108
Beltsville, MD 20705
Office: 301-594-5664
Cell: 301-440-1413
chizo.irechukwu@usda.gov

_____

From: artdeco1@swbell.net <artdeco1@swbell.net>
Sent: Thursday, August 13, 2020 10:55 AM
To: Irechukwu, Chizo
Subject: Draft Environmental Assessment and Finding of No Significant Impact

Dear Ms. Irechukwu,

Attached are my comments on the Beltsville Agricultural Research Center, Draft Environmental Assessment, Proposed Relocation of Two Poultry Quarantine Houses and the Wildlife Staff Office dated July 2020. Thank you for your kind consideration of my comments.

Deborah McKinley
55H Ridge Road, Greenbelt

The Delaware Nation
Historic Preservation Department
31064 State Highway 281
Anadarko, OK 73005
Phone (405)247-2448

August 10, 2020

To Whom It May Concern:

The Delaware Nation Historic Preservation Department received correspondence regarding the following referenced project(s).

Project(s): Proposed Relocation of Two Poultry Quarantine Houses and the Wildlife Staff Office at the Beltsville Agricultural Research Center, Beltsville, Maryland

Our office is committed to protecting tribal heritage, culture and religion with particular concern for archaeological sites potentially containing burials and associated funerary objects.

The Lenape people occupied the area indicated in your letter prior to European contact until their eventual removal to our present locations. According to our files, the location of the proposed project does not endanger cultural, or religious sites of interest to the Delaware Nation. **Please continue with the project as planned** keeping in mind during construction should an archaeological site or artifacts inadvertently be uncovered, all construction and ground disturbing activities should immediately be halted until the appropriate state agencies, as well as this office, are notified (within 24 hours), and a proper archaeological assessment can be made.

Please note the Delaware Nation, the Delaware Tribe of Indians, and the Stockbridge Munsee Band of Mohican Indians are the only Federally Recognized Delaware/Lenape entities in the United States and consultation must be made only with designated staff of these three tribes. We appreciate your cooperation in contacting the Delaware Nation Historic Preservation Office to conduct proper Section 106 consultation. Should you have any questions, feel free to contact our offices at 405-247-2448 ext. 1403.

Erin N. Paden

Erin Paden
Director of Historic Preservation
Delaware Nation
31064 State Highway 281
Anadarko, OK 73005
Ph. 405-247-2448 ext. 1403
epaden@delawarenation-nsn.gov

From: Irechukwu, Chizo
To: Wetmore, Marisa L CIV USARMY CENAB (USA)
Subject: [Non-DoD Source] Fwd: Draft EA and FNSI for the Beltsville Agricultural Research Center Poultry Quarantine Houses and Wildlife Office
Date: Thursday, August 20, 2020 5:19:17 PM

FYI below.

Chizo Irechukwu
Asset and Facilities Manager
USDA/NEA/BARC/FS
10300 Baltimore Avenue
Bldg 426A Room 108
Beltsville, MD 20705
Office: 301-594-5664
Cell: 301-440-1413
chizo.irechukwu@usda.gov

From: Traver, Carrie <Traver.Carrie@epa.gov>
Sent: Thursday, August 20, 2020 4:48 PM
To: Irechukwu, Chizo
Cc: Rudnick, Barbara
Subject: Draft EA and FNSI for the Beltsville Agricultural Research Center Poultry Quarantine Houses and Wildlife Office

Dear Ms. Irechukwu,

The U.S. Environmental Protection Agency (EPA) received notice of the availability of the draft Environmental Assessment (EA or Study) and Draft Finding of No Significant Impact (FNSI) for the proposed relocation of two poultry quarantine houses and the Wildlife Staff Office at Beltsville Agricultural Research Center (BARC) in Beltsville, Maryland. The proposed action would include rehabilitation of Building 434 for use as a poultry quarantine facility and the placement of a modular structure for the Wildlife Staff Office (WSO) near Building 513.

EPA has reviewed the Study in accordance with the National Environmental Policy Act (NEPA) of 1969, Section 309 of the Clean Air Act, and the Council on Environmental Quality regulations implementing NEPA (40 CFR 1500-1508). Thank you for this notice. Generally, we found that the EA was clear and addressed potential impacts from the proposed action in an appropriate level of detail. As indicated in the EA, appropriate best management practices (BMPs) to minimize potential impacts on the human and natural environment will be employed. Such BMPs include (but are not limited to) bioretention areas for stormwater management, visual screening with vegetation, maintaining a minimum 100-foot buffer from the Hall family cemetery, and reuse of an existing historic building.

The document presents rationale for proposing a new modular structure for the WSO. Before finalizing decision-making, we suggest that evaluation of reuse be reviewed with consideration of additional factors. Section 2.3.1 states that the renovation and repair of Building 513 (which had previously been used as the WSO) was evaluated but was eliminated as it was considered to be too costly as a result of deterioration, extensive updates needed to meet code, and higher renovation cost for historic buildings. As indicated, BARC has a number of unused buildings on the campus and it is unclear whether any of the other buildings were considered as the location for the WSO. As cost is a consideration for the WSO, when costs of the project were analyzed, were the lifecycle costs and the serviceable life of the modular building considered? Additionally, are there any opportunities for partnerships or initiatives that could help reduce the cost of historic building renovations?

As indicated, a residential home is located southwest of Building 434 and shares an entrance road with the building. The EA states that BARC would ensure that access to the private residence remains available throughout the

construction and renovation process and that any disturbances would be coordinated with the residents. We concur that the residents should be engaged as soon as possible regarding potential impacts during construction and operation, including traffic and noise. We suggest that the EA further address potential management of noise impacts from construction using BMPs such as screening, equipment mufflers, or other measures. We also recommend that potential impacts from lighting at the facility also be evaluated and discussed with the residents.

Section 3.8 Transportation indicates that a minimal increase in traffic and minimal impacts to the shared access road would occur from BARC workers responsible for the poultry quarantine facility during operation. To support this finding, it would be helpful to indicate the approximate number of employees that would report to the facility on a regular basis.

We appreciate your coordination with our office and look forward to continuing to work with you in the future. If the project changes or additional information comes to light, we request information be shared with EPA. Please do not hesitate to reach out to me if you would like to discuss this project or others.

Thank you,
Carrie

Carrie Traver
Life Scientist
Office of Communities, Tribes, & Environmental Assessment
U.S. Environmental Protection Agency, Region 3
1650 Arch Street – 3RA10
Philadelphia, PA 19103
215-814-2772
traver.carrie@epa.gov <mailto:traver.carrie@epa.gov>

From: Irechukwu, Chizo
To: Cisar, Heather R CIV CENAB CENAD (USA)
Cc: Wetmore, Marisa L CIV USARMY CENAB (USA)
Subject: [Non-DoD Source] FW: New Wildlife Staff Office comment
Date: Friday, August 21, 2020 2:45:16 PM

Hi Heather,

Since you will be taking over from Marisa while she is out, I am forwarding comments from the Draft EA that has been on our site for the last few weeks.

Thanks

Chizo

Chizo Irechukwu

Asset and Facilities Manager

USDA/NEA/BARC/FS

10300 Baltimore Avenue

Bdlg 426A Room 108

Beltsville, MD 20705

Voice: (301) 504-5664

Cell: (301) 440-1413

chizo.irechukwu@usda.gov

From: bluebirder@aol.com [mailto:bluebirder@aol.com]
Sent: Friday, August 21, 2020 2:26 PM
To: Irechukwu, Chizo <chizo.irechukwu@usda.gov>
Subject: New Wildlife Staff Office comment

Ms. Irechukwu,

I'd like to comment on the project site for the new WSO. I understand that, as indicated in the NCPC Preliminary Submission for July 2020, "the site is currently unused USDA property," however it is not unused by pollinator insects as it was planted as a natural meadow by the BARC employees. Granted, today in August, it is becoming more a field of non-native grasses due to the fact that the grounds maintenance mowers make the decision to mow the site at the height of bloom, mowing under the nectar and host plants for the thousands of bees and butterflies that make use of the site, but many of these plants do grow back partially over the next 4- 6 weeks and the following year. (Another very large field at the other end of Beaver Dam Road planted as a meadow for its benefit to the ecology, farm fields, and for entomologists is now completely taken over by non-native grasses as the mowers mowed at the height of bloom and before seeds were set in the past. A massive field of common milkweed covered with monarch butterflies and their caterpillars along with the huge open area of nectar flowers teeming with bees was mowed in one day last August. All bees and butterflies, and monarch caterpillars disappeared or were mowed.)

BARC also used to have large areas along some roadsides planted with sunflowers and other pollinator plants just a few years ago. Those are all gone now as they were also mowed just before they set seed.

Is there any way, since BARC is constructing on part of the meadow next to 513 for this project, there can be a greater focus on BARC land stewardship indicated as a priority in the 2018 Agriculture bill in a section on EQIP (Environmental Quality Incentives Program), a program promoting habitat conservation on farms? There is open space, the last large open space between Washington and Baltimore, here at BARC, to fulfill the goals set forth in the bill. I know the research entomologists are very interested in increasing forage food supply for our beneficial insects which will ultimately benefit all the wildlife up the food chain, along with the plants and trees throughout the property.

Finally, it would be nice if the remaining part of that field behind the new WSO was returned to meadow and managed as such. That does not mean it is not mowed. It needs to be. What it does mean is that it, and other sites like it , are mowed at the right time.

Thank you for considering my comment,

Marcia Van Horn

BARC permitted insectivore nestbox monitor of historic nest box trail begun in 1967, taken over by me in 1994.

From:	Beth Cole - MHT
To:	Wetmore, Marisa L CIV USARMY CENAB (USA)
Cc:	Chizo Irechukwu (chizo.irechukwu@usda.gov); Falls, Eva E CIV USARMY CENAB (USA)
Subject:	[Non-DoD Source] Re: Invitation to Review Draft EA and FNSI for the Beltsville Agricultural Research Center
Date:	Tuesday, July 28, 2020 2:00:52 PM

Hi Marisa,

Thank you for providing the Maryland Historical Trust with notice of the draft EA. The Corps has already completed its Section 106 consultation on behalf of USDA/BARC for these undertakings. The EA should accurately reflect the results of that consultation and include copies of the relevant correspondence to document consideration of cultural resources. See attached copy of MHT's concurrence with the Corps findings of no adverse effect on historic properties.

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Have a good day,

Beth Cole

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Beth Cole
Administrator, Project Review and Compliance

Maryland Historical Trust
Maryland Department of Planning

100 Community Place
Crownsville, MD 21032

beth.cole@maryland.gov <mailto:beth.cole@maryland.gov> / 410-697-9541
MHT.Maryland.gov <Blockedhttp://mht.maryland.gov/>

Please take our customer service surve <Blockedhttp://www.doit.state.md.us/selectsurvey/TakeSurvey.aspx?agencycode=MDP&SurveyID=86M2956#> y

*Please note that due to a current staff vacancy in Review & Compliance, the review period for submittals is approximately 45-60 days. To check on the status of a submittal, please use our online search: Blockedhttps://mht.maryland.gov/compliancelog/ComplianceLogSearch.aspx.

On Wed, Jul 22, 2020 at 5:32 PM Wetmore, Marisa L CIV USARMY CENAB (USA) <Marisa.L.Wetmore@usace.army.mil <mailto:Marisa.L.Wetmore@usace.army.mil> > wrote:

> Good evening,

On behalf of the U.S. Department of Agriculture, the U.S. Army Corps of Engineers, Baltimore District, has prepared a Draft Environmental Assessment (EA) and Draft Finding of No Significant Impact (FNSI) for the proposed relocation of two poultry quarantine houses and the Wildlife Staff Office at the Beltsville Agricultural Research Center. As part of this effort, we invite you to review and comment on the Draft EA and FNSI during the public comment period, which will run from 23 July 2020 to 22 August 2020.

Please find attached the stakeholder letter for this project, which includes the location of the Draft EA and FNSI for review. While we would normally send this via hard copy in the mail, we are sending it via email due to COVID-19 working arrangements. We would appreciate any comments or questions within 30 days of receipt of this letter (22 August 2020).

Please direct any questions or comments to Ms. Chizo Irechukwu, who is cc'ed on this email and whose contact information can be found in the attached stakeholder letter.

Thank you,

Marisa Wetmore
Biologist
USACE Baltimore District, Planning Division
Work: 667-203-0149
Cell: 410-710-8378

August 25, 2020

Ms. Chizo Irechukwu
U. S. Department of Agriculture
Agricultural Research Services
10300 Baltimore Avenue
Building 426 BARC-East, Room 108
Beltsville, MD 20705

STATE CLEARINGHOUSE RECOMMENDATION

State Application Identifier: MD20200723-0635
Applicant: U. S. Department of Agriculture **and** U.S. Army Corps of Engineers, Baltimore District
Project Description: Draft Environmental Assessment (EA) and Finding of No Significant Impact (FNSI): Proposed Action Includes Relocation of Two Poultry Quarantine Houses and the Wildlife Staff Office at the Beltsville Agricultural Research Center Via Renovation of Building 434 and the Installation of a New Modular Building
Project Address: Beltsville Agricultural Research Center, 10300 Baltimore Avenue, Beltsville, MD 20705
Project Location: Prince George's County
Recommendation: Consistent Contingent Upon Certain Actions

Dear Ms. Irechukwu:

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 Agriculture, General Services, Natural Resources, Transportation, and the Environment; Prince George's County; the Maryland National Capital Parks and Planning Commission - Prince George's County; and the Maryland Department of Planning, including the Maryland Historical Trust. The Maryland Department of Agriculture and the Maryland Department of Planning did not have comments; and Prince George's County did not provide comments.

The Maryland Departments of General Services, Natural Resources, and Transportation; the Maryland National Capital Parks and Planning Commission - Prince George's County; 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 effect" on historic properties and that the federal and/or State historic preservation requirements have been met.

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' (COMAR 26.11.06.03D), 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. 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's Air and Radiation Management Administration. Please contact the New Source Permits Division, Air and Radiation Management Administration at (410) 537-3230 to learn about the State's requirements for these permits.
3. If the applicant suspects that asbestos is present in any portion of the structure that will be renovated/demolished, then the applicant should contact the Community Environmental Services Program, Air and Radiation Management Administration at (410) 537-3215 to learn about the State's requirements for asbestos handling.
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 and Materials 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 Resource Management Program at (410) 537-3314 for additional information regarding recycling activities.
7. The Resource Management Program should be contacted directly at (410) 537-3314 by those facilities which generate or propose to generate or handle hazardous wastes to ensure these activities are being conducted in compliance with applicable State and federal laws and regulations. The Program should also be contacted prior to construction activities to ensure that the treatment, storage or disposal of hazardous wastes and low-level radioactive wastes at the facility will be conducted in compliance with applicable State and federal laws and regulations.
8. Any contract specifying 'lead paint abatement' must comply with Code of Maryland Regulations (COMAR) 26.16.01 - Accreditation and Training for Lead Paint Abatement Services. If a property was built before 1978 and will be used as rental housing, then compliance with COMAR 26.16.02 - Reduction of Lead Risk in Housing; and Environment Article Title 6, Subtitle 8, is required. Additional guidance regarding projects where lead paint may be encountered can be obtained by contacting the Environmental Lead Division at (410) 537-3825.
9. The proposed project may involve rehabilitation, redevelopment, revitalization, or property acquisition of commercial, industrial property. Accordingly, MDE's Brownfields Site Assessment and Voluntary Cleanup Programs (VCP) may provide valuable assistance to you in this project. These programs involve environmental site assessment in accordance with accepted industry and financial institution standards for property transfer. For specific information about these programs and eligibility, please Land Restoration Program at (410) 537-3437.
10. 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 requires site approval. Contact the Mining Program at (410) 537-3557 for further details.
11. The project may cause contaminated runoff from an animal feeding operation (AFO). Please contact the AFO Division at (410) 537-4423 to determine if this AFO will require registration under the General Discharge Permit for Animal Feeding Operations.

12. The project will result in increased numbers of confined animals at this animal feeding operation (AFO) and therefore necessitate registration under the General Discharge Permit for Animal Feeding Operations. Please contact the AFO Division at (410) 537-4423 to determine if this AFO will require registration under this permit."

Additional MDE comments are enclosed.

The Maryland National Capital Parks and Planning Commission - Prince George's County provided the following comments: "It is recommended that pedestrian connectivity and walkability not be adversely affected with the proposed development and that facilities to make walking and bicycling safer and convenient within the BARC [Beltsville Agricultural Research Center] campus be considered, such as bicycle lanes and sidewalks along both Powder Mill Road and Beaver Dam Road. Landscaping should be provided in conformance with the Prince George's County Landscape Manual to the extent feasible."

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
Enclosures—MDE Additional Comments
cc:

Tony Redman - DNR	Tanja Rucci - DGS	Ivy Thompson - MNCPPCP
Amanda Redmiles - MDE	Denise Burrell - MDA	Joseph Griffiths - MDPL
Ian Beam - MDOT	Kathleen Herbert - PGEO	Beth Cole - MHT

20-0635_CRR.CLS.docx

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.

Draft Environmental Assessment (EA) and Finding of No Significant Impact (FNSI): Proposed Action Includes Relocation of Two Poultry Quarantine Houses and the Wildlife Staff Office at the Beltsville Agricultural Research Center Via Renovation of Bldg. 434 and the Installation of a New Modular Bldg.

Maryland Department of the Environment – WSA/IWPP/EASP

REVIEW FINDING: R2 Contingent Upon Certain Actions (MD2020 0723-0635)

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 Beaverdam Creek 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.

---

[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.

Beaverdam Creek 2, which is located within the vicinity of the Project, has been designated as a Tier II stream. The Project is within the Catchment (watershed) of the segment. (See attached map).

Currently, there is assimilative capacity in this watershed; therefore at this time, no detailed social and economic justification is needed.

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

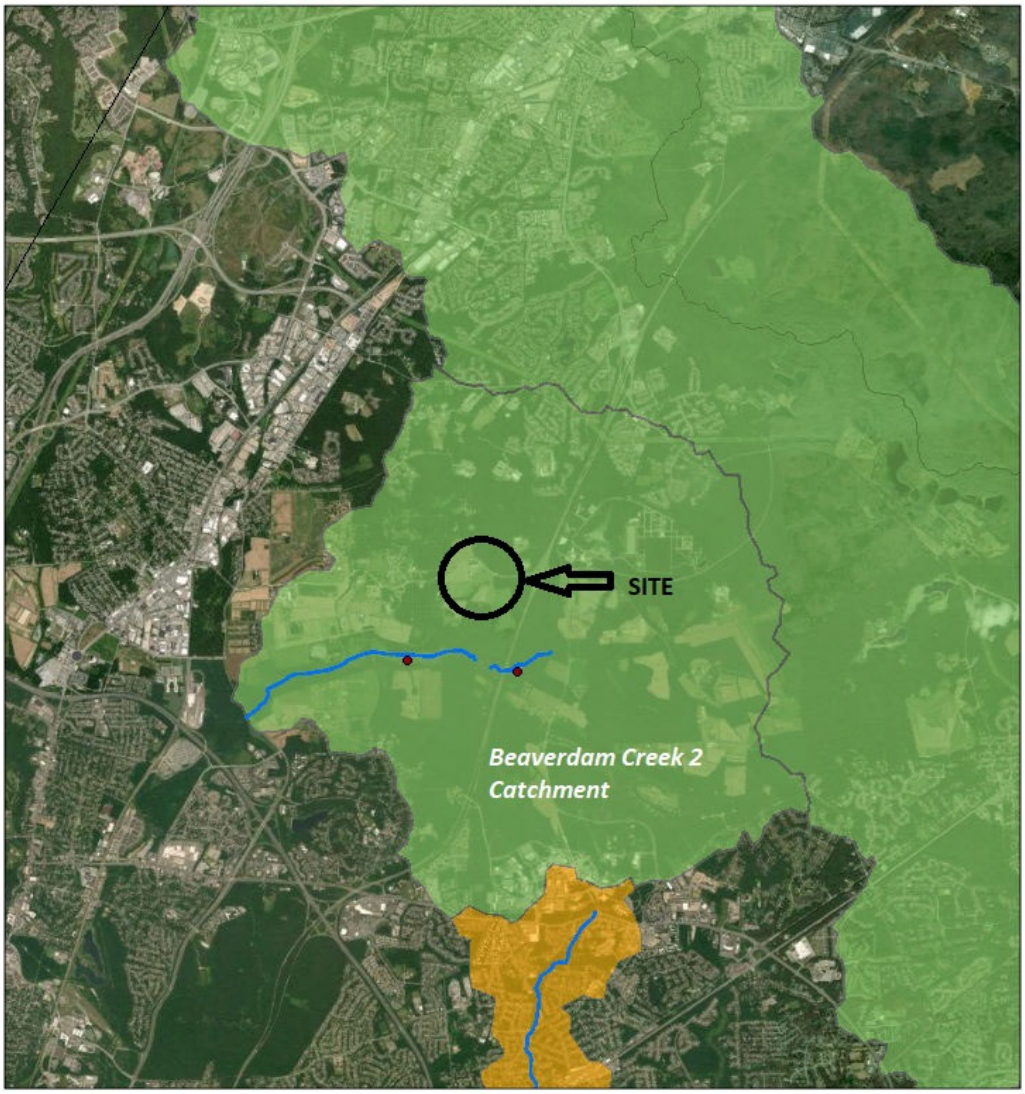
Planners should consider all Maryland Stormwater Management Controls and during Site Design the planner should consider all Environmental Site Design to the Maximum Extent Practicable and “Green Building” Alternatives. Designs that reduce impervious surface and BMPs that increase runoff infiltration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

MD2020 0723-0635



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1:92,286

0 0.5 1 2 mi

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Tier II Catchments 2016

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

Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community. Creator: Maryland Department of the Environment, Water and Science Administration (MDE WSA), MDE

Web AppBuilder for ArcGIS

Earthstar Geographics, CNES/Airbus DS | MDE | Creator: Maryland Department of the Environment, Water and Science Administration (MDE WSA) | MD iMAP, MDP |

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.

Appendix B

SITE PHOTOGRAPHS OF BUILDING 434

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Exterior Elevation – North

Exterior Elevation – North East End

Exterior Elevation – North West End

Exterior Elevation – South West End

Exterior Elevation – North West End

Exterior Elevation – South

Exterior – South West End

Exterior – West End

Exterior Elevation – West End

Exterior Elevation – South

Exterior Roof – Damaged To Be Replaced

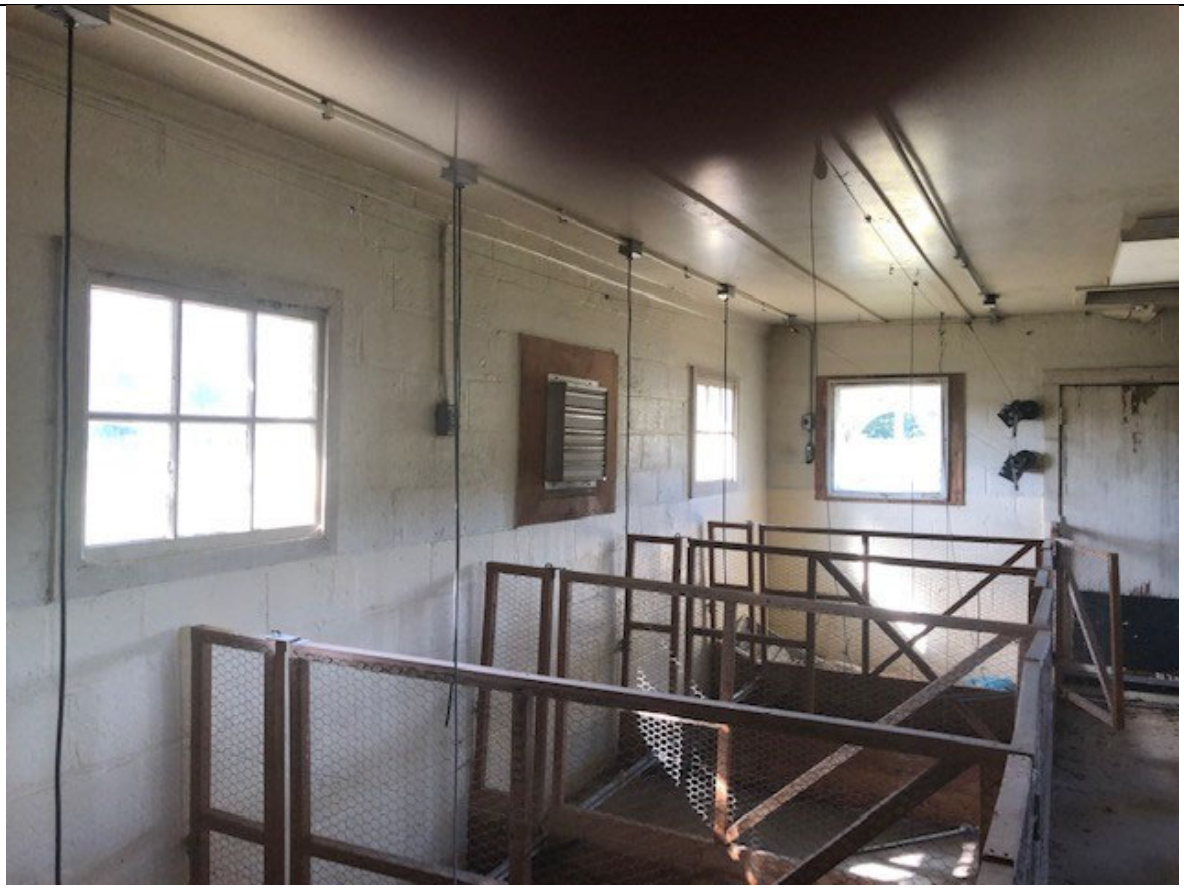
Exterior Roof – Damaged To Be Replaced

Exterior Masonry – Crack Shows Damaged To Be Repaired

Exterior Masonry – Crack Shows Damaged To Be Repaired

Exterior – West End

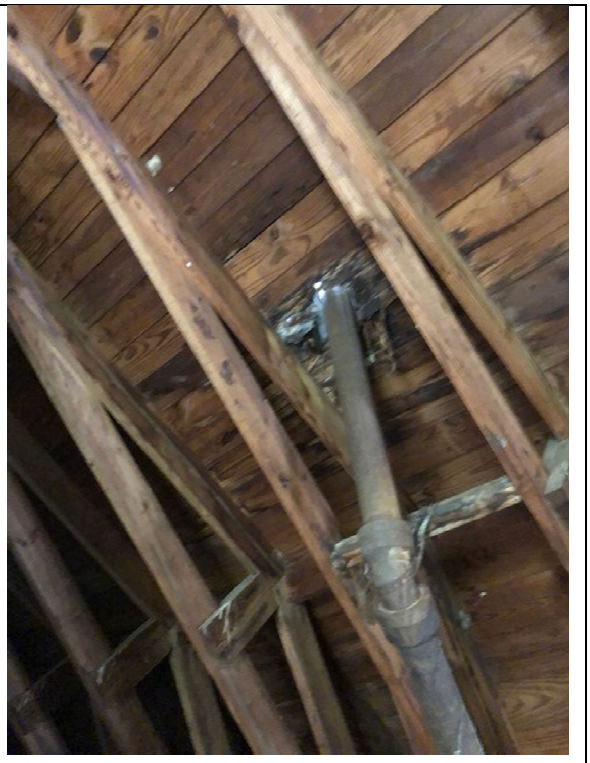
Exterior Elevation – South



Interior – West End

Interior – Central Main Section

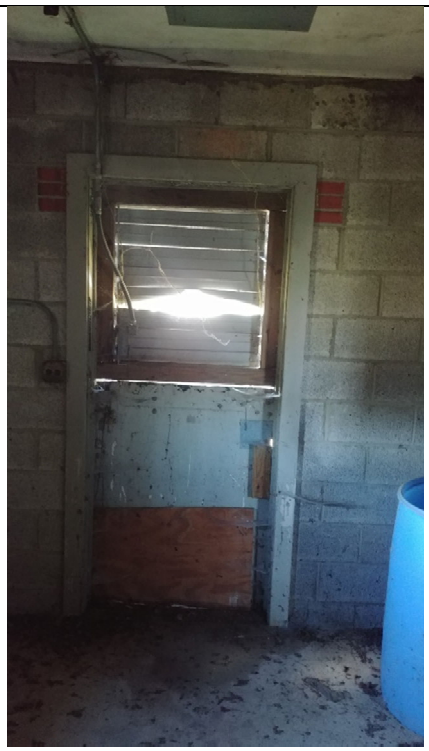
Attic – Looking West



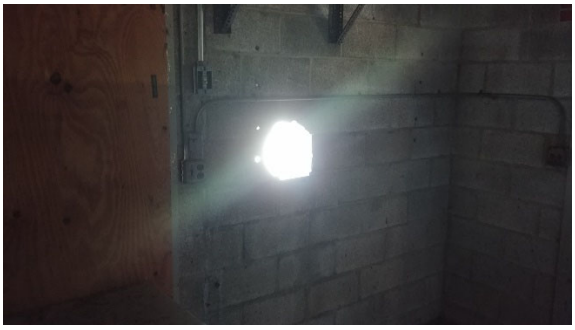
Attic – Damaged Wood Sheathing

Attic – Dormers Over Wood Trusses

Attic –



Interior – East End Addition



Interior – East End Addition

Interior – Looking West

Exterior Masonry Cracks & Structural Damage To Be Repaired

Exterior Masonry Cracks & Structural Damage To Be Repaired

Interior – Looking West

Original Interior Wall Was Removed

Electrical

Interior - Office

Appendix C

SOIL REPORT

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United States Department of Agriculture

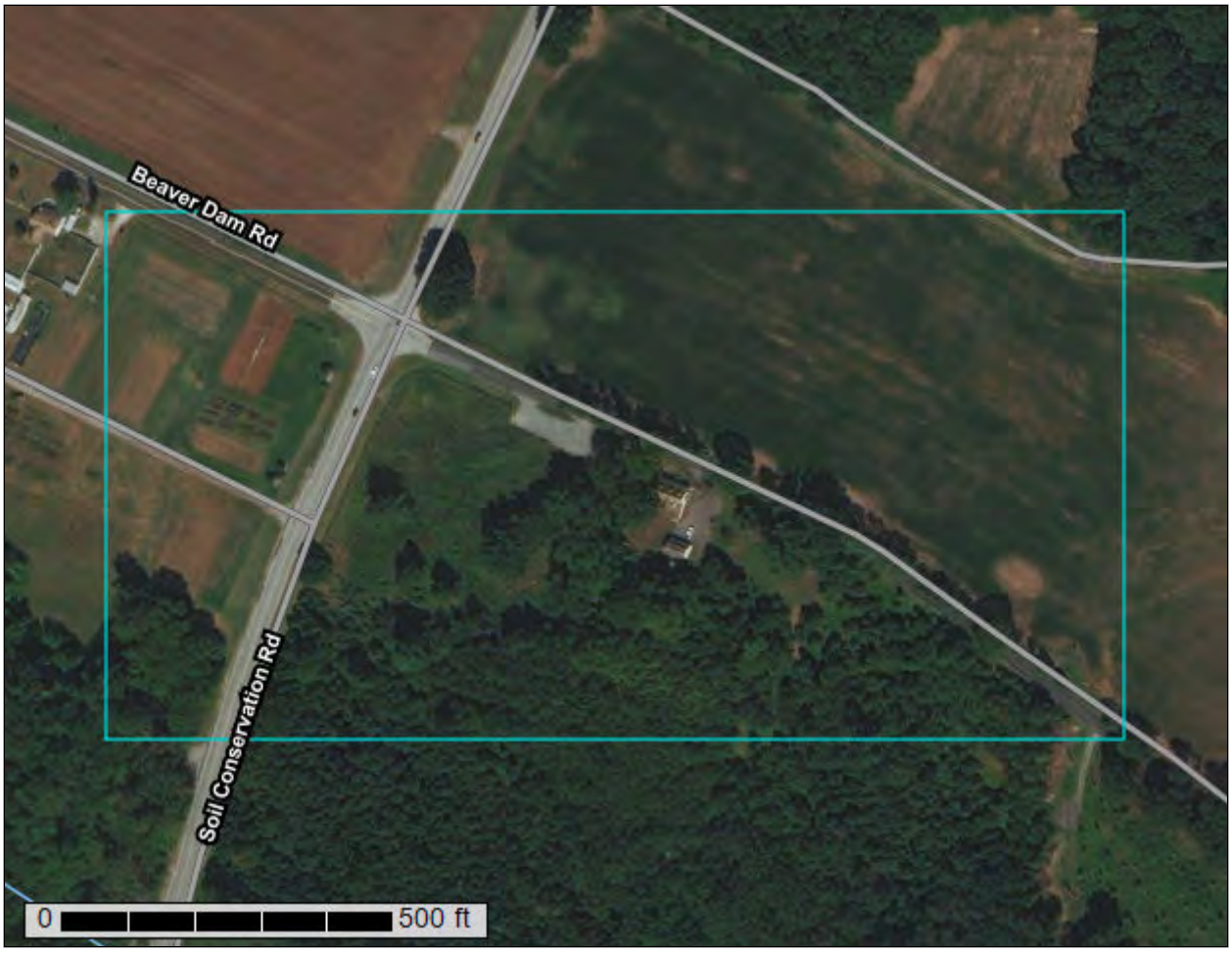
NRCS

Natural Resources Conservation Service

A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

Custom Soil Resource Report for Prince George's County, Maryland

Building 513 Vicinity



January 8, 2020

Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (https://offices.sc.egov.usda.gov/locator/app?agency=nrcs) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

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Contents

How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Custom Soil Resource Report
Soil Map

Map Scale: 1:2,570 if printed on A landscape (11" x 8.5") sheet.

N

Meters: 0 35 70 140 210

Feet: 0 100 200 400 600

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 18N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:12,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Prince George's County, Maryland
Survey Area Data: Version 17, Sep 13, 2019

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: May 3, 2015—Feb 22, 2017

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
CcC	Christiana-Downer complex, 5 to 10 percent slopes	5.9	21.1%
CcD	Christiana-Downer complex, 10 to 15 percent slopes	2.9	10.4%
DoB	Downer-Hammonton complex, 2 to 5 percent slopes	8.7	31.2%
RcA	Russett-Christiana complex, 0 to 2 percent slopes	0.0	0.1%
RcB	Russett-Christiana complex, 2 to 5 percent slopes	10.3	36.8%
RuB	Russett-Christiana-Urban land complex, 0 to 5 percent slopes	0.1	0.3%
Totals for Area of Interest		**27.9**	**100.0%**

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not

mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Prince George's County, Maryland

CcC—Christiana-Downer complex, 5 to 10 percent slopes

Map Unit Setting

National map unit symbol: 2ndxb
Elevation: 10 to 390 feet
Mean annual precipitation: 40 to 50 inches
Mean annual air temperature: 52 to 57 degrees F
Frost-free period: 180 to 210 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Christiana and similar soils: 45 percent
Downer and similar soils: 30 percent
Minor components: 25 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Christiana

Setting

Landform: Interfluves, hillslopes, drainhead complexes, swales
Landform position (two-dimensional): Footslope
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Clayey fluviomarine deposits

Typical profile

A - 0 to 6 inches: silt loam
BE - 6 to 10 inches: silt loam
Bt1 - 10 to 21 inches: silty clay loam
Bt2 - 21 to 49 inches: silty clay
BC - 49 to 80 inches: clay loam

Properties and qualities

Slope: 5 to 10 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Moderately well drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: About 20 to 40 inches
Frequency of flooding: None
Frequency of ponding: None
Salinity, maximum in profile: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water storage in profile: Low (about 4.9 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3e
Hydrologic Soil Group: D
Hydric soil rating: No

Description of Downer

Setting

Landform: Knolls, interfluves
Landform position (two-dimensional): Shoulder, backslope
Down-slope shape: Convex, linear
Across-slope shape: Convex, linear
Parent material: Loamy fluviomarine deposits

Typical profile

Ap - 0 to 12 inches: loamy sand
Bt - 12 to 31 inches: sandy loam
BC - 31 to 38 inches: loamy sand
C - 38 to 72 inches: sand

Properties and qualities

Slope: 5 to 10 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): High (1.98 to 5.95 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water storage in profile: Low (about 5.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3e
Hydrologic Soil Group: A
Hydric soil rating: No

Minor Components

Galestown

Percent of map unit: 10 percent
Landform: Flats, terraces, knolls, dunes
Landform position (three-dimensional): Side slope
Down-slope shape: Convex
Across-slope shape: Convex
Hydric soil rating: No

Beltsville

Percent of map unit: 10 percent
Landform: Flats
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

Fallsington

Percent of map unit: 5 percent
Landform: Swales, interfluves, depressions, drainhead complexes, drainageways
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Dip
Down-slope shape: Concave, linear
Across-slope shape: Linear, concave

Hydric soil rating: Yes

CcD—Christiana-Downer complex, 10 to 15 percent slopes

Map Unit Setting

National map unit symbol: 2ndxc
Elevation: 10 to 390 feet
Mean annual precipitation: 40 to 50 inches
Mean annual air temperature: 52 to 57 degrees F
Frost-free period: 180 to 210 days
Farmland classification: Not prime farmland

Map Unit Composition

Christiana and similar soils: 50 percent
Downer and similar soils: 35 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Christiana

Setting

Landform: Swales, interfluves, hillslopes, drainhead complexes
Landform position (two-dimensional): Footslope
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Clayey fluviomarine deposits

Typical profile

A - 0 to 6 inches: silt loam
BE - 6 to 10 inches: silt loam
Bt1 - 10 to 21 inches: silty clay loam
Bt2 - 21 to 49 inches: silty clay
BC - 49 to 80 inches: clay loam

Properties and qualities

Slope: 10 to 15 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Moderately well drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: About 20 to 40 inches
Frequency of flooding: None
Frequency of ponding: None
Salinity, maximum in profile: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water storage in profile: Low (about 4.9 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 4e
Hydrologic Soil Group: D
Hydric soil rating: No

Description of Downer

Setting

Landform: Knolls, interfluves
Landform position (two-dimensional): Shoulder, backslope
Down-slope shape: Convex, linear
Across-slope shape: Convex, linear
Parent material: Loamy fluviomarine deposits

Typical profile

Ap - 0 to 12 inches: loamy sand
Bt - 12 to 31 inches: sandy loam
BC - 31 to 38 inches: loamy sand
C - 38 to 72 inches: sand

Properties and qualities

Slope: 10 to 15 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): High (1.98 to 5.95 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water storage in profile: Low (about 5.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 4e
Hydrologic Soil Group: A
Hydric soil rating: No

Minor Components

Galestown

Percent of map unit: 10 percent
Landform: Interfluves, terraces, knolls, dunes
Landform position (two-dimensional): Shoulder, backslope
Landform position (three-dimensional): Riser
Hydric soil rating: No

Fallsington

Percent of map unit: 5 percent
Landform: Depressions, interfluves, drainageways, drainhead complexes, swales
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Dip
Hydric soil rating: Yes

DoB—Downer-Hammonton complex, 2 to 5 percent slopes

Map Unit Setting

National map unit symbol: 2p27r
Elevation: 10 to 120 feet
Mean annual precipitation: 40 to 50 inches
Mean annual air temperature: 52 to 57 degrees F
Frost-free period: 180 to 210 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Downer and similar soils: 55 percent
Hammonton and similar soils: 25 percent
Minor components: 20 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Downer

Setting

Landform: Broad interstream divides, knolls, interfluves
Landform position (two-dimensional): Summit
Down-slope shape: Convex, linear
Across-slope shape: Convex, linear
Parent material: Loamy fluviomarine deposits

Typical profile

Ap - 0 to 12 inches: loamy sand
Bt - 12 to 31 inches: sandy loam
BC - 31 to 38 inches: loamy sand
C - 38 to 72 inches: sand

Properties and qualities

Slope: 2 to 5 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Well drained
Runoff class: Very low
Capacity of the most limiting layer to transmit water (Ksat): High (1.98 to 5.95 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water storage in profile: Low (about 5.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2e
Hydrologic Soil Group: A
Hydric soil rating: No

Description of Hammonton

Setting

Landform: Swales, depressions, interfluves
Landform position (two-dimensional): Summit
Down-slope shape: Linear, concave
Across-slope shape: Concave, linear
Parent material: Loamy fluviomarine deposits

Typical profile

A - 0 to 12 inches: loamy sand
Bt - 12 to 25 inches: sandy loam
BC - 25 to 66 inches: stratified coarse sand to loamy coarse sand to loamy sand

Properties and qualities

Slope: 2 to 5 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Moderately well drained
Runoff class: Very low
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.60 to 6.00 in/hr)
Depth to water table: About 20 to 40 inches
Frequency of flooding: None
Frequency of ponding: None
Available water storage in profile: Low (about 5.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2e
Hydrologic Soil Group: B
Hydric soil rating: No

Minor Components

Phalanx

Percent of map unit: 10 percent
Landform: Interfluves
Landform position (two-dimensional): Summit
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

Patapsco

Percent of map unit: 5 percent
Landform: Broad interstream divides, knolls
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

Russett

Percent of map unit: 5 percent
Landform: Interfluves, swales
Landform position (two-dimensional): Footslope
Down-slope shape: Concave
Across-slope shape: Linear
Hydric soil rating: No

RcA—Russett-Christiana complex, 0 to 2 percent slopes

Map Unit Setting

National map unit symbol: 2ndx7
Elevation: 10 to 390 feet
Mean annual precipitation: 40 to 50 inches
Mean annual air temperature: 52 to 57 degrees F
Frost-free period: 180 to 210 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Russett and similar soils: 45 percent
Christiana and similar soils: 25 percent
Minor components: 30 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Russett

Setting

Landform: Swales, broad interstream divides, interfluves, drainhead complexes
Landform position (two-dimensional): Footslope, summit
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Loamy fluviomarine deposits

Typical profile

A - 0 to 4 inches: fine sandy loam
Bt1 - 4 to 7 inches: loam
Bt2 - 7 to 13 inches: loam
Bt3 - 13 to 46 inches: clay loam
BCg1 - 46 to 57 inches: sandy clay loam
BCg2 - 57 to 77 inches: silty clay loam

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Moderately well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.57 in/hr)
Depth to water table: About 20 to 40 inches
Frequency of flooding: None
Frequency of ponding: None
Available water storage in profile: High (about 9.7 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2w
Hydrologic Soil Group: C

Hydric soil rating: No

Description of Christiana

Setting

Landform: Swales, interfluves, hillslopes, drainhead complexes
Landform position (two-dimensional): Footslope, summit, shoulder, backslope
Landform position (three-dimensional): Interfluve
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Clayey fluviomarine deposits

Typical profile

A - 0 to 6 inches: silt loam
BE - 6 to 10 inches: silt loam
Bt1 - 10 to 21 inches: silty clay loam
Bt2 - 21 to 49 inches: silty clay
BC - 49 to 80 inches: clay loam

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Moderately well drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: About 20 to 40 inches
Frequency of flooding: None
Frequency of ponding: None
Salinity, maximum in profile: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water storage in profile: Low (about 4.9 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2w
Hydrologic Soil Group: D
Hydric soil rating: No

Minor Components

Beltsville

Percent of map unit: 10 percent
Landform: Interfluves
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

Fallsington

Percent of map unit: 10 percent
Landform: Drainageways, drainhead complexes, swales, depressions
Down-slope shape: Linear, concave
Across-slope shape: Concave
Hydric soil rating: Yes

Phalanx

Percent of map unit: 5 percent
Landform: Interfluves

Landform position (two-dimensional): Summit
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

Issue

Percent of map unit: 5 percent
Landform: Flood plains
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

RcB—Russett-Christiana complex, 2 to 5 percent slopes

Map Unit Setting

National map unit symbol: 2ndx8
Elevation: 10 to 390 feet
Mean annual precipitation: 40 to 50 inches
Mean annual air temperature: 52 to 57 degrees F
Frost-free period: 175 to 220 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Russett and similar soils: 40 percent
Christiana and similar soils: 35 percent
Minor components: 25 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Russett

Setting

Landform: Swales, broad interstream divides, interfluves, drainhead complexes
Landform position (two-dimensional): Footslope, summit
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Loamy fluviomarine deposits

Typical profile

A - 0 to 4 inches: fine sandy loam
Bt1 - 4 to 7 inches: loam
Bt2 - 7 to 13 inches: loam
Bt3 - 13 to 46 inches: clay loam
BCg1 - 46 to 57 inches: sandy clay loam
BCg2 - 57 to 77 inches: silty clay loam

Properties and qualities

Slope: 2 to 5 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Moderately well drained
Runoff class: Low

Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.57 in/hr)
Depth to water table: About 20 to 40 inches
Frequency of flooding: None
Frequency of ponding: None
Available water storage in profile: High (about 9.7 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2e
Hydrologic Soil Group: C
Hydric soil rating: No

Description of Christiana

Setting

Landform: Swales, interfluves, hillslopes, drainhead complexes
Landform position (two-dimensional): Footslope
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Clayey fluviomarine deposits

Typical profile

A - 0 to 6 inches: silt loam
BE - 6 to 10 inches: silt loam
Bt1 - 10 to 21 inches: silty clay loam
Bt2 - 21 to 49 inches: silty clay
BC - 49 to 80 inches: clay loam

Properties and qualities

Slope: 2 to 5 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Moderately well drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: About 20 to 40 inches
Frequency of flooding: None
Frequency of ponding: None
Salinity, maximum in profile: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water storage in profile: Low (about 4.9 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2e
Hydrologic Soil Group: D
Hydric soil rating: No

Minor Components

Hambrook

Percent of map unit: 10 percent
Landform: Fluviomarine terraces, knolls, flats, depressions
Hydric soil rating: No

Hammonton

Percent of map unit: 5 percent

Hydric soil rating: No

Fallsington

Percent of map unit: 5 percent
Landform: Drainhead complexes, depressions, swales, drainageways
Down-slope shape: Concave, linear
Across-slope shape: Concave
Hydric soil rating: Yes

Sassafras

Percent of map unit: 5 percent
Hydric soil rating: No

RuB—Russett-Christiana-Urban land complex, 0 to 5 percent slopes

Map Unit Setting

National map unit symbol: 2ndxg
Elevation: 10 to 390 feet
Mean annual precipitation: 40 to 50 inches
Mean annual air temperature: 52 to 57 degrees F
Frost-free period: 180 to 210 days
Farmland classification: Not prime farmland

Map Unit Composition

Russett and similar soils: 30 percent
Christiana and similar soils: 30 percent
Urban land: 30 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Russett

Setting

Landform: Swales, drainhead complexes, broad interstream divides, interfluves
Landform position (two-dimensional): Footslope, summit
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Loamy fluviomarine deposits

Typical profile

A - 0 to 4 inches: fine sandy loam
Bt1 - 4 to 7 inches: loam
Bt2 - 7 to 13 inches: loam
Bt3 - 13 to 46 inches: clay loam
BCg1 - 46 to 57 inches: sandy clay loam
BCg2 - 57 to 77 inches: silty clay loam

Properties and qualities

Slope: 0 to 5 percent
Depth to restrictive feature: More than 80 inches

Natural drainage class: Moderately well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.57 in/hr)
Depth to water table: About 20 to 40 inches
Frequency of flooding: None
Frequency of ponding: None
Available water storage in profile: High (about 9.7 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2e
Hydrologic Soil Group: C
Hydric soil rating: No

Description of Christiana

Setting

Landform: Swales, hillslopes, drainhead complexes, interfluves
Landform position (two-dimensional): Footslope
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Clayey fluviomarine deposits

Typical profile

A - 0 to 6 inches: silt loam
BE - 6 to 10 inches: silt loam
Bt1 - 10 to 21 inches: silty clay loam
Bt2 - 21 to 49 inches: silty clay
BC - 49 to 80 inches: clay loam

Properties and qualities

Slope: 0 to 5 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Moderately well drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: About 20 to 40 inches
Frequency of flooding: None
Frequency of ponding: None
Salinity, maximum in profile: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water storage in profile: Low (about 4.9 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2e
Hydrologic Soil Group: D
Hydric soil rating: No

Description of Urban Land

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 8
Hydrologic Soil Group: D

Hydric soil rating: No

Minor Components

Udorthents

Percent of map unit: 5 percent
Hydric soil rating: No

Hammonton

Percent of map unit: 5 percent
Landform: Interfluves, swales, depressions
Landform position (two-dimensional): Summit
Down-slope shape: Concave, linear
Across-slope shape: Linear, concave
Hydric soil rating: No

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United States Department of Agriculture

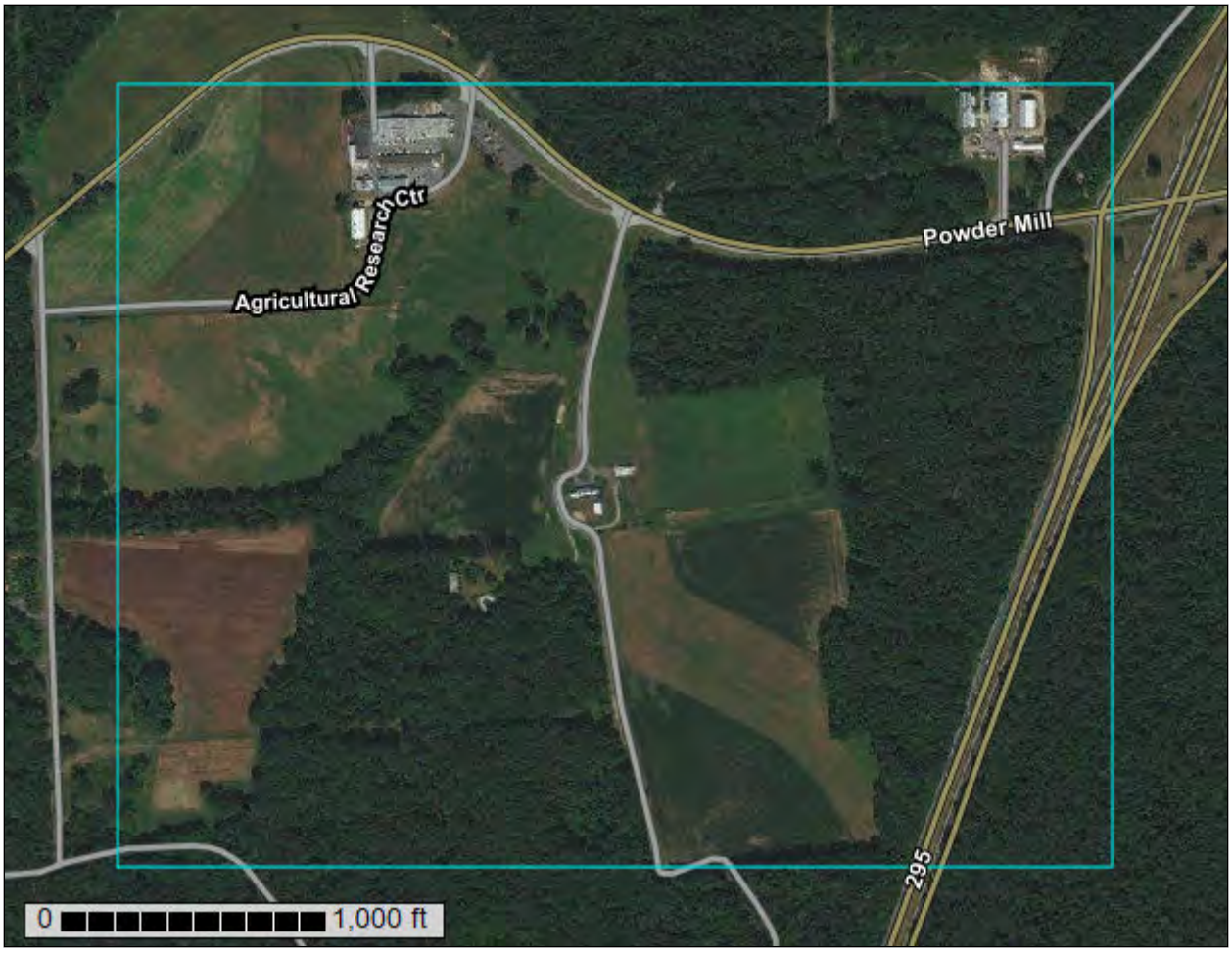
NRCS

Natural Resources Conservation Service

A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

Custom Soil Resource Report for Prince George's County, Maryland

Building 434 Vicinity



January 8, 2020

Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (https://offices.sc.egov.usda.gov/locator/app?agency=nrcs) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

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Contents

How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Custom Soil Resource Report
Soil Map

Map Scale: 1:7,610 if printed on A landscape (11" x 8.5") sheet.

N

Meters: 0 100 200 400 600

Feet: 0 350 700 1400 2100

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 18N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:12,000.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Prince George's County, Maryland
Survey Area Data: Version 17, Sep 13, 2019

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: May 3, 2015—Feb 22, 2017

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
BaA	Beltsville silt loam, 0 to 2 percent slopes	3.2	1.3%
BaB	Beltsville silt loam, 2 to 5 percent slopes	28.8	11.3%
CcC	Christiana-Downer complex, 5 to 10 percent slopes	81.5	31.9%
CcD	Christiana-Downer complex, 10 to 15 percent slopes	15.5	6.1%
CdD	Christiana-Downer-Urban land complex, 5 to 15 percent slopes	0.2	0.1%
CrD	Croom gravelly sandy loam, 10 to 15 percent slopes	7.2	2.8%
DoB	Downer-Hammonton complex, 2 to 5 percent slopes	9.7	3.8%
EkA	Elkton silt loam, 0 to 2 percent slopes	2.1	0.8%
FaaA	Fallsington sandy loams, 0 to 2 percent slopes, northern coastal plain	5.1	2.0%
RcA	Russett-Christiana complex, 0 to 2 percent slopes	5.5	2.1%
RcB	Russett-Christiana complex, 2 to 5 percent slopes	72.4	28.4%
RuB	Russett-Christiana-Urban land complex, 0 to 5 percent slopes	10.6	4.2%
ScC	Sassafras-Croom complex, 5 to 10 percent slopes	3.4	1.4%
UdaF	Udorthents, highway, 0 to 65 percent slopes	10.0	3.9%
Totals for Area of Interest		**255.2**	**100.0%**

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the

characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered

practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Prince George's County, Maryland

BaA—Beltsville silt loam, 0 to 2 percent slopes

Map Unit Setting

National map unit symbol: 2ndw1
Elevation: 10 to 360 feet
Mean annual precipitation: 40 to 50 inches
Mean annual air temperature: 52 to 57 degrees F
Frost-free period: 180 to 210 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Beltsville and similar soils: 75 percent
Minor components: 25 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Beltsville

Setting

Landform: Broad interstream divides
Landform position (three-dimensional): Interfluve
Down-slope shape: Convex, linear
Across-slope shape: Linear, convex
Parent material: Silty eolian deposits over loamy fluviomarine deposits

Typical profile

A - 0 to 3 inches: silt loam
E - 3 to 8 inches: silt loam
Bt - 8 to 20 inches: silt loam
Btx - 20 to 41 inches: loam
2B't - 41 to 65 inches: sandy clay loam
2BCg - 65 to 71 inches: very gravelly sandy clay loam
2CB - 71 to 76 inches: gravelly coarse sandy loam

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: 20 to 40 inches to fragipan
Natural drainage class: Moderately well drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.06 in/hr)
Depth to water table: About 20 to 40 inches
Frequency of flooding: None
Frequency of ponding: None
Available water storage in profile: Low (about 3.8 inches)

Interpretive groups

Land capability classification (irrigated): 2w
Land capability classification (nonirrigated): 2w
Hydrologic Soil Group: C
Hydric soil rating: No

Minor Components

Aquasco

Percent of map unit: 15 percent
Landform: Broad interstream divides
Landform position (three-dimensional): Interfluve
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

Woodstown

Percent of map unit: 5 percent
Landform: Interfluves, swales, fluviomarine terraces, drainhead complexes, broad interstream divides, depressions
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Tread
Down-slope shape: Concave, linear
Across-slope shape: Linear, concave
Hydric soil rating: No

Matapeake

Percent of map unit: 5 percent
Landform: Interfluves, broad interstream divides, fluviomarine terraces
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

BaB—Beltsville silt loam, 2 to 5 percent slopes

Map Unit Setting

National map unit symbol: 2ndw2
Elevation: 10 to 400 feet
Mean annual precipitation: 40 to 50 inches
Mean annual air temperature: 52 to 57 degrees F
Frost-free period: 180 to 210 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Beltsville and similar soils: 70 percent
Minor components: 30 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Beltsville

Setting

Landform: Broad interstream divides
Landform position (three-dimensional): Interfluve
Down-slope shape: Linear

Across-slope shape: Linear
Parent material: Silty eolian deposits over loamy fluviomarine deposits

Typical profile

A - 0 to 3 inches: silt loam
E - 3 to 8 inches: silt loam
Bt - 8 to 20 inches: silt loam
Btx - 20 to 41 inches: loam
2B't - 41 to 65 inches: sandy clay loam
2BCg - 65 to 71 inches: very gravelly sandy clay loam
2CB - 71 to 76 inches: gravelly coarse sandy loam

Properties and qualities

Slope: 2 to 5 percent
Depth to restrictive feature: 20 to 40 inches to fragipan
Natural drainage class: Moderately well drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.06 in/hr)
Depth to water table: About 20 to 40 inches
Frequency of flooding: None
Frequency of ponding: None
Available water storage in profile: Low (about 3.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2e
Hydrologic Soil Group: C
Hydric soil rating: No

Minor Components

Reybold

Percent of map unit: 10 percent
Landform: Broad interstream divides
Landform position (three-dimensional): Interfluve
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

Aquasco

Percent of map unit: 10 percent
Landform: Broad interstream divides
Landform position (three-dimensional): Interfluve
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

Grosstown

Percent of map unit: 5 percent
Landform: Broad interstream divides
Landform position (three-dimensional): Interfluve
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

Lenni, undrained

Percent of map unit: 5 percent

Landform: Depressions
Down-slope shape: Concave
Across-slope shape: Concave
Hydric soil rating: Yes

CcC—Christiana-Downer complex, 5 to 10 percent slopes

Map Unit Setting

National map unit symbol: 2ndxb
Elevation: 10 to 390 feet
Mean annual precipitation: 40 to 50 inches
Mean annual air temperature: 52 to 57 degrees F
Frost-free period: 180 to 210 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Christiana and similar soils: 45 percent
Downer and similar soils: 30 percent
Minor components: 25 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Christiana

Setting

Landform: Interfluves, hillslopes, drainhead complexes, swales
Landform position (two-dimensional): Footslope
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Clayey fluviomarine deposits

Typical profile

A - 0 to 6 inches: silt loam
BE - 6 to 10 inches: silt loam
Bt1 - 10 to 21 inches: silty clay loam
Bt2 - 21 to 49 inches: silty clay
BC - 49 to 80 inches: clay loam

Properties and qualities

Slope: 5 to 10 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Moderately well drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: About 20 to 40 inches
Frequency of flooding: None
Frequency of ponding: None
Salinity, maximum in profile: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water storage in profile: Low (about 4.9 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3e
Hydrologic Soil Group: D
Hydric soil rating: No

Description of Downer

Setting

Landform: Knolls, interfluves
Landform position (two-dimensional): Shoulder, backslope
Down-slope shape: Convex, linear
Across-slope shape: Convex, linear
Parent material: Loamy fluviomarine deposits

Typical profile

Ap - 0 to 12 inches: loamy sand
Bt - 12 to 31 inches: sandy loam
BC - 31 to 38 inches: loamy sand
C - 38 to 72 inches: sand

Properties and qualities

Slope: 5 to 10 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): High (1.98 to 5.95 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water storage in profile: Low (about 5.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3e
Hydrologic Soil Group: A
Hydric soil rating: No

Minor Components

Galestown

Percent of map unit: 10 percent
Landform: Flats, terraces, knolls, dunes
Landform position (three-dimensional): Side slope
Down-slope shape: Convex
Across-slope shape: Convex
Hydric soil rating: No

Beltsville

Percent of map unit: 10 percent
Landform: Flats
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

Fallsington

Percent of map unit: 5 percent
Landform: Swales, interfluves, depressions, drainhead complexes, drainageways
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Dip
Down-slope shape: Concave, linear
Across-slope shape: Linear, concave
Hydric soil rating: Yes

CcD—Christiana-Downer complex, 10 to 15 percent slopes

Map Unit Setting

National map unit symbol: 2ndxc
Elevation: 10 to 390 feet
Mean annual precipitation: 40 to 50 inches
Mean annual air temperature: 52 to 57 degrees F
Frost-free period: 180 to 210 days
Farmland classification: Not prime farmland

Map Unit Composition

Christiana and similar soils: 50 percent
Downer and similar soils: 35 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Christiana

Setting

Landform: Swales, interfluves, hillslopes, drainhead complexes
Landform position (two-dimensional): Footslope
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Clayey fluviomarine deposits

Typical profile

A - 0 to 6 inches: silt loam
BE - 6 to 10 inches: silt loam
Bt1 - 10 to 21 inches: silty clay loam
Bt2 - 21 to 49 inches: silty clay
BC - 49 to 80 inches: clay loam

Properties and qualities

Slope: 10 to 15 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Moderately well drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: About 20 to 40 inches

Frequency of flooding: None
Frequency of ponding: None
Salinity, maximum in profile: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water storage in profile: Low (about 4.9 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 4e
Hydrologic Soil Group: D
Hydric soil rating: No

Description of Downer

Setting

Landform: Knolls, interfluves
Landform position (two-dimensional): Shoulder, backslope
Down-slope shape: Convex, linear
Across-slope shape: Convex, linear
Parent material: Loamy fluviomarine deposits

Typical profile

Ap - 0 to 12 inches: loamy sand
Bt - 12 to 31 inches: sandy loam
BC - 31 to 38 inches: loamy sand
C - 38 to 72 inches: sand

Properties and qualities

Slope: 10 to 15 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): High (1.98 to 5.95 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water storage in profile: Low (about 5.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 4e
Hydrologic Soil Group: A
Hydric soil rating: No

Minor Components

Galestown

Percent of map unit: 10 percent
Landform: Interfluves, terraces, knolls, dunes
Landform position (two-dimensional): Shoulder, backslope
Landform position (three-dimensional): Riser
Hydric soil rating: No

Fallsington

Percent of map unit: 5 percent
Landform: Depressions, interfluves, drainageways, drainhead complexes, swales
Landform position (two-dimensional): Toeslope

Landform position (three-dimensional): Dip
Hydric soil rating: Yes

CdD—Christiana-Downer-Urban land complex, 5 to 15 percent slopes

Map Unit Setting

National map unit symbol: 2ndxh
Elevation: 10 to 390 feet
Mean annual precipitation: 40 to 50 inches
Mean annual air temperature: 52 to 57 degrees F
Frost-free period: 180 to 210 days
Farmland classification: Not prime farmland

Map Unit Composition

Christiana and similar soils: 30 percent
Downer and similar soils: 25 percent
Urban land: 20 percent
Minor components: 25 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Christiana

Setting

Landform: Swales, interfluves, hillslopes, drainhead complexes
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Interfluve
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Clayey fluviomarine deposits

Typical profile

A - 0 to 6 inches: silt loam
BE - 6 to 10 inches: silt loam
Bt1 - 10 to 21 inches: silty clay loam
Bt2 - 21 to 49 inches: silty clay
BC - 49 to 80 inches: clay loam

Properties and qualities

Slope: 5 to 15 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Moderately well drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: About 20 to 40 inches
Frequency of flooding: None
Frequency of ponding: None
Salinity, maximum in profile: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

Available water storage in profile: Low (about 4.9 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 4e
Hydrologic Soil Group: D
Hydric soil rating: No

Description of Downer

Setting

Landform: Interfluves, knolls
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Interfluve
Down-slope shape: Linear, convex
Across-slope shape: Linear, convex
Parent material: Loamy fluviomarine deposits

Typical profile

Ap - 0 to 12 inches: loamy sand
Bt - 12 to 31 inches: sandy loam
BC - 31 to 38 inches: loamy sand
C - 38 to 72 inches: sand

Properties and qualities

Slope: 5 to 15 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): High (1.98 to 5.95 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water storage in profile: Low (about 5.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 4e
Hydrologic Soil Group: A
Hydric soil rating: No

Description of Urban Land

Setting

Landform: Flats
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Human transported material

Properties and qualities

Slope: 5 to 15 percent
Depth to restrictive feature: 10 inches to
Runoff class: Very high

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 8

Hydrologic Soil Group: D
Hydric soil rating: No

Minor Components

Croom
Percent of map unit: 5 percent
Landform: Interfluves, hillslopes
Hydric soil rating: No

Udorthents
Percent of map unit: 5 percent
Hydric soil rating: No

Galestown
Percent of map unit: 5 percent
Landform: Interfluves, knolls, terraces, dunes
Landform position (two-dimensional): Shoulder, backslope
Landform position (three-dimensional): Interfluve, riser
Hydric soil rating: No

Sassafras
Percent of map unit: 5 percent
Landform: Interfluves, hillslopes
Landform position (three-dimensional): Interfluve, side slope
Down-slope shape: Linear
Across-slope shape: Convex
Hydric soil rating: No

Issue
Percent of map unit: 5 percent
Landform: Flood plains
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

CrD—Croom gravelly sandy loam, 10 to 15 percent slopes

Map Unit Setting
National map unit symbol: 2ndwq
Elevation: 10 to 370 feet
Mean annual precipitation: 40 to 50 inches
Mean annual air temperature: 52 to 57 degrees F
Frost-free period: 180 to 210 days
Farmland classification: Not prime farmland

Map Unit Composition
Croom and similar soils: 75 percent
Minor components: 25 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Croom

Setting

Landform: Hillslopes, knolls, interfluves
Landform position (two-dimensional): Shoulder
Landform position (three-dimensional): Nose slope, head slope, side slope
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Gravelly fluviomarine deposits

Typical profile

Ap1 - 0 to 1 inches: gravelly sandy loam
Ap2 - 1 to 9 inches: gravelly sandy loam
Bt1 - 9 to 13 inches: very gravelly clay loam
Bt2 - 13 to 30 inches: extremely gravelly sandy clay loam
Bt3 - 30 to 54 inches: extremely gravelly sandy clay loam
BCt - 54 to 66 inches: extremely gravelly sandy clay loam
BC - 66 to 80 inches: extremely gravelly coarse sandy loam

Properties and qualities

Slope: 10 to 15 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.57 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water storage in profile: Low (about 3.1 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 4e
Hydrologic Soil Group: C
Hydric soil rating: No

Minor Components

Marr

Percent of map unit: 10 percent
Landform: Interfluves, knolls
Landform position (three-dimensional): Side slope
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

Woodstown

Percent of map unit: 10 percent
Landform: Drainhead complexes, swales, fluviomarine terraces, broad interstream divides, depressions, interfluves
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Tread
Down-slope shape: Linear, concave
Across-slope shape: Concave, linear

Hydric soil rating: No

Beltsville

Percent of map unit: 5 percent
Landform: Broad interstream divides
Landform position (three-dimensional): Interfluve
Down-slope shape: Convex, linear
Across-slope shape: Linear, convex
Hydric soil rating: No

DoB—Downer-Hammonton complex, 2 to 5 percent slopes

Map Unit Setting

National map unit symbol: 2p27r
Elevation: 10 to 120 feet
Mean annual precipitation: 40 to 50 inches
Mean annual air temperature: 52 to 57 degrees F
Frost-free period: 180 to 210 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Downer and similar soils: 55 percent
Hammonton and similar soils: 25 percent
Minor components: 20 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Downer

Setting

Landform: Broad interstream divides, knolls, interfluves
Landform position (two-dimensional): Summit
Down-slope shape: Convex, linear
Across-slope shape: Convex, linear
Parent material: Loamy fluviomarine deposits

Typical profile

Ap - 0 to 12 inches: loamy sand
Bt - 12 to 31 inches: sandy loam
BC - 31 to 38 inches: loamy sand
C - 38 to 72 inches: sand

Properties and qualities

Slope: 2 to 5 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Well drained
Runoff class: Very low
Capacity of the most limiting layer to transmit water (Ksat): High (1.98 to 5.95 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None

Available water storage in profile: Low (about 5.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2e
Hydrologic Soil Group: A
Hydric soil rating: No

Description of Hammonton

Setting

Landform: Swales, depressions, interfluves
Landform position (two-dimensional): Summit
Down-slope shape: Linear, concave
Across-slope shape: Concave, linear
Parent material: Loamy fluviomarine deposits

Typical profile

A - 0 to 12 inches: loamy sand
Bt - 12 to 25 inches: sandy loam
BC - 25 to 66 inches: stratified coarse sand to loamy coarse sand to loamy sand

Properties and qualities

Slope: 2 to 5 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Moderately well drained
Runoff class: Very low
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.60 to 6.00 in/hr)
Depth to water table: About 20 to 40 inches
Frequency of flooding: None
Frequency of ponding: None
Available water storage in profile: Low (about 5.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2e
Hydrologic Soil Group: B
Hydric soil rating: No

Minor Components

Phalanx

Percent of map unit: 10 percent
Landform: Interfluves
Landform position (two-dimensional): Summit
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

Patapsco

Percent of map unit: 5 percent
Landform: Broad interstream divides, knolls
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

Russett

Percent of map unit: 5 percent
Landform: Interfluves, swales
Landform position (two-dimensional): Footslope
Down-slope shape: Concave
Across-slope shape: Linear
Hydric soil rating: No

EkA—Elkton silt loam, 0 to 2 percent slopes

Map Unit Setting

National map unit symbol: 2p28z
Elevation: 10 to 210 feet
Mean annual precipitation: 40 to 50 inches
Mean annual air temperature: 50 to 57 degrees F
Frost-free period: 180 to 210 days
Farmland classification: Not prime farmland

Map Unit Composition

Elkton and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Elkton

Setting

Landform: Fluviomarine terraces
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Silty eolian deposits over loamy fluviomarine deposits

Typical profile

A - 0 to 2 inches: silt loam
Eg - 2 to 7 inches: silt loam
Btg1 - 7 to 38 inches: silty clay loam
Btg2 - 38 to 54 inches: clay loam
2CBg - 54 to 72 inches: sandy clay loam

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Poorly drained
Runoff class: Very high
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: About 0 to 10 inches
Frequency of flooding: None
Frequency of ponding: Occasional

Available water storage in profile: High (about 9.4 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 5w
Hydrologic Soil Group: C/D
Hydric soil rating: Yes

Minor Components

Piccowaxen

Percent of map unit: 5 percent
Landform: Terraces
Landform position (three-dimensional): Tread
Down-slope shape: Linear, concave
Across-slope shape: Linear
Hydric soil rating: No

Fallsington

Percent of map unit: 5 percent
Landform: Depressions, swales, drainageways
Down-slope shape: Concave, linear
Across-slope shape: Concave
Hydric soil rating: Yes

Lenni, undrained

Percent of map unit: 5 percent
Landform: Depressions on broad interstream divides, fluviomarine terraces
Landform position (three-dimensional): Tread
Down-slope shape: Concave, linear
Across-slope shape: Concave, linear
Hydric soil rating: Yes

FaaA—Fallsington sandy loams, 0 to 2 percent slopes, northern coastal plain

Map Unit Setting

National map unit symbol: 2s96w
Elevation: 0 to 100 feet
Mean annual precipitation: 42 to 48 inches
Mean annual air temperature: 52 to 58 degrees F
Frost-free period: 180 to 220 days
Farmland classification: Prime farmland if drained

Map Unit Composition

Fallsington, undrained, and similar soils: 48 percent
Fallsington, drained, and similar soils: 27 percent
Minor components: 25 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Fallsington, Undrained

Setting

Landform: Depressions, flats, drainageways, swales
Landform position (three-dimensional): Dip, talf
Down-slope shape: Concave, linear
Across-slope shape: Concave, linear
Parent material: Loamy fluviomarine deposits

Typical profile

Oe - 0 to 2 inches: mucky peat
A - 2 to 10 inches: sandy loam
Btg - 10 to 32 inches: sandy clay loam
BCg - 32 to 39 inches: loamy sand
Cg1 - 39 to 46 inches: sandy clay loam
Cg2 - 46 to 80 inches: sand

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to high (0.01 to 1.98 in/hr)
Depth to water table: About 0 to 10 inches
Frequency of flooding: None
Frequency of ponding: Occasional
Salinity, maximum in profile: Nonsaline to very slightly saline (0.0 to 2.3 mmhos/cm)
Available water storage in profile: Moderate (about 8.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 5w
Hydrologic Soil Group: C/D
Hydric soil rating: Yes

Description of Fallsington, Drained

Setting

Landform: Flats, swales, depressions
Landform position (three-dimensional): Talf, dip
Down-slope shape: Linear, concave
Across-slope shape: Linear, concave
Parent material: Loamy fluviomarine deposits

Typical profile

Ap - 0 to 10 inches: sandy loam
Btg - 10 to 32 inches: sandy clay loam
BCg - 32 to 39 inches: loamy sand
Cg1 - 39 to 46 inches: sandy clay loam
Cg2 - 46 to 80 inches: sand

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Poorly drained

Capacity of the most limiting layer to transmit water (Ksat): Moderately low to high (0.01 to 1.98 in/hr)
Depth to water table: About 10 to 20 inches
Frequency of flooding: None
Frequency of ponding: Rare
Salinity, maximum in profile: Nonsaline to very slightly saline (0.0 to 2.3 mmhos/cm)
Available water storage in profile: Moderate (about 8.2 inches)

Interpretive groups
Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3w
Hydrologic Soil Group: C/D
Hydric soil rating: Yes

Minor Components

Woodstown
Percent of map unit: 9 percent
Landform: Fluviomarine terraces, flats, depressions, broad interstream divides
Landform position (two-dimensional): Summit, footslope
Landform position (three-dimensional): Tread, talf, dip
Down-slope shape: Linear, concave
Across-slope shape: Linear, concave
Hydric soil rating: No

Hammonton
Percent of map unit: 8 percent
Landform: Drainageways, flats
Landform position (three-dimensional): Dip, talf
Down-slope shape: Concave, linear
Across-slope shape: Linear
Hydric soil rating: No

Hambrook
Percent of map unit: 8 percent
Landform: Depressions, flats, fluviomarine terraces
Landform position (two-dimensional): Footslope, summit
Landform position (three-dimensional): Tread, dip, talf
Down-slope shape: Concave, linear
Across-slope shape: Concave, linear
Hydric soil rating: No

RcA—Russett-Christiana complex, 0 to 2 percent slopes

Map Unit Setting
National map unit symbol: 2ndx7
Elevation: 10 to 390 feet
Mean annual precipitation: 40 to 50 inches
Mean annual air temperature: 52 to 57 degrees F

Frost-free period: 180 to 210 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Russett and similar soils: 45 percent
Christiana and similar soils: 25 percent
Minor components: 30 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Russett

Setting

Landform: Swales, broad interstream divides, interfluves, drainhead complexes
Landform position (two-dimensional): Footslope, summit
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Loamy fluviomarine deposits

Typical profile

A - 0 to 4 inches: fine sandy loam
Bt1 - 4 to 7 inches: loam
Bt2 - 7 to 13 inches: loam
Bt3 - 13 to 46 inches: clay loam
BCg1 - 46 to 57 inches: sandy clay loam
BCg2 - 57 to 77 inches: silty clay loam

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Moderately well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.57 in/hr)
Depth to water table: About 20 to 40 inches
Frequency of flooding: None
Frequency of ponding: None
Available water storage in profile: High (about 9.7 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2w
Hydrologic Soil Group: C
Hydric soil rating: No

Description of Christiana

Setting

Landform: Swales, interfluves, hillslopes, drainhead complexes
Landform position (two-dimensional): Footslope, summit, shoulder, backslope
Landform position (three-dimensional): Interfluve
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Clayey fluviomarine deposits

Typical profile

A - 0 to 6 inches: silt loam
BE - 6 to 10 inches: silt loam

Bt1 - 10 to 21 inches: silty clay loam
Bt2 - 21 to 49 inches: silty clay
BC - 49 to 80 inches: clay loam

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Moderately well drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: About 20 to 40 inches
Frequency of flooding: None
Frequency of ponding: None
Salinity, maximum in profile: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water storage in profile: Low (about 4.9 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2w
Hydrologic Soil Group: D
Hydric soil rating: No

Minor Components

Beltsville

Percent of map unit: 10 percent
Landform: Interfluves
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

Fallsington

Percent of map unit: 10 percent
Landform: Drainageways, drainhead complexes, swales, depressions
Down-slope shape: Linear, concave
Across-slope shape: Concave
Hydric soil rating: Yes

Phalanx

Percent of map unit: 5 percent
Landform: Interfluves
Landform position (two-dimensional): Summit
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

Issue

Percent of map unit: 5 percent
Landform: Flood plains
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

RcB—Russett-Christiana complex, 2 to 5 percent slopes

Map Unit Setting

National map unit symbol: 2ndx8
Elevation: 10 to 390 feet
Mean annual precipitation: 40 to 50 inches
Mean annual air temperature: 52 to 57 degrees F
Frost-free period: 175 to 220 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Russett and similar soils: 40 percent
Christiana and similar soils: 35 percent
Minor components: 25 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Russett

Setting

Landform: Swales, broad interstream divides, interfluves, drainhead complexes
Landform position (two-dimensional): Footslope, summit
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Loamy fluviomarine deposits

Typical profile

A - 0 to 4 inches: fine sandy loam
Bt1 - 4 to 7 inches: loam
Bt2 - 7 to 13 inches: loam
Bt3 - 13 to 46 inches: clay loam
BCg1 - 46 to 57 inches: sandy clay loam
BCg2 - 57 to 77 inches: silty clay loam

Properties and qualities

Slope: 2 to 5 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Moderately well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.57 in/hr)
Depth to water table: About 20 to 40 inches
Frequency of flooding: None
Frequency of ponding: None
Available water storage in profile: High (about 9.7 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2e
Hydrologic Soil Group: C

Hydric soil rating: No

Description of Christiana

Setting

Landform: Swales, interfluves, hillslopes, drainhead complexes
Landform position (two-dimensional): Footslope
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Clayey fluviomarine deposits

Typical profile

A - 0 to 6 inches: silt loam
BE - 6 to 10 inches: silt loam
Bt1 - 10 to 21 inches: silty clay loam
Bt2 - 21 to 49 inches: silty clay
BC - 49 to 80 inches: clay loam

Properties and qualities

Slope: 2 to 5 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Moderately well drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: About 20 to 40 inches
Frequency of flooding: None
Frequency of ponding: None
Salinity, maximum in profile: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water storage in profile: Low (about 4.9 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2e
Hydrologic Soil Group: D
Hydric soil rating: No

Minor Components

Hambrook

Percent of map unit: 10 percent
Landform: Fluviomarine terraces, knolls, flats, depressions
Hydric soil rating: No

Hammonton

Percent of map unit: 5 percent
Hydric soil rating: No

Fallsington

Percent of map unit: 5 percent
Landform: Drainhead complexes, depressions, swales, drainageways
Down-slope shape: Concave, linear
Across-slope shape: Concave
Hydric soil rating: Yes

Sassafras

Percent of map unit: 5 percent

Hydric soil rating: No

RuB—Russett-Christiana-Urban land complex, 0 to 5 percent slopes

Map Unit Setting

National map unit symbol: 2ndxg
Elevation: 10 to 390 feet
Mean annual precipitation: 40 to 50 inches
Mean annual air temperature: 52 to 57 degrees F
Frost-free period: 180 to 210 days
Farmland classification: Not prime farmland

Map Unit Composition

Russett and similar soils: 30 percent
Christiana and similar soils: 30 percent
Urban land: 30 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Russett

Setting

Landform: Swales, drainhead complexes, broad interstream divides, interfluves
Landform position (two-dimensional): Footslope, summit
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Loamy fluviomarine deposits

Typical profile

A - 0 to 4 inches: fine sandy loam
Bt1 - 4 to 7 inches: loam
Bt2 - 7 to 13 inches: loam
Bt3 - 13 to 46 inches: clay loam
BCg1 - 46 to 57 inches: sandy clay loam
BCg2 - 57 to 77 inches: silty clay loam

Properties and qualities

Slope: 0 to 5 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Moderately well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.57 in/hr)
Depth to water table: About 20 to 40 inches
Frequency of flooding: None
Frequency of ponding: None
Available water storage in profile: High (about 9.7 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 2e
Hydrologic Soil Group: C
Hydric soil rating: No

Description of Christiana

Setting

Landform: Swales, hillslopes, drainhead complexes, interfluves
Landform position (two-dimensional): Footslope
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Clayey fluviomarine deposits

Typical profile

A - 0 to 6 inches: silt loam
BE - 6 to 10 inches: silt loam
Bt1 - 10 to 21 inches: silty clay loam
Bt2 - 21 to 49 inches: silty clay
BC - 49 to 80 inches: clay loam

Properties and qualities

Slope: 0 to 5 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Moderately well drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: About 20 to 40 inches
Frequency of flooding: None
Frequency of ponding: None
Salinity, maximum in profile: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water storage in profile: Low (about 4.9 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2e
Hydrologic Soil Group: D
Hydric soil rating: No

Description of Urban Land

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 8
Hydrologic Soil Group: D
Hydric soil rating: No

Minor Components

Udorthents

Percent of map unit: 5 percent
Hydric soil rating: No

Hammonton

Percent of map unit: 5 percent
Landform: Interfluves, swales, depressions
Landform position (two-dimensional): Summit

Down-slope shape: Concave, linear
Across-slope shape: Linear, concave
Hydric soil rating: No

ScC—Sassafras-Croom complex, 5 to 10 percent slopes

Map Unit Setting

National map unit symbol: 2p28m
Elevation: 10 to 390 feet
Mean annual precipitation: 30 to 50 inches
Mean annual air temperature: 46 to 59 degrees F
Frost-free period: 175 to 220 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Sassafras and similar soils: 45 percent
Croom and similar soils: 35 percent
Minor components: 20 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Sassafras

Setting

Landform: Fluviomarine terraces, broad interstream divides, knolls
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Loamy fluviomarine deposits

Typical profile

Ap - 0 to 9 inches: sandy loam
E - 9 to 15 inches: sandy loam
Bt - 15 to 30 inches: loam
BC - 30 to 37 inches: sandy loam
C - 37 to 80 inches: loamy sand

Properties and qualities

Slope: 5 to 10 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 1.98 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water storage in profile: Moderate (about 7.8 inches)

Interpretive groups

Land capability classification (irrigated): 1
Land capability classification (nonirrigated): 3e
Hydrologic Soil Group: B
Hydric soil rating: No

Description of Croom

Setting

Landform: Ravines
Landform position (three-dimensional): Nose slope, head slope, side slope
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Gravelly fluviomarine deposits

Typical profile

Ap1 - 0 to 1 inches: gravelly sandy loam
Ap2 - 1 to 9 inches: gravelly sandy loam
Bt1 - 9 to 13 inches: very gravelly clay loam
Bt2 - 13 to 30 inches: extremely gravelly sandy clay loam
Bt3 - 30 to 54 inches: extremely gravelly sandy clay loam
BCt - 54 to 66 inches: extremely gravelly sandy clay loam
BC - 66 to 80 inches: extremely gravelly coarse sandy loam

Properties and qualities

Slope: 5 to 10 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Well drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.57 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water storage in profile: Low (about 3.1 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3e
Hydrologic Soil Group: C
Hydric soil rating: No

Minor Components

Russett

Percent of map unit: 5 percent
Landform: Swales, interfluves
Landform position (two-dimensional): Footslope
Down-slope shape: Concave
Across-slope shape: Linear
Hydric soil rating: No

Ingleside

Percent of map unit: 5 percent
Landform: Fluviomarine terraces, broad interstream divides, depressions
Landform position (three-dimensional): Tread
Down-slope shape: Linear

Across-slope shape: Linear
Hydric soil rating: No

Hammonton

Percent of map unit: 5 percent
Landform: Swales, depressions, interfluves
Landform position (two-dimensional): Summit
Down-slope shape: Linear, concave
Across-slope shape: Concave, linear
Hydric soil rating: No

Christiana

Percent of map unit: 5 percent
Landform: Drainhead complexes, interfluves, swales, hillslopes
Landform position (two-dimensional): Footslope
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

UdaF—Udorthents, highway, 0 to 65 percent slopes

Map Unit Setting

National map unit symbol: 2ndvg
Mean annual precipitation: 40 to 50 inches
Mean annual air temperature: 52 to 57 degrees F
Frost-free period: 180 to 210 days
Farmland classification: Not prime farmland

Map Unit Composition

Udorthents, highway, and similar soils: 100 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Udorthents, Highway

Setting

Parent material: Human transported material

Properties and qualities

Slope: 0 to 65 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Well drained
Runoff class: Very high
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 8
Hydric soil rating: No

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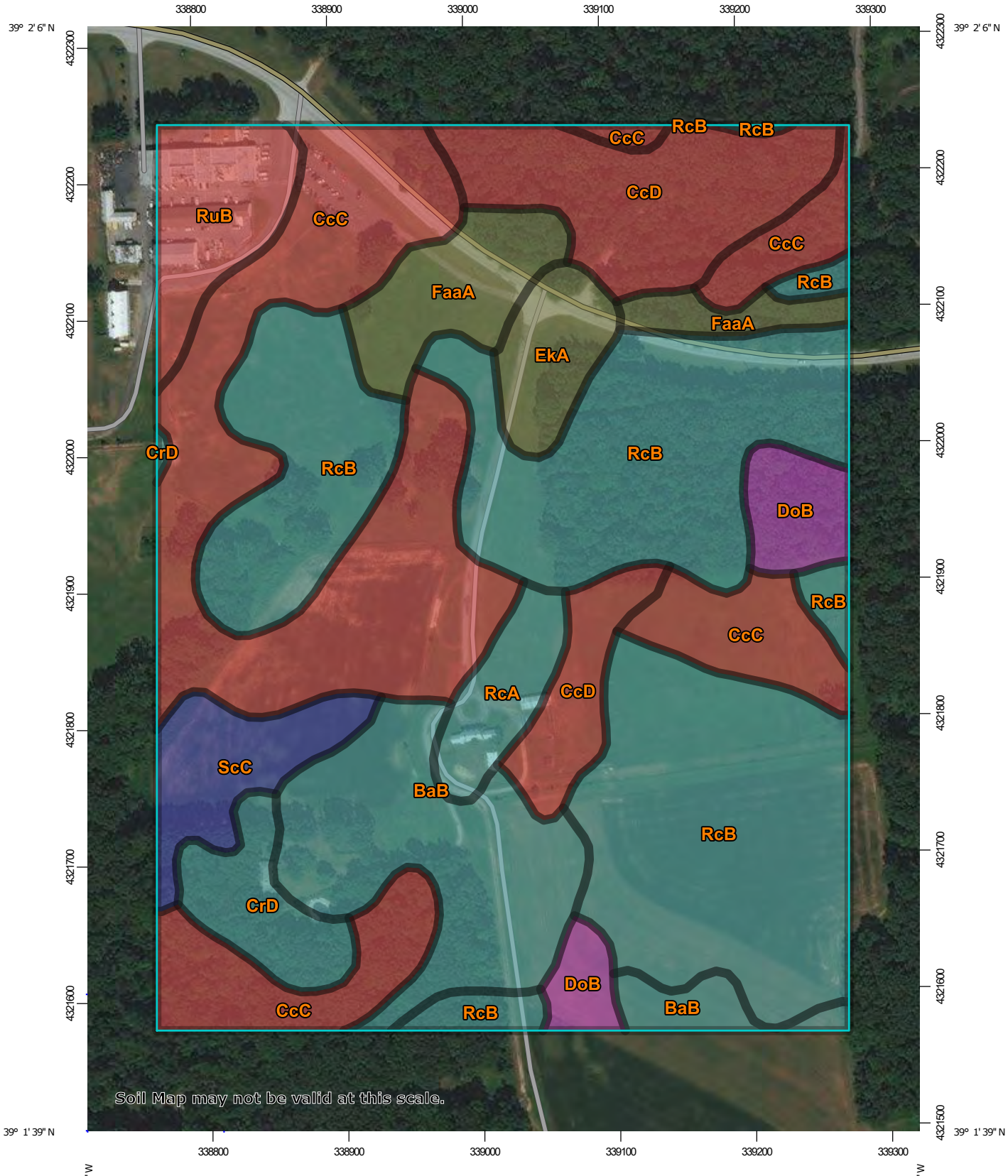
Hydrologic Soil Group—Prince George's County, Maryland
(BARC Bldg 434)



Map Scale: 1:3,950 if printed on A portrait (8.5" x 11") sheet.

N

Meters
0 50 100 200 300

Feet
0 150 300 600 900

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 18N WGS84

MAP LEGEND

Area of Interest (AOI)

Area of Interest (AOI)

Soils

Soil Rating Polygons

A
A/D
B
B/D
C
C/D
D
Not rated or not available

Soil Rating Lines

A
A/D
B
B/D
C
C/D
D
Not rated or not available

Soil Rating Points

A
A/D
B
B/D
C
C/D
D
Not rated or not available

Water Features

Streams and Canals

Transportation

Rails
Interstate Highways
US Routes
Major Roads
Local Roads

Background

Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:12,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Prince George's County, Maryland
Survey Area Data: Version 16, Sep 11, 2018

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: May 3, 2015—Feb 22, 2017

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Hydrologic Soil Group

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
BaB	Beltsville silt loam, 2 to 5 percent slopes	C	8.5	10.1%
CcC	Christiana-Downer complex, 5 to 10 percent slopes	D	20.6	24.6%
CcD	Christiana-Downer complex, 10 to 15 percent slopes	D	7.9	9.4%
CrD	Croom gravelly sandy loam, 10 to 15 percent slopes	C	2.4	2.9%
DoB	Downer-Hammonton complex, 2 to 5 percent slopes	A	2.5	2.9%
EkA	Elkton silt loam, 0 to 2 percent slopes	C/D	2.1	2.5%
FaaA	Fallsington sandy loams, 0 to 2 percent slopes, northern coastal plain	C/D	4.1	4.9%
RcA	Russett-Christiana complex, 0 to 2 percent slopes	C	2.0	2.4%
RcB	Russett-Christiana complex, 2 to 5 percent slopes	C	27.9	33.2%
RuB	Russett-Christiana-Urban land complex, 0 to 5 percent slopes	D	3.1	3.7%
ScC	Sassafras-Croom complex, 5 to 10 percent slopes	B	2.8	3.4%
Totals for Area of Interest			**83.8**	**100.0%**

Description

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The soils in the United States are assigned to four groups (A, B, C, and D) and three dual classes (A/D, B/D, and C/D). The groups are defined as follows:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual classes.

Rating Options

Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Higher

Appendix D

IPAC REPORT

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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: February 06, 2020
Consultation Code: 05E2CB00-2020-SLI-0538
Event Code: 05E2CB00-2020-E-01387
Project Name: Building 434 BARC

Subject: 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-0538

Event Code: 05E2CB00-2020-E-01387

Project Name: Building 434 BARC

Project Type: DEVELOPMENT

Project Description: Draft EA by the end of February. Renovating a historic goat barn.

Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/place/39.03134427244835N76.85950711466421W

Counties: Prince George's, 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.

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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.

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: February 06, 2020
Consultation Code: 05E2CB00-2020-SLI-0539
Event Code: 05E2CB00-2020-E-01389
Project Name: Wildlife Service Office Transfer

Subject: 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

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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.

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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-0539

Event Code: 05E2CB00-2020-E-01389

Project Name: Wildlife Service Office Transfer

Project Type: DEVELOPMENT

Project Description: A draft EA is needed by the end of February. Addition of a trailer for Wildlife Service Offices.

Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/place/39.01604525303194N76.84833347829196W

Counties: Prince George's, MD

Endangered Species Act Species

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

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---

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Mammals

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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.

Appendix E

MIHP FORMS

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MARYLAND HISTORICAL TRUST
DETERMINATION OF ELIGIBILITY FORM

NR Eligible: yes ___ no ___

Property Name: Building 434: Goat Barn, BARC — Inventory Number: PG:67-48

Address: 10300 Baltimore Avenue Building 252, Central Farm — Historic district: ___ yes X no

City: Beltsville — Zip Code: 20705 — County: Prince Georges

USGS Quadrangle(s): Laurel

Property Owner: U.S.A. - U.S. Department of Agriculture (USDA) — Tax Account ID Number: 01-0070151

Tax Map Parcel Number(s): 0143 — Tax Map Number: 0019

Project: DOEs of 69 Buildings at BARC — Agency: USDA

Agency Prepared By: AECOM

Preparer's Name: Kelly Whitton — Date Prepared: 12/1/2017

Documentation is presented in: MIHP Form, PG:62-14; Robinson and Associates 1998 report, Historic Site Survey, Beltsville Agricultural Research Center, Beltsville, Maryland. On file at MHT.

Preparer's Eligibility Recommendation: X Eligibility recommended ___ Eligibility not recommended

Criteria: X A ___ B X C ___ D Considerations: ___ A ___ B ___ C ___ D ___ E ___ F ___ G

Complete if the property is a contributing or non-contributing resource to a NR district/property

Name of the District/Property: Beltsville Agricultural Research Center

Inventory Number: PG:62-14 — Eligible: X yes — Listed: ___ yes

Site visit by MHT Staff ___ yes X no Name: ___ Date: ___

Description of Property and Justification: *(Please attach map and photo)*

The U.S. Department of Agriculture (USDA) Agricultural Research Service (ARS) Beltsville Agricultural Research Center (BARC) was one of the largest agricultural research facilities in the United States (Figures 1 and 2). Owned by the USDA, the facility was established in Beltsville in 1910 and significantly expanded in the 1930s and 1940s. In the 1960s, the USDA's research program began evolving from an internationally recognized research center to a decentralized model. In 1984, BARC wa re-designated as a regional center. BARC's period of significance ranges from its inception in 1910 to its reclassification as a regional center in 1984.

Building Location

BARC identifies Building 434's address as 10300 Baltimore Avenue - Building 434, Central Farm. Building 434 is located 1,060' south of Powder Mill Road, 1,787' west of the Baltimore-Washington Parkway, and 2,067' east of Biocontrol Road.

Building Description

Building 434, a goat barn, is located in the USDA ARS BARC's Central Farm (Figures 3-6). The rectangular building faces north towards Powder Mill Road. The building is oriented on an east-west axis, and is three bays in depth and is approximately eleven

MARYLAND HISTORICAL TRUST REVIEW

Eligibility recommended X **Eligibility not recommended** ___

Criteria: X A ___ B X C ___ D **Considerations:** ___ A ___ B ___ C ___ D ___ E ___ F ___ G

MHT Comments:

[signature] 3/22/2018

Reviewer, Office of Preservation Services **Date**

[signature] 4/19/18

Reviewer, National Register Program **Date**

ays in total width, arranged in a tripartite plan, with two wings (one with four bays, the other with five) intersecting a central even bay building (Photo 1). Design drawings for the building indicate the two-story central brick pavilion was designed first, beginning in 1933. The design was revised around the same time that plans for the one-story wings were drawn in January 1934. Plans for the central block denote the outline of the east and west wings with the annotation, "future construction."

The center pavilion features a gambrel roof with three individual dormers on the north elevation, each is filled with a single window opening; the openings are covered with plywood. The first story features a central door flanked by three six-over-six windows to the west, and two windows and a door to the east. The northeast door was created at an unknown date through modification of an original window. The northeast corner of the roof is pierced by a ventilation chimney, and the ridgeline feature two additional ventilators. The 1930s design drawings specified a brick chimney, which was either not constructed, or replaced by the existing metal chimney assembly. The central block and flanking wings are all clad with standing-seam metal roofing. The design drawings called for asbestos shingles over all roof surfaces.

The flanking east and west wings were designed to be symmetrical four-bay units constructed of cinder block, clad with stucco, and covered by a medium-pitch, side-gable roof. Both wings are set back from the north elevation and are aligned with the south elevation. The west wing maintains the four-bay configuration with a three bay end gable wall featuring a central door flanked by two windows (Photo 2). The east wing was extended by one bay; the modification occurred after the 1997 Robinson and Associates survey. The gable-end wall features a central door and no windows (Photo 3).

The south (rear) elevation features shed-roofed dormer on the roof, which is intersected by a gable (Photo 3). The gable roof features an extended ridge peak to allow for a hoisting apparatus to be mounted in order to feed a second-story door, implying the second-story of the central block was used as a hay loft or other storage space. The south dormer features two flanking six-light windows, arranged with one on either side of the gable. The first story of the elevation has six evenly spaced four-over-eight windows arranged in two separate operable sashes.

The compartmentalization of the interior closely follows the three main building blocks. The interior is composed largely of open spaces filled with short wood pens enclosed by metal chicken-wire fencing (Photo 4). The walls are exposed, painted brick or nder block and the ceilings are clad with a variety of wood paneling.

History of Property

Central Farm

Building 434, constructed in 1934, is located on the 2,980-acre Central Farm, the largest and oldest of all of BARC's farms. The USDA acquired the Central Farm in stages between 1910 and 1939, and most the buildings and landscape were constructed and established between 1911 and 1944. The Central Farm is located at the center of BARC and is adjacent to BARC's Linkage Farm on the west, single-family homes along Odell Road on the north, facilities associated with the U.S. Department of Health and Human Services (DHHS) and U.S. Department of State (DOS) on the northeast, the Baltimore-Washington Parkway on the east, and the City of Greenbelt on the south. The Central Farm has approximately 12 clusters of buildings situated on approximately 33 acres (of the 2,980-acre total), as well as pastures, wetlands, and forested areas used for animal husbandry, production crops, animal and plant research, and wildlife management. The USDA's Bureau of Animal Industry (BAI) has historically been the Central Farm's main user (Robinson and Associates 1998).

The USDA acquired the first portion of the Central Farm in 1910 when it purchased 475 acres of the Hall farm for the Farm Dairy and Animal Husbandry Divisions of the BAI to establish an experimental farm. To accommodate the experimental farm's many

MARYLAND HISTORICAL TRUST REVIEW

Eligibility recommended _____ **Eligibility not recommended** _____

Criteria: ___A ___B ___C ___D **Considerations:** ___A ___B ___C ___D ___E ___F ___G

MHT Comments:

_____ _____

Reviewer, Office of Preservation Services **Date**

_____ _____

Reviewer, National Register Program **Date**

search tasks during BARC's early period (i.e., 1910-1933), the USDA constructed laboratories, farm buildings, pastures, and staff housing. In addition, the BAI added laboratories for its Pathology and Zoological Divisions.

In the 1920's, the Bureau of Plant Industry (BPI) began to operate at BARC on approximately 425 acres of leased land that was subsequently purchased with Public Works Administration [PWA] funds in the 1930s, expanding the Central Farm (Wiser and Rasmussen 1966; USDA c. 1937). In 1924, the Farm Dairy and Animal Husbandry Divisions separated into the Bureau of Dairy Industry (BDI) and the BAI. The BDI used 190 acres for continued experiments on dairy cattle breeding, forage crop, silage, and milk research, and the BAI kept 285 acres for its animal research. By 1925, the USDA owned 1,062 acres of the Central Farm and leased about 1,000 more acres (Wiser and Rasmussen 1966). By 1933, four land purchases totaling an additional 1,381 acres further increased the Central Farm's size (USDA c. 1937, Robinson and Associates 1998).

The majority of the Central Farm was acquired under New Deal policies and funding of the 1930s, when the USDA transformed BARC into a model experiment station. A series of land acquisitions during the 1930s grew BARC to more than 12,000 acres. With this expansion, the BAI's pathology, zoology, and insecticide divisions and the Bureaus of Entomology and Plant Quarantine Human Nutrition and Home Economics, Agricultural Engineering, and Cultural and Industrial Chemistry established, enlarged, o constructed new research facilities on the Central Farm. The Food and Drug Administration also came to the Central Farm in 193 (Robinson and Associates 1998).

The expansion of BARC required major infrastructure improvements that were undertaken with PWA funding and oversight, and Civilian Conservation Corps (CCC) assistance and labor. A CCC camp was established on the north end of the Central Farm in 1933; eventually, four CCC camps were established at BARC, although their exact locations are not known. The CCC workers cleared and drained land, built fences and roads, and constructed small sheds and structures. The overall design of the Central Farm in the 1930s was guided by a master plan that was the work of A.D. Taylor and Delos Smith; HF Seahorn of the Public Buildings Administration; Robert T. Walker, CCC landscape architect; and Hugh H. Bennet of the Soil Conservation Service (Robinson and Associates 1998). The Central Farm's character-defining landscape features include:

Topographical and anthropogenically altered features, such as major paved roads, minor service and field roads, drainage systems, Beaver Dam Creek, and graded fields;
•Vegetation features, such as field and research crops, pastures, Beltsville Seasonal Ponds, Beltsville Bottomland Forest, and meadows;
•Circulation features, such as Dairy Farm, Powder Mill, Entomology, Research, BioControl, Poultry, and Beaver Dam Roads, as well as secondary and service roads;
•Five main clusters of development, including the 100 Area Cluster (BDI), 200 Area Cluster (BAI: Poultry Research Division), 300 Area Cluster (BAI: Parasitological Laboratory of the Zoological Division), 400 Area Cluster (Bureau of Entomology and Plant Quarantine: Entomology Research Division), and 1000 Area Cluster (Animal Disease Station); and
•Small-scale features, such as fencing, culverts, an amphitheater, and a cemetery (Robinson and Associates 1998).

Bureau of Animal Industry
Building 434 was a barn used by the Division of Animal Husbandry, in the BAI, the largest bureau at the agricultural research facility. The BAI, the earliest of the USDA's research bureaus at the BARC, came to Central Farm in 1910 when its Dairy and Animal Husbandry Divisions established an experimental farm within BARC's initial 475 acres. When the USDA reorganized the Dairy Division into the Bureau of Dairy Industry (BDI), the BAI retained 285 acres of the Central Farm for its Animal Husbandry Division, which led the continued development of the site in the 1920s. The BAI's Animal Husbandry Division was the largest section (in both area occupied and staff) at BARC. The Division's research initially focused on the breeding of domestic animals (all except dairy) (Robinson and Associates 1998).

MARYLAND HISTORICAL TRUST REVIEW

Eligibility recommended ____ **Eligibility not recommended** ____

Criteria: __A __B __C __D **Considerations:** __A __B __C __D __E __F __G

MHT Comments:

_____ _____

Reviewer, Office of Preservation Services **Date**

_____ _____

Reviewer, National Register Program **Date**

By the early 1930s, the BAI's Animal Husbandry Division's needs far exceeded its facilities. To address these needs, the PWA allotted over $1 million for a major construction program at BARC that included laboratories, an abattoir (slaughterhouse), and animal buildings. These facilities were constructed at BARC with the assistance of CCC workers, with funding and oversight provided by the PWA and the Civil Works Administration. A new Main Laboratory (i.e., Building 200), constructed under this program, was the showpiece of the new animal husbandry area.

As a result of the expansion, by the mid-1930s, the BAI's Animal Husbandry Division was the largest experimental farm in the country and was the center of nation's research into animal husbandry (Robinson and Associates 1998). In addition to animal husbandry, the Bureau transferred other divisions to BARC during the late 1920s and early 1930s. Additional BAI facilities were developed at this time using New Deal funding sources at the Central and East Farms. The BAI's Zoological Division moved its experimental headquarters to, and the BAI's Animal Disease Station was established at BARC's Central Farm in 1929 and 1935, respectively (Robinson and Associates 1998).

In 1953, the USDA undertook a major reorganization and decentralization of the department's agricultural research program that continued through the 1970s (Office of Technology Assessment [OTA] 1981). The decentralization had long-lasting consequences for BARC. The USDA's scientific bureaus, including the BAI, were discontinued and the department's research functions were centralized under the new Agricultural Research Administration (now the ARS) (OTA 1981). The USDA again reorganized in 1972 with administrative decentralization as its goal (OTA 1981). Operating responsibility was delegated to four regions, which were then subdivided into research area centers. Beltsville's scientists and facilities thus became a regional research facility, rather than a national one (OTA 1981). By 1980, the USDA's research program was highly decentralized, with research undertaken at 148 locations, including the much diminished 450-scientist facility at BARC (OTA 1981).

Over the years, BAI's researchers conducted important research at BARC that has led to major improvements in eradicating and treating contagious diseases in farm animals, reducing parasite infestations, and improvements in nutrition. The BAI's Animal Husbandry Division undertook critical poultry and swine research that improved the size and health of the farm animals. The BAI's Zoology Division's parasite research brought innovative new approaches to treating infestations. The BAI's Animal Disease Station developed vaccines to prevent Bang's disease and developed sterilization methods for contaminated hides (Robinson and Associates 1998).

History of the Goat Barn, Building 434

Two sets of design drawings exist for Building 434; the original concept for the central block of the Goat Barn, drawn November 9, 1933 and revised January 6, 1934, and the design drawing for the wings, dated January 15, 1934. Both projects were drawn by the USDA Bureau of Agricultural Engineering, Division of Plans and Service. The timeline and construction methodology for the building is consistent with the New Deal development of BARC, prioritizing Colonial and Georgian Revival design elements including symmetry, strong central entrances, and brick construction, and balancing fireproof materials and construction techniques with the buildings' individual designs and programs. The building's brick construction and Colonial and Georgian Revival design elements were conscious and informed decisions by the architects for the purposes of aesthetic consistency as well as the promotion of fire safety among livestock and experimental/laboratory buildings (Robinson and Associates 1998).

Principle alterations to the building include the east wing extension, the window-to-door conversion in the northeast bay of the central block, and replacement of the asbestos shingle roofing with metal roofing. The building has been vacant since 2008.

MARYLAND HISTORICAL TRUST REVIEW

Eligibility recommended _____ **Eligibility not recommended** _____

Criteria: ___A ___B ___C ___D **Considerations:** ___A ___B ___C ___D ___E ___F ___G

MHT Comments:

_____ _____

Reviewer, Office of Preservation Services **Date**

_____ _____

Reviewer, National Register Program **Date**

National Register of Historic Places Evaluation

Building 434 was evaluated in 1997 to determine its individual significance or status as contributing or non-contributing property within BARC, a 6,582-acre federal agricultural research facility, which was determined eligible in its entirety for listing in the National Register of Historic Places (NRHP) as the largest national research facility for the USDA and for its role as the most diversified agricultural research complex in the world. That evaluation determined the building to be eligible for listing in the NRHP as a contributing property within BARC. This evaluation concurs that while Building 434 is not individually significant, it contributes to the overall significance of BARC. The history and development of the agricultural research facility also reflects New Deal policies and programs, and contains notable landscape architecture, Georgian Revival architecture, and experimental agricultural architecture.

Under Criterion A, Building 434 is a contributing property within BARC, which is significant at the national level for its association with events that have made significant contributions to the broad pattern of our history with agricultural experimentation. Many aspects of twentieth century living for the farmer and consumer were influenced by the scientific research conducted at BARC. BARC is a prominent example of the federal role in agricultural research, scientific agricultural research in general, and New Deal policies and programs, such as the 1930s agricultural policies and funding, the PWA, and the CCC, which all played important roles in shaping the experimental farm. BARC's scientists and researchers have made major contributions toward scientific knowledge that have resulted in incredible advances in crop production, plant and animal disease control, and pest control. Building 434 was specifically designed and operated as a Goat Barn for the BAI, the largest bureau at the agricultura research facility, and its Division of Animal Husbandry. BARC scientists and researchers made valuable scientific contributions, both in foundational and applicable science.

BARC and Building 434 have not been determined significant under Criterion B for their association with the lives of persons significant in our past.

Under Criterion C, Building 434 is a contributing property within BARC, as it embodies the distinctive characteristics of a type, period, or method of construction. The physical appearance of BARC was strongly influenced in the 1930s by the planning team c W.D. Taylor, landscape architect, and Delos Smith, architect. The majority of BARC's buildings share a Georgian Revival style and/or display the characteristics of experimental agricultural architecture. BARC's landscape includes major paved roads, minor service roads, field and research crops, pasture lands, seasonal ponds, forests, sustainable meadows, and other landscape features and buildings. Building 434, while relatively modest in design, represents an example of the experimental, and purpose-driven agricultural architecture trends for which BARC is significant, and contributes to the overall landscape.

The agricultural research facility was not evaluated under Criterion D for its yielding, or likelihood to yield, information importan in prehistory or history.

Building 434 retains its original location and setting within an agricultural research complex. The building is specifically linked t its design and operation as a Goat Barn and its ties to the BAI's Animal Husbandry division laboratory and research buildings. Th feeling of, and association with, an agricultural research center is intact. Although the building features a one bay extension of the east wing, replacement of the roofing material, addition of a first-story door, and missing or boarded-up windows, Building 434 maintains key elements of its original design including massing, fenestration, roofing pattern, and cladding. It retains its integrity design, workmanship, and materials. The building has been vacant since 2008.

Although Building 434 does not reach the level of significance necessary for individual listing on the NRHP, it maintains its significance within BARC under Criteria A and C.

MARYLAND HISTORICAL TRUST REVIEW

Eligibility recommended _____ **Eligibility not recommended** _____

Criteria: __A __B __C __D **Considerations:** __A __B __C __D __E __F __G

MHT Comments:

_____ _____

Reviewer, Office of Preservation Services **Date**

_____ _____

Reviewer, National Register Program **Date**

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MARYLAND HISTORICAL TRUST REVIEW

Eligibility recommended _____ **Eligibility not recommended** _____

Criteria: ___A ___B ___C ___D **Considerations:** ___A ___B ___C ___D ___E ___F ___G

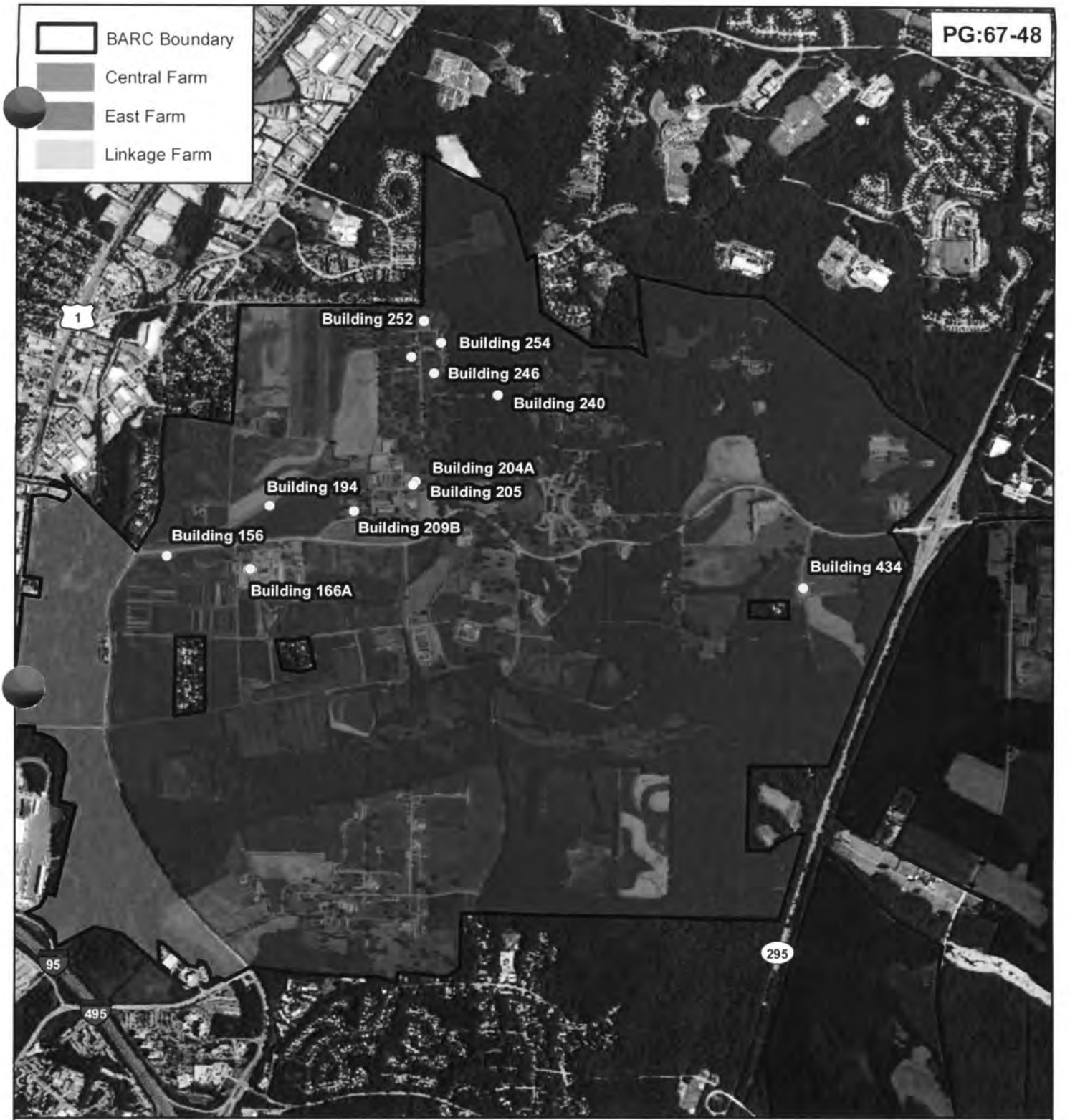
MHT Comments:

_____ _____

Reviewer, Office of Preservation Services **Date**

_____ _____

Reviewer, National Register Program **Date**



0 1,000 2,000
Feet

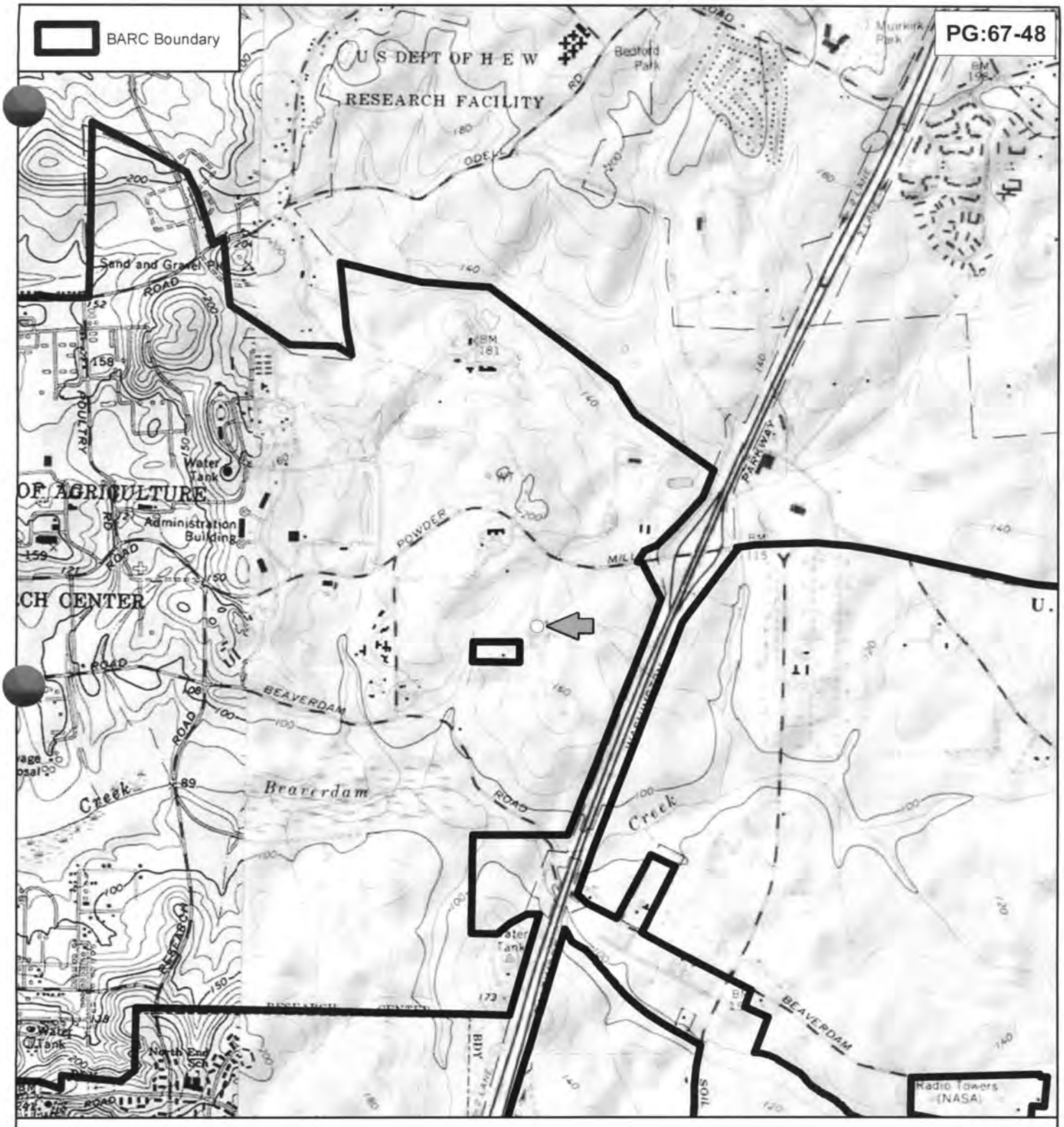
PG:67-48
Goat Barn, Building 434
Beltsville, Prince George's County
USGS 7.5-minute Topographic Quadrangle, Laurel, MD, 1965. photorevised 1979

CLIENT	USDA
PROJ	DOEs for 69 Buildings at BARC
SCALE	1:28,000
SOURCE	ESRI 2017; PG Co. Dept. of Planning 2017
	Q:\Projects\ENV\IAP\CRM\USDA - BARC CRM study, Phase 2\900-GIS and Graphics\920 GIS\Fig 3_BARC_farm_central.mxd

TITLE
Beltsville Agricultural Research Center, Central Farm

AECOM
12420 Milestone Center Dr.
Germantown, MD 20876

PROJ NO 60551541
FIGURE 3



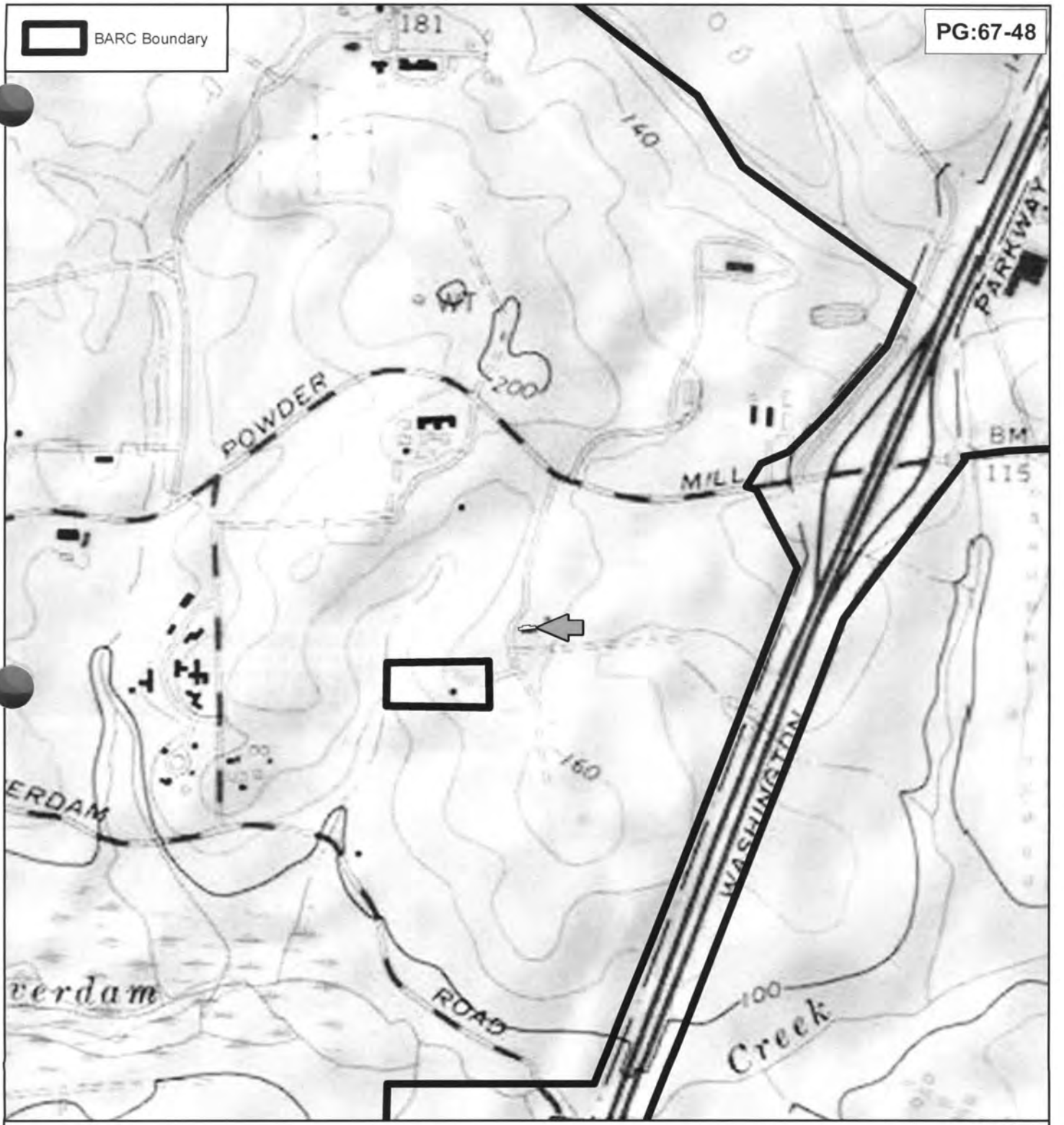
PG:67-48
Goat Barn, Building 434
Beltsville, Prince George's County
USGS 7.5-minute Topographic Quadrangle, Laurel, MD, 1965. photorevised 1979

CLIENT	U.S. Department of Agriculture
PROJECT	USDA ARS Beltsville Ph II
SCALE	1:24,000
SOURCE	ESRI 2017
	Q:\Projects\ENV\IAP\CRM\USDA - BARC CRM study, Phase 2\900-GIS and Graphics\920 GIS\Fig 4_BARC_topo24k.mxd

TITLE: Central Farm, Building 434

AECOM
12420 Milestone Center Dr.
Germantown, MD 20876

PROJ NO: 60551541
FIGURE: 4



PG:67-48
Goat Barn, Building 434
Beltsville, Prince George's County
USGS 7.5-minute Topographic Quadrangle, Laurel, MD, 1965. photorevised 1979

0 500 1,000
Feet

CLIENT	U.S. Department of Agriculture
PROJECT	USDA ARS Beltsville Ph II
SCALE	1:10,997
SOURCE	ESRI 2017
Q:\Projects\ENV\IAP\CRM\USDA - BARC CRM study, Phase 2\900-GIS and Graphics\920 GIS\Fig 5_BARC_topo10k.mxd	

TITLE
Central Farm, Building 434

AECOM
12420 Milestone Center Dr.
Germantown, MD 20876

PROJ NO 60551541
FIGURE 5

0 50 100
Feet

PG:67-48
Goat Barn, Building 434
Beltsville, Prince George's County
USGS 7.5-minute Topographic Quadrangle, Laurel, MD, 1965. photorevised 1979

CLIENT	USDA
PROJECT	DOEs for 69 Buildings at BARC
SCALE	1:1,500
SOURCE	ESRI 2017
	Q:\Projects\ENV\IAP\CRM\USDA - BARC CRM study, Phase 2\900-GIS and Graphics\920 GIS\Fig 6_BARC_aerial.mxd

TITLE
Central Farm, Building 434

AECOM
12420 Milestone Center Dr.
Germantown, MD 20876

PROJ NO 60551541
FIGURE 6

Photograph Log **PG:67-48**

USDA
DOEs for 69 Buildings at BARC
Building 434: Goat Barn
10300 Baltimore Avenue, Central Farm
Prince George's County, MD
Photographer: Mark Edwards and Brian Cleven, Architectural Historians
March 2, 2016 and September 22, 2017
MD SHPO

Archival Black and White Photographs and Digital Photographs for the Maryland Historic Trust.

1. PG;67-48_2017-09-22_01.tif, Building 434, Goat Barn, Central Farm, View of North Elevation, Looking South
2. PG;67-48_2017-09-22_02.tif, Building 434, Goat Barn, Central Farm, View of West Elevation, Looking East
3. PG;67-48_2016-03-02_03.tif, Building 434, Goat Barn, Central Farm, View of South and East Elevations, Looking Northwest
4. PG;67-48_2017-09-22_04.tif, Building 434, Goat Barn, Central Farm, View of Interior, Looking East

PG: 67-48

MD_Prince George's County_Goat Barn_0001

B. Cleven, 9/[illegible]/2017

#1 of 4

PG: 69-48

MD_Prince George's County_[illegible]at Barn_0002

B. Cleven, 9/22/2017

#2 of 4

26:67-48
MD_Prince George's County_GreatBarn_0003
M. Edwards, 3/2/2016
3 of 4

PG:67-48

MD_Prince Georges County_EastBarn_0004

B.Cleven, 4/27/2017

#4 of 4

MARYLAND HISTORICAL TRUST
DETERMINATION OF ELIGIBILITY FORM

NR Eligible: yes ___
no ___

Property Name: Buildings 513: Hall House & 513A: Garage, BARC Inventory Number: PG:64-23

Address: 10300 Baltimore Avenue Buildings 513 and 513A, Central Farm Historic district: ___ yes X no

City: Beltsville Zip Code: 20705 County: Prince Georges

USGS Quadrangle(s): Laurel

Property Owner: U.S.A. - U.S. Department of Agriculture (USDA) Tax Account ID Number: 14-1699586

Tax Map Parcel Number(s): 0002 Tax Map Number: 0020

Project: DOEs for 69 Buildings at BARC Agency: USDA

Agency Prepared By: AECOM

Preparer's Name: Lorin Farris Date Prepared: 12/1/2017

Documentation is presented in: MIHP Form, PG:62-14; Robinson and Associates 1998 report, Historic Site Survey, Beltsville Agricultural Research Center, Beltsville, Maryland. On file at MHT.

Preparer's Eligibility Recommendation: X Eligibility recommended ___ Eligibility not recommended

Criteria: X A ___ B X C ___ D Considerations: ___ A ___ B ___ C ___ D ___ E ___ F ___ G

Complete if the property is a contributing or non-contributing resource to a NR district/property

Name of the District/Property: Beltsville Agricultural Research Center

Inventory Number: PG:62-14 Eligible: X yes Listed: ___ yes

Site visit by MHT Staff ___ yes X no Name: ___ Date: ___

Description of Property and Justification: *(Please attach map and photo)*

The U.S. Department of Agriculture (USDA) Agricultural Research Service (ARS) Beltsville Agricultural Research Center (BARC) was one of the largest agricultural research facilities in the United States (Figures 1 and 2). Owned by the USDA, the facility was established in Beltsville in 1910 and significantly expanded in the 1930s and 1940s. In the 1960s, the USDA's research program began evolving from an internationally recognized research center to a decentralized model. In 1984, BARC wa re-designated as a regional center. BARC's period of significance ranges from its inception in 1910 to its reclassification as a regional center in 1984.

Building Location
BARC identifies Buildings 513 and 513A's address as 10300 Baltimore Avenue - Buildings 513 and 513A, East Farm. Buildings 513 and 513A are 500' southeast of the intersection of Soil Conservation Road and Beaver Dam Road.

Building Descriptions
Located in the Soil Conservation Area of the East Farm of the USDA's BARC is the Hall House, Building 513, which currently serves as a Wildlife Office/Hunter Check-In, and the Wildlife Office Garage, Building 513A (Figures 3-6).

MARYLAND HISTORICAL TRUST REVIEW

Eligibility recommended X **Eligibility not recommended** ___

Criteria: X A ___ B ___ C ___ D **Considerations:** ___ A ___ B ___ C ___ D ___ E ___ F ___ G

MHT Comments: House pre-dates BARC's planning and landscape development and lacks Georgian Style, ~~not~~ not contributing under Criterion C.

Matthew Smith 3/27/2018
Reviewer, Office of Preservation Services **Date**

[signature] 4/19/18
Reviewer, National Register Program **Date**

2018-0018

Hall House, Building 513

Originally a residence built in circa 1860, the building was acquired by BARC in 1933, transferred to the Soil Conservation Service (SCS) in 1964, and returned to BARC in 2001. The building faces north onto Beaver Dam Road. A c.1933 garage (Building 513A) is associated with the building.

The building appears to have originated as a circa 1860 side-gable residence that was three bays wide and one room deep with an interior brick chimney with a corbel top on the west side elevation. The original residence is located on a stone cellar. It has a centered entry filled by a non-historic door with two flanking replacement windows and two gable roof dormers with six-over-six, wood-sash windows on the front elevation (Photo 1). A full width, hipped roof front porch may have been added at this time, although it appears to have been rebuilt later. The front porch has six turned wood posts on brick piers. The balustrade has square balusters, a gooseneck handrail, and a bottom rail. The wood decking was replaced with composite decking. Circa 1890, a two bay addition was added to the west elevation. This first addition matched the existing roofline and added a matching front dormer. Th first addition rests on a stone foundation. A second entrance had a six-light-over-two-panel wood door (Photo 1). A hipped roof bay window and a gable window are located on the east side elevation (Photo 2). A gable roof dormer is located on the rear elevation (Photo 3).

Circa 1925, a one-and-one-half story rear gable addition was constructed with a shed roof dormer with two one-over-one wood-sash windows on the east elevation (Photo 4). The rear elevation featured an off-center rear entrance, a shed roof bay window with two windows, a small, six-over-six, double-hung, wood-sash windows between the entrance and the bay window, and a one-over-one, double-hung, wood-sash window in the rear gable. The rear entrance has a modern wood deck stoop. This first rear addition had a poured concrete foundation, except for the bay window, which has a structural clay block foundation.

Circa 1933, a one-story, rear addition infilled the southwest corner of the house and it rests on a concrete-block foundation (Photo 3-5). It has two windows on the rear elevation and one on the west elevation. The windows are six-over-six, double-hung, wood-sash units. The final two rear additions are in the south corner of the building (Photo 6). The first appears to date to 1964 (historicaerials.com). It is simple shed roof addition the infilled the southeast corner of the building. A slightly narrower, shallow gable roof addition extended off the rear of the previous addition circa 1970. The first of these additions has a vinyl-sash sliding window and the second has one-over-one vinyl sash windows on the east and west elevations and a rear entrance with a wood awning with a curved corrugated metal roof opening onto a small modern wood deck.

The front and west windows are two-over-two, double-hung, wood-sash units except for a six-light window, which may have been added later for a bathroom (Photo 6).

Building 513A

Located in the Soil Conservation Area of the East Farm of the USDA's BARC is Building 513A that served as the Garage for the Hall House (Building 513) (Figures 3-6). Originally, the Hall House was acquired by BARC in 1933 to be used by the Bureau of Animal Industry (BAI), was later transferred to the Soil Conservation Service (SCS) in 1964, and returned to BARC in 2001. The Hall House (Building 513) is currently utilized as the Wildlife Office/Hunter Check-In. The Wildlife Office Garage (Building 513A) is located 20' southeast of Building 513 and faces north onto Beaver Dam Road. The Wildlife Office Garage, constructed circa 1933, is a one-story, gambrel roof, concrete-block, two-car garage that faces north towards Beaver Dam Road (Photo 7). The roof has a center ventilator at the ridge and steel gutters and drain spout. The garage is three bays wide with two modern overhead garage doors in the center and western bays, and a single-light, wood-frame door and a four light, metal-sash hopper window in th

MARYLAND HISTORICAL TRUST REVIEW

Eligibility recommended _____ **Eligibility not recommended** _____

Criteria: __A __B __C __D **Considerations:** __A __B __C __D __E __F __G

MHT Comments:

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Reviewer, Office of Preservation Services **Date**

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Reviewer, National Register Program **Date**

stern bay. The building has a poured concrete foundation with a chamfered edge. The eastern elevation has a single door frame filled with plywood and a 10-light, metal-sash window (Photo 8). The center six lights are a hopper window. The gambrel end has double wood doors with four lights each and a concrete sill (Photo 8). The double doors provide access to the loft. The west elevation has a gambrel end eight-light window with center four lights movable as a hopper window (Photo 9). A small, one-story ell is attached to the southeast corner of the garage (Photo 10 and 11). It also has a gambrel roof, concrete block walls and rests on the concrete foundation. Appended to the ell is a lightweight metal-frame shelter covered with plywood and a plastic tarp that protects a large scale (Photo 11). The scale was likely added when the Hall House was first utilized as a Wildlife Office/Hunter Check-In. The rear elevation has four windows, three 10-light windows for the garage and an 8-light window in the ell. Each has center hopper window is flanked by fixed lights and has brick sills. The garage and ell roof surfaces are clad with large composite diamond-shaped shingles. The building is an actively used building. The building is in good/fair condition with only minor condition issues, including the presence of moss on some of the roof shingles, peeling paint on the concrete block walls and wood doors, rust on the metal-sash windows, broken glass at some of the windows, and missing concrete blocks beneath the gambrel-level's double wood doors.

History of Property

History of Hall House, Building 513

The Hall House, Building 513, was purchased by the federal government in 1933 during a time with the USDA was expanding its land holdings through the acquisition of multiple privately-owned farms that would eventually form the East Farm. The BAI purchased 1,811 acres of property in 1933, and it is believed that Building 513 was among one of the many properties it purchased that year. Building 513 was formerly a residence constructed in 1885. However, the 1861 Martenet's Map and the 1878 Hopkins Atlas depict a building in the same location as Building 513, indicating the building's construction date closer to circa 1860. This property was owned by William Hall, believed to be the brother of Richard Hall, owner of the nearby Walnut Grange Plantation (Building 209). Hall descendants sold the Walnut Grange Plantation with 375 acres to the USDA in 1910 that would become part of the Central Farm (Pearl 1990). Further supporting that Building 513 is associated with the Hall family is a nearby historic cemetery (PG:64-17) to the west, between the property and Soil Conservation Road (MEDUSA). There are two burials in the Hall family Cemetery: Edward Hall (1778-1834) and Rebecca Hall (1794-1829) (FindAGrave). The Hall House was purchased by the Animal Husbandry Division of the BAI in 1933. It was transferred to the SCS in 1964 and transferred back to BARC in 2001. Building 513 is currently utilized as a Wildlife Office/Hunter Check-In.

East Farm

The Hall House, (Building 513), constructed in circa 1860, is located on the East Farm. The Wildlife Office Garage (Building 513A), constructed in circa 1933, is also located on the East Farm. The USDA acquired BARC's 2,253-acre East Farm in stages between 1930 and 1939; the East Farm's main buildings and landscape date from 1933 to 1942. The East Farm is located on the eastern third of BARC, separated from the Central Farm and the rest of BARC by the Baltimore-Washington Memorial Parkway. is made up of two tracts separated by private land.

•The main tract is 1,700 acres and bordered by the Baltimore-Washington Parkway on the west, Powder Mill Road on the north, Patuxent Research Refuge on the east, and Beaver Dam Road, facilities of the National Resources Conservation Service (NRCS), and Beck Branch Creek on the south. This main tract contains forests, crop lands, hog pens, a plant pathology and quarantine lab, and a 250-acre University of Maryland agricultural extension facility. The National Aeronautics and Space Administration (NASA) also use 148 acres of the tract.
•The smaller 550-acre tract is bound by the Baltimore-Washington Parkway on the west, Beaver Dam Creek and private property

MARYLAND HISTORICAL TRUST REVIEW

Eligibility recommended _____ **Eligibility not recommended** _____

Criteria: __A __B __C __D **Considerations:** __A __B __C __D __E __F __G

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Reviewer, Office of Preservation Services **Date**

_____ _____

Reviewer, National Register Program **Date**

the north, Soil Conservation Road on the east, and the NASA-Goddard Space Flight Center on the south. This tract contains search fields, cropland, pasture, forest land, wetlands, and a few SCS buildings (the SCS was renamed to the NRCS in 1994).

Historically, the USDA's BAI has been the main user of the East Farm. The SCS also occupied portions of the East Farm (Robinson and Associates 1998).

The USDA created the East Farm from a number of smaller, privately-owned farms. On April 29, 1930, the BAI leased the 982-acre Hayden Dairy Farm. The USDA subsequently purchased the Hayden Farm in December 1933. The BAI then purchased the 298-acre Knobluach Farm in January 1934 and the 233-acre Maier Farm in April 1934. The Resettlement Administration transferred its purchase of the Hense and Knauer Farms (completed in 1936 and 1937) to the USDA between 1937 and 1939. After 1939, the USDA transferred portions of the East Farm to the Department of the Interior for the Patuxent Research Center and to the City of Greenbelt, Maryland. Of the early farm buildings extant at the time of USDA acquisition, the original Hall House (i.e., Building 513), Maier House (i.e., Building 531), and a cemetery remain (Robinson and Associates 1998).

The East Farm contains only a few building clusters, of which the most notable is the Swine Unit of the BAI's Animal Husbandry Division, which was moved from the Central Farm to the East Farm's Maier tract in 1938. The Swine Unit was "one of the larges and most important research units located at Beltsville" (Robinson and Associates 1998). It was developed during two major periods of construction: 1938 to 1939 and 1940 to 1942. The USDA submitted an application in 1938 to clear the land, and install fencing, water and power lines, roads, and buildings for the Swine Unit. The Public Works Administration (PWA) allocated $53,500 and the Works Progress Administration gave another $21,500 to conduct this work; the Civilian Conservation Corps (CCC) began the first phase of construction associated with the Swine Unit in September 1938, completing it in 1939. The Swine Unit included the Hog Farrowing House (i.e., Building 536), the Feed Storage Barn (i.e., Building 539), and combination field office and tool sheds. The extant Maier House (i.e., Building 531) was retained and used as an employee residence for the swine herdsman. The buildings were arranged on a north-south axis, parallel to Soil Conservation Road (Robinson and Associates 1998).

The second phase of development of the East Farm occurred from 1940 to 1942 and resulted in the construction of the remaining principal buildings of the Swine Unit, including the Record of Performance Barn (i.e., Building 537), the Swine Isolation and Breeding Barn (i.e., Building 540), and a large shed (i.e., Building 538). By 1942, there were 32 hog houses on individual pastures within the East Farm, some of which may have been moved from the Central Farm; of these 32 hog houses, only five remain (i.e., Buildings 541, 541A, 541B, 541C, and 541D). An additional eight hog houses were built in 1955 (i.e., Buildings 535 and 535A through 535G) and two more in 1959 (i.e., Buildings 554 and 555). A shed (i.e., Building 538) burned down in 1971 and was replaced with another shed (i.e., Building 538A) (Robinson and Associates 1998).

The East Farm's landscape was primarily established and expanded during the New Deal period. Character-defining landscape features of the East Farm include major paved roads (i.e., Soil Conservation Road and Powder Mill Road), a portion of the secondary road to the Beltsville Airport, minor service and field roads, drainage systems, Beaver Dam Creek and Beck Branch, graded fields, and portions of Beltsville Airport; vegetation features such as field and research crops, pastures, windbreaks/hedgerows, Cedar Allee at Hayden Tract, Beck Woods, Beltsville Airport Bog, Beltsville Bottomland Forest, and Beltsville forest; circulation features such as Beaver Dam, Springfield, SCS, and Powder Mill Roads, as well as secondary and service roads; and small-scale features such as fencing and a cemetery (Robinson and Associates 1998).

Bureau of Animal Industry

The Hall House (Building 513) was used by the BAI, the earliest of the USDA research bureaus at BARC. The Wildlife Office Garage (Building 513A) was also used from 1933 to 1964 by the BAI. The BAI came to the Central Farm in 1910 when its Dairy

MARYLAND HISTORICAL TRUST REVIEW

Eligibility recommended _____ **Eligibility not recommended** _____

Criteria: ___A ___B ___C ___D **Considerations:** ___A ___B ___C ___D ___E ___F ___G

MHT Comments:

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Reviewer, Office of Preservation Services **Date**

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Reviewer, National Register Program **Date**

d Animal Husbandry Divisions established an experiment farm within BARC's initial 475 acres. When the USDA reorganized e Dairy Division into a separate Bureau of Dairy Industry, the BAI retained 285 acres of the Central Farm for its Animal Husbandry Division, which led the continued development of the site in the 1920s. The BAI's Animal Husbandry Division was th largest section (in both area occupied and staff) at BARC. The BAI's research initially focused on the breeding of all domestic animals, except dairy (Robinson and Associates 1998).

By the early 1930s, the BAI's Animal Husbandry Division's needs far exceeded its facilities. To address these need, the PWA allotted over $1 million for a major construction program at BARC that included laboratories, a slaughterhouse, and animal buildings. These facilities were constructed at BARC with the assistance of CCC workers, with funding and oversight provided by the PWA and the Civil Works Administration. A new Main Laboratory (Building 200), constructed under this program, was the showpiece of the new animal husbandry area.

As a result of the expansion, by the mid-1930s, the Animal Husbandry Division of the BAI was the largest experimental farm in the country and the center of the nation research on animal husbandry (Robinson and Associates 1998). In addition to animal husbandry, the BAI transferred other divisions to BARC during the late 1920s and early 1930s. Additional BAI facilities were developed at this time using New Deal funding sources at the Central and East Farms. The BAI's Zoological Division moved its experimental headquarters to, and the BAI's Animal Disease Station was established at BARC's Central Farm in 1929 and 1935, respectively (Robinson and Associates 1998).

In 1953, the USDA undertook a major reorganization and decentralization of the USDA's agricultural research program that continued through the 1970s (Office of Technology Assessment [OTA] 1981). The decentralization had long-lasting consequences for BARC. The department's scientific bureaus, including the BAI, were discontinued and the department's research functions were centralized under the new Agricultural Research Administration (now the ARS) (OTA 1981). The USDA again reorganized in 1972 with administrative decentralization as its goal (OTA 1981). Operating responsibility was delegated to four regions, whicl were then subdivided into research area centers. BARC's scientists and facilities thus became a regional research facility, rather than a national one (OTA 1981). By 1980, the USDA's research program was highly decentralized, with research undertaken at 48 locations, including the much diminished 450-scientist facility at BARC (OTA 1981).

Over the years, the BAI's researchers conducted important research at BARC that has led to major improvements in eradicating and treating contagious diseases in farm animals, reducing parasite infestations, and improvements in nutrition. The Animal Husbandry Division undertook critical poultry and swine research that improved the size and health of the farm animals. The BAI's Zoology Division's parasite research brought innovative new approaches to treating infestations. The BAI's Animal Disease Station developed vaccines to prevent Bang's disease and developed sterilization methods for contaminated hides (Robinson and Associates 1998).

Soil Conservation Service

The Hall House (Building 513) was used by the USDA's SCS starting in 1964. The Wildlife Office Garage (Building 513A) was used from 1964 to 2001 by the USDA's SCS. The SCS was formed in 1935 to assume responsibility for all of the erosion-control experiment stations and organizations within the Bureau of Chemistry and Soils, Bureau of Agricultural Engineering, Bureau of Plant Industry (BPI), and Emergency Conservation Work Camps of the U.S. Forest Service. SCS's work at BARC began in the mid-1930s. By 1938, the SCS was responsible for 1,700 acres at BARC, including land transferred from the Resettlement Administration to the USDA in 1937. The SCS focused on testing and improving erosion-resistant plants and participated in erosion-control plant research performed by the BPI. The SCS's entire Cartographic Division transferred to BARC in 1941; this division developed and reproduced maps, charts, photographs, and technical drawings for farmers' use. The SCS constructed a

MARYLAND HISTORICAL TRUST REVIEW

Eligibility recommended _____ **Eligibility not recommended** _____

Criteria: __A __B __C __D **Considerations:** __A __B __C __D __E __F __G

MHT Comments:

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Reviewer, Office of Preservation Services **Date**

_____ _____

Reviewer, National Register Program **Date**

mall complex of buildings on the East Farm with funding from the PWA, including a nurseryman's cottage, a utility building, a garage and storage building, a greenhouse and lathhouse, and a plant storage building. These buildings are no longer within BAR boundaries (Robinson and Associates 1998).

History of Wildlife Office Garage, Building 513A

The BAI purchased 1,811 acres of property in 1933. The 1930s was when the USDA was expanding its land holdings through th acquisition of multiple privately-owned farms that would eventually form the East Farm. It is believed that the Hall House (Building 513) was among one of the many properties it purchased that year. The Wildlife Office Garage (Building 513A) was constructed circa 1933 after the USDA purchased the property. The Wildlife Office Garage (Building 513A) and the Hall House (Building 513, Wildlife Office/Hunter Check-In) were used by the BAI, the earliest of the USDA research bureaus at BARC, from 1933 to 1964. The property would then be transferred to the SCS until it was returned to BARC in 2001.

National Register of Historic Places Evaluation
Building 513 has not previously been evaluated to determine its individual significance or status as a contributing or non-contributing property within BARC, a 6,582-acre federal agricultural research facility. BARC was previously determined eligible in its entirety for listing in the National Register of Historic Places (NRHP) as the largest national research facility for the USDA and for its role as the most diversified agricultural research complex in the world. That evaluation determined Building 513 to be eligible for listing in the NRHP as a contributing building to BARC. This evaluation concurs that Building 513 contributes to the overall significance of BARC under Criterion A and C. The subsequent history and development of BARC also reflects New Deal policies and programs, and contains examples of notable landscape architecture, Georgian Revival architecture, and experimental agricultural architecture. This evaluation has also determined that Building 513 is individually significant under Criterion A and C Building 513 is associated with local history and has retained its historic materials to be eligible under Criterion A and C.
This evaluation concludes that while Building 513A is not individually significant, it contributes to the overall significance of BARC. The history and development of BARC also reflects New Deal policies and programs, and contains examples of notable landscape architecture, Georgian Revival architecture, and experimental agricultural architecture.

nder Criterion A, Buildings 513 and 513A are contributing properties within BARC, which is significant at the national level fo its association with events that have made significant contributions to the broad pattern of our history with agricultural experimentation. Many aspects of twentieth century living for the farmer and consumer were influenced by the scientific research conducted at BARC. BARC is a prominent example of the federal role in agricultural research, scientific agricultural research in general, and New Deal policies and programs, such as the 1930s agricultural policies and funding. PWA, and CCC, which all played important roles in shaping the experimental farm. BARC's scientists and researchers have made major contributions towar scientific knowledge that have resulted in incredible advances in crop production, plant and animal disease control, and pest control.

Building 513 was specifically used as a Wildlife Office/Hunter Check-In for the BAI and SCS. BARC scientists and researchers made valuable scientific contributions, both in foundation and applicable science. Also, under Criterion A, Building 513 is individually significant for its association with local Beltsville history during the second half of the nineteenth century. The building is associated with the Hall family, a prominent Beltsville family that was a large property owner during the late eighteent and nineteenth centuries.

Building 513A was specifically used as a garage for BAI and SCS. BARC scientists and researchers made valuable scientific contributions, both in foundational and applicable science.

MARYLAND HISTORICAL TRUST REVIEW

Eligibility recommended _____ **Eligibility not recommended** _____

Criteria: ___A ___B ___C ___D **Considerations:** ___A ___B ___C ___D ___E ___F ___G

MHT Comments:

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Reviewer, Office of Preservation Services **Date**

_____ _____

Reviewer, National Register Program **Date**

ARC and Buildings 513 and 513A have not been determined significant under Criterion B for their association with the lives of ersons significant in our past.

Under Criterion C, Building 513 is a contributing property within BARC, as it embodies the distinctive characteristics of a type, period, or method of construction. The physical appearance of BARC was strongly influenced in the 1930s by the planning team o A.D. Taylor, landscape architect, and Delos Smith, architect. The majority of the facility's buildings share a Georgian Revival style and/or display the characteristics of experimental agricultural architecture. BARC's landscape includes major paved roads, minor service roads, field and research crops, pasture lands, seasonal ponds, forests, sustainable meadows, and other landscape features and buildings. While Building 513 predates the architectural design and construction phases of BARC's development, the building was integrated into BARC's mission by 1933 and continues to be utilized as a Wildlife Office/Hunter Check-In at BARC Building 513 represents an example of the experimental agricultural architecture for which BARC is significant, and contributes t the overall landscape.

Additionally, under Criterion C, Building 513 is individually significant for embodying the distinctive characteristics of a type, period, or method of construction. The building's mid-nineteenth century vernacular architecture with stylistic influences of Cape Cod characteristics represents building traditions passed down over time and reflect the local skills, technology, and materials of the community in which they are built. Building 513's architectural elements are representative of the type of architecture expecte to appear in a rural setting and for the time period of which the building was constructed in circa1860.

Under Criterion C, Building 513A is a contributing property within BARC, as it embodies the distinctive characteristics of a type, period, or method of construction. Though Building 513A is of modest design, it represents an example of the supporting, experimental agricultural architecture for which BARC is significant, and contributes to the overall landscape.

The agricultural research facility was not evaluated under Criterion D for its yielding, or likely to yield, information important in prehistory or history.

uilding 513 retains its original location and has the same setting within an agricultural research complex. It is specifically linkec its supportive functions to research buildings associated with the 500 Area Cluster used by the BAI and SCS. The feeling of, an association with, an agricultural research center is intact. The building has few alterations and it retains its integrity of design, workmanship, and materials. Although the building has multiple additions, only the circa1970 rear addition has caused altered th building's design, workmanship, and materials. Other alterations include a non-historic door on the façade with flanking replacement windows. The building is in good condition, as the only deterioration visible is the failing paint on the exterior. Building 513 is an actively used building.

Building 513A retains its original location and has the same setting within an agricultural research complex. It is specifically link to its research functions and ties to the Bureau's Animal Husbandry Division's buildings in the 500 Area Cluster. The feeling of, and association with, an agricultural research center is intact. The building has few alterations and it retains its integrity of design workmanship, and materials. The building is an actively used building. The building is in good/fair condition with only minor condition issues, including the presence of moss on some of the roof shingles, peeling paint on the concrete block walls and wood doors, rust on the metal-sash windows, broken glass at some of the windows, and missing concrete blocks beneath the gambrel-level's double wood doors.

Although Buildings 513 and 513A do not reach the level of significance necessary for individual listing in the NRHP, they maintain their significance within BARC under Criteria A and C.

MARYLAND HISTORICAL TRUST REVIEW

Eligibility recommended _____ **Eligibility not recommended** _____

Criteria: __A __B __C __D **Considerations:** __A __B __C __D __E __F __G

MHT Comments:

_____ _____

Reviewer, Office of Preservation Services **Date**

_____ _____

Reviewer, National Register Program **Date**

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MARYLAND HISTORICAL TRUST REVIEW

Eligibility recommended _____ **Eligibility not recommended** _____

Criteria: ___A ___B ___C ___D **Considerations:** ___A ___B ___C ___D ___E ___F ___G

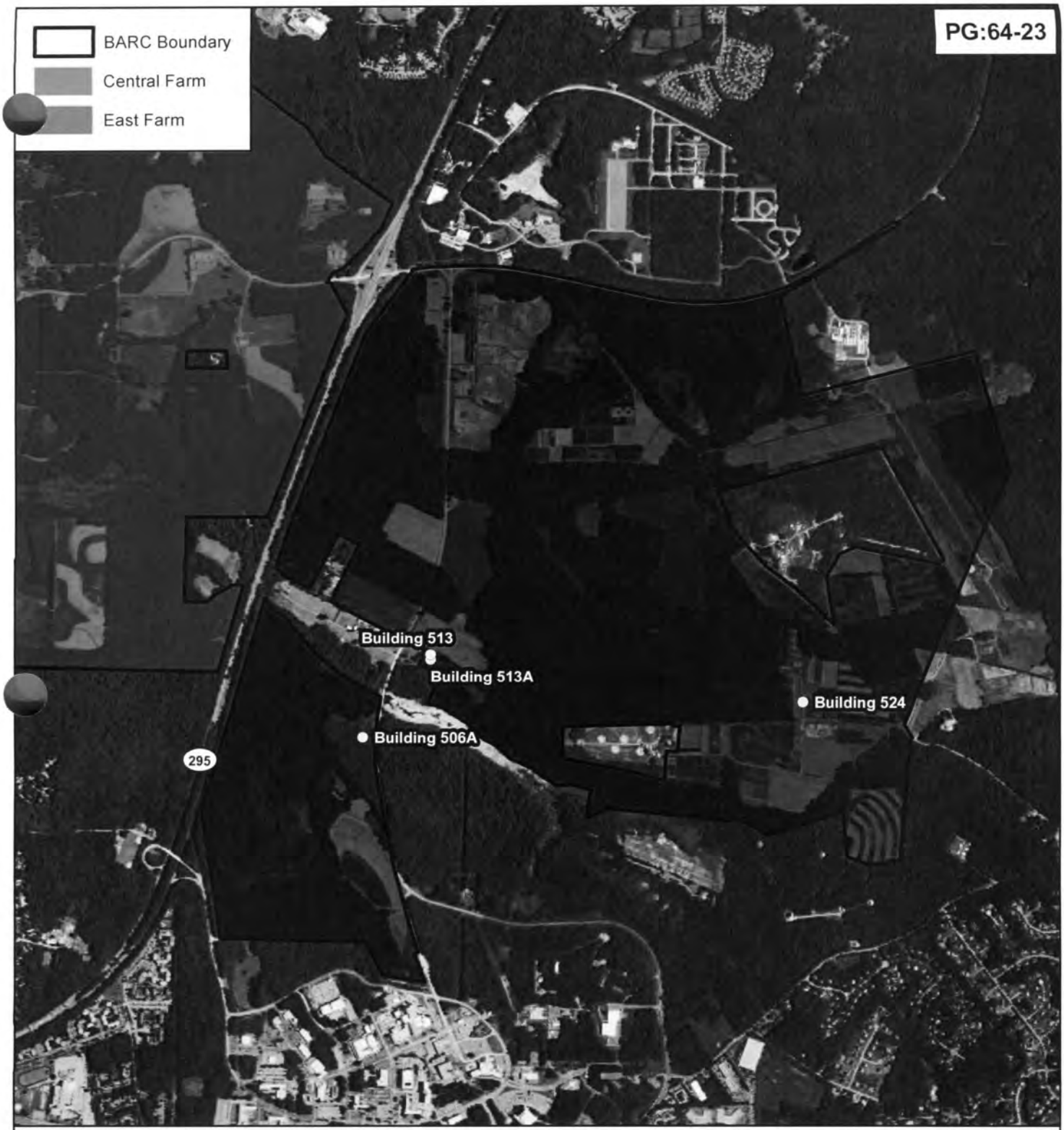
MHT Comments:

_____ _____

Reviewer, Office of Preservation Services **Date**

_____ _____

Reviewer, National Register Program **Date**



0 1,000 2,000
Feet

PG:64-23

Hall House, Building 513 and Wildlife Office Garage, Building 513A

Beltsville, Prince George's County

USGS 7.5-minute Topographic Quadrangle, Laurel, MD, 1965. photorevised 1979

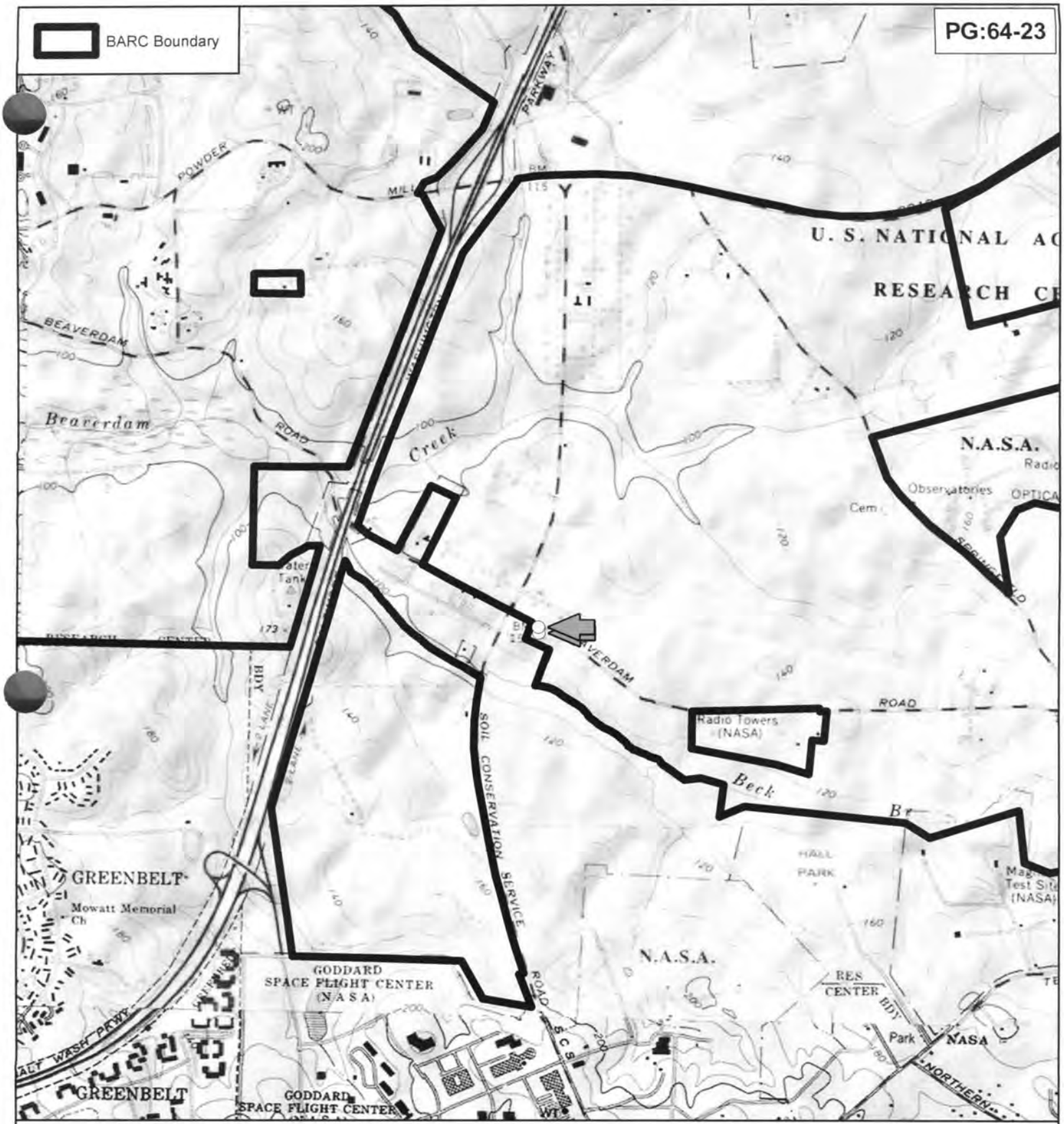
CLIENT	USDA
JOB	DOEs for 69 Buildings at BARC
SCALE	1:28,000
SOURCE	ESRI 2017; PG Co. Dept. of Planning 2017
Q:\Projects\ENV\IAP\CRM\USDA - BARC CRM study, Phase 2\900-GIS and Graphics\920 GIS\513-513A_Fig 3_Group 1_farm_east.mxd	

TITLE: Beltsville Agricultural Research Center, East Farm

AECOM
12420 Milestone Center Dr.
Germantown, MD 20876

PROJ NO 60551541

FIGURE 3



0 1,000 2,000
Feet

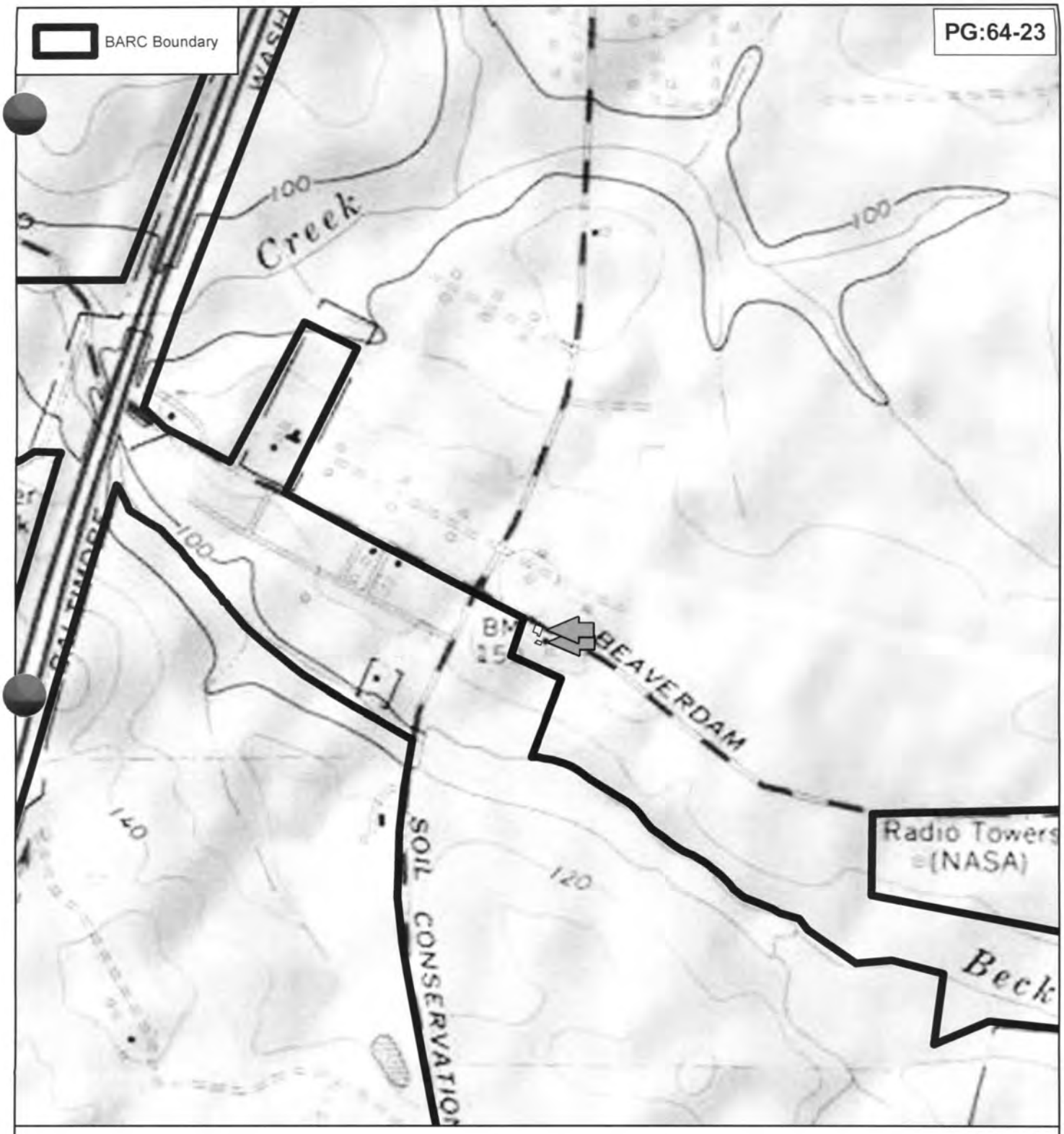
PG:64-23
Hall House, Building 513 and Wildlife Office Garage, Building 513A
Beltsville, Prince George's County
USGS 7.5-minute Topographic Quadrangle, Laurel, MD, 1965. photorevised 1979

CLIENT	U.S. Department of Agriculture
PROJ	USDA ARS Beltsville Ph II
SCALE	1:24,000
SOURCE	ESRI 2017
	Q:\Projects\ENV\IAP\CRM\USDA - BARC CRM study, Phase 2\900-GIS and Graphics\920 GIS\513-513A_Fig 4_Group 1_topo24k.mxd

TITLE: East Farm, Buildings 513 and 513A

AECOM
12420 Milestone Center Dr.
Germantown, MD 20876

PROJ NO 60551541
FIGURE 4



PG:64-23

Hall House, Building 513 and Wildlife Office Garage, Building 513A

Beltsville, Prince George's County

USGS 7.5-minute Topographic Quadrangle, Laurel, MD, 1965. photorevised 1979

0 500 1,000

Feet

CLIENT	U.S. Department of Agriculture
	USDA ARS Beltsville Ph II
SCALE	1:10,997
SOURCE	ESRI 2017
	Q:\Projects\ENV\IAP\CRM\USDA - BARC CRM study, Phase 2\900-GIS and Graphics\920 GIS\513-513A_Fig 5_Group 1_topo10k_513-513A.mxd

TITLE: East Farm, Buildings 513 and 513A

AECOM

12420 Milestone Center Dr.
Germantown, MD 20876

PROJ NO 60551541

FIGURE 5

0 50 100
Feet

PG:64-23
Hall House, Building 513 and Wildlife Office Garage, Building 513A
Beltsville, Prince George's County
USGS 7.5-minute Topographic Quadrangle, Laurel, MD, 1965. photorevised 1979

CLIENT	USDA
PROJ	DOEs for 69 Buildings at BARC
SCALE	1:1,500
SOURCE	ESRI 2017
	Q:\Projects\ENV\IAP\CRM\USDA - BARC CRM study, Phase 2\900-GIS and Graphics\920 GIS\513-513A_Fig 6_Group 1_aerial_513-513A.mxd

N

TITLE
East Farm, Buildings 513 and 513A

AECOM
12420 Milestone Center Dr.
Germantown, MD 20876

PROJ NO 60551541
FIGURE 6

USDA
DOEs for 69 Buildings at BARC
Building 513: Hall House and Building 513A: Wildlife Office Garage
10300 Baltimore Avenue, East Farm
Prince George's County, MD
Photographer: Brian Cleven, Architectural Historian
September 25, 2017
MD SHPO

Archival Black and White Photographs for the Maryland Historical Trust.

1. PG;64-23_2017-09-25_01.tif, Building 513, Hall House, East Farm, View of Northeast Elevation, Looking Southwest
2. PG;64-23_2017-09-25_02.tif, Building 513, Hall House, East Farm, View of Southeast Elevation, Looking Northwest
3. PG;64-23_2017-09-25_03.tif, Building 513, Hall House, East Farm, View of Southwest and Southeast Elevations, Looking North
4. PG;64-23_2017-09-25_04.tif, Building 513, Hall House, East Farm, View of Southwest Elevation, Looking Northeast

Digital Photographs for the Maryland Historical Trust.

5. PG;64-23_2017-09-25_05.tif, Building 513, Hall House, East Farm, View of Southwest Elevation, Looking East
6. PG;64-23_2017-09-25_06.tif, Building 513, Hall House, East Farm, View of Northwest Elevation, Looking Southeast

Archival Black and White Photographs and Digital Photographs for the Maryland Historical Trust.

7. PG;64-23_2017-09-25_07.tif, Building 513A, Wildlife Office Garage, East Farm, View of Northeast Elevation, Looking Southwest
8. PG;64-23_2017-09-25_08.tif, Building 513A, Wildlife Office Garage, East Farm, View of Southwest and Southeast Elevations, Looking Northwest
9. PG;64-23_2017-09-25_09.tif, Building 513A, Wildlife Office Garage, East Farm, View of Northwest and Southwest Elevations, Looking Northeast
10. PG;64-23_2017-09-25_10.tif, Building 513A, Wildlife Office Garage, East Farm, View of Northeast and Northwest Elevations, Looking Southeast

PG: 64-23

MD- Prince George's County Hall House - 2001

B. Cleven (1725) 2:1+

#1 of 10

PG: 64-23
MD- Prince George's County- Hall House- 0002
B. Cleven, 9/25/2017
2 of 10

PG: 64-23
MD- Prince Georges County- Hall House - 003
B. cleven, 9/25/2017
3 of 10

PG:64-23

MD_Prince George's County_Hall House_0004

B. cleven, 9/25/2017

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PG: 64-23

MD_Prince George's County_Wildlife office Garage-2007

3. Cleven, 9/25/2017

#7 of 10

PG: 64-23

MD- Prince George's County- wildlife office Garage

-2008

B. Cleven, 9/25/2017

8 of 10

PG: 64-23

MD_ Prince George's County_ Wildlife office Garage_

2009

B. Cleven, 9/25/2017

#9 of 10

PG: 64-23

MD_ Prince George's County_ Wildlife Office Garage_

CD10

B. Cleven, 9/25/2017

10 of 10

Appendix F

AGENCY AND PUBLIC COMMENTS AND RESPONSES

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BARC 434&WO EA Public Review COMMENT/RESPONSE - Public Comment

Commenter Number	Comment Number	Comment	Response
1	1	General: The descriptions of existing conditions and discussion of anticipated impacts of both the Proposed Action and No Action Alternative appear to be incomplete. The descriptions of existing conditions for each of the environmental impacts subsections in Section 3 do not include a description of existing conditions at the current locations of the Wildlife Staff Office (WSO) and Poultry Quarantine Facility (i.e., Buildings 253A, 277, and 278). No discussion of the anticipated impacts on the land use, topography, geology, soils, prime farmland, water resources, biological resources, cultural resources, socioeconomics, transportation, utilities, hazardous and toxic materials and waste, aesthetics and visual resources, air quality, noise, health and public safety, and cumulative impact at Buildings 253A, 277, and 278 under the Proposed Action and No Action Alternatives is presented. A description of existing conditions and discussion of anticipated impacts of both the Proposed Action and No Action Alternative should be added to the text for Buildings 253A, 277, and 278.	The scope of this EA focuses on the new sites, as the current buildings (253A, 277 and 278) would be left vacant until USDA determines their future use. Sections 1.1, 1.3, 2.1, and 3.0 have been clarified to accurately reflect the scope. As there would be no change to the current PQH and WSO locations, there would be no anticipated impacts to the existing locations. Text has been added to Section 3.0 to reflect this.
1	2	General: Grammatical and punctuation errors are present throughout the document. These errors should be corrected before issuing the Draft Final Environmental Assessment (EA).	Thank you for your comment. The document has been proofread.
1	3	General: In many instances, sentences are lengthy and contain two or more topics. These lengthy sentences make the report difficult to read. Suggest a technical editor review the document and revise the lengthy sentences for better readability and understanding.	Thank you for your comment. The EA has been revised for clarity.
1	4	Executive Summary: The Executive Summary should be revised to reflect those revisions made to the body of the text.	Thank you for your comment. The Executive Summary has been updated accordingly.
1	5	P. 1, Section 1.1, Last paragraph, penultimate sentence. Where specifically can these National Environmental Policy Act (NEPA) guidelines be found? Suggest a citation to these guidelines be added for completeness.	Thank you for your comment. The citations have been added for clarity.
1	6	P. 6, Figure 1-4. Due to the proximity of the proposed WSO site to the East Farm boundary, suggest the boundary be depicted on the figure.	Suggestion noted. Figure 1-4 is inteded to provide locational context relative to existing features found on and near the site.
1	7	P. 7, Section 1.3, first paragraph, last sentence. Because the term “resource areas” is not contained in the preceding sentence, the reader has no frame of reference for the meaning of “these resource areas”. The sentence should be revised for clarity.	Comment noted. "Resource areas" in this sentence refers generally to the environmental, cultural resources, and socioeconomic factors considered in the EA. The text of Section 1.3 has been revised to clarify this.
1	8	P. 7, Section 1.3, second paragraph, first sentence. The meaning of “proposed areas of development“ is unclear. Is this the same as the limit of disturbance? If so, the sentence should be revised for clarity and the term “limit of disturbance” be used consistently throughout the document.	The text of Section 1.3 has been revised to clarify the meaning of "proposed areas of development".
1	9	P. 7, Section 1.3, third paragraph, first sentence. The language in 7 CFR Part 1b.3 is that the listed categories of activities have been determined not to have a significant individual or cumulative effect on the human environment and are excluded from the preparation of EAs or Environmental Impact Statements (EISs) unless individual agency procedures prescribe otherwise. Please state whether or not U.S. Department of Agriculture (USDA) procedures prescribe otherwise.	Thank you for your comment. This question does not appear to have bearing on this particular NEPA review. USDA determined an EA analysis would be appropriate, not a categorical exclusion.
1	10	P. 8, Section 1.4, first complete paragraph, first sentence. Will the dates and link be added in the final version of the EA?	Yes, the text in Section 1.4 has been updated.
1	11	P. 8, Section 1.4, last paragraph, first sentence. The use of the past tense is unclear since the 30-day comment period has not ended. It appears future tense should have been used. Also, how specifically will the comments received be addressed and documented in the final EA? Will a responsiveness summary be included in the final EA? How the comments received will be addressed and documented in the final EA should be discussed.	The text in the Public Involvement section has been updated. Text in this section is typically used as a placeholder during the draft EA review, with dates to be filled in for the final EA.
1	12	P. 9, Section 2.1. Under the Proposed Action, what will happen at the existing locations of the Poultry Quarantine Facility and WSO (i.e., Buildings 253A, 277, and 278)?	The current buildings (253A, 277 and 278) would be vacated pending USDA's determination of their future use. BARC has not determined the future use of these buildings, and any future use would be coordinated with MHT and other regulatory agencies. Section 2.1 has been updated to clarify this.
1	13	P. 9, Section 2.1, first paragraph. Because there is no legend for Figure 2-1, it is difficult to determine from the figure the various features that will be constructed as part of the modification of Building 434. Not all the features shown in Figure 2-1 are described in the text. For example, there appear to be tanks on either side of Building 434, yet these tanks are not identified in the text until Section 3.6.2.1. The materials these tanks will hold should be identified in the description of the Proposed Action. There appear to be two elliptical features in front of Building 434. These features should be identified in the description of the Proposed Action. A complete description of the new features to be constructed should be provided in the text.	This figure was provided to allow a general overview understanding of how Building 434 would be modified. However, the level of detail provided in this figure is not needed for this EA, and therefore this figure has been modified to ensure clarity. Section 2.1 has also been updated to provide more detail regarding some of the proposed features, including the four feed silos.
1	14	P. 10, Figure 2-1. No legend is provided, making it difficult to determine what the various features are. Also, the labels are not crisp and are difficult to read, even at magnification. Many features are not labeled. No north arrow is provided. The figure should be revised to add a legend, make the labels readable, add a north arrow, and label more features for clarity and completeness.	Noted. See response to Comment #13.

1	15	P. 11, Figure 2-2. Neither the elliptical features in front of Building 434 nor the stormwater feature in the rear of one of the poultry wings are rendered in this figure. Suggest these features be rendered in the figure for completeness.	Comment noted. This figure is a conceptual rendering used to represent the overall aesthetic character of the proposed Building 434 modifications and show that they would be implemented using the existing architectural style.
1	16	P. 12, Figure 2-3. While this figure is more readable than Figure 2-1, there is no legend provided, some features are not labeled, and no north arrow is provided. This makes discerning the various features depicted difficult. A legend, labels, and north arrow should be added for completeness.	This figure was provided to allow a general overview understanding of how the new Wildlife Staff Office would be sited. However, the level of detail provided in this figure is not needed for this EA, and therefore this figure has been modified to ensure clarity.
1	17	P. 13, Section 2.2, first paragraph, first and last sentences. What is the difference between the NEPA regulations and the Council on Environmental Quality (CEQ) regulations? Are they not one and the same (i.e., 40 CFR Parts 1500–1508)? This should be clarified in the text.	Thank you for your comment. The text has been revised for clarity.
1	18	P. 13, Section 2.2, first paragraph, first sentences. The specific citation for this statement should be provided for completeness.	NEPA citation added.
1	19	P. 15, Section 3.1.1, first paragraph. What appears to be missing from the general description of land use is a discussion of the land use at the current locations of the Poultry Quarantine Facility in Buildings 277 and 278 and the WSO in Building 253A within the 105-acre parcel identified for transfer. A description of the land use of the existing locations of the Poultry Quarantine Facility and WSO would appear necessary in order to evaluate the No Action alternative.	Comment noted. As noted in Comment #12, Buildings 253A, 277, and 278 would be vacated as part of the Proposed Action, and because no changes would be made to these buildings, no impacts are anticipated, and these buildings are not evaluated in each individual resource area within Section 3. Text in Section 3.0 has been revised to clarify this. Additionally, under the No Action Alternative, there would be no change, and therefore no impacts, to existing poultry quarantine and WSO functions. Accordingly, the No Action Alternative analysis does not describe existing conditions of the locations where these functions currently occur.
1	20	P. 15, Section 3.1.1, first paragraph, penultimate sentence. No definition is provided for any of the land use characters listed (i.e., Open Space Network, Perceptually Sensitive Area, Natural Reserve Area, Conditional Reserve, and Public Land Uses), leaving the reader to wonder what they mean, how they apply to the current locations and proposed relocations of the Poultry Quarantine Facility and WSO, and what restrictions, if any, they impose on the current locations and proposed relocations of the Poultry Quarantine Facility and WSO. The foregoing should be clearly discussed in the text for clarity and completeness.	Definitions for each of the land use characterizations can be found in the referenced master plans. In-text citations have been added to the text to clarify this. For the conciseness of the this EA, each land use character will not be defined in the text. Because the land use characterizations would not be changing, and BARC's operations are fully compatible with these land use characters, the restrictions of each land use characterization are also not discussed.
1	21	P. 15, Section 3.1.1, second paragraph, penultimate sentence. The categorization of land use as agricultural is confusing because this term is not used in the first paragraph. Which of the land uses listed in the first paragraph is Building 434 characterized as (i.e., Open Space Network, Perceptually Sensitive Area, Natural Reserve Area, Conditional Reserve, and Public Land Uses)?	The first paragraph addresses BARC as a whole. This paragraph was revised to identify BARC, as a whole, as a low density agricultural property. The following paragraphs, specific to the poultry quarantine facility and WSO, are consistent with the overall description of BARC.
1	22	P. 15, Section 3.1.1, second paragraph, penultimate sentence. The land use is categorized as agricultural by what entity?	In-text citations have been added for clarity.
1	23	P. 15, Section 3.1.1, third paragraph, first sentence. What is the WSO proposed site currently categorized as? Please revise the text for completeness.	Comment noted. The text was revised to identify the site specifically as agricultural land use.
1	24	P. 16, Section 3.1.2.1, second paragraph, first sentence. Which of the entities identified in Section 3.1 (i.e., MNCPPC and the Langley Park/College Park/Greenbelt Master Plans) has designated the proposed location of the Poultry Quarantine Facility as an agricultural site? Under which category listed in Section 3.1 (i.e., Open Space Network, Perceptually Sensitive Area, Natural Reserve Area, Conditional Reserve, and Public Land Use) does agricultural use fall? The land use designations and designating entities should be clarified and consistent throughout Section 3.1.	Comment noted. The text of Section 3.1 has been revised as stated in Comment #21 and in-text citations have been added.
1	25	P. 16, Section 3.1.2.1, third paragraph, first sentence. Which of the entities identified in Section 3.1 has designated the proposed location of the WSO as an agricultural and research? Under which category listed in Section 3.1 does agricultural and research use fall? Suggest the text be revised to clarify land use designations and designating entities and present land uses in a consistent manner throughout Section 3.1.	Comment noted. The text of Section 3.1 has been revised as stated in Comment #21 and in-text citations have been added.
1	26	P. 16, Section 3.1.2.2, first paragraph, second sentence. Land use is only identified as agricultural in Section 3.1.2.1. This apparent discrepancy should be resolved. The text should be revised to clarify land use designations and present land uses in a consistent manner throughout Section 3.1.	Comment noted. The text has been revised for clarity and consistency.
1	27	P. 16, Section 3.1.2.2, last paragraph, second sentence. Land use is identified here as unutilized but previously as agricultural and research. This apparent discrepancy should be resolved. The text should be revised to clarify land use designations and present land uses in a consistent manner throughout Section 3.1.	Comment noted. The text has been revised for clarity and consistency.

1	28	P. 16, Section 3.1.2.2, last paragraph, last sentence. This does not appear to be a true statement. It was stated previously that the No Action Alternative could prevent the transfer of the 105-acre parcel to the US Department of the Treasury, thus complicating efforts to construct the proposed currency production facility. This statement should be revised to reflect the land use impacts at Building 253A of the No Action Alternative.	Comment noted. Under the No Action Alternative, the WSO would not be transferred. WSO operations would continue as currently conducted. Therefore, there would be no impacts. If the No Action Alternative were implemented, and then another action were proposed for the current WSO location, those potential impacts would be analyzed as part of that other action.
1	29	P. 16, 17, Section 3.2.1.1. The description presented is incomplete. No discussion of the topography at Buildings 277, 278, and 253A is presented. A discussion of the topography at the current locations of the Poultry Quarantine Facility and WSO as well as figures should be added to the text.	See Comments #1 and #12.
1	30	P. 22, Section 3.2.2.1, third paragraph, last sentence. It appears that a stormwater detention pond will be constructed at the proposed site based on Figure 2-3. A discussion of the construction of this pond and the disposition of the excavated soils should be added to the text.	Comment noted. Additional text has been added to Section 3.2.2.1 for clarity. The exact details of the stormwater management features have not been compiled as the final design process has not been completed. As stated, the MDE standards for stormwater management will be followed as is required when constructing the stormwater pond.
1	31	P. 22, Section 3.2.2.1, fifth paragraph, second sentence. No discussion is provided regarding the disposition of the excavated soils from the septic tank, drain field, and bioretention pond. Such a discussion should be added to the text.	Addressed in comment above.
1	32	P. 24, Section 3.3.1, first paragraph, first sentence. Because the term “ecoregion” is not contained in the preceding sentence, the reader has no frame of reference for the meaning of “this ecoregion”. Please define the ecoregion in question and revise the sentence for clarity.	Text has been revised for clarity.
1	33	P. 25, Section 3.4. There appears to be no discussion of BARC’s need to comply with its MS4 permit goal of achieving a 20-percent reduction in impervious area. To do so, USDA-ARS must demonstrate compliance with U.S. Environmental Protection Agency’s (EPA) *Technical Guidance on Implementing Stormwater Runoff Requirements for Federal Projects under Section 438 of the Energy Independence and Security Act* (EISA) (EPA, 2009). This requires that building sites must be returned to predevelopment conditions, where feasible, including natural topography to promote natural water drainage patterns. Will the Proposed Action and No Action Alternative comply with the MS4 goal? If so, how? If not, why not?	Added additional language to Sections 3.4.1 and 3.4.2.1 .discussing Section 438 of the Energy Independence and Security Act of 2007 (EISA) and NPDES requirements. The Proposed Action will comply with the requirments of all applicable permits.
1	34	P. 25, Section 3.4.1, last sentence. The description is incomplete. Figures should be added to the text that depict surface water in the vicinity of Buildings 277, 278, and 253A.	See Comments #1 and #12.
1	35	P. 27, Section 3.4.1.2, first paragraph, last sentence. From which aquifer does BARC obtain its water supply; the Patuxent Aquifer? Is the Patuxent Aquifer confined, semi-confined, or unconfined? The specific aquifer should be identified, and its characteristics presented. Also, the number, depth, and location of BARC’s production wells should be provided. A figure showing the locations of the production wells would be helpful.	Text of Section 3.4.1.2 has been revised to include additional aquifer information. With regard to the suggestion that the number and placement of wells be included in the EA, this level of detail suggested is incongruous with the minor nature of the project's impacts and imposes an unnecessary burden of documentation on a project that relocates existing uses (and does not increase personnel or demands on water supply).
1	36	P. 27, Section 3.4.1.2, second paragraph. The description presented is incomplete. No discussion of shallow groundwater resources is provided. No discussion of the expected shallow groundwater flow direction is provided. No discussion of whether or not shallow groundwater is expected to discharge to one of the surface water bodies depicted on Figure 3-5 is presented. This information should be added to the text not only for Building 434 but also for the current location of the Poultry Quarantine Facility (Buildings 277 and 278).	The discussion of possible impacts to shallow groundwater from both projects is minimized because the presence and influence of shallow groundwater in this geographic area is minimal. While any groundwater, either shallow or deep and forming an aquifer, ultimately influences water quality at its down gradient discharge point, for the purposes of these two small-scale projects which simply relocate existing uses on BARC, a discussion of impacts to shallow groundwater should be limited to the conclusion that the Proposed Action would have permanent, negligible adverse effects on any shallow groundwater resources in the area. The proposed excavation for these projects would be very shallow, so impacts to shallow groundwater would be minimal. Text has been revised to provide some additional information related to shallow groundwater.
1	37	P. 27, Section 3.4.1.2, third paragraph. The description presented is incomplete. No discussion of shallow groundwater resources is provided. No discussion of the expected shallow groundwater flow direction is provided. No discussion of whether or not shallow groundwater is expected to discharge to Beck Branch and/or Alter Pond is presented. This information should be added to the text not only for Building 513 but also for the current location of the WSO (Building 253A).	See response to Comment #36.

1	38	P. 30, Section 3.4.2.1, first paragraph, second sentence. What are the specific anticipated minor impacts to surface water and stormwater due to runoff during construction? The transport of sediment to surface water bodies? Would not these impacts be the same for wetlands? The specific anticipated impacts to stormwater, surface water, and wetlands should be identified.	Text has been revised in Section 3.4.2.1 for clarity.
1	39	P. 30, Section 3.4.2.1, fourth paragraph. No discussion of the anticipated impacts on shallow groundwater is provided. Such a discussion should be added to the text.	Text has been revised in Section 3.4.2.1 for clarity.
1	40	P. 30, Section 3.4.2.1, fifth paragraph, last sentence. Because shallow groundwater is not discussed, this statement is not supported.	See conclusion regarding shallow groundwater added to previous paragraph.
1	41	P. 32, Section 3.4.2.1, first paragraph, third sentence. Based on the soil types present at Building 434, is infiltration to the underlying soils anticipated? Why or why not?	The drainage potential of the underlying soils for Bldg 434 are discussed in Section 3.2.1.2, 2nd paragraph. Infiltration to the underlying soils is anticipated. The engineering design for the building, including drainage, is still in development. The final engineering design for the site, as well as the applicable stormwater management permits, will confirm the successful performance of the stormwater management features.
1	42	P. 32, Section 3.4.2.1, first paragraph, third sentence. If the retained stormwater drains through and underdrains to daylight or overflows via an inlet or weir spillway, where would the water flow? Would the water reach either of the surface water features shown in Figure 3-5? Why or why not?	The design of the stormwater management system has not been finalized at this time. The NEPA process is often conducted concurrently with project designs to allow for modifications resulting from new information, so not all details regarding final design decisions have been made at the time of the public review. The final stormwater management design, to include possible daylighted outlets, would be reviewed by the applicable federal and state agencies that regulate stormwater. Additionally, post-development hydrology will match pre-development hydrology to the maximum extent technically feasible, in accordance with Section 438 of the Energy Independence and Security Act (EISA) of 2007.
1	43	P. 32, Section 3.4.2.1, third paragraph, last sentence. This statement is not supported. Merely stating there would not be any expected impacts does not make it a reality. No discussion is provided on the depth to shallow groundwater and the anticipated impacts on shallow groundwater from the bioretention ponds. No discussion is provided regarding the anticipated flow direction of any stormwater that would underdrain or overtop the bioretention ponds. Information that would support this statement should be provided.	This paragraph is a conclusionary statement supported by the information and discussion provided earlier in the section. See responses for Comments #36, #38, and #39.
1	44	P. 32, Section 3.4.2.1, Wildlife Staff Office. The discussion of anticipated impacts is incomplete. No discussion is provided on the impacts on shallow groundwater by the bioretention pond, septic tank, or drain field. Such a discussion should be added to the text for completeness.	See response for Comment #43
1	45	P. 32, Section 3.4.2.1, fourth paragraph, last sentence. Specific measures such as these are not identified for the Poultry Quarantine Facility. For completeness and consistency, this information should also be provided for the Poultry Quarantine Facility.	Comment noted. While EO 13834 does not specify water conservation measures, it set requirements for Federal agencies. Specific measures would be determined during final engineering design.
1	46	P. 32, Section 3.4.2.1, fifth paragraph, third sentence. Based on the soil types present at Building 513, is infiltration to the underlying soils by the bioretention pond and septic tank drainage field anticipated? Why or why not?	The drainage potential of the underlying soils for Bldg 513 are discussed in Section 3.2.1.2, 3rd paragraph. Infiltration to the underlying soils is anticipated. The engineering design for the building, including drainage, is still in development. The final engineering design for the site, as well as the applicable stormwater management permits, will confirm the successful performance of the stormwater management features.
1	47	P. 32, Section 3.4.2.1, fifth paragraph, third and fourth sentences. If the retained stormwater drains through and underdrains to daylight or overflows via an inlet or weir spillway, where would the water flow? Would the water reach either Beck Branch or Alter Pond? Why or why not?	As stated in previous sections, stormwater management features would be designed and constructed to comply with applicable federal and state regulations and guidance.
1	48	P. 32, Section 3.4.2.1, seventh paragraph, last sentence. This statement is not supported. Merely stating there would not be any expected impacts does not make it a reality. No discussion is provided on the depth to shallow groundwater and the anticipated impacts on shallow groundwater from the bioretention pond or septic tank drainage field. No discussion is provided regarding the anticipated flow direction of any stormwater that would underdrain or overtop the bioretention pond. Information that would support this statement should be provided.	See Comments #36, #38, and #39 for shallow groundwater comment. As stated in previous sections, stormwater management features would be designed and constructed to comply with applicable federal and state regulations and guidance.

1	49	P. 35, Section 3.5.1.2, second paragraph, first sentence. This reviewer has personally observed an active bald eagle nest along Beaver Dam Creek east of Research Road. Any anticipated impacts on this nest should be discussed.	Thank you for that information. The project areas were screened for the potential presence of protected species, including bald eagles, using the USFWS' Information for Planning and Consultation web-based tool. Consultation with the USFWS and the MDE regarding protected species has been initiated and any recommendations provided by the agencies will be incorporated into the project. Additionally, text has been revised to include a nest that appears to be the one referenced in this comment, based on additional information from the Maryland Bird Conservation Partnership.
1	50	P. 36, Section 3.5.2.1, first paragraph, last sentence. This statement is unclear. If farmland is taken out of production by planting native grasses, what is the basis for the assertion that the impacts of replacing farmland with native grasses is negligible? A reasoned, supportable basis for this assertion should be provided.	This sentence supports the first sentence in the paragraph stating that "no impacts to vegetation would be expected to occur under the Proposed Action." Any areas that need to be cleared for construction, to include staging areas, would be revegetated. The reference to farmland has been removed from the text in this section, as farmland is not a natural vegetation community.
1	51	P. 37, Section 3.5.2.1, third paragraph, first sentence. What specifically are these minor adverse impacts? Also, would there be any adverse impacts to the eagles nesting along Beaver Dam Creek?	Text of Section 3.5.2.1 has been revised for clarity. Text has also been added to address the bald eagle impacts. No adverse impacts to nesting eagles are anticipated, as Building 434 is approximately 1.25 miles from, and the WSO project site is approxiately 2 miles from, the nest area described.
1	52	P. 37, Section 3.5.2.1, fourth paragraph, penultimate sentence. Given that new structures will be in place after construction ceases, what is the basis for the assertion that the impacts would be temporary and any wildlife that is disturbed during construction would return? A reasoned, supportable basis for this assertion should be provided.	To add clarity, sentence was changed to read: "These impacts would be temporary and any wildlife that is disturbed by increased human activity and noise levels from heavy equipment during construction would return once construction is complete and additional personnel and machines needed for construction have left."
1	53	P. 37, Section 3.5.2.1, last paragraph, penultimate sentence. Given that new structures will be in place after construction ceases, what is the basis for the assertion that the impacts would be temporary and any wildlife that is disturbed during construction would return?	See Comment #52.
1	54	P. 38, Section 3.6.1, first complete paragraph, second sentence. It appears the word should be “effect” not “affect”.	Revision made.
1	55	P. 44, Section 3.6.2.1, fourth paragraph, last sentence. It is unclear how a modular mobile home presents a residential appearance that is consistent with the historical physical appearance of BARC and continues to reflect a strong level of integrity. A modular mobile home would also appear to be out of place in an agricultural setting. A modular mobile home would appear to be a somewhat jarring feature within the historical and agricultural context of BARC. It is difficult to square the presence of a modular mobile home and the need to provide vegetative screening with the statement that adverse impacts would be mitigated to a negligible level. See also the c comment below regarding the proximity of the proposed WSO to the Hall Family Cemetery.	Added Figure 3-11 to Section 3.6.2.1 to demonstrate the unobtrusive nature of the proposed modular building. The single-story, 24-foot by 60-foot modular building would have a muted color scheme and low profile to minimize impacts to the visual character of the area. As noted in the third paragraph of Section 3.6.2.1, Wildlife Staff Office subsection, MHT concurred with the USDA determination of no adverse impact to historic resources. This project has been closely coordinated from its beginning with MHT and extensive effort has been made to avoid impacts to the historic standing of Building 513.
1	56	P. 44, Section 3.6.2.1, last paragraph. It was stated previously that the WSO proposed site is approximately 167 feet north of the Hall family cemetery. How, then, can this 100-foot buffer be maintained, if maintaining such a buffer provides only 67 feet for ground disturbance and construction?	Comment noted. At its closest point to the WSO proposed site LOD, the cemetery is 167 feet south of the WSO proposed site. The text was revised to specify that the LOD would be entirely outside of the 100-foot cemetery buffer.
1	57	P. 44, Section 3.6.2.1, last paragraph. What actions will be taken if unmarked graves are encountered? If unmarked graves are encountered, what effects would there be on the construction schedule or even the ability to install the WSO at its planned location? These issues should be addressed in the text.	In the prior paragraph, USDA states "Should any archaeological resources be inadvertently discovered during construction, these construction activities would be halted, the appropriate agencies and Tribes would be contacted, and an archaeological investigation would be conducted, as appropriate, to determine the full extent of the discovered resources and whether the proposed action must be modified." This includes unmarked graves. It is not reasonable to speculate how the discovery of unmarked graves would affect the construction schedule.
1	58	P. 47, Section 3.7.2.1, first incomplete sentence. What is the rationale behind the assertion that the increase in employment and spending on materials would have a less-than-significant beneficial impact? Merely making such a statement does not make it a reality. A reasoned, supportable basis for the assertion should be provided.	Comment noted. Under the Proposed Action, the USDA would provide funding for construction contractors to employ personnel and purchase materials to complete the proposed activities. This funding would be a minor beneficial impact to the local companies it supports.
1	59	P. 48, Section 3.8.1. No mention is made of Soil Conservation Road, which serves facility personnel and is a conduit for public through traffic. A discussion of Soil Conservation Road should be added.	Text of Section 3.8.1, Wildlife Staff Office subsection, has been revised.

1	60	P. 52, Section 3.10.1, first paragraph. The reference to 40 CFR Part 261 and the subsequent discussion does not appear appropriate given that Maryland has received authorization of their hazardous waste management program from the US Environmental Protection Agency (USEPA). It appears that Maryland regulations provide for two categories of generators: “Small quantity handler of universal waste" and “generators”. The discussion should be revised to reflect Maryland regulations (COMAR 26.13). There appears to be no such thing as the Maryland Resource Conservation and Recovery Act (RCRA). Is this a reference to Maryland Environmental Code §7-208 et seq.? Please clarify.	Comment noted. Text of Section 3.10.1 has been revised for clarity regarding these regulations.
1	61	P. 54, Section 3.10.1.1, first paragraph, last sentence. The specific regulations should be cited. Would not COMAR 26.13.02.19 govern the removal and disposal of soils or other materials contaminated with polychlorinated biphenyls (PCBs)?	Comment noted. Text of Section 3.10.1.1 has been revised for clarity regarding these regulations.
1	62	P. 54, Section 3.10.1.1, second paragraph, third sentence. It is not clear why Maryland Lead Paint Abatement Regulations (COMAR 26.02.07) are not referenced. Do these regulations not also govern the handling of lead-based paint (LBP)?	Comment noted. Text has been revised to include this regulation.
1	63	P. 54, Section 3.10.2.1, last paragraph, third through fifth sentences. It is not clear why RCRA is referenced rather than the Maryland Environmental Code. USEPA has delegated the RCRA program to Maryland.	Comment noted. Text of 3.10.2.1 has been revised.
1	64	P. 55, Section 3.10.2.1, first paragraph, first incomplete sentence. Would not COMAR 26.13.02.19 govern the removal and disposal of soils or other materials contaminated with polychlorinated biphenyls (PCBs) in lieu of or in addition to the Toxic Substances Control Act (TSCA)? Why or why not? If soil contaminated with PCBs above 500 ppm are encountered, how will these soils be handled?	Acknowledged. Addressed in Comment #61. If soils in exceedance of established thresholds are encountered, remediation plans would be established to ensure proper containment and disposal.
1	65	P. 55, Section 3.10.2.1, first paragraph, second complete sentence. No procedures are presented in the preceding text as implied by the sentence. Suggest either the sentence be revised or moved to the end of the section. If the sentence is not moved, a suggested revision is: “Implementing the procedures set forth in (cite the governing regulations) during renovation of Building 434 would minimize adverse impacts regarding the management and disposal of toxic wastes, hazardous wastes, and/or Universal Wastes.”	Acknowledged. Text has been revised for clarity.
1	66	P. 55, Section 3.10.2.1, first paragraph. Penultimate sentence. If the existing pole-mounted transformers that will be removed contain PCBs or di (2-ethylhexyl) phthalate (DEHP), how will these transformers be handled? Is there any asbestos in Building 434? The potential presence of these hazardous and toxic materials should be discussed.	Text of Section 3.10.2.1 has been revised to include additional information on asbestos and PCBs. All existing structures to be renovated would be reviewed for hazardous materials, including asbestos, and identified concerns would be managed in accordance with all applicable federal and state regulations, as noted in this section.
1	67	P. 55, Section 3.10.2.1, first paragraph, last sentence. If LBP may be present, how will any disturbed LBP be handled during renovation? What environmental law(s) and associated regulations address LBP? The need to address the potential presence of LBPs should be discussed.	Text of Section 3.10.2.1 has been revised to include additional information on LBP.
1	68	P. 55, Section 3.10.2.2, third sentence. The veracity of this statement appears tenuous. Light ballasts and light bulbs could eventually fall as the building deteriorates over time, releasing PCBs and mercury. Transformers could eventually fall from their poles over time and potentially release PCBs and/or DEHPs to the surrounding soil. It is possible if the transformers remain on the poles they could eventually leak. Window caulking and other materials containing asbestos could release fibers to the air as these materials deteriorate. Any LBPs on the building exterior could flake off over time, releasing lead to surrounding soils. If the roof would eventually fail, wind and rainwater could enter the building and potentially carry out any hazardous and toxic materials that had been released within the building. This statement should be modified considering the possibilities mentioned.	Text of Section 3.10.2.2 has been revised for clarity.
1	69	P. 56, Section 3.11.1.1, last paragraph, last sentence. As stated previously, it is unclear how a modular mobile home, even with vegetative buffers, would maintain the overall setting and feeling of the original viewshed. Also, since Building 513 is unoccupied, would there be any adverse impacts to the viewshed from Building 513 if there is no one there to view the WSO proposed site? Is Building 513 slated for future occupation?	It is stated in paragraph four of section 3.11.2.1 that minor impacts would occur to the viewshed of Building 513. It is also stated that the overall aesthetic of the area would remain the same, as the modular building would be similar to that of Builidng 513, diminishing impacts. The Maryland SHPO was consulted and confirmed all of these findings. Finally, viewsheds are evaluated regardless of whether there are occupants in a building.
1	70	P. 56, Section 3.11.1.2. It is unclear how the continued deterioration of historic buildings such as 434 and 513 would have only minor impacts on aesthetics and visual resources. Building 513 is clearly visible from Beaver Dam Road and its continued deterioration would appear to become an eyesore over time. Also, it is stated on P. 57 that the continued deterioration of Building 513 would decrease the aesthetic and visual resources of the area and decrease the aesthetics along Soil Conservation Road. This statement appears to contradict the statement made on P. 56. This apparent discrepancy should be resolved.	Section 3.11.2.1 was revised to note that while deterioration of Building 434 would continue, it would be a very gradual process and impacts would be minor. Building 513 is not within the WSO proposed site, and therefore the building itself is not subject to analysis under the No Action Alternative. The WSO proposed site consists of an empty field that would remain unchanged under the No Action Alternative; therefore the No Action Alternative would have no impacts at this site.

1	71	P. 62, Section 3.12.2.1. Would any window caulking and other materials containing asbestos be disturbed during the renovation of Building 434 such that asbestos fibers would be released into the air? The potential for asbestos emissions under the Proposed Action should be addressed.	Text of Section 3.12.2.1 has been revised to note that HAZMAT evaluations would occur prior to construction and to state how any hazardous materials, including asbestos, would be handled if found.
1	72	P. 63, Section 3.12.2.2. Window caulking and other materials containing asbestos in Building 434 could release fibers to the air as these materials deteriorate. This statement should be modified to address the potential for asbestos emissions as Building 434 continues to deteriorate.	Text of Section 3.12.2.2 has been revised to note that while Building 434 will continue to deteriorate, impacts to air quality would be negligible. BARC would still be compliant with applicable regulations.
1	73	P. 64, Section 3.13.1, last paragraph, fourth sentence. Disagree that traffic on Powder Mill Road is infrequent. As a regular user of Powder Mill Road, I have found Powder Mill Road to be widely used by local residents and well as commuters because Powder Mill Road provides easy access to the Baltimore-Washington Parkway. Powder Mill Road also provides access to Capitol Technology University. Disagree strongly that traffic on Powder Mill Road is somewhat infrequent.	Comment noted. The text of Section 3.13.1 was revised to describe Powder Mill Road traffic as moderate.
1	74	P. 65, Section 3.13.1, first paragraph, second sentence. No mention is made of whether the WSO proposed site could be affected by traffic on Soil Conservation Road. Soil Conservation Road appears to have a fair amount of traffic.	Text of Section 3.13.1 has been revised to address traffic on Soil Conservation Road.
1	75	P. 65, Section 3.13.2.1, second paragraph, last sentence. No basis is provided for the statement that impacts from operational noise would be negligible. No information is provided regarding what specific operations would generate noise at the Facility or what type of noise would be generated. Will there be air conditioners? Will there be an increase in noise levels due to the increase in the total number of workers? What types of noise will these additional workers generate? Merely stating an impact is negligible does not make it a reality. The specific operations that will generate noise should be provided. A reasoned, supportable basis for the statement of negligible noise impacts should also be provided.	Additional information added to Section 3.13.2.1 to address noise levels expected at the poultry quarantine facility.
1	76	P. 66, Section 3.14.1. No physical or chemical hazards that may be present in Building 434 or during renovation activities are identified or described in this section. These hazards should be addressed.	These hazards are addressed in section 3.10. This section is meant to address the general safety of the public as construcion occurs and operations of the facilities commence.
1	77	P. 66, Section 3.14.2.1. No mention is made of the specific safety hazards that may present during renovation of Building 434 such as the use heavy machinery, elevated noise levels, etc. What actions will be taken to reduce physical hazards to construction personnel? What protective equipment will be required to mitigate noise impacts? Will the identification, removal, and disposal of any ACM comply with 40 CFR Part 61, Subpart M and/or COMAR 26.11.21? Will asbestos materials to be removed be wetted with a solution containing a surfactant during the renovations to minimize friable asbestos? After removing any asbestos materials, will the work area be cleaned until no residue or asbestos material is visible? What specific actions will be taken to protect workers from ACM, LBP, mercury, and PCBs/DEPH? What specific actions will be taken to mitigate the release of ACM and PBP into the environment, especially the air? What specific actions will be taken to protect workers and the environment against any soil contaminated by LBP and/or PCBs/DEPH that will be disturbed during construction? How will any soil contaminated with LBP and/or PCBs/DEPH that requires removal be handled and disposed of in order to protect the environment and the general public? The physical and chemical hazards posed to construction personnel and how these hazards will be mitigated should be addressed.	Much of the text from Section 3.14.1 has been moved to 3.14.2 to address the processes to be taken under certain scenarios related to the proposed action.
1	78	P. 66, Section 3.14.2.1. No mention is made of the specific safety hazards that may present during construction of the WSO such as the use moving heavy machinery, elevated noise levels, etc. What actions will be taken to reduce physical hazards to construction personnel? What protective equipment will be required to mitigate noise impacts? The physical hazards posed to construction personnel and how these hazards will be mitigated should be addressed.	Addressed in Comment #77.
1	79	P. 66, Section 3.14.2.2. No mention is made of the physical safety risks that will occur as Building 434 continues to deteriorate. The ongoing deterioration of the structure would appear to pose a physical safety risk to anyone who would trespass into the building. There are no barriers to prevent a trespasser from walking, biking, or driving up to Building 434 at any time of the day due to easy access from Powder Mill Road. Although there may currently be barriers to entering the building (e.g., locked and intact doors and windows), these barriers may not exist in the future as the building continues to deteriorate. Once a trespasser would gain entry, what physical hazards may be encountered? Would not the exposure to deteriorated building materials presumed to contain ACM, LBP, and mercury be considered a potential health risk to trespassers? Will any steps be taken to prevent trespassers from entering Building 434 as it deteriorates? As the building continues to deteriorate, might not fugitive dust containing asbestos fibers be generated? Might LBP flakes become airborne as the building continues to deteriorate? The potential safety and health risks to the public (i.e., trespassers) and BARC grounds maintenance personnel should be clearly identified and discussed.	Addressed in Comment #77. Trespassing onto BARC private property is not within the scope of this EA. An EA is meant to analyze the environmental concerns of those who are authorized to be on the site, taking necessary precautions. Speculating as to what may occur under the unlikely circumstances that a trespasser enters the property is beyond the ordinary analysis of an EA.
1	80	P. 66, Section 3.14.2.2. As the pole-mounted transformers at Building 434 deteriorate over time, is it possible the public (i.e., trespassers) and BARC grounds maintenance personnel could potentially be exposed to PCBs/DEPH? These potential health risks should be clearly identified and discussed.	Addressed in Comment #77 and in Section 3.10.

1	81	P. 67, Section 3.15.1, fifth paragraph. The current locations of the Poultry Quarantine Facility (Buildings 277 and 278) and the WSO (Building 253A) are within the 105-acre parcel. What impacts will the transfer of land and proposed construction of the Bureau of Engraving and Printing (BEP) have on the current locations? Not addressing these impacts would appear to be a significant oversight.	Comment noted. Consideration of potential cumulative impacts from the proposed BEP action on each relevant resource area is incorporated throughout Section 3.15. As discussed in the response to Comment 1, the potential impacts on the existing PQH and WSO locations, specifically, is not relevant to this EA.
1	82	P. 70, Section 3.15.2.1, second paragraph, first and last sentences. The rationale behind these statements in unclear. The proposed construction of the BEP and MAGLEV would appear to have a radical impact on land use. A reasoned, supportable basis for the assertion the current and reasonably foreseeable future actions would have minimal impacts on land use should be provided.	Under the Proposed Action for this project, there would be no change to land use, so there would be no contribution to cumulative land use impacts of other projects at BARC. The potential BEP and MAGLEV projects are undergoing their own NEPA reviews.
1	83	P. 70, Section 3.15.2.1, third paragraph, second sentence. What is the basis for the assertion that the proposed construction of the BEP and MAGLEV would include mitigative measures for any large portions of farmland lost to development? What statues, regulations, or other regulatory mechanisms require such mitigative measures? What guarantees are there that mitigative measures will, in fact, be implemented? A reasoned, supportable basis for this statement should be provided.	Text of Section 3.15.2.1 has been revised to clarify the regulation that the lead agencies of the BEP and MAGLEV projects would follow.
1	84	P. 71, Section 3.15.2.1, first paragraph, third sentence. What is the basis for the assertion that the proposed construction of the BEP and MAGLEV would not impact native habitats or protected species present on BARC? A reasoned, supportable basis for this statement should be provided	Comment noted. The text was revised to clarify that construction activities associated with this Proposed Action would not impact native habitats or protected species.
1	85	P. 71, Section 3.15.2.1, second paragraph, second sentence. What is the basis for the expectation that all projects would be include Section 106 consultation and mitigation measures, as appropriate? A reasoned, supportable basis for this statement should be provided	Section 106 consultation must occur when actions are proposed on Federal land, in accordance with the National Historic Preservation Act (NHPA). Text has been revised to include the NHPA requirement for Section 106 consultation and mitigation.
1	86	P. 71, Section 3.15.2.1, second paragraph. The cumulative impacts of the Proposed Action on cultural resources does not appear to be clearly stated. A clear statement should be added regarding the cumulative impacts of the proposed Action	It is stated that minor impacts are expected with the proper mitigation steps and Section 106 consultation.
1	87	P. 71, Section 3.15.2.1, third paragraph. The statements made in this paragraph are unclear and appear to be unsupported. Construction of the proposed BEP and MAGLEV would appear to require an increase in short-term employment during their construction. Operations at the BEP would increase employment by 1,440 employees working in shifts (6:30 am, 2:30 pm, and 10:30 pm) (https://www.nab.usace.army.mil/Home/BEP-Replacement-Project/). What is the basis for the assertion that the proposed construction of the BEP and MAGLEV and operations at the BEP would not adversely impact the socioeconomic setting of the BARC facility? What is the basis for the implied assertion that the proposed construction of the BEP and MAGLEV and operations at the BEP would result in minor beneficial impacts? In what way is the proposed construction of the BEP and MAGLEV constrained by the USDA-ARS mission and ongoing compliance with the MS4 permit and other regional conservation initiatives? The reasoned, supportable bases for the assertions made in this paragraph should be provided.	Text of Section 3.15.2.1 has been revised to clarify the socioeconomic and employment impacts that would be expected to result from the Proposed Action.
1	88	P. 71, Section 3.15.2.1, Transportation. It appears that a proposed alignment of the MAGLEV Trainset Maintenance Facility (TMF) and associated Powder Mill Road interchange reconstruction and construction laydown area in the vicinity of the proposed location of the Poultry Quarantine Facility was not addressed. There appears to be a good deal of proposed construction associated with the MAGLEV elements identified in the preceding sentence. It also appears that the potential for construction of the BARC West TMF Ramps in the vicinity of the proposed WSO was not addressed. The impacts of the potential future construction of the various MAGLEV elements in the vicinity of the proposed locations of the Poultry Quarantine Facility and WSO should be addressed in the EA.	Text of Section 3.15.2.1 has been revised to include relevant information regarding the proposed MAGLEV alignments. However, the Proposed Action would not alter transportation infrastructure and would only minimally impact traffic, so it would only contribute minimally to cumulative transportation impacts.
1	89	P. 71, Section 3.15.2.1, fourth paragraph, last sentence. What is the basis for the expectation that transportation impacts will be mitigated through public transportation improvements? A reasoned, supportable basis for this statement should be provided.	BEP is conducting a traffic analysis pursuant to its NEPA analysis. This analysis will inform decisions on mitigation measures associated with traffic concerns. It is not within the scope of this EA. The Proposed Action is not anticipated to contribute cumulatively to overall traffic congestion in the area, as it is essentially a relocation of an existing use.
1	90	P. 71, Section 3.15.2.1, last paragraph, second sentence. From what station would some form of ground transportation be required to get riders to the BARC facility? The BWI station? Please identify the specific station(s).	The MAGLEV project is still in the planning phases with various alignment and station alternatives under consideration. The language regarding stations accessing BARC was removed to reduce confusion, as this project is planned as a connector between Baltimore and Washington, DC with few stops.
1	91	P. 72, Section 3.15.2.1, first paragraph, second sentence. What is the basis for the expectation that existing utility capacities on BARC are expected to be sufficient to support the planned BEP operations? A reasoned, supportable basis for this expectation should be provided.	The first sentence in this section limits the scope of the conclusions to projects on BARC. Ascertaining the impacts to utilities from the BEP project would be addressed under its NEPA review. Additionally, since this Proposed Action is merely relocating existing BARC operations, there would be a negligible contribution to cumulative utility impacts.

1	92	P. 72, Section 3.15.2.1, Aesthetics and Visual Resources. It is unclear how the mitigation measures identified could minimize the impacts of the proposed BEP and MAGLEV facilities to the extent that the cumulative impacts would be expected to be minor. Both the BEP and MAGLEV facilities appear to be large and difficult to screen from view. The BEP development footprint is estimated to be between 850,000 and 1 million square feet and the BEP building height may range from 30 to 40 feet. Both facilities could be viewed as an affront to the pastoral aesthetic of BARC, especially the BEP if plans are to operate 24 hours a day and keep the building and surrounding area well lighted.	All potential impacts from the BEP and MAGLEV projects are not known at this time as these projects are still under development and may or may not be constructed. Specific impacts from the BEP and MAGLEV projects should be considered and addressed by appropriate environmental and cultural processes and documentation. As stated in this EA, overall negligible impacts to aesthetics and visual resources would be anticipated at BARC if the Proposed Action were implemented, so the Proposed Action's contributions to cumulative aesthetic and visual resources would be negligible.
1	93	P. 72, Section 3.15.2.1, Air Quality. No discussion is provided regarding the generation of fugitive dust resulting from excavation and earth-moving activities associated with the Proposed Action or proposed construction of the BEP and MAGLEV. Also, no discussion is provided regarding the potential for air emissions from the BEP facility and MAGLEV once operations begin. The BEP facility may require approximately 1,440 employees working in shifts (6:30 am, 2:30 pm, and 10:30 pm), yet no discussion is provided regarding the associated vehicular traffic and resulting emissions.	All potential impacts from the BEP and MAGLEV projects are not known at this time as these projects are still under development and may or may not be constructed. Specific impacts from the BEP and MAGLEV projects should be considered and addressed by appropriate environmental and cultural processes and documentation. Text of Sections 3.12 and 3.15.2.1 have been revised to include a discussion of fugitive dust.
1	94	P. 72, Section 3.15.2.1, Noise. No acknowledgement is made of the potential for noise impacts associated with the operation of the proposed BEP and MAGLEV. What is the basis for the implied assertion that there would not be high, long-term, non-abatable noise levels associated with the proposed BEP and/or MAGLEV? A reasoned, supportable basis for this assertion should be provided.	All potential impacts from the BEP and MAGLEV projects are not known at this time as these projects are still under development and may or may not be constructed. Specific impacts from the BEP and MAGLEV projects should be considered and addressed by appropriate environmental and cultural processes and documentation. As stated in this EA, temporary noise associated with construction and long-term minor noise generated by accessing and operation Building 434 and the WSO is anticipated at BARC if the Proposed Action were implemented. Therefore, the Proposed Action's contributions to cumulative noise impacts at BARC would be negligible.
1	95	P. 72, Section 3.15.2.1, Health and Public Safety. No discussion is provided regarding the physical hazards associated with construction of the new Poultry Quarantine Facility, WSO, BEP, and MAGLEV. No discussion is provided regarding the potential for the generation and/or storage of hazardous materials associated with the proposed BEP and MAGLEV. Such a discussion should be added. The cumulative impacts of the Proposed Action on health and public safety does not appear to be clearly stated. A clear statement should be added regarding the cumulative impacts of the Proposed Action.	Construction of the new Poultry Quaranting Facility, WSO, BEP, and MAGLEV would be separated enough both spatially and temporally, that cumulative impacts generated by construction and the use and/or storage of hazardous material are not anticipated. Separate subsection to address Hazardous and Toxic Materials and Waste has been added for clarity, and clear statements on cumulative impacts for both HTMW and Health and Public Safety have been added.
1	96	P. 73, Section 3.15.2.2. Under the No Action Alternative, the continued deterioration of Building 434 will increase physical hazards and may release hazardous materials into the environment, thus posing a greater risk to public health and safety in the future. However, this is not acknowledged in the discussion.	Text has been revised to address potential cumulative impacts from the No Action Alternative.
1	97	P. 75, Table 4-1. This table should be revised to reflect those revisions made to the text in the preceding sections.	Noted. Any applicable revisions have been made to the table.
2	1	I understand that, as indicated in the NCPC Preliminary Submission for July 2020, "the site is currently unused USDA property," however it is not unused by pollinator insects as it was planted as a natural meadow by the BARC employees. Granted, today in August, it is becoming more a field of non-native grasses due to the fact that the grounds maintenance mowers make the decision to mow the site at the height of bloom, mowing under the nectar and host plants for the thousands of bees and butterflies that make use of the site, but many of these plants do grow back partially over the next 4- 6 weeks and the following year. (Another very large field at the other end of Beaver Dam Road planted as a meadow for its benefit to the ecology, farm fields, and for entomologists is now completely taken over by non-native grasses as the mowers mowed at the height of bloom and before seeds were set in the past. A massive field of common milkweed covered with monarch butterflies and their caterpillars along with the huge open area of nectar flowers teeming with bees was mowed in one day last August. All bees and butterflies, and monarch caterpillars disappeared or were mowed.) BARC also used to have large areas along some roadsides planted with sunflowers and other pollinator plants just a few years ago. Those are all gone now as they were also mowed just before they set seed.	Following construction of the Proposed Action, the remaining field area behind the new WSO would be returned to its previous condition, and native grasses would be replanted. Maintenance and mowing of this field would be done in a manner consistent with BARC's vegetation maintenance plan.
2	2	Is there any way, since BARC is constructing on part of the meadow next to 513 for this project, there can be a greater focus on BARC land stewardship indicated as a priority in the 2018 Agriculture bill in a section on EQIP (Environmental Quality Incentives Program), a program promoting habitat conservation on farms? There is open space, the last large open space between Washington and Baltimore, here at BARC, to fulfill the goals set forth in the bill. I know the research entomologists are very interested in increasing forage food supply for our beneficial insects which will ultimately benefit all the wildlife up the food chain, along with the plants and trees throughout the property.	Thank you for your comment. BARC will consider this in future land use planning.

2	3	Finally, it would be nice if the remaining part of that field behind the new WSO was returned to meadow and managed as such. That does not mean it is not mowed. It needs to be. What it does mean is that it, and other sites like it , are mowed at the right time.	See response to Reviewer 2, Comment 1.

BARC 434&WO EA Public Review COMMENT/RESPONSE - Agency Comment

Commenter Number	Comment Number	Date Received	Organization	First Name	Last Name	Title	Comment	Response
1	1	28-Jul-20	Maryland Historical Trust	Beth	Cole	Administrator, Project Review and Compliance	Section 106 consultation has already been completed for this proposed project. MHT has already issued its concurrence with USACE's finding that there will be no adverse effect on historic properties (concurrence letter dated 16 June 2020). The results of the consultation and copies of correspondence should be included in the Final EA.	This information and correspondence is included in the Final EA. No further response needed.
2	1	10-Aug-20	Delaware Nation	Erin	Paden	Director of Historic Preservation	The proposed project locations do not appear to endanger any sites of interest to the Delaware Nation, so please proceed with the project as planned. Should any archaeological sites or artifacts be inadvertently found during construction, it is expected that construction would be halted, the Delaware Nation and other appropriate agencies and Tribes be contacted, and an appropriate archaeological investigation conducted.	Text has been revised to include the planned actions to be taken if archaeological resources are inadvertently found during construction.
3	1	12-Aug-20	Maryland Department of Natural Resources - Wildlife and Heritage Service	Lori	Byrne	Environmental Review Coordinator	No comments related to rare, threatened, or endangered species.	No further response needed.
4	1	21-Aug-20	Environmental Protection Agency - Region 3	Carrie	Traver	Life Scientist	Generally, we found that the EA was clear and addressed potential impacts from the proposed action in an appropriate level of detail. As indicated in the EA, appropriate best management practices (BMPs) to minimize potential impacts on the human and natural environment will be employed. Such BMPs include (but are not limited to) bioretention areas for stormwater management, visual screening with vegetation, maintaining a minimum 100-foot buffer from the Hall family cemetery, and reuse of an existing historic building.	No further response needed.
4	2	21-Aug-20	Environmental Protection Agency - Region 3	Carrie	Traver	Life Scientist	The document presents rationale for proposing a new modular structure for the WSO. Before finalizing decision-making, we suggest that evaluation of reuse be reviewed with consideration of additional factors. Section 2.3.1 states that the renovation and repair of Building 513 (which had previously been used as the WSO) was evaluated but was eliminated as it was considered to be too costly as a result of deterioration, extensive updates needed to meet code, and higher renovation cost for historic buildings. As indicated, BARC has a number of unused buildings on the campus and it is unclear whether any of the other buildings were considered as the location for the WSO. As cost is a consideration for the WSO, when costs of the project were analyzed, were the lifecycle costs and the serviceable life of the modular building considered? Additionally, are there any opportunities for partnerships or initiatives that could help reduce the cost of historic building renovations?	Building 209 was also considered; however, there are offices located in that building and that was not a viable option. The wildlife office requires its own building, away from the public, due to the nature of services it provides. The lifecycle costs and serviceable life of the modular building were considered, and no opportunities to reduce the cost of historic building renovations were identified during site evaluation discussions.
4	3	21-Aug-20	Environmental Protection Agency - Region 3	Carrie	Traver	Life Scientist	As indicated, a residential home is located southwest of Building 434 and shares an entrance road with the building. The EA states that BARC would ensure that access to the private residence remains available throughout the construction and renovation process and that any disturbances would be coordinated with the residents. We concur that the residents should be engaged as soon as possible regarding potential impacts during construction and operation, including traffic and noise. We suggest that the EA further address potential management of noise impacts from construction using BMPs such as screening, equipment mufflers, or other measures. We also recommend that potential impacts from lighting at the facility also be evaluated and discussed with the residents.	The residents have been contacted regarding this proposed action, and coordination will be ongoing as the design and construction plans progress. Text has also been revised to include all planned BMPs to reduce traffic, noise, and lighting impacts.
4	4	21-Aug-20	Environmental Protection Agency - Region 3	Carrie	Traver	Life Scientist	Section 3.8 Transportation indicates that a minimal increase in traffic and minimal impacts to the shared access road would occur from BARC workers responsible for the poultry quarantine facility during operation. To support this finding, it would be helpful to indicate the approximate number of employees that would report to the facility on a regular basis.	One to two employees will work at the poultry quarantine facility at any time.
5	1	26-Aug-20	Maryland Department of Agriculture	Denise	Burrell		No comments provided.	No further response needed.
6	1	26-Aug-20	Maryland Department of Planning	Joseph	Griffiths		No comments provided.	No further response needed.
7	1	26-Aug-20	Maryland Departments of General Services	Tanja	Rucci		Project is consistent with plans, programs, and objectives.	No further response needed.
8	1	26-Aug-20	Maryland Department of Natural Resources	Tony	Redman		Project is consistent with plans, programs, and objectives.	No further response needed.
9	1	26-Aug-20	Maryland Department of Transportation	Ian	Beam		Project is consistent with plans, programs, and objectives.	No further response needed.
10	1	26-Aug-20	Maryland Department of the Environment	Amanda	Redmiles		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' (COMAR 26.11.06.03D), 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.	Noted. Work will be conducted in conformance with State regulations pertaining to particulate matter and fugitive dust.
10	2	26-Aug-20	Maryland Department of the Environment	Amanda	Redmiles		2. 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's Air and Radiation Management Administration. Please contact the New Source Permits Division, Air and Radiation Management Administration at (410) 537-3230 to learn about the State's requirements for these permits.	Understood. Appropriate measures will be taken and permits obtained should soil contamination be encountered.

Commenter Number	Comment Number	Date Received	Organization	First Name	Last Name	Title	Comment	Response
10	3	26-Aug-20	Maryland Department of the Environment	Amanda	Redmiles		3. If the applicant suspects that asbestos is present in any portion of the structure that will be renovated/demolished, then the applicant should contact the Community Environmental Services Program, Air and Radiation Management Administration at (410) 537-3215 to learn about the State's requirements for asbestos handling.	Understood. Should asbestos be present in Building 434, which will be renovated, the appropriate State office will be contacted and all State requirements for handling asbestos will be met.
10	4	26-Aug-20	Maryland Department of the Environment	Amanda	Redmiles		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 and Materials Administration in accordance with COMAR 26.10. Contact the Oil Control Program at (410) 537-3442 for additional information.	Understood. Appropriate measures will be taken in compliance with applicable laws.
10	5	26-Aug-20	Maryland Department of the Environment	Amanda	Redmiles		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.	Noted.
10	6	26-Aug-20	Maryland Department of the Environment	Amanda	Redmiles		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 Resource Management Program at (410) 537-3314 for additional information regarding recycling activities.	Noted.
10	7	26-Aug-20	Maryland Department of the Environment	Amanda	Redmiles		7. The Resource Management Program should be contacted directly at (410) 537-3314 by those facilities which generate or propose to generate or handle hazardous wastes to ensure these activities are being conducted in compliance with applicable State and federal laws and regulations. The Program should also be contacted prior to construction activities to ensure that the treatment, storage or disposal of hazardous wastes and low-level radioactive wastes at the facility will be conducted in compliance with applicable State and federal laws and regulations.	Noted.
10	8	26-Aug-20	Maryland Department of the Environment	Amanda	Redmiles		8. Any contract specifying 'lead paint abatement' must comply with Code of Maryland Regulations (COMAR) 26.16.01 - Accreditation and Training for Lead Paint Abatement Services. If a property was built before 1978 and will be used as rental housing, then compliance with COMAR 26.16.02 - Reduction of Lead Risk in Housing; and Environment Article Title 6, Subtitle 8, is required. Additional guidance regarding projects where lead paint may be encountered can be obtained by contacting the Environmental Lead Division at (410) 537-3825.	Noted.
10	9	26-Aug-20	Maryland Department of the Environment	Amanda	Redmiles		9. The proposed project may involve rehabilitation, redevelopment, revitalization, or property acquisition of commercial, industrial property. Accordingly, MDE's Brownfields Site Assessment and Voluntary Cleanup Programs (VCP) may provide valuable assistance to you in this project. These programs involve environmental site assessment in accordance with accepted industry and financial institution standards for property transfer. For specific information about these programs and eligibility, please Land Restoration Program at (410) 537-3437.	Noted.
10	10	26-Aug-20	Maryland Department of the Environment	Amanda	Redmiles		10. 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 requires site approval. Contact the Mining Program at (410) 537-3557 for further details.	Noted.
10	11	26-Aug-20	Maryland Department of the Environment	Amanda	Redmiles		11. The project may cause contaminated runoff from an animal feeding operation (AFO). Please contact the AFO Division at (410) 537-4423 to determine if this AFO will require registration under the General Discharge Permit for Animal Feeding Operations.	Noted.
10	12	26-Aug-20	Maryland Department of the Environment	Amanda	Redmiles		12. The project will result in increased numbers of confined animals at this animal feeding operation (AFO) and therefore necessitate registration under the General Discharge Permit for Animal Feeding Operations. Please contact the AFO Division at (410) 537-4423 to determine if this AFO will require registration under this permit.	Noted.
11	1	26-Aug-20	Maryland National Capital Parks and Planning Commission - Prince George's County	Ivy	Thompson		It is recommended that pedestrian connectivity and walkability not be adversely affected with the proposed development and that facilities to make walking and bicycling safer and convenient within the BARC [Beltsville Agricultural Research Center] campus be considered, such as bicycle lanes and sidewalks along both Powder Mill Road and Beaver Dam Road.	Noted.
11	2	26-Aug-20	Maryland National Capital Parks and Planning Commission - Prince George's County	Ivy	Thompson		Landscaping should be provided in conformance with the Prince George's County Landscape Manual to the extent feasible.	Noted.