

**DRAFT ENVIRONMENTAL ASSESSMENT
FOR
CONSTRUCTION AND OPERATION OF THE
CONSOLIDATED COMMUNICATIONS CENTER
JOINT BASE ANDREWS-NAVAL AIR FACILITY, MARYLAND**



Prepared for:

**DEPARTMENT OF THE AIR FORCE
Joint Base Andrews-Naval Air Facility, MD 20762**

October 2018

**Draft Environmental Assessment for
Consolidated Communications Center at
Joint Base Andrews-Naval Air Facility, Maryland**



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October 2018

Letters or other written comments provided may be published in the Final EA. As required by law, substantive comments will be addressed in the Final EA and made available to the public. Any personal information provided will be kept confidential. Private addresses will be compiled to develop a mailing list for those requesting copies of the Final EA. However, only the names of the individuals making comments and their specific comments will be disclosed. Personal home addresses and phone numbers will not be published in the Final EA.

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44
45 The Proposed Action is expected to result in less than significant or no effects to land use,
46 groundwater, floodplains, cultural resources, electric and lighting, hazardous materials and waste
47 management, environmental justice, and safety and occupational health. During construction, the
48 Proposed Action would have temporary and minor impacts to vegetation, wildlife, surface water
49 resources, local air quality, transportation, and existing noise levels on JBA. Short-term minor
50 impacts to soils and topography due to the grading and filling of areas would be expected during
51 construction. However, the reduction in the impervious surface would result in a projected net
52 decrease in impervious area by approximately 7.09 acres, providing long-term beneficial impacts to
53 stormwater systems and water resources.

54
55 The No Action Alternative would have long-term adverse impacts to communications operations
56 and socioeconomics as a result of the continued deterioration of the existing communications
57 facilities. Safety and stormwater would also be negatively impacted by the No Action Alternative.

58
59 To implement the Proposed Action, various federal and state reviews and permits would be
60 required. Potential permits and environmental protection plans include, but are not limited to, the
61 following:

- 62
- 63 • Individual Permit for Stormwater Associated with Construction Activity from the
 - 64 Maryland Department of the Environment (MDE)
 - 65 • Soil Erosion Control Plan
 - 66 • Air Quality Construction Permits
 - 67 • Environmental Protection Plan
- 68

69 These permits and approvals would be obtained prior to the start of construction.

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Acronyms and Abbreviations

ACM	Asbestos-Containing Materials
AFDW	Air Force District of Washington
AFI	Air Force Instruction
AOC	Area of Concern
AT/FP	Antiterrorism/Force Protection
CCC	Consolidated Communications Center
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
COMAR	Code of Annotated Maryland Regulations
CWA	Clean Water Act
CZMA	Coastal Zone Management Act
dB	Decibel
dBA	A-weighted decibels
DNL	Day-Night Average Sound Level
DoD	Department of Defense
DoDI	Department of Defense Instruction
DOPAA	Description of the Proposed Action and Alternatives
EA	Environmental Assessment
EIAP	Environmental Impact Analysis Process
EIS	Environmental Impact Statement
EISA	Energy Independence and Security Act
EO	Executive Order
ESA	Endangered Species Act
FONPA	Finding of No Practicable Alternative
FONSI	Finding of No Significant Impact
HVAC	Heating, Ventilation, and Air Conditioning
IDP	Installation Development Plan
INRMP	Integrated Natural Resources Management Plan
ITLO	Installation Tribal Liaison Officer
JBA	Joint Base Andrews
LEED	Leadership in Energy and Environmental Design
Leq	Equivalent Continuous Noise Level
LF	Linear Feet
LOD	Limit of Disturbance
MAJCOM	Major Command
MBTA	Migratory Bird Treaty Act
MDE	Maryland Department of the Environment
MDNR	Maryland Department of Natural Resources
MHT	Maryland Historic Trust
MW	Megawatt
NCC	Network Control Center
NCPC	National Capital Planning Commission
NCR	National Capital Region
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NOA	Notice of Availability
NPDES	National Pollutant Discharge Elimination System
NRL	Noise Level Reduction

NSR	Noise Sensitive Receiver
POL	Petroleum, Oil, Lubricant
POV	Privately Owned Vehicle
RF	Radio Frequency
sf	Square Feet
UFC	United Facilities Criteria
USAF	United States Air Force
USC	United States Code
USFWS	United States Fish and Wildlife Service

1.0 PURPOSE AND NEED FOR ACTION

1.1 INTRODUCTION

The U.S. Air Force's (USAF) Joint Base Andrews-Naval Air Facility (JBA), Maryland, has identified the need to construct a new Consolidated Communications Center (CCC) to support the communications and network integration missions of the base. This Environmental Assessment (EA) was prepared to evaluate the potential environmental impacts of this proposed project in compliance with the National Environmental Policy Act of 1969 (NEPA) (42 United States Code [U.S.C] 4331 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), the Air Force Environmental Impact Assessment Process Regulations at 32 CFR Part 989, and Air Force Instruction 32-7061 (Secretary of the Air Force, 2003).

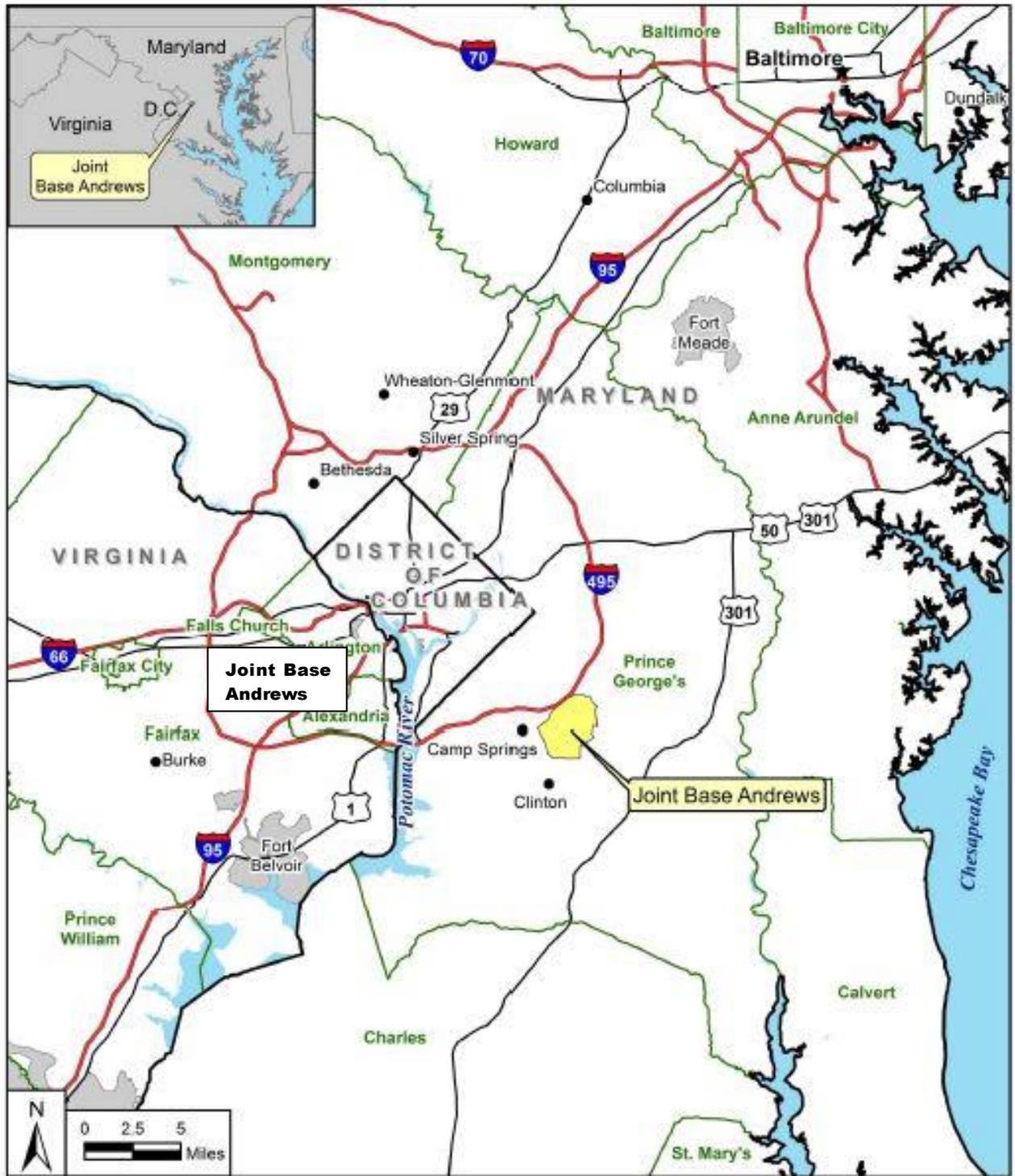
JBA is located five miles southeast of Washington, DC, in southern Prince George's County, Maryland, and occupies 4,390 acres of land (Figures 1.1-1 and 1.1-2). JBA is home to the 11th Wing which provides contingency response capability critical to national security, including emergency reaction rotary-wing airlift for the National Capital Region (NCR), combat-ready airmen in support of air and space expeditionary forces, and a secure installation with robust infrastructure that supports organizations housed on-base. Among those organizations are the Air Force District of Washington (AFDW), Air National Guard Readiness Center, Naval Air Facility Washington, U.S. Army, USAF Reserve, 89th Airlift Wing, 844th Communications Group, 113th Wing (DC Air National Guard), 459th Air Refueling Wing, U.S. Army Priority Air Transport, and Defense Intelligence Agency. The 11th Wing and the 844th Communications Group are part of the AFDW. The mission partners at JBA provide oversight, training, and readiness support for their respective organizations and transport for senior military and elected leaders. JBA also supports communication functions.

The information presented in this document will serve as the basis for deciding whether the Proposed Action would result in a significant impact to the human environment, requiring the preparation of an Environmental Impact Statement (EIS), or whether no significant impacts would occur, in which case a Finding of No Significant Impact (FONSI) would be appropriate. If the execution of any of the Proposed Action would involve "construction" in a wetland as defined in Executive Order (EO) 11990, *Protection of Wetlands*, or "action" in a floodplain under EO 11988, *Floodplain Management*, a Finding of No Practicable Alternative (FONPA) would be prepared in conjunction with the FONSI.

1.2 PURPOSE OF THE ACTION

The purpose of the proposed construction of the CCC facility is to provide an adequately sized and properly configured communications facility at JBA to support critical communications functions. A new CCC facility would provide centrally located, secure, and consolidated communications operations and maintenance and network integration support to the NCR, and other priority command and control missions.

Figure 1.2-1 : Location of Joint Base Andrews

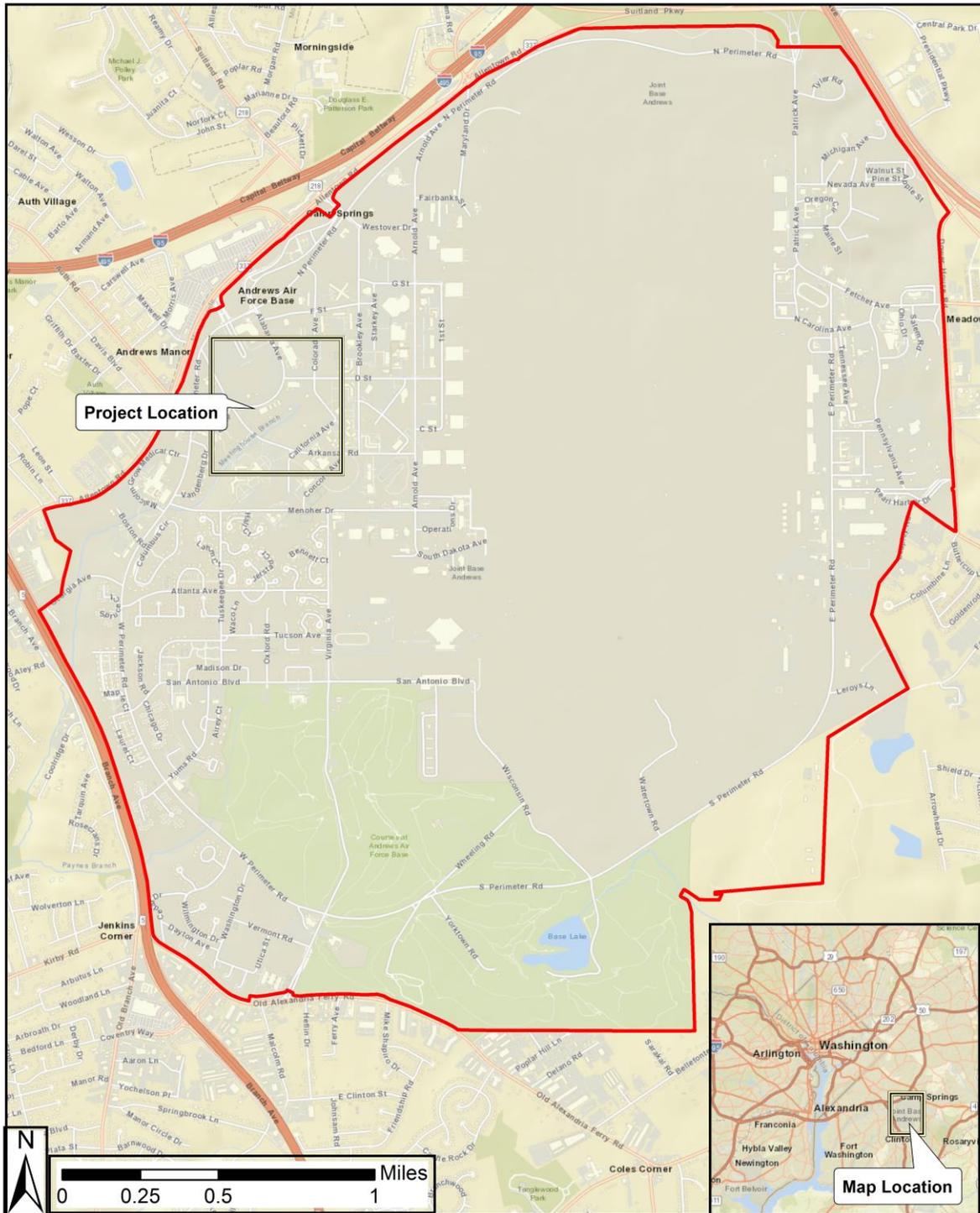


LEGEND

- Joint Base Andrews
- Surface Water
- Interstate Highway
- U.S. Route
- County Boundary

**Location of Joint Base Andrews-
Naval Air Facility Washington,
Maryland**

Figure 1.2-2: Location of Proposed Consolidated Communications Center on JBA



Installation Boundary

Location of Proposed Consolidated Communication Center on JBA

1.3 NEED FOR THE ACTION

The need for the proposed construction of the CCC facility is driven by relocation of communication functions from aged and unsafe buildings, centrally locating secure communication service areas, and allowing for necessary Network Control Center (NCC) expansion. Existing communications facilities on JBA are more than 50 years old and have foundation deterioration; inadequate fire suppression systems in critical server rooms; electrical load distributions that do not meet current electrical code; utility infrastructure that is more than 25 years old; inadequate heating, ventilation, and air conditioning (HVAC) systems; and asbestos-containing materials (ACM) that make upgrading or expanding the existing facilities difficult. The project would reduce life-cycle cost, provide systems and facilities that meet current and projected mission requirements, and improve health and safety on JBA.

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 Intergovernmental Cooperation Act of 1968 (42 U.S.C. 4231(a)) and EO 12372, Federal, state, and local agencies with jurisdiction that could be affected by the Proposed Action were notified during the development of this EA.

Appendix A contains the list of agencies consulted during this analysis and copies of the correspondence.

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. Consistent with that EO, Department of Defense Instruction (DoDI) 4710.02, *Interactions with Federally-Recognized Tribes*, and Air Force Instruction (AFI) 90-2002, *Air Force Interactions with Federally-Recognized Tribes*, Federally-Recognized tribes that are historically affiliated with JBA's geographic region were invited to consult on all proposed undertakings that have a potential to affect properties of cultural, historical, or religious significance to the tribes. 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. The JBA's point-of-contact for Native American tribes is the Installation Tribal Liaison Officer (ITLO).

The Native American tribal governments that were coordinated or consulted with regarding these actions are listed 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, including the Migratory Bird Treaty Act (MBTA) and Coastal Zone Management Act (CZMA), findings of effect and request for concurrence were transmitted to the Maryland Historic Trust (MHT) and the U.S. Fish and Wildlife Service (USFWS). Because the Proposed Action is located within Maryland's Coastal Zone, a consistency determination was submitted to the Maryland Coastal Zone Management Program for review. JBA also initiated consultation with the following agencies for the proposed project: Maryland Department of Natural Resources (MDNR), Maryland State Clearinghouse Office of Planning, Maryland Department of the Environment (MDE), Prince George's County Department of Planning, National Capital Parks-East, and National Capital Planning Commission (NCPC). JBA did not coordinate with the National Marine Fisheries Service (NMFS) because no marine resources will be impacted from this project.

Concurrence indicating a finding of no adverse effect for the demolition of buildings 1539 and 1558 was received from the MHT on 7 November 2017. On 20 April 2018, concurrence indicating a primary finding of no adverse effect on historic properties was received from the MHT for the construction of the CCC. On 1 March 2018, a report was generated through the Information for Planning and Conservation system, the USFWS online system for searching for species protected under the Endangered Species Act, which notes that no protected species occur on the proposed CCC construction site.

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

1.5 PUBLIC AND AGENCY REVIEW OF EA

A Notice of Availability (NOA) of the Draft EA and FONSI was published in the newspaper of record (listed below), announcing the availability of the Draft EA for review on 7 November 2018. The NOA invited the public to review and comment on the Draft EA. The public and agency review period ended on 7 December 2018. The NOA and public and agency comments are provided in Appendix A.

The NOA was published in the following newspaper: Maryland Independent.

Hard copies of the Draft EA and FONSI were made available for review at the following locations: Upper Marlboro Branch of the Prince George's County Memorial Library System, 14730 Main Street, Upper Marlboro, Maryland and the JBA Library, 1442 Concord Avenue, Joint Base Andrews, Maryland.

Electronic copies of the Draft EA and FONSI were also made available for review on the JBA website, www.andrews.af.mil.

1.6 DECISION TO BE MADE

The EA evaluates whether the Proposed Action would result in significant impacts on the human environment. If significant impacts are identified, JBA would undertake mitigation to reduce impacts to below the level of significance, undertake the preparation of an EIS addressing the Proposed Action, or abandon the Proposed Action.

This EA is a planning and decision-making tool that will be used to guide JBA in implementing the Proposed Action in a manner consistent with Air Force standards for environmental stewardship.

2.0 DESCRIPTION OF THE PROPOSED ACTION AND ALTERNATIVES

2.1 PROPOSED ACTION

The Proposed Action is to construct and operate an approximate 79,374 square foot CCC using economical design and construction methods (Figure 2.1-1). The facility would be constructed with reinforced concrete foundations, steel frame and roof systems, and concrete masonry unit walls. The construction would include site work, communications support, fire detection and suppression systems, environmental controls, pavement, a parking area, exterior lighting, security systems, landscaping, emergency generators, and all other support.

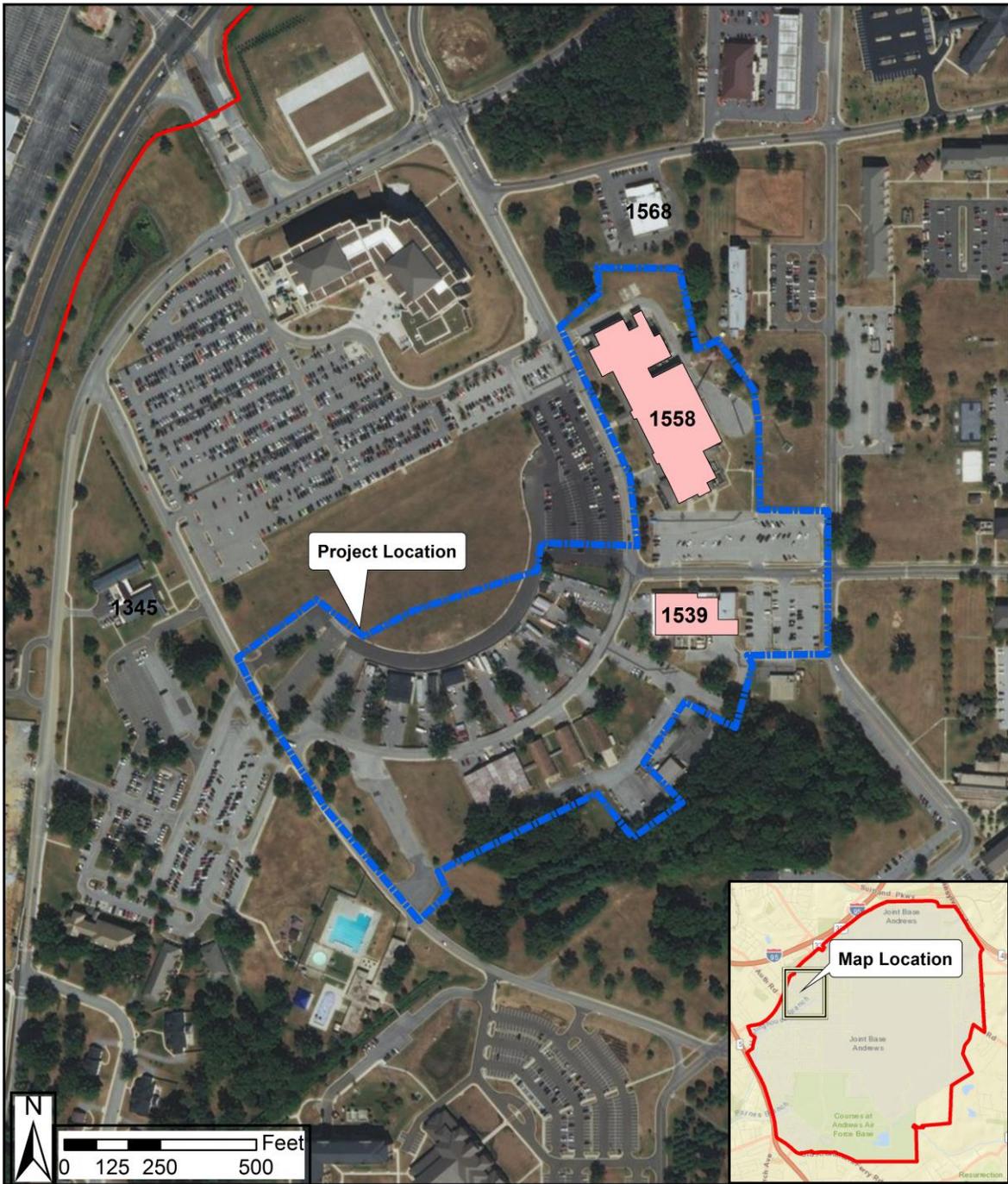
Data center equipment from other mission partners at JBA would be consolidated to take advantage of the fiber optic infrastructure recently completed at the installation, including the USAF Reserve, DC Air National Guard, and U.S. Army.

All major utility services are available in the proposed area, including water, sanitary sewer, natural gas, and electricity. The facility would have at least two electrical feeds from the JBA substation and communications cabling connections to maintain redundancy for the facility's operations. Approximately 1,500 linear feet (LF) of trenching for power and 2,000 LF of trenching for telecommunications would be required. Emergency generators and all necessary support for an uninterrupted power system would be required. In order to provide improved redundancy and availability, standby power would be supplied by two – 1 megawatt (MW) generators, plus one additional 1MW generator. The switchgear will also be configured to include a provision for a 1MW roll-up generator.

Buildings 1539 and 1558 (the existing facilities currently occupied by the mission partners) would remain operational throughout the construction of the new CCC. Once the new CCC was completed and certified for use, the functions in those facilities would be relocated to the new CCC, and buildings 1539 and 1558 would be demolished, including removal of electrical and communications ducts, HVAC equipment, four 25,000-gallon fuel tanks, and associated piping.

Approximately 412,078 square feet (sf) (266,587 sf impervious (asphalt and concrete) and 145,490 sf building area) would be demolished for this project. Approximately 6,392 LF for utilities (1,836 LF stormwater, 2,301 LF underground electric, 518 LF overhead electric, 1,277 LF underground telephone, and 460 LF gas) would be demolished for this project. The existing land use is categorized as Administration and Industrial and includes the current communication facilities (buildings 1558 and 1539). The total acreage of limit of disturbance (LOD) would be approximately 18.49 acres. Impervious surface would be reduced by approximately 7.09 acres, which is a 38 percent decrease from existing impervious surface (Figure 2.1-2). Landscaping would be included with the project. No additional personnel or traffic will be introduced to the project area as the new CCC is near the existing facilities and no new personnel are associated with the Proposed Action.

Figure 2.1-1 : Project Area and Demolition

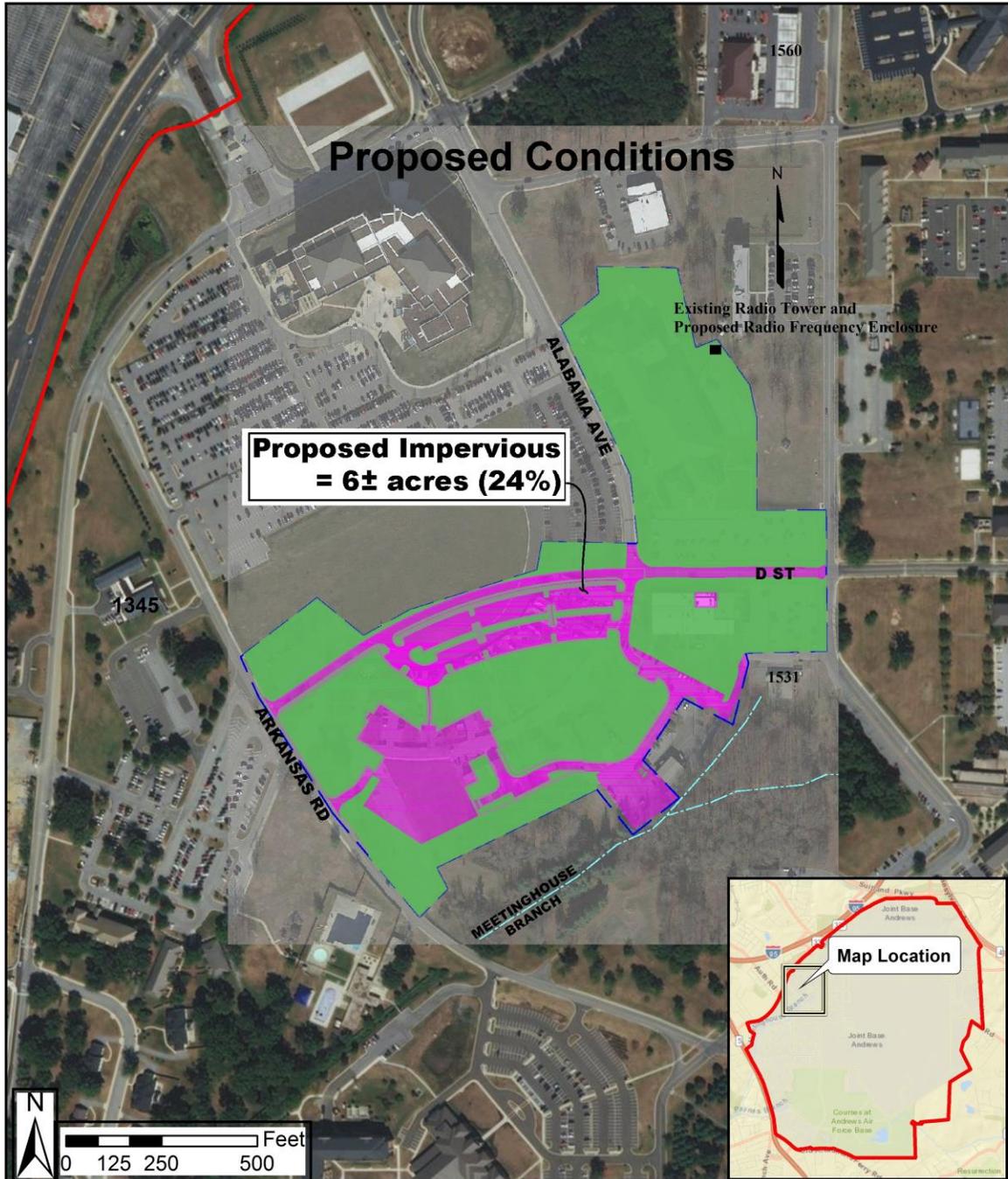


-  Project Area
-  Installation Boundary
-  Building to be Demolished

Project Area and Demolition at Proposed Consolidated Communication Center

Map Date: 22 January 2018; 35% Design

Figure 2.1-2: Layout and Facility Design of Proposed Consolidated Communications Center at JBA



-  Project Area
-  Installation Boundary
-  Proposed Pervious Surface
-  Proposed Impervious Surface

Layout and Facility Design of Proposed Consolidated Communication Center at JBA

Map Date: 22 January 2018; 35% Design

The existing communications vault below building 1539 would be retained and reused as a main connection point to the installation's cabling infrastructure. Building 1531 and the adjacent parking area would be retained and reused as a cable yard and protected parking for the CCC. The existing antenna tower located between buildings 1558 and 1560 would be retained. A radio frequency (RF) enclosure and new power connection would be provided at the base of the tower to permit the continued use of that facility. An area of the proposed site would be identified for a future antenna tower to allow the existing tower to be removed by JBA in the future.

Facility design would be compatible with applicable Department of Defense (DoD), Air Force, and base design standards. Local materials and construction techniques would be used when cost effective. The facility would be designed as permanent construction in accordance with DoD United Facilities Criteria (UFC) 1-200-01 and 1-200-02. The project would comply with DoD Antiterrorism/Force Protection (AT/FP) requirements per UFC 4-010-01 and AFI 32-9010, *Management and Reporting of Air Force Space and Building Services in OSD Assigned Facilities and in the Washington DC Area*.

The proposed site for the CCC is located in the northwest quadrant of JBA, south of the intersection of Alabama Avenue and D Street. Several other projects are planned in the near vicinity of the proposed site over the next five years and are further discussed in Section 4.16: Cumulative Impacts.

There are a number of trailers and temporary structures located in the parking lots to the north of the 1520 series buildings that are currently being used as construction laydown and staging areas. It is anticipated that these staging areas will be used during some phases of construction and demolition on the CCC, however, laydown areas may need to be moved to another location over the course of the project.

The new facility would include fire detection and notification, suppression, and control systems; and electrical and HVAC systems with 100-percent backup power (generators) to designated critical functions. The electrical system would include a facility uninterrupted power supply capable of providing sustained power for all essential communications technical loads. All secure areas would have entrance personnel entrapment, security locks, cameras, and physical security of the entire perimeter of the secured section.

In addition to supporting the Purpose of and Need for the Action, the Proposed Action must meet the following baseline requirements:

- The CCC facility must be designed as permanent construction in accordance with DoD UFC 1-200-01, *General Building Requirements*, and UFC 1-200-02, *High Performance and Sustainable Building Requirements*.
- The project must comply with DoD AT/FP requirements per UFC 4-010-01, *DoD Minimum Antiterrorism Standards for Buildings*.

- New facilities should be located and designed to minimize potential adverse impacts to the human and natural environments, and should be sited to avoid development constraints that would result in excessive costs or schedule delays.
- New facilities must not displace or adversely impact other missions at JBA.
- The project should leverage existing infrastructure to the greatest extent practicable.
- Facilities must be consistent with the Installation Development Plan (IDP), which guides the future development of the base.
- Stream and stormwater solutions must comply with the Clean Water Act (CWA) and the Code of Annotated Maryland Regulations (COMAR), U.S. Army Corp of Engineers (USACE) regulations, and pollutant discharge standards prescribed by Chesapeake Bay restoration initiatives, National Pollutant Discharge Elimination System (NPDES) permits, and section 438 of the Energy Independence and Security Act of 2007 (EISA).

In summary, construction of the CCC would involve the following actions:

- Construct a new CCC.
- Install an RF enclosure and new power connection at the base of the existing antenna tower.
- Construct a new parking lot north of the CCC, with a capacity of approximately 350 vehicles to provide parking for 60 percent of assigned personnel.
- Demolish buildings 1539 and 1558.

2.2 SELECTION STANDARDS

NEPA and the CEQ regulations mandate the consideration of reasonable alternatives for the Proposed Action. “Reasonable alternatives” are those that also could be utilized to meet the purpose of and need for the Proposed Action. Per the requirements of 32 CFR §989, the Air Force Environmental Impact Analysis Process (EIAP) regulations, selection standards are used to identify alternatives for meeting the purpose of and need for the Proposed Action.

As a point of reference, the 11th Wing conducted an Economic Analysis (12 Jul 2016), which compared the economic cost of a status quo (similar to the No Action Alternative), repair and upgrade of the existing facilities, and new construction. The Economic Analysis recommended new construction.

In selecting possible alternative locations for the construction of the CCC facility at JBA, the Air Force evaluated sites that met the following selection standards:

- Needs to stay as close as possible to the communications network infrastructure and existing communications tower.
- Best AT/FP site (ability to support 82 feet stand-off) and out of the main travel patterns.
- Needs to sustain current operations until new CCC is built and can switch over quickly so as not to interrupt mission.

2.3 SCREENING OF THE ALTERNATIVES

The following potential location alternatives that might meet the purpose and need were considered:

2.3.1 Alternative 1 (Proposed Action): South of Alabama Avenue

Under this alternative, JBA would implement the project south of Alabama Avenue, as defined in section 2.1.

2.3.2 Alternative 2: Building 1558 Site

This alternative is located northeast of the proposed site and would involve phased demolition and construction.

2.3.3 Alternative 3: Former Building 1535 Site

This alternative is a vacant site of the demolished building 1535, just north of the proposed site. This alternative would involve only the construction of a CCC facility and no initial demolition would be necessary. This alternative would also require the demolition of buildings 1558 and 1539 after construction of the CCC.

2.3.4 Alternative 4: Repair and Upgrade Buildings 1539 and 1558

This alternative would include general facility repairs for building 1539 and major upgrades to building 1558. Building 1558 upgrades would include repair and replacement of ductwork, adapting existing HVAC to create air plenum, installing fire suppression systems in Room 13 and the System Network Control Center, repairing cracks and joints for telephone support, replacing section A of the roof, and replacing the entire HVAC system in the Network Control Station section.

The selection standards described in Section 2.2 were applied to these alternatives to determine which alternative(s) could serve the purpose of and need for the action.

Table 2.3-1: Screening of the Alternatives

Alternative Descriptions	Selection Standards		
	Close as possible to communications	A/T/FP and out of main travel pattern	Maintain complete operations until new CCC completion
	A	B	C
Alternative 1	Yes*	Yes	Yes
Alternative 2	Yes	Partially	Partially
Alternative 3	Yes	No	Yes
Alternative 4	Yes	No	Partially

* Yes = Fully satisfies Selection Standard
 Partially = Does not fully satisfy Selection Standard
 No = Does not satisfy Selection Standard

2.4 DETAILED DESCRIPTION OF THE ALTERNATIVES

NEPA and the CEQ regulations mandate the consideration of reasonable alternatives to the Proposed Action. “Reasonable alternatives” are those that also could be utilized to meet the purpose of and need for the Proposed Action.

Alternative 1 (Proposed Action), met all the selection standards, and will be evaluated along with the No Action Alternative. Under the No Action Alternative, the CCC facility would not be constructed and the existing mission would continue to use buildings 1558 and 1539. The No Action Alternative would not meet current and projected mission requirements due to deteriorating facility conditions that would impact health and safety (inadequate fire suppression systems in critical server rooms, electrical load distributions that do not meet current electrical code and the presence of ACM). The Proposed Action satisfies applicable Air Force, DoD, State and/or Federal requirements, and supports current and future mission requirements.

The NEPA process is intended to support flexible, informed decision-making; the analysis provided by this EA and feedback from the public and other agencies will inform decisions made about whether, when and how to execute the Proposed Action. Among the alternatives evaluated is a No Action Alternative. The No Action Alternative will analyze the consequences of not undertaking the Proposed Action, not simply conclude no impact, and will serve to establish a comparative baseline for analysis.

One alternative, Alternative 1 (Proposed Action): South of Alabama Avenue, was found to answer the purpose of and need for the action and to satisfy the selection standards. Alternative 1, and a “No Action” Alternative, are carried forward for detailed analysis in this EA. Alternatives considered, but eliminated from further consideration are discussed in Section 2.5.

2.4.1 Alternative 1 (Proposed Action): South of Alabama Avenue

Under the Alternative 1 (Proposed Action), JBA would install an RF enclosure and new power connection at the base of the existing antenna tower, construct the new CCC facility south of Alabama Avenue, and then demolish buildings 1539 and 1558.

2.4.2 No Action Alternative

Under the No Action Alternative, the CCC facility would not be constructed and the existing mission would continue to use buildings 1558 and 1539. The No Action Alternative would not meet current and projected mission requirements due to deteriorating facility conditions that would impact health and safety (inadequate fire suppression systems in critical server rooms, electrical load distributions that do not meet current electrical code and the presence of ACM). The Proposed Action satisfies applicable Air Force, DoD, State and/or Federal requirements, and supports current and future mission requirements. However, it will be carried forward for further analysis, consistent with CEQ regulations, to provide a baseline against which the impacts of the Proposed Action can be assessed.

2.5 ALTERNATIVES ELIMINATED FROM FURTHER CONSIDERATION

Alternatives 2, 3, and 4 have been eliminated from further consideration based on the results of screening presented in Section 2.3. Alternative 2 fully satisfies Selection Standard A and only partially satisfies Selection Standards B and C because the site does not meet AT/FP requirements and partially impacts CCC missions during construction. Alternative 3 fully satisfies Selection Standards A and C, but does not satisfy Selection Standard B because it would not provide the required AT/FP stand-off distance of 82 feet around the building. Alternative 4 fully satisfies Selection Standard A; however, this alternative does not satisfy AT/FP requirements and would partially impact CCC missions during construction.

3.0 AFFECTED ENVIRONMENT

3.1 SCOPE OF ANALYSIS

This Section describes the relevant environmental conditions at the project site and surrounding area for resources potentially affected by the Proposed Action and No Action Alternative described in Section 2.0. Although the region of influence (ROI) or the expected geographic scope of potential impacts is considered to be all of Joint Base Andrews, the total acreage of limit of disturbance (LOD) would be approximately 18.49 acres. In compliance with guidelines contained in NEPA and CEQ regulations, and in AFI 32-7061 *Environmental Impact Analysis Process*, each environmental, cultural, and social resource category typically considered in an EA was reviewed for its applicability to the Proposed Action and No Action Alternative. Affected resources applicable to the Proposed Action are discussed further in this section and in Section 4.0, Environmental Consequences.

3.1.1 Resource Areas Eliminated from Detailed Analysis

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 construction, demolition, and operation associated with the proposed CCC. The following resource areas are not analyzed in this EA because the Proposed Action either has no potential to affect them or the potential impacts would be negligible:

Airspace. No impacts to airspace from construction, demolition, or operation activities related to the proposed CCC are expected to occur.

Designated Natural Areas. No Wild or Scenic Rivers, Natural Areas, or National Forests are present. (National Park Service (NPS) 2018) (Wilderness.net 2018)

Prime and Unique Farmlands. There are no prime and unique farmland soils located within the proposed project area.

Environmental Justice and Protection of Children. EO 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low income Populations, was issued by President Clinton on February 11, 1994. The EO requires that federal agencies take into consideration disproportionately high and adverse environmental effects of governmental decisions, policies, projects, and programs on minority and low-income populations.

Environmental Justice would be impacted if implementation of the Proposed Action affected localized minority and/or low-income populations through impacts that would disproportionately affect the earning potential, distribution, or health of these sensitive populations. Demolition and construction activities associated with the CCC would be entirely contained within the JBA boundaries and would not significantly impact on- or off-base communities. Although minor short-term impacts to traffic in the area would be anticipated, a traffic construction route and schedule

would be established to lessen the potential impact of construction traffic. It is not expected that increases in traffic would significantly impact the local community. Therefore, no populations (minority, low-income, or otherwise) would be disproportionately or adversely impacted and no adverse impact with regard to environmental justice would result.

On April 21, 1997, President Clinton issued EO 13045, Protection of Children from Environmental Health Risks and Safety Risks. The EO recognizes a body of scientific knowledge that demonstrates children might suffer disproportionately from environmental health risks and safety risk and directs each federal agency to make it a high priority to identify and assess environmental health risks and safety risks that might disproportionately affect children.

Implementation of the Proposed Action would not result in increased exposure of children to environmental health risks or safety risks such as those associated with the generation, use, or storage of hazardous materials. The Proposed Action sites are not near facilities where children would typically be present (e.g., residential housing, recreational areas, schools, child care centers). Standard construction site safety precautions (e.g., fencing and other security measures) would reduce potential risks to minimal levels and any potential impacts to children would be negligible and short-term.

3.2 NOISE / ACOUSTIC ENVIRONMENT

Sound is a physical phenomenon consisting of vibrations that travel through a medium such as air and are sensed by the human ear. Noise is defined as any sound that is undesirable because it interferes with communication, is intense enough to damage hearing, or is otherwise intrusive. Human response to noise varies depending on the type and characteristics of the noise distance between the noise source and the receptor, receptor sensitivity, and time of day. Noise often is generated by activities essential to a community's quality of life such as construction or vehicular traffic.

Sound varies by both intensity and frequency. Sound pressure level, described in decibels (dB), is used to quantify sound intensity. The dB is a logarithmic unit that expresses the ratio of a sound pressure level to a standard reference level. Hertz are used to quantify sound frequency. The human ear responds differently to different frequencies. *A-weighting*, measured in *A-weighted* decibels (dBA), approximates a frequency response expressing the perception of sound by humans. Sounds encountered in daily life and their dBA levels are provided in Table 3.2-1.

Table 3.2-1: Common Sound Analysis

Outdoor	Sound Level (dBA)	Indoor
Motorcycle	100	Subway train
Tractor	90	Garbage disposal
Noisy restaurant	85	Blender
Downtown	80	Ringling telephone
Freeway traffic	70	TV audio
Normal conversation	60	Sewing machine
Rainfall	50	Refrigerator
Quiet residential area	40	Library

The dBA noise metric describes steady noise levels, although very few noises are, in fact, constant. Therefore, A-weighted day-night sound level has been developed. *Day-night sound level* (DNL) is defined as the average sound energy in a 24-hour period with a 10-dB penalty added to the nighttime levels (10:00 p.m. to 7:00 a.m.). DNL is a useful descriptor for noise because it (1) averages ongoing yet intermittent noise and (2) measures total sound energy over a 24-hour period. In addition, *equivalent sound level* (Leq) often is used to describe the overall noise environment. Leq is the average sound level in dB.

The Noise Control Act of 1972 (Public Law 92-574) directs federal agencies to comply with applicable federal, state, and local noise control regulations. In 1974, EPA provided information suggesting continuous and long-term noise levels in excess of DNL 65 dBA are normally unacceptable for noise-sensitive land uses such as residences, schools, churches, and hospitals.

Maryland's Environmental Noise Act of 1974 limits noise to the level that will protect the health, general welfare, and property of the people of the state. Maryland limits both the overall noise environment and the maximum allowable noise level for residential, industrial, and commercial areas (Code of Maryland [COMAR] 26.02.03). Maximum levels in residential areas cannot exceed 65 dBA in the daytime (7:00 a.m. to 10:00 p.m.) and 55 dBA at night. In addition, the DNL cannot exceed 55 dBA in residential areas and 64 dBA in commercial areas. For construction and demolition activities, a person may not cause or permit noise levels that exceed 90 dBA during daytime hours (COMAR 26.02.03). Prince George's County maintains a noise ordinance that limits the maximum sound level in residential areas to 85 dBA.

DoD Instruction 4165.57 establishes and requires the military departments to develop, implement, and maintain an Air Installation Compatible Use Zone (AICUZ) program for installations with flying operations. AFI 32-7063, *Air Installations Compatible Use Zones Program*, provides installations with an overview of the Air Force's AICUZ program. AFI 32-7063 outlines noise level reduction (NLR) for new construction exposed to greater than 65 dB DNL. These NLR measures must be incorporated into the design and construction of portions of the new buildings where the public is received, office areas, noise-sensitive areas (NSAs), and where the normal noise level is low.

Existing sources of noise at JBA include aircraft overflights, road traffic, and other noises such as lawn maintenance equipment, construction noise, and bird and animal vocalizations. Background

noise levels without aircraft overflights (Leq and DNL) were estimated for the surrounding areas using the techniques specified in the American National Standards Institute's *Quantities and Procedures for Description and Measurement of Environmental Sound Part 3: Short-term measurements with an observer present*. A NSA is an area that, because of its use by humans or special status wildlife species and the importance of reduced noise levels to such use, is designated for management which limits the noise level from long-term and/or continuous noise producing sources. The closest NSA to the proposed CCC is approximately 1,590 feet to the west. The NSA type is residential and located in the Urban and Noisy Suburban Land Use Category. The estimated dBA for this NSA is as follows: DNL is 56 dB; daytime Leq is 55 dB; and nighttime Leq is 49 dB (DAF, 2017).

3.3 AIR QUALITY AND GREENHOUSE GAS

3.3.1 National Ambient Air Quality Standards and Attainment Status

The United States Environmental Protection Agency (USEPA) Region 3 and the Maryland Department of the Environment (MDE) regulate air quality in Maryland. The Clean Air Act (CAA) (42 U.S.C. 7401–7671q), as amended, gives USEPA the responsibility to establish the primary and secondary National Ambient Air Quality Standards (NAAQS) (40 CFR Part 50) acceptable concentration levels for seven criteria pollutants: particulate matter less than 10 microns (PM10), particulate matter less than 2.5 microns (PM2.5), sulfur dioxide (SO2), carbon monoxide (CO), nitrogen oxides (NOx), ozone (O3), and 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. Each state has the authority to adopt standards stricter than those established under the Federal program. MDE has adopted the NAAQS and is responsible for maintaining air quality standards for the State of Maryland.

Primary and secondary NAAQS for the aforementioned criteria are presented in Table 3.3-1. Areas that exceed the NAAQS ambient concentration (i.e., have poor air quality) are labeled as nonattainment areas and are designated by federal regulations. According to the severity of the pollution problem, areas exceeding the established NAAQS are categorized as marginal, moderate, serious, severe, or extreme nonattainment. Maintenance areas have recently met NAAQS but are considered to be at risk of not remaining in attainment if efforts aren't continued to maintain better air quality. The Proposed Action is located in Prince George County, which is within the National Capital Interstate Air Quality Control Region in the State of Maryland. Prince George County is designated as marginal nonattainment for 2008 8-hour O3 standards (USEPA, 2018). Additionally, the Proposed Action is located within the O3 transport region that includes 11 states and Washington, D.C. Metropolitan Statistical Area, including the northern Virginia suburbs.

Table 3.3-1: National Ambient Air Quality Standards

Pollutant	Standard	Averaging Time	Ambient Concentration	Prince George County Attainment Status
CO	Primary	1-hour ^a (ppm)	35	Attainment
		8-hour ^a (ppm)	9	
NO ₂	Primary	1-hour ^b (ppb)	100	Attainment
	Primary and Secondary	Annual ^c (ppb)	53	
O ₃	Primary and Secondary	8-hour ^d (ppm)	0.070	Nonattainment
SO ₂	Primary	1-hour ^e (ppb)	75	Attainment
	Secondary	3-hour ^a (ppm)	0.5	
PM _{2.5}	Primary and Secondary	24-hour ^f (µg/m ³)	35	Attainment
	Primary	Annual arithmetic mean ^g (µg/m ³)	12	
	Secondary	Annual arithmetic mean ^g (µg/m ³)	15	
PM ₁₀	Primary and Secondary	24-Hour ^h (µg/m ³)	150	Attainment

Source: USEPA Website

CO = carbon monoxide; µg/m³ = micrograms per cubic meter; NAAQS = National Ambient Air Quality Standards; NO₂ = nitrogen dioxide; O₃ = ozone; ppb = parts per billion; ppm = parts per million; PM_{2.5} = particulate matter less than 2.5 microns; PM₁₀ = particulate matter less than 10 microns; SO₂ = sulfur dioxide

a Not to be exceeded more than once per year; b 98th percentile of 1-hour daily maximum concentrations, averaged over 3 years.

c Annual mean; d Annual fourth-highest daily maximum 8-hour concentration, averaged over 3 years.

e 99th percentile of 1-hour daily maximum concentrations, averaged over 3 years; f 98th percentile, averaged over 3 years.

g Annual mean, averaged over 3 years; h Not to be exceeded more than once per year, on average over 3 years.

3.3.2 Regulatory Requirements for Hazardous Air Pollutants

In addition to criteria pollutant standards, the EPA also regulates hazardous air pollutant (HAP) emissions for each state. HAPs differ from criteria pollutants for they are known or suspected to cause cancer and other diseases, or have adverse environmental impacts. The National Emission Standards regulate 188 HAPs based on available control technologies. Sources of HAP emission at JBA include stationary, mobile, and fugitive emissions sources. Stationary sources include boilers, incinerators, fuel storage tanks, fuel-dispensing facilities, vehicle maintenance shops, laboratories, solvent degreasers, and aircraft engine testing facilities. Mobile sources of emissions include private and government-owned vehicles. Fugitive sources include dust generated from demolition activities, open burning, detonation of munitions, and roadway traffic. JBA is a minor source of HAP.

3.3.3 Clean Air Act Conformity

32 CFR 989, “Environmental Impact Analysis Process,” or EIAP, is the Air Force’s implementation tool for NEPA. EIAP provides the Air Force with a framework on how to comply with NEPA and the President’s CEQ Regulations for Implementing the Procedural Provisions of NEPA (40 CFR Parts 1500-1508, referred to as the CEQ Regulations). Additionally, for air quality (according to 32 CFR 989.30), all EIAP documents must address the CAA Conformity Rules (CRs) requirements. States (in this case MDE) develops air quality plans, which are also referred to as State Implementation Plans (SIPs) that are designed to attain and maintain the NAAQS, and to prevent

significant deterioration of air quality in areas which demonstrate air that exceeds NAAQS standards. Maryland has individual SIPs for various pollutants, including NO₂, PM_{2.5}, 8-hour O₃, regional 5 haze, lead, etc. Federal agencies must ensure that their actions conform to the SIP in a non-attainment area, and do not contribute to new violations of ambient air quality standards, or an increase in the frequency or severity of existing violations, or a delay in timely state and/or regional attainment standards.

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

- Ensure that Federal activities do not interfere with the budgets in the SIPs
- Ensure the attainment and maintenance of NAAQS
- Ensure that actions do not cause or contribute to new violations of NAAQS

USEPA has developed two distinctive sets of conformity regulations: one for transportation projects and one for non-transportation projects. Non-transportation projects are governed by general conformity regulations (40 CFR 93). The Proposed Action is a non-transportation project within a nonattainment area. Therefore, a general conformity analysis is required with respect to the 8-hour O₃ NAAQS.

Two levels of GCR documentation exist under a Conformity Evaluation: Applicability Analysis and Conformity Determination. Applicability Analysis is the process of determining if the Federal action must be supported by a Conformity Determination. This is accomplished through the use of the Air Force's approved tool, Air Conformity Applicability Model (ACAM). ACAM will perform a quantitative analysis of projected emission against regulatory thresholds which trigger a Conformity Determination. Conformity Determination is the evaluation made after an Applicability Analysis is completed and identifies if a Conformity Determination is required. The Conformity Determination is a complex assessment of air quality impacts and, if necessary, mitigation measure to ensure that a Federal action conforms to the applicable implementation plan and meets the requirements of the GCR. The General Conformity thresholds intended to be used to perform an Applicability Analysis can also be used as a general indicator for air quality NEPA assessments when the General Conformity thresholds are compared directly to the estimated net total direct and indirect emissions from the Proposed Action (or alternatives). The Applicability Analysis and the NEPA Assessment are referred to as Level II, Air Quality Quantitative Assessment in the Air Force EIAP Guide.

Prince George County has marginal ozone nonattainment classification. Because ozone formation is driven by other direct emissions, the air quality analyses focus on ozone precursors that include VOCs and NO_x. For an area in marginal nonattainment for the 8-hour O₃ NAAQS within the O₃ transport region, the regulatory threshold is 100 tons per year (tpy) for NO_x and 50 tpy for VOCs (40 CFR 93.153).

3.3.4 Asbestos Laws and Regulations

The most commonly found Asbestos in the United States are chrysotile, amosite, and crocidolite. The short thin asbestos fibers released into the air are a hazard to people who inhale these fibers. There is no known safe level of exposure for persons working with asbestos or near the same area

as an asbestos project; therefore, the CAA has defined national emission standards for hazardous air pollutants (NESHAP), including asbestos (a HAP pollutant with CAS No. 1332-21-4).

Under Section 112 of the CAA, the Asbestos NESHAP standards can be found under 40 CFR Part 61, Subpart M. The Asbestos standards have been amended several times, most comprehensively in November 1990 and again in 1995, the rule was amended to correct cross-reference citations to OSHA, DOT, and other EPA rules governing asbestos. Standards for demolition and renovation will apply to the Proposed Action.

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

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

3.3.5 Greenhouse Gas Emissions

Greenhouse Gases (GHGs) are a particular group of gasses that have the ability to trap heat by absorbing infrared radiation in the atmosphere. Scientific evidence indicates a trend of increasing global temperature over the past century which may be due to an increase in GHG emissions from human based activities. The most common GHGs emitted from natural processes and human activities include carbon dioxide (CO₂), methane (CH₄), and nitrous oxide (N₂O). The main source of GHGs from human activities is the combustion of fossil fuels, including crude oil and coal. Other examples of GHGs created and emitted primarily through human based activities include fluorinated gases (hydro-fluorocarbons and perfluorocarbons) and sulfur hexafluoride.

Each GHG is assigned a global warming potential (GWP). The GWP is the ability of a gas or aerosol to trap heat in the atmosphere. The GWP rating system is standardized to CO₂, which has a value of one. For example, CH₄ has a GWP of 25, which means that it has a global warming effect 25 times greater than CO₂ on an equal-mass basis (IPCC, 2007). To simplify GHG analyses, total GHG emissions from a source are often expressed as a CO₂ equivalent (CO_{2e}).

3.3.6 Regulatory Review and Permitting

Currently the USEPA has two regulations that 1) require annual GHG emissions reporting, and 2) add the requirement to address best available control technology (BACT) for new or modified sources that occur after January 2, 2011. These rules apply to fossil fuel suppliers and industrial gas suppliers, direct GHG emitters, and manufacturers of heavy-duty and off-road vehicles and engines.

On August 1, 2016, the CEQ released their final Guidance on GHG and Climate Change (CEQ, 2016). The CEQ guidance is applicable to all Federal actions subject to NEPA, including site specific actions, certain funding of site-specific projects, rulemaking actions, permitting decisions, and land/resource management decisions. Under the guidance, federal agencies should address climate change with two primary viewpoints:

- The potential effects of a Proposed Action on climate change and,
- The effects of climate change on a Proposed Action and its environmental impacts.

In the guidance issued on August 1, 2016, CEQ did not propose a particular quantity of GHG emissions as “significant” or “insignificant” relating to impacts to the environment or climate change. However, on 3 October 2016, EPA proposed establishing a de minimis value of GHGs or “Significant Emissions Rate” (SER) of 75,000 tons per year (tons/yr or tpy) CO₂e from stationary sources as a basis for requiring sources to obtain a Title V permit, if the sources were not otherwise required to obtain a Title V permit. As a result of this rule proposal, the 75,000 tpy CO₂e can be used as an indicator of de minimis significance. Therefore, actions resulting in less than 75,000 tpy CO₂e of GHG emissions are considered de minimis and not significant enough to warrant further NEPA analysis.

3.3.7 Executive Order (EO) 13693

In April 2007, the U.S. Supreme Court determined that the USEPA has the regulatory authority to list GHGs as pollutants under the federal CAA. Congress has considered numerous proposals and bills to regulate GHGs but has not adopted any legislation.

Currently, federal agencies address emissions of GHGs by reporting and meeting reductions mandated in laws, executive orders, and policies. The most recent of these are EO 13693, *Planning for Federal Sustainability in the Next Decade*, of March 19, 2015. The Energy Policy Act of 2005, Energy Independence and Security Act of 2007, and EO 13693 require an installation to adhere to specific energy improvements, which address waste reduction and improvements in efficiency.

3.3.8 Executive Order (EO) 13783

President Trump’s *Executive Order on Energy Independence (EO 13783)* rescinded certain energy and climate-related Presidential and Regulatory actions that previously had required Federal Departments and Agencies to consider greenhouse gas emissions and the effects of climate change in National Environmental Policy Act Reviews. However, GHG assessment was performed for the Proposed Action to concur with the EIAP guidance.

3.4 WATER RESOURCES

3.4.1 Groundwater

JBA is located in a section of the Inner Coastal Plain where several important and regional aquifers exist. Groundwater underlying the Main Base occurs at or near the ground surface, with shallow groundwater occurring at depths of less than 20 feet below ground surface (bgs), likely under confined conditions. Groundwater recharge occurs primarily through precipitation. Groundwater flow is believed to be down-gradient toward local streams or downward toward deeper underlying aquifers (USACE Baltimore District, 2014).

3.4.2 Surface Water

The Rivers and Harbors Act of 1899 (33 U.S.C. 401) establishes a program to regulate activities affecting navigable waters of the United States. Section 10 of the act (33 U.S.C. 403) directs that proponents must obtain a Section 10 permit administered by USACE for construction, excavation, or deposition of materials in, over, or under navigable waters, or for any work that would affect the course, location, condition, or capacity of those waters. Activities requiring Section 10 permits include structures (e.g., piers, wharves, breakwaters, bulkheads, jetties, weirs, transmission lines) and work such as dredging or disposal of dredged material, or excavation, filling, or other modifications to the navigable waters of the United States.

JBA is located in the watersheds of the Potomac and Patuxent rivers. The vast majority of the base is within the Potomac River watershed. Tributaries of the Potomac River on JBA are Meetinghouse Branch and Paynes Branch, which both originate in the southwestern quadrant of the base and flow west to the Potomac; Piscataway Creek, which originates in the southeast corner of the base; Tinkers Creek, which originates near the southwest corner of the base and flows to Piscataway Creek; and Henson Creek, in the northwest corner of the base. An area at the northeastern corner of the base is within the Patuxent River watershed. Tributaries of the Patuxent River are Cabin Creek and Charles Branch.

In Maryland's 2014 assessment of surface water quality, 22 percent of first through fourth order streams in the upper Patuxent River, partially in Prince George's County, are listed as impaired for the designated use of aquatic life and wildlife due to chlorides and sulfates attributable to urban runoff and stormwater (MDE 2015). The 2014 assessment made no change to the 2004 assessment of Piscataway Creek, in which first through fourth order streams in the creek in Prince George's County are listed as impaired for the designated use of aquatic life and wildlife for unknown causes.

Other surface water resources at JBA are Base Lake (Freedom Lake) in the southwest corner, three ponds in the northwest portion, and two other small impoundments at the south golf course (USACE Baltimore District, 2014). The proposed CCC is located adjacent to Meetinghouse Branch (Figure 3.4-1). Meetinghouse Branch is classified as a Use I stream by the MDDNR. Use class is a grouping or set of designated uses that apply to a water body which individually may or may not be supported now, but should be attainable. Use Class I streams designated uses include Water Contact Recreation, and Protection of Nontidal Warmwater Aquatic Life.

3.4.3 Floodplains

EO 11988 (May 24, 1977, 42 FR 26971, 3 CFR, 1977 Comp., p. 117) requires that development on Federal lands is to avoid to the extent possible the long- and short-term adverse impacts associated with the occupancy and modification of floodplains. Section 2 of the EO states that each agency has a responsibility to evaluate the potential effects of any actions it may take in a floodplain; to ensure that its planning programs and budget request reflect consideration of flood hazards and floodplain management; and to prescribe procedures to implement the policies and requirements of the EO. Before taking an action, each agency shall determine whether the Proposed Action will occur in a floodplain.

This determination shall be made according to a Department of Housing and Urban Development (HUD) floodplain map, Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) or a more detailed map of an area, if available. If such maps are not available, the agency shall make a determination of the location of the floodplain based on the best available information.

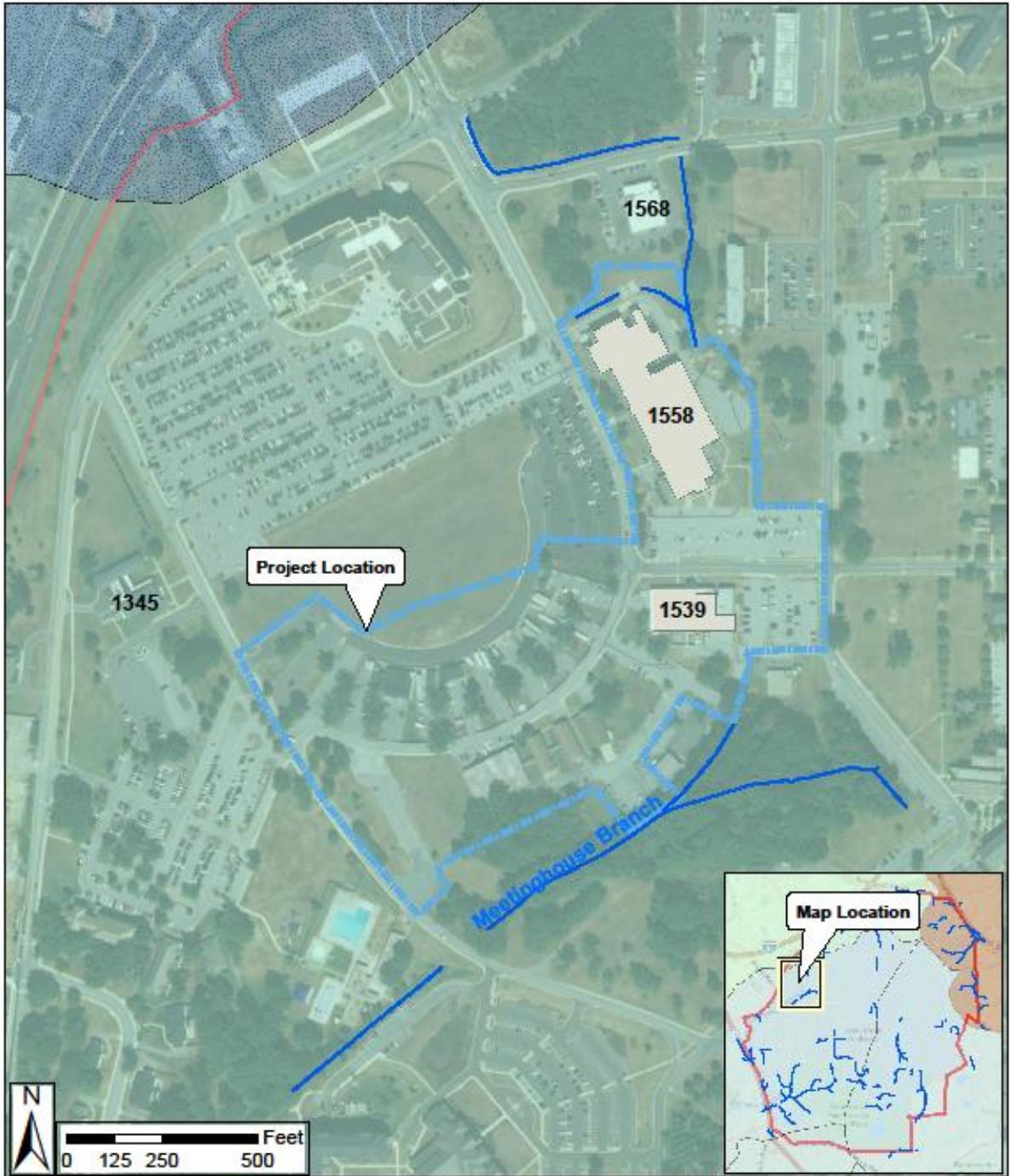
In July 2005 Andrews Air Force Base completed an analysis to determine the extent of the 100-year floodplain for the entire base. The purpose of this analysis, titled Andrews Air Force Base, 89th Airlift Wing Floodplain Analysis, was to produce a 100-year floodplain map and correlated Geographic Information System (GIS) files of the main Andrews Air Force Base installation.

The proposed CCC location is located within the vicinity of the 100 year floodplain associated with Meetinghouse Branch. Floodplains in the vicinity of the proposed CCC are presented on Figure 3.4-2. Construction and demolition for the proposed CCC could occur anywhere from approximately 500 feet to the area directly adjacent to floodplain.

3.4.4 Coastal Zone

JBA is within the designated Maryland coastal zone. When a federal agency conducts an activity or development project, or has an activity performed by a contractor for the benefit of the federal agency, the agency must determine whether its activities are reasonably likely to affect any coastal use or resource and to conduct the activities in a manner that is consistent to the maximum extent practicable with the enforceable policies of the applicable state coastal program. The federal agency must provide a consistency determination and supporting materials to the state Coastal Zone Management Program agency at least 90 days before starting the proposed activity (unless a different arrangement has previously been made between the federal agency and the authorized state agency) (Ghigiarelli 2004).

Figure 3.4-1: Surface Waters at Proposed Consolidated Communications Center



- Streams
- Potomac Sub Watershed
- Piscataway Creek
- Potomac River U tidal
- Project Area
- Installation Boundary
- Building to be Demolished

Surface Waters at Proposed Consolidated Communication Center

Map Date: 20 March 2018; 35% Design

Figure 3.4-2: Floodplains at Proposed Consolidated Communications Center



Floodplains at Proposed Consolidated Communication Center

-  Floodplain
-  Project Area
-  Installation Boundary
-  Building to be Demolished

Map Date: 20 March 2018; 35% Design

3.4.5 Stormwater Runoff

JBA is required to manage its stormwater discharges in accordance with the regulations and requirements contained in the COMAR Chapter 26 subsections. Generally, JBA is required to control preconstruction and postconstruction stormwater runoff, including erosion, sedimentation, and nonpoint source pollution. Specific requirements for JBA are described in *Maryland Stormwater Management Guidelines for State and Federal Projects* (MDE 2010) and in the MDE Stormwater Management Act of 2007 (MDE 2007). The regulations require that environmental site design (ESD) be implemented to the maximum extent practicable through the use of nonstructural BMPs and other site design techniques.

In accordance with the Stormwater Management Act of 2007, Maryland requires construction projects, including stream restoration projects, to provide ESD to the maximum extent practicable in an effort to minimize the adverse impacts of the discharge of stormwater runoff. ESD means using small-scale stormwater management practices, nonstructural techniques, and better site planning to mimic natural hydrologic runoff characteristics and minimize the impact of land development on water resources. MDE has published guidance on how federal facilities shall comply with the Stormwater Management Act, and it is enforced during the permit application process.

EISA Section 438 requires federal agencies to reduce water quality problems from stormwater runoff to the maximum extent technically feasible. Federal agencies can comply with EISA Section 438 by using a variety of stormwater management practices often referred to as *green infrastructure* or *low impact development* practices. The document *Technical Guidance on Implementing the Stormwater Runoff Requirements for Federal Projects under Section 438 of the Energy Independence and Security Act* is used as guidance to ensure compliance with EISA section 438.

It is USAF policy to apply sustainable development concepts to the planning, design, construction, environmental management, operation, maintenance, and disposition of infrastructure projects. Sustainable infrastructure achieves optimum resource efficiency and constructability while minimizing adverse impacts to the built and natural environments through all phases of its life cycle. The goal of sustainable infrastructure is to prevent environmental degradation caused by construction, operations, and disposition of facilities and to create built environments that are livable, healthy, maintainable, and productive. The USAF follows UFC 1-200-02, *High Performance and Sustainable Building Requirements* to meet sustainability criteria with all projects.

Stormwater runoff at JBA is conveyed through oil/water separators and storm drains in industrial areas, and through swales and ditches in other areas. JBA has eight subwatersheds, each of which discharges to a major storm drain outfall at the base boundary. Most stormwater (approximately 90 percent) drains to tributaries that flow to the Potomac River, with the rest draining to the Patuxent River.

3.4.6 Wetlands

CWA section 404 (33 U.S.C. 1344) establishes a program to regulate all dredging and filling activities related to jurisdictional waters and wetlands of the United States. Actions that might impact wetlands, to include dredging, filling, and activities that could displace soil into a wetland, might require a section 404 permit from USACE.

CWA section 401 directs that any proponent of an action that requires a federal license or permit (such as a section 404 permit) must obtain a Water Quality Certificate from the state water pollution control agency, certifying that the action complies with state water quality criteria.

In compliance with EO 11990, Protection of Wetlands, the USAF attempts to preserve the natural values of wetlands while carrying out its mission on both USAF lands and non-USAF lands. To the maximum extent practicable, the USAF avoids actions that would either destroy or adversely modify wetlands.

Wetland surveys were conducted at JBA in 1997, 2004, 2010, and 2012. The three main wetland community types identified at JBA are palustrine emergent wetlands (PEM), palustrine scrub-shrub wetlands (PSS), and palustrine forested wetlands (PFO). Most wetlands on JBA occur in association with streams.

Wetlands occur along Meetinghouse Branch east of the proposed CCC location (Figure 3.4-3).

3.5 BIOLOGICAL / NATURAL RESOURCES

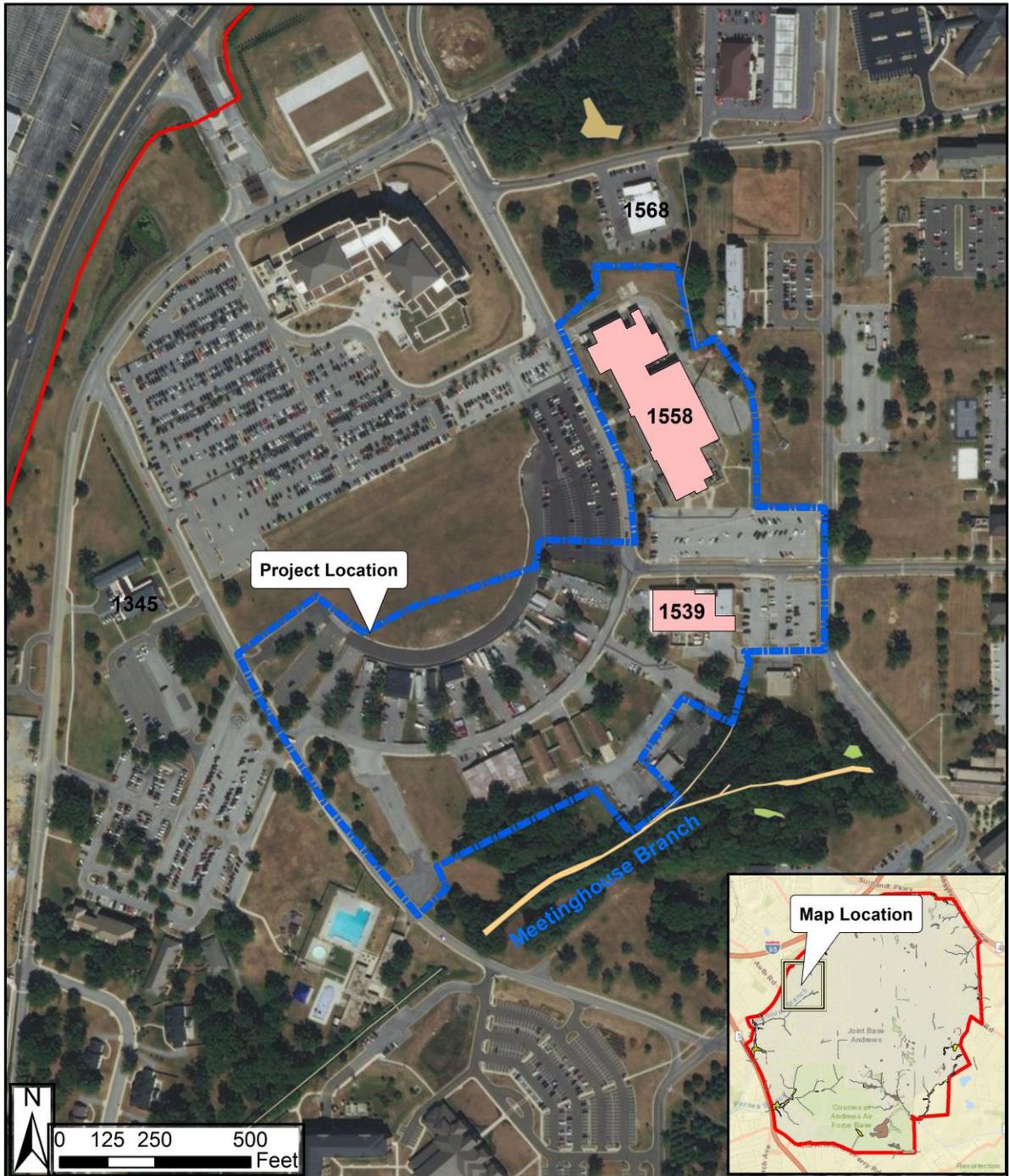
3.5.1 Vegetation

Nearly 80 percent of JBA is developed or intensely managed. Vegetation occurs largely in association with extensively managed or *improved* areas such as lawns, gardens, golf course fairways, housing areas, and recreational fields; along major roadways; and in *semi-improved* areas such as runway borders and clear zones, and the runway infield. Most turf and landscape areas are located in the improved and semi-improved portions of JBA.

Remaining patches of original vegetation (unimproved areas) consist of shallow, emergent marshland and forestland. JBA is in the Atlantic Slope section of the Oak-Pine Forest Region. Approximately 720 acres of forested land on JBA are scattered around the perimeter and southern portion of the base.

There is a mixed hardwood forest that occurs south of the site proposed for the CCC, but the site itself and locations where buildings would be removed are maintained lawns or developed areas. There are no sensitive plant communities near the project site. The project area has been maintained by mowing for at least 20 years (Figure 3.5-1).

Figure 3.4-3: Wetlands at Proposed Consolidated Communications Center

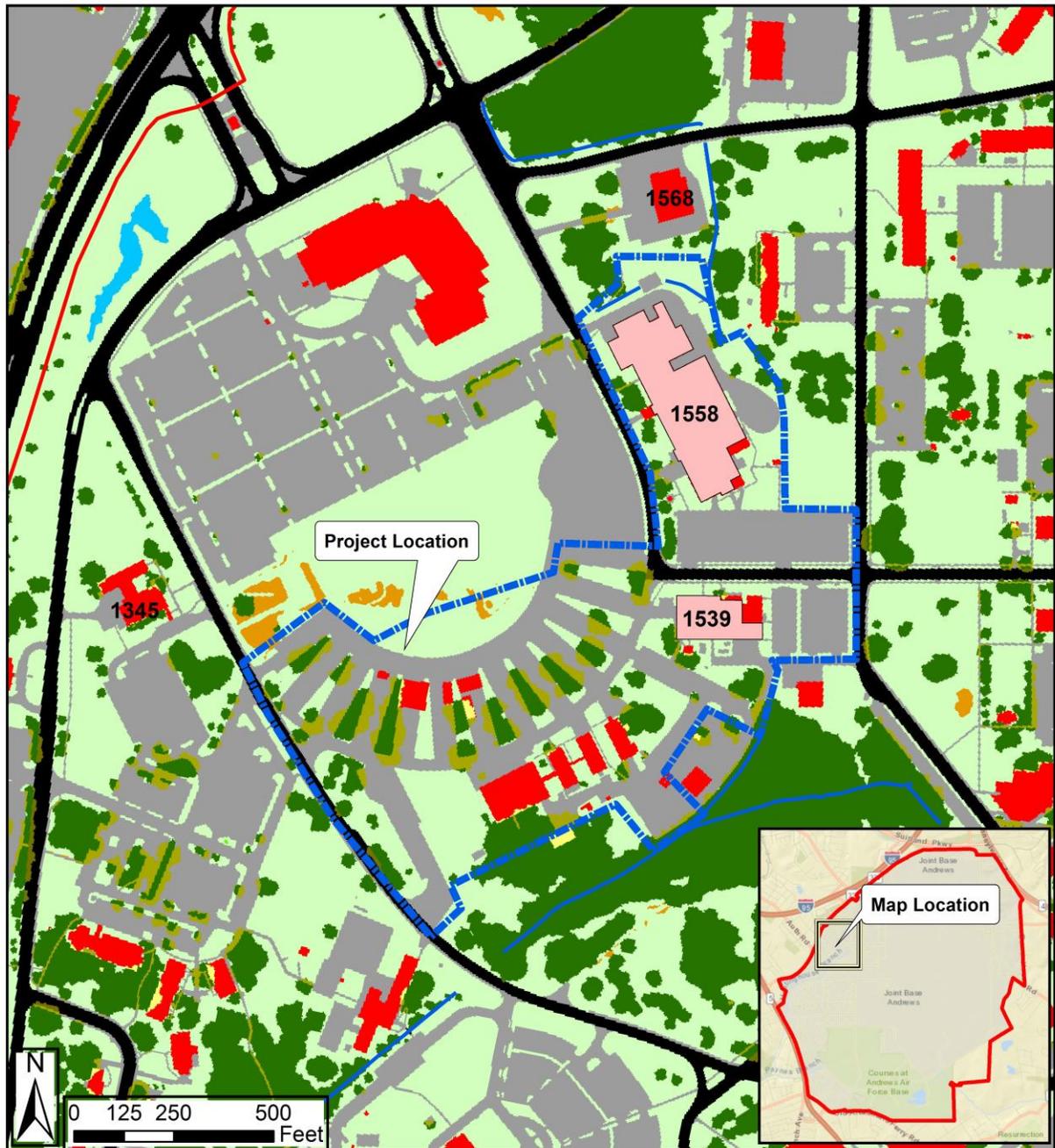


- | | |
|----------------------|---------------------------|
| Wetland Type | Project Area |
| Intermittent Stream | Installation Boundary |
| Isolated PEM Wetland | Building to be Demolished |
| Isolated PFO Wetland | |
| Perennial Stream | |

Wetlands at Proposed Consolidated Communication Center

Map Date: 20 March 2018; 35% Design

Figure 3.5-1: Land Cover at Proposed Consolidated Communications Center



Land Cover at Proposed Consolidated Communication Center

Land Cover	Low Vegetation	Tree Canopy	Tree Canopy over Impervious Roads	Project Area
Barren	Shrubland	Tree Canopy over Impervious Surfaces	Installation Boundary	Building to be Demolished
Impervious Roads	Structures	Tree Canopy over Structures		
Impervious Surfaces	Tree Canopy	Water		

Map Date: 20 March 2018; 35% Design

3.5.2 Wildlife

Wildlife on JBA is typical of the mid-Atlantic region. More than 80 bird species have been identified at the base, including geese, herons, perching birds, and birds of prey. Migratory birds, especially waterfowl, are common at JBA because of the ponds and wetlands and its proximity to the Chesapeake Bay. Certain birds are protected under the Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act. Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures.

The 25 migratory birds listed were generated by the Information for Planning and Conservation system, (the U.S. Fish and Wildlife Service online system for searching for species protected) as birds of particular concern either because they occur on the USFWS Birds of Conservation Concern (BCC) list or warrant special attention in the proposed CCC project site location (Table 3.5-1). A full report including breeding season and probability of presence within the CCC project area is included in Appendix C.

Reptiles found on JBA include common species of snakes, lizards, and turtles. Mammals known to occur at JBA also are typical of those in the region, including whitetailed deer (*Odocoileus virginianus*), raccoon (*Procyon lotor*), eastern gray squirrel (*Sciurus carolinensis*), eastern cottontail (*Sylvilagus floridanus*), and several bat species.

Table 3.5-1: Migratory Birds at the Proposed Consolidated Communications Center

Common Name	Scientific Name	Level of Concern
Bald Eagle	<i>Haliaeetus leucocephalus</i>	Non-BCC Vulnerable*
Black-billed Cuckoo	<i>Coccyzus erythrophthalmus</i>	BCC Rangewide
Bobolink	<i>Dolichonyx oryzivorus</i>	BCC Rangewide
Buff-breasted Sandpiper	<i>Calidris subru collis</i>	BCC Rangewide
Cerulean Warbler	<i>Dendroica cerulea</i>	BCC Rangewide
Eastern Whip-poor-will	<i>Antrostomus vociferus</i>	BCC Rangewide
Evening Grosbeak	<i>Coccothraustes vespertinus</i>	BCC Rangewide
Golden Eagle	<i>Aquila chrysaetos</i>	Non-BCC Vulnerable*
Golden-winged Warbler	<i>Vermivora chrysoptera</i>	BCC Rangewide
Hudsonian Godwit	<i>Limosa haemastica</i>	BCC Rangewide
Kentucky Warbler	<i>Oporornis formosus</i>	BCC Rangewide
King Rail	<i>Rallus elegans</i>	BCC Rangewide
Least Tern	<i>Sterna antillarum</i>	BCC in particular BCRs**
Lesser Yellowlegs	<i>Tringa flavipes</i>	BCC Rangewide
Long-eared Owl	<i>asio otus</i>	BCC Rangewide
Nelson's Sparrow	<i>Ammodramus nelsoni</i>	BCC Rangewide
Prairie Warbler	<i>Dendroica discolor</i>	BCC Rangewide
Prothonotary Warbler	<i>Protonotaria citrea</i>	BCC Rangewide
Red-headed Woodpecker	<i>Melanerpes erythrocephalus</i>	BCC Rangewide
Red-throated Loon	<i>Gavia stellata</i>	BCC Rangewide
Rusty Blackbird	<i>Euphagus carolinus</i>	BCC Rangewide
Semipalmated Sandpiper	<i>Calidris pusilla</i>	BCC Rangewide
Short-billed Dowitcher	<i>Limnodromus griseus</i>	BCC Rangewide
Willet	<i>Tringa semipalmata</i>	BCC Rangewide
Wood Thrush	<i>Hylocichla mustelina</i>	BCC Rangewide

*This is not a Bird of

Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.

**This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA.

3.5.3 Threatened and Endangered Species

There are eight sensitive species known to have existed at JBA (Table 3.5-2). The federally listed endangered species (the sandplain gerardia (*Agalinis acuta*)) was identified during a 1994 survey and observed during the annual monitoring for the plant in 2002, but was not observed in a 2006 survey because of its short blooming period. The only known population of the sandplain gerardia on JBA is south of the flight line near the 13th tee of the golf course. On 8 September 2016, the U.S. Army Corps of Engineers (USACE), Baltimore District, Planning Division, performed on-site vegetation surveys to determine the presence or absence of sandplain gerardia within this designated protection area. No sandplain gerardia were observed during the time of the survey. One species of gerardia was observed, blunt-leaved gerardia (*Agalinis obtusifolia*), which is listed as S1 or State Endangered (USACE Baltimore District 2018). In 2017, the sandplain gerardia was observed by Resource Management Associates. Monitoring at the known population site is on-going.

The habitats of the proposed CCC are not suitable for any of the sensitive species that have been found on JBA. JBA has fenced the original location of the sandplain gerardia and manages it as a preservation area for the species, and signage warns of the presence of a protected species. It is likely to have suffered from natural succession.

Further, the Information for Planning and Conservation system, the U.S. Fish and Wildlife Service online system for searching for species protected under the Endangered Species Act, notes that no protected species occur on the proposed CCC EA (USFWS, 2018). The full report can be found in Appendix C.

Table 3.5-2: RTE Species Previously Found at JBA

Common Name	Scientific Name	Status
Sandplain gerardia	<i>Agalinis acuta</i>	Federal
Blunt-leaved gerardia	<i>Agalinis obtusifolia</i>	State
Curtiss' three-awn	<i>Aristida curtissii</i>	State
Spiral pondweed	<i>Potamogeton spirillus</i>	State
Swollen bladderwort	<i>Utricularia inflata</i>	State
Tall nutrush	<i>Scleria triglomerata</i>	State
Carolina meadow-foxtail	<i>Alopecurus carolinianus</i>	State
Humped bladderwort	<i>Utricularia inflata</i>	State

3.6 EARTH RESOURCES

3.6.1 Geology and Soils

The majority of the surficial geology on JBA is comprised of upland deposits approximately 7 million years old and consists of irregularly bedded cobbles, gravel, and fine sand intermixed with silt or clay varying in thickness from 10 to 20 feet. The underlying Calvert Formation is visible where streams have cut deeply through the upland deposits. This formation was deposited during the

Miocene Epoch, approximately 19 million years ago, and consists of a mixture of sands, silts, clays, and shell beds.

Much of the original land area of the base has been disturbed by cut and fill or other construction activities since the base was constructed in 1942. Some areas, especially in and around the runways and taxiways, have been highly disturbed, and some disturbed areas have 20 feet or more of fill material.

Buildings associated with the CCC project are on Udorthents or Urban Land soils, with Udorthents and Fallsington-Urban Land Complex soils surrounding the buildings (Figure 3.6-1). Farmland classification identifies map units as prime farmland, farmland of statewide importance, farmland of local importance, or unique farmland. It identifies the location and extent of the soils that are best suited to food, feed, fiber, forage, and oilseed crops. Natural Resources Conservation Service (NRCS) policy and procedures on prime and unique farmlands are published in the "Federal Register," Vol. 43, No. 21, January 31, 1978.

There are no prime and unique farmland soils located within the proposed project area.

Table 3.6-1: Soil Classifications and Prime Farmland Soil at Project Site

Unit	Soil Name	Acres in AOI	Percent AOI	Prime Farmland Soil Designation
FbB	Fallsington-Urban land complex, 0 to 5 percent slopes	1.3	5.2%	Not Prime Farmland
UdbB	Udorthents, loamy, 0 to 5 percent slopes	4.7	18.8%	Not Prime Farmland
Un	Urban land	19.0	76.0%	Not Prime Farmland

(USDA-NRCS 2018)

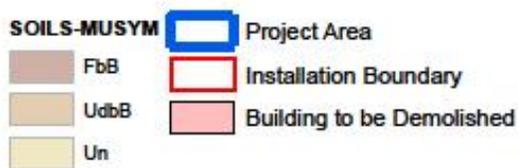
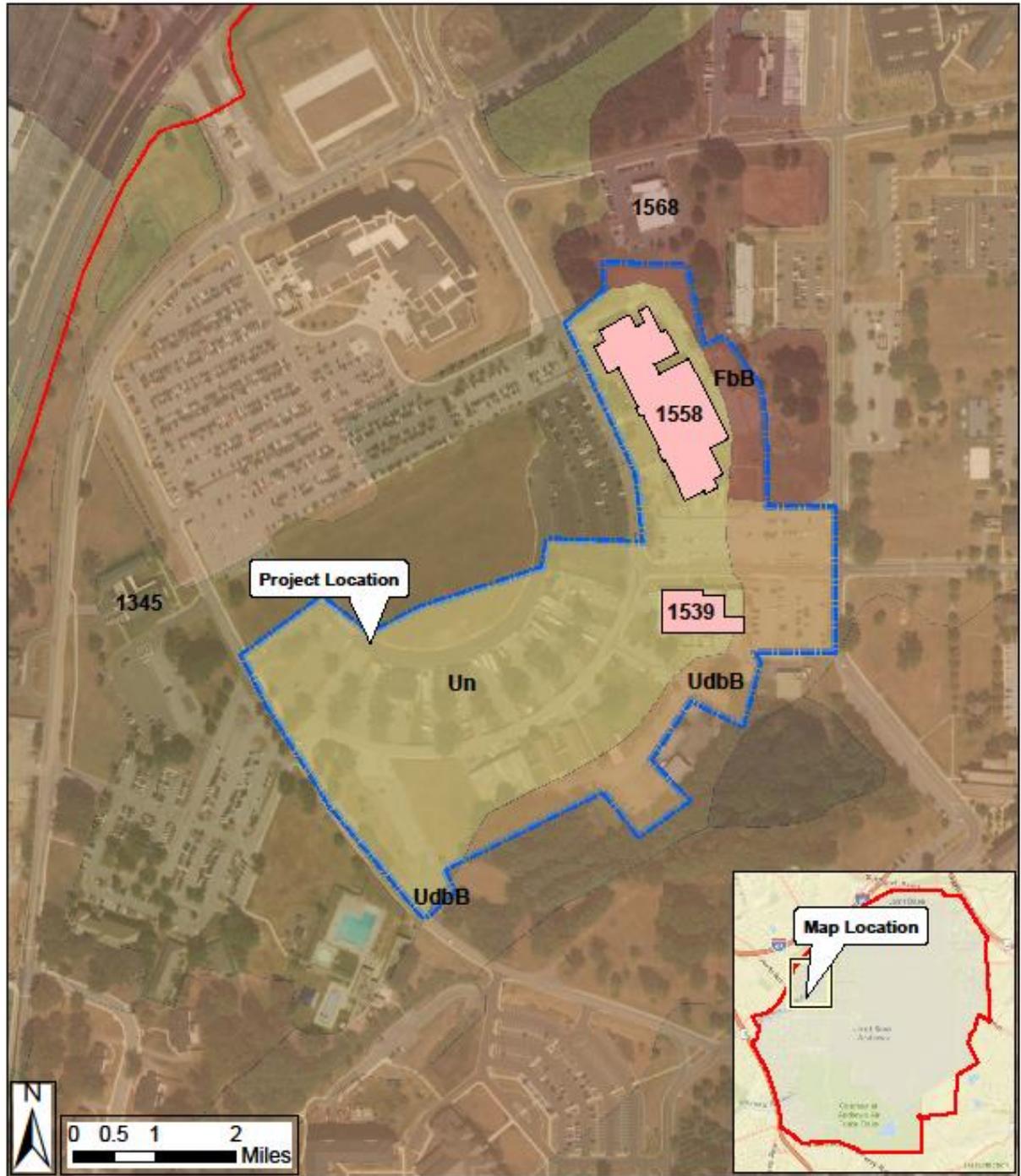
3.6.2 Topography

JBA is located between the Blue Ridge Mountains (60 miles to the west) and the Chesapeake Bay (25 miles to the east). The base is near the western edge of the Middle Atlantic Coastal Plain physiographic province. This fall line occurs between the Piedmont and Coastal Plain, approximately 12 miles west of the base. JBA is located on a plateau, situated between the Anacostia River to the west and the Patuxent River to the east. As shown in Figure 3.6-2, the topography is level to gently sloping, with elevations averaging 260 feet above mean sea level and local relief being less than 100 feet (Andrews AFB, 2009c).

3.7 HAZARDOUS MATERIALS / WASTE

The term *hazardous materials* refers to substances defined as hazardous by the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), and the term *hazardous waste* refers to wastes defined as hazardous by the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act (RCRA). Hazardous materials are substances that, because of their quality, concentration, or physical, chemical, or infectious characteristics, could

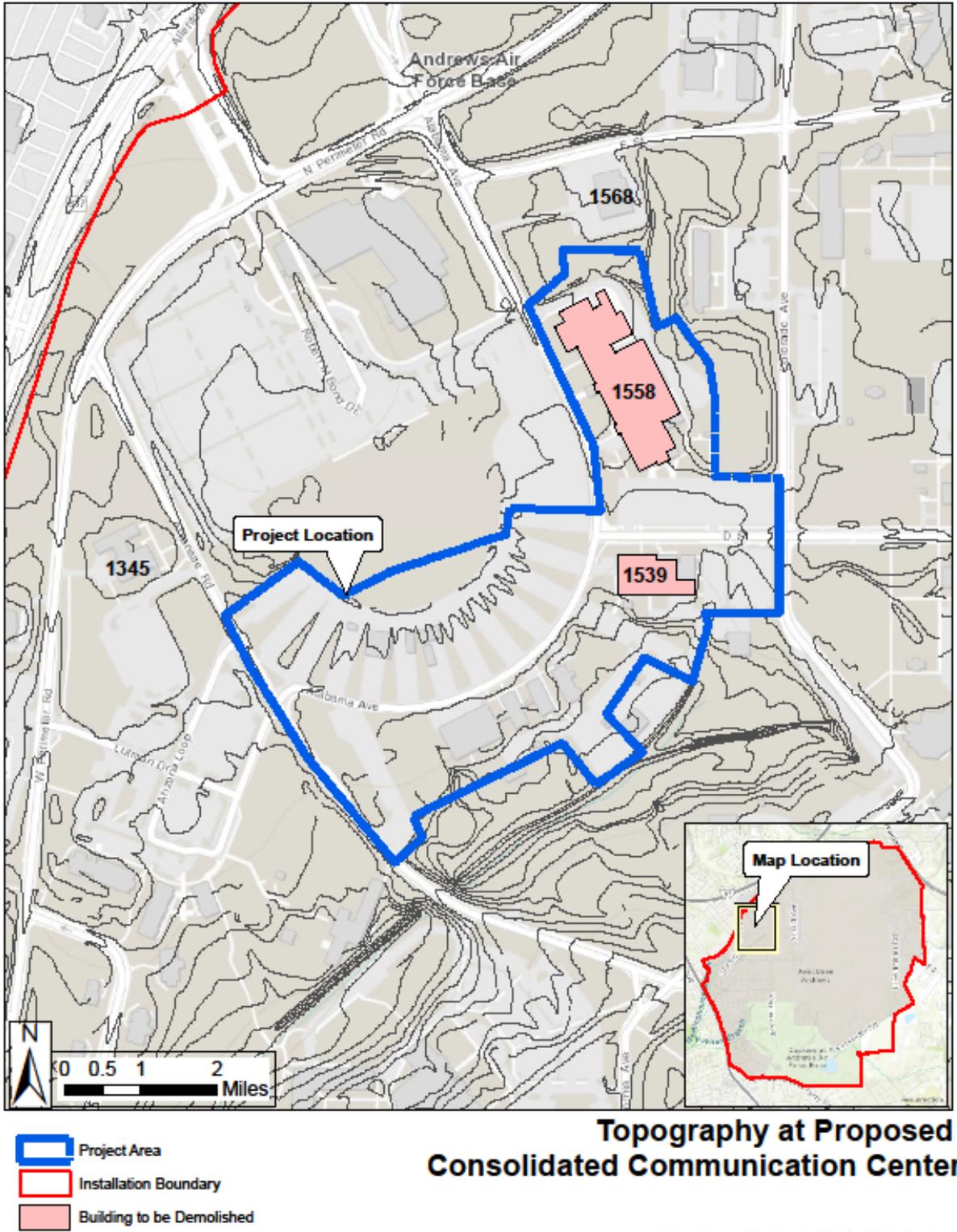
Figure 3.6-1: Soils at Proposed Consolidated Communications Center



Soil Types at Proposed Consolidated Communication Center

Map Date: 18 March 2018; 35% Design

Figure 3.6-2: Topography at Proposed Consolidated Communications Center



present substantial danger to public health or the environment when released into the environment.

Under 40 CFR Part 261, hazardous wastes regulated under RCRA are defined as solid, liquid, contained gaseous, semisolid waste, or any combination of wastes that either are listed or exhibit one or more of the hazardous characteristics. Petroleum products—including petroleum-based fuels, oils, and their wastes—are not covered under CERCLA but might be covered under RCRA.

Issues associated with hazardous materials and wastes typically center on waste streams; underground storage tanks (USTs); above ground storage tanks (ASTs); and the storage, transport, use, and disposal of pesticides, fuels, lubricants, and other industrial substances. For the purposes of this EA, hazardous materials and wastes include hazardous materials and waste management, Environmental Restoration Program (ERP) sites, Military Munitions Response Program Sites (MMRPs), USTs and ASTs, ACM, and LBP.

3.7.1 Hazardous and Petroleum Wastes Management

Operations conducted at JBA require the use and storage of hazardous materials, primarily associated with aircraft operations. The 11th Wing and its tenants produce more than 2,000 pounds of hazardous waste per month. Primary types of hazardous wastes generated include batteries, used fuel and oil, solvents, fluorescent bulbs, rags, fuel filters, and solvent-contaminated solids. Most of the hazardous waste is generated as a result of aircraft operations. JBA is regulated as a large quantity generator of hazardous wastes under EPA identification number MD0570024000.

The Toxic Substances Control Act of 1976 addresses the production, importation, use, and disposal of chemicals such as PCB's, Asbestos, Lead and Lead based paint, Mercury, Formaldehyde and Hexavalent Chromium Compounds. Buildings 1539 and 1558 were built in the 1950's and contain chemicals such as PCB's, Asbestos and Lead/Lead based paint.

Situated inside building 1558 are used oil and acid battery storage areas. A chemical storage shed is located on the east side of the building. To the south of building 1527 are storage facilities for refrigerant and acetylene and an oil drum (URS 2011).

3.7.2 Environmental Restoration Program Sites

The JBA ERP identifies, evaluates, remediates, and restores sites contaminated with toxic and hazardous substances, petroleum, oils, lubricants, and other pollutants and contaminants. The ERP has established a process to evaluate past disposal sites, control the migration of contaminants, identify potential hazards to human health and the environment, and remediate the sites.

ERP sites in close proximity to the proposed CCC Proposed Action sites are ST-20 USTs and TU-24 Car Care Center (building 1568). ERP site ST-20 consisted of multiple leaking USTs at multiple buildings, including building 1558. The USTs and the associated contaminated soils were excavated and disposed of off-site. Follow-up response actions included installing and sampling monitoring wells. In 2002, MDE issued a closure letter for the building 1558 UST site (JBA 2016c). While the site is closed, residual petroleum contamination could be present in soils surrounding the former USTs.

ERP site TU-24 Car Care Center (building 1568) is immediately north of building 1558. The site had several USTs removed in 1986 and between 2004 and 2005. Petroleum-impacted soil as well as thousands of gallons of petroleum-impacted groundwater were excavated from the site. The estimated extent of petroleum contamination came within about 50 feet of USTs that support building 1558. Remediation efforts were implemented and proved very effective in reducing petroleum constituents. The site was closed in 2011 and groundwater monitoring wells were properly abandoned. One well from the site investigation remains and is used as part of the base-wide groundwater monitoring well network (JBA 2016d). While the site is closed, residual petroleum contamination could be present in soils surrounding the former USTs. Additionally, while the proposed project location does not fall directly within a JBA ERP site, located just south of (to be demolished) building 1539 there are also three monitoring wells (1539-MW01, 02 and 03) associated with the base-wide monitoring well (MW) network.

3.7.3 Military Munitions Response Program

The Military Munitions Response Program (MMRP) at JBA consists of several sites dating back to 1943. The areas of concern are to the south end of the west runway and include: The Skeet and Trap Club (1964), a Firing in-Buttress (1943), a Small Arms Range (1959) and an Old Skeet Range (1954). The Skeet and Trap Club and Old Skeet Range were recreational in use and likely used 12-, 20-, and 28-gauge ammunition. The Firing-In Buttress was built to withstand munitions ranging from .30 caliber to 37mm. The Small Arms Range was an indoor pistol range with five firing positions. The only documented ammunition used was .38 and .45 caliber rounds. There are no MMRP sites known to occur near the project site (JBA, 2010).

3.7.4 ASTs and USTs

Two 25,000-gallon double-walled diesel USTs serve generators inside building 1558. The USTs are situated side by side at the north end of the building. The loading area for the USTs is sloped into a trench drain to capture any releases. The containment area is designed to provide containment for the largest compartment of a commercial fuel truck. There are two additional USTs that were abandoned in place in the 1990s, under the battery room of building 1558. A 6,000-gallon diesel convault AST and a 50-gallon double-walled steel AST containing diesel are located within a fenced area on the south side of building 1539. Both tanks have secondary containment (URS 2011). Monitoring wells are situated to the south of the building 1539 ASTs.

3.7.5 Asbestos and Lead

Within the project boundaries there is potential for asbestos-containing material (ACM) and lead to exist on buildings that were constructed more than 50 years ago. Buildings 1539 and 1558 are known to contain ACM, but not lead, and are proposed for demolition. In building 1558, there is an estimated 8,400 square feet of ACM floor tile present. Additionally, ACM mastic remains on approximately 1,725 square feet of concrete slab where tile has been removed. Exterior caulking material at older doors and at brick expansion joints contains asbestos. There is an estimated 245 linear feet of this non-friable ACM in building 1558.

In building 1539, there is approximately 220 linear feet of large (>12" diameter) ACM Thermal System Insulation (TSI) insulation was identified as generator exhaust flues. This friable ACM shall be removed prior to demolition. Additionally, 60 linear feet of smaller (<12" diameter) ACM TSI

insulated lines was determined present. There is an estimated 13,500 square feet of ACM floor tile remaining in the building, most under the carpet. An un-renovated section in the central main conference room contains ACM acoustical tile and adhesive. This material is presently non-friable but can become friable and should be removed as such. There is an estimated 100 square feet in the area.

3.8 CULTURAL RESOURCES

Cultural resources are any prehistoric or historic district, site, or building, structure, or object considered important to a culture or community for scientific, traditional, religious, or other purposes. They include archaeological resources, historic architectural resources, and traditional resources.

Cultural resources that meet the criteria for listing on the National Register of Historic Places (NRHP) are also known as historic properties (36 CFR 800.16(l)). If the eligibility of a Historic property has not been determined, then they must be treated as if they were listed on the NRHP.

Cultural resources can be divided into three subsections:

- Archaeological (i.e., prehistoric or historic sites where human activity has left physical evidence to that activity but no structures remain standing)
- Architectural (i.e., buildings or other structures or groups of structures, or designed landscapes that are of historic or aesthetic significance)
- Traditional Cultural Properties (TCPs) (resources of traditional, religious, or cultural significance to Native American tribes)

Cultural resources are “historic properties” as defined by the National Historic Preservation Act (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 of 1987 (AIRFA), and collections and associated records as defined in 36 CFR 79.

The NHPA, as amended, requires federal agencies to consider effects of federal undertakings on historic properties prior to making a decision or taking an action, and to integrate historic preservation values into their decision making processes. Federal agencies fulfill this requirement by completing the Section 106 consultation process, as set forth in 36 CFR 800.

The construction of the CCC has the potential to affect historic properties. The Area of Potential Effect (APE) for this undertaking, as defined at 36 CFR §800.16(d), is the footprint of the project including the anticipated limits of construction and its associated ancillary activities, and the geographic areas within which the undertaking may directly or indirectly cause alterations, including visual effects, to the character or use of historic properties.

3.8.1 Archeological Resources

The physiographic location of JBA between the Potomac and Patuxent rivers would have been attractive to prehistoric inhabitants of the region. It is known that prehistoric groups utilized the immediate environs of JBA for habitation and/or resource procurement. During the historic period, this region contained plantations associated with the rural agricultural economy of Prince George's County. However, construction and development of JBA has disturbed much of the area's soils thus affecting the integrity of many prehistoric and historic deposits within JBA (National Park Service 1993).

The 2017 JBA Integrated Cultural Resources Management Plan (ICRMP) Update includes a synopsis of previous cultural resource surveys and architectural inventories, and outlines and assigns responsibilities for the management and preservation of cultural resources at JBA. The ICRMP indicates that JBA has completed its inventory and identification of archeological resources and that no new inventory efforts are needed (Andrews AFB, 2017).

While previous investigations have identified six archeological sites that are eligible for inclusion in the NRHP on properties owned by JBA (Andrews AFB 1996; Harrell and Montagiani 1984; Moeller et al. 1995; NPS 1993; Tetra Tech 1999), the only eligible site on JBA's main base is Belle Chance (site 18PR447). Moeller et al. (1995) identified 62 locations that could contain historic archeological resources. Although these locations have been subjected to disturbance from base construction, subsurface deposits associated with these sites may remain intact at some localities.

3.8.2 Architectural Resources

One historic property, Belle Chance (PG: 77-14), within the boundaries of JBA has been determined to be eligible for the NRHP. The Belle Chance property includes a 1912 dwelling, two auxiliary buildings, a cemetery, and one historic archaeological site (18PR447) near the northwest boundary of JBA. The Belle Chance buildings were transferred to a housing privatization contractor in 2007, although the land that encompasses Belle Chance remains in the larger JBA boundary and under federal ownership (Figure 3.8-1). A base-wide inventory of Cold War era buildings and structures was performed and no structures were determined to be eligible for inclusion in the NRHP (Andrews AFB 2009a). No architectural or archaeological historic properties are known to be within the footprint of the proposed CCC.

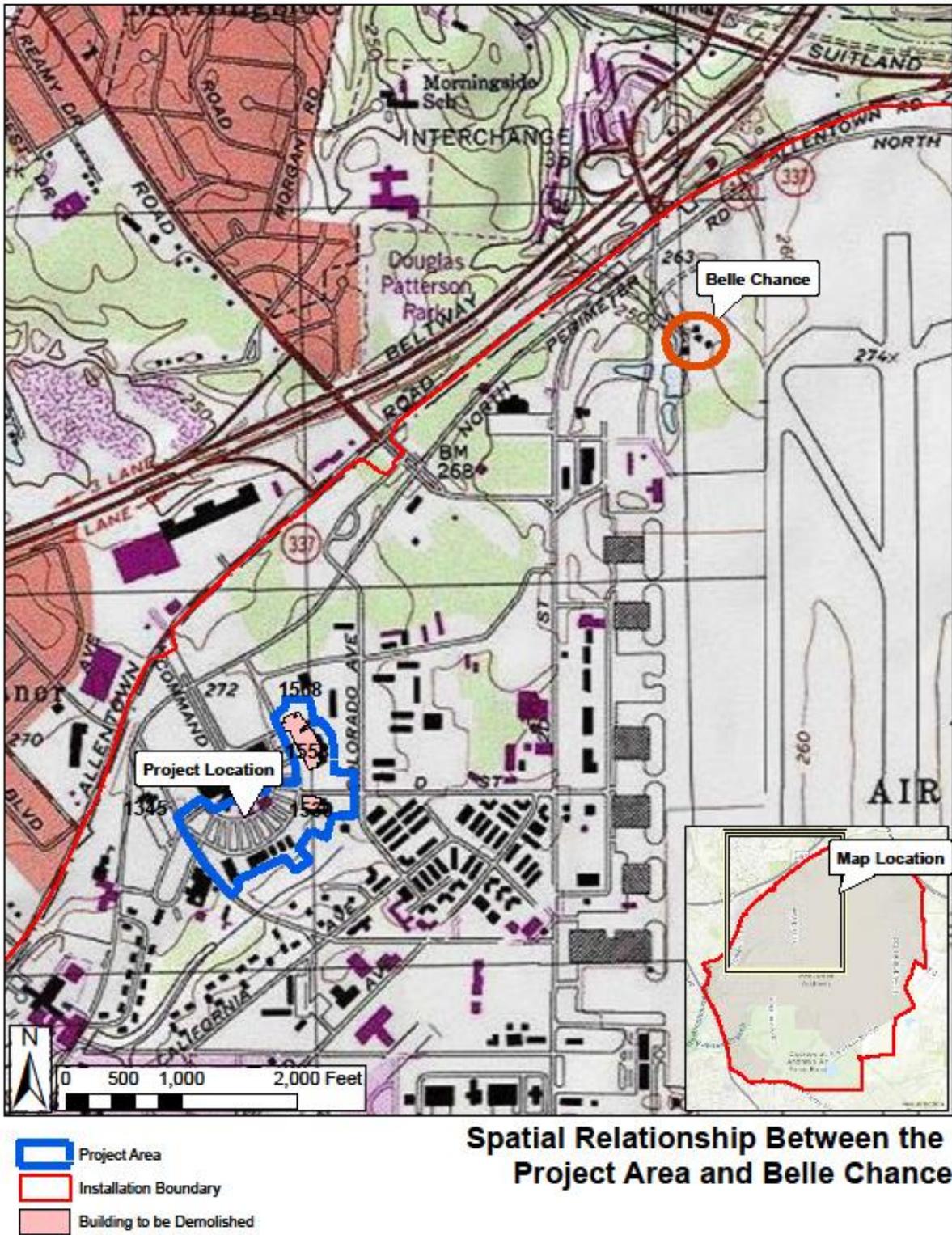
3.8.3 Traditional Cultural Properties

No TCPs have been identified on JBA.

3.9 LAND USE

JBA was originally established in a relatively undeveloped area in Prince George's County, Maryland. In recent years, additional development has occurred adjacent to JBA, but this development has not been nearly as extensive or sprawling as that experienced by suburban counties in nearby northern Virginia. Existing land uses adjacent to JBA are mostly residential, commercial, or industrial. Just north of JBA is the Suitland Parkway, a limited access scenic roadway that was opened on December 9, 1944, to serve as a rapid transit road between Camp Springs and Bolling Field Air Force Base, the Pentagon and downtown Washington, D.C.

Figure 3.8-1: Location of Belle Chance



The National Park Service (NPS) manages the parkway. It is part of the National Executive Route, along which motorcades travel between JBA and Washington, D.C. Also, the Parkway is listed on the National Register of Historic Places (NRHP). The main base's 4,390 acres are divided among 10 land use classifications. The approximate acreage of each land use is provided in Table 3.9-1 (Department of the Air Force, 2016).

Table 3.9-1: Acreage of Land Use Categories at Joint Base Andrews

Land Use	Acreage
Administrative	127
Aircraft Operations and Maintenance	366
Airfield (Includes Grass Areas inside Runways)	1,525
Community	136
Housing (Includes Demolished and Unoccupied Housing)	508
Industrial	144
Medical	47
Open Space	784
Outdoor Recreation	731
Water	22
TOTAL	4,390

The *existing land use* at the project site is categorized as Administration and Industrial, but the *future land use* is proposed to be designated as only Administration in the future (Table 3.9-2).

Table 3.9-2: Acreage of Land Use Categories at Proposed CCC

Facility	Existing Land Use	Surrounding Land Use	Future Land Use	Future Surrounding Land Use
Building 1539, 1558	Administrative	Administration	Administration	Community Housing Unaccompanied

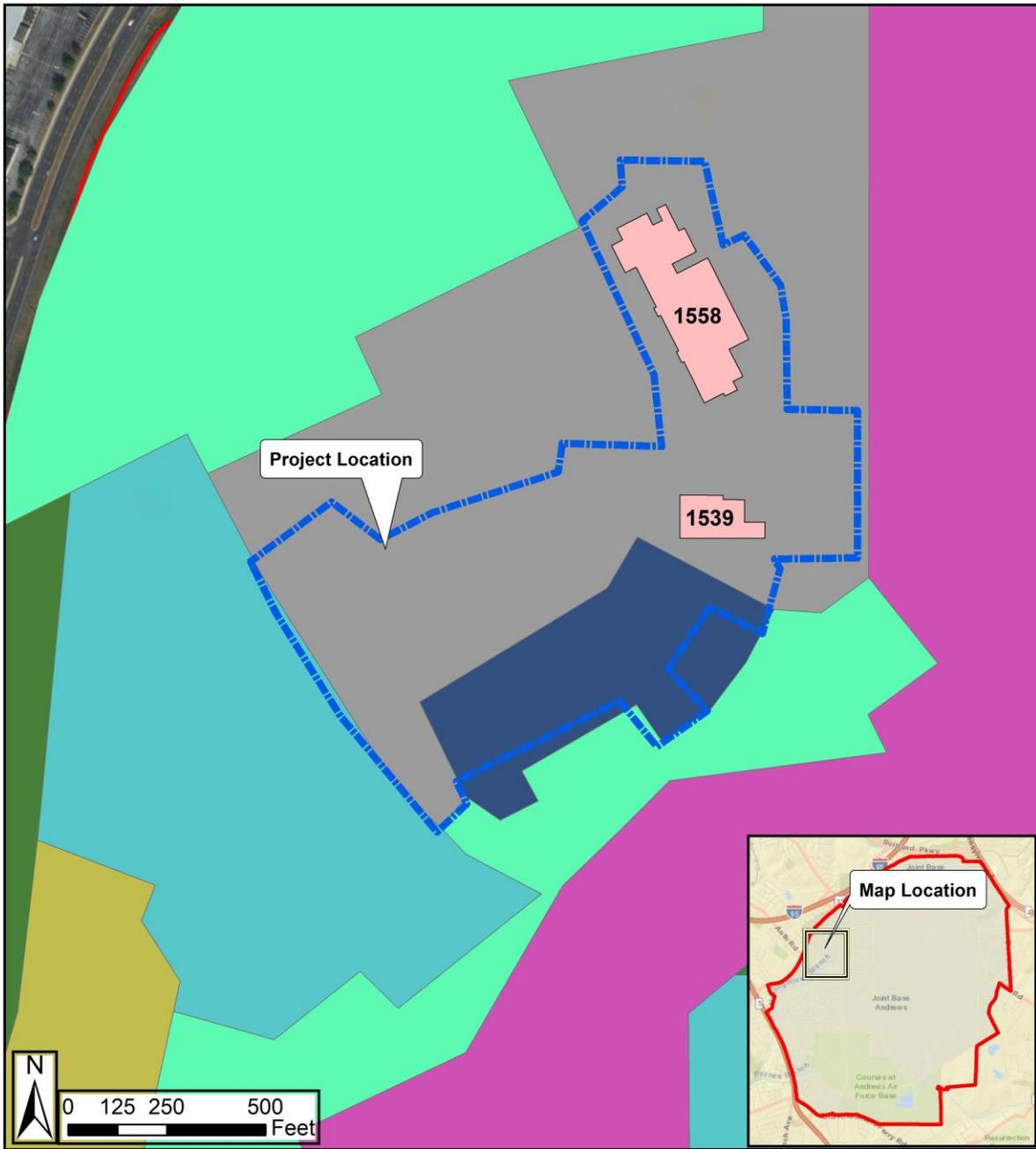
Existing land use refers to the parcel's current land use designation, as shown in the 2016 Installation Development Plan (IDP) (Figure 3.9-1) (Michael Baker 2015). *Future land use* refers to the proposed land use designation of the parcel (Figure 3.9-2).

3.10 INFRASTRUCTURE / UTILITIES

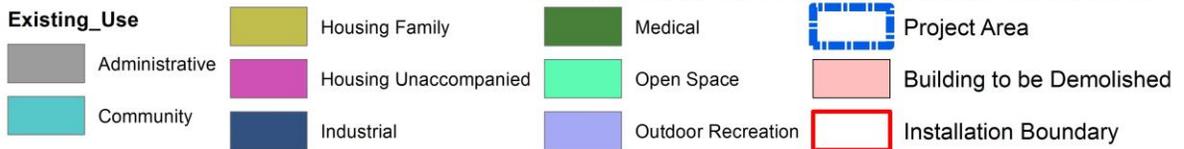
3.10.1 Potable Water Distribution System

The water system infrastructure at JBA was privatized in February 2006. Terrapin Utility Services Inc., owns and operates the system under a 50-year contract and purchases water from the Washington Suburban Sanitary Commission (WSSC) to serve the base. The water supply and

Figure 3.9-1: Existing Land Use at Proposed Consolidated Communications Center

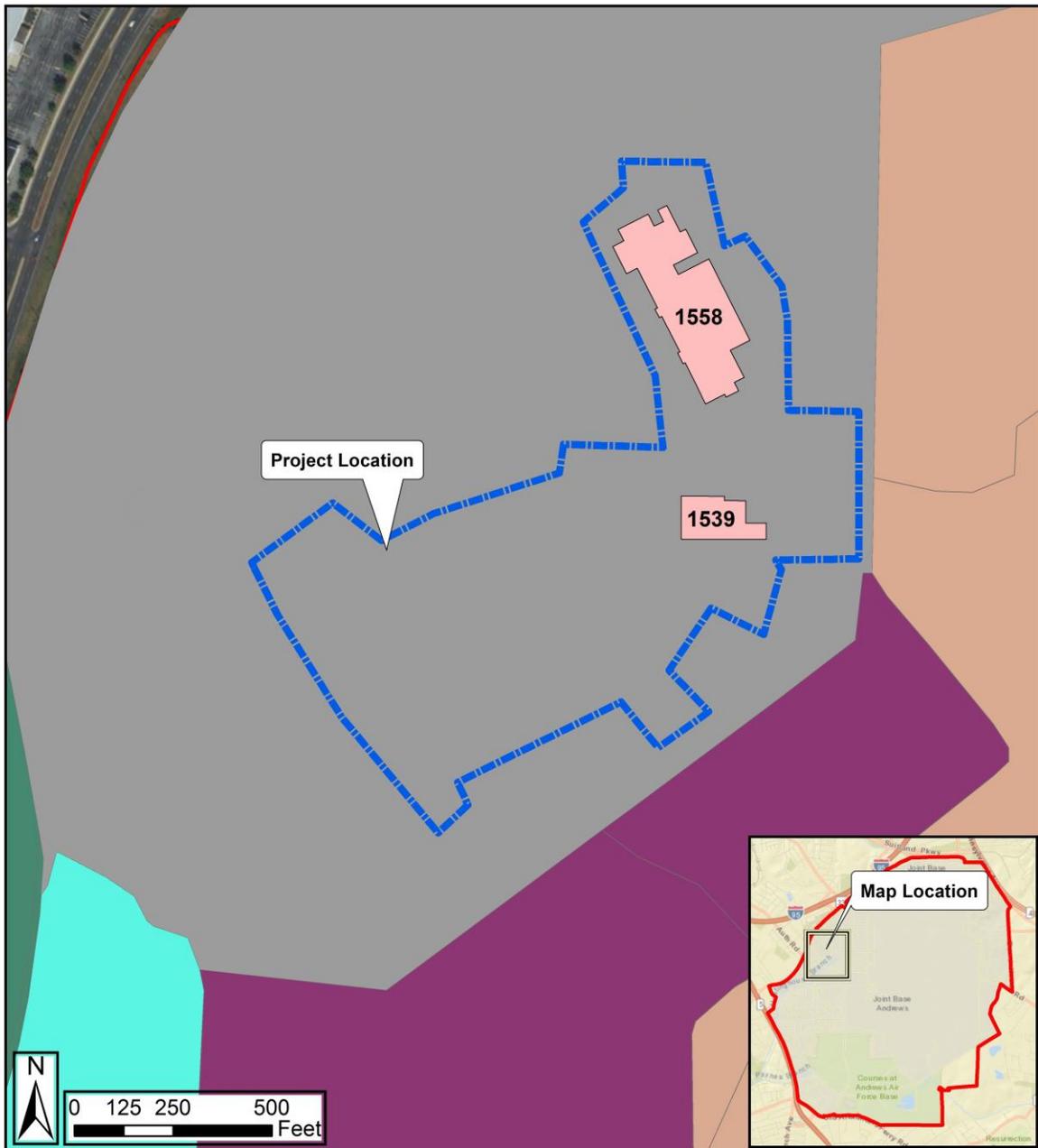


Existing Land Use at Proposed Consolidated Communication Center

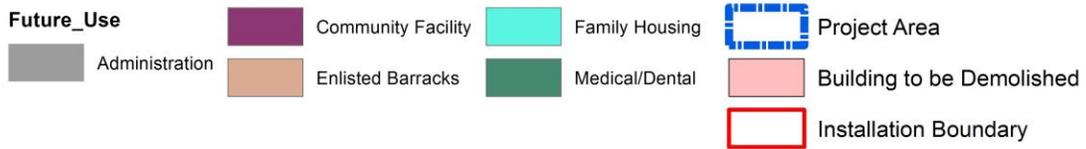


Map Date: 20 March 2018; 35% Design

Figure 3.9-2: Future Land Use at Proposed Consolidated Communications Center



Future Land Use at Proposed Consolidated Communication Center



Map Date: 20 March 2018; 35% Design

treatment provided by WSSC are adequate for all current and industrial uses. Terrapin Utility Services addresses issues in the distribution system, particularly on the east side and lower west side of the base, as part of its contractual arrangement and currently is replacing water distribution pipes throughout the base.

3.10.2 Sanitary Sewer System

The sanitary sewer system at JBA also was privatized in February 2006 and also is owned and operated by Terrapin Utility Services, Inc. JBA's wastewater is sent off-base to the WSSC wastewater treatment plant. The wastewater distribution system at JBA is divided into east and west sections, each with its own capacity and demand. The combined average daily demand is less than 600,000 gallons per day, well below the system's capacity.

3.10.3 Stormwater Drainage System

The JBA stormwater system consists of catch basins and culverts that guide water through a series of natural drainage channels, underground storm sewer pipes, and man-made ditches. The system discharges rain water into Piscataway Creek and tributaries to Tinkers Creek, Henson Creek, Cabin Branch, and Charles Branch. Ultimately, these creeks flow into either the Potomac or the Patuxent Rivers. The majority of stormwater leaving the base drains into the Piscataway Creek watershed and eventually into the Potomac River (Andrews AFB 2007b).

JBA maintains a Stormwater Pollution Prevention Plan that provides drainage descriptions and best management practices (BMPs) for stormwater pollution prevention consistent with the National Pollutant Discharge Elimination System (NPDES) requirements found in 40 CFR 126.26.

3.10.4 Electrical System

Potomac Electric Power Company (PEPCO) provides electrical power to JBA. Two 69-kilovolt electrical feeders from off base tie directly into a main substation owned and operated by the USAF. Primary feeder circuits distribute electricity to the rest of the base from the substation. More than 90 percent of the overhead power lines have been placed underground. The base owns, operates, and maintains the on-base electric power distribution system, except in the housing area, where it is privatized. The electrical supply from PEPCO is adequate for the on-base existing demands.

3.10.5 Heating and Cooling System

The JBA heating and cooling system has been decentralized and no longer includes central heating plants. More than 300 oil-fired and natural gas boilers are still operational, about 95 percent of which run on natural gas; the rest run on oil. Approximately 60 percent of the buildings on base are on an automated heating and cooling system. Eighty percent of the system is new and in good condition; the remaining 20 percent is in mediocre-to-poor condition.

3.10.6 Natural Gas System

Washington Gas supplies natural gas to JBA through seven connection points. The system, which was installed in 1985, is a looped distribution system approximately 10 miles long. Washington Gas owns and operates 100 percent of the natural gas system and is responsible for maintaining and installing all natural gas lines from the connection point to the pressure regulators at each building.

The USAF is responsible for maintaining and repairing all lines in each building. The natural gas system is adequate, and the privatization of the distribution system's maintenance and operation to Washington Gas has improved the efficiency for completing on-site repairs and reduced the likelihood of system failures.

3.10.6 Solid Waste Management

The Civil Engineering Operations Flight manages the program for collecting, handling, and disposing of solid waste generated on JBA. The Resources, Recovery, and Recycling Program office and the Maintenance and Engineering office are responsible for the collection, segregation, accumulation, and disposition of domestic waste recyclables from numerous industrial and domestic collection sites. Solid waste generated on JBA that cannot be recycled is collected and disposed of by a contractor at a licensed landfill in Prince George's County. In addition, construction debris is disposed of at an offsite landfill by the contractor responsible for any renovation or demolition activities (JBA, 2010).

3.11 TRANSPORTATION

JBA is located 5 miles southeast of Washington, D.C. (see Figure 1.2-1). The primary roadway serving JBA and the surrounding communities is Interstate 95/495 (I-95/495), known as the "Capital Beltway," which runs along the west side of the base and provides direct access to Allentown Road (Maryland [MD] 337), Suitland Parkway, and Marlboro Pike. Other routes, including MD 4, Pennsylvania Avenue, and MD 5, distribute traffic from I-95/495 onto other local roadways.

Transportation on and near JBA is achieved mainly via road and street networks and pedestrian walkways. Regional access to JBA is provided by Interstate 95 (I-95) and I-495. State routes that provide access to the area include Pennsylvania Avenue, Branch Avenue, Allentown Road, Woodyard Road, and Dower House Road; and the base perimeter roads, Maryland Avenue, North Carolina Avenue, and Arkansas Road provide access to the sites.

3.11.1 On-Base Roadways and Gate Traffic

JBA has approximately 101 miles of paved roads that provide access to administrative, operations, housing, industrial, medical, recreation, and airfield areas. The overall pavement condition for roads and parking lots on JBA is adequate, and the majority are in good condition. The perimeter roads (North, East, South, and West Perimeter roads) are the primary roadways connecting the two sides of JBA. Combined, they form a two-lane, undivided road that makes an 8.2-mile loop around the base in four segments. Traffic during peak flow hours is heaviest at the Alabama Avenue/North Perimeter Road and Virginia Avenue/South Perimeter Road intersections because of the limited number of egress points on the base (Infinity & PBS&J 2010).

The proposed CCC will be accessed by West Perimeter Road, Arkansas Road, and Alabama Avenue.

3.11.2 Off-Base Roadways

I-95/I-495 is adjacent to JBA along the northwest side of the base and parallels Allentown Road/Suitland Parkway MD-337/223 on the northwest portion of the base. Major thoroughfares providing access to JBA are MD-4 and MD-5.

In general, major intersections in the roadway network surrounding JBA are operating over capacity. That situation creates queuing, delays, and potentially unsafe conditions. Notably, each of the following intersections that provides access to the associated gate operates above its capacity during at least one peak traffic period (Infinity & PBS&J 2010).

- Pearl Harbor Drive and Dower House Road (Pearl Harbor Gate*)
- Allentown Road and I-95 Northbound Off-ramp (Main Gate)
- Old Alexandria Ferry Road and Coventry Way (near Virginia Gate)

* Pearl Harbor Gate is the base access point for all construction traffic.

The *average annual daily traffic* (AADT) is the average number of vehicles traveling along a roadway each day. *Level of service* (LOS) is a measure of the operational conditions on a roadway or at an intersection. LOS ranges from A to F, with “A” representing the best operating conditions (free flow, little delay) and “F” representing the worst conditions (congestion, long delays). LOS A, B, or C is typically considered a good operating condition. Table 3.11-1 lists the routes near the proposed sites and in the area, their AADT, and their estimated existing LOS. Note that some the nearby roadways already are congested during peak traffic periods (i.e., LOS D, E, or F).

Table 3.11-1: Existing AADT and LOS on Nearby Roadways

Roadway	AADT (vpd)	One-way Peak Hour Volume (vph)	Volume to Capacity Ratio	Estimated Existing LOS
Allentown Road	31,940	1,725	1.01	F
Pennsylvania Avenue	70,281	1,150	0.68	E
Branch Avenue	67,061	2,530	1.49	F
Capital Beltway	219,571	1,811	1.07	F

Source: DAF, 2017

3.11.3 Air, Rail, and Public Transportation

The closest large public airport is Ronald Reagan Washington National Airport, which is 15 miles away in Arlington, Virginia, and has 874 operations per day (AirNav 2016). Other nearby airports include Baltimore-Washington Thurgood Marshall International Airport and Washington Dulles International Airport. The closest Amtrak station is 56 miles away at Union Station in Washington, DC. Three public agencies provide transit service to the area surrounding JBA: Washington Metropolitan Area Transit Authority via the Metrorail and Metrobus systems, the Maryland Transit Administration, and Prince George’s County via TheBus service. The Branch Avenue Metrorail station (approximately 3 miles from the JBA main gate) provides rail service and transfers. Two bus routes have at least two stops within one-quarter mile of the intersection of Suitland Road and Allentown Road outside the main gate (Prince George’s County 2016).

3.12 SAFETY AND OCCUPATIONAL HEALTH

Development on JBA is constrained by explosive safety zones, environmental restoration activities, airfield clearance requirements, and airfield noise (Jacobs 2014). Minor safety-related development constraints on JBA are AT/FP requirements and environmental restoration site restrictions. (Consideration of noise constraints is discussed in section 3.2, and consideration of environmental restoration sites is discussed in section 3.8.) Explosive safety quantity distance (ESQD) arcs, or the areas within a specified distance of explosive materials storage sites, cover a portion of the golf course and the southwest portion of the airfield. Those areas are either limited or restricted for development. Future plans envision all ESQD arcs being on the eastern portion of the base. No areas that would be affected by the Proposed Action considered in this EA are within existing ESQD arcs. Construction site safety and prevention of mishaps is an ongoing activity for any Air Force jobsite. The Air Force Occupational Safety and Health regulations provide for compliance with confined spaces regulations, minimum personal protection equipment standards, limited access to the jobsite, and other items.

3.13 SOCIOECONOMICS

This section describes the economy and sociological environment of the region of influence (ROI) surrounding JBA. An ROI is a geographic area selected as a basis on which social and economic impacts of project alternatives are analyzed. The ROI for the socioeconomic environment is defined as Prince George's County, Maryland. For comparative purposes, socioeconomic data also are presented for the State of Maryland and the United States.

3.13.1 Population

Population trends are presented in Table 3.13-1. The ROI's population increased by about 5 percent (about 46,000 people) between 2010 and 2015. That population growth rate was similar to the rates of the state and the nation, where the populations increased by 4 percent. By 2030, the ROI's population is projected to increase by 4 percent, Maryland's population is projected to increase by 17 percent, and the United States population is projected to increase by 13 percent (MDP 2014; U.S. Census Bureau 2010, 2016a).

Table 3.13-1: Population Trends

Geographic Area	2010 Population	2015 Population	2030 Projected Population	Projected Change in Population 2015-2030
ROI (Prince Georges County)	863,519	909,535	5%	4%
Maryland	5,773,785	6,006,401	4%	17%
United States	308,758,105	321,418,820	4%	13%

JBA is about 5 miles southeast of Washington, DC, and is bordered on the west by a highly urbanized area and on the east by a semirural area that is undergoing suburban residential and

commercial growth. Communities around JBA include Forestville and Morningside to the north and northwest, Camp Springs to the west, Clinton to the south, and Rosaryville to the southeast and east. Immediately adjacent to the northeast boundary of JBA is a major new town development (Westphalia) to be built-out over a 30-year period with about 10,000 new homes and a town center with offices, retail, and entertainment venues. That development is expected to attract significant residential and commercial activity (DAF, 2017).

3.13.2 Employment, Industry, and Income

The ROI is in the Washington, DC, Metropolitan Statistical Area. In general, the area enjoys a robust economy and has experienced sustained growth (Michael Baker 2015). As shown in Table 3-11, ROI labor force and unemployment trends are about the same as they are for the state and nation. The ROI labor force increased 2 percent between 2010 and 2015, just below the Maryland labor force growth of 3 percent, but the same as the U.S. labor force growth for that time period. The ROI, state, and national unemployment rates all declined from 2010 to 2015. The ROI and Maryland 2015 annual unemployment rate was 5 percent, lower than the national rate of 6 percent.

Table 3.13-2: Labor Force and Unemployment

Geographic Area	2010 Civilian Labor Force	2015 Change in Labor Force	Change in Labor Force 2010-2015	2010 Annual Unemployment Rate	2015 Unemployment Rate
ROI (Prince George’s County)	479,606	490,697	2%	7.5%	5.3%
Maryland	3,073,826	3,151,129	3%	7.7%	5.2%
United States	152,957,000	156,050,000	2%	10.6%	6.1%

As of 2014, the leading ROI industries on the basis of employment were government and government enterprises (which includes federal military, civilian, and state and local government); retail trade; health care and social assistance; construction; and professional, scientific, and technical services. Together those five industry sectors accounted for about 60 percent of regional employment. The government and government enterprises industry sector (which includes JBA) was the largest employer in the region, accounting for 22 percent of total ROI employment (BEA 2015).

JBA is a major contributor to the regional economy. The daytime workforce consists of about 17,000 USAF personnel and about 500 Navy personnel. JBA is the largest employer in the ROI and has an estimated economic impact of \$1.2 billion on the local economy (Michael Baker 2015).

Table 3.13-3 lists per capita income (PCPI) and median household income. The ROI income levels were about the same as for the state, but higher than for the nation. The ROI per capita personal income (PCPI) was \$32,637, which was 89 percent of the Maryland state PCPI of \$36,670, but 114 percent of the national PCPI of \$28,555. The ROI median household income of \$73,856 was 99

percent of the Maryland median household income of \$74,149, and 138 percent of the national median household income of \$53,482.

Table 3.13-3: Income, 2010-2014 5-year Estimates

Geographic Area	PCPI	Median Household Income
ROI (Prince George’s County)	\$32,637	\$73,856
Maryland	\$36,670	\$74,149
United States	\$28,555	\$53,482

3.13.3 Recreation and Services

JBA has a number of indoor and outdoor recreational and service facilities. Indoor facilities include the Community Activities Center, Youth Center, Child Development Centers, fitness centers, Commissary, and Base Exchange. Outdoor facilities include golf courses; playgrounds; a lake; swimming pool; tennis courts; basketball courts; and fields for softball, baseball, and football/soccer. The majority of the recreational facilities are generally centrally located in the western portion of JBA, but the golf courses and lake recreation area are in the south/southwestern portion of JBA. Future land use plans designate an area in the northeast corner of JBA (east of the airfield) as open space/recreation (Infinity and PBS&J 2010).

3.13.4 Police, Fire, and Medical Services

JBA is a limited access facility with its own force protection, law enforcement, fire protection, and health care services.

The primary mission of the JBA 11th Security Forces Squadron is to provide police services and force protection to the base and to the President of the United States, U.S. senior leaders, and visiting dignitaries.

The 11th Civil Engineer Squadron is responsible for JBA readiness and emergency management, and fire and emergency services. The base has two fire stations as well as mutual aid agreements with Prince George’s County for fire and emergency services (Michael Baker 2015).

JBA’s Malcolm Grow Medical Clinic is a multifunctional medical facility offering a full range of primary care services, medical and surgical subspecialties, aerospace medicine, and dental care. It is part of the NCR enhanced Multi-Service Market along with nine other medical treatment facilities—including Walter Reed National Military Medical Center, Fort Belvoir Community Hospital, and Kimbrough Ambulatory Care Clinic—that provide care to more than 500,000 beneficiaries (JBA 2016a).

3.14 SUSTAINABILITY AND GREENING

In accordance with Executive Order (EO) 13693: Planning for Federal Sustainability in the Next Decade, the USAF would incorporate sustainability and greening practices by minimizing waste during construction, recycling appropriate materials, and purchasing items produced from recycled materials. EO 13693 is a directive that requires federal agencies to implement sustainable practices

for a variety of water, energy, and transportation-related activities; makes reducing GHG emissions a priority of the federal government; and places an emphasis on increasing energy efficiency, reducing fleet petroleum consumption, conserving water, reducing waste, supporting sustainable communities, and leveraging purchasing power to promote environmentally responsible products and technologies. Where possible, the USAF would incorporate sustainability concepts into the engineering design and demolition and construction processes.

4.0 ENVIRONMENTAL CONSEQUENCES

4.1 INTRODUCTION

This Section presents the potential environmental consequences of implementing the Proposed Action and No Action Alternative. The potential impacts to the human and natural environment were evaluated relative to the existing environment described in Section 3.0. For each environmental resource or issue, anticipated direct and indirect effects were assessed, considering both short- and long-term project effects. Although the Proposed Action or implementation of the No Action Alternative would affect the human and natural environment, minor impacts would be expected.

4.2 NOISE / ACOUSTIC ENVIRONMENT

An impact to noise could occur if the Proposed Action or alternative would change the number of acres of real estate exposed to noise levels of 65 DNL or higher.

4.2.1 Proposed Action

Implementation of the Proposed Action would not permanently alter the noise environment in and around the project site. The Proposed Action would have short-term minor adverse effects. Short-term increases in noise would be the result of construction and demolition activities. There would be no long-term changes in the noise environment associated with the CCC. These short-term effects would not result in the violation of any applicable federal, state, or local noise regulation or create appreciable areas of incompatible land use outside the property boundary of JBA.

In terms of noise levels, the additional noise generated by construction activities (Table 4.2-1), specifically the use of heavy equipment such as graders, front-end loaders and dump trucks would be noticeable but unlikely to cause an increase in noise levels above the current levels that include aircraft overflight on JBA. Compared to aircraft noise, noise produced by construction would tend to be more impulsive, relatively lower in magnitude, and spread out during the day. The noise from construction activities would be of a fairly short duration, coinciding with the length of the construction projects, and would typically occur during weekdays and standard working hours. There are no NSAs (residential areas, schools, hospitals, or churches) close enough (800ft) to the project area to be affected by noise related to demolition of construction associated with the Proposed Action. Upon completion of the project, the noise exposure would return to existing levels, which are dominated by aircraft overflights. Therefore, no long-term or major impact to the noise environment would occur from implementing the Proposed Action. There are no changes to the existing operational noise levels at JBA expected from the Proposed Action.

- Construction activities would primarily occur during normal weekday business hours; and
- Heavy equipment mufflers would be properly maintained and in good working order.

Heavy equipment noise would dominate the soundscape for all on-site personnel. Equipment operators would wear adequate personal hearing protection to limit exposure and ensure compliance with federal health and safety regulations.

Operation of the proposed CCC would introduce new traffic patterns that would provide a more direct route to parking and facilities. Those roadway improvements would alleviate some traffic-related noise in the area. No military training activities, use of weaponry, demolitions, or changes in aircraft operations would occur. Therefore, there would be no long-term changes in the existing noise environment associated with those sources. The effects would be negligible. Notably, the CCC would not be within the 65 dB noise level noise contour; therefore, the facility would not need to implement the NLR measures outlined in AFI 32-7063 (JBA 2007).

Table 4.2-1: Typical Noise Levels of Principal Construction Equipment

Construction Vehicle Type	dBA
Front End Loader	80
Backhoe	72-93
Concrete Truck	85
Roof Saw	76
Crane	75-77
Pick-Up Truck	83-94
Delivery Truck	83-94

USEPA (1971)

4.2.2 No Action

Under the No Action Alternative, there would be no change to noise or the acoustic environment at JBA.

4.3 AIR QUALITY AND GREENHOUSE GAS

The Proposed Action would be considered to have a significant effect on air quality and greenhouse gas impacts if the emissions exceed the de minimis levels for a pollutant.

4.3.1 Proposed Action

A General Conformity Applicability Analysis was performed for the Proposed Action, which estimated the level of potential air emissions. The ACAM model was used to estimate the steady state emissions for the project. It is not anticipated that the Proposed Action would result in a significant adverse impact to Air Quality as estimated emissions are below the de minimis threshold (Table 4.3-1). Table 4.3-1 below shows the estimated maximum emissions for a 12-month period. The ACAM final report with the assumptions and inputs used for the calculations is provided in Appendix B.

Table 4.3-1: Estimated Maximum Annual Emissions from the Proposed Consolidated Communications Center at JBA

Emission Source	VOC	NO_x
Proposed Action Emissions (tons per year)	2.91	24.35
<i>de minimis</i> threshold	50	100
Exceeds <i>de minimis</i> or NSR threshold?	No	No

Notes:

¹ The project is in a marginal nonattainment area for the 8-hour O₃ NAAQS (VOCs and NO_x are precursors to the formation of O₃). *De minimis* thresholds are defined in 40 CFR 93 Section 153. VOC *de minimis* established for nonattainment areas located in an O₃ transport area.

The Proposed Action would create short-term impacts on air quality from fuel combustion emissions of VOC, NO_x, and fugitive dust generated through the duration of the construction. All construction activities would be required to comply with federal, state, and current Air Force regulations designed to support compliance with CAA, Occupational Safety and Health Administration (OSHA), and Toxic Substances Control Act (TSCA). If regulated material is found at construction sites such as lead and asbestos, best management practices will be followed.

CEQ guidance, based on many previous NEPA analyses, suggest that individual project scale GHG emissions typically have small potential environmental effects (CEQ, 2010). The 2017 CO₂e emissions from stationary sources at JBA as reported to MDE are 6,068 tpy (JBA, 2017). The CO₂e emissions estimated by ACAM for the Proposed Action are 3,813.9 tpy. The cumulative emissions from the stationary sources and the Proposed Action do not exceed the SER of 75,000 tpy. Therefore, the Proposed Action would not have a significant effect on air quality and greenhouse gas impacts.

4.3.2 No Action

Under the No Action Alternative, no construction activities would take place and general emissions would stay at their current rate.

4.4 WATER RESOURCES

Water resources would be impacted if the construction and demolition activities resulted in a change to the groundwater or surface water quantity or quality. Changes that exceed the maximum contaminant levels (MCL) or state water quality standards for surface waters would be considered significant. Floodplains would be impacted if the proposed project were to affect the storage or flow of flood waters within the mapped area. Wetlands would be impacted if the Proposed Action either destroyed or adversely modified wetlands.

4.4.1 Proposed Action

Implementation of the Proposed Action would not result in long-term negative impacts to floodplains, groundwater or surface water resources. The Proposed Action would result in a net decrease of approximately 1.5 acres of imperious area within the project area, thereby reducing stormwater runoff flows. The municipal groundwater supply provided to JBA would not be used for the construction and demolition activities. Excavation for construction activities during UST removal could intersect the shallow groundwater table and may require pumping during tank

removal by a Maryland certified UST removal company. The use of a treatment and discharge system for the water around the tank may also be required; otherwise the water would have had to be disposed of off-site. UST removal executed for the Proposed Action would be conducted in accordance with all federal, state, and local regulations as described in MDE's 7 May 2018 letter (Appendix A). Therefore, impacts to groundwater quality and quantity are not expected.

Floodplains associated with Meetinghouse Branch occur in the vicinity of the Proposed Action. Construction in the vicinity of the floodplain consists of modifying an existing stormwater channel that drains into Meetinghouse Branch. Pursuant to Executive Order 11988: Floodplain Management, JBA will ensure the proposed modifications to the channel does not create an alteration to the floodplain that may increase elevation of the 100-Year Water Surface Elevation (WSE). JBA will not fill any areas of the channel or storage areas. Further, JBA will adjust the pipe outfall or channel leading to the Meetinghouse Branch in a manner that provides a smooth transition.

Per MDDNR's 7 May 2018 letter, Meetinghouse Branch is classified as a Use I stream. Generally no in-stream work is permitted in Use I streams from March 1st through June 15th of any given year to protect spawning fish. JBA will ensure instream work does not occur during the restricted dates and appropriate sediment and erosion controls are implemented. Therefore, no long-term impacts to streams are anticipated.

Short-term negative impacts to surface water resources during construction and demolition activities (grading, clearing, excavation) are anticipated. These activities would result in ground surface disturbance and could lead to soil erosion and sedimentation in streams via stormwater. Impacts would include increased turbidity and the transport and deposition of fine materials downstream of the project area. Such impacts could affect aquatic life within the downstream reaches during construction activities.

Those effects would be short-term minor adverse effects and would be minimized through the use of erosion and sediment control BMPs, which could include silt fencing, sediment traps, and revegetation of disturbed areas. As discussed above, JBA or its contractors would prepare erosion and sediment control plans for construction projects as necessary and would have them approved by MDE before construction, and JBA would comply with stormwater-and construction-related permits. An Individual Permit for Stormwater Associated with Construction Activity may be required from MDE for this project. Postconstruction stormwater runoff would be controlled and managed in accordance with an MDE-approved stormwater management plan. All projects would comply with the current version of the Maryland Stormwater Management Guidelines for State and Federal Projects and with EISA section 438. Comprehensive ESD methods would be integrated into stormwater control designs. Emphasis would be on using nonstructural BMPs when designing stormwater management controls, and structural BMPs would be used only after all practical nonstructural options are exhausted.

Once construction has ceased, such impacts would also cease, and the downstream stream channel would recover its ability to support benthic and lithic life. Best management practices would be incorporated to minimize these impacts. Further, impervious surface would be approximately 6.0

acres which is a decrease of 7.09 acres (38 percent decrease) from the existing impervious surface resulting in positive long-term effects.

Wetlands occur along Meetinghouse Branch east of the proposed location of the new CCC. In compliance with EO 11990, Protection of Wetlands, the USAF attempts to preserve the natural values of wetlands while carrying out its mission on both USAF lands and non-USAF lands. To the maximum extent practicable, the USAF avoids actions that would either destroy or adversely modify wetlands. The Proposed Action would not destroy or modify wetlands within or adjacent to the proposed CCC location.

JBA is within Maryland's designated coastal zone, and as such is regulated under the federal Coastal Zone Management Act (CZMA) and Maryland's federally approved Coastal Zone Management Program.

The Proposed Action would be fully consistent with Maryland's Enforceable Coastal Policies (effective April 11, 2011), implemented by the Maryland Department of the Environment (MDE). No effects or beneficial effects on Maryland's coastal resources would be expected from implementing the Proposed Action.

The Proposed Action would be conducted in accordance with applicable laws, regulations, and policies governing erosion and sediment control and stormwater management, which would ensure that the actions would be undertaken in a manner consistent with the applicable Maryland Coastal Program enforceable policies. A Coastal Zone Determination is included in Appendix E.

4.4.2 No Action

Under the No Action Alternative, there would be no change in the current conditions of water resources. No construction or demolition would take place, therefore, no ground or soil disturbance would occur that could impact water resources.

4.5 BIOLOGICAL / NATURAL RESOURCES

Biological and natural resources would be impacted if implementation of the Proposed Action resulted in a change to wildlife species or their habitat, including threatened or endangered species, in the area. Changes that reduced the viability of native vegetation in the area would be considered significant. Changes that reduced the viability of wildlife population in the area or eliminated them would be considered significant.

4.5.1 Proposed Action

Short-term minor adverse effects on vegetation and habitats would be expected from implementing the Proposed Action. Most of the project location is developed and supports maintained lawns, which if disturbed during project implementation, would be replanted with grass. Long-term minor beneficial effects on aquatic biota in JBA streams would be expected due the decrease in stormwater runoff due to the 38 percent decrease in impervious surface.

Patches of natural habitat occur near some of the Proposed Action sites. A forested area occurs south of the proposed location for the new CCC. JBA would disturb as little natural habitat as feasible when implementing the projects and would comply with the provisions of its arbor plan. The arbor plan requires 1:1 tree replacement for projects disturbing less than one acre, and 60 percent canopy replacement for projects disturbing more than one acre. Implementation of the Proposed Action would temporarily affect wildlife in the area by displacement or loss, however the project area contains minimal wildlife habitat and is of relatively low quality compared to the adjacent woods and open lands. Short-term minor impacts of wildlife displacement during construction/demolition would be expected, but wildlife would return once work ceased.

Although it is important to try to avoid and minimize impacts to all birds, all attempts should be made, in particular, to avoid impacts to migratory birds. Project impacts to migratory birds are prohibited. Common migratory birds found on JBA are listed in Section 3.5.2. Although the USFWS recently rescinded its “incidental take” requirements, the DoD still maintains the “incidental take” of migratory bird prohibition. Take should be explicitly prohibited, and the USFWS conservation measures are described in JBA’s Integrated Natural Resources Management Plan (INRMP) (2014).

No effects on protected species would be expected from implementing the Proposed Action. Letters from the USFWS indicate that no rare, threatened or endangered species occur in the project area (Appendix A). Further, the Information for Planning and Conservation system, the U.S. Fish and Wildlife Service online system for searching for species protected under the Endangered Species Act, notes that no protected species occur on the proposed CCC (USFWS, 2018). The full report can be found in Appendix C.

The MDDNR Wildlife Heritage Service also reviewed the Proposed Action for impacts to rare, threatened or endangered species and found that there does not appear to be any impacts to these resources of concern (Appendix A). MDDNR advised JBA to adhere to the approved sediment and erosion control plan during construction.

4.5.2 No Action

No adverse effects on biological resources would be expected from implementing the No Action Alternative. No vegetation, wildlife or protected species would be affected under the No Action Alternative.

4.6 EARTH RESOURCES

The soils and topography would be impacted if implementation of the Proposed Action changed the geologic features or resulted in severe soil loss such that the area could no longer maintain the existing land use.

4.6.1 Proposed Action

Implementation of the Proposed Action would result in short-term minor adverse impacts to soils and topography within the project area. The total project area encompasses approximately 18.49 acres. Most of the disturbed area is within proposed construction footprint of the CCC. The short-

term minor adverse effects on soils would be expected during construction, demolition, and maintenance projects because of temporary disturbance of the ground surface, which could cause soil erosion.

It is estimated that a total of nearly 7.09 acres will be converted from impervious surfaces to mowed maintained areas. Impervious surfaces are mainly artificial structures—such as pavements (roads, sidewalks, driveways and parking lots, all of which use considerable paved areas) that are covered by impenetrable materials such as asphalt, concrete, brick, stone—and rooftops. Soils would be temporarily exposed prior to establishment of grassland surrounding the CCC. Minor short-term adverse impacts would be expected following grading and revegetation of the project area as the existing soils and topography are altered. These surface disturbances would not impact the geology of the area. No long-term impacts to the soils or topography of the area would result from the Proposed Action.

Staging areas for the equipment and construction materials would be areas covered with gravel or grass, or paved areas; therefore, any effects on soils in those areas would be limited. Contractors would be required to comply with JBA's environmental standards, which would include submitting an erosion and sediment control plan to MDE for each project that would disturb more than 5,000 square feet and obtaining coverage under the NPDES General Construction Permit, as applicable to each project. Implementing erosion and sediment control BMPs during construction, as specified in those plans, would minimize the effects on soils.

Accidental release of contaminants such as hydraulic and lubricating oils or cooling fluids could occur during construction, along with accidental releases of pollutants into soils during routine maintenance activities. Any accidental release of contaminants or liquid fuels would be addressed in accordance with the base's Spill Prevention, Control, and Countermeasure Plan (SPCCP). The likelihood of an accidental release would be low because of implementation of spill prevention and containment measures, as provided in the SPCCP.

4.6.2 No Action

No effects on earth resources would be expected under the No Action Alternative. The Proposed Action would not be undertaken and no soil disturbance would take place.

4.7 HAZARDOUS MATERIALS / WASTE

Hazardous materials and wastes would be impacted if the operations at the CCC activities resulted in a release of these materials into the environment. Potential releases could occur to the air, water, and soil. Releases that exceed federal and state guidance would be considered significant.

4.7.1 Proposed Action

Implementation of the Proposed Action would not require the use of hazardous materials to sustain daily operations. However, hazardous materials would be used and wastes generated as part of the maintenance and fueling of emergency generators. All contractors involved with implementing the Proposed Action would be required to comply with JBA's Environmental Standards for Contractors, which includes managing, storing, transporting, and disposing of hazardous materials

and wastes, and taking all necessary precautions to prevent spills of hazardous materials (including oils and hazardous wastes) in accordance with all applicable federal, state, and local laws and regulations.

Proposed Actions requiring the removal of USTs would be coordinated with the JBA Environmental Restoration Office and Maryland regulators. USTs would be removed by a Maryland certified UST removal company. Any contamination would be reported to base personnel and removed and disposed of in accordance with MDE regulations. MDE provided further guidance for UST, AST, ACM, LBP, and other hazardous materials and waste disposal in their response letter on 7 May 2018 (Appendix A).

ERP sites in close proximity to the proposed CCC Proposed Action sites are ST-20 USTs and TU-24 Car Care Center (building 1568). These sites are closed, however residual petroleum contamination could be present in soils. Any contamination would be reported to base personnel and removed and disposed of in accordance with MDE regulations.

While the proposed project location does not fall within a JBA environmental restoration program (ERP) site, located just south of (to be demolished) building 1539 there are three monitoring wells (1539-MW01, 02 and 03) associated with the base-wide monitoring well (MW) network. While work may take place without the additional precautions that would be expected if this location contained historical releases of hazardous materials, no digging should occur within 10 feet of any ERP related MW unless coordinated with the ERP. JBA ERP reserves the right to require the abandonment as per State of MD regulations and/or replacement of MWs if they are damaged by a contractor during construction.

Before any building demolition or modification of existing buildings, determinations will be made to ensure that no ACM or LBP is present. If reuse of concrete slab is anticipated, removal would be required. Depending on method of demolition, Category I non-friable ACM may stay in place if all debris is hauled to a landfill approved to accept non-friable ACM debris. Such determinations can be made by referencing existing sampling data, by testing, or based on the age of the structures. If ACM or LBP is present, it must be abated by qualified and licensed contractors. Abatement plans detailing abatement disposal methods of ACM and LBP would be coordinated with base personnel. Such abatement and disposal activity would be conducted as required by federal, state, and local regulations. Asbestos cement piping associated with the proposed deluge system would be closed in place. Any necessary cutting and disposal would be conducted in accordance with appropriate health and safety procedures and regulations.

Furthermore, contractors would remove hazardous waste generated by fueling and maintenance for disposal at their own facilities. The excavation of asphalt would not generate hazardous waste, and offsite disposal of any construction waste would be to an approved landfills. Therefore, there would be no significant impacts to human health or the environment. The Contractors would be required to comply with JBA's Environmental Standards for Contractors and all applicable laws regarding hazardous waste handling and disposal.

4.7.2 No Action

Under the No Action Alternative, there would be no change to hazardous materials and wastes management. No hazardous materials and wastes would be used, stored, or disposed of under the No Action Alternative.

4.8 CULTURAL RESOURCES

Cultural resources would be impacted if the construction of the CCC resulted in adverse effects on historic properties through the disturbance of buried archeological deposits or through disturbance of the integrity of an existing historic building, district, or landscape. Earth-moving activities related to construction could impact the integrity of an archeological site, expose a previously unrecorded site, or could impact unmarked prehistoric or historic burials. However, there are no known cultural resources in the project area.

4.8.1 Proposed Action

No historic properties have been identified within the Proposed Action site location (Andrews AFB 2009a); therefore, no impacts are anticipated.

The demolition of buildings 1539 and 1558 was previously reviewed under Section 106 of the NHPA. On November 7, 2017, the Maryland State Historic Preservation Office (MDSHPO) concurred with JBA's determination that no historic properties would be affected by the demolition of these buildings (Appendix A). The construction of the CCC does have the potential to affect the viewshed of the NRHP eligible Belle Chance property located roughly one mile to the northeast of the project area, but there are numerous buildings and vegetative barriers between Belle Chance and the project area (Figure 3.8-1).

JBA initiated consultation with the MDSHPO for the construction of the new CCC building, and received a letter with their comments and recommendations on April 20, 2018 (Appendix A). They concurred with the finding of "no effect" to historic properties within the current proposed project boundaries on 20 April 2018. JBA also initiated consultation with Federally-Recognized Tribes on 25 April 2018 and received a letter(s) with their comments and recommendations located in Appendix A.

4.8.2 No Action

Implementation of the No Action Alternative would not be expected to have any impact on historic properties as no construction or demolition would occur.

4.9 LAND USE

Land Use would be impacted if the Proposed Action would alter acreage for a land use category in either the existing or surrounding project site.

4.9.1 Proposed Action

No adverse effects on land use would be expected from the Proposed Action. The existing and future land uses of the Proposed Action site and surrounding land uses are compatible with the proposed post-project use.

4.9.2 No Action

Under the No Action Alternative, there would be no change to land use at JBA.

4.10 INFRASTRUCTURE / UTILITIES

Infrastructure and utilities would be impacted if the Proposed Action resulted in increased utility usage or altered infrastructure at the project site. Stormwater systems would be impacted should the project result in a change in the amount of stormwater or in the collection and handling of stormwater. Solid waste management would be impacted should the project result in a change in the amount of solid waste generated, collected, or handled.

4.10.1 Proposed Action

A long-term minor beneficial effect on utility systems would be expected from implementing the Proposed Action because of an overall decreased demand that should result from demolishing unneeded facilities and replacing aging facilities with a new one that have modern, efficient utility service. The net reduction would be approximately 244,000 square feet of built space. All required utility systems are available at and adequate to service the proposed CCC. All new facilities would be water- and energy-efficient and would be constructed to comply with UFC 1-200-02.

4.10.2 No Action

Long-term minor adverse effects on utility systems would result from implementing the No Action Alternative. Aging facilities with old systems would be expected to become less efficient over time, increasing their demand on the utility systems.

4.11 TRANSPORTATION

Transportation would be impacted if the Proposed Action resulted in increased traffic congestion, additional vehicles entering the installation, or restricted movement throughout JBA.

4.11.1 Proposed Action

Short and long-term minor adverse effects on transportation would be expected. Short-term effects would be the result of additional vehicles and day-labor traffic during construction. Long-term effects would be caused by small changes in vehicle traffic on nearby roadways. The Proposed Action would have no appreciable effect on air, rail, or public transportation.

Construction and demolition activities would have short-term minor adverse effects on transportation and traffic. The effects would be primarily from worker commutes and delivery of equipment and materials to and from the proposed CCC. Congestion could increase in the immediate area from additional vehicles and traffic delays near the site, but positioning the laydown area in the vicinity of the Proposed Action site would help alleviate construction traffic (Section 3.11). In addition, road closures or detours to accommodate utility system work could be expected. The effects would be temporary and would end with the construction phase. The existing transportation infrastructure would be sufficient to support the increase in vehicle traffic. Although the effects would be minor, contractors would route and schedule construction vehicles to minimize conflicts with other traffic and strategically locate staging areas to minimize traffic impacts. All construction vehicles would comply with local safety regulations for construction vehicles.

There would be no change in the number of personnel at JBA due to the proposed CCC. Operation of the proposed CCC, however, would introduce small changes in vehicle traffic on nearby

roadways. Direct effects would include small changes in daily and peak-period traffic volumes on roadways and at intersections adjacent to the proposed CCC; particularly D Street and Alabama Avenue. During its operation, the proposed CCC would generate approximately 1,380 vehicle trips per day and 190 vehicle trips during peak travel periods. Some queuing could result at intersections near the proposed CCC during peak traffic periods because of commuting workers. That would constitute a minor change in both on- and off-base traffic, but would not appreciably affect any nearby roadways or intersections. These vehicle trips would be offset by reductions in traffic at the existing facilities that would be demolished upon completion of the CCC. The effects would be somewhat offset by consolidating operations, improving traffic circulation, and providing adequate parking. Overall, the effects would be minor.

4.11.2 No Action

Under the No Action Alternative, there would be no changes to vehicular transportation on Base or in the surrounding area. As a result, no impacts to transportation would be associated with this alternative.

4.12 SAFETY AND OCCUPATIONAL HEALTH

An impact would occur if construction of the CCC or demolition activities at the project site resulted in the likelihood that human health and safety would be endangered. Changes that result in unacceptable or unnecessary health and safety risks would be considered significant.

4.12.1 Proposed Action

Construction of the CCC and demolition activities would not result in long-term negative impacts to worker health and safety. Contract specifications for the Proposed Action would be implemented to protect the workers. All construction contractors would be required to strictly adhere to safety procedures, including complying with USAF safety and Occupational Safety and Health Administration regulations and conducting construction activities in a manner that poses no undue risk to workers or other personnel.

No effects on the safety and occupational health of personnel at JBA or the public would be expected from implementing the Proposed Action. No new facilities would be constructed within ESQD arcs, and all new and expanded facilities would adhere to airfield clearance requirements. The Proposed Action would pose no unacceptable or unnecessary safety risk to JBA personnel, construction workers, or the public.

In the long-term, safety and occupational health would be enhanced by the reduced maintenance requirements at the CCC. Therefore, implementation of the Proposed Action would not adversely impact safety and occupational health at JBA.

4.12.2 No Action

Long-term minor adverse effects on safety and occupational health would be expected if the No Action Alternative was implemented. The existing communications facilities are generally in poor condition and expose personnel in the buildings to fire risk, poor environmental working conditions, and ACM. In conclusion, under the No Action Alternative, there would be ongoing safety concerns related to the degraded communication facilities. Long-term impacts to the safety of personnel in the area would exist.

4.13 SOCIOECONOMICS

Socioeconomics would be impacted if there were a change in income, population, or demographics.

4.13.1 Proposed Action

Implementing the Proposed Action would result in no major impacts on the demographics, employment, or income potential of JBA's ROI. Contractors would perform demolition and construction projects with employees from within the ROI. The economic benefits would be local and short-term since this alternative would not create any new employment positions within the Air Force. Since this alternative would not create any new employment opportunities, or reduce the current number of employment opportunities, or change the population growth rate, there would be no anticipated impacts to the social or economic characteristics of the ROI.

4.13.2 No Action

Implementing the No Action Alternative would result in no change to the demographics, employment, or income potential of JBA's ROI in the short-term. By implementing the No Action Alternative, the communications infrastructure would continue to degrade and be judged unsafe for future operations. This could ultimately lead to mission changes at the base that could, in time, reduce the employment opportunities at JBA. As the Prince George's County's largest employer, this could result in a long-term adverse impact to the social and economic conditions of the area. However, it is not anticipated that this alternative would change the county population growth rate.

4.14 SUSTAINABILITY AND GREENING

4.14.1 Proposed Action

Long-term minor beneficial effects on sustainability at JBA would be expected from implementing the Proposed Action. Replacing outdated and inefficient facilities with modern and more functional facilities adheres to the base's mission to develop new infrastructure that meets federal sustainability and greening goals and practices. New construction would follow UFC 1-200-02, *High Performance and Sustainable Building Requirements*. To the extent possible, the construction projects would be implemented using sustainable design concepts.

4.14.2 No Action

Long-term minor adverse effects would be expected under the No Action Alternative. Implementing the No Action Alternative would result in the continued operation of buildings with inefficient utility systems, construction materials, and designs.

4.15 OTHER NEPA CONSIDERATIONS

4.15.1 Unavoidable Adverse Effects

Unavoidable adverse effects are those impacts JBA would experience if construction of the proposed CCC were implemented under the Proposed Action. The Proposed Action is required, however, for health and safety requirements and achieving the mission. Potential minor temporary impacts that would occur from implementation of the Proposed Action include: 1) minor adverse impacts to air quality from equipment use; 2) minor impacts to water resources from heavy machinery during construction and demolition activities that could cause erosion that would be minimized or avoided through the use of temporary erosion and sediment control measures; and 3) minor adverse impacts to wildlife and wildlife habitat also during construction and demolition activities. The Proposed Action would result in no or negligible impacts to land use; noise; geology; topography; cultural resources; socioeconomics; environmental justice; traffic and transportation; utilities; hazardous materials and wastes; visual and aesthetic resources; ground water; floodplains; rare, threatened, and endangered species. No significant cumulative impacts are anticipated. No significant impacts on human health or the environment are expected to result from the Proposed Action.

Under the No Action Alternative, the communications facilities would continue to be non-compliant with safety requirements, which would impact the mission at JBA.

4.15.2 Relationship of Short-Term Uses and Long-Term Productivity

CEQ NEPA regulations (40 CFR 1502.16) require consideration of “the relationship between local short-term uses of man’s environment and the maintenance and enhancement of long-term productivity.” This consideration involves using all practicable means and measures, including financial and technical assistance, in a manner calculated to foster and promote the general welfare, to create and maintain conditions under which humans and nature can exist in productive harmony, and fulfill the social, economic, and other requirements of present and future generations of Americans. This section of the EA recognizes that short-term uses and long-term productivity of the environment are linked, and that opportunities that are acted upon have consequences that could have continuing effects well into the future.

The Proposed Action would involve construction, demolition, and operation activities. The construction would include site work, communications support, fire detection and suppression systems, environmental controls, pavement, a parking area, exterior lighting, security systems, landscaping, emergency generators, and all other support. Two existing buildings (1539 and 1558) would be demolished on the project site.

The expected impacts on environmental resources as a result of constructing, operating, and maintaining the proposed CCC are presented in Chapter 4. The conclusions presented in those chapters were the basis for developing Table 4.15-1; the table summarizes the anticipated short- and long-term effects of implementing the Proposed Action and No Action Alternative.

Table 4.15-1 lists the potentially significant short-term effects (both beneficial and adverse) and the long-term beneficial and significant unavoidable adverse effects associated with each environmental resource. In the table, “short-term effects” relate to the short-term uses of environmental resources during the construction of the Proposed Action, and “long-term effects” relate to the maintenance and enhancement of long-term productivity – in particular, the consistency of the Proposed Action with long-term economic, social, regional, and local planning objectives.

Table 4.15-1: Summary of Potential Environmental Consequences

Resource	Proposed Action	No Action
Noise/Acoustic Environment	Short-term minor adverse	No effects
Air Quality and Greenhouse Gas	Short-term minor adverse	No effects
Water Resources	Short-term minor adverse	No effects
Biological/Natural Resources	Short-term minor adverse	No effects
Earth Resources	Short-term minor adverse	No effects
Hazardous, Toxic, and Radioactive Substances	Short-term minor adverse	No effects
Cultural Resources	No effects	No effects
Land Use	No effects	No effects
Infrastructure/Utilities	Long-term minor beneficial	Long-term minor adverse
Transportation	Short- and long-term minor adverse	No effects
Safety and Health	No effects	Long-term minor adverse
Socioeconomics	Short-term minor beneficial	Long-term minor adverse
Environmental Justice	No effects	No effects
Sustainability/Greening	Long-term minor beneficial	Long-term minor adverse

The long-term adverse effects as a result of not implementing the Proposed Action would outweigh the short-term adverse effects on the individual resources evaluated in this EA.

4.15.3 Irreversible and Irretrievable Commitments of Resources

NEPA requires that environmental analysis include identification of “...any irreversible and irretrievable commitments of resources which would be involved in the Proposed Action should it be implemented.” Irreversible and irretrievable resource commitments are related to the use of nonrenewable resource and the effects that the uses of these resources have on future generations. Irreversible effects primarily result from the use or destruction of a specific resource (e.g., energy and minerals) that cannot be replaced within a reasonable timeframe. Irretrievable resource commitments involve the loss in value of an affected resource that cannot be restored as a result of

the action (e.g., extinction of a threatened or endangered species or the disturbance of a cultural site).

For the Proposed Action, most resource commitments are neither irreversible nor irretrievable. Most impacts are short-term and temporary. Those limited resources that may involve a possible irreversible or irretrievable commitment under the Proposed Action are discussed below. Construction and maintenance of the proposed CCC and associated communications asset relocations would require consumption of limited quantities of aggregate, steel, and concrete. Construction would occur primarily on previously disturbed areas lacking native habitat. The Proposed Action would avoid impacts to water resources such as wetlands, floodplains, and streams. Construction would avoid significant natural resources and result in no adverse effects to cultural resources. While demolition of existing facilities and construction of new facilities would incur some soil disturbance and loss, measures to localize and minimize soil loss would be implemented. Operation of the CCC would result in the use of hazardous materials such as petroleum, oil, and lubricant (POL), but the frequency or usage of these materials is not expected to differ from current consumption rates at the existing CCC facilities.

4.16 CUMULATIVE EFFECTS

Cumulative effects are the change to “the environment that results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions.” (40 CFR 1508.7). Cumulative effects can result from individually minor but collectively substantial actions taken over a period of time. In accordance with NEPA, a discussion is required of cumulative effects that could result from actions proposed or anticipated in the foreseeable future.

As an active military installation, JBA and its tenant organizations undergo changes in mission and training requirements in response to changing defense policies, current threats, and tactical and technological advances and, as a result, require new construction, facility improvements, infrastructure upgrades, and ongoing maintenance and repairs on a continual basis. Previous, known or proposed construction and upgrade projects are listed in Table 4.16-1 and are included in this analysis, although future requirements could change and alter the reality of cumulative effects. NEPA analysis will be conducted for future Proposed Actions as necessary.

Table 4.16-1: Projects Considered in Cumulative Impact Analysis

Horizon	Project #	Description	Planning District
Completed	AJXF151516	Repair Deluge System	West Operations
	AJXF161655	Repair MSA Dehumidification	Industrial
	AJXF171532	Renovate West Fitness Center Floor Building 1444	Administrative and Support
	AJXF161500	Repair SFC HQ Building 1845	Administrative and Support
	AJXF171606	Repair Restrooms Building 1240	West Operations
	AJXF171564	Repair Navy Warfare Concrete Pad Building 3094	Industrial
	AJXF171570	Repair Parking Lot Building 1206	West Operations
	AJXF171580	Repair West Perimeter Road – Near Medical Facility	Administrative and Support
	AJXF161631	Repair RV Parking Lot Virginia Avenue	West Operations
	AJXF171531	Repair Dormitory Lighting	Administrative and Support
	AJXF 111517	Replace Taxiway Sierra	Airfield
	AJXF 106000	Construct Taxiway North of ACA Facility B - 2489	East Operations
	TBD	6,000 SF Building for Terrapin	Industrial
Short Range (1-5 Years)	AJFX 111516	Replace/Upgrade Taxiway Whiskey, Demolish Pad 14	Airfield
	TBD	Construct Large Aircraft Engine Run-up Pad	Airfield
	AJXF 103010	Design and Build Helicopter Operations Facility	West Operations
	TBD	Consolidated Maintenance Facility	West Operations
	AJXF 092300	Construct New Hydrant Fuel System	East Operations
	AJXF 093000	Construct 21 Point Enclosed Firing Range	Industrial
	AJXF 088000 / 088001	Construct New Health Care Facility/Dental Clinic	Administrative and Support
	AJXF 151508	Demo 1522, 1524, 1527, 1526, and 1531	Administrative and Support
	AJXF 093005	Construct CDC	Residential
	AJXF 15153801	Mill/Overlay North Perimeter Road	Base-wide
	AJXF115002A	Construct Addition Main Exchange Building 1811	Administrative and Support
	TBD	Move 1 C-37A and 2 C-40 Aircraft to JBA	West Operations
	TBD	Construction Associated With Presidential Aircraft Recapitalization EIS	West Operations (Hangar) / Industrial (JADOC) / Airfield (Haz Cargo Pad)
	N/A	I-495 and I-275 Improvements - Maryland Department of Transportation	Off-base
	N/A	Improve Dower House and Woodyard Road Intersection	Off-base
	TBD	Relocate East Runway	Airfield / District 1
	TBD	Build New East Taxiway for Relocated East Runway	Airfield / District 1
TBD	Relocate FAA VORTAC	Airfield / District 1	
Medium	TBD	Relocate FAA Airport Surveillance Radar	Airfield / District 1

Range (6-10 Years)	TBD	Construct New West Fitness Center	Administrative and Support / District 7
	TBD	Develop Security Forces Complex	Administrative and Support / District 7
	TBD	USAPAT Battalion Headquarters	Administrative and Support / District 7

Horizon	Project #	Description	Planning District
Medium Range (6-10 Years)	TBD	UH1-N Helicopter Recapitalization	West Operations
	TBD	Construct Consolidated Security Forces Group Complex	Administrative and Support
	TBD	Construct Entry Control Measures North Gate	Airfield
	N/A	MSA Easement Expansion	Off-base
	N/A	Maryland Route 4 and Suitland Interchange and NuStar Pipe Relocation	Off-base
	TBD	Two Big Box Hangars - 89 AW	West Operations
Long Range (11+ Years)	TBD	2-Bay Large Aircraft Fuel Cell Hangar	West Operations
	TBD	Replace Legacy Aircraft Hangars for LEAR Aircraft Program (as required)	West Operations
	TBD	East Fitness Center	East Operations, Industrial
	TBD	2 X Parking Structure	Administrative and Support
	TBD	Navy Operational Support Center	Administrative and Support

Resource areas of concern (AOCs) with respect to cumulative effects are areas on which the Proposed Actions would have an adverse effect. The resource AOCs for the Proposed Actions at JBA are noise, air quality, soils, and biological resources. Table 4.15-1 summarizes the anticipated effects of the Proposed Actions. Only those resources with adverse impacts resulting from the Proposed Action were analyzed for long-term cumulative effects. These impacts are discussed below:

Noise. No significant adverse cumulative effects on the noise environment would be expected. Effects on the noise environment are cumulative when the projects co-occur and are in close enough proximity to one another to contribute to the same noise environment. In general, construction projects are expected to have effects on the noise environment within 800 feet from the project site. The airfield is the primary source of noise on JBA. The proposed site for the CCC is located in an administrative area that generates little noise. Cumulative noise effects at this location would be expected to be minor.

Air Quality. In general, combustive and fugitive dust emissions from proposed construction and demolition activities under the Proposed Actions would produce air pollutants locally that would persist for a short duration, but would not result in any long-term effects on the air quality of Air Quality Control Region 47. Operational emissions from new facilities, however, would produce cumulative long-term increases in air pollutant emissions. The State of Maryland takes into account

the effects of all past, present, and reasonably foreseeable emissions during the development of its State Implementation Plan, in which the state accounts for all significant stationary, area, and mobile emission sources. Construction, demolition and improvement activities associated with the Proposed Action would result in minimal adverse cumulative impacts related to air quality. Short-term impacts are expected, but would be negligible and therefore, no long-term cumulative impacts are anticipated.

Water Resources. The Proposed Action is not anticipated to have impacts on water resources. Proposed projects would not directly impact surface waters or groundwater and indirect impacts from stormwater runoff from construction activities would be minimized and mitigated through use of erosion and sediment control measures. Therefore, cumulative impacts to surface waters are not expected.

Water Resources - Coastal Zone. The Proposed Action takes place within the coastal zone (the coastal zone encompasses all of JBA). The overall cumulative impact from the Proposed Action is not considered significant because JBA would follow applicable laws, regulations, and policies governing erosion and sediment control and stormwater management, which would ensure that the actions would be undertaken in a manner consistent with the applicable Maryland Coastal Program enforceable policies. A full list of Coastal Zone enforceable policies as well as a description of the compliance of the Proposed Action with the Maryland CZMA is provided in Appendix E.

Earth Resources - Soils. No adverse cumulative effects on soils would be expected. Soil impacts are site-specific, and no other projects are planned to occur in the same location as the Proposed Action.

Biological Resources. Construction, demolition, and operation activities would be occur primarily in built and previously disturbed environments. Therefore, it is not anticipated that any impacts to biological resources would occur from the Proposed Action. Species that currently occupy potential project sites are most likely highly adaptable and are expected to return to the sites upon completion of work and restoration of sites. Where in-kind repair and replacement work would occur in pervious surfaces, sites would be revegetated with native vegetation. Projects at JBA that disturb forested areas are required to compensate by planting trees elsewhere, which results in a long-term stability in forest resources on JBA. No substantial habitats would be disturbed or protected species impacted by the Proposed Action and therefore no cumulative impacts on biological resources are anticipated.

4.17 POTENTIAL MITIGATION MEASURES

Mitigation measures are used to reduce the adverse effects of implementing projects to below the level of significance. Because no significant adverse effects would result from implementing the Proposed Action, no mitigation measures would be required. BMPs such as those used to control erosion and stormwater runoff, to minimize air pollutant emissions, and to reduce energy consumption from facilities would be implemented as described in this EA.

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APPENDIX A: AGENCY CORRESPONDENCE

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**DEPARTMENT OF THE AIR FORCE
HEADQUARTERS 11TH WING (AFDW)
JOINT BASE ANDREWS, MARYLAND 20762**

March 28, 2018

MEMORANDUM FOR SEE DISTRIBUTION

FROM: 11 CES/CEIE
3466 North Carolina Avenue
Joint Base Andrews, Maryland 20762-4803

SUBJECT: Description of Proposed Action and Site Maps for Construction of a Consolidated Communications Center at Joint Base Andrews, Maryland

1. Joint Base Andrews is preparing an Environmental Assessment (EA) for construction of a new Consolidated Communications Center (CCC) at Joint Base Andrews-Naval Air Facility, Washington, Maryland (JBA). Pursuant to the National Environmental Policy Act (NEPA) of 1969 (42 *United States Code* [USC] 4321-4347), Council on Environmental Quality (CEQ) Regulations for Implementing the Procedural Provisions of NEPA (40 *Code of Federal Regulations* [CFR] Sections 1500-1508) and 32 CFR Part 989, *et seq.*, JBA will prepare an EA that considers the potential consequences to human health and the natural environment of implementing the proposed action. The EA will examine the effects of the proposed project and will include analysis of the required no-action alternative.
2. In accordance with Executive Order 12372, *Intergovernmental Review of Federal Programs*, we invite your agency to comment on the proposed action described below and provide relevant information about resources under your jurisdiction that may be present in the project area as indicated in Attachments 1-3.
3. Also enclosed is a copy of the distribution list for those federal, state, and local agencies to be contacted regarding this CCC EA (Attachment 4). If you consider any additional agencies should review and comment on this proposal, please feel free to include them in a re-distribution of this letter and the attached materials.
4. The Proposed Action for the construction of a new CCC would involve the following:
 - a. Construction of a new CCC;
 - b. Installation of a radio frequency enclosure and new power connection at the base of the existing antenna tower;
 - c. Construction of a new parking lot north of the CCC, with capacity of 350 vehicles to provide parking for 60 percent of assigned personnel; and
 - d. Demolition of buildings 1539 and 1558.
5. If undertaken, this project will be completed in accordance with applicable Executive Orders and sustainability criteria as defined by United Facilities Criteria (UFC) 01-200-02, *High Performance and Sustainable Building Requirements*. Per this UFC, the United States Green Building Council will review the Department of Defense's adherence to High Performance and Sustainable Building criteria.

6. Your assistance in providing information is greatly appreciated. Please provide written comments within 30 days from the date of this letter to Ms. Rachel McAnallen, 11 CES/CEIE, 3466 North Carolina Avenue, Joint Base Andrews Maryland 20762 or send via e-mail to rachel.a.mcanallen.civ@mail.mil. If you need further information, please contact Ms. McAnallen at 202-750-1855.

A handwritten signature in black ink that reads "Steve Richards". The signature is written in a cursive style with a large, sweeping initial "S".

Steven Richards
Chief of Environmental Management

4 Attachments

1. Joint Base Andrews Location
2. Proposed Project Location
3. Proposed Project Layout
4. Agency Coordination List



**DEPARTMENT OF THE AIR FORCE
HEADQUARTERS 11TH WING (AFDW)
JOINT BASE ANDREWS, MARYLAND 20762**

March 28, 2018

11 CES/CEIE
3466 North Carolina Avenue
Joint Base Andrews, Maryland 20762-4803

Ms. Elizabeth Hughes
Maryland Historical Trust
100 Community Place, 3rd Floor
Crownsville, Maryland 21032-2023

SUBJECT: National Historic Preservation Act Section 106 Compliance Regarding the Construction of a Consolidated Communications Center at Joint Base Andrews, Maryland

Dear Ms. Hughes,

Joint Base Andrews-Naval Air Facility (JBA) is writing this letter to initiate consultation with your office in accordance with Section 106 of the National Historic Preservation Act (NHPA) of 1966 (54 *United States Code* [USC] 30610, regarding a proposed undertaking involving construction of a new Consolidated Communications Center (CCC) at JBA. The proposed undertaking is also being reviewed pursuant to the National Environmental Policy Act (NEPA) of 1969 (42 USC 4321-4347). The Section 106 review will be integrated and coordinated with the NEPA review to ensure the requirements of both statutes are met in a timely manner. JBA will prepare an Environmental Assessment (EA) that considers the potential consequences to human health and the natural environment of implementing the proposed action.

The proposed undertaking for the construction of a new CCC involves the following: construction of a new CCC, installation of a radio frequency enclosure and new power connection at the base of the existing antenna tower, construction of a new parking lot north of the CCC, with capacity of 350 vehicles to provide parking for 60 percent of assigned personnel and demolition of buildings 1539 and 1558.

The demolition of buildings 1539 and 1558 was previously reviewed under Section 106 of the NHPA. On November 7, 2017, the Maryland State Historic Preservation Office concurred with JBA's determination that no historic properties would be effected by the demolition of these buildings.

The construction of the CCC has the potential to affect historic properties. The Area of Potential Effect (APE) for this undertaking, as defined at 36 CFR §800.16(d), is the footprint of the project including the anticipated limits of construction and its associated ancillary activities, and the geographic areas within which the undertaking may directly or indirectly cause alterations, including visual effects, to the character or use of historic properties. JBA is currently in the process of identifying historic properties in the APE.

America's Airmen

We look forward to consulting with your office on the proposed undertaking. Please contact Ms. Rachel McAnallen at 202-750-1855, 11 CES/CEIE, 3466 North Carolina Avenue, Joint Base Andrews Maryland 20762, or send via e-mail to rachel.a.mcanallen.civ@mail.mil, if you have any questions regarding this project.

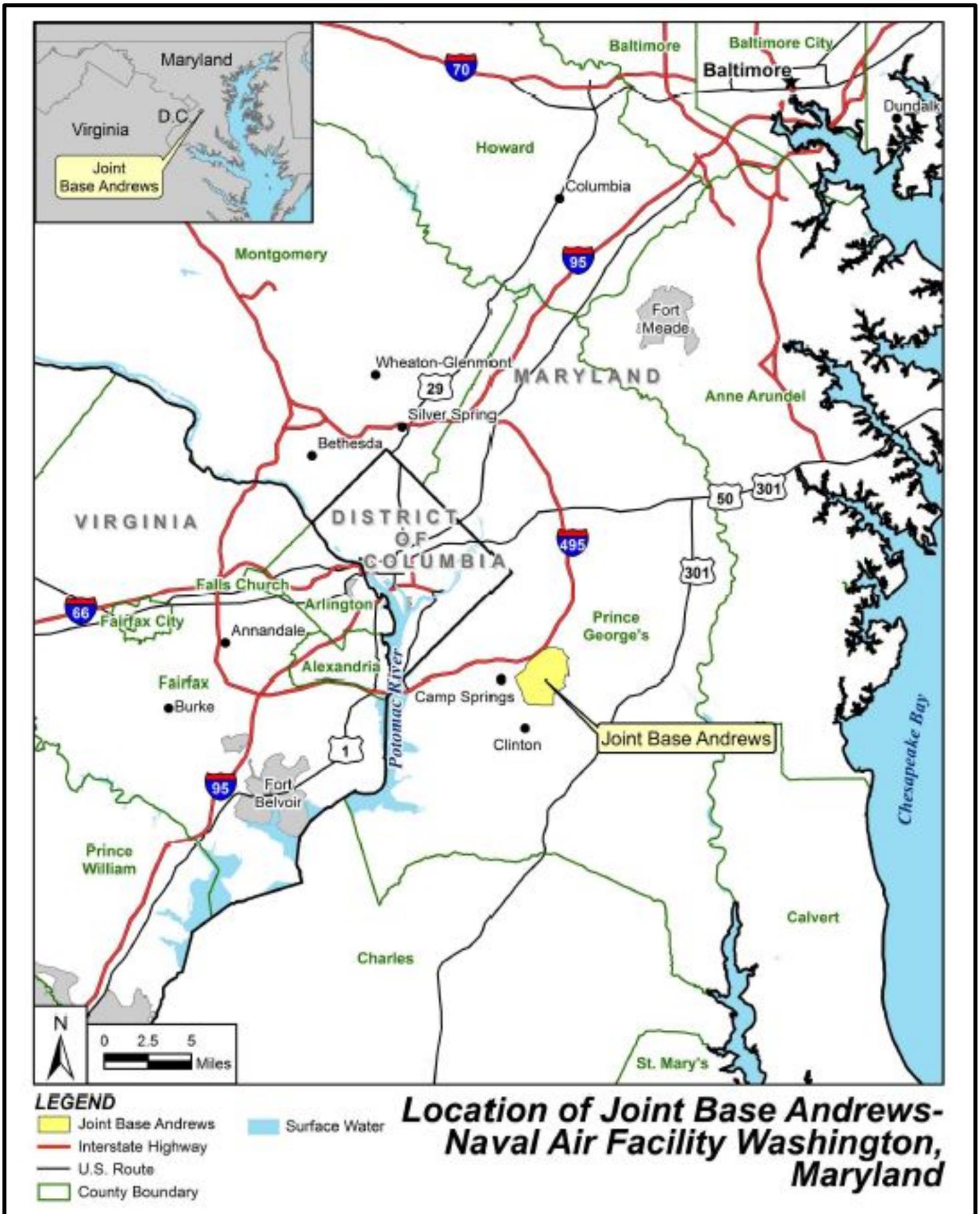


Steven Richards
Chief of Environmental Management

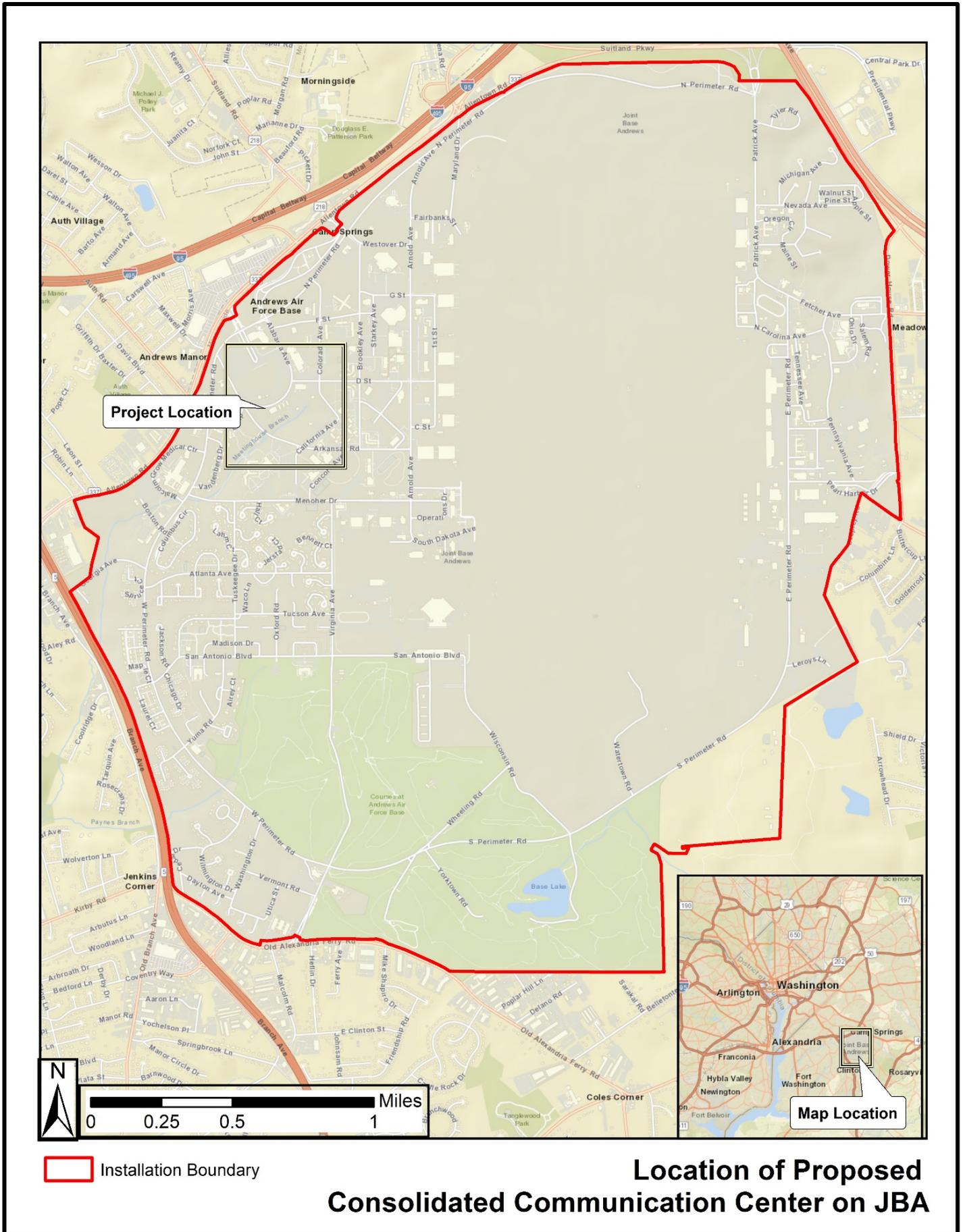
3 Attachments

1. Joint Base Andrews Location
2. Proposed Project Location
3. Proposed Project Layout

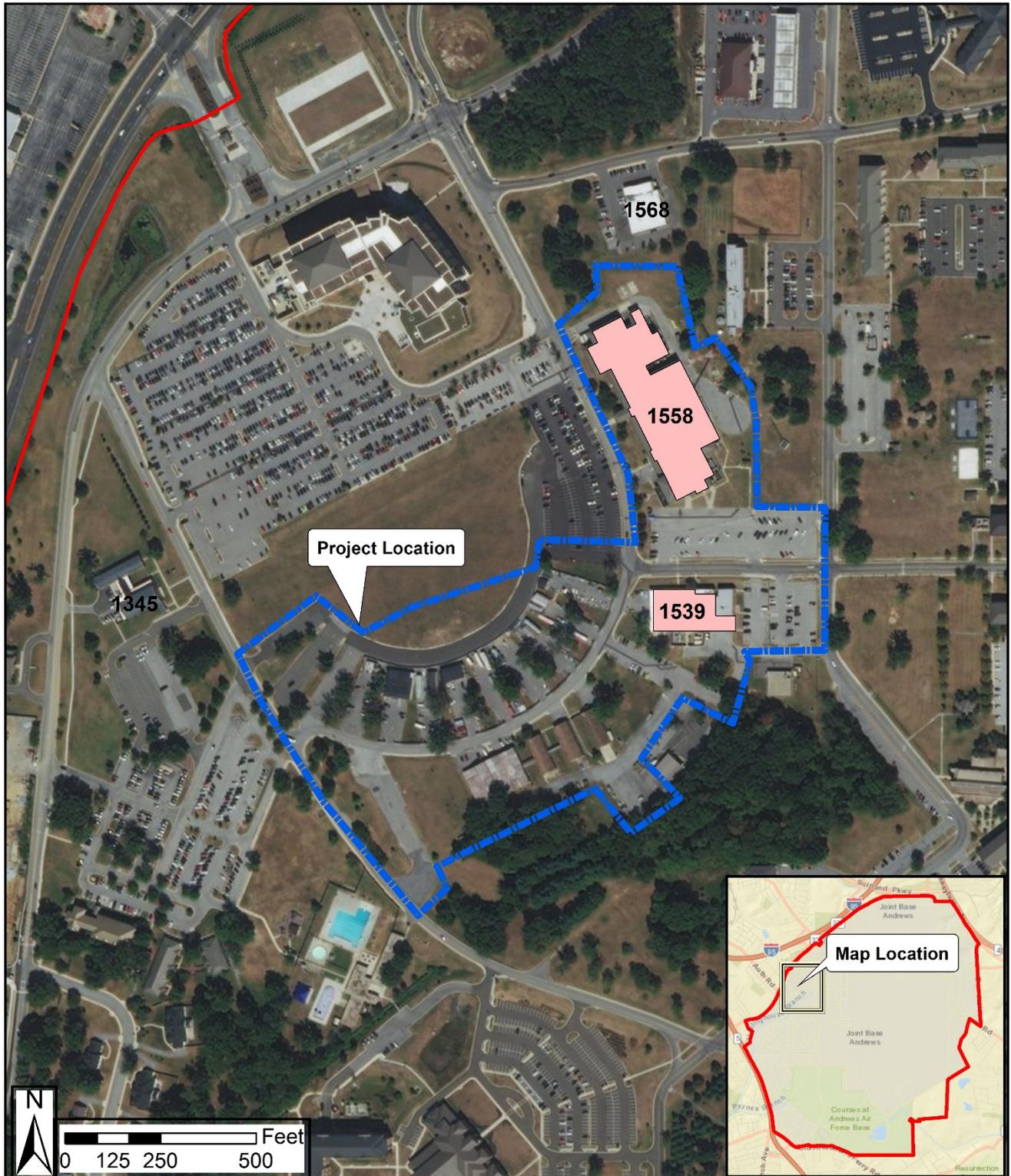
Attachment 1: Joint Base Andrews Location



Attachment 2: Proposed Project Location



Attachment 3: Proposed Project Layout



-  Project Area
-  Installation Boundary
-  Building to be Demolished

Project Area and Demolition at Proposed Consolidated Communication Center

Map Date: 22 January 2018; 35% Design

Attachment 4: Agency Coordination List

Mr. Greg Golden
Environmental Review Unit
Maryland Department of Natural Resources
Tawes State Office, Building B-3
580 Taylor Avenue
Annapolis, Maryland 21401
*sent separate letter

Ms. Linda C. Janey, J.D.
Director
Maryland State Clearinghouse
Maryland Office of Planning, Room 1104
301 West Preston Street
Baltimore, Maryland 21201-2365

Ms. Brigid E. Kenney
Planning Director
Maryland Department of the Environment
Office of the Secretary
1800 Washington Boulevard
Baltimore, Maryland 21230

Ms. Marie Halka
Deputy Director
Maryland Department of the Environment
SSA-Director's Office
1800 Washington Boulevard
Baltimore, Maryland 21230

Ms. Elizabeth Hughes
Director/State Historic Preservation Officer
Maryland Historical Trust
100 Community Place, 3rd Floor
Crownsville, Maryland 21032-2023
*sent separate letter

Ms. Katharine Kerr
Advisory Council on Historic Preservation
401 F Street NW, Suite 308
Washington, DC 20001-2637

Ms. Genevieve Larouche
U.S. Department of the Interior
Fish & Wildlife Services
Chesapeake Bay Field Office
177 Admiral Cochrane Drive
Annapolis, Maryland 21401
*sent separate letter

Ms. Fem Piret
Director of Planning
Prince George's County Department of Planning
14741 Governor Oden Bowie Drive, Room 4150
Upper Marlboro, Maryland 20772

Mr. Alex Romero
National Capital Parks-East
1900 Anacostia Drive SE
Washington, DC 20020

Mr. Michael Weil
Director
National Capital Planning Commission
North Lobby, Suite 500
401 9th Street NW
Washington, DC 20004

Ms. Lisa Savoy
Chairman (Piscataway)
Maryland Commission on Indian Affairs
100 Community Place
Crownsville, Maryland 21032



DEPARTMENT OF THE AIR FORCE
HEADQUARTERS 11TH WING (AFDW)
JOINT BASE ANDREWS, MARYLAND 20762

March 28, 2018

11 CES/CEIE
3466 North Carolina Avenue
Joint Base Andrews, Maryland 20762-4803

Mr. Greg Golden
Environmental Review Unit
Maryland Department of Natural Resources
Tawes State Office Building B-3
580 Taylor Avenue
Annapolis, MD 21401

Dear Mr. Golden,

Joint Base Andrews (JBA) is preparing an Environmental Assessment (EA) for construction of a new Consolidated Communications Center (CCC) at Joint Base Andrews-Naval Air Facility, Washington, Maryland. Pursuant to the National Environmental Policy Act (NEPA) of 1969 (42 *United States Code* [USC] 4321-4347), Council on Environmental Quality (CEQ) Regulations for Implementing the Procedural Provisions of NEPA (40 *Code of Federal Regulations* [CFR] Sections 1500-1508) and 32 CFR Part 989, *et seq.*, JBA will prepare an EA that considers the potential consequences to human health and the natural environment of implementing the proposed action. The EA will examine the effects of the proposed project and will include analysis of the required no-action alternative.

In accordance with Executive Order 12372, *Intergovernmental Review of Federal Programs*, we invite your agency to comment on the proposed action described below and provide relevant information about resources under your jurisdiction that may be present in the project area as indicated in Attachments 1-3.

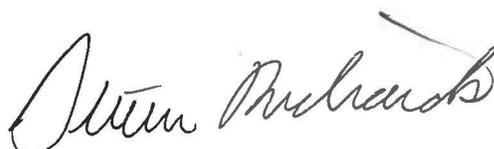
Also enclosed is a copy of the distribution list for those federal, state, and local agencies to be contacted regarding this CCC EA (Attachment 4). If you consider any additional agencies should review and comment on this proposal, please feel free to include them in a re-distribution of this letter and the attached materials.

The Proposed Action for the construction of a new CCC would involve the following:

- a. Construction of a new CCC;
- b. Installation of a radio frequency enclosure and new power connection at the base of the existing antenna tower;
- c. Construction of a new parking lot north of the CCC, with capacity of 350 vehicles to provide parking for 60 percent of assigned personnel; and
- d. Demolition of buildings 1539 and 1558.

If undertaken, this project will be completed in accordance with applicable Executive Orders and sustainability criteria as defined by United Facilities Criteria (UFC) 01-200-02, *High Performance and Sustainable Building Requirements*. Per this UFC, the United States Green Building Council will review the Department of Defense's adherence to High Performance and Sustainable Building criteria.

We request that your office provide an endangered species review of the proposed project. This request is for the project areas shown in Enclosures 1-3. A coordination letter has also been sent to the United States Fish and Wildlife Service for information concerning listed species managed under their jurisdiction (Enclosure 4). Please provide written comments within 30 days from the date of this letter to Ms. Rachel McAnallen, 11 CES/CEIE, 3466 North Carolina Avenue, Joint Base Andrews MD 20762, or send via e-mail to rachel.a.mcanallen.civ@mail.mil. If you need further information, please contact Ms. McAnallen at 202-750-1855.



Steven Richards
Chief of Environmental Management

4 Attachments

1. Joint Base Andrews Location
2. Proposed Project Location
3. Proposed Project Layout
4. Agency Coordination List



**DEPARTMENT OF THE AIR FORCE
HEADQUARTERS 11TH WING (AFDW)
JOINT BASE ANDREWS, MARYLAND 20762**

March 28, 2018

11 CES/CEIE
3466 North Carolina Avenue
Joint Base Andrews, Maryland 20762-4803

Ms. Genevieve Larouche
U.S. Dept. of the Interior
Fish & Wildlife Services
Chesapeake Bay Field Office
177 Admiral Cochrane Drive
Annapolis, MD 21401

Dear Ms. Larouche,

Joint Base Andrews is preparing an Environmental Assessment (EA) for construction of a new Consolidated Communications Center (CCC) at Joint Base Andrews-Naval Air Facility, Washington, Maryland (JBA). Pursuant to the National Environmental Policy Act (NEPA) of 1969 (42 *United States Code* [USC] 4321-4347), Council on Environmental Quality (CEQ) Regulations for Implementing the Procedural Provisions of NEPA (40 *Code of Federal Regulations* [CFR] Sections 1500-1508) and 32 CFR Part 989, *et seq.*, JBA will prepare an EA that considers the potential consequences to human health and the natural environment of implementing the proposed action. The EA will examine the effects of the proposed project and will include analysis of the required no-action alternative.

In accordance with Executive Order 12372, *Intergovernmental Review of Federal Programs*, we invite your agency to comment on the proposed action described below and provide relevant information about resources under your jurisdiction that may be present in the project area as indicated in Attachments 1-3.

Also enclosed is a copy of the distribution list for those federal, state, and local agencies to be contacted regarding this CCC EA (Attachment 4). If you consider any additional agencies should review and comment on this proposal, please feel free to include them in a re-distribution of this letter and the attached materials.

The Proposed Action for the construction of a new CCC would involve the following:

- a. Construction of a new CCC;
- b. Installation of a radio frequency enclosure and new power connection at the base of the existing antenna tower;
- c. Construction of a new parking lot north of the CCC, with capacity of 350 vehicles to provide parking for 60 percent of assigned personnel; and
- d. Demolition of buildings 1539 and 1558.

If undertaken, this project will be completed in accordance with applicable Executive Orders and sustainability criteria as defined by United Facilities Criteria (UFC) 01-200-02, *High Performance and Sustainable Building Requirements*. Per this UFC, the United States Green Building Council will review the Department of Defense's adherence to High Performance and Sustainable Building criteria.

We request any information your office may have on the presence of federally protected species of animals and plants listed by the Fish and Wildlife Coordination Act and Section 7 of the Endangered Species Act (ESA). This request is for the project areas shown in Attachments 1-3. A coordination letter has also been sent to the Maryland Department of Natural Resources and Environmental Conservation for information concerning listed species managed under their jurisdiction (Enclosure 4). Please provide written comments within 30 days from the date of this letter to Ms. Rachel McAnallen, 11 CES/CEIE, 3466 North Carolina Avenue, Joint Base Andrews, Maryland 20762 or send via e-mail to rachel.a.mcanallen.civ@mail.mil. If you need further information, please contact Ms. McAnallen at 202-750-1855.



Steven Richards
Chief of Environmental Management

4 Attachments

1. Joint Base Andrews Location
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**DEPARTMENT OF THE AIR FORCE
HEADQUARTERS 11TH WING (AFDW)
JOINT BASE ANDREWS, MARYLAND 20762**

April 25, 2018

Lieutenant Colonel Christopher M. Kuester, USAF
Installation Tribal Liaison Officer
1500 West Perimeter Road
Joint Base Andrews, Maryland 20762-4803

Mr. Robert Gray, Chief
Pamunkey Indian Tribe
191 Lay Landing Road
King William, Virginia 23086

Dear Mr. Gray

I hope my correspondence finds you and your tribal members well. The Pamunkey Indian Tribe was identified as a tribe with a connection to the area of Joint Base Andrews. While I know you stated you were not interested in pre coordination for large construction projects I am taking this opportunity as an annual letter and to tell you about a new construction project getting ready to start.

Joint Base Andrews has been given the funding for the Consolidated Communications Center project (CCC). This project has new construction and demolition activities to include the construction of the CCC with associated parking, installation of a radio frequency enclosure, new power connection and demolition of two buildings. We want to ensure the Pamunkey Indian Tribe has the opportunity to engage in consultation with the Air Force on this project.

We would appreciate a response as to whether the Pamunkey Indian Tribe would like to engage in consultation on the CCC so that we may have documentation for our records, and to help facilitate a way forward. Please be assured that regardless of the Pamunkey Indian Tribe's decision regarding consultation on the CCC, the Air Force will fully comply with all applicable laws and regulations in the event of an inadvertent discovery of archaeological or funerary objects and/or human remains.

The Air Force is dedicated to fulfilling its legal and regulatory obligations to engage in government-to-government consultation with the Pamunkey Indian Tribe. We will continue to provide annual information updates and requests for future assistance identifying any historic properties of religious and cultural significance related to construction projects or addressing remains which may be encountered during construction. If you have any questions, please contact me or Ms. Rachel McAnallen, Joint Base Andrews Cultural Resources Manager, 202-750-1855, or via e-mail at rachel.a.mcanallen.civ@mail.mil.

I look forward to having future correspondence with you to enhance the relationship between the base and the Pamunkey Indian Tribe. Thank you for your assistance.

Sincerely



CHRISTOPHER M. KUESTER, Lt Col, USAF
Deputy Commander, 11th Mission Support Group

2 Attachments

1. Proposed Project Location
2. Proposed Project Layout



**DEPARTMENT OF THE AIR FORCE
HEADQUARTERS 11TH WING (AFDW)
JOINT BASE ANDREWS, MARYLAND 20762**

April 25, 2018

Lieutenant Colonel Christopher M. Kuester, USAF
Installation Tribal Liaison Officer
1500 West Perimeter Road
Joint Base Andrews, Maryland 20762-4803

Mr. Kerry Holton, Chief
Delaware Nation
P.O. Box 825
Anadarko, Oklahoma 73005

Dear Mr. Holton

I hope my correspondence finds you and your tribal members well. The Delaware Nation was identified as a tribe with a connection to the area of Joint Base Andrews and that you are interested in understanding large construction projects on base. I have Kim Penrod as your contact that you will review our 106 evaluation, the Area of Potential Effect, and the site/construction maps to help determine if the area might have cultural significance or possible remains. These documents will be sent to her soon.

With this in mind, I have enclosed some basic information on a current undertaking: the Consolidated Communications Center project (CCC). This project has new construction and demolition activities to include the construction of the CCC with associated parking, installation of a radio frequency enclosure, new power connection and demolition of two buildings. We want to ensure the Delaware Nation has the opportunity to engage in consultation with the Air Force on this project.

We would appreciate a response as to whether the Delaware Nation would like to engage in consultation on the CCC so that we may have documentation for our records, and to help facilitate a way forward. Please be assured that regardless of Delaware Nation's decision regarding consultation on the CCC, the Air Force will fully comply with all applicable laws and regulations in the event of an inadvertent discovery of archaeological or funerary objects and/or human remains.

The Air Force is dedicated to fulfilling its legal and regulatory obligations to engage in government-to-government consultation with the Delaware Nation. We will continue to provide pre-construction information and requests for future assistance identifying any historic properties of religious and cultural significance related to construction projects or addressing remains which may be encountered during construction. If you have any questions, please contact me or Ms. Rachel McAnallen, Joint Base Andrews Cultural Resources Manager, 202-750-1855, or via e-mail at rachel.a.mcanallen.civ@mail.mil.

I look forward to having future correspondence with you to enhance the relationship between the base and the Delaware Nation. Thank you for your assistance.

Sincerely



CHRISTOPHER M. KUESTER, Lt Col, USAF
Deputy Commander, 11th Mission Support Group

3 Attachments

1. Joint Base Andrews Location
2. Proposed Project Location
3. Proposed Project Layout



**DEPARTMENT OF THE AIR FORCE
HEADQUARTERS 11TH WING (AFDW)
JOINT BASE ANDREWS, MARYLAND 20762**

April 25, 2018

Lieutenant Colonel Christopher M. Kuester, USAF
Installation Tribal Liaison Officer
1500 West Perimeter Road
Joint Base Andrews, Maryland 20762-4803

Mr. Chester L. Brooks, Chief
Delaware Tribe of Indians
5100 Tuxedo Boulevard
Bartlesville, Oklahoma 74006-2838

Dear Mr. Brooks

I hope my correspondence finds you and your tribal members well. The Delaware Tribe of Indians was identified as a tribe with a connection to the area of Joint Base Andrews and is interested in understanding large construction projects on base. I have talked with Brice Obermeyer and Susan Bachor at Temple University will review the 106 evaluation, the Area of Potential Effect, and the site/construction maps to help determine if the area might have cultural significance or possible remains. These documents will be sent to them soon.

With this in mind, I have enclosed some basic information on a current undertaking: the Consolidated Communications Center project (CCC). This project has new construction and demolition activities to include the construction of the CCC with associated parking, installation of a radio frequency enclosure, new power connection and demolition of two buildings. We want to ensure the Delaware Tribe of Indians has the opportunity to engage in consultation with the Air Force on this project.

We would appreciate a response as to whether the Delaware Tribe of Indians would like to engage in consultation on the CCC so that we may have documentation for our records, and to help facilitate a way forward. Please be assured that regardless of Delaware Tribe of Indians' decision regarding consultation on the CCC, the Air Force will fully comply with all applicable laws and regulations in the event of an inadvertent discovery of archaeological or funerary objects and/or human remains.

The Air Force is dedicated to fulfilling its legal and regulatory obligations to engage in government-to-government consultation with the Delaware Tribe of Indians. We will continue to provide pre-construction information and requests for future assistance identifying any historic properties of religious and cultural significance related to construction projects or addressing remains which may be encountered during construction. If you have any questions, please contact me or Ms. Rachel McAnallen, Joint Base Andrews Cultural Resources Manager, 202-750-1855, or via e-mail at rachel.a.mcanallen.civ@mail.mil.

I look forward to having future correspondence with you to enhance the relationship between the base and the Delaware Tribe of Indians. Thank you for your assistance.

Sincerely



CHRISTOPHER M. KUESTER, Lt Col, USAF
Deputy Commander, 11th Mission Support Group

3 Attachments

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2. Proposed Project Location
3. Proposed Project Layout



**DEPARTMENT OF THE AIR FORCE
HEADQUARTERS 11TH WING (AFDW)
JOINT BASE ANDREWS, MARYLAND 20762**

April 25, 2018

Lieutenant Colonel Christopher M. Kuester, USAF
Installation Tribal Liaison Officer
1500 West Perimeter Road
Joint Base Andrews, Maryland 20762-4803

Ms. Christina Danforth, Chairwoman
Oneida Tribe of Indians of Wisconsin
P.O. Box 365
Oneida, Wisconsin 54115-0365

Dear Ms. Danforth

I hope my correspondence finds you and your tribal members well. The Oneida Tribe of Indians of Wisconsin was identified as a tribe that might have a connection to the area of Joint Base Andrews.

With this in mind, I have enclosed basic information on a current undertaking: a Consolidated Communications Center (CCC). This project has new construction and demolition activities to include the construction of the CCC with associated parking, installation of a radio frequency enclosure, new power connection and demolition of two buildings. Most of the area being developed has been previously occupied by buildings and developed. We want to ensure the Oneida Tribe of Indians of Wisconsin has the opportunity to engage in consultation with the Air Force on this project. If you wish to review our 106 evaluation and the Area of Potential Effect, please provide good contact information for the office that will perform the work.

We would appreciate a response as to whether the Oneida Tribe of Indians of Wisconsin would like to engage in consultation on the CCC so that we may have documentation for our records, and to help facilitate a way forward. Please be assured that regardless of Oneida Tribe of Indians of Wisconsin's decision regarding consultation on the CCC, the Air Force will fully comply with all applicable laws and regulations in the event of an inadvertent discovery of archaeological or funerary objects and/or human remains.

The Air Force is dedicated to fulfilling its legal and regulatory obligations to engage in government-to-government consultation with the Oneida Tribe of Indians of Wisconsin. We will continue to provide pre-construction information and requests for future assistance identifying any historic properties of religious and cultural significance related to construction projects or addressing remains which may be encountered during construction. If you have any questions, please contact me or Ms. Rachel McAnallen, Joint Base Andrews Cultural Resources Manager, 202-750-1855, or via e-mail at rachel.a.mcanallen.civ@mail.mil.

I look forward to having future correspondence with you to enhance the relationship between the base and the Oneida Tribe of Indians of Wisconsin. Thank you for your assistance.

Sincerely



CHRISTOPHER M. KUESTER, Lt Col, USAF
Deputy Commander, 11th Mission Support Group

3 Attachments

1. Joint Base Andrews Location
2. Proposed Project Location
3. Proposed Project Layout



**DEPARTMENT OF THE AIR FORCE
HEADQUARTERS 11TH WING (AFDW)
JOINT BASE ANDREWS, MARYLAND 20762**

April 25, 2018

Lieutenant Colonel Christopher M. Kuester, USAF
Installation Tribal Liaison Officer
1500 West Perimeter Road
Joint Base Andrews, Maryland 20762-4803

Mr. Ray Halbritter, Chief
Oneida Indian Nation
5218 Patrick Road
Verona, New York 13421

Dear Mr. Halbritter

I hope my correspondence finds you and your tribal members well. The Oneida Indian Nation was identified as a tribe that has a connection to the area of Joint Base Andrews and that you are interested in understanding large construction projects on base. I have talked with Jesse Birgavin and he will review the 106 evaluation, Area of Potential Effect, and the site/construction maps to help determine if the area might have cultural significance or possible remains. These documents will be sent to him soon.

With this in mind, I have enclosed some basic information on the current undertaking: the Consolidated Communications Center project (CCC). This project has new construction and demolition activities to include the construction of the CCC with associated parking, installation of a radio frequency enclosure, new power connection and demolition of two buildings. We want to ensure the Oneida Indian Nation has the opportunity to engage in consultation with the Air Force on this project.

We would appreciate a response as to whether the Oneida Indian Nation would like to engage in consultation on the CCC so that we may have documentation for our records, and to help facilitate a way forward. Please be assured that regardless of Oneida Indian Nation's decision regarding consultation on the CCC, the Air Force will fully comply with all applicable laws and regulations in the event of an inadvertent discovery of archaeological or funerary objects and/or human remains.

The Air Force is dedicated to fulfilling its legal and regulatory obligations to engage in government-to-government consultation with the Oneida Indian Nation. We will continue to provide pre-construction information and requests for future assistance identifying any historic properties of religious and cultural significance related to construction projects or addressing remains which may be encountered during construction. If you have any questions, please contact me or Ms. Rachel McAnallen, Joint Base Andrews Cultural Resources Manager, 202-750-1855 or via e-mail at rachel.a.mcanallen.civ@mail.mil.

I look forward to having future correspondence with you to enhance the relationship between the base and the Oneida Indian Nation. Thank you for your assistance.

Sincerely



CHRISTOPHER M. KUESTER, Lt Col, USAF
Deputy Commander, 11th Mission Support Group

3 Attachments

1. Joint Base Andrews Location
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**DEPARTMENT OF THE AIR FORCE
HEADQUARTERS 11TH WING (AFDW)
JOINT BASE ANDREWS, MARYLAND 20762**

April 25, 2018

Lieutenant Colonel Christopher M. Kuester, USAF
Installation Tribal Liaison Officer
1500 West Perimeter Road
Joint Base Andrews, Maryland 20762-4803

Mr. Leo R. Henry, Chief
Tuscarora Nation
2006 Mount Hope Road
Lewiston, New York 14092

Dear Mr. Henry

The Tuscarora Nation was identified as a tribe with a connection to the area of Joint Base Andrews. While I know you stated you were not interested in pre coordination for large construction projects I am taking this opportunity as an annual letter and to tell you about a new construction project getting ready to start.

Joint Base Andrews has been given the funding for a Consolidated Communications Center (CCC). This project has new construction and demolition activities to include the construction of the CCC with associated parking, installation of a radio frequency enclosure, new power connection and demolition of two buildings. We want to ensure the Tuscarora Nation has the opportunity to engage in consultation with the Air Force on this project.

We would appreciate a response as to whether the Tuscarora Nation would like to engage in consultation on the CCC so that we may have documentation for our records, and to help facilitate a way forward. Please be assured that regardless of Tuscarora Nation's decision regarding consultation on the CCC, the Air Force will fully comply with all applicable laws and regulations in the event of an inadvertent discovery of archaeological or funerary objects and/or human remains.

The Air Force is dedicated to fulfilling its legal and regulatory obligations to engage in government-to-government consultation with the Tuscarora Nation. We will continue to provide annual information and requests for future assistance identifying any historic properties of religious and cultural significance related to construction projects or addressing remains which may be encountered during construction. If you have any questions, please contact me or Ms. Rachel McAnallen, Joint Base Andrews Cultural Resources Manager, 202-750-1855 or via e-mail at rachel.a.mcanallen.civ@mail.mil.

I look forward to having future correspondence with you to enhance the relationship between the base and the Tuscarora Nation. Thank you for your assistance.

Sincerely



CHRISTOPHER M. KUESTER, Lt Col, USAF
Deputy Commander, 11th Mission Support Group

3 Attachments

1. Joint Base Andrews Location
2. Proposed Project Location
3. Proposed Project Layout



Larry Hogan, Governor
Boyd Rutherford, Lt. Governor

Robert S. McCord, Acting Secretary

May 7, 2018

Ms. Rachel McAnallen
Department of the Air Force
11 CES/CEIE
3466 North Carolina Avenue
Joint Base Andrews, MD 20762

STATE CLEARINGHOUSE RECOMMENDATION

State Application Identifier: MD20180329-0202

Applicant: Department of the Air Force

Project Description: Environmental Assessment (EA): Construction of a New Consolidated Communications Center (CCC) including Installation of a Radio Frequency enclosure... New Parking lot, and Demolition of Buildings 1539 and 1558 at Joint Base Andrews-Naval Air Facility, Washington, Maryland (JBA)

Project Location: County(ies) of Prince George's

Approving Authority: U.S. Department of Defense DOD/USAF

Recommendation: Consistent with Qualifying Comments

Dear Ms. McAnallen:

In accordance with Presidential Executive Order 12372 and Code of Maryland Regulation 34.02.01.04-.06, the State Clearinghouse has coordinated the intergovernmental review of the referenced project. This letter constitutes the State process review and recommendation. This recommendation is valid for a period of three years from the date of this letter.

Review comments were requested from the Maryland Department(s) of Natural Resources, Transportation, the Environment; the Maryland Military Department; Prince George's County; the Maryland National Capital Parks and Planning Commission - Prince George's County; and the Maryland Department of Planning, including the Maryland Historical Trust. As of this date, the Maryland Department of Natural Resources has not submitted comments.

The Maryland Military Department and Prince George's County had no comment.

The Maryland Department of Transportation and the Maryland Department of Planning, including the Maryland Historical Trust found this project to be consistent with their plans, programs, and objectives.

Our Department (Planning) noted that the proposed construction of the Consolidated Communications Center at Joint Base Andrews is located on Federal Land and is not subject to Maryland's Priority Funding Area law.

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

Ms. Rachel McAnallen

May 7, 2018

Page 2

State Application Identifier: **MD20180329-0202**

The Maryland Department of Environment (MDE) and the Maryland National Capital Parks and Planning Commission - Prince George's County (M-NCPPC) found this project to be generally consistent with their plans, programs, and objectives, but included certain qualifying comments summarized below.

The Maryland Department of Environment stated the following:

1. Any above ground or underground petroleum storage tanks, which may be utilized, must be installed and maintained in accordance with applicable State and federal laws and regulations. Underground storage tanks must be registered and the installation must be conducted and performed by a contractor certified to install underground storage tanks by the Land Management Administration in accordance with COMAR 26.10. Contact the Oil Control Program at (410) 537-3442 for additional information.
2. If the proposed project involves demolition – Any above ground or underground petroleum storage tanks that may be on site must have contents and tanks along with any contamination removed. Please contact the Oil Control Program at (410) 537-3442 for additional information.
3. Any solid waste including construction, demolition and land clearing debris, generated from the subject project, must be properly disposed of at a permitted solid waste acceptance facility, or recycled if possible. Contact the Solid Waste Program at (410) 537-3315 for additional information regarding solid waste activities and contact the Waste Diversion and Utilization Program at (410) 537-3314 for additional information regarding recycling activities.
4. The Waste Diversion and Utilization Program should be contacted directly at (410) 537-3314 by those facilities which generate or propose to generate or handle hazardous wastes to ensure these activities are being conducted in compliance with applicable State and federal laws and regulations. The Program should also be contacted prior to construction activities to ensure that the treatment, storage or disposal of hazardous wastes and low-level radioactive wastes at the facility will be conducted in compliance with applicable State and federal laws and regulations.
5. Any contract specifying “lead paint abatement” must comply with Code of Maryland Regulations (COMAR) 26.16.01 - Accreditation and Training for Lead Paint Abatement Services. If a property was built before 1950 and will be used as rental housing, then compliance with COMAR 26.16.02 - Reduction of Lead Risk in Housing; and Environment Article Title 6, Subtitle 8, is required. Additional guidance regarding projects where lead paint may be encountered can be obtained by contacting the Environmental Lead Division at (410) 537-3825.
6. The proposed project may involve rehabilitation, redevelopment, revitalization, or property acquisition of commercial, industrial property. Accordingly, MDE's Brownfields Site Assessment and Voluntary Cleanup Programs (VCP) may provide valuable assistance to you in this project. These programs involve environmental site assessment in accordance with accepted industry and financial institution standards for property transfer. For specific information about these programs and eligibility, please contact the Land Restoration Program at (410) 537-3437.
7. If the applicant suspects that asbestos is present in any portion of the structure that will be renovated/demolished, then the applicant should contact the Community Environmental Services Program, Air and Radiation Management Administration at (410) 537-3215 to learn about the State's requirements for asbestos handling.

8. Construction, renovation and/or demolition of buildings and roadways must be performed in conformance with State regulations pertaining to "Particulate Matter from Materials Handling and Construction" (COMAR 26.11.06.03D), requiring that during any construction and/or demolition work, reasonable precaution must be taken to prevent particulate matter, such as fugitive dust, from becoming airborne.

The Maryland National Capital Park and Planning Commission (M-NCPPC), Environmental Planning Section "has received a clearinghouse request for MD20180329-0202, Construction of a Consolidated Communications Center (CCC) at Joint Base Andrews (JBA), involving the installation of a radio frequency enclosure and new power connection at the base of the existing antenna tower, construction of a new parking lot north of the CCC with capacity of 350 vehicles, and demolition of buildings 1539 and 1558.

As this is a federally owned and operated property, the project is not subject to the county's local building and grading regulations. Additionally, M-NCPPC does not have regulatory jurisdiction over activities, development or otherwise, within the boundary of the facility, however the following recommendations are offered for the benefit of the applicant:

Regarding the construction of the CCC, associated parking, and the radio frequency enclosure, staff recommends appropriate measures of stormwater management for any new impervious areas and proper stabilization of any areas of grading or impervious removal.

Staff defers to Maryland Department of the Environment and U.S. Army Corps of Engineers to ensure that all state and federal regulations are being followed and meets the regulatory standards of the Clean Water Act."

Any statement of consideration given to the comments should be submitted to the approving authority, with a copy to the State Clearinghouse. The State Application Identifier Number must be placed on any correspondence pertaining to this project. The State Clearinghouse must be kept informed if the approving authority cannot accommodate the recommendation.

Please remember, you must comply with all applicable state and local laws and regulations. If you need assistance or have questions, contact the State Clearinghouse staff person noted above at 410-767-4490 or through e-mail at myra.barnes@maryland.gov. **Also, please complete the attached form and return it to the State Clearinghouse as soon as the status of the project is known. Any substitutions of this form must include the State Application Identifier Number. This will ensure that our files are complete.**

Thank you for your cooperation with the MIRC process.

Sincerely,


Myra Barnes, Lead Clearinghouse Coordinator

MB:MB

Enclosure(s)

cc: Amanda Degen - MDE
Tina Quinichette - MDOT
Greg Golden - DNR
18-0202_CRR.CLS.docx

Daniel Pyle - MILT
Kathleen Herbert - PGEO
Jay Mangalvedhe - MNCPPC

Bihui Xu - MDPI-T
Joseph Griffiths - MDPL
Beth Cole - MHT

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Larry Hogan, Governor
Boyd Rutherford, Lt. Governor

Robert S. McCord, Acting Secretary

PROJECT STATUS FORM

Please complete this form and return it to the State Clearinghouse upon receipt of notification that the project has been approved or not approved by the approving authority.

TO: Maryland State Clearinghouse
Maryland Department of Planning
301 West Preston Street
Room 1104
Baltimore, MD 21201-2305

DATE: _____
(Please fill in the date form completed)

FROM: _____
(Name of person completing this form.)

PHONE: _____
(Area Code & Phone number)

RE: State Application Identifier: MD20180329-0202
Project Description: Environmental Assessment (EA): Construction of a New Consolidated Communications Center (CCC) including Installation of a Radio Frequency enclosure... New Parking lot, and Demolition of Buildings 1539 and 1558 at Joint Base Andrews-Naval Air Facility, Washington, Maryland (JBA)

PROJECT APPROVAL	
This project/plan was:	<input type="checkbox"/> Approved <input type="checkbox"/> Approved with Modification <input type="checkbox"/> Disapproved
Name of Approving Authority:	Date Approved:
_____	_____

FUNDING APPROVAL			
The funding (if applicable) has been approved for the period of:			
_____ , 201__ to _____ , 201__ as follows:			
Federal \$:	Local \$:	State \$:	Other \$:
_____	_____	_____	_____

OTHER
<input type="checkbox"/> Further comment or explanation is attached



Larry Hogan, Governor
Boyd Rutherford, Lt. Governor

Robert S. McCord, Acting Secretary

March 29, 2018

Ms. Rachel McAnallen
Department of the Air Force
11 CES/CEIE
3466 North Carolina Avenue
Joint Base Andrews, MD 20762

STATE CLEARINGHOUSE REVIEW PROCESS

State Application Identifier: MD20180329-0202

Reply Due Date: 05/03/2018

Project Description: Environmental Assessment (EA): Construction of a New Consolidated Communications Center (CCC) including Installation of a Radio Frequency enclosure... New Parking lot, and Demolition of Buildings 1539 and 1558 at Joint Base Andrews-Naval Air Facility, Washington, Maryland (JBA)

Project Location: County(ies) of Prince George's

Clearinghouse Contact: Myra Barnes

Dear Ms. McAnallen:

Thank you for submitting your project for intergovernmental review. Your participation in the Maryland Intergovernmental Review and Coordination (MIRC) process helps to ensure that your project will be consistent with the plans, programs, and objectives of State agencies and local governments.

We have forwarded your project to the following agencies and/or jurisdictions for their review and comments: the Maryland Department(s) of the Environment, Transportation, Natural Resources; the Maryland Office(s) of Maryland Military Department; the County(ies) of Prince George's; the Regional Agency(ies) of Maryland-National Capital Park and Planning Commission in Prince George's; and the Maryland Department of Planning; including Maryland Historical Trust. A composite review and recommendation letter will be sent to you by the reply due date. Your project has been assigned a unique State Application Identifier that you should use on all documents and correspondence.

Please be assured that we will expeditiously process your project. The issues resolved through the MIRC process enhance the opportunities for project funding and minimize delays during project implementation.

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

Sincerely,

A handwritten signature in blue ink that reads "Myra A. Barnes".

Myra Barnes, Lead Clearinghouse Coordinator

MB:MB
18-0202_NRR.NEW.docx

IN REPLY REFER TO:
NCPC File No. 7902

April 26, 2018

Ms. Rachel McAnallen
11 CES/CEIE
3466 North Carolina Avenue
Joint Base Andrews, Maryland 20762

Re: Proposed New Consolidated Communications Center - Scoping Comments

Dear Ms. McAnallen:

Thank you for the opportunity to provide scoping comments on the proposed new Consolidated Communications Center (CCC) at Joint Base Andrews. As the central planning agency for the federal government in the National Capital Region, NCPC has advisory review authority over this project under the National Capital Planning Act (40 USC § 8722 (b) (1)).¹ The following comments are based on policies from our Comprehensive Plan, as well as our previous reviews of the Joint Base Andrews (JBA) Installation Development Plan (January 2018) and Consolidated Communication Center project in November 2017. The Navy submitted the CCC to NCPC for concept review to solicit early planning and design comments and we ask that the Navy address our comments in the Environmental Assessment (EA) document and future project submissions.

NCPC Comprehensive Plan for the National Capital

The Federal Elements of the *Comprehensive Plan for the National Capital* contain regional federal planning policies, designed to influence federal development within the National Capital Region. In particular, we recommend that the following applicable policies from the Federal Environment Element guide future project development.

- When tree removal is necessary, trees should be replaced to prevent a net tree loss to the project area.
- Incorporate new trees and vegetation into plans and projects to absorb carbon dioxide, moderate temperatures, minimize energy consumption, reduce pollution, and mitigate stormwater runoff. This includes the use of vegetation in the design and development of green roof projects where feasible and consistent with local regulations.
- Encourage the use of native plant species and remove invasive plants where appropriate.
- Use pervious surfaces and bio-retention facilities to reduce stormwater runoff and impacts on off-site water quality.

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

Ms. Rachel McAnallen

Page Two

- Use technical guidance provided by EPA, in addition to working with local jurisdictions, to meet both federal and local stormwater requirements.
- Decrease federal employee use of single-occupant vehicles and reduce the number and length of trips through operational policies, such as reduced parking ratios using Transportation Demand Management strategies.
- Provide secure and sheltered bicycle parking spaces or bicycle lockers in close proximity to building entrances at federal buildings and on federal campuses.
- Provide locker and shower facilities on federal campuses to support pedestrian/bicycle commuters.

Consolidated Communications Center Concept Review

NCPC provided the Navy with a number of comments as part of an earlier project review (November 2017) to help reconcile the project design with our Comprehensive Plan policies and policies from the 2012 Unified Facilities Criteria for Installation Master Planning reference. The following comments are from the previous Commission Action:

- Using existing nearby parking facilities to accommodate the project's parking requirements or locating parking in a structure on the south-side of the building to allow better project integration with future development;
- Designing the site with smaller building set-backs in light of the project's location on a secure installation;
- Providing on-site bicycle racks in a convenient sheltered location and provide showering/locker-room facilities inside the building to support bicycling;
- Identifying reserved on-site carpool/vanpool parking in a favorable location to encourage multi-occupant vehicle use;
- Locating the driveway area near the building front entrance so it can be used as a potential bus transit stop; and
- Designing the project to prevent any adverse water quality impacts to Meetinghouse Branch stream pursuant to referral comments from Prince George's County.

In response, we ask that you consider analyzing these comments in the EA. The complete Commission Action is included with this letter for your reference.

Joint Base Andrews Installation Development Plan Review

NCPC found that that additional information is needed for our review of future individual projects, including the Consolidated Communications Center, to better understand potential on- and off-base impacts. Therefore, we urge Joint Base Andrews to study cumulative impacts from future master plan projects through the Environmental Assessment. Additionally, we would like JBA to prioritize an Area Development Plan for Planning District 7 to provide our Commission with a

Ms. Rachel McAnallen
Page Three

broader understanding of how the CCC will support various installation planning goals. The additional detail would benefit the project's environmental review if included in the EA process. The complete Commission Action from our previous review of the Installation Development Plan is included with this letter for your reference.

We appreciate the opportunity to provide input on the Consolidated Communications Center project, and look forward to our continued involvement. If you have any questions, please contact Michael Weil at (202) 482-7253 or michael.weil@ncpc.gov. In addition, you may also consult NCPC's website (www.ncpc.gov/) for further information on the Comprehensive Plan and the project submission guidelines.

Sincerely,

For 
Diane Sullivan
Director, Urban Design and Plan Review Division

cc: Nik Tompkins-Flagg, Navy Facilities Division
Christine Osei, Maryland-National Capital Park & Planning Commission-
Prince George's County



Commission Action
November 2, 2017

PROJECT Consolidated Communications Center Joint Base Andrews Camp Springs, Maryland	NCPC FILE NUMBER 7902
SUBMITTED BY United States Department of Defense Department of the Navy	NCPC MAP FILE NUMBER 3207.00(38.00)44592
REVIEW AUTHORITY Advisory per 40 U.S.C. § 8722(b)(1)	APPLICANT'S REQUEST Approval of comments on concept design
	ACTION TAKEN Approved comments as requested

The Commission:

Finds the proposed Consolidated Communications Center concept plan is very difficult to analyze without an up-to-date master plan for the installation.

Requests that the Air Force submit the following information with the next submission so that the Commission can better understand the larger context of the proposed project:

- A draft master plan that provides the framework, goals, and objectives for future development on the campus;
- A high-level street and block plan for the area surrounding the Consolidated Communications Center;
- A plan of the surrounding area street network, with future street cross sections, bus transit stops, and bicycle and pedestrian facility improvements;
- Current and future parking facilities to help identify shared-parking opportunities; and
- A landscape plan for the surrounding area that reflects installation stormwater management goals and NCPC policies related to trees and vegetation.

Finds the Consolidated Communications Center concept plan is generally inconsistent with the goals and policies of the Comprehensive Plan and strategies outlined in the Unified Facilities Criteria Manual for installation master plans, particularly those related to encouraging more compact, low-impact, pedestrian-oriented development, and structured parking.

Requests that the Navy submit a revised site plan that reconciles the proposed site and design of the Consolidated Communications Center with Comprehensive Plan policies and the Unified Facilities strategies and consider the following:

-
- Using existing nearby parking facilities to accommodate the project's parking requirements or locating parking in a structure on the south-side of the building to allow better project integration with future development;
 - Designing the site with smaller building set-backs in light of the project's location on a secure installation;
 - Providing on-site bicycle racks in a convenient sheltered location and provide showering/locker-room facilities inside the building to support bicycling;
 - Identifying reserved on-site carpool/vanpool parking in a favorable location to encourage multi-occupant vehicle use;
 - Locating the driveway area near the building front entrance so it can be used as a potential bus transit stop; and
 - Designing the project to prevent any adverse water quality impacts to Meetinghouse Branch stream pursuant to referral comments from Prince George's County.

//Original Signed//

Julia A. Koster

11/03/2017

Date

Secretary to the National Capital Planning Commission



Commission Action

January 4, 2018

PROJECT Joint Base Andrews Draft Master Plan Update Joint Base Andrews Camp Springs, Maryland	NCPC FILE NUMBER MP48
SUBMITTED BY United States Department of Defense Department of the Air Force	NCPC MAP FILE NUMBER 3207.00(05.00)44633
REVIEW AUTHORITY Advisory per 40 U.S.C. § 8722(a) and (b)(1)	APPLICANT'S REQUEST Approval of comments on draft master plan
	ACTION TAKEN Approved comments on draft master plan

The Commission:

Notes that in accordance with the Department of Defense Unified Facilities Criteria and Air Force Instruction for Comprehensive Planning, the Air Force has developed a draft Installation Development Plan for Joint Base Andrews in lieu of a more traditional master plan.

Notes that the Installation Development Plan is a broad framework plan that includes a vision, goals, and objectives for the installation, in addition to a list of recommendations and desired capital projects. Joint Base Andrews does not anticipate a population change in the future.

Supports the stated vision, goals, and objectives from the draft Installation Development Plan to create a more sustainable, efficient operation at Joint Base Andrews, however;

Finds that additional information is necessary for NCPC's future review of individual site and building projects and their potential impacts on and off the installation prior to future project submissions.

Requests that in accordance with NCPC's master plan submission guidelines, the Air Force include the following information with its next Installation Development Plan submission to provide the Commission with a broader context of installation development

- An installation-wide circulation plan with graphics showing existing and planned future roadway, transit, bicycle, and pedestrian networks, as well as future transportation improvement projects;
- An up-to-date Transportation Management Plan with installation parking utilization, current and planned travel demand management improvements and programs, goals, strategies, action steps and implementation schedules for reducing single occupant vehicle travel;
- Installation-wide management plans, with associated graphics, for planned:

- Stormwater infrastructure in accordance with federal, state, and installation goals/requirements;
- Wetlands mitigation addressing current and potential future deficits; and
- Renewable energy showing potential locations for on-site production to meet Joint Base Andrews goals.

Requests that the Air Force submit Area Development Plans related to each new project with the following information:

- A street and block plan with potential development sites;
- Street cross sections, bus transit stops, and bicycle and pedestrian facility improvements;
- Current and future parking facilities to help identify shared-parking opportunities; and
- A landscape plan that reflects installation stormwater management goals and NCPC policies related to trees and vegetation.

Recommends that the Air Force prioritize completion of the Area Development Plans in the Administration and Support District (Planning District 7) in light of the number of planned capital projects within the District.



Julia A. Koster

Date

1/5/2018

Secretary to the National Capital Planning Commission

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Larry Hogan, Governor
Boyd Rutherford, Lt. Governor
Mark Belton, Secretary
Joanne Throwe, Deputy Secretary

18-MIS-173

May 10th, 2018

Rachel McAnallen
11 CES/ CEIE
3466 North Carolina Avenue
Joint Base Andrews MD 20762

Subject: Endangered Species Review and Fisheries Information for the Consolidated Communications Center (CCC) at Joint Base Andrews, Prince George County.

Dear Ms. McAnallen;

The above referenced project has been reviewed to determine endangered species and fisheries species near the proposed project. The proposed activities include the construction of the Consolidated Communications Center (CCC) at Joint Base Andrews, Prince George County, Maryland.

The project may affect Meetinghouse Branch which is classified as a Use I stream. Generally no in-stream work is permitted in Use I streams from March 1st through June 15th of any given year to protect spawning fish. If no instream work is proposed and appropriate sediment and erosion controls are implemented, then no TOY restriction would be needed.

The MDDNR Wildlife Heritage Service has also reviewed this project for impacts to rare, threatened or endangered species and found that there does not appear any impacts to these resources of concern. The applicant is encouraged to adhere to the approved sediment and erosion control plan during construction.

There are many resident fish species documented by our Maryland Biological Stream Survey. MBSS data can be accessed via the MDDNR web page at <http://streamhealth.maryland.gov>, allowing access to resource surveys in neighboring tributaries.

Please note that these comments do not constitute a full review by the Department of Natural Resources Environmental Review Program and are for planning purposes only. Once a final permit application has been submitted with a full set of detailed plans, a full review by MDDNR may take place.

If you have any further questions, please feel free to contact me at 410 260-8736.

Sincerely;

Christopher Aadland
Environmental Review Program

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April 9, 2018

Ms. Rachel McAnallen
11 CES/CEIE
3466 North Carolina Avenue
Joint Base Andrews, Maryland 20762

**RE: Consolidated Communications Center
Joint Base Andrews Environmental
Assessment (MR-1723A)**

Dear Ms. McAnallen:

The Prince George's County Planning Department appreciates the opportunity to review the proposed Environmental Assessment (EA) of the Consolidated Communications Center (CCC). The CCC was reviewed through the Mandatory Referral review process as MR-1723A. A letter dated September 18, 2017, containing the Planning Department's comments on this project was sent to Mr. Michael Weil with the National Capital Planning Commission. A copy of that letter is enclosed. It also contains the staff memoranda from the Environmental Planning Section, Urban Design Section and Community Planning Division that further discuss the proposed development site.

If you should have any questions or need additional information, please contact Christine A. Osei, Project Manager, at 301-952-3313 via email at Christine.Osei@ppd.mncppc.org.

Sincerely,


Andree Green Checkley
Planning Director

Enclosure

c: Derick Berlage, Chief, Countywide Planning Division
Maria Ann Martin, Planning Supervisor, Special Projects Section, Countywide Planning Division
Christine A. Osei, Project Manager, Special Projects Section, Countywide Planning Division
Redis C. Floyd, Clerk of the Council, Prince George's County Council

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THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION

Office of the Planning Director
Prince George's County Countywide Planning Division

14741 Governor Oden Bowie Drive
Upper Marlboro, Maryland 20772
www.mncppc.org/pgco
301-952-3595

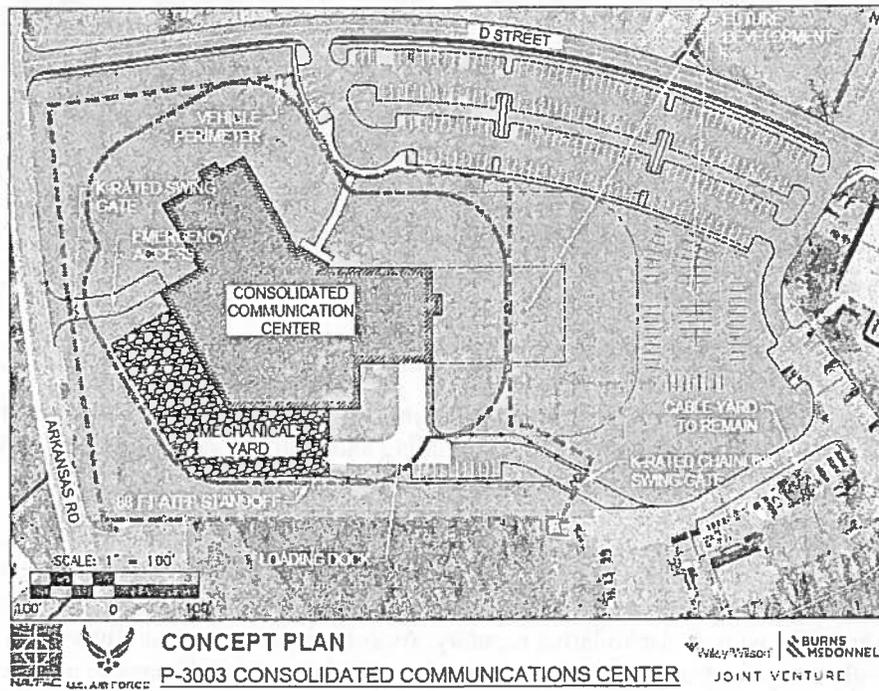
September 18, 2017

Mr. Michael Weil, Urban Planner
National Capital Planning Commission
401 Ninth Street, N.W. Suite 500
Washington, D.C 20576

**RE: Consolidated Communications Center
Joint Base Andrews - (MR-1723A)**

Dear Mr. Weil:

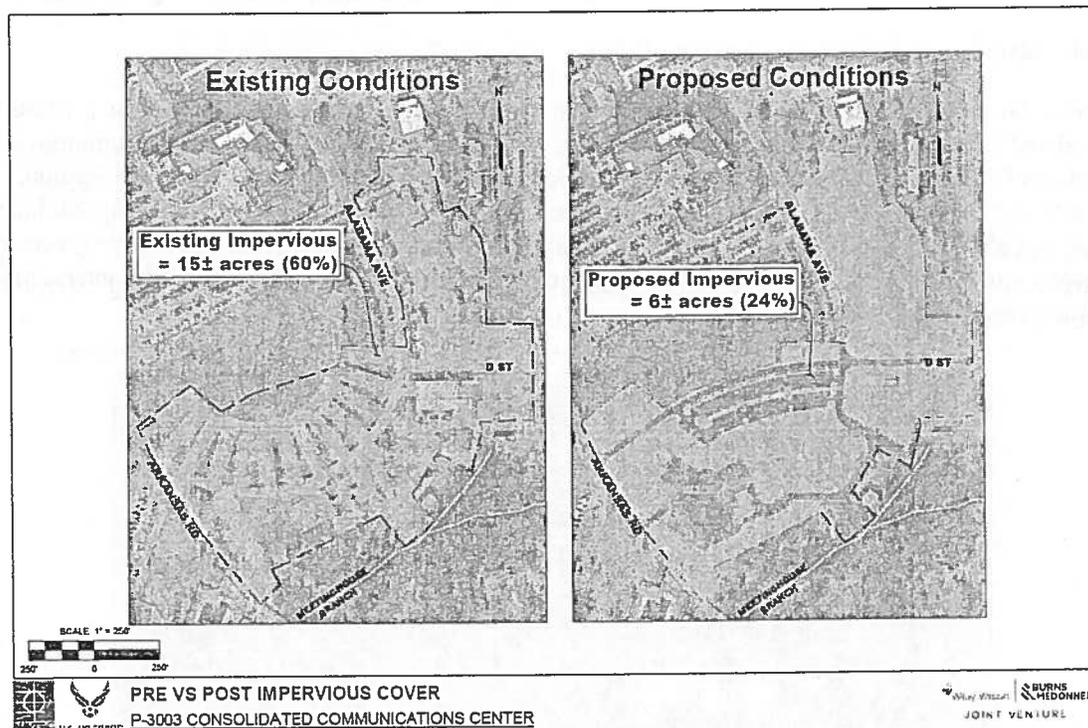
The Prince George's County Planning Department appreciates the opportunity to review the proposed Consolidated Communications Center in accordance with the National Capital Planning Commission's "Procedures for Intergovernmental Cooperation in Federal Planning in the National Capital Region." The proposed (98,684 square foot) 2-story building will occupy a previously developed site of approximately twenty-five (25) acres with six existing buildings, sidewalks, surface parking lots and a large green area. The project site is located in the northwest quadrant of Joint Base Andrews (JBA) near the intersection of Alabama Avenue and D Street at JBA.



Objective:

The project's objective is to construct a Consolidated Communications Center (CCC) at Joint Base Andrews (JBA), located in Camp Springs, Maryland for the Air Force's 89th, 744th, and 844th Squadrons within a single facility. The facility will support critical communication functions for the Air Force, White House, and Defense Information System Agency (DISA), along with Senior Leaders Command, Control, and Communications Systems (SLC3S). The Concept Plan above shows the proposed two-story building with a fenced mechanical storage area located to the rear of the building and a surface parking lot to the northeast portion of the buildings. The proposed landscaped plan shows a large span of green area with new landscaping along the frontage of the main access road.

The project will be completed in two phases. Phase one includes the demolition of existing surface parking lots, removal of existing driveways and the construction of the new Communications Center building. Phase two involves the demolition of three existing buildings and removal of additional paved surfaces, thereby reducing the overall impervious area from twenty-five (25) acres to six acres. See existing and proposed impervious space reduction maps below.



Review and Approval Agencies: The project is not subject to Prince George's County's Woodland and Wildlife Habitat Conservation Ordinance or local building and grading regulations. The following comments are provided for applicant's consideration:

Environmental Comments: The subject development site drains to Meetinghouse Branch, a tributary of Piscataway Creek in the Potomac River basin. Piscataway Creek is identified by the Maryland Department of Natural Resources as a Stronghold Watershed. This watershed is also designated as a Tier II Catchment watershed with no assimilative capacity. As such the stream is currently rated as healthy, but cannot withstand any further degradation without harmful effects and damage to aquatic life. All efforts should be made to ensure that the water quality of Meetinghouse Branch is not negatively impacted by the proposed development.

Mr. Michael Weil

Page 3 of 3

Staff defers to the Maryland Department of the Environment and the U.S. Army Corps of Engineers to ensure that all state and federal regulations are being followed and the project meets the regulatory standards of the Clean Water Act.

Urban Design Comments: The applicant provided a concept plan that indicates appropriate landscaping along the street line and interior landscaping of the parking lot. Currently the site is largely impervious and the proposed green area and landscaping is a welcome improvement to the area. Landscaping along Allentown Road would also be a welcome addition to the edge of the Joint Base Andrews and could improve the view from the abutting roadway for the larger community.

Enclosed are staff memoranda from the Environmental Planning Section, Urban Design Section and Community Planning Division that further discuss the proposed development site.

If you should have any questions or need additional information, please contact Christine A. Osei, Project Manager, at 301-952-3313 via email at Christine.Osei@ppd.mncppc.org.

Sincerely,



Andree Green Checkley
Planning Director

c: Derick Berlage, Chief, Countywide Planning Division
Maria Ann Martin, Planning Supervisor, Special Projects Section, Countywide Planning Division
Redis C. Floyd, Clerk of the Council, Prince George's County Council
Christine A. Osei, Project Manager, Special Projects Section, Countywide Planning Division

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THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION

Countywide Planning Division
Environmental Planning Section

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

August 16, 2017

TO: Christine Osei, Planner Coordinator, Special Projects Section
VIA: Katina Shoulars, Supervisor, Environmental Planning Section
FROM: Thomas Burke, Senior Planner, Environmental Planning Section **TB**
SUBJECT: MR-1723A Consolidated Communication Center at Joint Base Andrews

The Environmental Planning Section has completed the review of MR-1723A, Consolidated Communications Center at Joint Base Andrews.

After an evaluation of the site plan submitted by the applicant, referred on July 26, 2017, the Environmental Planning Section has determined that because this is a federally owned and operated property, the project is not subject to Prince George's County's Woodland and Wildlife Habitat Conservation Ordinance or local building and grading regulations. Nor does M-NCPPC have regulatory jurisdiction over activities, development or otherwise. The following information is provided for the benefit of the applicant.

The proposed development will take place in two phases and involves the demolition of existing structures, grading and redevelopment of a 25-acre section of the overall Joint Base Andrews. The redevelopment will consolidate the structures and parking, resulting in a net decrease in the impervious area from 15 +/- acres to 6 +/- acres. No woodlands or environmentally sensitive areas will be disturbed for this project, and there are no rare, threatened, or endangered species mapped on or near the site based on information provided by the Maryland Department of Natural Resources, Natural Heritage Program.

This property drains to Meetinghouse Branch, a tributary of Piscataway Creek, in the Potomac River basin. Piscataway Creek is identified by the Maryland Department of Natural Resources as a Stronghold Watershed. This watershed is also designated as a Tier II Catchment watershed with no assimilative capacity. As such the stream is currently rated as healthy, but cannot withstand any further degradation without harmful effects and damage to aquatic life. All efforts should be made to ensure that the water quality of Meetinghouse Branch is not negatively impacted by the proposed development. Staff defers to Maryland Department of the Environment and U.S. Army Corps of Engineers to ensure that all state and federal regulations are being followed and meets the regulatory standards of the Clean Water Act.

Thank you for the opportunity to review this project. If you have questions regarding the information presented, please contact the Environmental Planning Section at 301-883-3650.

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August 21, 2017

MEMORANDUM

TO: Maria Martin, Supervisor, Countywide Planning Division, Special Projects

VIA: Scott Rowe, AICP, CNU-A, Acting Division Chief, Community Planning Division *BSR*
Dave Green, Supervisor, Community Planning Division, Central Section *DG*

FROM: John Wooden, Planner Coordinator, Community Planning Division, Central Section *JW*

SUBJECT: MR-1723F JBA Consolidated Communications Center

DETERMINATIONS

General Plan: The application is consistent with the Plan Prince George's 2035 Approved General Plan which designates this area as an Established Community (p. 106).

Master Plan: This application conforms to the *Approved Subregion 6 Master Plan* land use recommendation for institutional land use.

BACKGROUND

Location: Joint Base Andrews

Size: Approximately 6.8 square miles

Existing Use: Federal facility

Proposal: Joint Base Andrews proposes to construct a two-story consolidated communications center approximately 98,684-square foot in size on the northwest quadrant of the base

GENERAL PLAN, MASTER PLAN AND SMA

General Plan: The Plan Prince George's 2035 Approved General Plan designates this area as an Established Community consisting of neighborhoods, municipalities, and unincorporated areas outside of designated centers. The proposed use is context-sensitive and seeks to complement existing uses on the base.

Master Plan: *The Approved Subregion 6 Master Plan* seeks to achieve compatible land uses and development in areas subject to noise and aircraft accident potential.

**Planning Area/
Community:** 77 - Melwood

Land Use: Federal facility/industrial

Environmental: See the Environmental Planning Section referral for comments

Historic Resources: There are multiple historic resources on the property. Refer to the Historic Preservation Section referral for their comments on any potential impacts.

Transportation: Please refer to the Transportation Planning Section referral regarding impacts from potential facility and parking expansions on JBA.

Public Facilities: No public facilities have been designated on the subject property.

Parks & Trails: None

SMA/Zoning: *The Approved Subregion 6 Sectional Map Amendment* retained the subject property in the I-1 zone.

Military Installation Overlay Zoning Map Amendment (MIOZ-MA), approved by the District Council on November 15, 2016, by CR-097-2016, prohibits uses that are incompatible with flight operations at Joint Base Andrews by placing use, height, and noise attenuation requirements on future development on properties located within the MIOZ.

This project will provide a two-story, 98,684 square-foot, consolidated communications center located in the northwest quadrant of the base serving the Air Force's 89th, 744th, and 844th squadrons in a single facility. The project will be completed in two phases, beginning with the demolition of excess hardscapes, followed by the erection of the new facility in phase 1. In phase 2, buildings 1539 & 1558, will be demolished. The new L-shaped facility along with the existing Jones building will become the centerpiece of the administrative core for communications at Joint Base Andrews.

Located on the northwest side of the base, this project is not located in any of the safety zones or the noise contours but is in the Inner Horizontal Surface of the Approved Military Installation Overlay Zone which has a maximum height limit of 150 feet.

c: Long-range Agenda Notebook



THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION

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

August 21, 2017

MEMORANDUM

TO: Christine Osei, Planner Coordinator
Special Projects Section, Countywide Planning

FROM: Susan Lareuse, Master Planner, Urban Design Section *SL*

SUBJECT: Mandatory Referral MR-1723A
Consolidate Communications Center at Joint Base Andrews

The Urban Design Section has reviewed the information submitted in support of MR-1723A, for the Air Force's 89th, 744th, and 844th Squadrons. Phase One of the larger plan for the development of the subject property is a two story, 98,684 square foot building. This project requires demolition of several existing, outdated facilities. The area of disturbance is approximately 15 acres of land for the first phase.

The concept plan proposes to construct the two-story building with a fenced mechanical storage area to the rear of the building. Parking is proposed to the northeast of the building. The building is surrounded with green area with landscaping proposed along the frontage of the main road within the Joint Base Andrews. The Urban Design Section offers the following comments and recommendations regarding the proposed project:

Architecture

1. The concept plan indicates a two story, 98,684 square foot building approximately 850 feet from the perimeter of the Joint Andres Base frontage along Allentown Road. Staff has no comments on the architecture of the building, as it is unlikely that the building will be visible from Allentown Road.

Landscaping

2. The applicant provided a concept plan that indicates appropriate landscaping along the street line and interior landscaping of the parking lot. Currently the site is largely impervious and the proposed green area and landscaping is a welcome improvement to the area. Landscaping along Allentown Road would also be a welcome addition to the edge of the Joint Base Andrews and could improve the view from the abutting roadway for the larger community.

Parking

3. The applicant is proposing a net total of 300 parking spaces for the facility and additional parking

may also be provided in Phase two of the project. Landscaping is also proposed within the parking facility and appears to be sufficient to provide shaded areas within the parking compound.

Conclusion

The Urban Design Section offers the following suggestion:

1. The applicant is encouraged to provide additional plantings along the perimeter of Joint Base Andrews adjacent to Allentown Road to provide some buffering and visual enhancement of the edge of the overall facility as viewed from the larger community.



Larry Hogan, Governor
Boyd Rutherford, Lt. Governor

Robert S. McCord, Acting Secretary

April 20, 2018

Steven Richards
Chief of Environmental Management
11 CES/CEIE
3466 North Carolina Avenue
Joint Base Andrews, Maryland 20762

Re: MHT Review of Proposed Consolidated Communications Center at Joint Base Andrews
Prince George's County, Maryland

Dear Mr. Richards:

The Maryland Historical Trust (Trust) received the information regarding the above-referenced undertaking and is writing to conclude consultation for the project. As the State Historic Preservation Office, the Trust reviews all projects in Maryland that are undertaken, assisted, or permitted by a federal agency pursuant to Section 106 of the National Historic Preservation Act.

The undertaking entails the construction of a new Consolidated Communications Center, installation of a radio frequency enclosure and new power connection at the base of the existing antenna tower, construction of a parking lot, and the demolition of Buildings 1539 and 1558. The project is located along Alabama Avenue near D Street. The Trust has previously concurred that the demolition of Buildings 1522, 1522A, 1524, 1526, and 1527 (June 6, 2017, located within the project area) and Buildings 1539 and 1558 (November 6, 2017) would not affect historic properties. The proposed undertaking will have **no effect on historic properties**. USAF has met the requirements of federal historic preservation law, and no additional consultation with the Trust is necessary.

Thank you for providing us this opportunity to comment. If you have any questions or we may be of assistance, please contact me at natalie.loukianoff@maryland.gov or 410-697-9587.

Sincerely,

Natalie Loukianoff
Preservation Officer
Maryland Historical Trust

EJC/NSL/201801608

CC: Rachel McAnallen (11 CES/CEIE) via email
Michael Weil (NCPC)

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United States Department of the Interior



FISH AND WILDLIFE SERVICE

Chesapeake Bay Field Office
177 Admiral Cochrane Drive
Annapolis, Maryland 21401
<http://www.fws.gov/chesapeakebay>

May 21, 2014

Re: Quicker and easier online project review process for Delaware, Maryland and Washington, D.C.

To whom this concerns:

Although workloads continue to increase at the U.S. Fish and Wildlife Service's Chesapeake Bay Field Office, we are dedicated to providing the public with the best, most efficient service possible. Therefore, we have developed an online project review process to identify whether a project will or will not impact federally-listed endangered or threatened species in Delaware, Maryland and Washington, D.C.

We are asking all those with the capability to use this online process to go to:

<http://www.fws.gov/chesapeakebay/EndSppWeb/ProjectReview/Index.html>

Using this website will take approximately 15 minutes and you will receive an immediate answer regarding whether your project will potentially impact federally listed endangered or threatened species and, if need be, any further instructions. Please contact Trevor Clark of my staff at (410) 573-4527 or by email at Trevor_Clark@fws.gov if you have any questions about the online review process or are unable to use this online tool.

Sincerely,

Genevieve LaRouche
Supervisor

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From: Iris R. Metoxen
To: [McDonald, Wanda M Lt Col USAF AFDW \(US\)](#)
Cc: [Soens, Ryan A CIV USAF AFDW \(US\)](#); [Kristine M. Hill](#)
Subject: RE: [Non-DoD Source] RE: Oneida Tribes of Indians of Wisconsin - Follow-up JBA CCC Project
Date: Friday, September 21, 2018 9:51:18 AM
Attachments: [image001.png](#)
[image002.jpg](#)

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

Good Morning Lt Col Wanda McDonald,

Hope you're well. At this time our office will be the one to address these matters. As indicated in a previous correspondence 'that regardless of [our] tribe's decision regarding consultation on the CCC, the Air Force will fully comply with all applicable laws and regulations in the event of an inadvertent discovery of archaeological or funerary objects and/or human remains;' with this understanding please proceed with your project and we hope you accept our deepest apologies in any delays that have occurred while waiting for a response. We greatly appreciate your willingness in working with us as we catch up in these matters. Thank you for your time.

-Iris Metoxen-

[Yako>nikuhli=y%](#) -a good mind she has

Oneida Cultural Heritage

Administrative Assistant

imetoxe1@oneidanation.org < Caution-mailto:imetoxe1@oneidanation.org >



A good mind. A good heart. A strong fire.

Office: 920.496.5396
Cell #: 920.327.8474
PO Box 365 – Oneida, WI 54155

Yosahetaw\$stu(Cool Beans) –Jeff Metoxen, Beloved Papa Bear

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From: McDonald, Wanda M Lt Col USAF AFDW (US) [Caution-mailto:wanda.m.mcdonald.mil@mail.mil]
Sent: Thursday, September 20, 2018 9:20 AM
To: Iris R. Metoxen <imetoxe1@oneidanation.org>; Kristine M. Hill <KHILL1@oneidanation.org>
Cc: Soens, Ryan A CIV USAF AFDW (US) <ryan.a.soens.civ@mail.mil>
Subject: RE: [Non-DoD Source] RE: Oneida Tribes of Indians of Wisconsin - Follow-up JBA CCC Project

Thank you, Ms. Metoxen. I'll stand by to hear from you this afternoon.

Respectfully,

WANDA M. MCDONALD, Lt Col, USAF
Deputy Commander, 11th Mission Support Group
Joint Base Andrews, MD 20762
Comm  (240) 612-5843
DSN  612-5843

From: Iris R. Metoxen <imetoxe1@oneidanation.org < Caution-mailto:imetoxe1@oneidanation.org > >
Sent: Thursday, September 20, 2018 9:57 AM
To: McDonald, Wanda M Lt Col USAF AFDW (US) <wanda.m.mcdonald.mil@mail.mil < Caution-mailto:wanda.m.mcdonald.mil@mail.mil > >; Kristine M. Hill <KHILL1@oneidanation.org < Caution-mailto:KHILL1@oneidanation.org > >
Cc: Soens, Ryan A CIV USAF AFDW (US) <ryan.a.soens.civ@mail.mil < Caution-mailto:ryan.a.soens.civ@mail.mil > >
Subject: [Non-DoD Source] RE: Oneida Tribes of Indians of Wisconsin - Follow-up JBA CCC Project

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

Good Morning Lt Col Wanda McDonald,

Hope you're well. My apologies I was out of the office since Monday at 12:30 P.M. We have received your correspondence. Our Tribal Historic Preservation Officer – Corina Williams, is out on Medical Leave. We are working diligently to pull our resources to see who is the most qualified and available to step in regarding these matters. I am still needing to meet with my supervisor, Kristine Hill – Oneida Cultural Heritage Area Manager to be briefed on the progress regarding Corina's coverage. I hope to be in touch with any further contact information later this afternoon. Thank you for your time.



From: McDonald, Wanda M Lt Col USAF AFDW (US) [Caution-Caution-mailto:wanda.m.mcdonald.mil@mail.mil]

Sent: Tuesday, September 18, 2018 1:55 PM

To: Kristine M. Hill <KHILL1@oneidanation.org < Caution-mailto:KHILL1@oneidanation.org > >; Iris R. Metoxen <imetoxe1@oneidanation.org < Caution-mailto:imetoxe1@oneidanation.org > >

Cc: Soens, Ryan A CIV USAF AFDW (US) <ryan.a.soens.civ@mail.mil < Caution-mailto:ryan.a.soens.civ@mail.mil > >

Subject: RE: Oneida Tribes of Indians of Wisconsin - Follow-up JBA CCC Project

Good afternoon,

Would you please be so kind as to reply simply to acknowledge receipt of this email and the email with attachments sent on 14 Sep 18? I do not want to burden you with another phone call but do not want to delay if my message has not reached the intended recipients.

Thank you.

Respectfully,

WANDA M. MCDONALD, Lt Col, USAF
Deputy Commander, 11th Mission Support Group
Joint Base Andrews, MD 20762
Comm  (240) 612-5843



DSN 612-5843
iPhone: 202-498-3483

From: McDonald, Wanda M Lt Col USAF AFDW (US)
Sent: Friday, September 14, 2018 10:36 AM
To: 'khill1@oneidanation.org' <khill1@oneidanation.org < Caution-Caution-mailto:khill1@oneidanation.org %3c Caution-Caution-mailto:khill1@oneidanation.org >>>; 'imetoxe1@oneidanation.org' <imetoxe1@oneidanation.org < Caution-Caution-mailto:imetoxe1@oneidanation.org < Caution-mailto:imetoxe1@oneidanation.org %3c Caution-Caution-mailto:imetoxe1@oneidanation.org >>>
Cc: Soens, Ryan A CIV USAF AFDW (US) <ryan.a.soens.civ@mail.mil < Caution-Caution-mailto:ryan.a.soens.civ@mail.mil < Caution-mailto:ryan.a.soens.civ@mail.mil %3c Caution-Caution-mailto:ryan.a.soens.civ@mail.mil >>>
Subject: Oneida Tribes of Indians of Wisconsin - Follow-up JBA CCC Project

Greetings Mr. Hill,

I am Lt Col Wanda M. McDonald, the Installation Tribal Liaison for Joint Base Andrews, Maryland. I have replaced Lt Col Kuester who had attempted to reach your Tribe leadership previously by mail. I hope my correspondence finds you and your tribal members well. The Oneida Tribe of Indians of Wisconsin has been identified as a tribe with a connection to the land area of Joint Base Andrews, and as having an interest in knowing about large construction projects on base which may affect the Nation. Ms. Christina Danforth was previously listed as the point of contact to review our environmental evaluations, including the Area of Potential Effect, and the site/construction maps to help determine if the area might have cultural significance or possible remains. Documents for review regarding construction of a Consolidated Communications Center (CCC) were sent on 25 April 2018.

We have received no reply to our April correspondence. We are sending you this second request due to the time sensitive nature of fiscal year appropriation. We respectfully request your response in regards to this project by 20 September 2018, or we must proceed with concluding our environmental assessment with the understanding that the Nation has no concerns as regards this project. Please be assured that regardless of your tribe's decision regarding consultation on the CCC, the Air Force will fully comply with all applicable laws and regulations in the event of an inadvertent discovery of archaeological or funerary objects and/or human remains.

Please note that the Cultural Resource Manager POC listed in the letter, Ms. Rachel McAnallen has been replaced by Mr. Ryan Soens at 240-857-0444 or email,ryan.a.soens.civ@mail.mil < Caution-Caution-mailto:ryan.a.soens.civ@mail.mil > .

I respectfully request acknowledgement of this email correspondence and your response by replying to all on this email no later than 20 September 2018.

Thank you!

WANDA M. MCDONALD, Lt Col, USAF

Deputy Commander, 11th Mission Support Group
Joint Base Andrews, MD 20762
Comm  (240) 612-5843
DSN  612-5843

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From: Jesse Bergevin
To: [Kuester, Christopher M \(Magnum\) Lt Col USAF AFDW \(US\)](#)
Cc: [McAnallen, Rachel A CIV USAF AFDW \(US\)](#)
Subject: [Non-DoD Source] Joint Base Andrews Consolidated Communications Center
Date: Thursday, May 31, 2018 12:19:18 PM

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

Dear Lieutenant Colonel Kuester,

The Oneida Indian Nation (the “Nation”) received a letter, dated April 25, 2018, and documentation from the Department of the Air Force, Joint Base Andrews (USAF), regarding the Consolidated Communications Center project (the “Project”) at Joint Base Andrews, Maryland. The Nation does not anticipate the Project will affect historic properties significant to the Nation and, therefore, does not wish to be a consulting party on the Project.

The Nation requests that the USAF apprise the Nation of any inadvertent discoveries of human remains or if there are any unanticipated historic properties related to past Oneida land use encountered through the later stages of the Project.

Please let me know if there are any questions.

Thank you,

Jesse Bergevin | Historic Resources Specialist
Oneida Indian Nation | 2037 Dream Catcher Plaza, Oneida, NY 13421-0662
jbergevin@oneida-nation.org < Caution-<mailto:jbergevin@oneida-nation.org> > | Caution-
www.oneidaindiannation.com < Caution-<http://www.oneidaindiannation.com> >
315.829.8463 Office | 315.829.8473 Fax

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Rachel,

Please update your files to reflect our current President, Debbie Dotson ddotson@delawarenation.com

I am the cultural resources director and will handle all Section 106 reviews.

Kim

The protection of our tribal cultural resources and tribal trust resources will take all of us working together.

We look forward to working with you and your agency.

With the information you have submitted we can concur at present with this proposed plan for the proposed Consolidated Communications Center on the Joint Base Andrews.

As with any new project, we never know what may come to light until work begins.

The Delaware Nation asks that you keep us up to date on the progress of this project and

if any discoveries arise please contact us immediately.

Our department is trying to go as paper free as possible. If it is at all feasible for your office to send email correspondence we would greatly appreciate.

If you need anything additional from me please do not hesitate to contact me.

Respectfully,

Kim Penrod
Delaware Nation
Director, Cultural Resources/106
Archives, Library and Museum
31064 State Highway 281
PO Box 825
Anadarko, OK 73005
(405)-247-2448 Ext. 1403 Office
(405)-924-9485 Cell
kpenrod@delawarenation.com

Unless someone like you cares a whole awful lot, nothing is going to get better. It's not. ~Dr. Seuss

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-----Original Message-----

From: McAnallen, Rachel A CIV USAF AFDW (US)
<rachel.a.mcanallen.civ@mail.mil>
Sent: Thursday, June 14, 2018 7:48 AM
To: Kimberly Penrod <kpenrod@delawarenation.com>
Cc: Kasunic, Michelle J CIV USAF (US)
<michelle.j.kasunic.civ@mail.mil>
Subject: Joint Base Andrews Sect. 106 - Delaware Nation Consultation

Good morning Ms. Penrod,

On 25 April 2018, our Installation Tribal Liaison Officer, Lt Col Christopher M. Kuester sent correspondence to Mr. Kerry Holton regarding a proposed Consolidated Communications Center on Joint Base Andrews, located in MD.

Based on previous discussions between Mr. Holton and Lt Col Kuester, I am contacting you in the capacity of our installation's cultural resources manager to forward you the Sect. 106 evaluation we shared with the Maryland Historic Trust. For consultation purposes, the Area of Potential Effect (APE) in this instance is understood to be the project boundaries. I have attached the original correspondence and the attachments between Mr. Kerry and Lt Col Kuester for your review, as well as the Maryland Historic Trust's evaluation of the proposed Consolidated Communications Center on Joint Base Andrews.

The Air Force is dedicated to fulfilling its legal and regulatory obligations to engage in government-to-government consultation with the

Delaware Nation. If you have any questions please contact myself and Ms.

Michelle Kasunic, our alternate cultural resources manager.

Thank you so much for your assistance.

Very respectfully,

Rachel McAnallen, P.E.
Environmental Engineer
Natural Infrastructure AMP/NEPA/Natural/Cultural Resources Program
Manager
11 CES/CEIE
3466 North Carolina Ave
Joint Base Andrews MD 20762
COMM: (202) 750-1855

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From: McDonald, Wanda M Lt Col USAF AFDW (US)
To: ["Eastern Historic Preservation"](#)
Cc: [Soens, Ryan A CIV USAF AFDW \(US\)](#)
Subject: RE: [Non-DoD Source] Re: Delaware Tribe - Follow-up JBA CCC Project
Date: Thursday, September 13, 2018 3:16:55 PM

Ms. Bachor,

Thank you for your response. The Air Force will take every measure to preserve the site and contact you if there is an inadvertent discovery.

Respectfully,

WANDA M. MCDONALD, Lt Col, USAF
Deputy Commander, 11th Mission Support Group
Joint Base Andrews, MD 20762
Comm 📞 (240) 612-5843
DSN 📞 612-5843

From: Eastern Historic Preservation <temple@delawaretribe.org>
Sent: Thursday, September 13, 2018 3:10 PM
To: McDonald, Wanda M Lt Col USAF AFDW (US) <wanda.m.mcdonald.mil@mail.mil>
Cc: Soens, Ryan A CIV USAF AFDW (US) <ryan.a.soens.civ@mail.mil>
Subject: [Non-DoD Source] Re: Delaware Tribe - Follow-up JBA CCC Project

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

Lt Col McDonald,

The information shows the demolition of buildings in an already disturbed area. We have no objection to the proposed work but we ask that in the event a concentration of artifacts and/or in the unlikely event any human remains are accidentally unearthed during the project that all work is halted until a qualified archaeologist can evaluate the find and the Delaware Tribe of Indians is informed of the inadvertent discovery.

If you have any questions, feel free to contact this office at (570) 422-2023, cell phone at (610) 761-7452, or by e-mail at sbachor@delawaretribe.org < Caution-mailto:sbachor@delawaretribe.org > .

Thank you and have a nice day.

Susan Bachor, M.A.

Archaeologist

Delaware Tribe Historic Preservation

P.O. Box 64

Pocono Lake, PA 18347

sbachor@delawaretribe.org

office - 1.570.422.2023

cell-1.610.761.7452

This electronic message contains information from the Delaware Tribe of Indians that may be confidential, privileged or proprietary in nature. The information is intended solely for the specific use of the individual or entity to which this is addressed. If you are not the intended recipient of this message, you are notified that any use, distribution, copying, or disclosure of this communication is strictly prohibited. If you received this message in error, please notify the sender then delete this message.

From: "McDonald, Wanda M Lt Col USAF AFDW (US)"
<wanda.m.mcdonald.mil@mail.mil>
To: "temple@delawaretribe.org" <temple@delawaretribe.org>
Cc: "Soens, Ryan A CIV USAF AFDW (US)" <ryan.a.soens.civ@mail.mil>
Sent: 9/13/2018 11:00 AM
Subject: Delaware Tribe - Follow-up JBA CCC Project

Greetings Mr. Brooks,

I hope my correspondence finds you and your tribal members well. The Delaware Tribe has been identified as a tribe with a connection to the land area of Joint Base Andrews, and as having an interest in knowing about large construction projects on base which may affect the Nation. Susan Bachor was listed as the point of contact to review our environmental evaluations, including the Area of Potential Effect, and the site/construction maps to help determine if the area might have cultural significance or possible remains. Documents for review regarding construction of a Consolidated Communications Center (CCC) were sent on 25 April 2018.

We have received no reply to our April correspondence. We are sending you this follow-up request due to the time sensitive nature of fiscal year appropriation. If we don't hear back from you in regards to this project by September 20, 2018, we shall proceed with concluding our environmental assessment with the understanding that the Nation has no concerns as regards this project. Please be assured that regardless your tribe's decision regarding consultation on the CCC, the Air Force will fully comply with all applicable laws and regulations in the event of an inadvertent discovery of archaeological or funerary objects and/or human remains.

I respectfully request acknowledgement of this email correspondence and your response by replying to all on this email no later than 20 September 2018.

Thank you sincerely for your time.

Respectfully,

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**APPENDIX B: DETAIL AIR CONFORMITY APPLICABILITY MODEL REPORT
AND RECORD OF CONFORMITY ANALYSIS (ROCA)**

DETAIL AIR CONFORMITY APPLICABILITY MODEL REPORT

1. General Information

- Action Location

Base: ANDREWS AFB
County(s): Prince George's
Regulatory Area(s): Washington, DC-MD-VA

- **Action Title:** Construction of a Consolidated Communication Center (CCC)

- **Project Number/s (if applicable):**

- **Projected Action Start Date:** 8 / 2018

- Action Purpose and Need:

The purpose of the proposed construction of the CCC facility is to provide an adequately sized and properly configured communications facility at JBA to support critical communications functions. A new CCC facility would provide centrally located, secure, and consolidated communications operations and maintenance and network integration support to the NCR, and other priority command and control missions.

The need for the proposed construction of the CCC facility is driven by relocation of communication functions from aged and unsafe buildings, centrally locating secure communication service areas, and allowing for necessary Network Control Center (NCC) expansion. Existing communications facilities on JBA are more than 50 years old and have foundation deterioration; inadequate fire suppression systems in critical server rooms; electrical load distributions that do not meet current electrical code; utility infrastructure that is more than 25 years old; inadequate heating, ventilation, and air conditioning (HVAC) systems; and asbestos-containing materials (ACM) that make upgrading or expanding the existing facilities difficult. The project would reduce life-cycle cost, provide systems and facilities that meet current and projected mission requirements, and improve health and safety on JBA.

- Action Description:

The proposed action is to construct and operate an approximate 95,910-square-foot CCC using economical design and construction methods. The facility would be constructed with reinforced concrete foundations, steel frame and roof systems, and concrete masonry unit walls. The construction would include site work, communications support, fire detection and suppression systems, environmental controls, pavement, a parking area, exterior lighting, security systems, landscaping, emergency generators, and all other support.

Data center equipment from other mission partners at JBA would be consolidated to take advantage of the fiber optic infrastructure recently completed at the installation, including the USAF Reserve, DC Air National Guard, and U.S. Army.

All major utility services are available in the proposed area, including water, sanitary sewer, natural gas, and electricity. The facility would have at least two electrical feeds from the JBA substation and communications cabling connections to maintain redundancy for the facility's operations. Approximately 1,500 linear feet (LF) of trenching for power and 2,000 LF of trenching for telecommunications would be required. Emergency generators and all necessary support for an uninterrupted power system would be required. In order to provide improved redundancy and availability, standby power would be supplied by two – 1 megawatt (MW) generators, plus one additional 1MW generator. The switchgear will also be configured to include a provision for a 1MW roll-up generator.

Buildings 1539 and 1558 – the existing facilities currently occupied by the mission partners – would remain operational throughout the construction of the new CCC. Once the new CCC was completed and certified for use, the functions in those facilities would be relocated to the new CCC and buildings 1539 and 1558 would be demolished, including removal of electrical and communications ducts, HVAC equipment, four 25,000-gallon fuel tanks, and associated piping.

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Approximately 412,078 square feet (sf) (266,587 sf impervious (asphalt and concrete) and 145,490 sf building area) would be demolished for this project. Approximately 6,392 LF for utilities (1,836 LF stormwater, 2,301 LF underground electric, 518 LF overhead electric, 1,277 LF underground telephone, and 460 LF gas) would be demolished for this project. The existing land use is dilapidated vacant buildings. The total acreage of limit of disturbance (LOD) would be approximately 18.49 acres. Impervious surface would be reduced by approximately 7.09 acres which is a 38 percent decrease from existing impervious surface (Figure 2.1-2). Landscaping would be included with the project. No additional personnel or traffic will be introduced to the project area as the new CCC is near the existing facilities and no new personnel are associated with the Proposed Action.

The existing communications vault below building 1539 would be retained and reused as a main connection point to the installation's cabling infrastructure. Building 1531 and the adjacent parking area would be retained and reused as a cable yard and protected parking for the CCC. The existing antenna tower located between buildings 1558 and 1560 would be retained. A radio frequency (RF) enclosure and new power connection would be provided at the base of the tower to permit the continued use of that facility. An area of the proposed site would be identified for a future antenna tower to allow the existing tower to be removed by JBA in the future.

- Point of Contact

Name: Raga Kalapati
Title: Project Environmental Engineer
Organization: Arcadis, U.S., Inc
Email: raga.kalapati@arcadis.com
Phone Number: 858-699-4487

- Activity List:

	Activity Type	Activity Title
2.	Construction / Demolition	Proposed Action - Construction
3.	Tanks	Remove Tanks
4.	Emergency Generator	Add Emergency Generators

2. Construction / Demolition

2.1 General Information & Timeline Assumptions

- Activity Location

County: Prince George's
Regulatory Area(s): Washington, DC-MD-VA

- Activity Title: Proposed Action - Construction

- Activity Description:

- Construct a Consolidated Communication Center
- Install an RF enclosure and new power connection at the base of the existing antenna tower.
- Construct a new parking lot north of the CCC, with a capacity of 350 vehicles to provide parking for 60 percent of assigned personnel.
- Demolish buildings 1539 and 1558.
- Grading, trenching etc

- Activity Start Date

Start Month: 8
Start Month: 2018

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- Activity End Date

Indefinite: False
End Month: 7
End Year: 2020

- Activity Emissions:

Pollutant	Total Emissions (TONs)
VOC	5.562930
SO _x	0.071176
NO _x	38.281452
CO	28.988123
PM 10	209.853490

Pollutant	Total Emissions (TONs)
PM 2.5	1.811374
Pb	0.000000
NH ₃	0.026395
CO _{2e}	7092.7

2.1 Demolition Phase

2.1.1 Demolition Phase Timeline Assumptions

- Phase Start Date

Start Month: 8
Start Quarter: 1
Start Year: 2018

- Phase Duration

Number of Month: 24
Number of Days: 0

2.1.2 Demolition Phase Assumptions

- General Demolition Information

Area of Building to be demolished (ft²): 103000
Height of Building to be demolished (ft): 22

- Default Settings Used: Yes

- Average Day(s) worked per week: 5 (default)

- Construction Exhaust (default)

Equipment Name	Number Of Equipment	Hours Per Day
Concrete/Industrial Saws Composite	1	8
Rubber Tired Dozers Composite	1	1
Tractors/Loaders/Backhoes Composite	2	8

- Vehicle Exhaust

Average Hauling Truck Capacity (yd³): 20 (default)
Average Hauling Truck Round Trip Commute (mile): 20 (default)

- Vehicle Exhaust Vehicle Mixture (%)

	LDGV	LDGT	HGV	LDDV	LDDT	HDDV	MC
POVs	0	0	0	0	0	100.00	0

- Worker Trips

Average Worker Round Trip Commute (mile): 20 (default)

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- Worker Trips Vehicle Mixture (%)

	LDGV	LDGT	HDGV	LDDV	LDDT	HDDV	MC
POVs	50.00	50.00	0	0	0	0	0

2.1.3 Demolition Phase Emission Factor(s)

- Construction Exhaust Emission Factors (lb/hour) (default)

Concrete/Industrial Saws Composite								
	VOC	SO _x	NO _x	CO	PM 10	PM 2.5	CH ₄	CO _{2e}
Emission Factors	0.0604	0.0006	0.3958	0.3850	0.0260	0.0260	0.0054	58.600
Rubber Tired Dozers Composite								
	VOC	SO _x	NO _x	CO	PM 10	PM 2.5	CH ₄	CO _{2e}
Emission Factors	0.2343	0.0024	1.8193	0.8818	0.0737	0.0737	0.0211	239.61
Tractors/Loaders/Backhoes Composite								
	VOC	SO _x	NO _x	CO	PM 10	PM 2.5	CH ₄	CO _{2e}
Emission Factors	0.0512	0.0007	0.3330	0.3646	0.0189	0.0189	0.0046	66.912

- Vehicle Exhaust & Worker Trips Emission Factors (grams/mile)

	VOC	SO _x	NO _x	CO	PM 10	PM 2.5	Pb	NH ₃	CO _{2e}
LDGV	000.322	000.002	000.281	003.417	000.009	000.008		000.025	00341.032
LDGT	000.413	000.003	000.493	004.958	000.011	000.010		000.026	00442.380
HDGV	000.855	000.005	001.335	017.836	000.027	000.024		000.045	00776.376
LDDV	000.125	000.003	000.151	002.524	000.004	000.004		000.008	00333.080
LDDT	000.327	000.004	000.494	005.013	000.007	000.007		000.008	00485.907
HDDV	000.488	000.013	005.448	001.814	000.217	000.200		000.027	01495.979
MC	002.380	000.003	000.763	013.157	000.028	000.024		000.053	00398.543

2.1.4 Demolition Phase Formula(s)

- Fugitive Dust Emissions per Phase

$$PM10_{FD} = (0.00042 * BA * BH) / 2000$$

PM10_{FD}: Fugitive Dust PM 10 Emissions (TONs)

0.00042: Emission Factor (lb/ft³)

BA: Area of Building to be demolished (ft²)

BH: Height of Building to be demolished (ft)

2000: Conversion Factor pounds to tons

- Construction Exhaust Emissions per Phase

$$CEE_{POL} = (NE * WD * H * EF_{POL}) / 2000$$

CEE_{POL}: Construction Exhaust Emissions (TONs)

NE: Number of Equipment

WD: Number of Total Work Days (days)

H: Hours Worked per Day (hours)

EF_{POL}: Emission Factor for Pollutant (lb/hour)

2000: Conversion Factor pounds to tons

- Vehicle Exhaust Emissions per Phase

$$VMT_{VE} = BA * BH * (1 / 27) * 0.25 * (1 / HC) * HT$$

VMT_{VE}: Vehicle Exhaust Vehicle Miles Travel (miles)

BA: Area of Building being demolish (ft²)

BH: Height of Building being demolish (ft)

(1 / 27): Conversion Factor cubic feet to cubic yards (1 yd³ / 27 ft³)

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0.25: Volume reduction factor (material reduced by 75% to account for air space)

HC: Average Hauling Truck Capacity (yd³)

(1 / HC): Conversion Factor cubic yards to trips (1 trip / HC yd³)

HT: Average Hauling Truck Round Trip Commute (mile/trip)

$$V_{POL} = (VMT_{VE} * 0.002205 * EF_{POL} * VM) / 2000$$

V_{POL}: Vehicle Emissions (TONs)

VMT_{VE}: Vehicle Exhaust Vehicle Miles Travel (miles)

0.002205: Conversion Factor grams to pounds

EF_{POL}: Emission Factor for Pollutant (grams/mile)

VM: Vehicle Exhaust On Road Vehicle Mixture (%)

2000: Conversion Factor pounds to tons

- Worker Trips Emissions per Phase

$$VMT_{WT} = WD * WT * 1.25 * NE$$

VMT_{WT}: Worker Trips Vehicle Miles Travel (miles)

WD: Number of Total Work Days (days)

WT: Average Worker Round Trip Commute (mile)

1.25: Conversion Factor Number of Construction Equipment to Number of Works

NE: Number of Construction Equipment

$$V_{POL} = (VMT_{WT} * 0.002205 * EF_{POL} * VM) / 2000$$

V_{POL}: Vehicle Emissions (TONs)

VMT_{WT}: Worker Trips Vehicle Miles Travel (miles)

0.002205: Conversion Factor grams to pounds

EF_{POL}: Emission Factor for Pollutant (grams/mile)

VM: Worker Trips On Road Vehicle Mixture (%)

2000: Conversion Factor pounds to tons

2.2 Site Grading Phase

2.2.1 Site Grading Phase Timeline Assumptions

- Phase Start Date

Start Month: 8

Start Quarter: 1

Start Year: 2018

- Phase Duration

Number of Month: 24

Number of Days: 0

2.2.2 Site Grading Phase Assumptions

- General Site Grading Information

Area of Site to be Graded (ft²): 805424.4

Amount of Material to be Hauled On-Site (yd³): 78150

Amount of Material to be Hauled Off-Site (yd³): 335770

- Site Grading Default Settings

Default Settings Used: Yes

Average Day(s) worked per week: 5 (default)

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- Construction Exhaust (default)

Equipment Name	Number Of Equipment	Hours Per Day
Excavators Composite	1	8
Graders Composite	1	8
Other Construction Equipment Composite	1	8
Rubber Tired Dozers Composite	1	8
Scrapers Composite	3	8
Tractors/Loaders/Backhoes Composite	3	8

- Vehicle Exhaust

Average Hauling Truck Capacity (yd³): 20 (default)

Average Hauling Truck Round Trip Commute (mile): 20 (default)

- Vehicle Exhaust Vehicle Mixture (%)

	LDGV	LDGT	HDGV	LDDV	LDDT	HDDV	MC
POVs	0	0	0	0	0	100.00	0

- Worker Trips

Average Worker Round Trip Commute (mile): 20 (default)

- Worker Trips Vehicle Mixture (%)

	LDGV	LDGT	HDGV	LDDV	LDDT	HDDV	MC
POVs	50.00	50.00	0	0	0	0	0

2.2.3 Site Grading Phase Emission Factor(s)

- Construction Exhaust Emission Factors (lb/hour) (default)

Excavators Composite								
	VOC	SO _x	NO _x	CO	PM 10	PM 2.5	CH ₄	CO _{2e}
Emission Factors	0.0848	0.0013	0.5180	0.5159	0.0249	0.0249	0.0076	119.77
Graders Composite								
	VOC	SO _x	NO _x	CO	PM 10	PM 2.5	CH ₄	CO _{2e}
Emission Factors	0.1049	0.0014	0.7217	0.5812	0.0354	0.0354	0.0094	132.97
Other Construction Equipment Composite								
	VOC	SO _x	NO _x	CO	PM 10	PM 2.5	CH ₄	CO _{2e}
Emission Factors	0.0633	0.0012	0.4477	0.3542	0.0181	0.0181	0.0057	122.66
Rubber Tired Dozers Composite								
	VOC	SO _x	NO _x	CO	PM 10	PM 2.5	CH ₄	CO _{2e}
Emission Factors	0.2343	0.0024	1.8193	0.8818	0.0737	0.0737	0.0211	239.61
Scrapers Composite								
	VOC	SO _x	NO _x	CO	PM 10	PM 2.5	CH ₄	CO _{2e}
Emission Factors	0.2135	0.0026	1.6041	0.8417	0.0653	0.0653	0.0192	262.96
Tractors/Loaders/Backhoes Composite								
	VOC	SO _x	NO _x	CO	PM 10	PM 2.5	CH ₄	CO _{2e}
Emission Factors	0.0512	0.0007	0.3330	0.3646	0.0189	0.0189	0.0046	66.912

- Vehicle Exhaust & Worker Trips Emission Factors (grams/mile)

	VOC	SO _x	NO _x	CO	PM 10	PM 2.5	Pb	NH ₃	CO _{2e}
LDGV	000.322	000.002	000.281	003.417	000.009	000.008		000.025	00341.032
LDGT	000.413	000.003	000.493	004.958	000.011	000.010		000.026	00442.380
HDGV	000.855	000.005	001.335	017.836	000.027	000.024		000.045	00776.376
LDDV	000.125	000.003	000.151	002.524	000.004	000.004		000.008	00333.080

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LDDT	000.327	000.004	000.494	005.013	000.007	000.007		000.008	00485.907
HDDV	000.488	000.013	005.448	001.814	000.217	000.200		000.027	01495.979
MC	002.380	000.003	000.763	013.157	000.028	000.024		000.053	00398.543

2.2.4 Site Grading Phase Formula(s)

- Fugitive Dust Emissions per Phase

$$PM10_{FD} = (20 * ACRE * WD) / 2000$$

PM10_{FD}: Fugitive Dust PM 10 Emissions (TONs)
 20: Conversion Factor Acre Day to pounds (20 lb / 1 Acre Day)
 ACRE: Total acres (acres)
 WD: Number of Total Work Days (days)
 2000: Conversion Factor pounds to tons

- Construction Exhaust Emissions per Phase

$$CEE_{POL} = (NE * WD * H * EF_{POL}) / 2000$$

CEE_{POL}: Construction Exhaust Emissions (TONs)
 NE: Number of Equipment
 WD: Number of Total Work Days (days)
 H: Hours Worked per Day (hours)
 EF_{POL}: Emission Factor for Pollutant (lb/hour)
 2000: Conversion Factor pounds to tons

- Vehicle Exhaust Emissions per Phase

$$VMT_{VE} = (HA_{OnSite} + HA_{OffSite}) * (1 / HC) * HT$$

VMT_{VE}: Vehicle Exhaust Vehicle Miles Travel (miles)
 HA_{OnSite}: Amount of Material to be Hauled On-Site (yd³)
 HA_{OffSite}: Amount of Material to be Hauled Off-Site (yd³)
 HC: Average Hauling Truck Capacity (yd³)
 (1 / HC): Conversion Factor cubic yards to trips (1 trip / HC yd³)
 HT: Average Hauling Truck Round Trip Commute (mile/trip)

$$V_{POL} = (VMT_{VE} * 0.002205 * EF_{POL} * VM) / 2000$$

V_{POL}: Vehicle Emissions (TONs)
 VMT_{VE}: Vehicle Exhaust Vehicle Miles Travel (miles)
 0.002205: Conversion Factor grams to pounds
 EF_{POL}: Emission Factor for Pollutant (grams/mile)
 VM: Vehicle Exhaust On Road Vehicle Mixture (%)
 2000: Conversion Factor pounds to tons

- Worker Trips Emissions per Phase

$$VMT_{WT} = WD * WT * 1.25 * NE$$

VMT_{WT}: Worker Trips Vehicle Miles Travel (miles)
 WD: Number of Total Work Days (days)
 WT: Average Worker Round Trip Commute (mile)
 1.25: Conversion Factor Number of Construction Equipment to Number of Works
 NE: Number of Construction Equipment

$$V_{POL} = (VMT_{WT} * 0.002205 * EF_{POL} * VM) / 2000$$

DETAIL AIR CONFORMITY APPLICABILITY MODEL REPORT

V_{POL}: Vehicle Emissions (TONs)
 VMT_{WT}: Worker Trips Vehicle Miles Travel (miles)
 0.002205: Conversion Factor grams to pounds
 EF_{POL}: Emission Factor for Pollutant (grams/mile)
 VM: Worker Trips On Road Vehicle Mixture (%)
 2000: Conversion Factor pounds to tons

2.3 Trenching/Excavating Phase

2.3.1 Trenching / Excavating Phase Timeline Assumptions

- Phase Start Date

Start Month: 8
Start Quarter: 1
Start Year: 2018

- Phase Duration

Number of Month: 24
Number of Days: 0

2.3.2 Trenching / Excavating Phase Assumptions

- General Trenching/Excavating Information

Area of Site to be Trenched/Excavated (ft²): 63920
Amount of Material to be Hauled On-Site (yd³): 0
Amount of Material to be Hauled Off-Site (yd³): 0

- Trenching Default Settings

Default Settings Used: Yes
Average Day(s) worked per week: 5 (default)

- Construction Exhaust (default)

Equipment Name	Number Of Equipment	Hours Per Day
Excavators Composite	2	8
Other General Industrial Equipmen Composite	1	8
Tractors/Loaders/Backhoes Composite	1	8

- Vehicle Exhaust

Average Hauling Truck Capacity (yd³): 20 (default)
Average Hauling Truck Round Trip Commute (mile): 20 (default)

- Vehicle Exhaust Vehicle Mixture (%)

	LDGV	LDGT	HDGV	LDDV	LDDT	HDDV	MC
POVs	0	0	0	0	0	100.00	0

- Worker Trips

Average Worker Round Trip Commute (mile): 20 (default)

- Worker Trips Vehicle Mixture (%)

	LDGV	LDGT	HDGV	LDDV	LDDT	HDDV	MC
POVs	50.00	50.00	0	0	0	0	0

2.3.3 Trenching / Excavating Phase Emission Factor(s)

DETAIL AIR CONFORMITY APPLICABILITY MODEL REPORT

- Construction Exhaust Emission Factors (lb/hour) (default)

Excavators Composite								
	VOC	SO _x	NO _x	CO	PM 10	PM 2.5	CH ₄	CO _{2e}
Emission Factors	0.0848	0.0013	0.5180	0.5159	0.0249	0.0249	0.0076	119.77
Graders Composite								
	VOC	SO _x	NO _x	CO	PM 10	PM 2.5	CH ₄	CO _{2e}
Emission Factors	0.1049	0.0014	0.7217	0.5812	0.0354	0.0354	0.0094	132.97
Other Construction Equipment Composite								
	VOC	SO _x	NO _x	CO	PM 10	PM 2.5	CH ₄	CO _{2e}
Emission Factors	0.0633	0.0012	0.4477	0.3542	0.0181	0.0181	0.0057	122.66
Rubber Tired Dozers Composite								
	VOC	SO _x	NO _x	CO	PM 10	PM 2.5	CH ₄	CO _{2e}
Emission Factors	0.2343	0.0024	1.8193	0.8818	0.0737	0.0737	0.0211	239.61
Scrapers Composite								
	VOC	SO _x	NO _x	CO	PM 10	PM 2.5	CH ₄	CO _{2e}
Emission Factors	0.2135	0.0026	1.6041	0.8417	0.0653	0.0653	0.0192	262.96
Tractors/Loaders/Backhoes Composite								
	VOC	SO _x	NO _x	CO	PM 10	PM 2.5	CH ₄	CO _{2e}
Emission Factors	0.0512	0.0007	0.3330	0.3646	0.0189	0.0189	0.0046	66.912

- Vehicle Exhaust & Worker Trips Emission Factors (grams/mile)

	VOC	SO _x	NO _x	CO	PM 10	PM 2.5	Pb	NH ₃	CO _{2e}
LDGV	000.322	000.002	000.281	003.417	000.009	000.008		000.025	00341.032
LDGT	000.413	000.003	000.493	004.958	000.011	000.010		000.026	00442.380
HDGV	000.855	000.005	001.335	017.836	000.027	000.024		000.045	00776.376
LDDV	000.125	000.003	000.151	002.524	000.004	000.004		000.008	00333.080
LDDT	000.327	000.004	000.494	005.013	000.007	000.007		000.008	00485.907
HDDV	000.488	000.013	005.448	001.814	000.217	000.200		000.027	01495.979
MC	002.380	000.003	000.763	013.157	000.028	000.024		000.053	00398.543

2.3.4 Trenching / Excavating Phase Formula(s)

- Fugitive Dust Emissions per Phase

$$PM10_{FD} = (20 * ACRE * WD) / 2000$$

PM10_{FD}: Fugitive Dust PM 10 Emissions (TONs)

20: Conversion Factor Acre Day to pounds (20 lb / 1 Acre Day)

ACRE: Total acres (acres)

WD: Number of Total Work Days (days)

2000: Conversion Factor pounds to tons

- Construction Exhaust Emissions per Phase

$$CEE_{POL} = (NE * WD * H * EF_{POL}) / 2000$$

CEE_{POL}: Construction Exhaust Emissions (TONs)

NE: Number of Equipment

WD: Number of Total Work Days (days)

H: Hours Worked per Day (hours)

EF_{POL}: Emission Factor for Pollutant (lb/hour)

2000: Conversion Factor pounds to tons

- Vehicle Exhaust Emissions per Phase

$$VMT_{VE} = (HA_{OnSite} + HA_{OffSite}) * (1 / HC) * HT$$

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VMT_{VE}: Vehicle Exhaust Vehicle Miles Travel (miles)
HA_{OnSite}: Amount of Material to be Hauled On-Site (yd³)
HA_{OffSite}: Amount of Material to be Hauled Off-Site (yd³)
HC: Average Hauling Truck Capacity (yd³)
(1 / HC): Conversion Factor cubic yards to trips (1 trip / HC yd³)
HT: Average Hauling Truck Round Trip Commute (mile/trip)

$$V_{POL} = (VMT_{VE} * 0.002205 * EF_{POL} * VM) / 2000$$

V_{POL}: Vehicle Emissions (TONs)
VMT_{VE}: Vehicle Exhaust Vehicle Miles Travel (miles)
0.002205: Conversion Factor grams to pounds
EF_{POL}: Emission Factor for Pollutant (grams/mile)
VM: Vehicle Exhaust On Road Vehicle Mixture (%)
2000: Conversion Factor pounds to tons

- Worker Trips Emissions per Phase

$$VMT_{WT} = WD * WT * 1.25 * NE$$

VMT_{WT}: Worker Trips Vehicle Miles Travel (miles)
WD: Number of Total Work Days (days)
WT: Average Worker Round Trip Commute (mile)
1.25: Conversion Factor Number of Construction Equipment to Number of Works
NE: Number of Construction Equipment

$$V_{POL} = (VMT_{WT} * 0.002205 * EF_{POL} * VM) / 2000$$

V_{POL}: Vehicle Emissions (TONs)
VMT_{VE}: Worker Trips Vehicle Miles Travel (miles)
0.002205: Conversion Factor grams to pounds
EF_{POL}: Emission Factor for Pollutant (grams/mile)
VM: Worker Trips On Road Vehicle Mixture (%)
2000: Conversion Factor pounds to tons

2.4 Building Construction Phase

2.4.1 Building Construction Phase Timeline Assumptions

- Phase Start Date

Start Month: 8
Start Quarter: 1
Start Year: 2018

- Phase Duration

Number of Month: 24
Number of Days: 0

2.4.2 Building Construction Phase Assumptions

- General Building Construction Information

Building Category: Office or Industrial
Area of Building (ft²): 95910
Height of Building (ft): 22
Number of Units: N/A

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- Building Construction Default Settings

Default Settings Used: Yes
 Average Day(s) worked per week: 5 (default)

- Construction Exhaust (default)

Equipment Name	Number Of Equipment	Hours Per Day
Cranes Composite	1	6
Forklifts Composite	2	6
Generator Sets Composite	1	8
Tractors/Loaders/Backhoes Composite	1	8
Welders Composite	3	8

- Vehicle Exhaust

Average Hauling Truck Round Trip Commute (mile): 20 (default)

- Vehicle Exhaust Vehicle Mixture (%)

	LDGV	LDGT	HDGV	LDDV	LDDT	HDDV	MC
POVs	0	0	0	0	0	100.00	0

- Worker Trips

Average Worker Round Trip Commute (mile): 20 (default)

- Worker Trips Vehicle Mixture (%)

	LDGV	LDGT	HDGV	LDDV	LDDT	HDDV	MC
POVs	50.00	50.00	0	0	0	0	0

- Vendor Trips

Average Vendor Round Trip Commute (mile): 40 (default)

- Vendor Trips Vehicle Mixture (%)

	LDGV	LDGT	HDGV	LDDV	LDDT	HDDV	MC
POVs	0	0	0	0	0	100.00	0

2.4.3 Building Construction Phase Emission Factor(s)

- Construction Exhaust Emission Factors (lb/hour) (default)

Cranes Composite								
	VOC	SO _x	NO _x	CO	PM 10	PM 2.5	CH ₄	CO _{2e}
Emission Factors	0.1012	0.0013	0.7908	0.4059	0.0318	0.0318	0.0091	128.85
Forklifts Composite								
	VOC	SO _x	NO _x	CO	PM 10	PM 2.5	CH ₄	CO _{2e}
Emission Factors	0.0371	0.0006	0.2186	0.2173	0.0101	0.0101	0.0033	54.479
Generator Sets Composite								
	VOC	SO _x	NO _x	CO	PM 10	PM 2.5	CH ₄	CO _{2e}
Emission Factors	0.0477	0.0006	0.3758	0.2785	0.0191	0.0191	0.0043	61.100
Tractors/Loaders/Backhoes Composite								
	VOC	SO _x	NO _x	CO	PM 10	PM 2.5	CH ₄	CO _{2e}
Emission Factors	0.0512	0.0007	0.3330	0.3646	0.0189	0.0189	0.0046	66.912
Welders Composite								
	VOC	SO _x	NO _x	CO	PM 10	PM 2.5	CH ₄	CO _{2e}
Emission Factors	0.0387	0.0003	0.1940	0.1876	0.0133	0.0133	0.0034	25.690

- Vehicle Exhaust & Worker Trips Emission Factors (grams/mile)

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	VOC	SO _x	NO _x	CO	PM 10	PM 2.5	Pb	NH ₃	CO _{2e}
LDGV	000.322	000.002	000.281	003.417	000.009	000.008		000.025	00341.032
LDGT	000.413	000.003	000.493	004.958	000.011	000.010		000.026	00442.380
HDGV	000.855	000.005	001.335	017.836	000.027	000.024		000.045	00776.376
LDDV	000.125	000.003	000.151	002.524	000.004	000.004		000.008	00333.080
LDDT	000.327	000.004	000.494	005.013	000.007	000.007		000.008	00485.907
HDDV	000.488	000.013	005.448	001.814	000.217	000.200		000.027	01495.979
MC	002.380	000.003	000.763	013.157	000.028	000.024		000.053	00398.543

2.4.4 Building Construction Phase Formula(s)

- Construction Exhaust Emissions per Phase

$$CEE_{POL} = (NE * WD * H * EF_{POL}) / 2000$$

CEE_{POL}: Construction Exhaust Emissions (TONs)

NE: Number of Equipment

WD: Number of Total Work Days (days)

H: Hours Worked per Day (hours)

EF_{POL}: Emission Factor for Pollutant (lb/hour)

2000: Conversion Factor pounds to tons

- Vehicle Exhaust Emissions per Phase

$$VMT_{VE} = BA * BH * (0.42 / 1000) * HT$$

VMT_{VE}: Vehicle Exhaust Vehicle Miles Travel (miles)

BA: Area of Building (ft²)

BH: Height of Building (ft)

(0.42 / 1000): Conversion Factor ft³ to trips (0.42 trip / 1000 ft³)

HT: Average Hauling Truck Round Trip Commute (mile/trip)

$$V_{POL} = (VMT_{VE} * 0.002205 * EF_{POL} * VM) / 2000$$

V_{POL}: Vehicle Emissions (TONs)

VMT_{VE}: Vehicle Exhaust Vehicle Miles Travel (miles)

0.002205: Conversion Factor grams to pounds

EF_{POL}: Emission Factor for Pollutant (grams/mile)

VM: Worker Trips On Road Vehicle Mixture (%)

2000: Conversion Factor pounds to tons

- Worker Trips Emissions per Phase

$$VMT_{WT} = WD * WT * 1.25 * NE$$

VMT_{WT}: Worker Trips Vehicle Miles Travel (miles)

WD: Number of Total Work Days (days)

WT: Average Worker Round Trip Commute (mile)

1.25: Conversion Factor Number of Construction Equipment to Number of Works

NE: Number of Construction Equipment

$$V_{POL} = (VMT_{WT} * 0.002205 * EF_{POL} * VM) / 2000$$

V_{POL}: Vehicle Emissions (TONs)

VMT_{WT}: Worker Trips Vehicle Miles Travel (miles)

0.002205: Conversion Factor grams to pounds

EF_{POL}: Emission Factor for Pollutant (grams/mile)

VM: Worker Trips On Road Vehicle Mixture (%)

DETAIL AIR CONFORMITY APPLICABILITY MODEL REPORT

2000: Conversion Factor pounds to tons

- Vender Trips Emissions per Phase

$$VMT_{VT} = BA * BH * (0.38 / 1000) * HT$$

- VMT_{VT}: Vender Trips Vehicle Miles Travel (miles)
- BA: Area of Building (ft²)
- BH: Height of Building (ft)
- (0.38 / 1000): Conversion Factor ft³ to trips (0.38 trip / 1000 ft³)
- HT: Average Hauling Truck Round Trip Commute (mile/trip)

$$V_{POL} = (VMT_{VT} * 0.002205 * EF_{POL} * VM) / 2000$$

- V_{POL}: Vehicle Emissions (TONs)
- VMT_{VT}: Vender Trips Vehicle Miles Travel (miles)
- 0.002205: Conversion Factor grams to pounds
- EF_{POL}: Emission Factor for Pollutant (grams/mile)
- VM: Worker Trips On Road Vehicle Mixture (%)
- 2000: Conversion Factor pounds to tons

2.5 Paving Phase

2.5.1 Paving Phase Timeline Assumptions

- Phase Start Date

Start Month: 8
 Start Quarter: 1
 Start Year: 2018

- Phase Duration

Number of Month: 24
 Number of Days: 0

2.5.2 Paving Phase Assumptions

- General Paving Information

Paving Area (ft²): 63000

- Paving Default Settings

Default Settings Used: Yes
 Average Day(s) worked per week: 5 (default)

- Construction Exhaust (default)

Equipment Name	Number Of Equipment	Hours Per Day
Cement and Mortar Mixers Composite	4	6
Pavers Composite	1	7
Paving Equipment Composite	1	8
Rollers Composite	1	7
Tractors/Loaders/Backhoes Composite	1	7

- Vehicle Exhaust

Average Hauling Truck Round Trip Commute (mile): 20 (default)

- Vehicle Exhaust Vehicle Mixture (%)

DETAIL AIR CONFORMITY APPLICABILITY MODEL REPORT

	LDGV	LDGT	HDGV	LDDV	LDDT	HDDV	MC
POVs	0	0	0	0	0	100.00	0

- Worker Trips

Average Worker Round Trip Commute (mile): 20 (default)

- Worker Trips Vehicle Mixture (%)

	LDGV	LDGT	HDGV	LDDV	LDDT	HDDV	MC
POVs	50.00	50.00	0	0	0	0	0

2.5.3 Paving Phase Emission Factor(s)

- Construction Exhaust Emission Factors (lb/hour) (default)

Excavators Composite								
	VOC	SO _x	NO _x	CO	PM 10	PM 2.5	CH ₄	CO _{2e}
Emission Factors	0.0848	0.0013	0.5180	0.5159	0.0249	0.0249	0.0076	119.77
Graders Composite								
	VOC	SO _x	NO _x	CO	PM 10	PM 2.5	CH ₄	CO _{2e}
Emission Factors	0.1049	0.0014	0.7217	0.5812	0.0354	0.0354	0.0094	132.97
Other Construction Equipment Composite								
	VOC	SO _x	NO _x	CO	PM 10	PM 2.5	CH ₄	CO _{2e}
Emission Factors	0.0633	0.0012	0.4477	0.3542	0.0181	0.0181	0.0057	122.66
Rubber Tired Dozers Composite								
	VOC	SO _x	NO _x	CO	PM 10	PM 2.5	CH ₄	CO _{2e}
Emission Factors	0.2343	0.0024	1.8193	0.8818	0.0737	0.0737	0.0211	239.61
Scrapers Composite								
	VOC	SO _x	NO _x	CO	PM 10	PM 2.5	CH ₄	CO _{2e}
Emission Factors	0.2135	0.0026	1.6041	0.8417	0.0653	0.0653	0.0192	262.96
Tractors/Loaders/Backhoes Composite								
	VOC	SO _x	NO _x	CO	PM 10	PM 2.5	CH ₄	CO _{2e}
Emission Factors	0.0512	0.0007	0.3330	0.3646	0.0189	0.0189	0.0046	66.912

- Vehicle Exhaust & Worker Trips Emission Factors (grams/mile)

	VOC	SO _x	NO _x	CO	PM 10	PM 2.5	Pb	NH ₃	CO _{2e}
LDGV	000.322	000.002	000.281	003.417	000.009	000.008		000.025	00341.032
LDGT	000.413	000.003	000.493	004.958	000.011	000.010		000.026	00442.380
HDGV	000.855	000.005	001.335	017.836	000.027	000.024		000.045	00776.376
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HDDV	000.488	000.013	005.448	001.814	000.217	000.200		000.027	01495.979
MC	002.380	000.003	000.763	013.157	000.028	000.024		000.053	00398.543

2.5.4 Paving Phase Formula(s)

- Construction Exhaust Emissions per Phase

$$CEE_{POL} = (NE * WD * H * EF_{POL}) / 2000$$

CEE_{POL}: Construction Exhaust Emissions (TONs)

NE: Number of Equipment

WD: Number of Total Work Days (days)

H: Hours Worked per Day (hours)

EF_{POL}: Emission Factor for Pollutant (lb/hour)

2000: Conversion Factor pounds to tons

DETAIL AIR CONFORMITY APPLICABILITY MODEL REPORT

- Vehicle Exhaust Emissions per Phase

$$VMT_{VE} = PA * 0.25 * (1 / 27) * (1 / HC) * HT$$

VMT_{VE}: Vehicle Exhaust Vehicle Miles Travel (miles)
PA: Paving Area (ft²)
0.25: Thickness of Paving Area (ft)
(1 / 27): Conversion Factor cubic feet to cubic yards (1 yd³ / 27 ft³)
HC: Average Hauling Truck Capacity (yd³)
(1 / HC): Conversion Factor cubic yards to trips (1 trip / HC yd³)
HT: Average Hauling Truck Round Trip Commute (mile/trip)

$$V_{POL} = (VMT_{VE} * 0.002205 * EF_{POL} * VM) / 2000$$

V_{POL}: Vehicle Emissions (TONs)
VMT_{VE}: Vehicle Exhaust Vehicle Miles Travel (miles)
0.002205: Conversion Factor grams to pounds
EF_{POL}: Emission Factor for Pollutant (grams/mile)
VM: Vehicle Exhaust On Road Vehicle Mixture (%)
2000: Conversion Factor pounds to tons

- Worker Trips Emissions per Phase

$$VMT_{WT} = WD * WT * 1.25 * NE$$

VMT_{WT}: Worker Trips Vehicle Miles Travel (miles)
WD: Number of Total Work Days (days)
WT: Average Worker Round Trip Commute (mile)
1.25: Conversion Factor Number of Construction Equipment to Number of Works
NE: Number of Construction Equipment

$$V_{POL} = (VMT_{WT} * 0.002205 * EF_{POL} * VM) / 2000$$

V_{POL}: Vehicle Emissions (TONs)
VMT_{VE}: Worker Trips Vehicle Miles Travel (miles)
0.002205: Conversion Factor grams to pounds
EF_{POL}: Emission Factor for Pollutant (grams/mile)
VM: Worker Trips On Road Vehicle Mixture (%)
2000: Conversion Factor pounds to tons

- Off-Gassing Emissions per Phase

$$VOC_P = (2.62 * PA) / 43560$$

VOC_P: Paving VOC Emissions (TONs)
2.62: Emission Factor (lb/acre)
PA: Paving Area (ft²)
43560: Conversion Factor square feet to acre (43560 ft² / acre)² / acre)

3. Tanks

3.1 General Information & Timeline Assumptions

- Add or Remove Activity from Baseline? Remove

- Activity Location

County: Prince George's

DETAIL AIR CONFORMITY APPLICABILITY MODEL REPORT

Regulatory Area(s): Washington, DC-MD-VA

- Activity Title: Remove Tanks

- Activity Description:

Remove 4 @ 25,000 gal Underground Storage Tanks

- Activity Start Date

Start Month: 8

Start Year: 2018

- Activity End Date

Indefinite: No

End Month: 8

End Year: 2020

- Activity Emissions:

Pollutant	Total Emissions (TONs)
VOC	-0.039920
SO _x	0.000000
NO _x	0.000000
CO	0.000000
PM 10	0.000000

Pollutant	Total Emissions (TONs)
PM 2.5	0.000000
Pb	0.000000
NH ₃	0.000000
CO _{2e}	0.0

3.2 Tanks Assumptions

- Chemical

Chemical Name: Fuel oil no. 2
Chemical Category: Petroleum Distillates
Chemical Density: 7.1
Vapor Molecular Weight (lb/lb-mole): 130
Stock Vapor Density (lb/ft³): 0.000152397573635847
Vapor Pressure (psia): 0.0065
Vapor Space Expansion Factor (dimensionless): 0.073

- Tank

Type of Tank: Horizontal Tank
Tank Length (ft): 10.5
Tank Diameter (ft): 38
Annual Net Throughput (gallon/year): 100000

3.3 Tank Formula(s)

- Vapor Space Volume

$$VSV = (PI / 4) * D^2 * L / 2$$

VSV: Vapor Space Volume (ft³)

PI: PI Math Constant

D²: Tank Diameter (ft)

L: Tank Length (ft)

2: Conversion Factor (Vapor Space Volume is assumed to be one-half of the tank volume)

- Vented Vapor Saturation Factor

$$VVVSF = 1 / (1 + (0.053 * VP * L / 2))$$

DETAIL AIR CONFORMITY APPLICABILITY MODEL REPORT

VVSF: Vented Vapor Saturation Factor (dimensionless)
0.053: Constant
VP: Vapor Pressure (psia)
L: Tank Length (ft)

- Standing Storage Loss per Year

$$SSL_{VOC} = 365 * VSV * SVD * VSEF * VVSF / 2000$$

SSL_{VOC}: Standing Storage Loss Emissions (TONs)
365: Number of Daily Events in a Year (Constant)
VSV: Vapor Space Volume (ft³)
SVD: Stock Vapor Density (lb/ft³)
VSEF: Vapor Space Expansion Factor (dimensionless)
VVSF: Vented Vapor Saturation Factor (dimensionless)
2000: Conversion Factor pounds to tons

- Number of Turnovers per Year

$$NT = (7.48 * ANT) / ((PI / 4.0) * D * L)$$

NT: Number of Turnovers per Year
7.48: Constant
ANT: Annual Net Throughput
PI: PI Math Constant
D²: Tank Diameter (ft)
L: Tank Length (ft)

- Working Loss Turnover (Saturation) Factor per Year

$$WLSF = (18 + NT) / (6 * NT)$$

WLSF: Working Loss Turnover (Saturation) Factor per Year
18: Constant
NT: Number of Turnovers per Year
6: Constant

- Working Loss per Year

$$WL_{VOC} = 0.0010 * VMW * VP * ANT * WLSF / 2000$$

0.0010: Constant
VMW: Vapor Molecular Weight (lb/lb-mole)
VP: Vapor Pressure (psia)
ANT: Annual Net Throughput
WLSF: Working Loss Turnover (Saturation) Factor
2000: Conversion Factor pounds to tons

4. Emergency Generator

4.1 General Information & Timeline Assumptions

- Add or Remove Activity from Baseline? Add

- Activity Location

County: Prince George's
Regulatory Area(s): Washington, DC-MD-VA

DETAIL AIR CONFORMITY APPLICABILITY MODEL REPORT

- **Activity Title:** Add Emergency Generators

- **Activity Description:**

Emergency generators and all necessary support for an uninterrupted power system would be required. In order to provide improved redundancy and availability, standby power would be supplied by two – 1 megawatt (MW) generators, plus one additional 1MW generator. The switchgear will also be configured to include a provision for a 1MW roll-up generator.

- **Activity Start Date**

Start Month: 8
Start Year: 2018

- **Activity End Date**

Indefinite: Yes
End Month: N/A
End Year: N/A

- **Activity Emissions:**

Pollutant	Emissions Per Year (TONs)
VOC	0.144023
SO _x	0.002514
NO _x	5.209785
CO	1.383912
PM 10	0.162730

Pollutant	Emissions Per Year (TONs)
PM 2.5	0.162730
Pb	0.000000
NH ₃	0.000000
CO _{2e}	267.5

4.2 Emergency Generator Assumptions

- **Emergency Generator**

Type of Fuel used in Emergency Generator: Diesel
Number of Emergency Generators: 3

- **Default Settings Used:** No

- **Emergency Generators Consumption**

Emergency Generator's Horsepower: 1341
Average Operating Hours Per Year (hours): 100

4.3 Emergency Generator Emission Factor(s)

- **Emergency Generators Emission Factor (lb/hp-hr)**

VOC	SO _x	NO _x	CO	PM 10	PM 2.5	Pb	NH ₃	CO _{2e}
0.000716	0.0000125	0.0259	0.00688	0.000809	0.000809			1.33

4.4 Emergency Generator Formula(s)

- **Emergency Generator Emissions per Year**

$$AE_{POL} = (NGEN * HP * OT * EF_{POL}) / 2000$$

AE_{POL}: Activity Emissions (TONs per Year)
NGEN: Number of Emergency Generators
HP: Emergency Generator's Horsepower (hp)
OT: Average Operating Hours Per Year (hours)
EF_{POL}: Emission Factor for Pollutant (lb/hp-hr)

AIR CONFORMITY APPLICABILITY MODEL REPORT RECORD OF CONFORMITY ANALYSIS (ROCA)

1. General Information: The Air Force's Air Conformity Applicability Model (ACAM) was used to perform an analysis to assess the potential air quality impact/s associated with the action in accordance with the Air Force Instruction 32-7040, Air Quality Compliance And Resource Management; the Environmental Impact Analysis Process (EIAP, 32 CFR 989); and the General Conformity Rule (GCR, 40 CFR 93 Subpart B). This report provides a summary of the ACAM analysis.

a. Action Location:

Base: ANDREWS AFB
County(s): Prince George's
Regulatory Area(s): Washington, DC-MD-VA

b. Action Title: Construction of a Consolidated Communication Center (CCC)

c. Project Number/s (if applicable):

d. Projected Action Start Date: 8 / 2018

e. Action Description:

The proposed action is to construct and operate an approximate 95,910-square-foot CCC using economical design and construction methods. The facility would be constructed with reinforced concrete foundations, steel frame and roof systems, and concrete masonry unit walls. The construction would include site work, communications support, fire detection and suppression systems, environmental controls, pavement, a parking area, exterior lighting, security systems, landscaping, emergency generators, and all other support.

Data center equipment from other mission partners at JBA would be consolidated to take advantage of the fiber optic infrastructure recently completed at the installation, including the USAF Reserve, DC Air National Guard, and U.S. Army.

All major utility services are available in the proposed area, including water, sanitary sewer, natural gas, and electricity. The facility would have at least two electrical feeds from the JBA substation and communications cabling connections to maintain redundancy for the facility's operations. Approximately 1,500 linear feet (LF) of trenching for power and 2,000 LF of trenching for telecommunications would be required. Emergency generators and all necessary support for an uninterrupted power system would be required. In order to provide improved redundancy and availability, standby power would be supplied by two – 1 megawatt (MW) generators, plus one additional 1MW generator. The switchgear will also be configured to include a provision for a 1MW roll-up generator.

Buildings 1539 and 1558 – the existing facilities currently occupied by the mission partners – would remain operational throughout the construction of the new CCC. Once the new CCC was completed and certified for use, the functions in those facilities would be relocated to the new CCC and buildings 1539 and 1558 would be demolished, including removal of electrical and communications ducts, HVAC equipment, four 25,000-gallon fuel tanks, and associated piping.

Approximately 412,078 square feet (sf) (266,587 sf impervious (asphalt and concrete) and 145,490 sf building area) would be demolished for this project. Approximately 6,392 LF for utilities (1,836 LF stormwater, 2,301 LF underground electric, 518 LF overhead electric, 1,277 LF underground telephone, and 460 LF gas) would be demolished for this project. The existing land use is dilapidated vacant buildings. The total acreage of limit of disturbance (LOD) would be approximately 18.49 acres. Impervious surface would be reduced by approximately 7.09 acres which is a 38 percent decrease from existing impervious surface (Figure 2.1-2). Landscaping would be included with the project. No additional personnel or traffic will be introduced to the project area as the new CCC is near the existing facilities and no new personnel are associated with the Proposed Action.

AIR CONFORMITY APPLICABILITY MODEL REPORT RECORD OF CONFORMITY ANALYSIS (ROCA)

The existing communications vault below building 1539 would be retained and reused as a main connection point to the installation’s cabling infrastructure. Building 1531 and the adjacent parking area would be retained and reused as a cable yard and protected parking for the CCC. The existing antenna tower located between buildings 1558 and 1560 would be retained. A radio frequency (RF) enclosure and new power connection would be provided at the base of the tower to permit the continued use of that facility. An area of the proposed site would be identified for a future antenna tower to allow the existing tower to be removed by JBA in the future.

f. Point of Contact:

Name: Raga Kalapati
Title: Project Environmental Engineer
Organization: Arcadis, U.S., Inc
Email: raga.kalapati@arcadis.com
Phone Number: 858-699-4487

2. Analysis: Total combined direct and indirect emissions associated with the action were estimated through ACAM on a calendar-year basis for the “worst-case” and “steady state” (net gain/loss upon action fully implemented) emissions. General Conformity under the Clean Air Act, Section 1.76 has been evaluated for the action described above according to the requirements of 40 CFR 93, Subpart B.

Based on the analysis, the requirements of this rule are: applicable
 not applicable

Conformity Analysis Summary:

2018

Pollutant	Action Emissions (ton/yr)	GENERAL CONFORMITY	
		Threshold (ton/yr)	Exceedance (Yes or No)
Washington, DC-MD-VA			
VOC	1.211	50	No
NOx	10.146	100	No
CO	6.616		
SOx	0.016		
PM 10	43.787		
PM 2.5	0.445		
Pb	0.000		
NH3	0.005		
CO2e	1589.1		

2019

Pollutant	Action Emissions (ton/yr)	GENERAL CONFORMITY	
		Threshold (ton/yr)	Exceedance (Yes or No)
Washington, DC-MD-VA			
VOC	2.906	50	No
NOx	24.351	100	No
CO	15.878		
SOx	0.038		
PM 10	105.089		
PM 2.5	1.068		
Pb	0.000		
NH3	0.013		
CO2e	3813.9		

AIR CONFORMITY APPLICABILITY MODEL REPORT RECORD OF CONFORMITY ANALYSIS (ROCA)

2020

Pollutant	Action Emissions (ton/yr)	GENERAL CONFORMITY	
		Threshold (ton/yr)	Exceedance (Yes or No)
Washington, DC-MD-VA			
VOC	1.754	50	No
NOx	16.375	100	No
CO	9.839		
SOx	0.023		
PM 10	61.370		
PM 2.5	0.691		
Pb	0.000		
NH3	0.008		
CO2e	2336.2		

2021 - (Steady State)

Pollutant	Action Emissions (ton/yr)	GENERAL CONFORMITY	
		Threshold (ton/yr)	Exceedance (Yes or No)
Washington, DC-MD-VA			
VOC	0.144	50	No
NOx	5.210	100	No
CO	1.384		
SOx	0.003		
PM 10	0.163		
PM 2.5	0.163		
Pb	0.000		
NH3	0.000		
CO2e	267.5		

None of estimated emissions associated with this action are above the conformity threshold values established at 40 CFR 93.153 (b); Therefore, the requirements of the General Conformity Rule are not applicable.

Raga Kalpatti

5/14/2018

DATE

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APPENDIX C: USFWS MIGRATORY BIRD REPORT, USDA NRCS SOIL REPORTS



United States Department of the Interior



FISH AND WILDLIFE SERVICE
Chesapeake Bay Ecological Services Field Office
177 Admiral Cochrane Drive
Annapolis, MD 21401-7307
Phone: (410) 573-4599 Fax: (410) 266-9127

<http://www.fws.gov/chesapeakebay/>
<http://www.fws.gov/chesapeakebay/endsppweb/ProjectReview/Index.html>

In Reply Refer To:

March 01, 2018

Consultation Code: 05E2CB00-2018-SLI-0813

Event Code: 05E2CB00-2018-E-01810

Project Name: JBA CCC EA

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

To Whom It May Concern:

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

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

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

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

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

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

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

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

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

Attachment(s):

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

Official Species List

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

This species list is provided by:

Chesapeake Bay Ecological Services Field Office

177 Admiral Cochrane Drive

Annapolis, MD 21401-7307

(410) 573-4599

Project Summary

Consultation Code: 05E2CB00-2018-SLI-0813

Event Code: 05E2CB00-2018-E-01810

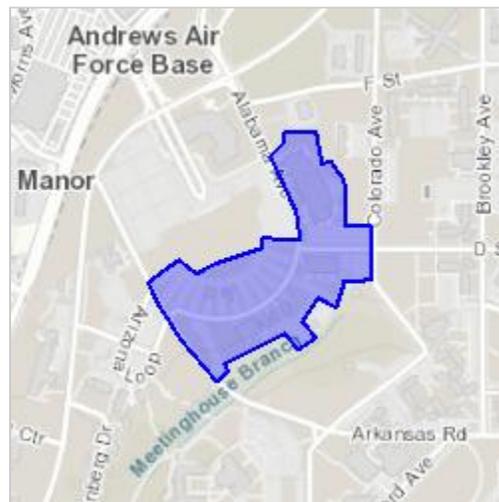
Project Name: JBA CCC EA

Project Type: DEVELOPMENT

Project Description: New construction of a communications facility on JBA.

Project Location:

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/place/38.81249425743731N76.88880878349923W>



Counties: Prince George's, MD

Endangered Species Act Species

There is a total of 0 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. 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.

Critical habitats

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

USFWS National Wildlife Refuge Lands And Fish Hatcheries

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

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

Wetlands

Impacts to [NWI wetlands](#) and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local [U.S. Army Corps of Engineers District](#).

THERE ARE NO WETLANDS WITHIN YOUR PROJECT AREA.

IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

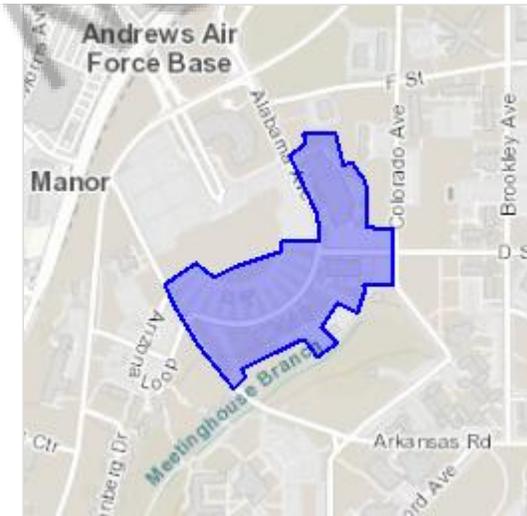
Project information

NAME

JBA CCC EA

LOCATION

Prince George's County, Maryland



DESCRIPTION

New construction of a communications facility on JBA.

Local office

Chesapeake Bay Ecological Services Field Office

☎ (410) 573-4599

📅 (410) 266-9127

177 Admiral Cochrane Drive
Annapolis, MD 21401-7307

<http://www.fws.gov/chesapeakebay/>

<http://www.fws.gov/chesapeakebay/endspweb/ProjectReview/Index.html>

Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population, even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Log in to IPaC.
2. Go to your My Projects list.
3. Click PROJECT HOME for this project.
4. Click REQUEST SPECIES LIST.

Listed species¹ are managed by the [Ecological Services Program](#) of the U.S. Fish and Wildlife Service.

1. Species listed under the [Endangered Species Act](#) are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the [listing status page](#) for more information.

THERE ARE NO ENDANGERED SPECIES EXPECTED TO OCCUR AT THIS LOCATION.

Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act¹ and the Bald and Golden Eagle Protection Act².

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described [below](#).

1. The [Migratory Birds Treaty Act](#) of 1918.
2. The [Bald and Golden Eagle Protection Act](#) of 1940.

Additional information can be found using the following links:

- Birds of Conservation Concern <http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php>
- Measures for avoiding and minimizing impacts to birds <http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php>
- Nationwide conservation measures for birds <http://www.fws.gov/migratorybirds/pdf/management/nationwidestandardconservationmeasures.pdf>

The birds listed below are birds of particular concern either because they occur on the [USFWS Birds of Conservation Concern](#) (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ [below](#). This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see maps of where birders and the general public have sighted birds in and around your project area, visit E-bird tools such as the [E-bird data mapping tool](#) (search for the name of a bird on your list to see specific locations where that bird has been reported to occur within your project area over a certain timeframe) and the [E-bird Explore Data Tool](#) (perform a query to see a list of all birds sighted in your county or region and within a certain timeframe). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list can be found [below](#).

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON (IF A BREEDING SEASON IS INDICATED FOR A BIRD ON YOUR LIST, THE BIRD MAY BREED IN YOUR PROJECT AREA SOMETIME WITHIN THE TIMEFRAME SPECIFIED, WHICH IS A VERY LIBERAL ESTIMATE OF THE DATES INSIDE WHICH THE BIRD BREEDS ACROSS ITS ENTIRE RANGE. "BREEDS ELSEWHERE" INDICATES THAT THE BIRD DOES NOT LIKELY BREED IN YOUR PROJECT AREA.)
<p>Bald Eagle <i>Haliaeetus leucocephalus</i> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626</p>	Breeds Oct 15 to Aug 31
<p>Black-billed Cuckoo <i>Coccyzus erythrophthalmus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9399</p>	Breeds May 15 to Oct 10
<p>Bobolink <i>Dolichonyx oryzivorus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.</p>	Breeds May 20 to Jul 31
<p>Buff-breasted Sandpiper <i>Calidris subruficollis</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9488</p>	Breeds elsewhere

Cerulean Warbler *Dendroica cerulea*

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/2974>

Breeds Apr 29 to Jul 20

Eastern Whip-poor-will *Antrostomus vociferus*

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Breeds May 1 to Aug 20

Evening Grosbeak *Coccothraustes vespertinus*

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Breeds elsewhere

Golden Eagle *Aquila chrysaetos*

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.

<https://ecos.fws.gov/ecp/species/1680>

Breeds elsewhere

Golden-winged Warbler *Vermivora chrysoptera*

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/8745>

Breeds May 1 to Jul 20

Hudsonian Godwit *Limosa haemastica*

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Breeds elsewhere

Kentucky Warbler *Oporornis formosus*

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Breeds Apr 20 to Aug 20

King Rail *Rallus elegans*

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/8936>

Breeds May 1 to Sep 5

Least Tern *Sterna antillarum*

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA

Breeds Apr 20 to Sep 10

Lesser Yellowlegs *Tringa flavipes*

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/9679>

Breeds elsewhere

Long-eared Owl *asio otus*

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/3631>

Breeds elsewhere

Nelson's Sparrow *Ammodramus nelsoni*

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Breeds May 15 to Sep 5

Prairie Warbler *Dendroica discolor*

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Breeds May 1 to Jul 31

Prothonotary Warbler *Protonotaria citrea*

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Breeds Apr 1 to Jul 31

Red-headed Woodpecker *Melanerpes erythrocephalus*

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Breeds May 10 to Sep 10

Red-throated Loon *Gavia stellata*

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Breeds elsewhere

Rusty Blackbird *Euphagus carolinus*

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Breeds elsewhere

Semipalmated Sandpiper *Calidris pusilla*

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Breeds elsewhere

Short-billed Dowitcher *Limnodromus griseus*

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/9480>

Breeds elsewhere

Willet *Tringa semipalmata*

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Breeds Apr 20 to Aug 5

Wood Thrush *Hylocichla mustelina*

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Breeds May 10 to Aug 31

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in your project's counties during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is $0.25/0.25 = 1$; at week 20 it is $0.05/0.25 = 0.2$.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

Breeding Season (■)

Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (|)

Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the counties of your project area. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

To see a bar's survey effort range, simply hover your mouse cursor over the bar.

No Data (-)

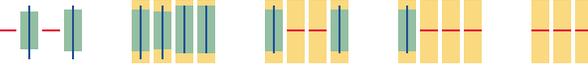
A week is marked as having no data if there were no survey events for that week.

Survey Timeframe

Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information.



Eastern Whip-poor-will
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)



Evening Grosbeak
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)



Golden Eagle
Non-BCC Vulnerable (This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.)



Golden-winged Warbler
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)

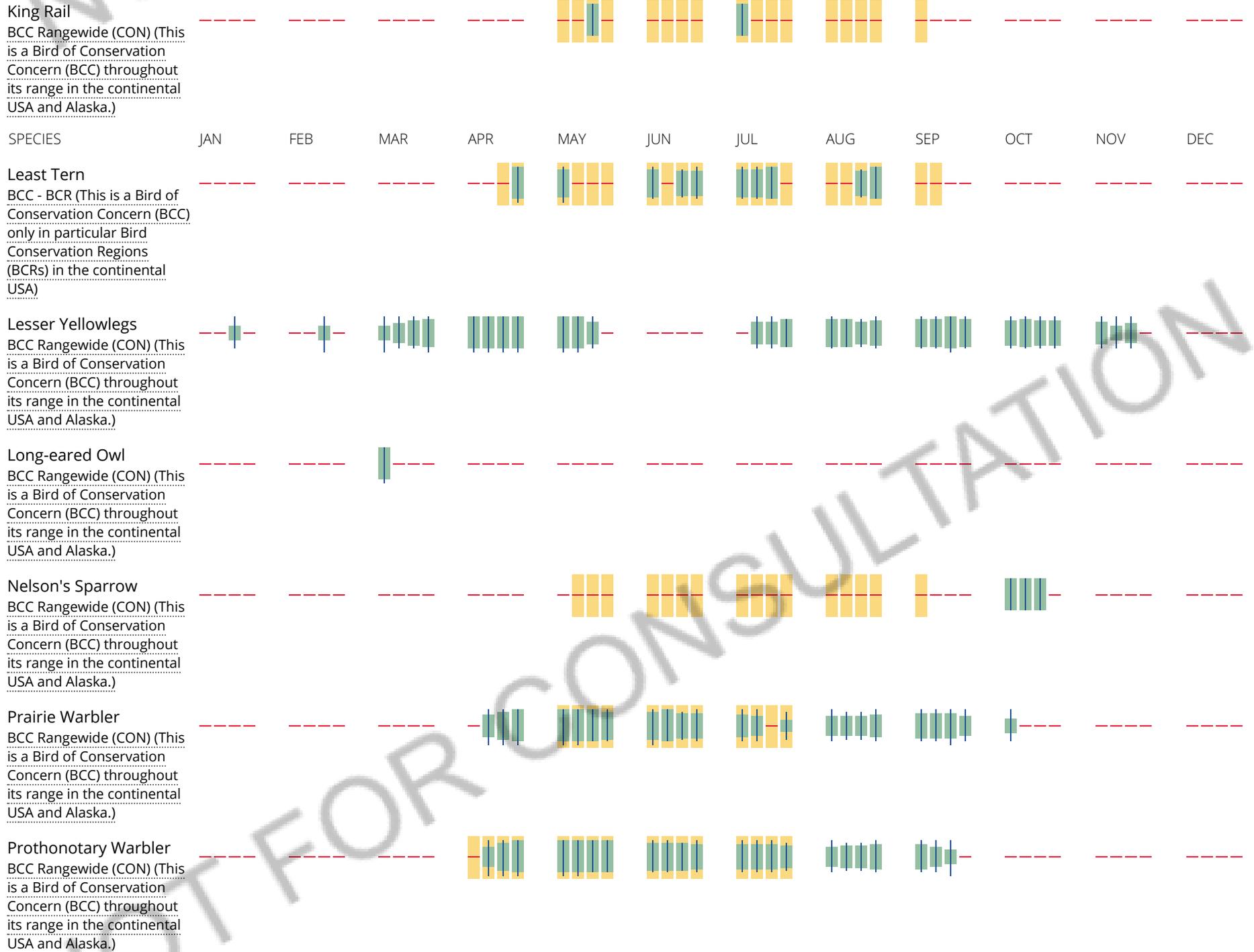


Hudsonian Godwit
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)



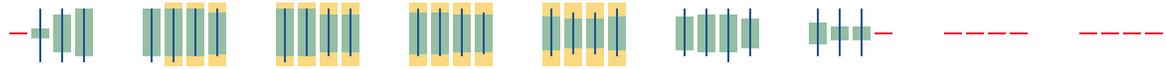
Kentucky Warbler
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)







Wood Thrush
 BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)



Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

[Nationwide Conservation Measures](#) describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. [Additional measures](#) and/or [permits](#) may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the migratory birds potentially occurring in my specified location?

The Migratory Bird Resource List is comprised of USFWS [Birds of Conservation Concern \(BCC\)](#) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the [Avian Knowledge Network \(AKN\)](#). The AKN data is based on a growing collection of [survey, banding, and citizen science datasets](#) and is queried and filtered to return a list of those birds reported as occurring in the counties which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle ([Eagle Act](#) requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the [E-bird Explore Data Tool](#).

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the [Avian Knowledge Network \(AKN\)](#). This data is derived from a growing collection of [survey, banding, and citizen science datasets](#).

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering, migrating or present year-round in my project area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may refer to the following resources: The [The Cornell Lab of Ornithology All About Birds Bird Guide](#), or (if you are unsuccessful in locating the bird of interest there), the [Cornell Lab of Ornithology Neotropical Birds guide](#). If a bird entry on your migratory bird species list indicates a breeding season, it is probable that the bird breeds in your project's counties at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are [Birds of Conservation Concern](#) (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the [Eagle Act](#) requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the [Northeast Ocean Data Portal](#). The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the [NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf](#) project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the [Diving Bird Study](#) and the [nanotag studies](#) or contact [Caleb Spiegel](#) or [Pam Loring](#).

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to [obtain a permit](#) to avoid violating the BGEPA should such impacts occur.

Facilities

National Wildlife Refuge lands

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 AT THIS LOCATION.

Fish hatcheries

THERE ARE NO FISH HATCHERIES AT THIS LOCATION.

Wetlands in the National Wetlands Inventory

Impacts to [NWI wetlands](#) and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local [U.S. Army Corps of Engineers District](#).

THERE ARE NO KNOWN WETLANDS AT THIS LOCATION.

Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tubercid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

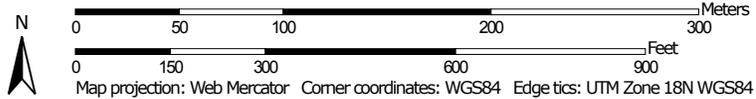
Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

Farmland Classification—Prince George's County, Maryland
(CCC Soils Farmland)



Map Scale: 1:3,620 if printed on A portrait (8.5" x 11") sheet.



Farmland Classification—Prince George's County, Maryland
(CCC Soils Farmland)

MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

Soil Rating Polygons

-  Not prime farmland
-  All areas are prime farmland
-  Prime farmland if drained
-  Prime farmland if protected from flooding or not frequently flooded during the growing season
-  Prime farmland if irrigated
-  Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season
-  Prime farmland if irrigated and drained
-  Prime farmland if irrigated and either protected from flooding or not frequently flooded during the growing season

-  Prime farmland if subsoiled, completely removing the root inhibiting soil layer
-  Prime farmland if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60
-  Prime farmland if irrigated and reclaimed of excess salts and sodium
-  Farmland of statewide importance
-  Farmland of local importance
-  Farmland of unique importance
-  Not rated or not available

Soil Rating Lines

-  Not prime farmland
-  All areas are prime farmland
-  Prime farmland if drained

-  Prime farmland if protected from flooding or not frequently flooded during the growing season
-  Prime farmland if irrigated
-  Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season
-  Prime farmland if irrigated and drained
-  Prime farmland if irrigated and either protected from flooding or not frequently flooded during the growing season
-  Prime farmland if subsoiled, completely removing the root inhibiting soil layer
-  Prime farmland if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60

-  Prime farmland if irrigated and reclaimed of excess salts and sodium
-  Farmland of statewide importance
-  Farmland of local importance
-  Farmland of unique importance
-  Not rated or not available

Soil Rating Points

-  Not prime farmland
-  All areas are prime farmland
-  Prime farmland if drained
-  Prime farmland if protected from flooding or not frequently flooded during the growing season
-  Prime farmland if irrigated
-  Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season

-  Prime farmland if irrigated and drained
-  Prime farmland if irrigated and either protected from flooding or not frequently flooded during the growing season
-  Prime farmland if subsoiled, completely removing the root inhibiting soil layer
-  Prime farmland if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60
-  Prime farmland if irrigated and reclaimed of excess salts and sodium
-  Farmland of statewide importance
-  Farmland of local importance
-  Farmland of unique importance
-  Not rated or not available

Water Features

MAP INFORMATION

 Streams and Canals

Transportation

 Rails

 Interstate Highways

 US Routes

 Major Roads

 Local Roads

Background

 Aerial Photography

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

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

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

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

Source of Map: Natural Resources Conservation Service

Web Soil Survey URL:

Coordinate System: Web Mercator (EPSG:3857)

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

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

Soil Survey Area: Prince George's County, Maryland

Survey Area Data: Version 15, Sep 19, 2017

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

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

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

Farmland Classification

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
FbB	Fallsington-Urban land complex, 0 to 5 percent slopes	Not prime farmland	1.3	5.2%
UdbB	Udorthents, loamy, 0 to 5 percent slopes	Not prime farmland	4.7	18.8%
Un	Urban land	Not prime farmland	19.0	76.0%
Totals for Area of Interest			25.0	100.0%

Description

Farmland classification identifies map units as prime farmland, farmland of statewide importance, farmland of local importance, or unique farmland. It identifies the location and extent of the soils that are best suited to food, feed, fiber, forage, and oilseed crops. NRCS policy and procedures on prime and unique farmlands are published in the "Federal Register," Vol. 43, No. 21, January 31, 1978.

Rating Options

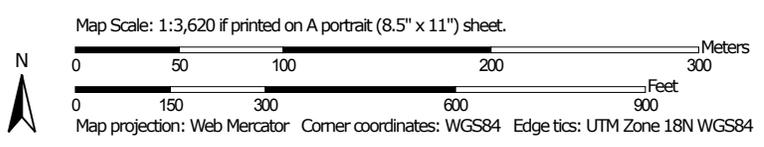
Aggregation Method: No Aggregation Necessary

Tie-break Rule: Lower

Soil Map—Prince George's County, Maryland
(CCC Soils)



Soil Map may not be valid at this scale.



MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points

Special Point Features



Blowout



Borrow Pit



Clay Spot



Closed Depression



Gravel Pit



Gravelly Spot



Landfill



Lava Flow



Marsh or swamp



Mine or Quarry



Miscellaneous Water



Perennial Water



Rock Outcrop



Saline Spot



Sandy Spot



Severely Eroded Spot



Sinkhole



Slide or Slip



Sodic Spot



Spoil Area



Stony Spot



Very Stony Spot



Wet Spot



Other



Special Line Features

Water Features



Streams and Canals

Transportation



Rails



Interstate Highways



US Routes



Major Roads



Local Roads

Background



Aerial Photography

MAP INFORMATION

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

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

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

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

Source of Map: Natural Resources Conservation Service

Web Soil Survey URL:

Coordinate System: Web Mercator (EPSG:3857)

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

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

Soil Survey Area: Prince George's County, Maryland

Survey Area Data: Version 15, Sep 19, 2017

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

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

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

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
FbB	Fallsington-Urban land complex, 0 to 5 percent slopes	1.3	5.2%
UdbB	Udorthents, loamy, 0 to 5 percent slopes	4.7	18.8%
Un	Urban land	19.0	76.0%
Totals for Area of Interest		25.0	100.0%

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APPENDIX D: NOTICE OF AVAILABILITY

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PUBLIC NOTICE

Notice of Availability

Draft Environmental Assessment and Finding of No Significant Impact/Finding of No Practical Alternative for Joint Base Andrews-Naval Air Facility Washington, Maryland

The Air Force District Washington and the 11 Wing announce the availability of and invite public comments on the Draft Environmental Assessment (EA) and Finding of No Significant Impact/Finding of No Practical Alternative (FONSI/FONPA) for implementation of the proposed Consolidated Communications Facility at Joint Base Andrews-Naval Air Facility Washington, MD (JBA). The Draft EA and FONSI/FONPA have been prepared pursuant to NEPA, 42 U.S.C. 4321 et seq, and CEQ regulations at 40 CFR Parts 1500-1508.

The purpose of the Proposed Action is to provide an adequately sized and properly configured communications facility at JBA to support critical communications functions. A new CCC facility would provide centrally located, secure, and consolidated communications operations and maintenance and network integration support to the NCR, and other priority command and control missions. This EA has been prepared to evaluate the Proposed Action and No Action alternatives. Resources addressed in the EA include noise, air quality, water resources, biological resources, earth resources, hazardous materials and hazardous waste management, cultural resources, land use, infrastructure/utilities, transportation, safety and occupational health, socioeconomic resources, environmental justice, and cumulative effects. The EA shows that the Proposed Action would not significantly impact the environment and supports a FONSI. An Environmental Impact Statement is not needed to implement the Proposed Action.

Copies of the Draft EA and FONSI/FONPA are available for review until December 7, 2018 at the Upper Marlboro Branch Library, 14730 Main St., Upper Marlboro, MD 20772, at the Joint Base Andrews Library at 1642 Brookley Ave and D Street, Andrews AFB, MD 20762, and online at (<http://www.andrews.af.mil/library/environmental/index.asp>). Please send written comments to Mr. Ryan Soens, 11 CES/CEIE 3466 North Carolina Avenue, Joint Base Andrews, Maryland 20762-4803.

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APPENDIX E: COASTAL ZONE CONSISTENCY DETERMINATION

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Coastal Zone Management Act (CZMA) Consistency Determination

This document provides Maryland with the Joint Base Andrews-Naval Air Facility (JBA) Consistency Determination under CZMA Section 307(c)(1) and (2) and 15 CFR Part 930, Subpart C, for the proposed operation and construction of a Consolidated Communications Center (CCC). The information in this Consistency Determination is provided pursuant to 15 CFR §930.39.

This Consistency Determination represents an analysis of the Proposed Action in light of established Maryland Coastal Resources Management (CRM) Program Enforceable Policies and Programs. Submission of this Consistency Determination reflects the commitment of JBA to comply with the maximum extent practicable with those Enforceable Policies and Programs. The Proposed Action would be operated and implemented in a manner consistent with the CRM. JBA has determined that the effects of the Proposed Action would be less than significant on land and water uses and natural resources of Maryland's Coastal Zone and is consistent to the maximum extent practicable with the enforceable policies of the CRM.

PROPOSED PROJECT DESCRIPTION

Project Location

JBA is located five miles southeast of Washington, D.C., in southern Prince George's County, 302 Maryland, and occupies 4,390 acres of land. The proposed site for the CCC is located in the northwest quadrant of JBA, south of the intersection of Alabama Avenue and D Street.

Project Description

The Proposed Action is to construct and operate an approximate 79,374 square foot CCC using economical design and construction methods. The facility would be constructed with reinforced concrete foundations, steel frame and roof systems, and concrete masonry unit walls. The construction would include site work, communications support, fire detection and suppression systems, environmental controls, pavement, a parking area, exterior lighting, security systems, landscaping, emergency generators, and all other support.

Data center equipment from other mission partners at JBA would be consolidated to take advantage of the fiber optic infrastructure recently completed at the installation, including the U.S. Air Force (USAF) Reserve, D.C. Air National Guard, and U.S. Army.

All major utility services are available in the proposed area, including water, sanitary sewer, natural gas, and electricity. The facility would have at least two electrical feeds from the JBA substation and communications cabling connections to maintain redundancy for the facility's operations. Approximately 1,500 linear feet (LF) of trenching for power and 2,000 LF of trenching for telecommunications would be required. Emergency generators and all necessary support for an uninterrupted power system would be required. In order to provide improved redundancy and availability, standby power would be supplied by two – 1 megawatt (MW) generators, plus one additional 1MW generator. The switchgear will also be configured to include a provision for a 1MW roll-up generator.

Buildings 1539 and 1558 (the existing facilities currently occupied by the mission partners) would remain operational throughout the construction of the new CCC. Once the new CCC was completed and certified for use, the functions in those facilities would be relocated to the new CCC, and buildings 1539 and 1558 would be demolished, including removal of electrical and communications ducts, HVAC equipment, four 25,000-gallon fuel tanks, and associated piping.

Approximately 412,078 square feet (sf) (266,587 sf impervious (asphalt and concrete) and 145,490 sf building area) would be demolished for this project. Approximately 6,392 LF for utilities (1,836 LF stormwater, 2,301 LF underground electric, 518 LF overhead electric, 1,277 LF underground telephone, and 460 LF gas) would be demolished for this project. The existing land use is categorized as Administration and Industrial and includes the current communication facilities (buildings 1558 and 1539). The total acreage of limit of disturbance would be approximately 18.49 acres. Impervious surface would be reduced by approximately 7.09 acres, which is a 38 percent decrease from existing impervious surface. Landscaping would be included with the project. No additional personnel or traffic will be introduced to the project area as the new CCC is near the existing facilities and no new personnel are associated with the Proposed Action.

The existing communications vault below building 1539 would be retained and reused as a main connection point to the installation's cabling infrastructure. Building 1531 and the adjacent parking area would be retained and reused as a cable yard and protected parking for the CCC. The existing antenna tower located between buildings 1558 and 1560 would be retained. A radio frequency (RF) enclosure and new power connection would be provided at the base of the tower to permit the continued use of that facility. An area of the proposed site would be identified for a future antenna tower to allow the existing tower to be removed by JBA in the future.

A new parking lot would be constructed north of the CCC with a capacity of approximately 350 vehicles to provide parking for 60 percent of assigned personnel.

Public Participation

A Notice of Availability (NOA) of the Draft Environmental Assessment (EA) and Finding of No Significant Impact (FONSI) will be published in the Maryland Independent. The NOA will announce the availability of the Draft EA for public and agency review.

Hard copies of the Draft EA and FONSI will be made available for review at the following locations: Upper Marlboro Branch of the Prince George's County Memorial Library System, 14730 Main Street, Upper Marlboro, Maryland and the JBA Library, 1442 Concord Avenue, Joint Base Andrews, Maryland.

Other Consultations

Per the requirements of Section 106 of the National Historic Preservation Act and implementing regulations (36 CFR Part 800), Section 7 of the Endangered Species Act (ESA) and implementing regulations, including the Migratory Bird Treaty Act, findings of effect and request for concurrence were transmitted to the Maryland Historic Trust (MHT) and the U.S. Fish and Wildlife Service (USFWS).

JBA also initiated consultation with the following agencies for the proposed project: Maryland Department of Natural Resources, Maryland State Clearinghouse Office of Planning, Maryland Department of the Environment, Prince George's County Department of Planning, National Capital Parks-East, and National Capital Planning Commission. JBA did not coordinate with the National Marine Fisheries Service because no marine resources will be impacted from this project.

Concurrence indicating a finding of no adverse effect for the demolition of buildings 1539 and 1558 was received from the MHT on 7 November 2017. On 20 April 2018, concurrence indicating a primary finding of no adverse effect on historic properties was received from the MHT for the construction of the CCC. On 1 March 2018, a report was generated through the Information for Planning and Conservation system, the USFWS online system for searching for species protected under the ESA, which notes that no protected species occur on the proposed CCC construction site.

SITE LOCATION

Site Location Map

The proposed location for the construction of the CCC is shown in Figures 1.2-1 and 2.1-1 and of the EA.

Photographs

Current site conditions are shown in Appendix A of the Consistency Determination.

BASIS OF DETERMINATION

The Proposed Action in the EA would be fully consistent with Maryland's Enforceable Coastal Policies (effective April 11, 2011), implemented by the Maryland Department of the Environment (MDE). No adverse or beneficial effects on Maryland's coastal resources would be expected from implementing the Proposed Action in the EA. The Proposed Action would be conducted in accordance with applicable laws, regulations, and policies governing erosion and sediment control and stormwater management, which would ensure that the actions would be undertaken in a manner consistent with the applicable Maryland Coastal Program enforceable policies. A synopsis of how the Proposed Action would be consistent with the enforceable coastal policies is provided below.

Maryland's Enforceable Coastal Policies are divided into three general sections: general policies, coastal resources, and coastal uses. The general policies are further divided into core, water quality, and flood hazards policies. Compliance of the Proposed Action in the EA with each of the applicable enforceable policies is discussed below. Policies not applicable to the Proposed Action are noted.

GENERAL POLICIES

Core Policies

Policy: It is State policy to maintain that degree of purity of air resources which will protect the health, general welfare, and property of the people of the State. MDE (C9) Md. Code Ann., Envir. §§ 2-102 to -103.

As noted in Section 4.3 of the EA, the Air Force would comply with all applicable air pollution control regulations when implementing the Proposed Action, and JBA's Environmental Protection Standards require that contractors do the same. Section 4.3 of the EA contains a detailed discussion of the projected air emissions associated with the Proposed Action. The CCC would have new permanent sources of air emissions—the heating and cooling system and emergency generator—but would likely result in a net decrease in air pollutant emissions because they would replace multiple old systems from the buildings the new Center would replace.

Further, all construction activities would be required to comply with federal, state, and current JBA versions of regulations designed to support compliance with the Clean Air Act (CAA), OSHA, and Toxic Substance and Control Act. Construction and demolition activities will use best management practices in order to reduce emissions and if necessary will utilize emission control technologies and other required mitigation technologies.

The Proposed Action is expected to comply with all air emission requirements and will follow the National Emissions Standards for Hazardous Air Pollutants (NESHAP). If regulated material is found within the work area such as lead and asbestos, best management practices outlined JBA's Environmental Protection Standards for contractors, which includes managing, storing, transporting, and disposing of hazardous materials and wastes will be followed. The Proposed Action is expected to comply with all state and federal asbestos regulations.

Policy: The environment shall be free from noise which may jeopardize health, general welfare, or property, or which degrades the quality of life. MDE (C9) COMAR 26.02.03.02.

Section 4.2 of the EA provides a discussion of the noise environment and a discussion of the expected noise-related impacts associated with the implementation of the Proposed Action in the EA. Noise associated with the actions would be associated with the construction and repair work only and would occur in developed areas on the base that are not near residential areas. All noise would cease upon completion of the Proposed Action and no new sources of environmental noise would be introduced.

Policy: Soil erosion shall be prevented to preserve natural resources and wildlife; control floods; prevent impairment of dams and reservoirs; maintain the navigability of rivers and harbors; protect the tax base, the public lands, and the health, safety and general welfare of the people of the State, and to enhance their living environment. MDA (C4) Md. Code Ann., Agric. § 8-102(d).

Soil disturbance would occur during the construction and demolition phases of the Proposed Action.

All disturbed areas would be graded to match surrounding areas and revegetated upon completion of the work. JBA would comply with the requirements described in the MDE (2010) document *Maryland Stormwater Management Guidelines for State and Federal Projects* and Maryland's Stormwater Management Act of 2007. Contractors would be required to comply with JBA's environmental standards, which would include submitting an erosion and sediment control plan to MDE for each project that would disturb more than 5,000 square feet and obtaining coverage under the NPDES General Construction Permit, as applicable to each project. Implementing erosion and sediment control BMPs during construction, as specified in those plans, would minimize the effects on soils.

Policy: Controlled hazardous substances may not be stored, treated, dumped, discharged, abandoned, or otherwise disposed anywhere other than a permitted controlled hazardous substance facility or a facility that provides an equivalent level of environmental protection. MDE (D4) Md. Code Ann., Envir. § 7-265(a).

All contractors involved with implementing the Proposed Action would be required to comply with JBA's Environmental Protection Standards for contractors, which includes managing, storing, transporting, and disposing of hazardous materials and wastes, and taking all necessary precautions to prevent spills of hazardous materials (including oils and hazardous wastes) in accordance with all applicable federal, state, and local laws and regulations.

Water Quality

Policy: No one may add, introduce, leak, spill, or emit any liquid, gaseous, solid, or other substance that will pollute any waters of the State without State authorization. MDE (A5) Md. Code Ann., Envir. §§ 4-402, 9-101, 9-322.

The EA discusses compliance with laws, regulations, and policies related to the use, storage, and disposal of hazardous wastes and materials in Section 4.8. All contractors involved with implementing the Proposed Action would be required to use hazardous materials; manage, store, transport, and dispose of hazardous wastes; and take all necessary precautions to prevent spills of hazardous materials (including oils and hazardous wastes) in accordance with JBA's Environmental Protection Standards for contracts and federal, state, and local laws and regulations.

Policy: All waters of the State shall be protected for water contact recreation, fish, and other aquatic life and wildlife. Shellfish harvesting and recreational trout waters and waters worthy of protection because of their unspoiled character shall receive additional protection. MDE (A1) COMAR 26.08.02.02.

JBA would protect the water quality of State waters by implementing erosion and sediment control measures at all Proposed Action locations and would control stormwater runoff, including erosion, sedimentation, and nonpoint source pollution in accordance with Maryland Stormwater Management Guidelines for State and Federal Projects (MDE, 2010) and Maryland's Stormwater Management Act of 2007. Additionally, Meetinghouse Branch is classified as a Use I stream (i.e., Water Contact Recreation and Protection of Aquatic Life). Generally, no in-stream work is permitted in Use I streams from March 1 through June 15. Therefore, if in-stream work is

necessary, JBA would avoid work in Meetinghouse Branch between those dates to the extent practicable, and would consult with the Maryland Department of Natural Resources (MDNR) before commencing any in-stream work if it was scheduled between March 1 and June 15.

Policy: Before constructing, installing, modifying, extending, or altering an outlet or establishment that could cause or increase the discharge of pollutants into the waters of the State, the proponent must hold a discharge permit issued by the Department of the Environment or provide an equivalent level of water quality protection. MDE (D6) Md. Code Ann., Envir. § 9-323(a).

JBA is required to manage its stormwater discharges in accordance with the regulations and requirements contained in the COMAR Chapter 26 subsections. Generally, JBA is required to control pre-construction and post-construction stormwater runoff, including erosion, sedimentation, and nonpoint source pollution. Specific requirements for JBA are described in *Maryland Stormwater Management Guidelines for State and Federal Projects* (MDE, 2010) and in the MDE Stormwater Management Act of 2007. The regulations require that environmental site design (ESD) be implemented to the maximum extent practicable through the use of nonstructural BMPs and other site design techniques. An Individual Permit for Stormwater Associated with Construction Activity may be required from MDE for this project.

Policy: The use of best available technology is required for all permitted discharges into State waters, but if this is insufficient to comply with the established water quality standards, additional treatment shall be required and based on waste load allocation. MDE (D4) COMAR 26.08.03.01C.

JBA holds a National Pollutant Discharge Elimination System (NPDES) permit. The proposed construction of the CCC would reduce the amount of impervious surface on the existing site. This action would help JBA meet the conditions of the NPDES permit by controlling and improving the water quality of discharges of stormwater and local streams.

Flood Hazards

The Flood Hazards Policies are not relevant to the Proposed Action. The Proposed Action would not create additional flooding upstream or downstream or have an adverse impact upon water quality or other environmental factors.

COASTAL RESOURCES

Chesapeake and Atlantic Coastal Bays Critical Area

The Chesapeake and Atlantic Coastal Bays Critical Area Policies are not relevant to the Proposed Action. The Proposed Action would not occur in a Chesapeake and Atlantic Coastal Bays Critical Area.

Tidal Wetlands

The Tidal Wetlands Policies are not relevant to the Proposed Action. The Proposed Action would not occur in a tidal wetland.

Nontidal Wetlands

The Nontidal Wetlands Policies are not relevant to the Proposed Action. The Proposed Action would not occur in a nontidal wetland.

Forests

The Forest Conservation Act and its implementing regulations, as approved by NOAA, are enforceable policies. Generally, before developing an area greater than 40,000 square feet, forested and environmentally sensitive areas must be identified and preserved whenever possible. If these areas cannot be preserved, reforestation or other mitigation is required to replace the values associated with them. This policy does not apply in the Critical Area. DNR (C5) Md. Code Ann., Nat. Res. §§ 5-1601 to -1613; COMAR 08.19.01-.06.

There is a mixed hardwood forest that occurs south of the site proposed for the CCC, but the site itself and locations where buildings would be removed are maintained lawns or developed areas. There are no sensitive plant communities near the project site. The project area has been maintained by mowing for at least 20 years. During construction and demolition activities, JBA would disturb as little natural habitat as feasible and would comply with the provisions of its arbor plan. The arbor plan requires 1:1 tree replacement for projects disturbing less than one acre, and 60 percent canopy replacement for projects disturbing more than one acre.

Historic and Archaeological Sites

The Historic and Archaeological Sites Policies are not relevant to the Proposed Action. The Proposed Action would not involve a submerged archaeological historic property, a cave feature or archeological site under State control, or a burial site or cemetery

Living Aquatic Resources

The Living Aquatic Resources Policies are not relevant to the Proposed Action. On 1 March 2018, a report was generated through the Information for Planning and Conservation system, the USFWS online system for searching for species protected under the ESA, which notes that no protected species occur on the proposed CCC construction site. If a Federal or state protected species was found in a proposed construction area, the installation would consult with the USFWS, the National Marine Fisheries Service, or the responsible state agency (as appropriate) and appropriate steps would be taken to ensure the species was not harmed.

Further, the Proposed Action is not anticipated to cause or contribute to an individual or cumulative effect that degrades aquatic diversity, productivity, and stability; Plankton, fish, shellfish, and

wildlife; Recreation, economic values, and public welfare; Surface water quality or groundwater quality.

COASTAL USES

Mineral Extraction

The Mineral Extraction Policies are not relevant to the Proposed Action. The Proposed Action does not require mineral extraction.

Electrical Generation and Transmission

The Electrical Generation and Transmission Policies are not relevant to the Proposed Action. The Proposed Action does not include the development of power plants, transmission lines, or cooling water intake structures.

Tidal Shore Erosion Control

The Tidal Shore Erosion Control Policies are not relevant to the Proposed Action. The Proposed Action would not occur in tidal shores.

Oil and Natural Gas Facilities

The Oil and Natural Gas Facilities Policies are not relevant to the Proposed Action. The Proposed Action does not include any oil or natural gas facilities.

Dredging and Disposal of Dredged Material

The Dredging and Disposal of Dredged Material Policies are not relevant to the Proposed Action. The Proposed Action does not require any dredging.

Navigation

The Navigation Policies are not relevant to the Proposed Action. The Proposed Action would not occur in proximity to navigable waters.

Transportation

The Transportation are not relevant. The Proposed Action is a non-transportation project.

Agriculture

The Agriculture Policies are not relevant to the Proposed Action. The Proposed Action would not occur on agricultural lands.

Development

Any development shall be designed to minimize erosion and keep sediment onsite. MDE (C4) COMAR 26.17.01.08.

The Proposed Action would include controls to minimize erosion and keep sediment on site, described above in Core Policies-Soil Erosion.

Development must avoid and then minimize the alteration or impairment of tidal and nontidal wetlands; minimize damage to water quality and natural habitats; minimize the cutting or clearing of trees and other woody plants; and preserve sites and structures of historical, archeological, and architectural significance and their appurtenances and environmental settings. MDE/DNR/CAC (D6) Md. Code Ann., Envir. §§ 4-402, 5-907(a), 16-102(b); Md. Code Ann., Nat. Res. §§ 5-1606(c), 8-1801(a); Md. Code Ann., Art. 66B § 8.01(b); COMAR 26.24.01.01(A).

Most disturbances associated with the Proposed Action would occur on previously disturbed areas. Most areas have a road and clearance areas already constructed and would need to be maintained.

Any proposed development may only be located where the water supply system, sewerage system, or solid waste acceptance facility is adequate to serve the proposed construction, taking into account all existing and approved developments in the service area and any water supply system, sewerage system, or solid waste acceptance facility described in the application and will not overload any present facility for conveying, pumping, storing, or treating water, sewage, or solid waste. MDE (C9) Md. Code Ann., Envir. § 9-512.

All required utility systems are available and are adequate to service the proposed CCC. All new facilities would be water and energy efficient and would not overload any present facility for conveying, pumping, storing, or treating water, sewage, or solid waste.

Local citizens shall be active partners in planning and implementation of development. MDP (D6) Md. Code Ann., St. Fin. & Proc. §§ 5-7A-01 to -02.

Public participation opportunities with respect to the EA and decision making on the Proposed Action are guided by 32 CFR Part 651. The EA and FONSI will be made available to the public for review and comment for 30 days.

Sewage Treatment

The Sewage Treatment Policies are not relevant to the Proposed Action. The Proposed Action does not require special water treatment.

SUMMARY OF FINDINGS

Based upon the following information, data, and analysis, JBA finds that the proposed operation and construction of the CCC is consistent to the maximum extent practicable with the enforceable policies of the Maryland Coastal Zone Management Program. The table below summarizes how

the Proposed Action would affect each of the enforceable policies outlined within the CZMA Consistency Determination.

Enforceable Policy	Consistent to the Maximum Extent Practicable?
Core Policies	Yes
Water Quality	Yes
Flood Hazards	N/A
Critical Areas	N/A
Tidal Wetlands	N/A
Nontidal Wetlands	N/A
Forests	Yes
Historic and Archaeological Sites Policies	N/A
Living Aquatic Resources	Yes
Mineral Extraction	N/A
Electrical Generation and Transmission	N/A
Tidal Shore Erosion Control	N/A
Oil and Natural Gas Facilities	N/A
Dredging and Disposal of Dredged Material	N/A
Navigation	N/A
Transportation	N/A
Agriculture	N/A
Development	Yes
Sewage Treatment	N/A

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

Steven Richards
 Chief of Environmental Management
 11 CES/CEIE
 3466 North Carolina Avenue
 Joint Base Andrews, Maryland 20762-4803

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