

**ENVIRONMENTAL ASSESSMENT  
FOR  
UNIVERSITY PARK RENOVATION – BUILDINGS 001, 002, 004, & 005  
PASTURE SYSTEMS AND WATERSHED MANAGEMENT  
RESEARCH UNIT**

U.S. Department of Agriculture – Agricultural Research Service  
University Park, Pennsylvania

February 2022

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**FINDING OF NO SIGNIFICANT IMPACT  
ENVIRONMENTAL ASSESSMENT  
University Park Renovations Buildings 001, 002, 004, & 005  
Pasture Systems and Watershed Management Research Unit**

U.S. Department of Agriculture- Agricultural Research Service  
University Park, Centre County, Pennsylvania

**Name of the Proposed Action:** Proposed modernization of University Park buildings, Building 001, 002, 004, and 005 for the United States Department of Agriculture-Agricultural Research Service (USDA-ARS) at University Park in Centre County, Pennsylvania.

**Purpose and Need:** The purpose of the Proposed Action is to modernize and renovate Buildings 001, 002, 004, and 005. Renovations would include extensive interior renovations along with some building exterior upgrades and minor site work.

The Proposed Action is needed to provide adequate working space to meet programmatic requirements for Pasture Systems and Watershed Management Research Unit (PSWMRU) personnel working within the buildings.

**Description of Proposed Action:** The Proposed Action includes the renovations of Buildings 001, 002, 004, and 005 at University Park on the Pennsylvania State University campus. The Proposed Action includes extensive renovations to the building interiors including demolition and reconstruction of laboratories and administrative spaces; addition of an elevator and emergency generator; addition of handicapped parking spaces to meet Americans with Disabilities Act (ADA) requirements; and updates to the electrical, telecommunications, mechanical (heating, ventilation, and air conditioning [HVAC] and plumbing), and life safety systems. Other planned renovations include building exterior upgrades that comply with historic preservation guidelines (roof, walls, floor, fenestration) and minor site work.

The Proposed Action, in total, includes the renovations of approximately 31,000 gross square feet of laboratory, office, and headhouse space for approximately 40 to 45 people. This space includes the renovation of wet laboratories, dry laboratories, greenhouses, and shared spaces.

Up to two temporary trailers would be placed next to Headhouse #4 along Tower Road to be used as storage for PSWMRU materials during renovations. Existing buildings, either on the Pennsylvania State University campus or off campus, would be utilized for temporary swing space for office and laboratory functions that would be displaced during renovations.

**Alternatives Evaluated:** An Environmental Assessment (EA) has been prepared to evaluate the potential environmental, cultural, and socioeconomic effects associated with the Proposed Action and the No Action Alternative.

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 all four buildings would remain unchanged for the foreseeable future. Operations at the buildings would continue as is, without renovations.

**Anticipated Impacts:** The analysis within this EA concluded the following impacts would occur under the Proposed Action:

**No expected impacts:** land use; socioeconomics, environmental justice, and protection of children; geology; surface water, ground water, floodplains, and wetlands; rare, threatened, and endangered species; and health and public safety.

**Minor adverse impacts:** topography and soils; prime farmland; vegetation; biological resources; cultural resources; transportation; utilities; hazardous and toxic materials and waste (HTMW); aesthetics and visual resources; air quality; and noise.

**Minor beneficial impacts:** stormwater.

**Public Involvement:** Agency consultation letters were sent out on [DATE] to interested parties to review the Draft EA and Draft Finding of No Significant Impact (FNSI). The Draft EA and Draft FNSI were made available for public review and agency comments for 30 days starting on [DATE] via the USDA website <https://www.ars.usda.gov/northeast-area/docs/environmental-assessment/> and hard copies were available upon request. A Notice of Availability (NOA) of the Draft EA and Draft FNSI was published in the *Centre Daily News* and mailed to interested agencies/parties. All comments received were reviewed and addressed as appropriate in 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 nor have significant impacts 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.

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Dr. Thomas Shanower  
Northeast Area Director, ARS  
U.S. Department of Agriculture

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Date

## EXECUTIVE SUMMARY

The U.S. Department of Agriculture-Agricultural Research Service (USDA-ARS) is proposing to modernize Buildings 001, 002, 004, and 005 at University Park in State College, Centre County, Pennsylvania. The modernization of the buildings would provide adequate working space to meet programmatic requirements for the Pasture Systems and Watershed Management Research Unit (PSWMRU) personnel working within the buildings.

This Environmental Assessment (EA) was prepared in accordance with the National Environmental Policy Act (NEPA), as amended (42 United States Code [USC] § 4321, et seq.); 40 Code of Federal Regulations (CFR) Parts 1500-1508 (51 FR 34191, 1986); and 7 CFR 520.

The purpose of this EA is to inform decision makers and the public of the likely environmental consequences of the Proposed Action. This EA identifies, documents, and evaluates the potential impacts of the renovations of Buildings 001, 002, 004, and 005 and the placement of two temporary trailers next to Headhouse #4 along Tower Road, as well as the potential impacts of the No Action Alternative.

The impacts of the Proposed Action would be minor and primarily short-term adverse impacts associated with construction-related activities. These impacts would be mitigated to the extent feasible. Buildings 001, 002, 004, and 005 are not listed as eligible for the National Register of Historic Places (NRHP), but they are considered to be of significance by the USDA-ARS for their contribution to the historic area in which they lie. Through consultation with the Pennsylvania State Historic Preservation Office (SHPO), mitigation measures will be taken to ensure minimal disturbance to the aesthetics of the historic buildings. The Proposed Action would have no effect under Section 106 of the National Historic Preservation Act (NHPA).

Careful design, the use of good engineering, best management practices (BMPs), 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

ACM	Asbestos-Containing Material
ADA	Americans with Disabilities Act
AIRFA	American Indian Religious Freedom Act
APE	Area of Potential Effect
ARPA	Archaeological Resource Protection Act of 1979
BGEPA	Bald and Golden Eagle Protection Act
BMP	Best Management Practices
CAA	Clean Air Act
CCTV	Closed Circuit Television
CEQ	Council of Environmental Quality
CFR	Code of Federal Regulations
CH <sub>4</sub>	Methane
CO	Carbon Monoxide
CO <sub>2</sub>	Carbon Dioxide
dB	Decibels
dBA	A-weighted Decibels
EA	Environmental Assessment
EIS	Environmental Impact Statement
EO	Executive Order
EPA	Environmental Protection Agency
ESA	Endangered Species Act
FNSI	Finding of No Significant Impact
GHG	Greenhouse Gases
HTMW	Hazardous and Toxic Materials and Waste
IPaC	Information for Planning and Consultation
kVA	Kilovolt-ampere
LBP	Lead-Based Paint
LED	Light-Emitting Diode
LOD	Limit of Disturbance
MBTA	Migratory Bird Treaty Act
MSL	Mean Sea Level
N <sub>2</sub> O	Nitrous Oxide
NAAQs	National Ambient Air Quality Standards
NAGPRA	Native American Graves Protection and Repatriation Act of 1979
NEC	National Electric Code
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NLEB	Northern Long Eared Bat
NMFS	National Marine Fisheries Service
NOA	Notice of Availability
NOI	Notice of Intent
NO <sub>x</sub>	Nitrous Oxides
O <sub>3</sub>	Ozone

PA DCNR	Pennsylvania Department of Conservation and Natural Resources
PA DEP	Pennsylvania Department of Environmental Protection
Pb	Lead
PFBC	Pennsylvania Fish & Boat Commission
PHMC	Pennsylvania Historical & Museum Commission
PM <sub>10</sub>	Particulate Matter Less than 10 microns
PM <sub>2.5</sub>	Particulate Matter Less than 2.5 microns
PNDI	Pennsylvania Natural Diversity Inventory
PNHP	Pennsylvania National Heritage Program
PSWMRU	Pasture Systems and Watershed Management Research Unit
RCRA	Resource Conservation and Recovery Act
RTE	Rare, Threatened, and Endangered
SAMH	Sanitary Manhole
SO <sub>2</sub>	Sulfur Dioxide
TSCA	Toxic Control Substances Act
USC	United States Code
USDA-ARS	U.S. Department of Agriculture – Agricultural Research Service
USFWS	U.S. Fish & Wildlife Service
V	Volt

# 1 PURPOSE OF AND NEED FOR THE PROPOSED ACTION

## 1.1 Introduction

The U.S. Department of Agriculture-Agricultural Research Service (USDA-ARS) is undertaking a modernization effort for the Pasture Systems and Watershed Management Research Unit (PSWMRU) buildings located at 3702 Curtin Road on the Pennsylvania State University campus in University Park, Pennsylvania. This project will include the renovation of four PSWMRU buildings at this site – Building 001 (greenhouse), Building 002 (greenhouse), Building 004 (laboratory/office), and Building 005 (headhouse) – and the placement of up to two temporary trailers next to Headhouse #4 along Tower Road to be used as storage for PSWMRU materials during renovations.

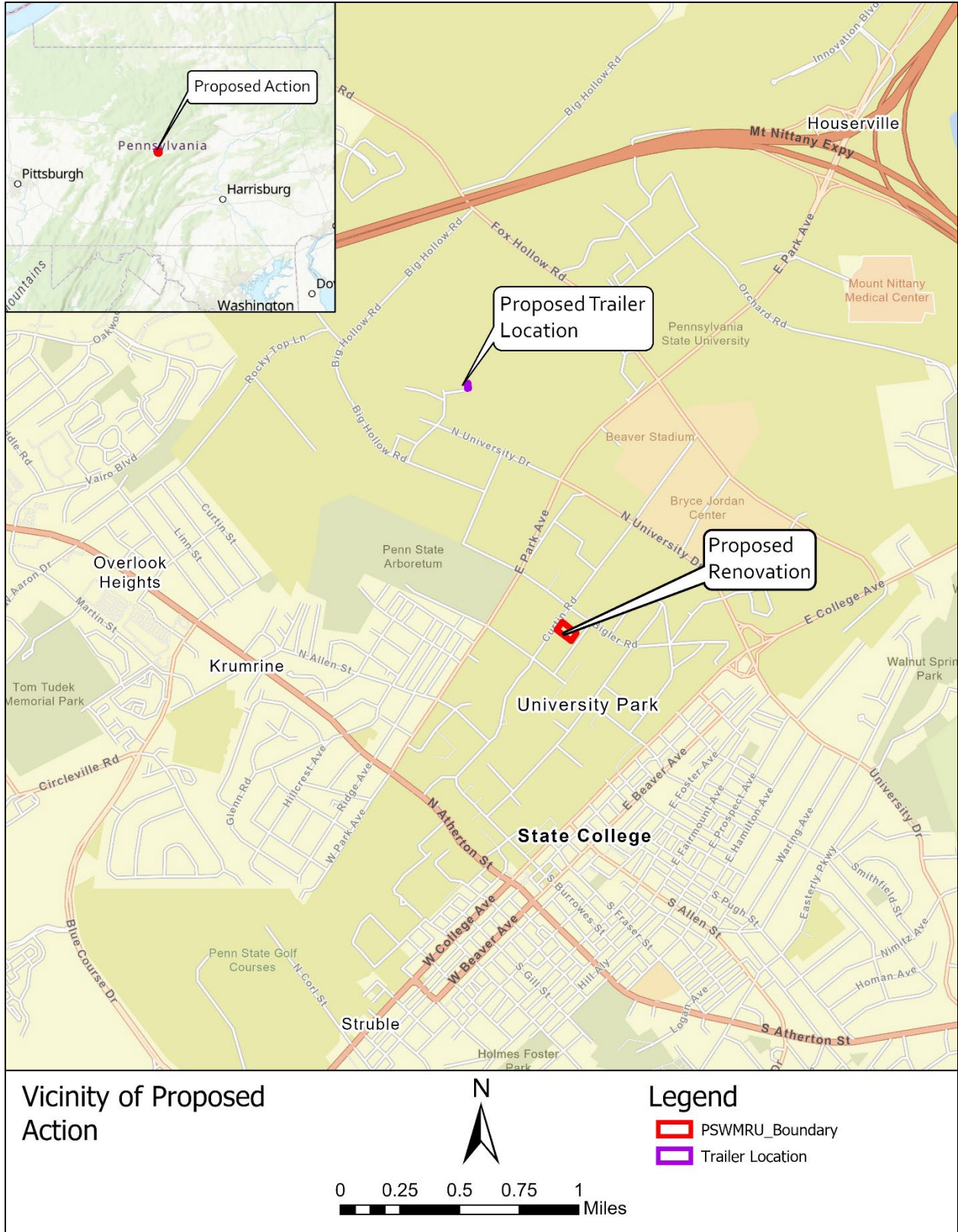
This Environmental Assessment (EA) was prepared to evaluate the potential environmental impacts of the PSWMRU building renovations, in compliance with the National Environmental Policy Act of 1969 (NEPA) (42 United States Code [USC] 4321, et seq.), the regulations of the President’s Council on Environmental Quality (CEQ) that implement NEPA procedures (40 Code of Federal Regulations [CFR] 1500-1508), and USDA-ARS’s NEPA-implementing regulations (7 CFR 520, et seq.).

University Park is in the northcentral portion of State College, Pennsylvania, in southcentral Centre County, Pennsylvania (Figure 1-1). University Park is home to the Pennsylvania State University, along with several other tenants, including USDA-ARS. USDA-ARS conducts research and laboratory operations at University Park, and the renovations of the PSWMRU buildings will allow the PSWMRU to complete more effectively its mission of supporting environmentally and economically sustainable farming in the northeastern U.S. by improving agroecosystem management.

## 1.2 Purpose and Need

The *purpose* of the Proposed Action is to modernize and renovate Buildings 001, 002, 004, and 005. These buildings are all connected on the same site. Renovations would include extensive interior renovations along with some building exterior upgrades and minor site work. The Proposed Action is needed to provide adequate working space to meet programmatic requirements for PSWMRU personnel working within the buildings.

The Proposed Action is *needed* for the USDA-ARS to accommodate changing research, laboratory, and administrative needs of the PSWMRU team.



**Figure 1-1: Vicinity Map**

## **1.3 Scope of the Environmental Assessment**

This EA evaluates the direct and indirect impacts associated with the renovation of the four PSWMRU buildings and the placement of the temporary trailers, in accordance with NEPA and the CEQ NEPA implementing regulations. This document identifies and evaluates the potential environmental, cultural, and socioeconomic impacts associated with the implementation of the Proposed Action and the No Action Alternative.

The EA focuses on impacts likely to occur within the proposed areas of development, including Buildings 001, 002, 004, and 005, and the vicinity of Headhouse #4 on Tower Road. The Proposed Action is discussed in further detail in Section 2.1, and the proposed project locations are shown in Figures 2-3 and 2-4.

This document analyzes direct impacts (those resulting from the alternatives and occurring at the same time and place) and indirect impacts (those distant or occurring at a future date) of the implementation of the Proposed Action. Compliance with applicable state and Federal statutes, standards, and directives pertinent to the Proposed Action were considered during the preparation of this EA.

Under the guidance provided in NEPA, 40 CFR 1500-1508, and 7 CFR 520, either an EA or an Environmental Impact Statement (EIS) must be prepared for any Federal action. Actions that are determined to be exempt by law, emergencies, or categorically excluded do not require the preparation of an EA or EIS, but the decision and analyses would be documented in a Record of Environmental Consideration if required. An EA provides sufficient evidence and analysis for determining whether or not to prepare an EIS. If an action may significantly affect the environment, an EIS would be prepared. 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 implementation of the Proposed Action and the No Action Alternative, which includes direct and indirect impacts, as well as qualitative and quantitative (where possible) assessments 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-ARS determines that this Proposed Action may have a significant impact on the quality of the human environment, an EIS will be prepared.

## **1.4 Interagency/Intergovernmental Coordination and Consultations**

### ***1.4.1 Interagency Coordination and Consultations***

Scoping is an early and open process for developing the breadth of issues to be addressed in the EA and for identifying significant concerns related to a Proposed Action. Per the requirements of the Intergovernmental Cooperation Act of 1968 (42 USC 4231(a)) and Executive Order (EO) 12372, *Intergovernmental Review of Federal Programs*, Federal, state, and local agencies with jurisdiction that could be affected by the Proposed Action were notified during the development of this EA.

USDA-ARS initiated consultation with the following agencies for the proposed project: the United States Environmental Protection Agency (USEPA), United States Fish and Wildlife Service (USFWS), Pennsylvania Historical & Museum Commission (PHMC), Pennsylvania Department of Conservation and Natural Resources (PA DCNR), Pennsylvania Department of Environmental Protection (PA DEP), Pennsylvania Fish & Boat Commission (PFBC), Pennsylvania Game Commission, and Pennsylvania National Heritage Program (PNHP).

Appendix A contains copies of agency correspondence obtained during this analysis.

#### **1.4.2 Government to Government Consultations**

EO 13175, *Consultation and Coordination with Indian Tribal Governments*, directs Federal agencies to coordinate and consult with Native American tribal governments whose interests might be directly and substantially affected by activities on federally administered lands. The tribal consultation process is distinct from NEPA consultation or the interagency coordination process, and it requires separate notification of all relevant tribes. The timelines for tribal consultation are also distinct from those of other consultations.

USDA-ARS initiated consultation with the following tribal governments for this proposed undertaking: Delaware Nation, Delaware Tribe of Indians, Oneida Indian Nation, Onondaga Nation, Saint Regis Mohawk Tribe, Seneca-Cayuga Nation, and Tuscarora Nation.

The consultation correspondence with Native American tribal governments regarding this proposed undertaking is included in Appendix A.

#### **1.4.3 Other Agency Consultations**

Per the requirements of Section 106 of the National Historic Preservation Act (NHPA) and implementing regulations (36 CFR Part 800); Section 7 of the Endangered Species Act (ESA) and implementing regulations; and the Migratory Bird Treaty Act (MBTA); findings of effect and request for concurrence were transmitted to PHMC and USFWS.

Concurrence indicating a finding of no adverse effect to historic properties for the renovation of the PSWMRU buildings was sent by the PHMC on 28 June 2021. On 30 November 2021, a report was generated through the Information for Planning and Conservation (IPaC) system, the USFWS online system for searching for species protected under the ESA. The IPaC report noted four federally listed species with potential to occur within the project area. Further coordination with the PA DCNR, Pennsylvania Game Commission, and PFBC through the Pennsylvania Natural Diversity Inventory (PNDI) determined there would be no known impacts to state-listed threatened or endangered species.

Correspondence regarding the findings, and concurrence and resolution of any adverse impact is included in Appendix A.

### **1.5 Public and Agency Review of EA**

A Notice of Availability (NOA) of the Draft EA and FNSI was published in the newspapers of record (listed below), announcing the availability of the Draft EA for review on [date]. The NOA invited the public to review and comment on the Draft EA. The public and agency review period ended on [date]. The NOA and public and agency comments are provided in Appendix A.



The NOA was published in the *Centre Daily Times*. Electronic copies of the EA and Draft FNSI were made available for review on the USDA environmental website, <https://www.ars.usda.gov/northeast-area/docs/environmental-assessment/>. The Draft EA and Draft FNSI were also available by request from USDA-ARS and hard copies were placed in the following public library:

- Schlow Centre Region Library, 211 S. Allen Street, State College, PA 16801

Comments received during the 30-day public review period have been addressed and documented in the final EA, as appropriate. All coordination letters and responses received during the preparation of this EA are located in Appendix A.

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## 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 1502.14, the purpose of this chapter is to sharply define the differences between the alternatives.

### 2.1 Proposed Action

The Proposed Action includes the renovations of Buildings 001 (greenhouse), 002 (greenhouse), 004 (laboratory/office), and 005 (headhouse) at 3702 Curtin Road in University Park, Pennsylvania (Figures 2-1 and 2-2). This alternative includes extensive renovations to the building interiors, including demolition and reconstruction of laboratories and administrative spaces; addition of an elevator, emergency generator, and more handicapped parking spaces; and updates to the electrical, telecommunications, mechanical (heating, ventilation, and air conditioning [HVAC] and plumbing), and life safety systems. Other planned renovations include building exterior upgrades that comply with historic preservation guidelines (roof, walls, floor, fenestration), the addition of an emergency generator, and minor site work.

The Proposed Action, in total, includes the renovations of approximately 31,000 gross square feet of the PSWMRU laboratory, office, and headhouse space for approximately 40 to 45 people. This space includes the renovation of wet laboratories, dry laboratories, greenhouses, and shared spaces.



**Figure 2-1: Buildings 004 and 005; Photographer facing southeast**



**Figure 2-2: Buildings 001 and 002; Photographer facing northeast**

A map of the Pasture Research Building locations is shown in Figure 2-3.

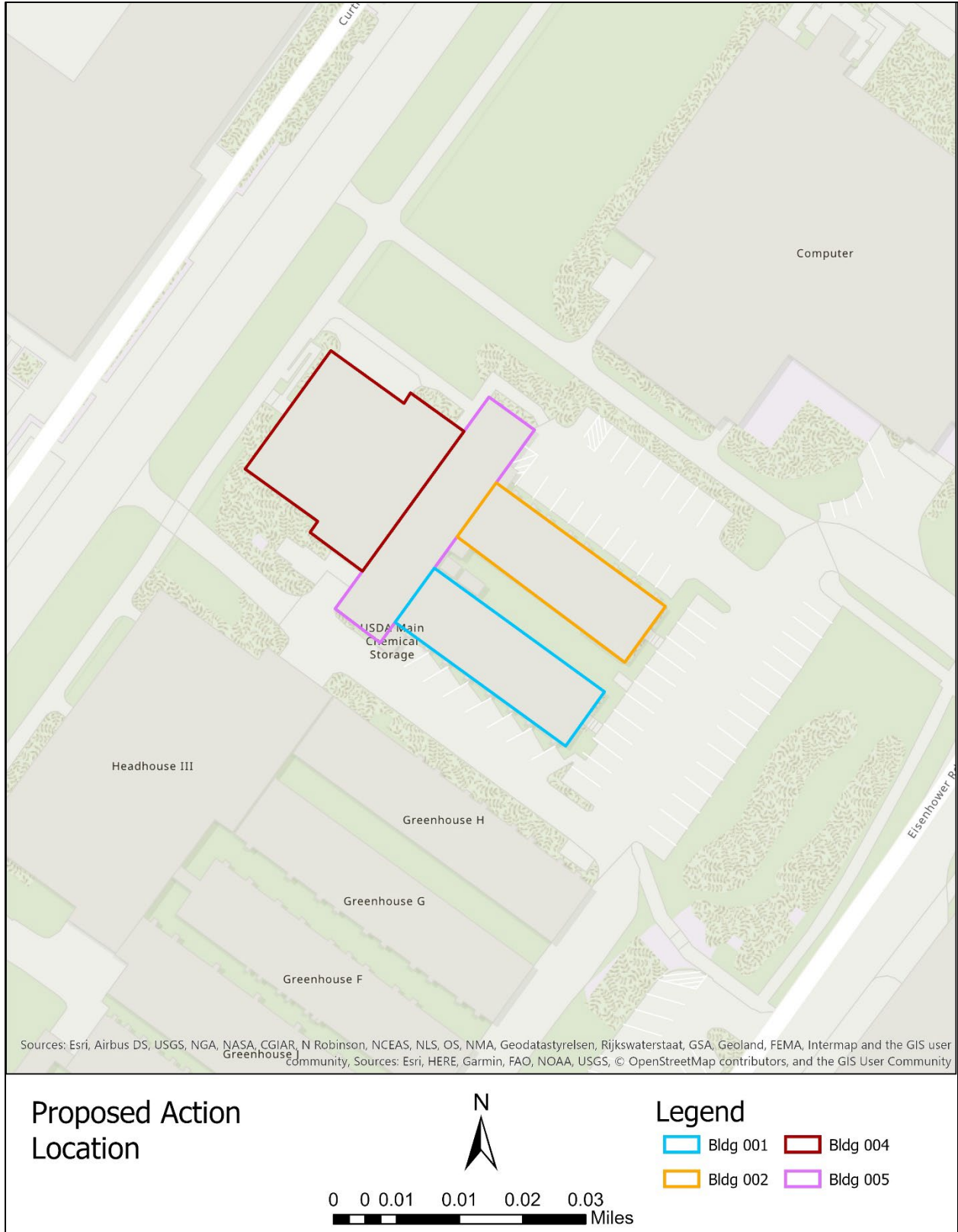
Also, as part of the Proposed Action, up to two temporary trailers would be placed next to Headhouse #4 along Tower Road to be used as storage for PSWMRU materials during renovations. A map of the proposed location for the temporary trailers is shown in Figure 2-4. Existing buildings, either on the Pennsylvania State University campus or off campus, would be utilized for temporary swing space for office and laboratory functions that would be displaced during renovations.

## **2.2 No Action Alternative**

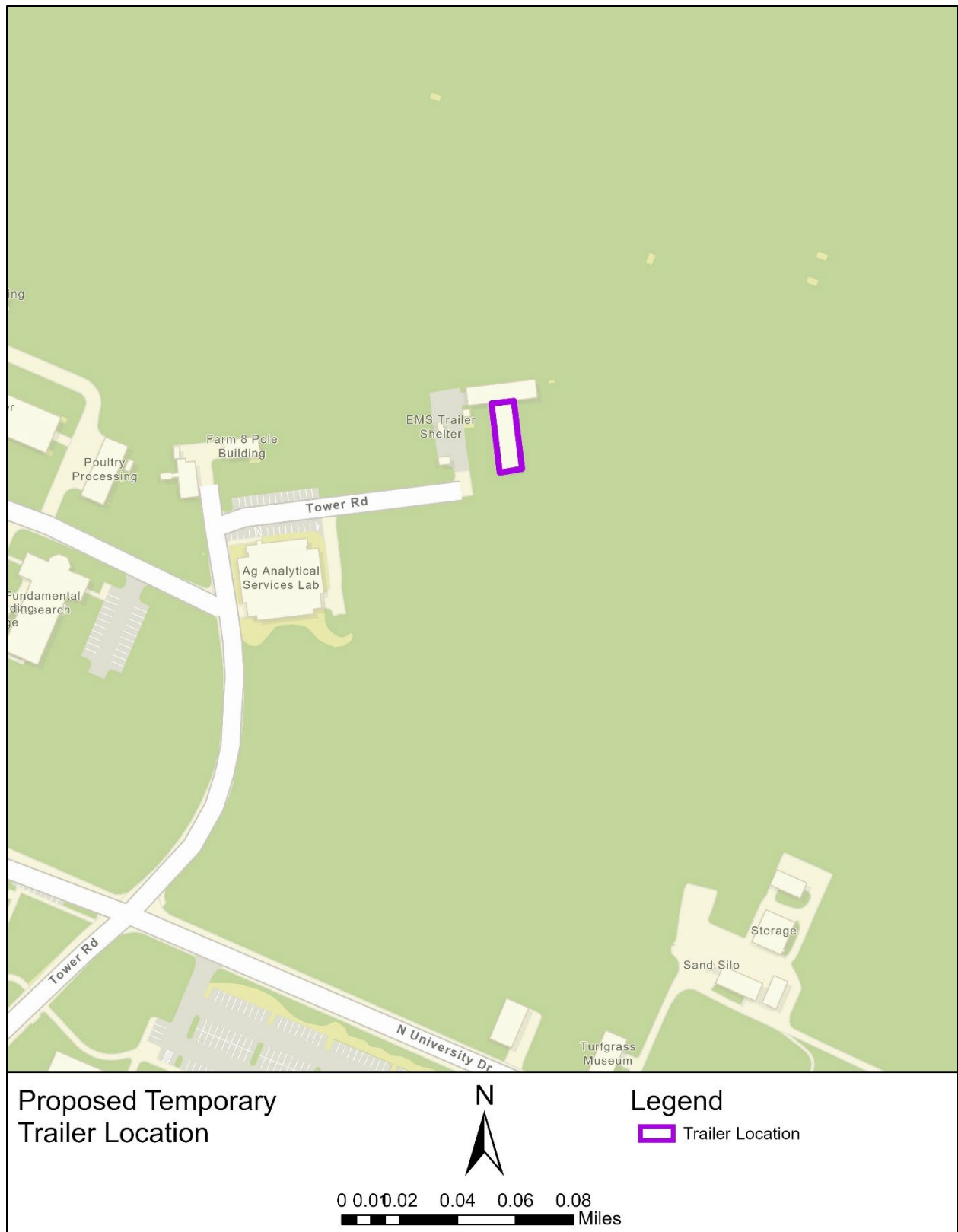
In accordance with CEQ NEPA implementing regulations and 7 CFR 520, the No Action Alternative must be taken into consideration in the NEPA analysis. This alternative provides a baseline against which the action alternatives can be measured.

The No Action Alternative in this EA is for Buildings 001, 002, 004, and 005 to remain in their current state, with no renovations or upgrades, and no temporary trailers would be placed next to Headhouse #4 along Tower Road. The laboratory and research spaces, administrative areas, and greenhouses would not be altered. Outdated building systems and exteriors would also not be altered under this alternative.

The No Action Alternative does not meet the operational needs of USDA-ARS, nor does it meet Americans with Disabilities Act (ADA) accessibility requirements; however, this alternative is evaluated further in this EA in accordance with CEQ NEPA regulations.



**Figure 2-3: Proposed Action Location Map**



**Figure 2-4: Temporary Trailer Proposed Location Map**

### 3 ENVIRONMENTAL IMPACTS OF THE PROPOSED PROJECT

Chapter 3 describes existing resources 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.

To the extent possible, analyses of the various resources presented in this EA are streamlined based on the anticipated level of potential impact. The focus of this EA is on the potential environmental impacts associated with the Proposed Action. The following resource areas are not analyzed in this EA because the Proposed Action has no potential to affect them:

- **Land Use:** The Proposed Action involves renovation of existing buildings, so no changes to or impacts to land use are expected;
- **Airspace:** This Proposed Action is not located within any restricted airspace, and the renovations would not have any impact on airspace; and
- **Socioeconomics, Environmental Justice, and Protection of Children:** The Proposed Action is not expected to bring any additional workforce to the area or have any other impact on socioeconomics, it is not an environmental justice community, and there are no residences, schools, or other facilities in the vicinity of the project that cater to children.

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.

#### 3.1 Topography, Geology, and Soils

##### 3.1.1 Existing Conditions

###### Topography

The PSWMRU is located within State College, Pennsylvania in the ridge and valley physiographic region of Pennsylvania. State College is in Centre County, located at the center of the state. Buildings 001, 002, 004, and 005 are in the central portion of the campus along Curtin Road. The topography gently slopes to the south, with the buildings resting at approximately 1,200 feet above mean sea level (MSL) according to the State College Quadrangle 7.5-minute United States Geological Survey (USGS). The proposed trailer site is in the western portion of the campus at the end of Tower Road. The topography is relatively flat, with the former greenhouse site where the trailers are proposed to be located at approximately 1,400 feet above MSL according to the State College Quadrangle 7.5-minute USGS.

###### Geology

The Proposed Action is located in the ridge and valley region of Pennsylvania. The Ridge and Valley Province reaches a maximum width of about 80 miles in central Pennsylvania and is bounded by the higher land surfaces of the Blue Ridge and the Piedmont Provinces on the southeast and the Appalachian Plateaus Province on the northwest. This area is characterized by a series of northeast-southwest trending synclines and anticlines composed of Early Paleozoic sedimentary

rocks. Limestones and shales are more susceptible to erosion and make up much of the valleys, whereas more resistant sandstones and conglomerates form the ridges. This folded stratum is the result of the compression associated with the assembly of the supercontinent Pangea and the various mountain building events that produced the Appalachian Mountains. Many of these folds are plunging, meaning that the axes (fold creases) are not horizontal but are tilted to the northeast or southwest. At the southernmost extent, the Ridge and Valley appears to plunge beneath the Coastal Plain province. Erosion of this folded and tilted terrain has produced a trellis drainage pattern (National Park Service [NPS], 2018).

### Soils

The soils within the limit of disturbance (LOD) for the PSWMRU portion of the Proposed Action are 85.5 percent Urban land-Hagerstown complex, gently sloping. Urban land-Hagerstown complex, gently sloping, is not prime farmland soil. This soil is a well-drained soil that occupies valley floors and the adjacent hills. Hagerstown silt loam, 3 to 8 percent slope, represents 11 percent of the proposed area soil and Hagerstown silt loam, 0 to 3 percent slope, represents 3.4 percent of the LOD's soil (Figure 3-1) (U.S. Department of Agriculture [USDA], 2020). Both soils are well-drained, form on hillslopes, and are considered prime farmland soil. None of these soils are considered hydric (USDA, 1993).



**Figure 3-1: PSWMRU Building Soils**

HaA = Hagerstown silt loam, 0 to 3 percent slopes  
HaB = Hagerstown silt loam, 3 to 8 percent slopes  
URB = Urban land-Hagerstown complex, gently sloping



The soils within the LOD for the temporary trailer location portion of the Proposed Action are 100 percent Hagerstown silty clay loam, 3 to 8 percent slope, which is a well-drained, medium runoff class soil, and is also considered prime farmland (Figure 3-2) (USDA, 2020). This soil type is not considered hydric (USDA, 1993).



**Figure 3-2: Trailer Location Soils**

HcB = Hagerstown silty clay loam, 3 to 8 percent slopes

### ***3.1.2 Anticipated Impacts***

#### ***3.1.2.1 Proposed Action***

Minor adverse impacts could occur to topography and soils. No adverse impacts would occur to geology.

#### **Topography**

Minor adverse impacts to topography could occur under the Proposed Action. Grading may occur at both the PSWMRU and temporary trailer sites. The only potential grading to take place at the PSWMRU site would be to add handicapped parking and an emergency generator. This grading would be minor and would be designed for low maintenance and provide sufficient slope for surface runoff. The area proposed for renovation and construction is currently developed; therefore, minimal undeveloped land would be impacted during renovation and construction. The majority of the Proposed Action involves interior renovations of the PSWMRU Buildings and some exterior upgrades that would not involve changes in topography. The temporary trailer site could require some minor grading prior to trailer placement.

## Geology

No adverse impacts would occur to geology. No construction activity would involve ground-breaking to the depth at which geology would be affected.

## Soils

Soils could incur minor adverse impacts under the Proposed Action. Minimal ground-breaking activity would occur at the PSWMRU site under the Proposed Action. The addition of handicapped parking as well as an emergency generator would slightly increase soil compaction within the area. The emergency generator would be placed in a 24-foot-long by 11-foot-wide area between the laboratory building (Building 004) and service generator. This area is previously disturbed and little soil impact would occur. Construction vehicles would also create more compaction within the area. However, the soils surrounding the Proposed Action are Urban land-Hagerstown complex, and thus are already disturbed soils due to the developed landscape. The soils within the trailer location could become compacted due to the trailer placement; however, this site was the previous location of a greenhouse, thus the soils are already likely compacted from that building and subsequent removal.

The project would follow the PA DEP Erosion and Sediment Pollution Control Program Manual and implement Best Management Practices (BMPs) to prevent erosion during the construction phase. General conservation practices to be utilized at the site include a silt fence and storm drain inlet protection (USDA, 2021).

### *3.1.2.2 No Action Alternative*

No adverse impacts would occur to topography, geology, and soils under the No Action Alternative. Under the No Action Alternative, no construction or renovations would occur. The PSWMRU buildings would remain as they stand and, therefore, no adverse impacts would occur.

## **3.2 Prime Farmland**

### ***3.2.1 Existing Conditions***

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).

The soils underlying the Proposed Action's PSWMRU LOD are 14.4 percent prime farmland and the soils underlying the trailer LOD are 100 percent prime farmland. Hagerstown silt loam, 3 to 8 percent slope, Hagerstown silt loam, 0 to 3 percent slope, and Hagerstown silty clay loam, 3 to 8 percent slopes, are all prime farmland soils. The soils are found along the northern and eastern edges of the PSWMRU LOD and throughout the trailer LOD.

### **3.2.2 Anticipated Impacts**

#### *3.2.2.1 Proposed Action*

Minor adverse impacts would occur to prime farmland under the Proposed Action. The farmland that does exist within the PSWMRU LOD is minimal and on the edges of the site, deeming it less likely to be affected. The soils near the PSWMRU buildings have been compacted from usage as institutional areas. The soils underlying the trailer LOD have also been compacted from the site's previous use as a greenhouse. The portions of the LODs that are prime farmland are not used for farming purposes, nor would they be under the Proposed Action.

#### *3.2.2.2 No Action Alternative*

No adverse impacts would occur under the No Action Alternative. No soils would be disturbed under this Alternative, therefore prime farmland would not be affected.

## **3.3 Water Resources**

### **3.3.1 Existing Conditions**

Water resources evaluated under the Proposed Action LOD are stormwater, surface water ground water, floodplains, and wetlands. There are no wetlands (USFWS, 2020), effective floodplains (FEMA, 2020), or surface bodies of water within or adjacent to the LODs at existing conditions. The existing ground water geologic conditions are considered non-hydric and well-drained; therefore, no aquifers would be affected. Existing stormwater infrastructure in the PSWMRU LOD consists of a series of stormwater conveyance pipes, storm drain inlets, sheet flow, roof drains, and manholes with confirmed locations. There are currently nine roof drain connections to the sanitary system that are not up to code and will be removed under the Proposed Action. These illegal roof drain connections were identified in a 2020 Utility Scoping Document prepared by the Pennsylvania State University's Utilities Division of the Office of Physical Plant (Pennsylvania State University [PSU], 2020).

### **3.3.2 Anticipated Impacts**

#### *3.3.2.1 Proposed Action*

##### Surface Water

Under the Proposed Action, no surface water would be affected. There are no surface water bodies within or adjacent to the project areas.

##### Ground Water

There are no ground water contamination concerns anticipated under the Proposed Action because there are no aquifers, wells, or ground water supplies assessed within or adjacent to the LOD. Due to these geologic conditions, subsurface infiltration should not be considered feasible for stormwater management practices if needed.

##### Floodplains

Under the Proposed Action, no floodplains would be affected. There are no effective floodplains within or adjacent to the project area.

## Wetlands

Under the Proposed Action, no wetlands would be affected. There are no wetlands within or adjacent to the project area.

## Stormwater

Under the Proposed Action, minor beneficial impacts to stormwater management are anticipated. Roof drains, which are not up to code, connected to the sanitary system would be removed and new roof drains would connect to nearby existing storm drain inlets. These stormwater updates would benefit the facility in terms of environmental compliance and utility management.

Stormwater updates anticipated under the Proposed Action include an updated roof drain system, with gutters located at low points and piped down to the existing underground storm system or discharged at grade. Although modifications to the existing underground storm system are not anticipated, the Proposed Action should be assessed for any potential changes to water quality and quantity. Surface drainage changes from roof leader discharge should also be assessed to ensure grading provides sufficient slope for surface runoff. It is anticipated that stormwater management practices will not be needed under the Proposed Action since there is no significant addition of impervious areas. However, the manual for PA DEP's Pennsylvania BMPs should be followed if applicable.

During construction, storm drain inlet protection should be used in accordance with PA DEP, Erosion and Sediment Pollutant Control Program Manual to minimize construction related pollutants and runoff. Other BMPs will also be implemented, as appropriate. Additionally, with approximately 23,000 square feet of space to be renovated, this project must have a stormwater plan that preserves the predevelopment hydrology in accordance with EPA's Technical Guidance for EISA Section 438 Storm Water Management ([http://www.epa.gov/greeningepa/documents/epa\\_swm\\_guidance.pdf](http://www.epa.gov/greeningepa/documents/epa_swm_guidance.pdf)).

### *3.3.2.2 No Action Alternative*

Under the No Action Alternative, roof drains that are not up to current code would continue to discharge water to the sanitary system. No other adverse effects would occur to water resources.

## **3.4 Biological Resources**

### ***3.4.1 Existing Conditions***

#### Vegetation

State College, Pennsylvania is a part of the ridge and valley region of Pennsylvania, which typically consists of Appalachian oak forests. These forests are generally dominated by oak species, especially chestnut oak (*Quercus montana*), white oak (*Quercus alba*), northern red oak (*Quercus rubra*), black oak (*Quercus velutina*), and scarlet oak (*Quercus coccinea*), with varying amounts of hickory (*Carya* spp.), black gum (*Nyssa sylvatica*), red maple (*Acer rubrum*), and other species such as white pine (*Pinus strobus*) and white ash (*Fraxinus americana*).

However, the project areas are developed, no longer containing tracts of forest. The campus is largely maintained and manicured. The PSWMRU buildings are in a developed space, surrounded by ornamental plantings. The surrounding area is mowed lawn with spaced large trees, and some shrubbery. Expanding outside of the LOD, the buildings are surrounded by roads, other buildings,

and maintained lawn habitat. The Tower Road area where the trailers would be located is also a developed area, and is bordered by mowed lawn with several copses of large trees nearby and some farm fields just to the north.

### Rare, Threatened, and Endangered Species

The ESA 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 RTE.

Most avian species native to the United States are protected under the 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.

Based on the USFWS's Information for Planning and Consultation (IPaC), the Indiana bat (*Myotis sodalis*), and northeastern bulrush (*Scirpus ancistrochaetus*) are federally listed endangered species within the limits of the Proposed Action (USFWS, 2021). The northern long-eared bat (NLEB) (*Myotis septentrionalis*) is the only federally listed threatened species within the limits of the Proposed Action (USFWS, 2021). The Pennsylvania State campus as a whole contains habitat suitable for the Indiana bat and NLEB. The monarch butterfly (*Danaus plexippus*) is a candidate species that is also listed on the IPaC for this project area.

There are 16 species of migratory birds that can be found in Centre County or in the vicinity of the Pennsylvania State campus (USFWS, 2021). However, based on the proposed project site and the habitat requirements of these migratory birds, it is unlikely that these birds would be found on the Proposed Action site. No known bald or golden eagles or nests are known to exist in the area.

### **3.4.2 Anticipated Impacts**

#### *3.4.2.1 Proposed Action*

Minor impacts to biological resources could occur under the Proposed Action

The proposed PSWMRU site is a previously disturbed area with little vegetation or environmental resources for wildlife. The area does contain some mature trees that could attract smaller urban animals such as chipmunks, squirrels, and certain species of birds. However, the majority of the site is mowed grass and provides little habitat or resources for wildlife. Local wildlife that exists on site would be temporarily disturbed during the construction phase. These impacts would be temporary and any wildlife that is disturbed by increased human activity and noise levels from heavy equipment during construction would likely return once construction is complete and additional personnel and machines needed for construction have left.

The proposed trailer location is surrounded by many mature trees that could provide suitable habitat for mammal and bird species; however, the site itself is completely developed. Additionally, aside from the placement and removal of the trailers, no work would be done on this site, so impacts to biological resources would be negligible at this site.

### Vegetation

Minor adverse impacts to vegetation would be expected to occur under the Proposed Action. Existing, mature trees at the PSWMRU site would be protected during construction. They contribute to the overall aesthetic of the buildings as well as provide beneficial impacts to the site, reinforcing the need for protection of the natural features of the site. Some removal of small bushes may be required to access the necessary structures. Any plantings that are removed would be replaced. Vegetation would be protected as much as possible. Any grasses disturbed during construction would be replanted with native grasses, so impacts would be minor. No impacts to vegetation would be expected at the trailer location.

### Rare, Threatened, and Endangered Species

The Proposed Action would not entail the removal of mature trees. In addition, NLEBs have not been recorded on the site nor are they likely to exist on the site due to a lack of suitable habitat. However, if tree removal did become necessary at the PSWMRU site, it 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, 2020). 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.*).

No adverse impacts would occur to migratory birds under the Proposed Action. Migratory birds are unlikely to occur on the PSWMRU site due to the present habitat. In addition, the Proposed Action does not entail the removal of habitat for migratory birds. However, any 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.

#### *3.4.2.2 No Action Alternative*

No adverse impacts to biological resources would occur under the No Action Alternative. Under this alternative, no construction or renovations would occur. Biological resources would remain undisturbed and would continue to be maintained in the same manner they are currently maintained.

## 3.5 Cultural Resources

### 3.5.1 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. These laws and regulations have been established to manage cultural resources.

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 the Proposed Action would include the limits of the proposed ground disturbance and those areas from which the Proposed Action is visible. The PSWMRU buildings have never been formally evaluated for inclusion in the NRHP; however, USDA-ARS considers the buildings as contributing elements to the historic university campus and is sensitive to ensuring that exterior renovations to the buildings are in keeping with the university campus setting and surrounding agricultural research buildings. Headhouse #4 next to the proposed trailer location has also not been formally evaluated for inclusion in the NRHP.

#### Archaeological Resources

Archaeological resources consist of locations where prehistoric or historic activity measurably altered the earth or produced deposits of physical remains. There are no known archaeological resources within the Proposed Site.

### 3.5.2 Anticipated Impacts

#### 3.5.2.1 Proposed Action

Under the Proposed Action, minor impacts would occur to the PSWMRU buildings. Based on a review of existing documentation, photographs and as-built drawings, USDA-ARS has determined that no historic properties would be adversely affected by the Proposed Action.

Consultation with the PA SHPO is ongoing to ensure PSWMRU renovations preserve the historic aesthetic of the PSWMRU buildings as much as possible. Although the PSWMRU buildings are not listed in the NRHP, the USDA-ARS considers the buildings to be contributing entities to the historical district of the university campus. Due to this, special sensitivity shall be shown in altering and retrofitting the PSWMRU buildings to preserve and highlight their architectural integrity. The improvement design will make no major impact on the character-defining features which make the structure significant in accordance with the NHPA. All replacements of features, including windows, would be in-kind replacements in keeping with architectural preservation. The Proposed Action is a “gut and rehabilitate” project, leaving all the fundamental architectural features of the buildings in place.

While Headhouse #4 along Tower Road has not been formally evaluated for NRHP listing, the headhouse itself will not be altered and the trailers to be placed next to the headhouse will be

removed upon completion of the PSWMRU renovations. Therefore, any viewshed impacts to Headhouse #4 would be negligible.

### Archaeological Resources

The PA SHPO determined no archaeological resources exist within the proposed PSWMRU area in a letter dated 4 June 2021 (included in Appendix A); however, consultation is ongoing regarding USDA-ARS's determination that no archaeological resources exist within the proposed trailer location. Pending PA SHPO concurrence, archaeological resources will not be affected by this undertaking. Proposed ground disturbance around the buildings would take place in areas that have been previously disturbed and have a low potential to contain significant archaeological resources. 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.

#### *3.5.2.2 No Action Alternative*

Under the No Action Alternative, no adverse effects would occur to the PSWMRU buildings. The buildings would continue to be undisturbed and no changes to their architecture or aesthetic would be undertaken.

## **3.6 Transportation**

### ***3.6.1 Existing Conditions***

The PSWMRU buildings are located approximately 1.33 miles from Highway 322, the Mount Nittany Expressway. The proposed site is also approximately 1.32 miles from State Highway 99. The buildings are accessible from State Highway 99 via Park Avenue or Highway 322 via East College Avenue. The buildings are surrounded by multiple roads, many of which provide access, including Shortlidge Road, Bigler Road, and Eisenhower Road. The college bus transit system (Central Area Transportation Authority) provides access to the buildings via a bus stop two blocks northeast on Curtin Road. There is an Amtrak station located on the west end of the campus that provides transit to multiple other destinations. There are three private bus companies that provide transportation services on campus to out of town destinations.

Three parking lots currently surround the buildings and contain 50 parking spaces at minimum, which provides adequate parking spaces for the buildings' use. Currently, there is only one handicapped parking space for the PSWMRU buildings.

The trailer location is only accessible via Tower Road, which can be accessed via North University Drive or Big Hollow Road. There is one parking lot next to the trailer location, which contains about 10 parking spots.

### ***3.6.2 Anticipated Impacts***

#### *3.6.2.1 Proposed Action*

Due to the size and nature of the Proposed Action, minor adverse impacts to transportation would be expected within the PSWMRU area. Any increase in traffic on the Pennsylvania State University campus due to construction equipment would be temporary in nature and minimal. No long-term adverse impacts would occur.



In the short term, minor impacts to traffic traveling on the local roads would occur due to the temporary increase in vehicles and large equipment accessing the proposed site and traveling to the site during construction and renovation activities. Increased vehicle and heavy equipment traffic could cause minor disruptions to traffic flow during peak travel times.

There are currently small parking lots surrounding Buildings 001 and 002 on three sides. There are no plans to expand parking once renovations are complete; however, there will be some additional ADA-accessible parking added to the parking lots along Buildings 001 and 002. During renovations, the parking lots surrounding Buildings 001 and 002 may be used as lay down areas for materials and disposal bins, and/or for construction worker parking. Parking is expected to be temporarily affected during the renovation period while construction workers and disposal bins may occupy regular parking spaces. These are limited-term issues and will have no long-term adverse impacts on traffic or parking.

No impacts to traffic or parking would be expected due to the trailer placement along Tower Road.

#### *3.6.2.2 No Action Alternative*

Under the No Action Alternative, no impacts to transportation would be expected to occur. No construction would occur at the site and, therefore, no changes to parking or traffic would take place. Under this action, the single ADA-compliant parking space and ramped access to Building 004 would remain.

### **3.7 Utilities**

#### *3.7.1 Existing Conditions*

Existing underground utilities currently serve the PSWMRU buildings. These utilities include water, sewer, steam, gas, storm lines, and electric. There are utilities in the vicinity of the trailer location; however, utilities will not be needed for the trailers, as they will only be used for storage.

#### Sanitary Sewers and Sewage Disposal System

A 6-inch diameter vitrified clay pipe sanitary sewer lateral currently serves the existing PSWMRU buildings. The pipe is in poor condition and in need of replacement. This lateral generally runs from the existing foundation of Building 004 to sanitary manhole (SAMH) 461, to SAMH 460, and to SAMH 490A. The sanitary sewer demand would be based on demand from the renovated buildings. This system is currently considered to have sufficient capacity for the existing PSWMRU buildings (USDA, 2021).

#### Potable Water

The existing PSWMRU potable water supply is provided through a 2-inch copper line, which is connected to the 12-inch ductile iron portable water main within Curtin Road. There is a 6-inch cast-iron fire service potable water line connection from the PSWMRU buildings which also connects to the 12-inch main line on Curtin Road.

## Electricity

An electric primary duct bank feeds into an existing 225 kilovolt-ampere (kVA) utility transformer with a primary voltage of 12,470 just outside of the PSWMRU buildings. A secondary duct bank from the utility transformer feeds into a 2000-amp 208/120 Volt (V) switchboard, located in the existing Electric Room 18. There is no stand-by generator or lightning protection system.

### **3.7.2 Anticipated Impacts**

#### *3.7.2.1 Proposed Action*

Minor, short-term adverse impacts to utilities would be expected to occur under the Proposed Action. No impacts would be expected in the vicinity of the trailer location.

## Sanitary Sewers and Sewage Disposal System

The current sanitary system is sufficient for the PSWMRU buildings. However, the 6-inch lateral pipe serving the PSWMRU buildings was found to have cracks. The Proposed Action would include new plumbing fixtures, including those for neutralized laboratory waste. Potentially increased demand and cracks in the pipe would require the replacement of the 6-inch lateral pipe flowing downstream to SAMH 490A. Sanitary sewer facilities shall comply with Division 33 of the Pennsylvania State Design and Construction Standards, available at <https://opp.psu.edu/>, and all other applicable local, state and Federal codes and regulations. All discharges to the sanitary sewer system shall be in accordance with Pennsylvania State Policy SY40 – Disposal of Pollutants in University Sanitary Systems.

There may be temporary disruptions to sanitary sewer service as work is done on the system to meet the potential increase in demand and/or to replace any pipes.

## Potable Water

Under the Proposed Action, the existing PSWMRU potable water lines would be abandoned with a new combined fire and domestic line to be installed. The existing water meter would need to be replaced as well. The combined domestic and fire protection service supply should split in the mechanical room to the domestic water service and fire protection water service.

A Water Services System Modification Permit will be issued for the approved plan. The permit and installation must be followed and adhered, failure to obtain or comply with the permit, design standards, and required inspections and testing will result in refusal of activation of the water service until the requirements are met.

Temporary disruptions to potable water service would be expected during the replacement of water lines and the water meter.

## Electricity

The Proposed Action would require changes to the electrical, telecommunications, and HVAC systems in the PSWMRU buildings. Electrical renovations to the buildings would include a full gut and removal of the interior power distribution, as well as the secondary duct bank and conductors, utility transformer, and light fixtures. A new 480/277V power distribution would be provided for the building, as well as a stand-by generator, lightning protection system, and light-

emitting diode (LED) lighting system. The existing outside telecommunication lines would remain and be reused for the renovation. Telecommunications renovations would include a full gut and removal of the interior communications distribution. A new telecommunications distribution system would be provided for the interior. An electronic security system would be provided for the building, including closed circuit television (CCTV), security system, and access control. Additionally, the Proposed Action would include the replacement of the HVAC system and the ventilation and exhaust systems within the laboratories and other renovated spaces. No additional capacity is expected to be needed for these system renovations, and all renovations will follow NHPA regulations and leave the exterior design and architecture of Buildings 001, 002, 004, and 005 intact. All electric connections will be designed in accordance with the National Electric Code (NEC).

Based on the need for extensive electrical work, telecommunications renovations, and HVAC replacement within the PSWMRU buildings, temporary disruptions to these services would be expected. These disruptions are expected to be minor and short-term.

#### *3.7.2.2 No Action Alternative*

Under the No Action Alternative, no adverse impacts to utilities would occur. The utilities have been deemed sufficient for the current PSWMRU buildings. The No Action Alternative would involve no updates to utilities, nor would it involve increased demands to utilities.

### **3.8 Hazardous and Toxic Materials and Waste**

#### *3.8.1 Existing Conditions*

Hazardous and non-hazardous waste are managed under the Resources Conservation and Recovery Act (RCRA), passed in 1976 and Pennsylvania Hazardous Waste Regulations Article VII, which adheres to 40 CFR 261.3. Materials regulated by the RCRA are known as “solid wastes.” Only materials that meet the definition of solid waste under the RCRA can be classified as hazardous wastes. Polychlorinated biphenyls (light ballasts, transformer, hydraulic fluid, window caulking, di-2-ethylhexyl phthalate (light ballast) and asbestos, lead-based paint (LBP), etc. are managed under the Toxic Control Substances Act (TSCA) and Pennsylvania Hazardous Waste Regulations Article VII. Mercury, commonly found in switches, thermostats and fluorescent light tubes and batteries, is managed as Universal Waste.

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. 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.

Hazardous materials have not been abated from the PSWMRU buildings. Asbestos-containing material (ACM), LBP, mercury-containing fluorescent light ballasts and thermostats, mold, and refrigerant-containing equipment were identified in a 2021 hazardous materials survey (U.S. Army Corps of Engineers [USACE], 2021). No hazardous and toxic materials and waste (HTMW) are expected to be in the vicinity of the trailer location.

### **3.8.2 Anticipated Impacts**

#### **3.8.2.1 Proposed Action**

Under the Proposed Action minor, short-term impacts to HTMW would be expected to occur at the PSWMRU site. No impacts would be expected in the vicinity of the trailer location.

Chemicals present in laboratories would be relocated to temporary space prior to renovation activities. ACM would be removed from the buildings by a Pennsylvania Certified Abatement Contractor prior to the start of renovation activities, as recommended in the hazard assessment.

LBP abatement would not be required prior to start of renovation activities; however, the contractor responsible for renovation or partial demolition would be lead-safe certified by the U.S. Environmental Protection Agency (EPA) and use lead-safe practices. Also, personnel or contractors that might impact the identified surfaces with LBP will be made aware of the components which contain LBP so they may protect the workers. All the controls in place to protect the worker health will follow 29 CFR 1926.62.

All mercury-containing materials and refrigerant-containing equipment will be disposed of in accordance with 40 CFR Part 273 and 40 CFR Part 82, respectively, prior to the start of renovations. During renovation activities, all surfaces/components affected by mold will be replaced in accordance with the “EPA Mold Remediation in Schools and Commercial Buildings Guide”. Personnel in charge of the remediation job should wear personal protective equipment to avoid inhaling mold and skin contact.

#### **3.8.2.2 No Action Alternative**

Under the No Action Alternative, no adverse impacts to HTMW would be expected to occur, as the current levels of HTMW within the PSWMRU buildings would remain the same; however, there would be no plans to disturb these materials. They would remain inside the buildings and could pose health risks to the workers inside the buildings should the HTMW be disturbed.

## **3.9 Aesthetics and Visual Resources**

### **3.9.1 Existing Conditions**

Visual resources consist of elements in both the natural environment and human-made structures. Natural environmental features include water bodies, vegetation, 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.

The landscaping around the PSWMRU buildings is well established and bordered by mature trees and shrubs. The buildings are next to the Computer Building, which is separated by a sidewalk and small grassy area, and a USDA-ARS headhouse, which is separated by a parking lot. The trailer location is bordered by Headhouse #4 to the north and farm fields to the north just beyond that, with mowed lawns to the east and copses of mature trees surrounding the site on the west and south.

### **3.9.2 Anticipated Impacts**

#### **3.9.2.1 Proposed Action**

Under the Proposed Action, minor impacts to aesthetics and visual resources are expected to occur due to construction activities. The PSWMRU buildings are not in the viewshed of any known NRHP-eligible buildings, so there are no expected impacts to viewshed as a result of the proposed renovations. The trailers are also not in the viewshed of any known NRHP-eligible buildings, so while they may cause minor impacts to aesthetics, these impacts would be temporary, as the trailers would be removed after PSWMRU renovations are complete.

The proposed PSWMRU design will respect and preserve the natural attributes of the site, the regional character in the site planning, and the site's individual character. Upon completion of construction activities, the four buildings will be renovated, and any exterior renovations will retain character-defining features to the largest extent practicable. Any exterior features that need to be replaced would be replaced in-kind, retaining the aesthetic value. The demolition of one of the greenhouses and its reconstruction as a headhouse will have a negligible impact on aesthetics, as the new headhouse will be designed in a manner consistent with the existing architecture and design elements of Buildings 004 and 005.

There are no expected adverse impacts to landscaping as a result of the renovation of these buildings. The design will respect and preserve the natural attributes of the site, the regional character in the site planning, and the site's individual character. Full advantage would be taken of existing site and landscape potential by preserving the site's natural features possible. Existing mature trees will be protected during construction and existing landscape will be preserved to the largest extent practicable. Proposed new landscaping features will be consistent with the site's character and any disturbed grass areas will be restored and seeded or replaced with sod. There are no expected adverse impacts to landscaping as a result of the renovation of these buildings.

#### **3.9.2.2 No Action Alternative**

Under the No Action Alternative, no adverse effects to aesthetics and visual resources would occur. No changes to existing aesthetics or visual resources would occur under this alternative.

## **3.10 Air Quality**

### **3.10.1 Existing Conditions**

#### National Ambient Air Quality Standards

The EPA Region 3 and the PA DEP regulate air quality in Pennsylvania. The Clean Air Act (CAA) (42 USC §7401–7671q), as amended, gives the EPA 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<sub>10</sub>)
- Particulate matter less than 2.5 microns (PM<sub>2.5</sub>)
- Sulfur dioxide (SO<sub>2</sub>)
- Carbon monoxide (CO)

- Nitrogen oxides (NO<sub>x</sub>)
- Ozone (O<sub>3</sub>)
- Lead (Pb)

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. PA DEP is responsible for maintaining air quality standards for the State of Pennsylvania and has adopted the NAAQS.

Primary and secondary NAAQS for the aforementioned criteria are described in Table 3-1. The attainment status of Centre County is included, for that is where all project activities would take place. 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. Centre County is in attainment for all NAAQS.

#### Clean Air Conformity Act

EPA 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 93). Pursuant to 40 CFR 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 93.153 (b)(1) or (2). The Proposed Action is a non-transportation project within an O<sub>3</sub> attainment area.

#### Greenhouse Gas Emissions

Greenhouse gases (GHGs) are a particular group of gases that can 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<sub>2</sub>), methane (CH<sub>4</sub>), and nitrous oxide (N<sub>2</sub>O). 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.

**Table 3-1: National Ambient Air Quality Standards**

<b>Pollutant</b>	<b>Standard</b>	<b>Averaging Time</b>	<b>Centre County Attainment Status</b>
<b>CO</b>	Primary	1-hour <sup>a</sup> (ppm)	Attainment
		8-hour <sup>a</sup> (ppm)	
<b>NO<sub>2</sub></b>	Primary	1-hour <sup>b</sup> (ppm)	Attainment
	Primary and Secondary	Annual <sup>c</sup> (ppm)	
<b>O<sub>3</sub></b>	Primary and Secondary	8-hour <sup>d</sup> (ppm)	Attainment
<b>SO<sub>2</sub></b>	Primary	1-hour <sup>e</sup> (ppb)	Attainment
	Secondary	3-hour <sup>a</sup> (ppm)	
<b>PM<sub>2.5</sub></b>	Primary and Secondary	24-hour <sup>f</sup> ( $\mu\text{g}/\text{m}^3$ )	Attainment
	Primary	Annual arithmetic mean <sup>g</sup> ( $\mu\text{g}/\text{m}^3$ )	
	Secondary	Annual arithmetic mean <sup>g</sup> ( $\mu\text{g}/\text{m}^3$ )	
<b>PM<sub>10</sub></b>	Primary and Secondary	24-Hour <sup>h</sup> ( $\mu\text{g}/\text{m}^3$ )	Attainment
<b>Lead</b>	Primary and Secondary	Rolling 3-month average ( $\mu\text{g}/\text{m}^3$ )	Attainment

Source: 40 CFR 50.1-50.12; USEPA, 2020

$\mu\text{g}/\text{m}^3$  = micrograms per cubic meter; NO<sub>2</sub> = nitrogen dioxide; ppb = parts per billion; ppm = parts per million;

<sup>a</sup> Not to be exceeded more than once per year.

<sup>b</sup> 98<sup>th</sup> percentile, averaged over 3 years.

<sup>c</sup> Annual mean.

<sup>d</sup> Annual fourth highest daily maximum 8-hour average O<sub>3</sub> concentrations, averaged over 3 years.

<sup>e</sup> The 3-year average of the 99<sup>th</sup> percentile of 1-hour daily maximum concentrations.

<sup>f</sup> The 3-year average of the 98<sup>th</sup> percentile of 24-hour concentrations.

<sup>g</sup> The 3-year average of the weighted annual mean.

<sup>h</sup> Not to be exceeded more than once per year, on average over 3 years.

### **3.10.2 Anticipated Impacts**

#### **3.10.2.1 Proposed Action**

The Proposed Action would be considered to have a significant effect on air quality if:

- an impact caused the Proposed Action to not conform with the state implementation plan’s (SIP) purpose of eliminating or reducing the severity and number of violations of the NAAQS and achieving expeditious attainment of the NAAQS; or
- an impact causes any new violation of any standard in any area; or
- an impact causes a delay in timely attainment of any standard or any required interim emission reductions or other milestones in any area; or

- an impact substantially increased GHG emissions such that there would be a noticeable increase in overall global temperature, independent of cumulative impacts.

Under the Proposed Action, minor adverse impacts would occur to air quality. The Proposed Action is an attainment area for all criteria pollutants listed in the NAAQS; therefore, a general conformity analysis is not required for this project.

The Proposed Action would result in temporary, localized changes to air quality as a result of 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. Applicable NEPA considerations would be made, and the resulting documentation (if any) would be kept on file. 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 to long-term overall emissions. Mitigation efforts to reduce GHGs can be implemented by maintaining emission control technology on construction equipment.

#### *3.10.2.2 No Action Alternative*

Under the No Action Alternative, no adverse impacts to air quality would occur. The PSWMRU buildings would continue to operate as they currently do, with no construction actions and no additional emissions.

### **3.11 Noise**

#### *3.11.1 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 3-2 and 3-3). Construction noise can result in relatively high noise levels during daytime 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 3-2: 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	

Source: EPA, 1986

**Table 3-3: Typical Noise levels of Construction Equipment**

Construction Vehicle Type	dBA (at 50 feet)
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: EPA, 1986

The PSWMRU buildings and trailer location are located within a developed, urban environment with many noise sources and receptors. The most commonly occurring noise on the Pennsylvania State University campus is from vehicular traffic. Other typical noise sources on the campus include HVAC systems; landscape maintenance; and other general maintenance activities. None of these sources produce excessive noise levels. Operation of the PSWMRU buildings does not currently exceed permissible noise levels. Potential noise receptors to the construction and renovation activities include passers-by on the campus, and students and local personnel in the adjacent buildings. There are no residences near the PSWMRU buildings.

### **3.11.2 Anticipated Impacts**

#### **3.11.2.1 Proposed Action**

Temporary, minor impacts would be expected to occur as a result of the Proposed Action due to demolition and construction activities. To mitigate noise impacts, demolition activities would take place during normal business hours. Equipment and machinery used at the Proposed Action sites would meet all local, state, and Federal noise regulations. Noise associated with operation of the four PSWMRU buildings after renovation would be consistent with current uses, so there would

be no additional noise expected outside of construction and demolition activities. Therefore, there would be no lasting effect on ambient noise levels.

#### *3.11.2.2 No Action Alternative*

Under the No Action Alternative, no adverse impacts would occur to noise. No construction would take place under this alternative; therefore, no changes to noise levels would occur.

### **3.12 Health and Public Safety**

#### *3.12.1 Existing Conditions*

The presence of ACM, LBP, mercury-containing fluorescent light ballasts and thermostats, mold, and refrigerant-containing equipment within the PSWMRU buildings was identified in a 2021 hazardous materials survey. Should they be disturbed, these materials could cause health concerns for those working in the buildings. These buildings pose no known safety concerns and are not accessible to the public. No health and public safety concerns are known to exist at the trailer location.

#### *3.12.2 Anticipated Impacts*

##### *3.12.2.1 Proposed Action*

Under the Proposed Action, no adverse impacts to health and public safety would be expected to occur. The company awarded the building renovation and construction project would be required to implement a site-specific health and safety plan in accordance with Occupational Safety and Health Administration regulations. This plan would be reviewed by the USDA-ARS for adequacy prior to the start of work on the site. 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.

In the event of an injury or accident, the health and safety plan would include procedures specifying actions to be taken. With these standard operating procedures in place, the project's effects on worker safety would not be significant.

During the proposed renovation and construction projects, 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 the construction sites 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.

##### *3.12.2.2 No Action Alternative*

Under the No Action Alternative, no adverse impacts to health and public safety would occur. No construction would occur, adding no public safety or health risks.

## 4 CONCLUSION

The Proposed Action includes the renovation and modernization of four PSWMRU Buildings - Building 001 (greenhouse), Building, 002 (greenhouse), Building 004 (laboratory/office), and Building 005 (headhouse) and the placement of two temporary trailers next to Headhouse #4 along Tower Road. The Proposed Action includes renovations to building interiors, including demolition and reconstruction of laboratories and administrative spaces, addition of an elevator, and updates to the electrical, telecommunications, mechanical HVAC and plumbing, and life safety systems. 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**

<b>Resource Area</b>	<b>Proposed Action</b>	<b>No Action Alternative</b>
<b>Topography, Geology, and Soils</b>	Minor adverse impacts to topography and soils. No adverse impacts to geology.	None.
<b>Prime Farmland</b>	Minor adverse impacts.	None.
<b>Water Resources</b>	No impacts to surface water, ground water, floodplains, or wetlands. Minor beneficial impacts to stormwater.	Minor adverse impacts to stormwater from roof drains that are not up to code.
<b>Biological Resources</b>	Minor adverse impacts to biological resources and vegetation. No adverse impacts to RTE species.	None.
<b>Cultural Resources</b>	Minor adverse impacts	None.
<b>Transportation</b>	Minor adverse impacts.	None.
<b>Utilities</b>	Minor adverse impacts.	None.
<b>Hazardous and Toxic Materials and Waste</b>	Minor adverse impacts.	None.
<b>Aesthetics and Visual Resources</b>	Minor adverse impacts.	None.
<b>Air Quality</b>	Minor adverse impacts.	None.
<b>Noise</b>	Minor adverse impacts	None.
<b>Health and Public Safety</b>	None.	None.

The conclusion of this EA is that the implementation of the Proposed Action will not generate significant controversy or have significant impacts 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.

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## 5 REFERENCES

- Federal Emergency Management Agency (FEMA). 2020. Flood Insurance Rate Maps. Retrieved from <https://msc.fema.gov/portal>.
- National Park Service (NPS). 2018. Valley and Ridge Province. Retrieved from: <https://www.nps.gov/articles/valleyandridgeprovince.htm091361>
- U.S. Army Corps of Engineers (USACE). 2021. Hazardous Material Assessment USDA Agricultural Research Unit Pasture Systems & Water Management Research Unit.
- U.S. Department of Agriculture (USDA). n.d. Land Capability Classification. [http://www.ncrcd.org/files/4414/0968/3285/NRCS\\_Land\\_Capability\\_Classes.pdf](http://www.ncrcd.org/files/4414/0968/3285/NRCS_Land_Capability_Classes.pdf).
- U.S. Department of Agriculture (USDA). 1993. USDA Handbook No. 18. Soil Survey Manual, October 1993.
- U.S. Department of Agriculture (USDA). 2020. Natural Resources Conservation Service, Web Soil Survey. Retrieved from <http://websoilsurvey.sc.egov.usda.gov/>.
- U.S. Department of Agriculture (USDA). 2021. Program of Requirements USDA-ARS University Park Renovation PSWMRU Buildings 001, 002, 004 & 005.
- U.S. Environmental Protection Agency (EPA). 1986. Pamphlet “Noise and Your Hearing”.
- U.S. Fish and Wildlife Service. 2020. Wetlands Mapper. Retrieved from <https://www.fws.gov/wetlands/data/mapper.html>.
- U.S. Geological Survey. 2016. Pennsylvania-Centre Co. 7.5 Minute Series.

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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**

19 November 2021

MEMORANDUM FOR SEE DISTRIBUTION

SUBJECT: Initiating Agency Coordination for the Renovation of Pasture Systems and Watershed Management Research Unit (PSWMRU) Buildings 001, 002, 004, and 005 at the Pennsylvania State University, State College, Pennsylvania

1. The U.S. Department of Agriculture (USDA) is initiating agency coordination for a new proposed action at the Pennsylvania State University campus in State College, PA. The proposed action consists of the renovation of two occupied greenhouses (Buildings 001 and 002), a laboratory/office building (Building 004), and a headhouse (Building 005) located at 3702 Curtin Road (Enclosures 1 and 2). The proposed action includes extensive interior renovations to the buildings, along with some building exterior upgrades, the addition of an emergency generator, and minor site work. 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 (Enclosure 3).
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 7 CFR 520, *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 be directed to the USACE NEPA point of contact, Marisa Wetmore, at 410-962-9500 or by email at [Marisa.L.Wetmore@usace.army.mil](mailto:Marisa.L.Wetmore@usace.army.mil).

Sincerely,

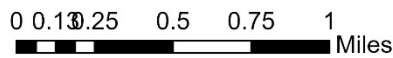
David Robbins  
Project Manager  
USACE, Baltimore District

ENCLOSURES

# Enclosure 1: Vicinity of Project



Figure 1: Vicinity of Proposed Action



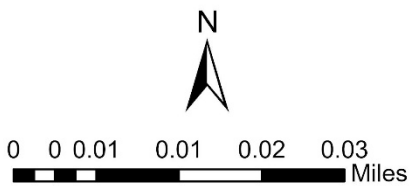
## Legend

Proposed Action


## Enclosure 2: Proposed Project Location



Figure 2: Proposed Action Location



### Legend

- |  |  |
|--|--|
|  Bldg 001 |  Bldg 004 |
|  Bldg 002 |  Bldg 005 |

## Enclosure 3: Memo

11/20/2021

### MEMORANDUM FOR RECORD

SUBJECT: Agency Coordination for the Modernization/Renovation of Agricultural Research Services' Pasture Systems and Watershed Management Research Unit (PSWMRU) Laboratory/Office building 3702 Curtin Road, University Park, Pennsylvania

1. Agricultural Research Service (ARS) is initiating agency coordination for a proposed action at 3702 Curtin Road, University Park, Pennsylvania. The proposed action consists of interior demolition and repair by replacement of major mechanical, electrical, and fire protection systems within ARS' existing Laboratory/Office/Headhouse building. An elevator will be added to the interior of the building. Additionally, one greenhouse will be upgraded with a new glazing system. A second greenhouse will be demolished and replaced by a new, smaller headhouse. ARS' Lab/Office/Headhouse/Greenhouse building is located on federal land, within Penn State's larger campus. Agency coordination will be completed in accordance with Section 106 of the National Historic Preservation Act and the National Environmental Policy Act (NEPA).
2. ARS 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. Questions or comments may directed to Robert Drechsler (301) 504-1217 or by email at Robert.drechsler@USDA.gov. David Robbins is the primary point of contact at USACE for this undertaking. He can be reached at (410) 962-0685 and by email at David.W.Robbins@usace.army.mil.

**Robert.Drechsler** Digitally signed by Robert.Drechsler  
Date: 2021.11.19 06:48:24 -05'00'

Robert Drechsler

Chief, Capital Investment & Asset Management  
Modernization Branch

Facilities Division

Agricultural Research Service

#### **Enclosure 4: Agency Mailing List**

Ms. Carrie Traver  
U.S. Environmental Protection Agency, Region 3  
Office of Environmental Programs (3EA30)  
1650 Arch Street  
Philadelphia, PA 19103-2029  
traver.carrie@epa.gov

Mr. Robert Anderson  
U.S. Fish & Wildlife Service  
Pennsylvania Field Office  
110 Radnor Rd, Suite 101  
State College, PA 16801  
robert\_m\_anderson@fws.gov

Ms. Denise Coleman  
USDA-NRCS, State Conservationist  
Pennsylvania State Office  
359 East Park Drive, Suite 2  
Harrisburg, PA 17111-2747  
denise.coleman@usda.gov

Ms. Heather Smiles  
PA Fish & Boat Commission  
595 East Rolling Ridge Drive  
Bellefonte, PA 16823  
hsmiles@pa.gov

Mr. Patrick McDonnell,  
Secretary, Pennsylvania Department of  
Environmental Protection  
Rachel Carson State Office Building,  
400 Market Street  
Harrisburg, Pennsylvania 17101

Mr. Jared Dressler  
PA Department of Environmental  
Protection  
Northcentral Regional Office  
208 West Third Street, Suite 101  
Williamsport, PA 17701  
jardressle@pa.gov

Mr. Greg Podniesinski  
Pennsylvania Natural Heritage Program  
400 Market Street  
Harrisburg, Pennsylvania 17105  
gpodniesin@pa.gov

Ms. Aura Stauffer  
Pennsylvania Department of Conservation  
and Natural Resources  
Ecological Services Section, Bureau of Forestry  
6th Floor, Rachel Carson State Office Building  
400 Market Street  
Harrisburg, Pennsylvania 17105-8767  
astauffer@pa.gov

Ms. Cheryl Nagle  
Pennsylvania Historical & Museum Commission  
State Historic Preservation Office  
Commonwealth Keystone Building, Second  
Floor  
400 North Street  
Harrisburg, PA 17120-0093  
chnagle@pa.gov





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

19 November 2021

ATTN: Ms. Erin Paden  
Director of Historic Preservation and Section 106  
Delaware Nation of Oklahoma  
P.O. Box 826  
Anadarko, OK 73006  
epaden@delawarenation-nsn.gov

**Re: U.S. Department of Agriculture – Agricultural Research Service (USDA-ARS) – Section 106 Consultation and Environmental Assessment for the Pasture Systems and Watershed Management Research Unit (PSWMRU) Building Renovations**

Dear Ms. Paden,

The USDA-ARS would like to initiate coordination with your Tribe for a new proposed undertaking, the renovation of four buildings on the Pennsylvania State University campus, per Section 106 of the National Historic Preservation Act (NHPA) (Enclosure 1). USDA-ARS is also preparing an Environmental Assessment (EA) for the Proposed Action, and would appreciate receiving your Tribe's early input to help USDA-ARS identify issues for consideration regarding the Proposed Action.

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 (Enclosure 3).

The EA is being prepared pursuant to the National Environmental Policy Act of 1969 (42 United States Code [USC] 4321, et seq.), herein known as NEPA; the Council of Environmental Quality (CEQ) regulations that implement NEPA (40 Code of Federal Regulations [CFR] 1500 to 1508); and 7 CFR 520, et. seq. This EA will analyze the potential impacts to the natural and human environment that could result from the renovation of four PSWMRU buildings – Buildings 001, 002, 004, and 005 – located at 3702 Curtin Road in University Park, Pennsylvania (Figures 1 and 2).

The Proposed Action is to renovate PSWMRU Buildings 001, 002, 004, and 005 (Enclosure 2). This includes extensive interior renovations to the buildings, along with some building exterior upgrades, the addition of an emergency generator, and minor site work. The Proposed Action is needed to meet the operational requirements of USDA-ARS and it will provide more functional laboratory, research, and administrative spaces for the PSWMRU. The Area of Potential Effect (APE) for the undertaking will be the footprint of the four buildings to be renovated, the limits of disturbance for the minor site work, and those areas from which the undertaking will be visible.

USDA-ARS has started to identify historic properties within the APE. The EA will consider potential impacts to cultural resources and historic properties from implementing the Proposed Action based on information compiled by USDA-ARS. Based on this information, no archaeological sites have been identified within the APE. No formal evaluations of the architectural resources within the APE have been conducted; however, USDA-ARS determined, and the Pennsylvania Historical & Museum Commission (PHMC) concurred via correspondence on 28 June 2021, that the project as proposed will have no adverse effect on historic properties, should they exist. Based on PHMC's concurrence, no historic properties are expected to be impacted by this Proposed Action.

In the event that there is a discovery of any unreported archaeological resource or historic property (16 USC 470aa, et seq.), Native American sacred site and/or traditional cultural property, USDA-ARS would implement "Accidental Discovery" procedures to comply with the National Historic Preservation Act (NHPA), Archaeological Resources Protection Act of 1979 (ARPA), Native American Graves Protection and Repatriation Act (NAGPRA), American Indian Religious Freedom Act (AIRFA), 36 CFR Part 79, and Executive Order (EO) 13007, *Indian Sacred Sites*. Under this plan, if prehistoric or historic artifacts that could be associated with Native American, early European, or American settlement are encountered at any time during activities in the Proposed Action, USDA-ARS would cease all activities involving subsurface disturbance in the vicinity of the discovery until the PHMC and selected Native American Tribes are contacted to properly identify and appropriately treat discovered items in accordance with applicable state and Federal law(s). Implementation of these measures would ensure that the Proposed Action would have "No Adverse Effect" on historic properties or cultural resources.

USDA-ARS would appreciate your written response within 30 days of receipt of this letter. The USACE point of contact for these NEPA and Section 106 actions is Marisa Wetmore, and she can be reached at 410-962-9500 or [Marisa.L.Wetmore@usace.army.mil](mailto:Marisa.L.Wetmore@usace.army.mil).

Sincerely,

David Robbins  
Project Manager  
USACE, Baltimore District

Enclosures



# ENCLOSURE 1




Figure 1: Vicinity of Proposed Action



0 0.1 0.25 0.5 0.75 1 Miles

## Legend

 Proposed Action

# ENCLOSURE 2



Figure 2: Proposed Action Location

### Legend

- Bldg 001
- Bldg 002
- Bldg 004
- Bldg 005

0 0.01 0.01 0.02 0.03 Miles

## ENCLOSURE 3

11/20/2021

### MEMORANDUM FOR RECORD

SUBJECT: Agency Coordination for the Modernization/Renovation of Agricultural Research Services' Pasture Systems and Watershed Management Research Unit (PSWMRU) Laboratory/Office building 3702 Curtin Road, University Park, Pennsylvania

1. Agricultural Research Service (ARS) is initiating agency coordination for a proposed action at 3702 Curtin Road, University Park, Pennsylvania. The proposed action consists of interior demolition and repair by replacement of major mechanical, electrical, and fire protection systems within ARS' existing Laboratory/Office/Headhouse building. An elevator will be added to the interior of the building. Additionally, one greenhouse will be upgraded with a new glazing system. A second greenhouse will be demolished and replaced by a new, smaller headhouse. ARS' Lab/Office/Headhouse/Greenhouse building is located on federal land, within Penn State's larger campus. Agency coordination will be completed in accordance with Section 106 of the National Historic Preservation Act and the National Environmental Policy Act (NEPA).
2. ARS 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. Questions or comments may directed to Robert Drechsler (301) 504-1217 or by email at Robert.drechsler@USDA.gov. David Robbins is the primary point of contact at USACE for this undertaking. He can be reached at (410) 962-0685 and by email at David.W.Robbins@usace.army.mil.

**Robert.Drechsler** Digitally signed by Robert.Drechsler  
Date: 2021.11.19 06:48:24 -05'00'

Robert Drechsler

Chief, Capital Investment & Asset Management  
Modernization Branch

Facilities Division

Agricultural Research Service





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

19 November 2021

ATTN: Ms. Susan Bachor  
Archaeologist  
Delaware Tribe of Indians  
126 University Circle  
Stroud Hall, Room 437  
East Stroudsburg, PA 18301  
sbachor@delawaretribe.org

**Re: U.S. Department of Agriculture – Agricultural Research Service (USDA-ARS) – Section 106 Consultation and Environmental Assessment for the Pasture Systems and Watershed Management Research Unit (PSWMRU) Building Renovations**

The USDA-ARS would like to initiate coordination with your Tribe for a new proposed undertaking, the renovation of four buildings on the Pennsylvania State University campus, per Section 106 of the National Historic Preservation Act (NHPA) (Enclosure 1). USDA-ARS is also preparing an Environmental Assessment (EA) for the Proposed Action, and would appreciate receiving your Tribe's early input to help USDA-ARS identify issues for consideration regarding the Proposed Action.

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 (Enclosure 3).

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The Proposed Action is to renovate PSWMRU Buildings 001, 002, 004, and 005 (Enclosure 2). This includes extensive interior renovations to the buildings, along with some building exterior upgrades, the addition of an emergency generator, and minor site work. The Proposed Action is needed to meet the operational requirements of USDA-ARS and it will provide more functional laboratory, research, and administrative spaces for the PSWMRU. The Area of Potential Effect (APE) for the undertaking will be the footprint of the four buildings to be renovated, the limits of disturbance for the minor site work, and those areas from which the undertaking will be visible.

USDA-ARS has started to identify historic properties within the APE. The EA will consider potential impacts to cultural resources and historic properties from implementing the Proposed Action based on information compiled by USDA-ARS. Based on this information, no archaeological sites have been identified within the APE. No formal evaluations of the architectural resources within the APE have been conducted; however, USDA-ARS determined, and the Pennsylvania Historical & Museum Commission (PHMC) concurred via correspondence on 28 June 2021, that the project as proposed will have no adverse effect on historic properties, should they exist. Based on PHMC's concurrence, no historic properties are expected to be impacted by this Proposed Action.

In the event that there is a discovery of any unreported archaeological resource or historic property (16 USC 470aa, et seq.), Native American sacred site and/or traditional cultural property, USDA-ARS would implement "Accidental Discovery" procedures to comply with the National Historic Preservation Act (NHPA), Archaeological Resources Protection Act of 1979 (ARPA), Native American Graves Protection and Repatriation Act (NAGPRA), American Indian Religious Freedom Act (AIRFA), 36 CFR Part 79, and Executive Order (EO) 13007, *Indian Sacred Sites*. Under this plan, if prehistoric or historic artifacts that could be associated with Native American, early European, or American settlement are encountered at any time during activities in the Proposed Action, USDA-ARS would cease all activities involving subsurface disturbance in the vicinity of the discovery until the PHMC and selected Native American Tribes are contacted to properly identify and appropriately treat discovered items in accordance with applicable state and Federal law(s). Implementation of these measures would ensure that the Proposed Action would have "No Adverse Effect" on historic properties or cultural resources.

USDA-ARS would appreciate your written response within 30 days of receipt of this letter. The USACE point of contact for these NEPA and Section 106 actions is Marisa Wetmore, and she can be reached at 410-962-9500 or [Marisa.L.Wetmore@usace.army.mil](mailto:Marisa.L.Wetmore@usace.army.mil).

Sincerely,

David Robbins  
Project Manager  
USACE, Baltimore District

Enclosures


# ENCLOSURE 1

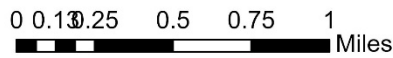


Figure 1: Vicinity of Proposed Action



## Legend

 Proposed Action



# ENCLOSURE 2



Figure 2: Proposed Action Location

### Legend

- Bldg 001
- Bldg 002
- Bldg 004
- Bldg 005

0 0.01 0.01 0.02 0.03 Miles



## ENCLOSURE 3

11/20/2021

### MEMORANDUM FOR RECORD

SUBJECT: Agency Coordination for the Modernization/Renovation of Agricultural Research Services' Pasture Systems and Watershed Management Research Unit (PSWMRU) Laboratory/Office building  
3702 Curtin Road, University Park, Pennsylvania

1. Agricultural Research Service (ARS) is initiating agency coordination for a proposed action at 3702 Curtin Road, University Park, Pennsylvania. The proposed action consists of interior demolition and repair by replacement of major mechanical, electrical, and fire protection systems within ARS' existing Laboratory/Office/Headhouse building. An elevator will be added to the interior of the building. Additionally, one greenhouse will be upgraded with a new glazing system. A second greenhouse will be demolished and replaced by a new, smaller headhouse. ARS' Lab/Office/Headhouse/Greenhouse building is located on federal land, within Penn State's larger campus. Agency coordination will be completed in accordance with Section 106 of the National Historic Preservation Act and the National Environmental Policy Act (NEPA).
2. ARS 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. Questions or comments may directed to Robert Drechsler (301) 504-1217 or by email at Robert.drechsler@USDA.gov. David Robbins is the primary point of contact at USACE for this undertaking. He can be reached at (410) 962-0685 and by email at David.W.Robbins@usace.army.mil.

**Robert.Drechsler** Digitally signed by Robert.Drechsler  
Date: 2021.11.19 06:48:24 -05'00'

Robert Drechsler

Chief, Capital Investment & Asset Management  
Modernization Branch

Facilities Division

Agricultural Research Service





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

19 November 2021

ATTN: Mr. Jesse Bergevin  
Historic Resource Specialist  
Oneida Indian Nation  
1256 Union Street  
P.O. Box 662  
Oneida, NY 13421  
jbergevin@oneida-nation.org

**Re: U.S. Department of Agriculture – Agricultural Research Service (USDA-ARS) – Section 106 Consultation and Environmental Assessment for the Pasture Systems and Watershed Management Research Unit (PSWMRU) Building Renovations**

Dear Mr. Bergevin,

The USDA-ARS would like to initiate coordination with your Tribe for a new proposed undertaking, the renovation of four buildings on the Pennsylvania State University campus, per Section 106 of the National Historic Preservation Act (NHPA) (Enclosure 1). USDA-ARS is also preparing an Environmental Assessment (EA) for the Proposed Action, and would appreciate receiving your Tribe's early input to help USDA-ARS identify issues for consideration regarding the Proposed Action.

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 (Enclosure 3).

The EA is being prepared pursuant to the National Environmental Policy Act of 1969 (42 United States Code [USC] 4321, et seq.), herein known as NEPA; the Council of Environmental Quality (CEQ) regulations that implement NEPA (40 Code of Federal Regulations [CFR] 1500 to 1508); and 7 CFR 520, et. seq. This EA will analyze the potential impacts to the natural and human environment that could result from the renovation of four PSWMRU buildings – Buildings 001, 002, 004, and 005 – located at 3702 Curtin Road in University Park, Pennsylvania (Figures 1 and 2).

The Proposed Action is to renovate PSWMRU Buildings 001, 002, 004, and 005 (Enclosure 2). This includes extensive interior renovations to the buildings, along with some building exterior upgrades, the addition of an emergency generator, and minor site work. The Proposed Action is needed to meet the operational requirements of USDA-ARS and it will provide more functional laboratory, research, and administrative spaces for the PSWMRU. The Area of Potential Effect (APE) for the undertaking will be the footprint of the four buildings to be renovated, the limits of disturbance for the minor site work, and those areas from which the undertaking will be visible.

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In the event that there is a discovery of any unreported archaeological resource or historic property (16 USC 470aa, et seq.), Native American sacred site and/or traditional cultural property, USDA-ARS would implement "Accidental Discovery" procedures to comply with the National Historic Preservation Act (NHPA), Archaeological Resources Protection Act of 1979 (ARPA), Native American Graves Protection and Repatriation Act (NAGPRA), American Indian Religious Freedom Act (AIRFA), 36 CFR Part 79, and Executive Order (EO) 13007, *Indian Sacred Sites*. Under this plan, if prehistoric or historic artifacts that could be associated with Native American, early European, or American settlement are encountered at any time during activities in the Proposed Action, USDA-ARS would cease all activities involving subsurface disturbance in the vicinity of the discovery until the PHMC and selected Native American Tribes are contacted to properly identify and appropriately treat discovered items in accordance with applicable state and Federal law(s). Implementation of these measures would ensure that the Proposed Action would have "No Adverse Effect" on historic properties or cultural resources.

USDA-ARS would appreciate your written response within 30 days of receipt of this letter. The USACE point of contact for these NEPA and Section 106 actions is Marisa Wetmore, and she can be reached at 410-962-9500 or [Marisa.L.Wetmore@usace.army.mil](mailto:Marisa.L.Wetmore@usace.army.mil).

Sincerely,

David Robbins  
Project Manager  
USACE, Baltimore District

Enclosures


# ENCLOSURE 1

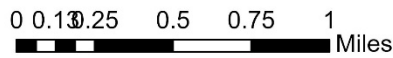


Figure 1: Vicinity of Proposed Action



## Legend

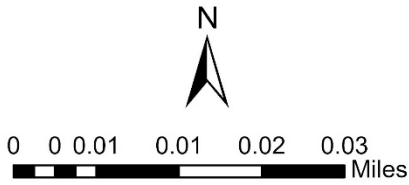
 Proposed Action



# ENCLOSURE 2



Figure 2: Proposed Action Location



- Legend**
- Bldg 001 (blue outline)
  - Bldg 002 (orange outline)
  - Bldg 004 (red outline)
  - Bldg 005 (purple outline)

## ENCLOSURE 3

11/20/2021

### MEMORANDUM FOR RECORD

SUBJECT: Agency Coordination for the Modernization/Renovation of Agricultural Research Services' Pasture Systems and Watershed Management Research Unit (PSWMRU) Laboratory/Office building 3702 Curtin Road, University Park, Pennsylvania

1. Agricultural Research Service (ARS) is initiating agency coordination for a proposed action at 3702 Curtin Road, University Park, Pennsylvania. The proposed action consists of interior demolition and repair by replacement of major mechanical, electrical, and fire protection systems within ARS' existing Laboratory/Office/Headhouse building. An elevator will be added to the interior of the building. Additionally, one greenhouse will be upgraded with a new glazing system. A second greenhouse will be demolished and replaced by a new, smaller headhouse. ARS' Lab/Office/Headhouse/Greenhouse building is located on federal land, within Penn State's larger campus. Agency coordination will be completed in accordance with Section 106 of the National Historic Preservation Act and the National Environmental Policy Act (NEPA).
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**Robert.Drechsler** Digitally signed by Robert.Drechsler  
Date: 2021.11.19 06:48:24 -05'00'

Robert Drechsler

Chief, Capital Investment & Asset Management  
Modernization Branch

Facilities Division

Agricultural Research Service







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

19 November 2021

ATTN: Mr. Tony Gonyea  
Historic Preservation Office  
Onondaga Indian Nation  
4040 Route 11  
Nedrow, NY 13120  
ononcomm@gmail.com

**Re: U.S. Department of Agriculture – Agricultural Research Service (USDA-ARS) – Section 106 Consultation and Environmental Assessment for the Pasture Systems and Watershed Management Research Unit (PSWMRU) Building Renovations**

Dear Mr. Gonyea,

The USDA-ARS would like to initiate coordination with your Tribe for a new proposed undertaking, the renovation of four buildings on the Pennsylvania State University campus, per Section 106 of the National Historic Preservation Act (NHPA) (Enclosure 1). USDA-ARS is also preparing an Environmental Assessment (EA) for the Proposed Action, and would appreciate receiving your Tribe's early input to help USDA-ARS identify issues for consideration regarding the Proposed Action.

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 (Enclosure 3).

The EA is being prepared pursuant to the National Environmental Policy Act of 1969 (42 United States Code [USC] 4321, et seq.), herein known as NEPA; the Council of Environmental Quality (CEQ) regulations that implement NEPA (40 Code of Federal Regulations [CFR] 1500 to 1508); and 7 CFR 520, et. seq. This EA will analyze the potential impacts to the natural and human environment that could result from the renovation of four PSWMRU buildings – Buildings 001, 002, 004, and 005 – located at 3702 Curtin Road in University Park, Pennsylvania (Figures 1 and 2).

The Proposed Action is to renovate PSWMRU Buildings 001, 002, 004, and 005 (Enclosure 2). This includes extensive interior renovations to the buildings, along with some building exterior upgrades, the addition of an emergency generator, and minor site work. The Proposed Action is needed to meet the operational requirements of USDA-ARS and it will provide more functional laboratory, research, and administrative spaces for the PSWMRU. The Area of Potential Effect (APE) for the undertaking will be the footprint of the four buildings to be renovated, the limits of disturbance for the minor site work, and those areas from which the undertaking will be visible.

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In the event that there is a discovery of any unreported archaeological resource or historic property (16 USC 470aa, et seq.), Native American sacred site and/or traditional cultural property, USDA-ARS would implement "Accidental Discovery" procedures to comply with the National Historic Preservation Act (NHPA), Archaeological Resources Protection Act of 1979 (ARPA), Native American Graves Protection and Repatriation Act (NAGPRA), American Indian Religious Freedom Act (AIRFA), 36 CFR Part 79, and Executive Order (EO) 13007, *Indian Sacred Sites*. Under this plan, if prehistoric or historic artifacts that could be associated with Native American, early European, or American settlement are encountered at any time during activities in the Proposed Action, USDA-ARS would cease all activities involving subsurface disturbance in the vicinity of the discovery until the PHMC and selected Native American Tribes are contacted to properly identify and appropriately treat discovered items in accordance with applicable state and Federal law(s). Implementation of these measures would ensure that the Proposed Action would have "No Adverse Effect" on historic properties or cultural resources.

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Sincerely,

David Robbins  
Project Manager  
USACE, Baltimore District

Enclosures


# ENCLOSURE 1

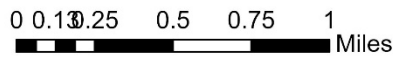


Figure 1: Vicinity of Proposed Action



## Legend

 Proposed Action



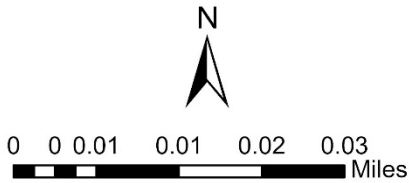
# ENCLOSURE 2



Figure 2: Proposed Action Location

### Legend

- Bldg 001
- Bldg 002
- Bldg 004
- Bldg 005



## ENCLOSURE 3

11/20/2021

### MEMORANDUM FOR RECORD

SUBJECT: Agency Coordination for the Modernization/Renovation of Agricultural Research Services' Pasture Systems and Watershed Management Research Unit (PSWMRU) Laboratory/Office building 3702 Curtin Road, University Park, Pennsylvania

1. Agricultural Research Service (ARS) is initiating agency coordination for a proposed action at 3702 Curtin Road, University Park, Pennsylvania. The proposed action consists of interior demolition and repair by replacement of major mechanical, electrical, and fire protection systems within ARS' existing Laboratory/Office/Headhouse building. An elevator will be added to the interior of the building. Additionally, one greenhouse will be upgraded with a new glazing system. A second greenhouse will be demolished and replaced by a new, smaller headhouse. ARS' Lab/Office/Headhouse/Greenhouse building is located on federal land, within Penn State's larger campus. Agency coordination will be completed in accordance with Section 106 of the National Historic Preservation Act and the National Environmental Policy Act (NEPA).
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**Robert.Drechsler** Digitally signed by Robert.Drechsler  
Date: 2021.11.19 06:48:24 -05'00'

Robert Drechsler

Chief, Capital Investment & Asset Management  
Modernization Branch

Facilities Division

Agricultural Research Service





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

19 November 2021

ATTN: Mr. Darren Bonaparte  
Tribal Historic Preservation Officer  
Saint Regis Mohawk Tribe  
412 State Route 37  
Akwesasne, NY 13655  
darren.bonaparte@srmt-nsn.gov

**Re: U.S. Department of Agriculture – Agricultural Research Service (USDA-ARS) – Section 106 Consultation and Environmental Assessment for the Pasture Systems and Watershed Management Research Unit (PSWMRU) Building Renovations**

Dear Mr. Bonaparte,

The USDA-ARS would like to initiate coordination with your Tribe for a new proposed undertaking, the renovation of four buildings on the Pennsylvania State University campus, per Section 106 of the National Historic Preservation Act (NHPA) (Enclosure 1). USDA-ARS is also preparing an Environmental Assessment (EA) for the Proposed Action, and would appreciate receiving your Tribe's early input to help USDA-ARS identify issues for consideration regarding the Proposed Action.

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 (Enclosure 3).

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The Proposed Action is to renovate PSWMRU Buildings 001, 002, 004, and 005 (Enclosure 2). This includes extensive interior renovations to the buildings, along with some building exterior upgrades, the addition of an emergency generator, and minor site work. The Proposed Action is needed to meet the operational requirements of USDA-ARS and it will provide more functional laboratory, research, and administrative spaces for the PSWMRU. The Area of Potential Effect (APE) for the undertaking will be the footprint of the four buildings to be renovated, the limits of disturbance for the minor site work, and those areas from which the undertaking will be visible.

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Sincerely,

David Robbins  
Project Manager  
USACE, Baltimore District

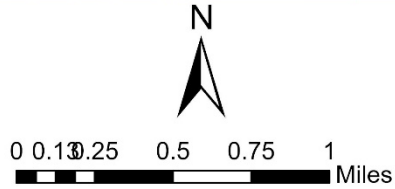
Enclosures



# ENCLOSURE 1



Figure 1: Vicinity of Proposed Action



**Legend**  
[Red Box] Proposed Action

# ENCLOSURE 2



Figure 2: Proposed Action Location

### Legend

- Bldg 001
- Bldg 002
- Bldg 004
- Bldg 005

0 0.01 0.01 0.02 0.03 Miles

## ENCLOSURE 3

11/20/2021

### MEMORANDUM FOR RECORD

SUBJECT: Agency Coordination for the Modernization/Renovation of Agricultural Research Services' Pasture Systems and Watershed Management Research Unit (PSWMRU) Laboratory/Office building 3702 Curtin Road, University Park, Pennsylvania

1. Agricultural Research Service (ARS) is initiating agency coordination for a proposed action at 3702 Curtin Road, University Park, Pennsylvania. The proposed action consists of interior demolition and repair by replacement of major mechanical, electrical, and fire protection systems within ARS' existing Laboratory/Office/Headhouse building. An elevator will be added to the interior of the building. Additionally, one greenhouse will be upgraded with a new glazing system. A second greenhouse will be demolished and replaced by a new, smaller headhouse. ARS' Lab/Office/Headhouse/Greenhouse building is located on federal land, within Penn State's larger campus. Agency coordination will be completed in accordance with Section 106 of the National Historic Preservation Act and the National Environmental Policy Act (NEPA).
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**Robert.Drechsler** Digitally signed by Robert.Drechsler  
Date: 2021.11.19 06:48:24 -05'00'

Robert Drechsler

Chief, Capital Investment & Asset Management  
Modernization Branch

Facilities Division

Agricultural Research Service





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

19 November 2021

ATTN: Mr. William Tarrant  
Tribal Historic Preservation Officer  
Seneca-Cayuga Nation of Oklahoma  
P.O. Box 45322  
Grove, OK 74345  
wtarrant@sctribe.com

**Re: U.S. Department of Agriculture – Agricultural Research Service (USDA-ARS) – Section 106 Consultation and Environmental Assessment for the Pasture Systems and Watershed Management Research Unit (PSWMRU) Building Renovations**

Dear Mr. Tarrant,

The USDA-ARS would like to initiate coordination with your Tribe for a new proposed undertaking, the renovation of four buildings on the Pennsylvania State University campus, per Section 106 of the National Historic Preservation Act (NHPA) (Enclosure 1). USDA-ARS is also preparing an Environmental Assessment (EA) for the Proposed Action, and would appreciate receiving your Tribe's early input to help USDA-ARS identify issues for consideration regarding the Proposed Action.

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Sincerely,

David Robbins  
Project Manager  
USACE, Baltimore District

Enclosures


# ENCLOSURE 1

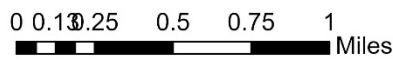


Figure 1: Vicinity of Proposed Action



## Legend

 Proposed Action



# ENCLOSURE 2



Figure 2: Proposed Action Location

### Legend

- Bldg 001
- Bldg 002
- Bldg 004
- Bldg 005

0 0.01 0.01 0.02 0.03 Miles



## ENCLOSURE 3

11/20/2021

### MEMORANDUM FOR RECORD

SUBJECT: Agency Coordination for the Modernization/Renovation of Agricultural Research Services' Pasture Systems and Watershed Management Research Unit (PSWMRU) Laboratory/Office building 3702 Curtin Road, University Park, Pennsylvania

1. Agricultural Research Service (ARS) is initiating agency coordination for a proposed action at 3702 Curtin Road, University Park, Pennsylvania. The proposed action consists of interior demolition and repair by replacement of major mechanical, electrical, and fire protection systems within ARS' existing Laboratory/Office/Headhouse building. An elevator will be added to the interior of the building. Additionally, one greenhouse will be upgraded with a new glazing system. A second greenhouse will be demolished and replaced by a new, smaller headhouse. ARS' Lab/Office/Headhouse/Greenhouse building is located on federal land, within Penn State's larger campus. Agency coordination will be completed in accordance with Section 106 of the National Historic Preservation Act and the National Environmental Policy Act (NEPA).
2. ARS 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. Questions or comments may directed to Robert Drechsler (301) 504-1217 or by email at Robert.drechsler@USDA.gov. David Robbins is the primary point of contact at USACE for this undertaking. He can be reached at (410) 962-0685 and by email at David.W.Robbins@usace.army.mil.

**Robert.Drechsler** Digitally signed by Robert.Drechsler  
Date: 2021.11.19 06:48:24 -05'00'

Robert Drechsler

Chief, Capital Investment & Asset Management  
Modernization Branch

Facilities Division

Agricultural Research Service





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

19 November 2021

ATTN: Mr. Bryan Printup  
Representative  
Tuscarora Nation  
5226 Walmore Road  
Lewiston, NY 14092  
bprintup@hetf.org

**Re: U.S. Department of Agriculture – Agricultural Research Service (USDA-ARS) – Section 106 Consultation and Environmental Assessment for the Pasture Systems and Watershed Management Research Unit (PSWMRU) Building Renovations**

Dear Mr. Printup,

The USDA-ARS would like to initiate coordination with your Tribe for a new proposed undertaking, the renovation of four buildings on the Pennsylvania State University campus, per Section 106 of the National Historic Preservation Act (NHPA) (Enclosure 1). USDA-ARS is also preparing an Environmental Assessment (EA) for the Proposed Action, and would appreciate receiving your Tribe's early input to help USDA-ARS identify issues for consideration regarding the Proposed Action.

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 (Enclosure 3).

The EA is being prepared pursuant to the National Environmental Policy Act of 1969 (42 United States Code [USC] 4321, et seq.), herein known as NEPA; the Council of Environmental Quality (CEQ) regulations that implement NEPA (40 Code of Federal Regulations [CFR] 1500 to 1508); and 7 CFR 520, et. seq. This EA will analyze the potential impacts to the natural and human environment that could result from the renovation of four PSWMRU buildings – Buildings 001, 002, 004, and 005 – located at 3702 Curtin Road in University Park, Pennsylvania (Figures 1 and 2).

The Proposed Action is to renovate PSWMRU Buildings 001, 002, 004, and 005 (Enclosure 2). This includes extensive interior renovations to the buildings, along with some building exterior upgrades, the addition of an emergency generator, and minor site work. The Proposed Action is needed to meet the operational requirements of USDA-ARS and it will provide more functional laboratory, research, and administrative spaces for the PSWMRU. The Area of Potential Effect (APE) for the undertaking will be the footprint of the four buildings to be renovated, the limits of disturbance for the minor site work, and those areas from which the undertaking will be visible.

USDA-ARS has started to identify historic properties within the APE. The EA will consider potential impacts to cultural resources and historic properties from implementing the Proposed Action based on information compiled by USDA-ARS. Based on this information, no archaeological sites have been identified within the APE. No formal evaluations of the architectural resources within the APE have been conducted; however, USDA-ARS determined, and the Pennsylvania Historical & Museum Commission (PHMC) concurred via correspondence on 28 June 2021, that the project as proposed will have no adverse effect on historic properties, should they exist. Based on PHMC's concurrence, no historic properties are expected to be impacted by this Proposed Action.

In the event that there is a discovery of any unreported archaeological resource or historic property (16 USC 470aa, et seq.), Native American sacred site and/or traditional cultural property, USDA-ARS would implement "Accidental Discovery" procedures to comply with the National Historic Preservation Act (NHPA), Archaeological Resources Protection Act of 1979 (ARPA), Native American Graves Protection and Repatriation Act (NAGPRA), American Indian Religious Freedom Act (AIRFA), 36 CFR Part 79, and Executive Order (EO) 13007, *Indian Sacred Sites*. Under this plan, if prehistoric or historic artifacts that could be associated with Native American, early European, or American settlement are encountered at any time during activities in the Proposed Action, USDA-ARS would cease all activities involving subsurface disturbance in the vicinity of the discovery until the PHMC and selected Native American Tribes are contacted to properly identify and appropriately treat discovered items in accordance with applicable state and Federal law(s). Implementation of these measures would ensure that the Proposed Action would have "No Adverse Effect" on historic properties or cultural resources.

USDA-ARS would appreciate your written response within 30 days of receipt of this letter. The USACE point of contact for these NEPA and Section 106 actions is Marisa Wetmore, and she can be reached at 410-962-9500 or [Marisa.L.Wetmore@usace.army.mil](mailto:Marisa.L.Wetmore@usace.army.mil).

Sincerely,

David Robbins  
Project Manager  
USACE, Baltimore District

Enclosures


# ENCLOSURE 1

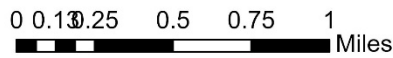


Figure 1: Vicinity of Proposed Action



## Legend

 Proposed Action



# ENCLOSURE 2



Figure 2: Proposed Action Location

### Legend

- Bldg 001
- Bldg 002
- Bldg 004
- Bldg 005

0 0.01 0.01 0.02 0.03 Miles

## ENCLOSURE 3

11/20/2021

### MEMORANDUM FOR RECORD

SUBJECT: Agency Coordination for the Modernization/Renovation of Agricultural Research Services' Pasture Systems and Watershed Management Research Unit (PSWMRU) Laboratory/Office building 3702 Curtin Road, University Park, Pennsylvania

1. Agricultural Research Service (ARS) is initiating agency coordination for a proposed action at 3702 Curtin Road, University Park, Pennsylvania. The proposed action consists of interior demolition and repair by replacement of major mechanical, electrical, and fire protection systems within ARS' existing Laboratory/Office/Headhouse building. An elevator will be added to the interior of the building. Additionally, one greenhouse will be upgraded with a new glazing system. A second greenhouse will be demolished and replaced by a new, smaller headhouse. ARS' Lab/Office/Headhouse/Greenhouse building is located on federal land, within Penn State's larger campus. Agency coordination will be completed in accordance with Section 106 of the National Historic Preservation Act and the National Environmental Policy Act (NEPA).
2. ARS 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. Questions or comments may directed to Robert Drechsler (301) 504-1217 or by email at Robert.drechsler@USDA.gov. David Robbins is the primary point of contact at USACE for this undertaking. He can be reached at (410) 962-0685 and by email at David.W.Robbins@usace.army.mil.

**Robert.Drechsler** Digitally signed by Robert.Drechsler  
Date: 2021.11.19 06:48:24 -05'00'

Robert Drechsler

Chief, Capital Investment & Asset Management  
Modernization Branch

Facilities Division

Agricultural Research Service







## Pennsylvania State Historic Preservation Office

PENNSYLVANIA HISTORICAL AND MUSEUM COMMISSION

June 4, 2021

Eva Falls  
USACE Baltimore  
2 Hopkins Plaza  
US Army Corps of Engineers, 10-A-01  
Baltimore PA 21030

RE: ER Project # 2021PR04244.001, Pasture Research Building Rehabilitation (3702 Curtain Road, University Park), US Department of Agriculture, State College Borough, Centre County

Dear Eva Falls:

Thank you for submitting information concerning the above referenced project. The Pennsylvania State Historic Preservation Office (PA SHPO) reviews projects in accordance with state and federal laws. Section 106 of the National Historic Preservation Act of 1966, and the implementing regulations (36 CFR Part 800) of the Advisory Council on Historic Preservation, is the primary federal legislation. The Environmental Rights amendment, Article 1, Section 27 of the Pennsylvania Constitution and the Pennsylvania History Code, 37 Pa. Cons. Stat. Section 500 et seq. (1988) is the primary state legislation. These laws include consideration of the project's potential effects on both historic and archaeological resources.

### **Above Ground Resources**

*More Information Requested - New Attachment*

Please provide additional information to assist in our review of the proposed project. Which greenhouse is proposed to be demolished (001 or 002)? Has that been rehabbed/reconstructed or windows replaced previously? What is a conventional construction of a headhouse ("The new headhouse is expected to be roof deck, clear span joists, load bearing CMU and shallow foundations - does that mean it will look like a greenhouse will it be more stories? will it be a bigger footprint? do you have a image of what is being proposed?). Per the submission "As for the greenhouse that will be renovated, it is anticipated that this will be a full replacement of the green house, including foundations/walls." How is this not demolition? How will it be similar to the existing 1936 one? Does in-kind mean the same window fenestration and materials? Are the other greenhouses (outside of your project area) still original materials? Please submit the requested materials to the PA SHPO through PA-SHARE using the link under SHPO Requests More Information on the Response screen.

For questions concerning above ground resources, please contact Cheryl Nagle at [chnagle@pa.gov](mailto:chnagle@pa.gov).

### **Archaeological Resources**

*No Archaeological Concerns - Environmental Review - No Historic Properties - Archaeological*

Thank you for submitting information concerning the above-referenced project. In our opinion and based on the information received and available in our files, there are no archaeological historic properties (resources listed in or eligible for listing in the National Register) present within the area of potential effect. Should the scope of the project change and/or should you be made aware of historic property concerns, you will need to notify the PA SHPO at [pashare@pa.gov](mailto:pashare@pa.gov) and provide the revised designs for review and comment.

For questions concerning archaeological resources, please contact Kimberly Sebestyen at [ksebestyen@pa.gov](mailto:ksebestyen@pa.gov).

Sincerely,

A handwritten signature in black ink, appearing to read "D. McLearn", written in a cursive style.

Douglas C. McLearn  
Chief Division of Environmental Review

**From:** [Anderson, Robert M](#)  
**To:** [Wetmore, Marisa L CIV USARMY CENAB \(USA\)](#)  
**Subject:** [Non-DoD Source] Re: [EXTERNAL] Initial NEPA Consultation for USDA-ARS Building Renovations at Penn State  
**Date:** Tuesday, November 23, 2021 3:54:33 PM

---

Hello Ms. Wetmore,

The Fish and Wildlife Service, Pennsylvania Field Office has no comment on this project.

Robert M. Anderson  
Assistant Field Office Supervisor  
U.S. Fish & Wildlife Service  
Pennsylvania Field Office  
110 Radnor Rd; Suite 101  
State College, PA 16801

phone: ~~814-234-4090~~

mobile: 814-883-3122

fax: ~~814-234-0748~~

[www.fws.gov/northeast/pafo/index.html](http://www.fws.gov/northeast/pafo/index.html)

---

**From:** Wetmore, Marisa L CIV USARMY CENAB (USA) <Marisa.L.Wetmore@usace.army.mil>  
**Sent:** Monday, November 22, 2021 5:16 PM  
**Cc:** Drechsler, Robert <robert.drechsler@usda.gov>; Hajjar, Michael - ARS-CEC, Beltsville, MD <michael.hajjar@usda.gov>; Mather, Cal - REE-ARS, Beltsville, MD <cal.mather@usda.gov>; King, Frank <frank.king@usda.gov>; Wurzberger, Linda <linda.wurzberger@usda.gov>; Villarreal, Michael - REE-ARS, Beltsville, MD <Michael.Villarreal@usda.gov>; Frank, Stephanie (CTR) - REE-ARS, Beltsville, MD <Stephanie.Frank@usda.gov>; Sadler, Sandra <sandra.sadler@usda.gov>  
**Subject:** [EXTERNAL] Initial NEPA Consultation for USDA-ARS Building Renovations at Penn State

**This email has been received from outside of DOI - Use caution before clicking on links, opening attachments, or responding.**

Good evening,

On behalf of the U.S. Department of Agriculture – Agricultural Research Service (USDA-ARS), the U.S. Army Corps of Engineers, Baltimore District (USACE), will be preparing an Environmental Assessment for the renovation of four Pasture Systems and Watershed Management Research Unit buildings (Buildings 001, 002, 004, and 005) on the Pennsylvania State University campus. As part of this effort, we would like to initiate agency coordination regarding this proposed action.

Please find attached the initial National Environmental Policy Act (NEPA) consultation letter. While

we would normally send this via hard copy in the mail, we are sending it via email due to current 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  
Office: 410-962-9500  
Work Cell: 667-203-0149

**From:** [Plowden, Yuri - NRCS, Harrisburg, PA](#)  
**To:** [Wetmore, Marisa L CIV USARMY CENAB \(USA\)](#)  
**Cc:** [Coleman, Denise - NRCS, Harrisburg, PA](#); [Ludwig, Daniel - NRCS, Harrisburg, PA](#); [Drechsler, Robert](#)  
**Subject:** [Non-DoD Source] RE: Initial NEPA Consultation for USDA-ARS Building Renovations at Penn State  
**Date:** Tuesday, November 30, 2021 2:48:14 PM  
**Attachments:** [ARS State College NRCS signed.pdf](#)

---

Dear Ms. Wetmore,

Thank you for the opportunity to comment on the environmental impact of the USDA-ARS building renovation project on PSU campus. There are no impacts of the project to NRCS interests. Since the project falls within the State College urbanized area, it is not subject to the FPPA. Attached is our formal letter of review.

If you have any questions or concerns, please do not hesitate to contact me.

Yuri Plowden  
State Soil Scientist  
Natural Resources Conservation Service  
359 E. Park Drive, Suite 2  
Harrisburg, PA 17111  
717-237-2207 (o)  
717-514-8303 (work cell)  
Best phone number to reach me during COVID19 is the work cell

---

**From:** Coleman, Denise - NRCS, Harrisburg, PA <[denise.coleman@usda.gov](mailto:denise.coleman@usda.gov)>  
**Sent:** Monday, November 22, 2021 5:46 PM  
**To:** Plowden, Yuri - NRCS, Harrisburg, PA <[yuri.plowden@usda.gov](mailto:yuri.plowden@usda.gov)>  
**Subject:** FW: Initial NEPA Consultation for USDA-ARS Building Renovations at Penn State

Yuri,  
This looks like an FPPA.  
denise

State Conservationist | USDA-NRCS  
359 East Park Drive, Suite 2, Harrisburg, PA 17111  
717.237.2203 | [denise.coleman@usda.gov](mailto:denise.coleman@usda.gov)

---

**From:** Wetmore, Marisa L CIV USARMY CENAB (USA) <[Marisa.L.Wetmore@usace.army.mil](mailto:Marisa.L.Wetmore@usace.army.mil)>  
**Sent:** Monday, November 22, 2021 5:17 PM  
**Cc:** Drechsler, Robert <[robert.drechsler@usda.gov](mailto:robert.drechsler@usda.gov)>; Hajjar, Michael - ARS-CEC, Beltsville, MD <[michael.hajjar@usda.gov](mailto:michael.hajjar@usda.gov)>; Mather, Cal - REE-ARS, Beltsville, MD <[cal.mather@usda.gov](mailto:cal.mather@usda.gov)>; King, Frank <[frank.king@usda.gov](mailto:frank.king@usda.gov)>; Wurzberger, Linda <[linda.wurzberger@usda.gov](mailto:linda.wurzberger@usda.gov)>; Villarreal, Michael - REE-ARS, Beltsville, MD <[Michael.Villarreal@usda.gov](mailto:Michael.Villarreal@usda.gov)>; Frank, Stephanie (CTR) - REE-ARS, Beltsville, MD <[Stephanie.Frank@usda.gov](mailto:Stephanie.Frank@usda.gov)>; Sadler, Sandra <[sandra.sadler@usda.gov](mailto:sandra.sadler@usda.gov)>  
**Subject:** Initial NEPA Consultation for USDA-ARS Building Renovations at Penn State

Good evening,

On behalf of the U.S. Department of Agriculture – Agricultural Research Service (USDA-ARS), the U.S. Army Corps of Engineers, Baltimore District (USACE), will be preparing an Environmental Assessment for the renovation of four Pasture Systems and Watershed Management Research Unit buildings (Buildings 001, 002, 004, and 005) on the Pennsylvania State University campus. As part of this effort, we would like to initiate agency coordination regarding this proposed action.

Please find attached the initial National Environmental Policy Act (NEPA) consultation letter. While we would normally send this via hard copy in the mail, we are sending it via email due to current 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  
Office: 410-962-9500  
Work Cell: 667-203-0149



November 30, 2021

Marisa Wetmore, Biologist  
USACE, Baltimore District  
2 Hopkins Plaza  
Baltimore, MD 21201  
[Marisa.L.Wetmore@usace.army.mil](mailto:Marisa.L.Wetmore@usace.army.mil)  
Office: 410-962-9500  
Work Cell: 667-203-0149

RE: USDA-ARS renovation of Pasture Systems and Watershed Management Research Unit Buildings on Penn State University campus, State College, PA – Centre County

Dear Ms. Wetmore:

Thank you for the opportunity to review the project map for the Environmental Report for the above referenced project on Penn State University campus in Centre County, PA. This is a USDA- Agricultural Research Service project. After completing a review of the project's potential to impact federal actions where NRCS has control or responsibility, no potential for impact has been found for our easements and dams.

We also reviewed the project with respect to the Farmland Protection Policy Act (FPPA). The purpose of the Act is to minimize the extent to which Federal programs contribute to the unnecessary and irreversible conversion of farmland to nonagricultural uses. Since the project lies within the State College Urbanized area it is not subject to the provisions of the Farmland Protection Policy Act.

If you have additional questions or concerns, please feel free to contact me at (717) 237-2207, or [yuri.plowden@usda.gov](mailto:yuri.plowden@usda.gov)

Sincerely,

Yuri Plowden  
State Soil Scientist, NRCS  
Harrisburg, PA

Cc: Denise Coleman, State Conservationist, Harrisburg, PA  
Dan Ludwig, NRCS State Resource Conservationist, Harrisburg, PA

Natural Resources Conservation Service  
359 East Park Drive, Suite 2  
Harrisburg, PA 17111-2747  
Voice: 717-237-2100 | Fax: 855-813-2861  
An Equal Opportunity Provider and Employer

**Helping People Help the Land**

*USDA is an equal opportunity provider and employer.*







**From:** [Jesse Bergevin](#)  
**To:** [Wetmore, Marisa L CIV USARMY CENAB \(USA\)](#)  
**Cc:** [Drechsler, Robert](#); [Hajjar, Michael - ARS-CEC, Beltsville, MD](#); [Mather, Cal - REE-ARS, Beltsville, MD](#); [King, Frank](#); [Wurzberger, Linda](#); [Villarreal, Michael - REE-ARS, Beltsville, MD](#); [Frank, Stephanie \(CTR\) - REE-ARS, Beltsville, MD](#); [Sadler, Sandra](#)  
**Subject:** [Non-DoD Source] RE: Government to Government Consultation for USDA-ARS Building Renovations at Penn State  
**Date:** Monday, December 6, 2021 10:43:34 AM

---

VIA E-MAIL [Marisa.L.Wetmore@usace.army.mil](mailto:Marisa.L.Wetmore@usace.army.mil)

Ms. Marisa L. Wetmore  
USACE Baltimore District

Dear Ms. Wetmore,

On November 22, 2021, the Oneida Indian Nation (the “Nation”) received an email with documentation from the U.S. Army Corps of Engineers, Baltimore District, regarding the proposed renovation of four Pasture Systems and Watershed Management Research Unit buildings on the Pennsylvania State University campus (the “Project”). The Nation has no concerns or comments regarding the Project and does not wish to be a Section 106 consulting party for the Project.

If you have any questions, please call me at (315) 829-8463.

Best Regards,

**JESSE BERGEVIN**

Historical Resources Specialist

**ONEIDA INDIAN NATION**

P: 315.829.8463  
2037 Dream Catcher Plaza  
Oneida, NY 13421



---

**From:** Wetmore, Marisa L CIV USARMY CENAB (USA) [mailto:Marisa.L.Wetmore@usace.army.mil]

**Sent:** Monday, November 22, 2021 5:33 PM

**To:** Jesse Bergevin <jbergevin@oneida-nation.org>

**Cc:** Drechsler, Robert <robert.drechsler@usda.gov>; Hajjar, Michael - ARS-CEC, Beltsville, MD <michael.hajjar@usda.gov>; Mather, Cal - REE-ARS, Beltsville, MD <cal.mather@usda.gov>; King, Frank <frank.king@usda.gov>; Wurzberger, Linda <linda.wurzberger@usda.gov>; Villarreal, Michael - REE-ARS, Beltsville, MD <Michael.Villarreal@usda.gov>; Frank, Stephanie (CTR) - REE-ARS, Beltsville, MD <Stephanie.Frank@usda.gov>; Sadler, Sandra <sandra.sadler@usda.gov>

**Subject:** Government to Government Consultation for USDA-ARS Building Renovations at Penn State

Good evening Mr. Bergevin,

On behalf of the U.S. Department of Agriculture – Agricultural Research Service (USDA-ARS), the U.S. Army Corps of Engineers, Baltimore District (USACE), would like to initiate consultation with your Tribe regarding a new proposed undertaking in State College, Pennsylvania, per Section 106 of the National Historic Preservation Act (NHPA). USACE will also be preparing an Environmental Assessment (EA) for the Proposed Action, and would appreciate receiving your Tribe’s early input to help USDA-ARS identify issues for consideration regarding the Proposed Action. The Proposed Action includes the renovation of four Pasture Systems and Watershed Management Research Unit buildings (Buildings 001, 002, 004, and 005) on the Pennsylvania State University campus.

Please find attached the initial government to government consultation letter. While we would normally send this via hard copy in the mail, we are sending it via email due to current 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  
Office: 410-962-9500  
Work Cell: 667-203-0149

**From:** [Davis, Jamie](#)  
**To:** [Wetmore, Marisa L CIV USARMY CENAB \(USA\)](#)  
**Cc:** [Nevshehrlan, Stepan](#)  
**Subject:** [Non-DoD Source] Agency Coordination for the Renovation of Pasture Systems and Watershed Management Research Unit (PSWMRU) Buildings  
**Date:** Tuesday, December 14, 2021 1:24:27 PM

---

Hi Marisa,

Thank you for taking the time to discuss the Agency Coordination for the Renovation of Pasture Systems and Watershed Management Research Unit (PSWMRU) Buildings 001, 002, 004, and 005 at the Pennsylvania State University, State College, Pennsylvania. EPA recommends that the USDA incorporate energy saving techniques and low impact building designs into the planned renovations wherever possible. We encourage the use of programs such as Leadership in Energy and Environmental Design (LEED). LEED provides a complete framework for assessing building performance and meeting sustainability goals. Based on well-founded scientific standards, LEED emphasizes state of the art strategies for sustainable site development, water savings, energy efficiency, materials selection and indoor environmental quality. For more information, contact the U.S. Green Building Council at the following web address: [www.usgbc.org/leed](http://www.usgbc.org/leed)

If EPA can provide any assistance in the future development of the EA please feel free to contact me directly,

Sincerely,

Jamie

Jamie Davis  
Office of Communities, Tribes & Environmental Assessment  
National Environmental Policy Act (NEPA)  
U.S. EPA Region III  
1650 Arch Street  
Philadelphia, PA 19103  
570-351-7192



## **Appendix B**

### **SITE PHOTOS**

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Figure 1: Bldg 004 (laboratory/office), photographer facing southeast



Figure 2: Bldg 004 (laboratory/office), photographer facing northeast



Figure 3: Bldg 005 (headhouse), photographer facing northeast



Figure 4: Bldgs 001 (greenhouse), 002 (greenhouse), 005 (headhouse), and 004 (laboratory/office), photographer facing northwest





Figure 5: Bldg 005 (headhouse), photographer facing southwest



Figure 6: Bldg 004 (laboratory/office), photographer facing south



Figure 7: View from sidewalk in front of Bldg 004 (laboratory/office), photographer facing northeast



Figure 8: View from sidewalk in front of Bldg 004 (laboratory/office), photographer facing northwest



Figure 9: View from sidewalk in front of Bldg 004 (laboratory/office), photographer facing southwest



**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 **Centre County, Pennsylvania**



# Preface

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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](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.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or a part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require



alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD). To file a complaint of discrimination, write to USDA, Director, Office of Civil Rights, 1400 Independence Avenue, S.W., Washington, D.C. 20250-9410 or call (800) 795-3272 (voice) or (202) 720-6382 (TDD). USDA is an equal opportunity provider and employer.

# Contents

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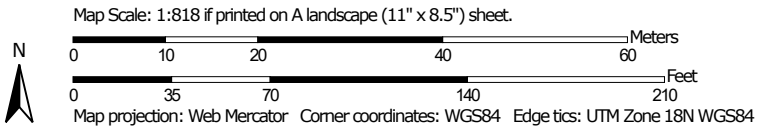
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# Soil Map

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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 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 1:20,000.

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: Centre County, Pennsylvania  
 Survey Area Data: Version 21, Aug 31, 2021

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

Date(s) aerial images were photographed: Dec 31, 2009—Mar 7, 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
HaA	Hagerstown silt loam, 0 to 3 percent slopes	0.0	3.4%
HaB	Hagerstown silt loam, 3 to 8 percent slopes	0.1	11.0%
URB	Urban land-Hagerstown complex, gently sloping	1.1	85.5%
<b>Totals for Area of Interest</b>		<b>1.3</b>	<b>100.0%</b>

## 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

## Custom Soil Resource Report

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.

## Centre County, Pennsylvania

### HaA—Hagerstown silt loam, 0 to 3 percent slopes

#### Map Unit Setting

*National map unit symbol:* 2tb05  
*Elevation:* 310 to 1,750 feet  
*Mean annual precipitation:* 37 to 45 inches  
*Mean annual air temperature:* 45 to 57 degrees F  
*Frost-free period:* 155 to 205 days  
*Farmland classification:* All areas are prime farmland

#### Map Unit Composition

*Hagerstown and similar soils:* 85 percent  
*Minor components:* 15 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

#### Description of Hagerstown

##### Setting

*Landform:* Hills  
*Landform position (two-dimensional):* Summit, backslope, footslope  
*Landform position (three-dimensional):* Interfluve, side slope  
*Down-slope shape:* Concave, linear  
*Across-slope shape:* Linear, concave  
*Parent material:* Clayey residuum weathered from limestone

##### Typical profile

*Ap - 0 to 10 inches:* silt loam  
*Bt1 - 10 to 21 inches:* silty clay loam  
*Bt2 - 21 to 56 inches:* silty clay  
*C - 56 to 73 inches:* silty clay loam  
*R - 73 to 83 inches:* bedrock

##### Properties and qualities

*Slope:* 0 to 3 percent  
*Depth to restrictive feature:* 43 to 98 inches to lithic bedrock  
*Drainage class:* Well drained  
*Runoff class:* Low  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high to high  
(0.60 to 2.00 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Maximum salinity:* Nonsaline (0.0 to 1.9 mmhos/cm)  
*Available water supply, 0 to 60 inches:* Moderate (about 7.2 inches)

##### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 1  
*Hydrologic Soil Group:* B  
*Hydric soil rating:* No



## Minor Components

### Carbo

*Percent of map unit:* 5 percent

*Landform:* Hills

*Landform position (two-dimensional):* Summit, shoulder, backslope

*Landform position (three-dimensional):* Side slope, crest

*Down-slope shape:* Convex, linear

*Across-slope shape:* Linear, convex

*Hydric soil rating:* No

### Opequon

*Percent of map unit:* 5 percent

*Landform:* Ridges

*Landform position (two-dimensional):* Summit, shoulder

*Landform position (three-dimensional):* Side slope, crest

*Down-slope shape:* Convex, linear

*Across-slope shape:* Convex, linear

*Hydric soil rating:* No

### Nolin

*Percent of map unit:* 3 percent

*Landform:* Swales

*Landform position (two-dimensional):* Toeslope

*Landform position (three-dimensional):* Base slope, tal

*Down-slope shape:* Concave, linear

*Across-slope shape:* Concave, linear

*Hydric soil rating:* No

### Funkstown

*Percent of map unit:* 2 percent

*Landform:* Valley floors

*Landform position (two-dimensional):* Toeslope

*Landform position (three-dimensional):* Base slope

*Down-slope shape:* Concave

*Across-slope shape:* Concave, linear

*Hydric soil rating:* No

## HaB—Hagerstown silt loam, 3 to 8 percent slopes

### Map Unit Setting

*National map unit symbol:* 2rc98

*Elevation:* 600 to 1,750 feet

*Mean annual precipitation:* 37 to 45 inches

*Mean annual air temperature:* 45 to 55 degrees F

*Frost-free period:* 155 to 190 days

*Farmland classification:* All areas are prime farmland

### Map Unit Composition

*Hagerstown and similar soils:* 85 percent

## Custom Soil Resource Report

*Minor components: 15 percent*  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

### Description of Hagerstown

#### Setting

*Landform: Hills*  
*Landform position (two-dimensional): Summit, backslope, footslope*  
*Landform position (three-dimensional): Interfluvium, side slope, base slope*  
*Down-slope shape: Concave, linear*  
*Across-slope shape: Linear, concave*  
*Parent material: Clayey residuum weathered from limestone*

#### Typical profile

*Ap - 0 to 10 inches: silt loam*  
*Bt1 - 10 to 21 inches: silty clay loam*  
*Bt2 - 21 to 56 inches: silty clay*  
*C - 56 to 73 inches: silty clay loam*  
*R - 73 to 83 inches: bedrock*

#### Properties and qualities

*Slope: 3 to 8 percent*  
*Depth to restrictive feature: 43 to 98 inches to lithic bedrock*  
*Drainage class: Well drained*  
*Runoff class: Medium*  
*Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high*  
*(0.60 to 2.00 in/hr)*  
*Depth to water table: More than 80 inches*  
*Frequency of flooding: None*  
*Frequency of ponding: None*  
*Available water supply, 0 to 60 inches: Moderate (about 8.7 inches)*

#### Interpretive groups

*Land capability classification (irrigated): None specified*  
*Land capability classification (nonirrigated): 2e*  
*Hydrologic Soil Group: B*  
*Hydric soil rating: No*

### Minor Components

#### Opequon

*Percent of map unit: 5 percent*  
*Landform: Ridges*  
*Landform position (two-dimensional): Summit, shoulder*  
*Landform position (three-dimensional): Side slope, crest*  
*Down-slope shape: Convex, linear*  
*Across-slope shape: Convex, linear*  
*Hydric soil rating: No*

#### Carbo

*Percent of map unit: 5 percent*  
*Landform: Hills*  
*Landform position (two-dimensional): Summit, shoulder, backslope*  
*Landform position (three-dimensional): Side slope, crest*  
*Down-slope shape: Convex, linear*  
*Across-slope shape: Linear, convex*  
*Hydric soil rating: No*

## Custom Soil Resource Report

### **Funkstown**

*Percent of map unit:* 3 percent  
*Landform:* Valley floors  
*Landform position (two-dimensional):* Toeslope  
*Landform position (three-dimensional):* Base slope  
*Down-slope shape:* Concave  
*Across-slope shape:* Concave, linear  
*Hydric soil rating:* No

### **Timberville**

*Percent of map unit:* 2 percent  
*Landform:* Hills  
*Landform position (two-dimensional):* Footslope  
*Landform position (three-dimensional):* Head slope, base slope  
*Down-slope shape:* Concave, linear  
*Across-slope shape:* Convex, linear, concave  
*Hydric soil rating:* No

## **URB—Urban land-Hagerstown complex, gently sloping**

### **Map Unit Setting**

*National map unit symbol:* I263  
*Elevation:* 310 to 3,000 feet  
*Mean annual precipitation:* 30 to 50 inches  
*Mean annual air temperature:* 45 to 57 degrees F  
*Frost-free period:* 120 to 205 days  
*Farmland classification:* Not prime farmland

### **Map Unit Composition**

*Urban land:* 50 percent  
*Hagerstown and similar soils:* 30 percent  
*Minor components:* 20 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

### **Description of Urban Land**

#### **Setting**

*Landform:* Valleys  
*Landform position (two-dimensional):* Toeslope  
*Landform position (three-dimensional):* Base slope  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Parent material:* Residuum weathered from limestone

#### **Interpretive groups**

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 8  
*Hydric soil rating:* No

## Description of Hagerstown

### Setting

*Landform:* Valleys  
*Landform position (two-dimensional):* Toeslope  
*Landform position (three-dimensional):* Base slope  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Parent material:* Residuum weathered from limestone

### Typical profile

*A - 0 to 8 inches:* silt loam  
*Bt - 8 to 45 inches:* clay  
*C - 45 to 75 inches:* clay loam

### Properties and qualities

*Slope:* 3 to 8 percent  
*Depth to restrictive feature:* 40 to 84 inches to lithic bedrock  
*Drainage class:* Well drained  
*Runoff class:* Medium  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high to high  
(0.60 to 2.00 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Available water supply, 0 to 60 inches:* High (about 10.4 inches)

### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 2e  
*Hydrologic Soil Group:* B  
*Hydric soil rating:* No

## Minor Components

### Carbo

*Percent of map unit:* 10 percent  
*Landform:* Hills  
*Landform position (two-dimensional):* Summit, shoulder, backslope  
*Landform position (three-dimensional):* Side slope, crest  
*Down-slope shape:* Convex, linear  
*Across-slope shape:* Linear, convex  
*Hydric soil rating:* No

### Opequeon

*Percent of map unit:* 5 percent  
*Hydric soil rating:* No

### Nolin

*Percent of map unit:* 5 percent  
*Landform:* Valleys  
*Landform position (three-dimensional):* Talf  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Hydric soil rating:* No

**Appendix D**

**IPAC REPORT**

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## United States Department of the Interior



FISH AND WILDLIFE SERVICE  
Pennsylvania Ecological Services Field Office  
110 Radnor Road Suite 101  
State College, PA 16801-7987  
Phone: (814) 234-4090 Fax: (814) 234-0748  
<http://www.fws.gov/northeast/pafo/>

In Reply Refer To:

November 30, 2021

Consultation Code: 05E2PA00-2021-SLI-0912

Event Code: 05E2PA00-2022-E-01083

Project Name: USDA PSWMRU Renovation

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

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

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](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://](http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html)

[www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html](http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html).

Any activity proposed on National Wildlife Refuge lands must undergo a "Compatibility Determination" conducted by the Refuge. Please contact the individual Refuge to discuss any questions or concerns.

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

Attachment(s):

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



## Official Species List

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

This species list is provided by:

**Pennsylvania Ecological Services Field Office**

110 Radnor Road Suite 101  
State College, PA 16801-7987  
(814) 234-4090

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## Project Summary

Consultation Code: 05E2PA00-2021-SLI-0912

Event Code: Some(05E2PA00-2022-E-01083)

Project Name: USDA PSWMRU Renovation

Project Type: DEVELOPMENT

Project Description: Renovation of existing laboratory/office building, headhouse, and two greenhouses

Project Location:

Approximate location of the project can be viewed in Google Maps: [https://](https://www.google.com/maps/@40.8032238,-77.86171968356012,14z)

[www.google.com/maps/@40.8032238,-77.86171968356012,14z](https://www.google.com/maps/@40.8032238,-77.86171968356012,14z)



Counties: Centre County, Pennsylvania

## Endangered Species Act Species

There is a total of 4 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<sup>1</sup>, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

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

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

### Mammals

NAME	STATUS
Indiana Bat <i>Myotis sodalis</i> There is <b>final</b> critical habitat for this species. The location of the critical habitat is not available. Species profile: <a href="https://ecos.fws.gov/ecp/species/5949">https://ecos.fws.gov/ecp/species/5949</a>	Endangered
Northern Long-eared Bat <i>Myotis septentrionalis</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/9045">https://ecos.fws.gov/ecp/species/9045</a>	Threatened

### Insects

NAME	STATUS
Monarch Butterfly <i>Danaus plexippus</i> No critical habitat has been designated for this species. This species only needs to be considered under the following conditions: <ul style="list-style-type: none"> <li>▪ The monarch is a candidate species and not yet listed or proposed for listing. There are generally no section 7 requirements for candidate species (FAQ found here: <a href="https://www.fws.gov/savethemonarch/FAQ-Section7.html">https://www.fws.gov/savethemonarch/FAQ-Section7.html</a>).</li> </ul> Species profile: <a href="https://ecos.fws.gov/ecp/species/9743">https://ecos.fws.gov/ecp/species/9743</a>	Candidate

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## Flowering Plants

NAME	STATUS
Northeastern Bulrush <i>Scirpus ancistrochaetus</i>	Endangered
Population: No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/6715">https://ecos.fws.gov/ecp/species/6715</a>	

## 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.

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