

# DRAFT ENVIRONMENTAL ASSESSMENT

# FIELD RESEARCH FACILITY (FRF) ANNEX U.S. Army Engineering Research and Development Center (ERDC)

Duck, North Carolina

June 2020

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# DRAFT ENVIRONMENTAL ASSESSMENT

# FIELD RESEARCH FACILITY (FRF) ANNEX U.S. Army Engineering Research and Development Center (ERDC)

# 1.0 INTRODUCTION

The U.S. Army Corps of Engineers (Corps), Savanah District, has prepared this draft Environmental Assessment (EA) to evaluate the potential impacts of an annex and parking lot constructed at the Field Research Center (FRF) at the existing U. S. Army Engineering Research and Development Center (ERDC) in Duck, Dare County, North Carolina (NC).

This EA has been prepared in accordance with the National Environmental Policy Act of 1969 and the Council on Environmental Quality's Regulations (40 CFR 1500-1508), as reflected in the USACE Engineering Regulation ER 200-2-2. This EA provides sufficient information on the potential adverse and beneficial environmental effects to allow the ERDC FRF Director to make an informed decision on the appropriateness of preparing an Environmental Impact Statement (EIS) or the signing a Finding of No Significant Impact (FONSI).

#### 1.1 Project Location

Duck, NC is located on the Outer Banks extending from Virginia to Oregon Inlet, NC. The Outer Banks are coastal barrier islands along the northern coast of NC. The NC State Line forms the boundary to the north, the Atlantic Ocean to the east, Oregon Inlet to the south, and Currituck Sound to the west. The Outer Banks to Cape Hatteras are characterized physically by sandy beaches terminating in a dune line with scattered dunes and sand reaching to the westerly sounds. The area is located approximately 72 miles south of Norfolk, Virginia, on the Outer Banks approximately one-half mile north of the town of Duck in Dare County, NC.

It is composed of 397 land acres along with 2,718 tidal water acres. The Duck Target Facility Formerly Used Defense Site (FUDS) is located within the MRS and encompasses 176 of the 397 MRS land acres (Figure 1). The Department of the Navy used the MRS as a bombing and rocket target range between 1941 and 1965. Numerous types of rockets and practice bombs were used.

The General Service Administration transferred 176 land acres within the Duck Bombing and Rocket Range Munitions Response Site (MRS) to the Department of the FRF Annex for ERDC Duck, North Carolina

Army (Civil Works) on 23 April 1973. The Army has used this acreage as a research facility, known as the ERDC Field Research Facility (FRF), since the 1973 transfer.



Figure 1: Location Map

# 1.2 Background

The Coastal and Hydraulics Laboratory (CHL) has an internationally recognized coastal observatory, the Field Research Facility in Duck, NC, consisting of 176 acres with a 1,840 ft. pier out into the Atlantic Ocean. Here, specialized vehicles and instruments are used to constantly record changing waves, winds, tides, and currents. The ERDC is one of the premier engineering and scientific research organizations in the world. As the research organization of the ERDC conducts research and development in support of the Soldier, military installations, and civil works projects (water resources, environmental missions, etc.) as well as for other federal agencies, state and municipal authorities, and with U.S. industry through innovative work agreements. ERDC research is developing innovative solutions for a safer, better world.

The ERDC helps solve our Nation's most challenging problems in civil and military engineering, geospatial sciences, water resources, and environmental sciences for the Army, Department of Defense, civilian agencies, and our Nation's public good. CHL solves interdisciplinary, strategically important problems of the USACE, Army, Department of Defense, and the Nation by providing the best solutions to water resource challenges through the design and application of cutting-edge science, engineering and technology.

# **1.3 Proposed Action**

The proposed action consists of construction of a 4,008 square foot FRF Annex within the existing nine-acre site enclosed by an eight-foot fence and is just to the north of the existing buildings. The site is a previously developed site with minimal vegetation. Supporting facilities would include site development, pavement removal, utilities and connections, lighting, lightning protection system, walks, curbs, fire access lanes, information systems, and signage. Facility space requirements were developed from space planning criteria contained in Army Regulation 405-70.

Site work for the project would include the following items: a reconfigured parking lot to accommodate additional parking for new staff, a fire truck access road to provide fast access to the new building in the event of a fire, two new handicapped access parking spaces close to the new Americans with Disabilities Act (ADA) compliant access ramp structure, and new larger septic tank to accommodate both buildings and a larger drain field to provide easy access for maintenance. Relocation of existing underground utility lines would be required. Demolition of an existing septic tank and drain field would occur. Measures in accordance with the Department of Defense (DOD) Minimum Antiterrorism for buildings standards would be provided. Cyber Security Measures would be incorporated into this project.

This proposed action would be completed within the existing complex boundaries; however, it would be new construction breaking new ground, and therefore requires an EA. There are no issues pending regarding this new construction.

# FRF Annex for ERDC Duck, North Carolina



Figure 2: Aerial Map of the Proposed Action



Figure 3: Engineering drawing of Proposed Action

# **1.4 Purpose and Need for the Proposed Action**

The purpose of the proposed project is to construct an annex facility at the FRF to support the expanded military mission in support of the Army Maneuver Center of excellence. Specifically, to provide adequate laboratory and administrative spaces to support the CHL FRF expanded military research mission of developing methods to project forces, conduct forcible and early entry, and transition rapidly to offensive operations to ensure access and seize the initiative for the Army Maneuver Center of Excellence. In the spring of 2017, the FRF military mission expanded by 20% requiring additional administrative and lab space to meet military research mission requirements.

# 1.5 Authority

The proposed action, the Urgent Minor Military Construction, Army (UMMCA) Validation Report (hereinafter called Urgent Minor Validation Report (UMVR) is based on the 60% design data as authorized for the UMMCA, FRF Annex, Duck, NC. This UMVR is authorized by the Code 2 directive issued by National Program Manager on 3 May 2019.

# **1.6 Prior Reports**

There was a Draft EIS completed in February 1973, which is incorporated herein by reference. This document is available in Appendix A. The existing complex that was evaluated in the 1973 EIS which covers approximately 9 acres. These were modifications to the beach and dunes, vehicular access to the beach, aesthetics, development of real estate, roadway to Virginia, water supply, and disposal of liquid wastes. Any concerns or issues that existed then were addressed. The comments and replies are in the EIS in Appendix D.

# 1.7 NEPA Scoping

There was no scoping done for this proposed project because the land is previously disturbed and in the current fenced location of the FRF.

# 2.0 ALTERNATIVES TO THE PROPOSED ACTION

One alternative in addition to the proposed project was carried forward for evaluation, the No Action Alternative.

Non-viable alternatives included the following:

- Renovation: Renovation alone will not provide the additional space required to meet the project objective.
- Renovation/New Construction Mix: The site of the current FRF cannot be expanded due to the elevated hardstand around the facility.
- Basic Allowance for Housing (BAH): Not Applicable

- Leasing: There are no facilities or services for this type of function that exist at the FRF.
- Other Facilities on Base; as Is, Renovation, or Renovation/New Construction Mix: There is only one other facility on the installation, and it is fully occupied. There are no other permanent facilities at the FRF.
- Other DOD or Federal Agency Facilities: To meet mission and operational requirements, this facility must be sited within the FRF.
- Contracting Services Out: The Government does not contract out this service.
- Innovative Alternatives or Combinations of the Above Alternatives: There are no other alternatives to be considered.
- Government Owned Contractor Operated Facility: Not applicable
- Contractor Owned Contractor Operated Facility: Not applicable

# 2.1 Alternative 1 – No Action Alternative

The No Action Alternative (NAA) would not construct the FRF Annex. If the proposed project is not constructed, the FRF will continue operate in an undersized facility that was not designed or constructed to meet the current and expanded military research mission. Ongoing warfighter support and force projection research would be adversely impacted. Without the proposed project, the FRF would be unable to develop methods to project forces, conduct forcible and early entry, and transition rapidly to offensive operations to ensure access and seize the initiative in support of the Army Maneuver Center of Excellence mission.

# 2.2 Alternative 2 – Proposed Action

The Proposed Action Alternative as described in Section 1.3, is construction of an annex and attendant features to provide adequate laboratory and administrative spaces to support the expanded military research mission.

# 3.0 AFFECTED ENVIRONMENT

# 3.1 General

Currently, the CHL FRF military mission is being conducted in a facility which was originally designed to support a small civil works research mission. A military research mission was added in 2015 which increased the scientific staff by 5 personnel of which some are currently house in a relocatable trailer and additional lab space is required.



Figure 4: Aerial Map showing existing site conditions at the FRF

# 3.1.1 ENVIRONMENTAL SETTING

# 3.1.2 DESCRIPTION OF THE WATERSHED

Duck, NC is located on the Outer Banks extending from Virginia to Oregon Inlet, NC. The Outer Banks are coastal barrier islands along the northern coast of NC. The NC State Line forms the boundary to the north, the Atlantic Ocean to the east, Oregon Inlet to the south, and Currituck Sound to the west. The Outer Banks to Cape Hatteras are characterized physically by sandy beaches terminating in a dune line with scattered dunes and sand reaching to the westerly sounds. The shaping forces are wave activity on the ocean side, wind, and some wave activity on the sound side. The windgenerated ocean waves shape the beach while winds move the dunes and surface sands; however, sand and dune movement are restricted by overlying vegetation of varying density and type. Ponded waters of varying salinities also are found.

The research facility area is part of the Coastal Plain of NC, a low and partially submerged area varying in width up to 125 miles and confined between the Piedmont Plateau on the west and the Continental Shelf on the east. A series of marine deposits, attesting to several cycles of uplift and submergence, were deposited upon the ancient rocks of the area. The source of these materials was probably adjacent portions of the Piedmont Plateau. The fluxuation in the sea level in the past geologic areas appears to be correlated with the Pleistocene glacial and interglacial stages, during which great quantities of water were alternately withdrawn and returned to the sea by the freezing and melting of the continental ice sheets.

The Coastal Plain area was submerged in early Pleistocene time. With each emergence and subsequent submergence, larger areas were left above the sea, and several well-defined terraces have been recognized in NC. During the flooding as a result of the last interglacial stage, the seaward part of the Coastal Plain was covered by a thin mantle of the lowest of these terraces - the Pamlico. This layer, composed almost entirely of sand, was deposited by the waves and currents. When the sea finally receded during again to a level higher than its present one. Along this emergent coast of NC, with its gently sloping shore covered by the Pleistocene formations, barrier beaches have formed under wave and current action.

The lagoons and sounds inland of the barrier beaches gradually accumulated sediment derived from erosion of the adjacent mainland and were converted to marshes. This trend is continuing at the present time.

#### 3.1.3 CLIMATE

The climate is characterized by long, hot summers and relatively mild, short winters. Average annual precipitation in the area is approximately 47 inches. The major portion of summer precipitation is received in the form of convectional thunderstorms and occasional tropical depressions. Mid-latitude, low-pressure cells preceding cold fronts are the major source of precipitation in the late fall and early spring.

The climatic conditions expected for the proposed project site are consistent with those considered to be in the Subtropical-Temperate Zone, which is characterized by a mild climate, plentiful rainfall, and a long growing season.

#### 3.2 RELEVANT RESOURCES

This section contains a description of relevant resources that could be impacted by the proposed project. The important resources described in this section are those recognized by laws, executive orders, regulations, and other standards of Federal, State, or regional agencies and organizations; technical or scientific agencies, groups or individuals; and the general public.

The resources in Table 1 have been considered and found to not be affected:

# Table 1: Resources Not Affected

Resource	Effect
Geology	No change.
Waters of the U.S. including wetlands	None present in the project area.
Recreational Resources	None present in the project area.
Aesthetics	No change, site previously disturbed.
Air Quality	No change, limited new construction.
Water Quality	No Change. No Waters of the U.S. including wetlands on site and no off-site discharges proposed.
Hazardous, Toxic, and Radioactive Resources	Site was cleared prior to initial occupancy; See 1973 EIS.
Environmental Justice	No change.
Aquatic Resources/Fisheries	None present in the project area.
Essential Fish Habitat	None present in the project area.
Floodplains	Although the project is not in a 100-year floodplain in-accordance-with Executive Order 11988, it is subject to flooding under certain conditions; however, the mission dictates that it be located as proposed. The facility will be designed and sited to minimize adverse effects on flood heights and damages to the structure or contents resulting from floods.
Beaches	None present in the project area. However, the project is located adjacent to the beach. Storm surges during tropical storms could affect the area. Proper design consideration will be taken to minimize the impact on the environment and facility.
Prime Farmland	None present in the project area.
Marine Mammal Protection Act	None present in the project area.

# 3.2.1 TERRESTRIAL RESOURCES

#### **Existing Conditions**

This is defined as non-wetland/upland resources which is the geography and general landscape topography. The terrain in the vicinity of the proposed project site is generally level with very few young pine trees. The soils are sandy, well drained, and low in organic material.

# 3.2.2 WILDLIFE: Flora and Fauna

#### **Existing Conditions**

**Flora**: The Outer Banks is a distinct ecological area as the barrier islands are known for their expansive sandy beaches. Duck, NC is approximately 45 miles northwest on a barrier island with very similar ecological resources. Growth is difficult for most plant species due to the variable weather, windblown sand, salt spray, and unfertile, sandy soils (Burk, 1962). Some windward portions of the dune are sparsely overgrown with clumps of American beach grass Ammophila breviligulata and sea oats (Uniola paniculata). These clumps become denser as one proceeds to the crest of the dune line and then leeward. Leeward of the dunes this grass community will eventually succeed into a thicket composed of wax myrtle (Myrica cerifera), Yaupon (Ilex vomitoria), willow (Salix sp.), and grapevines (Vitis sp.), and other species. This growth is strongly influenced by salt spray and wind-driven sand resulting in the stunted and sheared woody vegetation typical of shrub-thicket plant community found throughout the barrier islands.

Behind the outer protective shrub thicket, protected by both distance from the surf and a thick vegetative thicket, are found maritime forests, although such forests are not present at the site. These forests, where they occur, consist mainly of pines and live oaks with several other species, such as the forest at Buxton Woods on Cape Hatteras. Collier Cobb (1906) indicated that the Banks were previously more heavily vegetated with maritime forest. He wrote that at one time the Outer Banks was well forested and in some places the forest extended down to the water edge. He stated that the movement of sand (sand waves) on and from the banks, and particularly on Bodie and Hatteras Islands, was started just after the Civil War by deforesting or cutting of trees next to the shore for ship timbers. He further stated that the shore strip of the Outer Banks could be regained by reforestation and the dunes stabilized by planting native grasses.

The central portion of the site consists of areas of bare sand and areas of planted American beach grass. Dwarfed live oak (guercus Virginiana) and wax myrtle (Myrica cerifera) occur on the ocean side of secondary dunes. On the more protected sound side, a thicket of red maple (Acer rubrum), choke cherry (Prunus sp.), wax myrtle, summac (Rhus sp.), green brier (Simi1ax sp.), and blackberry (Rubus sp.) have developed. There is some evidence of pruning in this stand from effects of salt spray and wind-driven sand. The site is expected to become more vegetated with native plants and should revert to more typical dune and shrub-thicket habitat types since practice bombing has ceased. Currituck Sound supports considerable aquatic growth, grading from freshwater flora on its northern end to brackish water flora near its connection with Albermarle Sound.

**Fauna:** Beach fauna must adapt to withstand the severe environmental stresses. This is particularly true in the surf zone. The predominant animals are able to withstand environmental stress by burrowing, migration, and elastic or rigid skeletal structures. The last attribute is particularly marked in the crustaceans and mollusks which comprise the bulk of the sandy beach community. These and other animals constitute the food base for larger predators such as shorebirds, small mammals, fish and man.

Some of the bottom feeding fish such as whiting (Menticirrhus, sp.), drums (Sciaenops, sp.) and flunders (Paralichthys spp.), are especially noteworthy because they feed on the native invertebrates in the surf zone. Some fish migrate through the area during spring and fall, and are valuable to sport fishermen during those seasons, including such species as the channel bass (Sciaenops ocellata) and striped bass (Morone saxatilus). Other fish are either available as local residents or complete some portion of their life cycle in the near shore or sound area.

Proceeding inland, insect and plant populations support a minor number of amphibians, reptiles, and mammals but a considerable number of birds. These birds are primarily migratory and often spend time in the local marsh ponds and Currituck Sound.

It should be noted that the Outer Banks and especially the oligohaline waters of Currituck Sound are valuable to waterfowl, shorebirds, and other birds, as wintering and breeding grounds. Currituck Sound is relatively a fresh body of water. It supports large numbers of freshwater fish and other freshwater organisms at its upper end, where its sea connection has been lost, and more marine species at the lower and southern end where it connects to the more Saline waters of Albermarle Sound. Such a set of environmental conditions results in an extremely diverse, native fauna.

Upland areas include community types dominated by the dune vegetation and maritime shrub thicket. Field reconnaissance of the project area did not include biological sampling. However, observations at the site indicated that some ecological damage would continue without the building of the research facility due to heavy unauthorized usage of the area by dune buggies and other human effects concomitant with land development on both sides of the site.

# 3.2.3 PROTECTED SPECIES

#### **Existing Conditions**

There are Threatened and Endangered Species (TES) that occur around the project area as listed in Table 2.

#### Table 2: Protected Species near FRF in Duck, NC\*

Name	Status
MAMMALS	
Northern Long-Eared Bat (Myotis septentrionalis)	Threatened
Red Wolf ( <i>Canis rufus</i> )	EXPN
West Indian Manatee (Trichechus manatus)	Threatened
BIRDS	
Eastern Black Rail (Laterallus jamaicensis ssp. Jamaicensis)	Proposed
	Threatened
Piping Plover (Charadrius melodus)	Threatened
Red Knot (alidris canutus rufa)	Endangered
Red-cockaded woodpecker (Picoides borealis)	Endangered
Roseate Tern (Sterna dougallii dougallii)	Endangered
REPTILES	
American Alligator (Alligator mississippiensis)	SAT
Green Sea Turtle (Chelonia mydas)	Threatened
Hawksbill Sea Turtle (Eretmochelys imbricate)	Endangered
Kemp's Ridley Sea Turtle ( <i>Lepidochelys kempii</i> )	Endangered
Leatherback Sea Turtle (Dermochelys coriacea)	Endangered
Loggerhead Sea Turtle (Caretta caretta)	Threatened
FLOWERING PLANTS	
Seabeach Amaranth (Amaranthus pumilus)	Threatened

\*Threatened due to similarity of appearance (SAT or T(S/A)) is a species that is threatened due to similarity of appearance with another listed species and is listed for its protection. An experimental population, non-essential (EXPN) is a population that has been established within its historical range under section 10(j) of the Endangered Species Act (ESA) to aid recovery of the species.

# 3.2.4 CULTURAL RESOURCES

#### Existing Conditions

#### Efforts to Identify Historic Properties/Previous Work

In 1971 the Government conducted ordnance removal activities in the area that had been used for the bombing range. According to the Environmental Impact Statement that was prepared for the construction of the FRF in 1973, the heavy equipment that was used caused damage to the vegetation and modified the internal topography of the area. In 1972 vegetation was planted to stabilize the soils. No archaeological investigations were conducted prior to construction of the current facility due to the low potential of encountering intact archaeological sites. A database search of the National Register and NC's Department of Archives and History databases in 1972 also indicated low potential for archaeological sites because there were none recorded in the vicinity of the project area.

The U.S. Army Corps of Engineers, Baltimore District conducted a focused feasibility study to develop, evaluate and perform a detailed analysis of potential remedial

alternatives for the MRS in 2017 (USACE 2017). The report used historical data regarding the types of munitions that had been used at the former Duck Target Facility to determine the likelihood of encountering munitions on the surface and subsoil. Historical records recorded the use of a variety of rockets as well as large bombs (50 lb., 100 lb., and 250 lb.) at the target facility, and that during remediation activities in the 1970s items had been recovered as deep as 5 ft. below ground surface. Based on the types of munitions used, the majority of items would have been located between 1 and 3 ft. below ground surface.

# 3.2.5 NOISE

#### **Existing Conditions**

The surrounding area as well as the identified site of the Proposed Action is composed of a currently operational field research facility and functioning general access roadways. The noises generated from current activities, such as noise from vehicles and generators, are the primary contributors to the existing noise levels within this area. This noise falls within the dBA parameters for population annoyance.

# 4.0 ENVIRONMENTAL CONSEQUENCES

For the "proposed action" alternatives, both direct impacts and indirect impacts ("which are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable"; CEQ Regulation) are described for each alternative and resource.

#### 4.1 TERRESTRIAL RESOURCES

#### Future Conditions with No Action

Without implementation of the proposed action, there would be no effects to terrestrial resources.

#### Future Conditions with the Proposed Action

With implementation of the proposed action, there would be minimal minor adverse impacts to the geography and landscape topography during the proposed project's construction and site work, but most of the ground has been previously disturbed.

#### 4.2 WILDLIFE: Flora and Fauna

#### Future Conditions with No Action

Without implementation of the proposed action, there would be no effects to flora and fauna.

#### Future Conditions with the Proposed Action

With implementation of the proposed action, there may be minimal disturbance to flora and fauna that have returned to this previously disturbed site while the construction of the proposed project was occurring, but there would not be any long term adverse effects to this resource.

#### 4.3 PROTECTED SPECIES

#### Future Conditions with No Action

Without implementation of the proposed action, the Corps has made a No Effect determination for all listed species in Table 2.

#### Future Conditions with the Proposed Action

With implementation of the proposed action, the Corps has made a No Effect determination for all listed species in Table 2. None would occur within the proposed project area because they are marine, or the project area is previously disturbed and surrounded by an eight-foot fence. Further, there is no listed critical habitat at the project site.

#### 4.4 CULTURAL RESOURCES

#### Future Conditions with No Action

Without implementation of the proposed action, there would be no effects to cultural resources if this proposed project were not constructed.

#### Future Conditions with the Proposed Action

All proposed work for this undertaking will be performed within areas that have been previously disturbed by construction of the FRF and amenities, as well as ground disturbance from the previous land use and removal of ordnance. No archaeological investigations are necessary due to the low potential for encountering intact archaeological deposits.

A review of the National Register of Historic Places database and the NC State Historic Preservation Office's HPOWEB show no recorded resources within the project area or the immediate vicinity (1 km). The facility, constructed in the mid-1970s, has not been evaluated for the National Register and is not considered a cultural resource due to its age. The construction of the annex and supporting amenities will have no effects directly or indirectly on historic properties as there are none located within project area.

There will be no effects to historic properties as a result of this undertaking. No further investigations are needed for this undertaking. If a cultural resource is discovered during construction, action would need to cease and desist until an archeologist could

assess the site and coordinate with the State Historic Preservation Office and Tribal Nations with an interest in the area.

# 4.5 NOISE

#### Future Conditions with No Action

Without implementation of the proposed action, there would be no effects to noise.

#### Future Conditions with the Proposed Action

With implementation of the proposed action, there may be some adverse impacts to noise during construction, however, these would be temporary and minor and would cease when construction is complete.

#### 4.6 CUMULATIVE IMPACTS

The Council on Environmental Quality's (CEQ) regulations (40 CFR 1500-1508) implementing the procedural provisions of the National Environmental Policy Act (NEPA) of 1969, as amended (42 U.S.C. 4321 et seq.) define cumulative effects as "the impact on the environment which results from the incremental impact of the action when added to other past, present, or reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions (40 CFR 1508.7)". Cumulative effects can result from individually minor but collectively significant actions taking place over a period of time."

A fire station was recently built nearby in Duck, NC.

There are no cumulative impacts associated with the proposed action. No past projects resulted in an adverse impact to resources. The proposed action would not add in an adverse impact to this area. There are no other future projects on the horizon that could adversely impact resources.

# 5.0 COORDINATION (Relevant agencies)

Preparation of this EA and draft Finding of No Significant Impact (FONSI) is being coordinated with appropriate Congressional, Federal, state, and local interests, as well as environmental groups and other interested parties. List the federal and state agencies and NGO's that were contacted during the evaluation or that will receive a copy of the EA for review.

U.S. Department of Interior, Fish and Wildlife Service

Natural Resources Conservation Service, State Conservationist

Advisory Council on Historic Preservation

NC Department of Wildlife and Fisheries

NC Department of Environmental Quality

NC Historic Preservation Officer

# 6.0 MITIGATION

The appropriate application of mitigation is to formulate an alternative that first avoids adverse impacts, then minimizes adverse impacts, and lastly, compensates for unavoidable impacts. Compensatory mitigation would not be required, as all construction is within the existing previously disturbed FRF site that is within 8-foot fencing.

# 7.0 COMPLIANCE WITH ENVIRONMENTAL LAWS AND REGULATIONS

Environmental compliance for the proposed action would be achieved upon: coordination of this EA and draft Finding of No Significant Impact (FONSI) with appropriate agencies, organizations, and individuals for their review and comments; receipt of the State Historic Preservation Officer Determination of No Effect on cultural resources; receipt and acceptance or resolution of all USFWS Fish and Wildlife Coordination Act recommendations. The draft FONSI will not be signed until the proposed action achieves environmental compliance with applicable laws and regulations, as described above.

# 8.0 CONCLUSION

The proposed action consists of a field research annex. This office has assessed the environmental impacts of the proposed action and has determined that the proposed action would have no adverse or beneficial impact upon cultural resources, terrestrial resources, noise, wildlife or protected resources. There are minimal minor adverse cumulative impacts associated with the proposed action.

# 9.0 PREPARED BY

This EA and the associated draft FONSI were prepared by Cynthia Gose, Environmental Engineer, Kimberly L. Garvey, Biologist, with relevant sections prepared by: Julie Morgan-Ryan - Cultural Resources. The address of the preparers is: U.S. Army Corps of Engineers, 100 W. Oglethorpe Ave. Savannah, GA 31401.

#### **10.0 REFERENCES**

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