

DRAFT

**ENVIRONMENTAL ASSESSMENT FOR
FACILITY AND INFRASTRUCTURE CONSTRUCTION AND
MODERNIZATION**

MOODY AIR FORCE BASE, GEORGIA



Department of the Air Force

EA Identification Number: EAXX-007-57-UAF-1739351981

April 2025

FORMAT PAGE

Privacy Advisory

This Draft Environmental Assessment (EA) is provided for public comment in accordance with the National Environmental Policy Act of 1969 (NEPA) and 32 CFR Part 989, *Environmental Impact Analysis Process (EIAP)*, which provides an opportunity for public input on United States Department of the Air Force (DAF) decision-making, allows the public to offer input on alternative ways for DAF to accomplish what it is proposing, and solicits comments on the DAF's analysis of environmental effects.

Public commenting allows the DAF to make better, informed decisions. Letters or other written or oral comments provided may be published in the EA. As required by law, comments provided will be addressed in the EA and made available to the public. Providing personal information is voluntary. Any personal information provided will be used only to identify your desire to make a statement during the public comment portion of this process. Private addresses will be compiled to develop a mailing list for those requesting copies of EA; however, only the names of individuals making comments and specific comments will be disclosed. Personal home addresses and phone numbers will not be published in the EA.

Compliance with Section 508 of the Rehabilitation Act

To the extent possible, this document is compliant with Section 508 of the Rehabilitation Act. This allows assistive technology to be used to obtain the available information from the document. Due to the nature of graphics, figures, tables, and images occurring in the document, accessibility is limited to a descriptive title for each item.

FORMAT PAGE

Cover Sheet

Draft Environmental Assessment Facility and Infrastructure Construction and Modernization

- a. Responsible Agency: Department of the Air Force (DAF), Moody Air Force Base (AFB)
- b. Cooperating Agency: None
- c. Affected Location: Moody AFB, Georgia
- d. For Additional Information: Mr. Lorence Busker, 23d Civil Engineer Squadron, 3485 Georgia Street, Moody Air Force Base, Georgia 31699-1707; telephone: (229) 257-2396; email: lorence.busker@us.af.mil.
- e. Report Designation: Draft Environmental Assessment (EA)
- f. EA Identification Number: EAXX-007-57-UAF-1739351981
- g. Abstract: This EA has been prepared pursuant to provisions of the National Environmental Policy Act (NEPA), as amended by Public Law 118-5, the Fiscal Responsibility Act of 2023 (42 United States Code [USC] 4321 et seq.), and the DAF's *Environmental Impact Analysis Process* (EIAP; 32 Code of Federal Regulations [CFR] 989), to the extent they are consistent with NEPA as revised by the Fiscal Responsibility Act, and Executive Order 14154, *Unleashing American Energy*. Potentially affected environmental resources were identified in coordination with local, state, and federal agencies. Specific environmental resources with the potential for environmental consequences include land use; noise; air quality; earth resources; water resources; biological resources; cultural resources; socioeconomics; environmental justice; infrastructure and utilities; transportation; hazardous materials, Environmental Restoration Program, and toxic substances; and health and safety.

The purpose of the Proposed Action is to address deficiencies of function and capabilities in Moody AFB facilities and infrastructure to ensure efficient, uninterrupted operations. The Proposed Action is needed to conform with applicable antiterrorism/force protection criteria, to meet DAF space optimization requirements, and to reduce wasted person-hours and unnecessary risk to the mission due to inefficiencies.

The Proposed Action comprises 10 facility and infrastructure construction, demolition, and modernization projects to be performed within approximately the next five years (Fiscal Year 2025 through Fiscal Year 2030). The Proposed Action consists of the following proposed projects: Project 1: Guardian Angel Facility Construction and Renovation; Project 2: Aircraft Fire Training Facility Improvements; Project 3: Gate Overwatch Position Construction; Project 4: Aerospace Ground Equipment Facility Construction and Demolition; Project 5: Burma Road Realignment; Project 6: 38th Rescue Squadron Parking Lot Construction; Project 7: Airfield Stormwater Repair and Replacement; Project 8: Mission Lake Water Barrier and Stone Road Repairs; Project 9: Boundary Fence Repair; and Project 10: Building Demolition.

FORMAT PAGE

TABLE OF CONTENTS

	<u>Page</u>
1.0 PURPOSE OF AND NEED FOR THE ACTION.....	1-1
1.1 Introduction.....	1-1
1.2 Background	1-1
1.3 Location.....	1-2
1.4 Purpose for the Action.....	1-2
1.5 Need for the Action.....	1-2
1.6 Decision to Be Made	1-4
1.7 Interagency and Intergovernmental Coordination and Consultations	1-4
1.7.1 Interagency Coordination and Consultations	1-4
1.7.2 Government-to-Government Consultations	1-4
1.7.3 Other Agency Consultations	1-5
1.8 Public and Agency Review of EA	1-5
1.9 Scope of This Environmental Analysis	1-6
2.0 DESCRIPTION OF THE PROPOSED ACTION AND ALTERNATIVES.....	2-1
2.1 Proposed Action	2-1
2.2 Selection Standards for Project Alternatives	2-4
2.3 Descriptions of the Alternatives.....	2-4
2.3.1 Project 1: Guardian Angel Facility Construction and Renovation	2-5
2.3.2 Project 2: Aircraft Fire Training Facility Improvements	2-7
2.3.3 Project 3: Gate Overwatch Position Construction.....	2-8
2.3.4 Project 4: Aerospace Ground Equipment Facility Construction and Demolition	2-12
2.3.5 Project 5: Burma Road Realignment	2-15
2.3.6 Project 6: 38th Rescue Squadron Parking Lot Construction.....	2-17
2.3.7 Project 7: Airfield Stormwater Repair and Replacement.....	2-17
2.3.8 Project 8: Mission Lake Water Barrier and Stone Road Repairs	2-19
2.3.9 Project 9: Boundary Fence Repair.....	2-23
2.3.10 Project 10: Building Demolition	2-25
2.4 Screening of Alternatives	2-27

2.5	Alternative Actions Considered but Eliminated from Further Analysis	2-30
2.5.1	Project 5, Burma Road Realignment Permeable Paving Alternative	2-30
2.5.2	Project 6, 38 RQS Parking Lot Construction Permeable Paving Alternative	2-30
2.5.3	Project 3, Alternative 2: Build Overwatch Positions at Davidson Road Gate Only.....	2-30
2.6	Summary of Potential Environmental Consequences	2-31
3.0	AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES	3-1
3.1	Environmental Resource Areas Not Carried Forward for Detailed Analysis	3-1
3.2	Analyzed Resources and Regions of Influence.....	3-3
3.3	Reasonably Foreseeable Future Actions	3-3
3.4	Land Use	3-5
3.4.1	Affected Environment.....	3-5
3.4.2	Environmental Consequences	3-6
3.5	Noise	3-13
3.5.1	Affected Environment.....	3-13
3.5.2	Environmental Consequences	3-14
3.6	Air Quality, Climate Change, and Greenhouse Gases.....	3-23
3.6.1	Affected Environment.....	3-23
3.6.2	Environmental Consequences	3-25
3.7	Soils.....	3-41
3.7.1	Affected Environment.....	3-41
3.7.2	Environmental Consequences	3-43
3.8	Water Resources.....	3-48
3.8.1	Affected Environment.....	3-48
3.8.2	Environmental Consequences	3-52
3.9	Biological Resources.....	3-59
3.9.1	Affected Environment.....	3-59
3.9.2	Environmental Consequences	3-64
3.10	Cultural Resources.....	3-72
3.10.1	Affected Environment.....	3-72
3.10.2	Environmental Consequences	3-74
3.11	Infrastructure	3-82

3.11.1 Affected Environment.....	3-82
3.11.2 Environmental Consequences	3-85
3.12 Hazardous Materials and Wastes, Environmental Restoration Program, and Toxic Substances	3-92
3.12.1 Affected Environment.....	3-92
3.12.2 Environmental Consequences	3-94
3.13 Socioeconomics – Income and Employment	3-107
3.13.1 Affected Environment.....	3-107
3.13.2 Environmental Consequences	3-108
3.14 Health and Safety.....	3-112
3.14.1 Affected Environment.....	3-112
3.14.2 Environmental Consequences	3-112
4.0 LIST OF PREPARERS.....	4-1
5.0 REFERENCES	5-1

LIST OF FIGURES

	<u>Page</u>
Figure 1-1. Location of Moody Air Force Base, Georgia.....	1-3
Figure 2-1. Proposed Construction, Demolition, and Modernization Projects at Moody Air Force Base, Georgia.....	2-3
Figure 2-2. Project 1 – Guardian Angel Facility Construction and Renovation	2-6
Figure 2-3. Project 2 – Aircraft Fire Training Facility Improvements Alternative 1	2-9
Figure 2-4. Project 2 – Aircraft Fire Training Facility Improvements Alternative 2	2-10
Figure 2-5. Project 3 – Gate Overwatch Position Construction	2-11
Figure 2-6. Project 4, Alternative 1 – Aerospace Ground Equipment Facility with New Shop, Administrative Space, and Covered Storage.....	2-13
Figure 2-7. Project 4, Alternative 2 – Aerospace Ground Equipment Facility without New Shop and More Renovated Administrative Space	2-14
Figure 2-8. Project 5 – Burma Road Realignment	2-16
Figure 2-9. Project 6 – 38th Rescue Squadron Parking Lot Construction	2-18
Figure 2-10. Project 7 – Airfield Stormwater Repair and Replacement	2-20
Figure 2-11. Project 8 – Mission Lake Water Barrier and Stone Road Repairs.....	2-22

Figure 2-12. Project 9 – Boundary Fence Repair	2-24
Figure 2-13. Project 10 – Building Demolition.....	2-26
Figure 3-1. Land Use Categories at Moody Air Force Base Main Base	3-7
Figure 3-2. Aircraft Noise Contours for Moody Air Force Base Main Base	3-16
Figure 3-3. Small-Arms Noise Contours at Moody Air Force Base Main Base	3-17
Figure 3-4. Soil Units on Moody Air Force Base Main Base	3-42
Figure 3-5. Wetlands at Moody Air Force Base Main Base	3-50
Figure 3-6. 100-Year Floodplain at Moody Air Force Main Base	3-51
Figure 3-7. Gopher Tortoise Active and Inactive Burrow Locations at Moody Air Force Base Main Base.....	3-63
Figure 3-8. Transportation Network at Moody Air Force Base, Georgia	3-86
Figure 3-9. Environmental Restoration Program Sites Proximate to the Proposed Projects at Moody Air Force Base	3-95

LIST OF TABLES

	<u>Page</u>
Table 2-1. Proposed Construction, Demolition, and Modernization Projects and Implementation Alternatives	2-1
Table 2-2. Project 10, Proposed Building Demolition	2-27
Table 2-3. Screening of the Alternatives	2-28
Table 2-4. Summary of Potential Environmental Impacts by Project.....	2-33
Table 3-1. Estimated Total Area of Impacts for Each Proposed Project Alternative.....	3-2
Table 3-2. Region of Influence for the Proposed Action by Resource	3-3
Table 3-3. Reasonably Foreseeable Future Actions.....	3-4
Table 3-4. Land Use Category at the Proposed Action Project Areas	3-6
Table 3-5. Noise Levels of Heavy Construction Equipment.....	3-15
Table 3-6. National Ambient Air Quality Standards	3-23
Table 3-7. Estimated Air Emissions for Project 1, Alternative 1	3-27
Table 3-8. Estimated Air Emissions for Project 1, Alternative 2.....	3-28
Table 3-9. Estimated Air Emissions for Project 2, Alternative 1	3-29
Table 3-10. Estimated Air Emissions for Project 2, Alternative 2.....	3-30

Table 3-11. Estimated Air Emissions for Project 3, Alternative 1	3-31
Table 3-12. Estimated Air Emissions for Project 4, Alternative 1	3-32
Table 3-13. Estimated Air Emissions for Project 4, Alternative 2	3-32
Table 3-14. Estimated Air Emissions for Project 5, Alternative 1	3-33
Table 3-15. Estimated Air Emissions for Project 6, Alternative 1	3-34
Table 3-16. Estimated Air Emissions for Project 7, Alternative 1	3-35
Table 3-17. Estimated Air Emissions for Project 8, Alternative 1	3-36
Table 3-18. Estimated Air Emissions for Project 8, Alternative 2	3-36
Table 3-19. Estimated Air Emissions for Project 8, Alternative 3	3-37
Table 3-20. Estimated Air Emissions for Project 9, Alternative 1	3-38
Table 3-21. Estimated Air Emissions for Project 9, Alternative 2	3-39
Table 3-22. Estimated Air Emissions for Project 9, Alternative 3	3-39
Table 3-23. Estimated Air Emissions for Project 10, Alternative 1	3-40
Table 3-24. Estimated Air Emissions for All 10 Proposed Projects Combined	3-41
Table 3-25. Soil Units at the Proposed Projects on Moody Air Force Base Main Base	3-43
Table 3-26. Representative Wildlife Species Occurring on Moody Air Force Base	3-60
Table 3-27. Summary of Cultural Resource Investigations on Moody Air Force Base	3-73
Table 3-28. Environmental Restoration Program Sites Associated with the Proposed Action	3-96
Table 3-29. Population in the Moody Air Force Base Region of Influence as Compared to Georgia and the United States (2010 – 2022)	3-107
Table 4-1. List of Preparers	4-2

LIST OF APPENDICES

APPENDIX A. INTERAGENCY AND INTERGOVERNMENTAL COORDINATION AND CONSULTATIONS AND PUBLIC NOTICES	A-1
APPENDIX B. WETLAND DELINEATION VERIFICATION	B-1
APPENDIX C. DEFINITION OF SELECT RESOURCES	C-1
APPENDIX D. AIR QUALITY MODELING RESULTS	D-1

FORMAT PAGE

LIST OF ACRONYMS AND ABBREVIATIONS

23 CES	23d Civil Engineer Squadron
23 WG	23d Wing
38 RQS	38th Rescue Squadron
41 RQS	41st Rescue Squadron
93 AGOW	93d Air Ground Operations Wing
820 BDG	820th Base Defense Group
ACAM	Air Conformity Applicability Model
ACM	asbestos-containing material
AFB	Air Force Base
AFCEC	Air Force Civil Engineer Center
AFI	Air Force Instruction
AFMAN	Air Force Manual
AFTF	Aircraft Fire Training Facility
AGE	Aerospace Ground Equipment
APE	area of potential effect
AQCR	Air Quality Control Region
AST	aboveground storage tank
AT/FP	antiterrorism/force protection
BMP	best management practice
CEIE	Installation Management Flight, Environmental Management Element
CEQ	Council on Environmental Quality
CES	Civil Engineer Squadron
CFR	Code of Federal Regulations
CH ₄	methane
CO	carbon monoxide
CO ₂	carbon dioxide
CO ₂ e	carbon dioxide equivalent
COS	Combat Operations Squadron
CWA	Clean Water Act
CZ	Clear Zone
DAF	Department of the Air Force
DAFI	Department of the Air Force Instruction
DAFMAN	Department of the Air Force Manual
dB	decibel
dBA	A-weighted decibel
dBp	peak decibel

DCE	cis-1,1-dichloroethene
DNL	day-night average sound level
DoD	Department of Defense
EA	Environmental Assessment
EIAP	Environmental Impact Analysis Process
EISA	Energy Independence and Security Act
EO	Executive Order
ERP	Environmental Restoration Program
ESA	Endangered Species Act
ESOHHC	Environmental Safety and Occupational Health Council
°F	degrees Fahrenheit
FONPA	Finding of No Practicable Alternative
FONSI	Finding of No Significant Impact
FY	Fiscal Year
GDNR	Georgia Department of Natural Resources
GEPD	Georgia Environmental Protection Division
GHG	greenhouse gas
GI/LID	green infrastructure and low impact development
GSU	geographically separated unit
GWP	Global Warming Potential
HAZMART	hazardous material pharmacy
HVAC	heating, ventilation, and air conditioning
ICRMP	Integrated Cultural Resources Management Plan
IDP	Installation Development Plan
IPCC	Intergovernmental Panel on Climate Change
LBP	lead-based paint
mton	metric tons per year
MWD	Military Working Dogs
N ₂ O	nitrous oxide
N/A	not applicable
NAAQS	National Ambient Air Quality Standards
NAGPRA	Native American Graves Protection and Repatriation Act
NEPA	National Environmental Policy Act
NFPA	National Fire Protection Association
NH ₃	ammonia
NHPA	National Historic Preservation Act
NO ₂	nitrogen dioxide
NOA	Notice of Availability

NOx	nitrogen oxides
NPDES	National Pollutant Discharge Elimination System
NRHP	National Register of Historic Places
NSR	New Source Review
O ₃	ozone
OSHA	Occupational Safety and Health Administration
Pb	lead
PCB	polychlorinated biphenyl
PCE	dissolved-phase tetrachloroethene
pCi/L	picocuries per liter
PFAS	per- and polyfluoroalkyl substances
PFOA	perfluorooctanoic acid
PM _{2.5}	particulate matter, less than 2.5 microns in diameter
PM ₁₀	particulate matter, less than 10 microns in diameter
POL	petroleum, oil, and lubricant
POV	privately owned vehicle
PSD	Prevention of Significant Deterioration
PVC	polyvinyl chloride
Q-D	quantity-distance
RCRA	Resource Conservation and Recovery Act
ROI	region of influence
SAST	Suwannee alligator snapping turtle
SF	square feet
SFS	Security Forces Squadron
SHPO	State Historic Preservation Office
SO ₂	sulfur dioxide
SO _x	sulfur oxides
sq. ft.	square feet
SWPPP	Stormwater Pollution Prevention Plan
TCE	trichloroethylene
tpy	tons per year
UFC	Unified Facilities Criteria
US	United States
USACE	US Army Corps of Engineers
USC	United States Code
USEPA	US Environmental Protection Agency
USFWS	US Fish and Wildlife Service
UST	underground storage tank

UTV	utility terrain vehicle
VOC	volatile organic compound
VoIP	voice-over-internet-protocol
VoSIP	voice-over-secure-internet-protocol
WMA	Wildlife Management Area

1.0 PURPOSE OF AND NEED FOR THE ACTION

1.1 Introduction

The 23d Wing (23 WG) and 23d Civil Engineer Squadron (23 CES) at Moody Air Force Base (AFB) prepared this Environmental Assessment (EA) to evaluate select facility and infrastructure construction and modernization projects to support installation development at Moody AFB for the 23 WG and tenant organizations. The projects considered in this EA were identified as priorities for installation development in the Moody AFB Installation Development Plan (Moody AFB 2023) and would be implemented over an approximately five-year period, from fiscal year (FY) 2025 through FY 2030.

This EA was prepared per the National Environmental Policy Act (NEPA), as amended by Public Law 118-5, the Fiscal Responsibility Act of 2023 (42 United States Code [USC] 4321 et seq.), and the Department of the Air Force's (DAF's) *Environmental Impact Analysis Process* (EIAP; 32 Code of Federal Regulations [CFR] 989), to the extent they are consistent with NEPA as revised by the Fiscal Responsibility Act, and Executive Order (EO) 14154, *Unleashing American Energy*.

1.2 Background

The 23 WG is the host unit at Moody AFB. The current mission of the 23 WG is to organize, train, and equip the Flying Tigers to employ and execute the Global Precision Attack, Personnel Recovery, and Agile Combat Support service core functions to meet worldwide Combatant Commander requirements. The 23 WG organizes, trains, and employs combat-ready A-10C, HC-130J, and HH-60W aircraft and the Guardian Angel Weapons System. Approximately 5,500 military and civilian personnel comprise the 23 WG.

The 93d Air Ground Operations Wing (93 AGOW) is also located at Moody AFB. The 93 AGOW provides highly trained ground combat forces capable of integrating air and space power into the ground scheme of fire and maneuver. It provides Joint Force Commanders with expertise on the integration of air power with extending the Theater Air Control System for the Joint Forces Air Component Commander. The 93 AGOW comprises three operational Groups, one of which, the 820th Base Defense Group (820 BDG), is located at Moody AFB. The 820 BDG provides planning, training, equipment, and preparation to its three Base Defense Squadrons and one Combat Operations Squadron. The 820 BDG provides the ground forces necessary to protect the Air Force's resources.

Many Moody AFB facilities that support the 23 WG, the 93 AGOW, and tenant units have undergone minimal repair and sustainment in recent years. Some facilities do not meet the applicable Department of Defense (DoD) installation master planning criteria, consistent with Unified Facilities Criteria (UFC) 2-100-01, *Installation Master Planning*; or Air Force Instruction (AFI) 32-1015, *Integrated Installation Planning*; and Air Force Policy Directive 32-10, *Installations and Facilities*. Select Moody AFB facilities and infrastructure do not align with the 2011 US Air Force Civil Engineering Strategic Plan (US Air Force 2011) and the US Air Force Strategic Master Plan (US Air Force 2015). Further, there are facilities at Moody AFB that do not

meet current US Air Force Space Optimization requirements consistent with the Sub-Activity Management Plan, Facility Space Management, and Department of the Air Force Manual (DAFMAN) 32-1084, *Facility Requirements Standards*. Select infrastructure elements, such as gates and portions of the Moody AFB boundary fence, does not meet all applicable DoD antiterrorism/force protection (AT/FP) criteria, consistent with UFC 4-010-01, *DoD Minimum Antiterrorism Standards for Buildings*, and the Installation Force Protection Guide (US Air Force no date).

1.3 Location

Moody AFB covers 11,881 acres in Lowndes and Lanier counties, approximately 10 miles northeast of the city of Valdosta, Georgia (**Figure 1-1**). The installation consists of the Main Base (5,518 acres), the adjacent Grand Bay Range (5,874 acres), and the geographically separated Grassy Pond Recreational Annex (489 acres), which is located 25 miles southwest of the Main Base. The proposed facility infrastructure construction and modernization projects evaluated in this EA would be limited to Moody AFB Main Base (**Figure 1-1**).

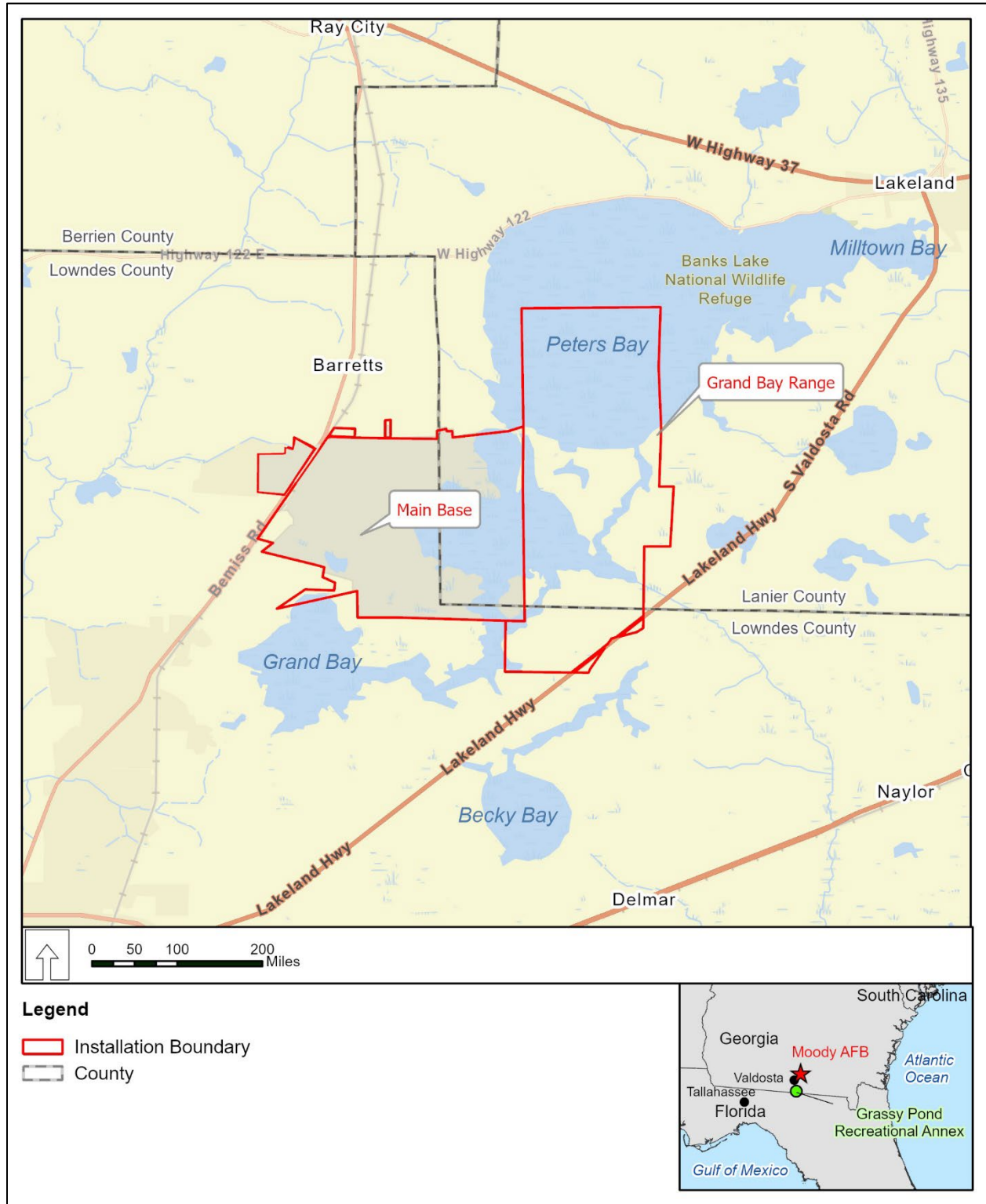
1.4 Purpose for the Action

The purpose of the Proposed Action is to address deficiencies of function and capabilities in Moody AFB facilities and infrastructure to ensure efficient, uninterrupted operations. These deficiencies would be remedied through an ongoing process of construction of new facilities and new infrastructure, the repair of existing facilities and infrastructure, and the demolition of obsolete and unneeded facilities.

1.5 Need for the Action

The Proposed Action is needed to conform with applicable AT/FP criteria, to meet DAF space optimization requirements, and to reduce wasted person-hours and risk to the mission due to inefficiencies.

The Guardian Angel Facility, Aircraft Fire Training Facility (AFTF), Davidson Road and Mitchell Boulevard gates, Aerospace Ground Equipment (AGE) complex, portions of Burma Road, airfield stormwater drainage system, Stone Road and associated Mission Lake water barrier, the western Moody AFB boundary fence, and underutilized buildings all have structural and organizational limitations. Left unchecked, these deficiencies could degrade the ability of the installation to meet DAF, DoD, state, and/or federal requirements and to support current and future mission requirements. Additional military personnel and civilian staff time is unnecessarily used when mission-support facilities are not consolidated and scattered in various facilities across Moody AFB. Examples of scattered facilities and the subsequent loss of staff time and wasted resources include inadequate available parking at facilities, causing personnel to park in distant parking lots on a daily basis; visually obscured Base boundary fencing, causing Base security personnel to walk along portions of the Moody AFB perimeter for security checks instead of driving; and lack of adequate facilities at Base gates, requiring Base security personnel to provide gate protection support from parked vehicles to meet AT/FP requirements.



Risks to the military mission at Moody AFB are caused by unconsolidated mission support facilities, which makes communication among personnel and use of critical equipment more difficult; by roadways and drainage structures located in the airfield Clear Zone (CZ) that generate risk to aircraft operations in the airfield; by a lack of access to the Base boundary security fencing for patrols and facilities at gates to for security personnel to respond to threats; and by potential failure of a water control structure at Mission Lake, which would increase flooding threats and damage a critical east-west roadway on Main Base.

1.6 Decision to Be Made

This EA evaluates whether the Proposed Action would result in significant impacts on the human or natural environment. Based on the analysis in this EA, the DAF will make one of three decisions regarding the Proposed Action: 1) determine the potential environmental consequences associated with the Proposed Action or alternatives are not significant and sign a Finding of No Significant Impact (FONSI), 2) initiate preparation of an Environmental Impact Statement if it is determined that significant impacts would occur from the implementation of the Proposed Action or alternatives, or 3) select the No Action Alternative, whereby the Proposed Action would not be implemented. As required by NEPA and its implementing regulations, preparation of an environmental document must precede final decisions regarding the proposed project and be available to inform decision makers of the potential environmental impacts.

The execution of the Proposed Action would involve “construction” in a wetland as defined in EO 11990, *Protection of Wetlands*, and “action” in a floodplain under EO 11988, *Floodplain Management*, as amended by EO 13690, *Establishing a Federal Flood Risk Management Standard and a Process for Further Soliciting and Considering Stakeholder Input*. Therefore, a Finding of No Practicable Alternative (FONPA) will be prepared in conjunction with the FONSI.

1.7 Interagency and Intergovernmental Coordination and Consultations

1.7.1 Interagency Coordination and Consultations

Scoping is an early and open process for developing the breadth of issues to be addressed in the EA and for identifying significant concerns related to a Proposed Action. Per the requirements of the Intergovernmental Cooperation Act of 1968 (42 USC § 4231[a]) and EO 12372, *Intergovernmental Review of Federal Programs*, as amended by EO 12416, federal, state, and local agencies with jurisdiction that could be affected by the Proposed Action will be notified during the development of this EA.

Appendix A identifies the stakeholders consulted during this analysis and provides copies of relevant correspondence.

1.7.2 Government-to-Government Consultations

Consistent with the National Historic Preservation Act’s (NHPA) implementing regulations (36 CFR Part 800), DoD Instruction 4710.02, *DoD Interactions with Federally-Recognized Tribes*,

DAF Instruction (DAFI) 90-2002, *Interactions with Federally-Recognized Tribes*, and Air Force Manual 32-7003, *Environmental Conservation*, the DAF is also consulting with federally recognized tribes that are historically affiliated with the geographic region that includes Moody AFB regarding the potential to affect properties of cultural, historical, or religious significance. The tribal coordination process is distinct from NEPA consultation or the intergovernmental coordination processes and requires separate notification of all relevant tribes. The timelines for tribal consultation are also distinct from those of intergovernmental consultations. The Moody AFB Installation Commander is the point of contact for consultation with Native American tribes.

Appendix A identifies the Native American tribal governments that Moody AFB consulted with during development of this EA and provides copies of relevant correspondence.

1.7.3 Other Agency Consultations

Compliance with Section 7 of the Endangered Species Act (ESA) and Section 106 of the NHPA is conducted through coordination and consultation with the US Fish and Wildlife Service and the Georgia State Historic Preservation Office, respectively. Consultation submittals and responses are included in **Appendix A**. Moody AFB completed a wetland delineation in support of the Proposed Action and requested a jurisdictional determination of waters of the US, including wetlands, with the US Army Corps of Engineers (USACE) Regulatory Division (**Appendix B**).

1.8 Public and Agency Review of EA

The Proposed Action is subject to the requirements and objectives of EO 11990 and EO 11988 because it would involve construction in a wetland and/or an action in a floodplain if implemented. Therefore, an early public notice was published in *The Valdosta Daily Times* and *The Lanier County Advocate* on 12 May 2024 and 22 May 2024, respectively (**Appendix A**). The early public notice solicited public comments on the Proposed Action and practicable alternatives.

A Notice of Availability (NOA) announcing the 30-day public comment period for the Draft EA and proposed FONSI/FONPA was published in *The Valdosta Daily Times* and *The Lanier County Advocate*. The NOA invited the public to review and comment on the Draft EA and initiated a 30-day public and agency review period. At the close of the review period, substantive comments will be incorporated into the analysis of potential environmental impacts performed as part of the EA, where applicable. Once the Final EA has been approved and the EA process concluded, a NOA of the signed FONSI/FONPA will be published in the newspapers of record and online.

Copies of the Draft EA and proposed FONSI/FONPA were made available for review for 30 days from the date of publication of the NOA at <https://www.moody.af.mil/Resources/Environmental-Initiative> and at the following locations:

Willis L. Miller Library
2906 Julia Drive
Valdosta, Georgia 31602

Miller Lakeland Library
18 South Valdosta Road
Lakeland, Georgia 31635

1.9 Scope of This Environmental Analysis

This EA, prepared in accordance with NEPA, analyzes the potential environmental consequences associated with implementation of 10 proposed facilities and infrastructure improvement projects at Moody AFB. The EA analysis focuses on resources that would be measurably or meaningfully affected by the Proposed Action; detailed discussions of these resources are provided in **Chapter 3**. Cumulative effects are also described for each resource, as applicable. Resources dismissed from detailed analysis in the EA because the Proposed Action would have no effects on them are briefly described in **Section 3.2**.

While the components of the Proposed Action are conceptual in design, the Proposed Action would implement the proposed projects described in **Section 2.1**. The EA will guide the 23 WG and 23 CES in implementing the proposed projects at Moody AFB in a manner that is consistent with DAF standards for environmental stewardship.

2.0 DESCRIPTION OF THE PROPOSED ACTION AND ALTERNATIVES

2.1 Proposed Action

The Proposed Action consists of 10 construction, demolition, and modernization projects (**Table 2-1; Figure 2-1**) that would be implemented on the Moody AFB Main Base within approximately the next five fiscal years (FY 2025 to FY 2030). These projects are evaluated collectively in this EA to streamline the NEPA compliance process; however, each project is independent of the others. The DAF could choose to implement all, none, or any combination of these projects. Specifics of the projects that compose the Proposed Action and Alternatives are described in **Section 2.3**.

Table 2-1. Proposed Construction, Demolition, and Modernization Projects and Implementation Alternatives

Project Number	Project Name	Building Demolition (sq. ft.)	Building Renovation (sq. ft.)	Building Construction (sq. ft.)	Other Improvements
1	Guardian Angel Facility Construction and Renovation Alternative 1	–	117,967	122,699	127,699 sq. ft. of ground disturbance for buildings, parking, access roads, and a retaining wall
	Guardian Angel Facility Construction and Renovation Alternative 2				152,699 sq. ft. of ground disturbance for buildings, parking, access roads, and 300 linear feet of trenching for belowground utilities
2	AFTF Improvements Alternative 1	–	–	10,000	9 acres of concrete surfacing, 1,200 linear feet of trenching, nine stadium-style lights, five fire hydrants, retention pond renovation, and propane gas tank relocation
	AFTF Improvements Alternative 2				6 acres of concrete surfacing, 1,200 linear feet of trenching, nine stadium-style lights, five fire hydrants, retention pond renovation, and propane gas tank relocation
3	Gate Overwatch Position Construction Alternative 1	–	–	2,500	Utility and communication systems connections
4	AGE Facility Construction and Demolition Alternative 1	24,097	–	56,466	Demolish Buildings 732, 752, 755, and 756 and construct a new consolidated AGE facility with warehouse area, administrative space, and covered storage.
	AGE Facility Construction and Demolition Alternative 2	7,896	13,230	37,890	Demolish Buildings 732, and 756. Building 755 would be modified to create administrative areas. Building 752 would be renovated for warehouse space. A new parts-support section and covered storage would be constructed.
5	Burma Road Realignment Alternative 1	–	–	–	Realign Burma Road, repave 6,000 linear feet of Burma Road, and remove 4.6 acres of trees.

Project Number	Project Name	Building Demolition (sq. ft.)	Building Renovation (sq. ft.)	Building Construction (sq. ft.)	Other Improvements
6	38 RQS Parking Lot Construction Alternatives 1 and 2	–	–	–	Construct a 20,000 sq. ft. parking lot with 10 electric charging stations, and 500 linear feet of trenching for electrical utility connection.
7	Airfield Stormwater Repair and Replacement Alternative 1	–	–	–	Repair or replace 1,500 linear feet of belowground stormwater drainage structures, disturbing approximately 7,500 sq. ft. of airfield soils. Replace approximately 2,000 sq. ft. of exposed concrete outfall structures with belowground culverts.
8	Mission Lake Water Barrier and Stone Road Repairs Alternative 1	–	–	–	3,500 cubic yards of riprap to stabilize the water barrier, 4,000 cubic yards of clay to widen Stone Road, and repaving 300 linear feet of Stone Road
	Mission Lake Water Barrier and Stone Road Repairs Alternative 2				3,500 cubic yards of riprap to stabilize the water barrier, 2,000 cubic yards of clay to widen Stone Road to the north only, and repaving 300 linear feet of Stone Road
	Mission Lake Water Barrier and Stone Road Repairs Alternative 3				3,500 cubic yards of riprap to stabilize the water barrier, realign 1,800 linear feet of Stone Road, removing 1.6 acres of vegetation and replacing with pavement for Stone Road.
9	Boundary Fence Repair Alternative 1	–	–	–	Remove 3.4 acres of vegetation along both sides of approximately 10,000 linear feet of Moody AFB boundary fence, and construct a 10-foot-wide unimproved driving lane. Install a culvert in Beatty Branch, and fill portions of the adjacent wetland for the driving lane.
	Boundary Fence Repair Alternative 2				Remove 1.7 acres of vegetation along the Moody AFB-side of approximately 10,000 linear feet of Base boundary fence.
	Boundary Fence Repair Alternative 3				Remove 3.4 acres of vegetation along both sides of approximately 10,000 linear feet of Moody AFB boundary fence.
10	Building Demolition Alternative 1	8,855	–	–	DAF would demolish 11 buildings that have been determined to be underutilized or no longer needed.

sq. ft. – square feet; **AFTF** – Aircraft Fire Training Facility; **AGE** – Aerospace Ground Equipment; **38 RQS** – 38th Rescue Squadron; **AFB** – Air Force Base

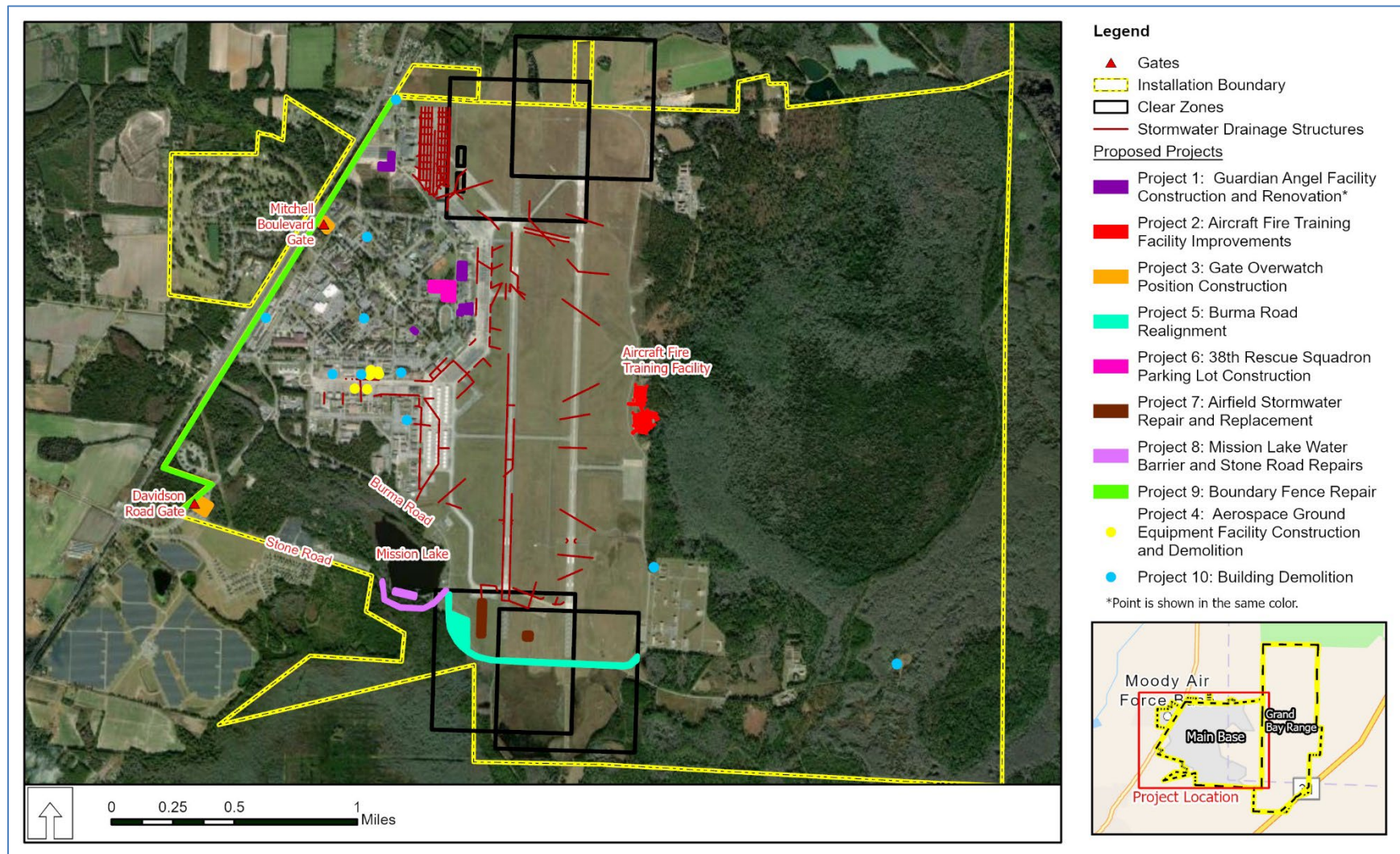


Figure 2-1. Proposed Construction, Demolition, and Modernization Projects at Moody Air Force Base, Georgia

2.2 Selection Standards for Project Alternatives

The CEQ regulations implementing NEPA mandate the consideration of reasonable alternatives for the Proposed Action. “Reasonable alternatives” are those that could also be utilized to meet the purpose of and need for the Proposed Action. Per the DAF EIAP regulations, selection standards are used to identify alternatives that meet the purpose of and need for the Proposed Action. Selection standards enable the 23 WG and 23 CES to critically evaluate whether all reasonable alternatives are included in the analysis. The DAF developed the following selection standards to identify reasonable alternatives for implementing projects comprising the Proposed Action:

- A) Mission Support Siting** – Alternatives must promote mission adjacency and operational efficiency by consolidating mission-specific facilities, functions, and operations. Alternatives must consider existing land use planning requirements as described in the Moody AFB Installation Development Plan (Moody AFB 2023) and area development plans.
- B) Compatibility with Planning Guidance and Development Criteria** – Alternatives must provide necessary facilities and infrastructure that meet established DoD and DAF sizing, siting, safety, and security requirements specified in UFC 4-010-01; DAFMAN 32-1084; DAFI 31-101, *Integrated Defense (ID)*; DAFI 91-212, *Bird/Wildlife Aircraft Strike Hazard (BASH) Management Program*; and Defense Explosive Safety Regulation 6055.09 DAFMAN 91-201, *Explosives Safety Standards*.
- C) Sustainability** – Alternatives must be able to operate in the future without a decline in either the mission or the natural and manmade systems that support it. Alternatives must meet sustainable building and low-impact development requirements in UFC 1-200-02, *High Performance and Sustainable Building Requirements*, and UFC 3-210-10, *Low Impact Development*.
- D) Capacity** – Alternatives must consider facility space utilization to meet the existing and future mission needs of the DAF, Moody AFB, the 23 WG, and the 93 AGOW. Alternatives must take into account the utilization of existing and proposed facilities to efficiently support specific mission functions as well as potential long-term maintenance and repair costs to manage outdated or underutilized facilities.

2.3 Descriptions of the Alternatives

The DAF evaluated design plans for each of the 10 proposed projects to identify potential design or siting alternatives. The following sections summarize the alternatives evaluated for each of the proposed projects making up the Proposed Action. This includes a No Action Alternative for each of the proposed projects. Each proposed project’s No Action Alternative would not meet the purpose and need. However, analysis of the No Action Alternative provides a benchmark, enabling decision makers to compare the magnitude of the potential environmental effects of the Proposed Action; therefore, the No Action Alternative for each proposed project is carried forward for analysis in this EA.

2.3.1 Project 1: Guardian Angel Facility Construction and Renovation

Currently, the 38th Rescue Squadron (38 RQS) primary operations (i.e., Guardian Angel Facility) share a building with the 41st Rescue Squadron (41 RQS). Further, the 38 RQS operations functions are housed in multiple facilities at Moody AFB. The 38 RQS requires an adequately sized and properly configured squadron operations building to consolidate mission functions, effectively execute its mission, and conduct necessary training to ensure mission readiness. In addition, there is currently inadequate parking for privately owned vehicles (POVs) for the 38 RQS primary operations.

DAF would construct a new 55,005-square-foot, single-story squadron operations facility for relocation of the 41 RQS. Additional pavement would be constructed for emergency vehicle access and utility terrain vehicle (UTV) parking. Following relocation of 41 RQS personnel and functions to the new facility, DAF would renovate the 9,925-square-foot Building 556 (which was constructed in 1941) and the 64,568-square-foot Building 663 (which was originally constructed in 2000) for the 38 RQS and construct a 62,414-square-foot addition to Building 663 and a 5,280-square-foot addition to relocate and consolidate maritime functions to Building 556. DAF would also renovate Buildings 606, 607, and 609 (constructed in 2005, 2005, and 1941, respectively) to be fully occupied by the 38 RQS.

2.3.1.1 Project 1, Alternative 1: Guardian Angel Facility Construction and Renovation North Site

DAF would construct a new 55,005-square-foot squadron operations facility near Sijan Street (**Figure 2-2**) to support the 41 RQS. Approximately 5,000 square feet of additional pavement would be constructed for emergency vehicle access and UTV parking, as well as a retaining wall for slope stabilization at the building location. DAF would renovate Buildings 556 and 663, construct a 5,280-square-foot addition to Building 556, and construct a 62,414-square-foot addition to Building 663 (**Figure 2-2**). DAF would renovate Buildings 606, 607, and 609. The total area of ground disturbance is estimated to be 127,699 square feet.

2.3.1.2 Project 1, Alternative 2: Guardian Angel Facility Construction and Renovation South Site

DAF would construct the new 55,005-square-foot squadron operations facility south of the Project 1 Alternative 1 location (**Figure 2-2**) to support the 41 RQS. Approximately 30,000 square feet of additional pavement would be constructed for emergency vehicle access, UTV parking, and key personnel parking. Approximately 300 linear feet of trenching to a depth of approximately 60 inches below grade would be required to extend utilities (i.e., sewer, water, electric, gas, and communications) for the new 41 RQS squadron operations building. DAF would renovate Buildings 556 and 663, construct a 5,280-square-foot addition to Building 556, and construct a 62,414-square-foot addition to Building 663 (**Figure 2-2**). DAF would renovate Buildings 606, 607, and 609. The total area of ground disturbance is estimated to be 152,699 square feet.

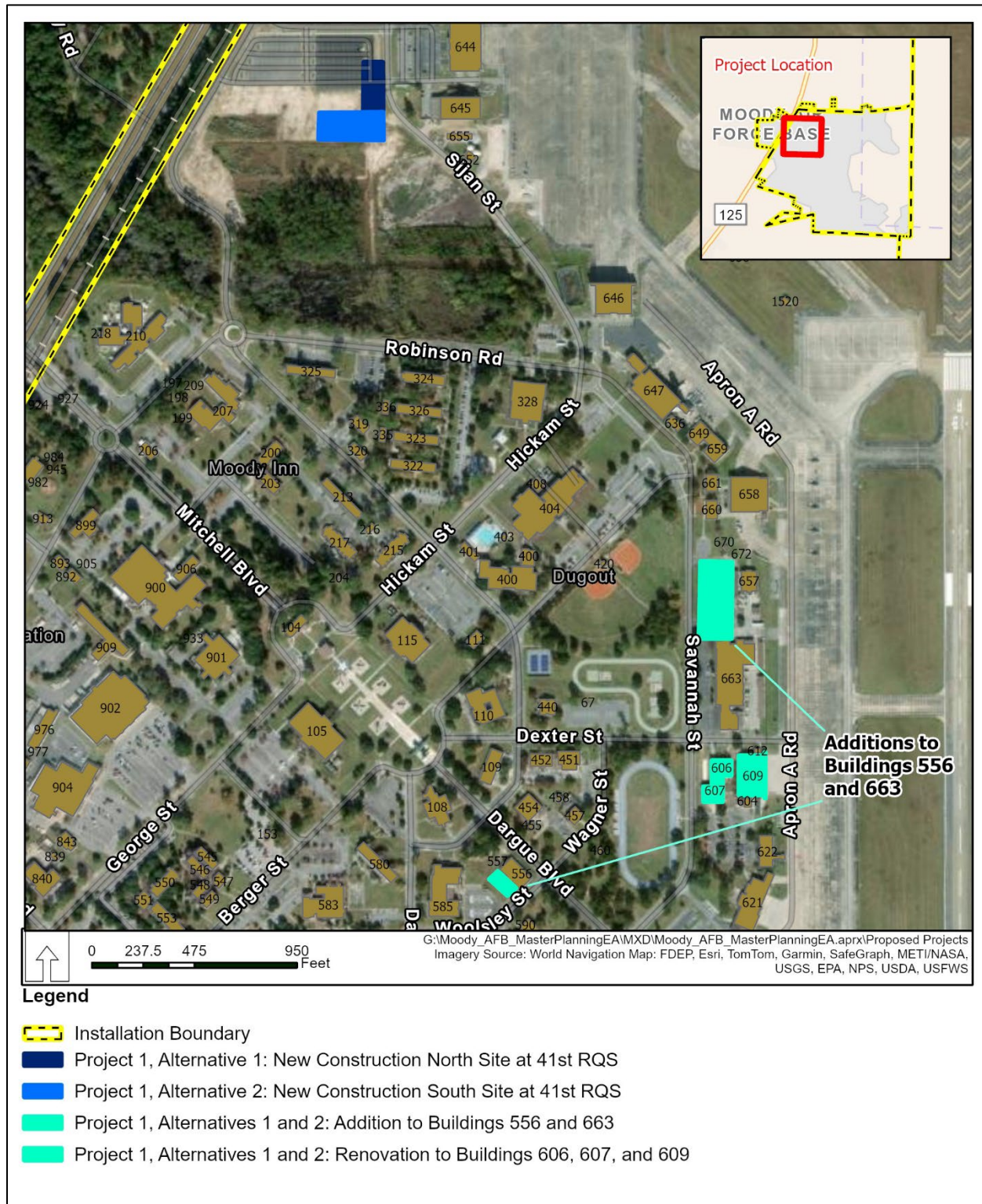


Figure 2-2. Project 1 – Guardian Angel Facility Construction and Renovation

2.3.1.3 Project 1, No Action Alternative

DAF would not construct a new facility for the 41 RQS and would not renovate and construct an addition to Building 663 for the 38 RQS. The 38 RQS would continue to have functional operations scattered across several facilities at Moody AFB, sustaining inefficiencies in use of manpower, equipment, and materials that are not housed in a single location. The 41 RQS and 38 RQS would share Building 663 to support their primary squadron operations.

2.3.2 Project 2: Aircraft Fire Training Facility Improvements

The existing AFTF has physical limitations in meeting aircraft fire training requirements (in accordance with AFI 32-2001, *Fire and Emergency Services Program*), including the lack of proper lighting for training in low-light conditions and warning lighting (DAFMAN 91-203, *Air Force Occupational Safety, Fire, and Health Standards*); a propane tank located in an explosive quantity-distance (Q-D) arc; a degraded mockup training airplane; and the lack of an air-conditioned training facility with proper storage and emergency safety features (in accordance with the Career Field Education and Training Plan; Air Force Tactics, Techniques, and Procedures 3-32.41, *Contingency Firefighting Operations*; DAFMAN 91-203, National Fire Protection Association [NFPA] 1403, Annex D, *Heat Exhaustion and Heat Stroke in Training*, and NFPA 1584, *Standard on the Rehabilitation Process for Members During Emergency Operations and Training Exercises*), and restrooms (in accordance with Occupational Health and Safety Administration 29 CFR 1910.141(c)). Moody AFB also lacks a designated truck driver training pad (in accordance with Career Field Education and Training Plan and NFPA 1002, *Standard for fire Apparatus Driver/Operator Professional Qualifications*), and truck driver training is conducted at temporary locations across Moody AFB as needed.

DAF would modernize the existing AFTF at Moody AFB. Using approximately 500 cubic yards of concrete, the DAF would construct an approximately 6-acre concrete pad around the AFTF, on each side of the structural fire training facility, and connect the concrete pad to North Perimeter Road. The DAF would remove and install a new mockup training aircraft for fire training. Five new fire hydrants would be installed replacing the existing fire hydrants. Approximately 100 feet of trenching to a depth of approximately 24 inches below grade would be required to connect the new hydrants to previously used locations. The DAF would install nine stadium-style lights to encompass all areas within the AFTF to allow for nighttime training. Approximately 1,200 linear feet of trenching for electrical wiring to a depth of 24 inches below grade would be completed for the nine lights; each of the nine lights would be set in concrete footers buried to a depth of 8 feet. The existing retention pond would be renovated, the propane gas tank replaced at a location beyond the existing Q-D arc, and environmental concerns associated with hazardous materials (i.e., perfluorooctanoic acid [PFOA]) managed by capping those contaminated soils with concrete. DAF would construct a 10,000-square-foot training facility that would include bathrooms, showers, a breakroom, a clean room/washroom, rollup doors on each end for drive-through capability, and concrete-finished floor and would install ceiling fans, with heating, ventilation, and air conditioning inside interior rooms. DAF would also construct an approximately 3-acre pad for a truck driving training using approximately 2,300 cubic yards of concrete.

2.3.2.1 Project 2, Alternative 1: Aircraft Fire Training Facility Improvements with Truck Driving Training

DAF would construct all proposed facilities at the existing AFTF as described by the Proposed Action (**Figure 2-3**).

2.3.2.2 Project 2, Alternative 2: Aircraft Fire Training Facility Repairs and Construction, No Truck Driving Pad

DAF would construct all the proposed facilities and infrastructure at the existing AFTF as described in Project 2, Alternative 1, except for the approximately 3-acre truck driving training pad (**Figure 2-4**). Truck driver training would continue at a temporary pad set up elsewhere on Moody AFB Main Base when needed.

2.3.2.3 Project 2, No Action Alternative

The DAF would not construct new facilities or renovate existing facilities at the AFTF. The AFTF is currently inoperable, and temporary duty travel would continue to be required for all aircraft fire training. The propane gas tank would remain in an inappropriate location within an existing, explosive Q-D arc, and environmental concerns associated with PFOA would not be properly managed. Truck driver training would continue at a temporary pad set up elsewhere on Moody AFB when needed.

2.3.3 *Project 3: Gate Overwatch Position Construction*

UFC 4-022-01, *Entry Control Facilities Access Control Points*, states installations must consider additional position(s) for security personnel to facilitate a response to a threat. The Davidson Road and Mitchell Boulevard gates do not meet these current AT/FP requirements. Currently, security personnel at both gates use armored vehicles parked at the gates to facilitate a response to a threat in lieu of reinforced overwatch positions.

DAF would construct two-story overwatch buildings at Moody AFB gates. Each overwatch building would be approximately 1,250 square feet, with approximately 625 square feet of new ground disturbance. Construction would include concrete footings and standard framing techniques. The overwatch buildings would be connected to utilities and communication systems, which are all located proximate to the gates.

2.3.3.1 Project 3, Alternative 1: Gate Overwatch Position Construction at Davidson Road and Mitchell Boulevard Gates

The DAF would construct two-story overwatch facilities at both the Davidson Road Gate and at the Mitchell Boulevard Gate (**Figure 2-5**). Approximately 50 feet of trenching to a depth of 24 inches would be required to connect electrical and gas utility and communication systems to each proposed overwatch facility.

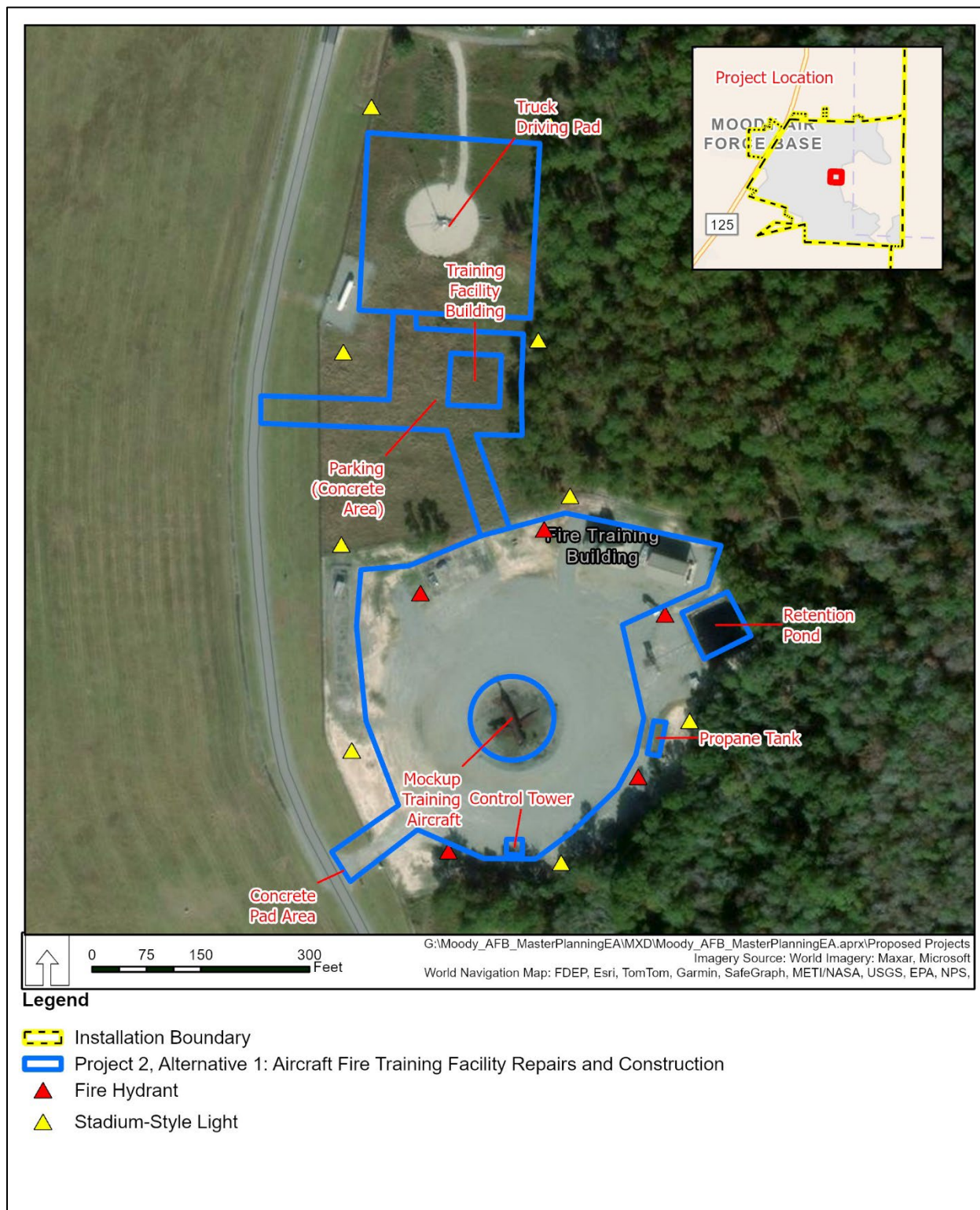


Figure 2-3. Project 2 – Aircraft Fire Training Facility Improvements Alternative 1

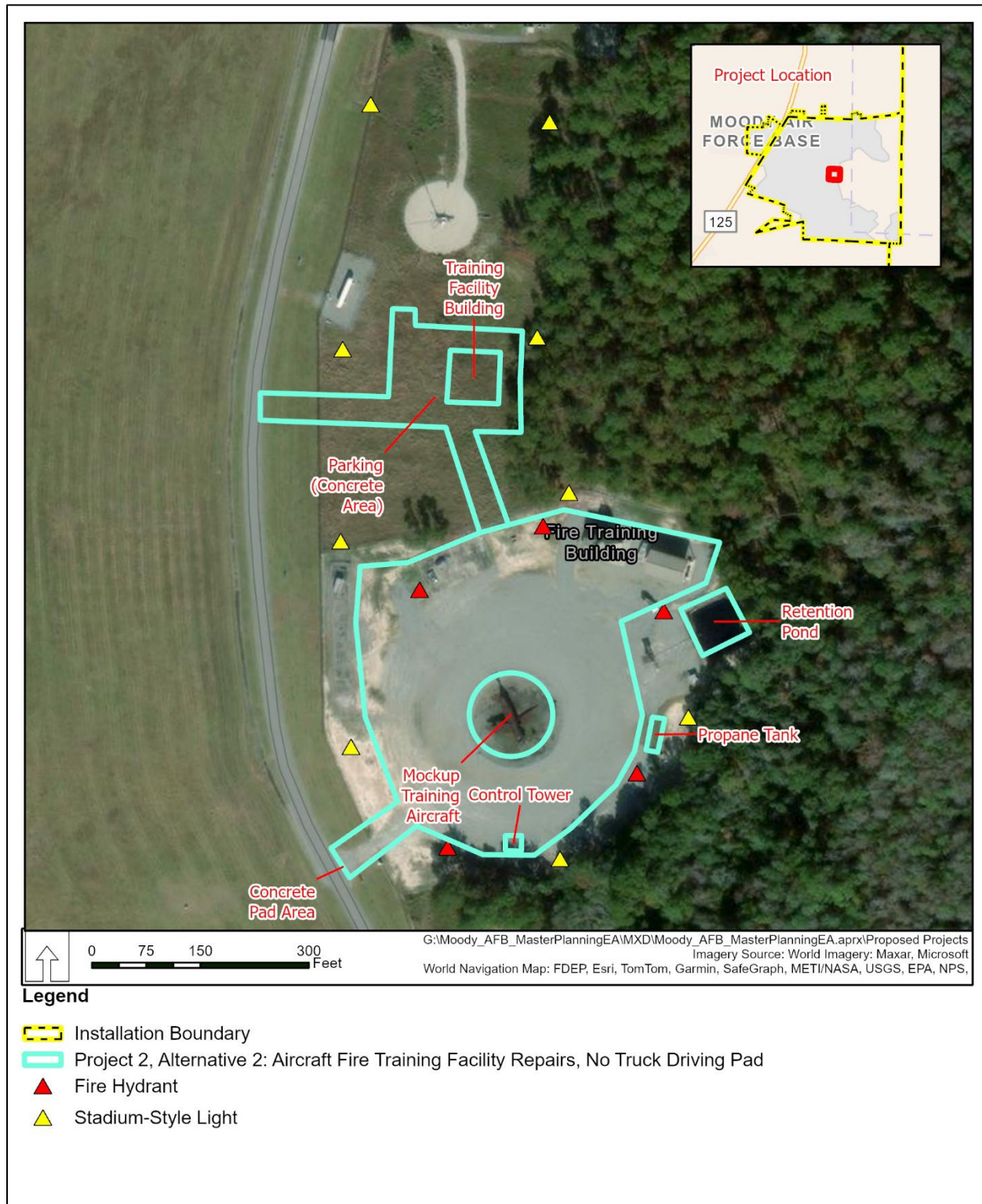


Figure 2-4. Project 2 – Aircraft Fire Training Facility Improvements Alternative 2

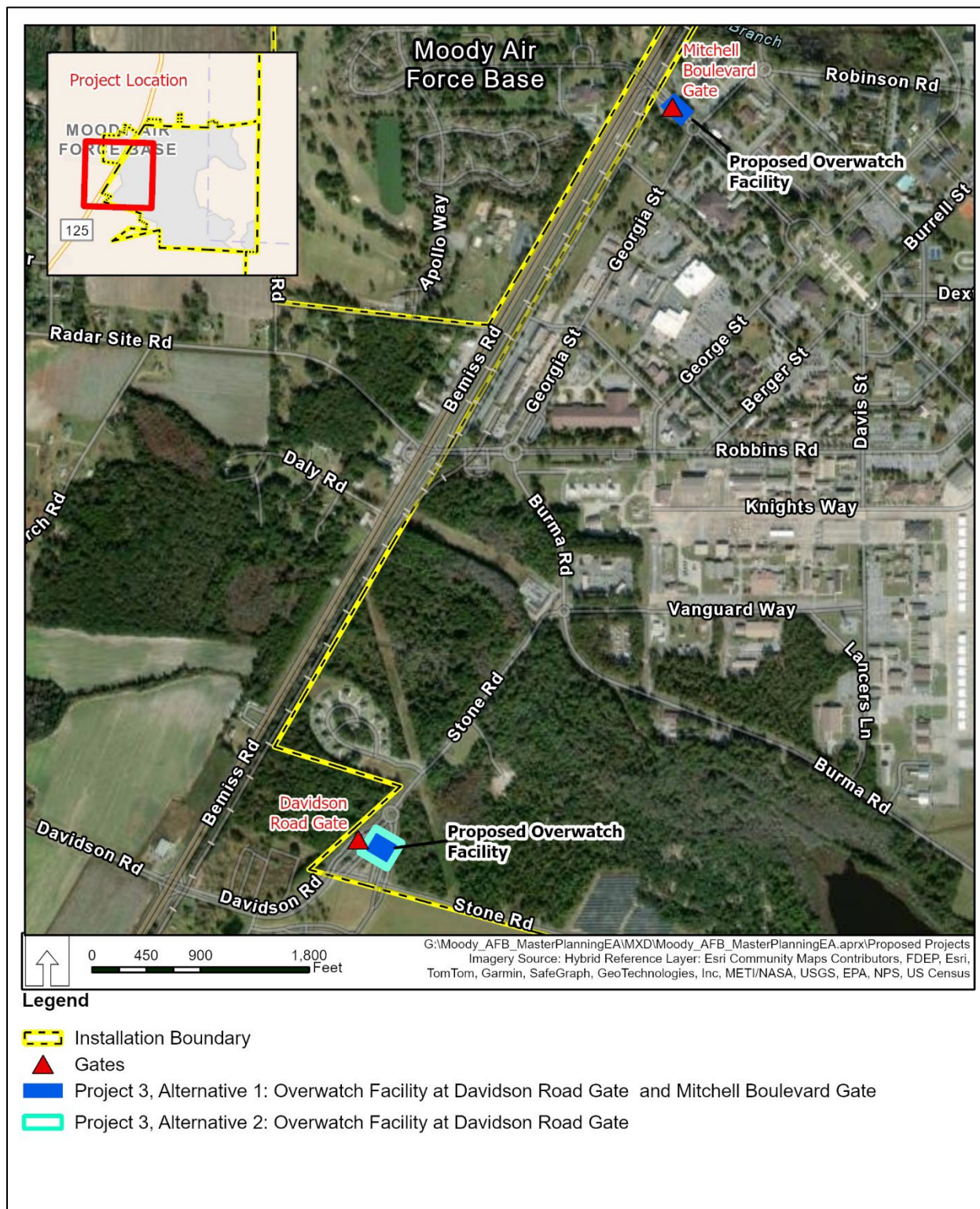


Figure 2-5. Project 3 – Gate Overwatch Position Construction

2.3.3.2 Project 3, Alternative 2: Gate Overwatch Position Construction at Davidson Road Gate Only

The DAF would construct a two-story overwatch facility only at the Davidson Road Gate (**Figure 2-5**). Approximately 50 feet of trenching to a depth of 24 inches would be required to connect electrical and gas utility and communication systems to the proposed overwatch facility.

2.3.3.3 Project 3, No Action Alternative

The DAF would not construct new overwatch facilities. Gate security personnel would continue to operate from armored vehicles parked at each gate. The gate security features would not meet AT/FP requirements.

2.3.4 *Project 4: Aerospace Ground Equipment Facility Construction and Demolition*

The current AGE complex at Moody AFB lacks adequate warehouse and office space. These functions are unconsolidated on Moody AFB and therefore lead to inefficiencies in AGE operations. This proposed project would construct new AGE facilities, renovate existing AGE facilities, and demolish existing AGE facilities within the existing AGE complex to consolidate AGE facilities and operations.

2.3.4.1 Project 4, Alternative 1: Aerospace Ground Equipment Facility Construction and Demolition with New Shop, Administrative Space, and Covered Storage

The DAF would demolish Buildings 732, 752, 755, and 756 (which were constructed in 1997, 1994, 1962, and 1977, respectively) and construct a new consolidated AGE facility with warehouse area, administrative space, and covered storage (**Figure 2-6**). A total of 24,097 square feet of existing buildings would be demolished, and 22,656 square feet of new building space, and 33,810 square feet of covered storage would be constructed. The covered storage would be constructed over an already paved area; no new surface paving or concrete would be required.

2.3.4.2 Project 4, Alternative 2: Aerospace Ground Equipment Facility Construction and Demolition without New Shop and More Renovated Administrative Space

The DAF would demolish Buildings 732, and 756. Building 755 would be modified to create administrative areas (e.g., offices, break room, conference room). Building 752 would be renovated for warehouse space. DAF would construct a new parts-support section (**Figure 2-7**). A total of 7,896 square feet of existing buildings would be demolished; 13,230 square feet of Buildings 752 and 766 would be renovated and 4,080 square feet of new building space would be constructed. A total of 33,810 square feet of covered storage would be constructed. The covered storage would be constructed over an already paved area; no new surface paving or concrete would be required.

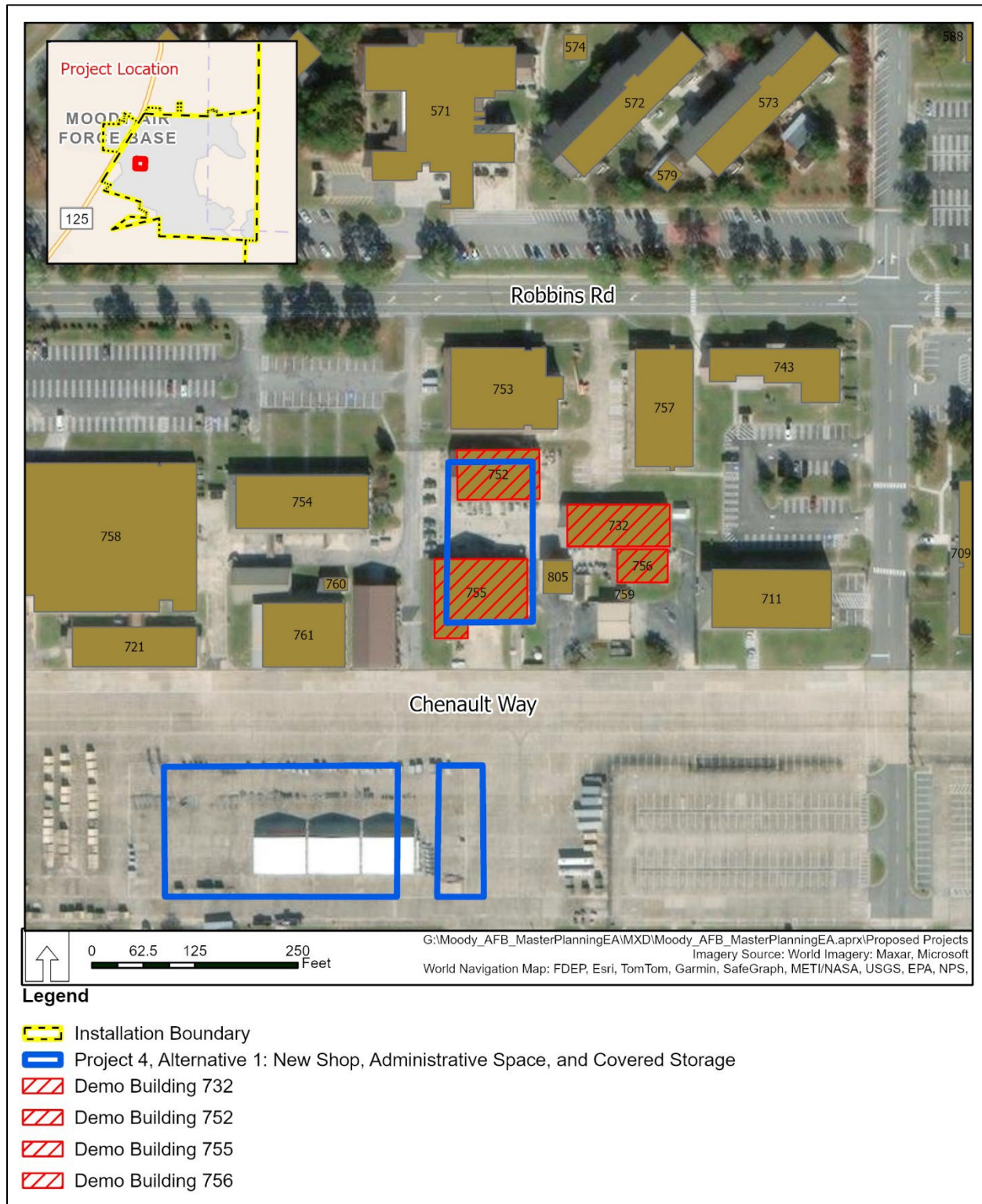


Figure 2-6. Project 4, Alternative 1 – Aerospace Ground Equipment Facility with New Shop, Administrative Space, and Covered Storage

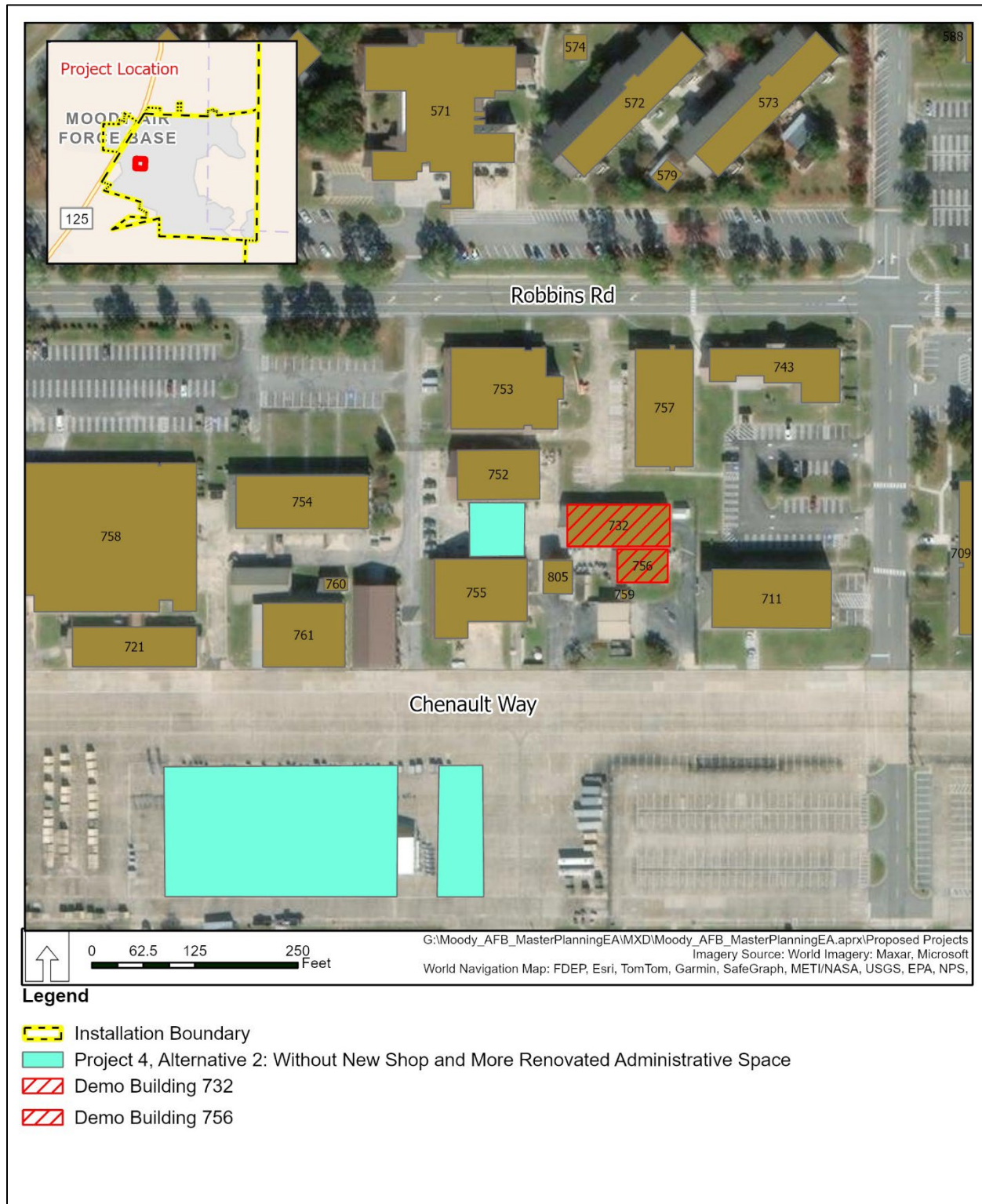


Figure 2-7. Project 4, Alternative 2 – Aerospace Ground Equipment Facility without New Shop and More Renovated Administrative Space

2.3.4.3 Project 4, No Action Alternative

The DAF would not demolish existing buildings or construct new facilities to consolidate AGE functions at a single AGE campus at Moody AFB. AGE operations would continue in incontiguous, antiquated facilities and would not be able to accommodate newer aircraft equipment, which is larger than existing equipment for the A-10s, HH-60s, and C-130s. Future missions would require utilizing a different facility for AGE.

2.3.5 Project 5: Burma Road Realignment

A CZ is an area 3,000 feet wide, centered on the centerline of the runway, extending 3,000 feet from the ends of the runway. This is the area associated with the airfield that has the greatest risk of accidents. Land use compatibility guidelines in accordance with AFI 32-1015 and Air Force Handbook 32-708, *AICUZ Program Manager's Guide*, are established for the CZ for aircraft and personnel safety, such as limitations on certain types of potential obstructions. Part of Burma Road is located within the graded portion of the Runway 18R/36L CZ. Because this portion of Burma Road is located in the graded portion of the CZ, it currently requires an airfield waiver from the land use compatibility guidelines for the CZ. Further, trees adjacent to Burma Road and within the CZ do not meet the requirements of UFC 3-260-1, *Airfield and Heliport Planning and Design*.

Burma Road would be realigned to the southwest and beyond the graded portion of the Runway 18R/36L CZ. As part of the Burma Road realignment, the Moody AFB boundary fence and airfield fence would be realigned. The realigned Base boundary fence would be constructed to current AT/FP standards. Realignment of Burma Road would require the removal of trees from the realignment footprint. Approximately 6,000 linear feet of Burma Road would be realigned and repaved.

2.3.5.1 Project 5, Alternative 1: Burma Road Realignment

The DAF would realign and repave approximately 6,000 linear feet of Burma Road with either conventional or permeable asphalt. The realignment of Burma Road would move it out of the graded portion of the CZ (**Figure 2-8**). Realignment of Burma Road would require the removal of approximately 4.6 acres of trees from the realignment footprint and graded portion of the CZ.

2.3.5.2 Project 5, No Action Alternative

DAF would not realign and repave Burma Road. Existing trees and Burma Road would remain located within the graded portion of the CZ, and an airfield waiver would continue to be required as Burma Road and the trees would not meet the requirements of UFC 3-260-1.

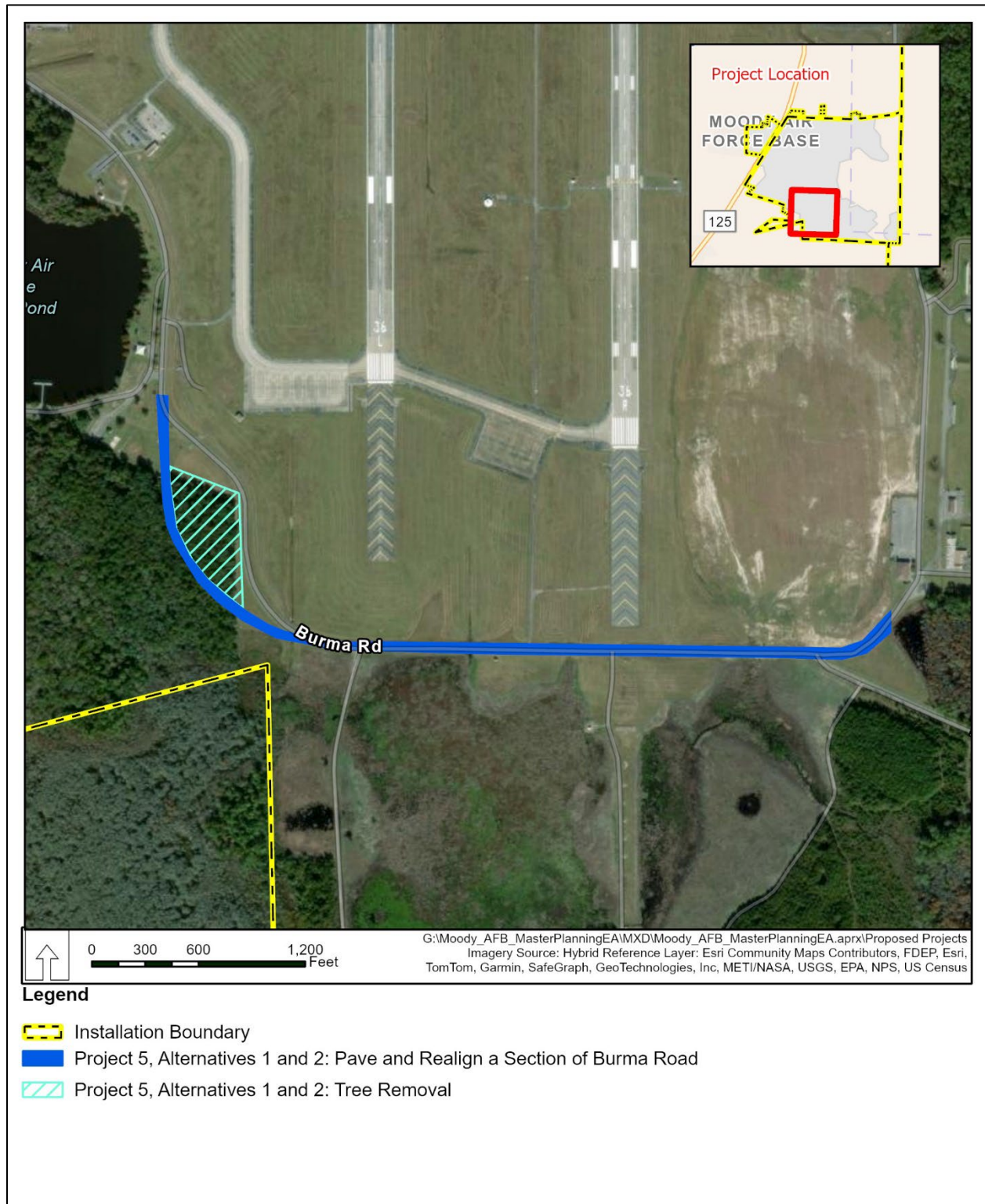


Figure 2-8. Project 5 – Burma Road Realignment

2.3.6 Project 6: 38th Rescue Squadron Parking Lot Construction

A new 20,000-square-foot parking lot for 125 POVs to support the 38 RQS operation in Building 663 would be constructed on an existing fitness track east of Building 663 (**Figure 2-9**). The parking lot would be paved with conventional asphalt. A total of 10 electric charging stations for POVs would be included at the parking lot, and approximately 500 feet of trenching for electrical connections would occur to support those charging stations.

2.3.6.1 Project 6, Alternative 1: 38th Rescue Squadron Parking Lot Construction

A new 20,000-square-foot parking lot for 125 POVs would be constructed on an existing fitness track east of Building 663 (**Figure 2-9**). The parking lot would be paved with either conventional or permeable asphalt. A total of 10 electric charging stations for POVs would be included at the parking lot, and approximately 500 feet of trenching for electrical connections to an estimated depth of 24 inches would occur to support those charging stations.

2.3.6.2 Project 6, No Action Alternative

Under the No Action Alternative, DAF would not construct a new parking lot to support the 38 RQS. No additional electric charging stations for POVs would be provided. There would continue to be inadequate parking for POVs at Building 663 to support the 38 RQS.

2.3.7 Project 7: Airfield Stormwater Repair and Replacement

The Moody AFB airfield stormwater drainage system is mostly below ground. Portions of the drainage system have noticeably begun to fail, and deterioration of underground drainage structures has caused visible slumping of surface soils within the airfield. The stormwater drainage system failures could lead to sediment transport in stormwater as well as causing the system to not meet Storm Water Management Facilities requirements of UFC 3-260-1.

An intrusion and infiltration study of the airfield stormwater drainage system would be completed to identify the exact location and types of stormwater drainage failures. Culverts and belowground drainage features identified as failing by the study would be removed and replaced. Additionally, two exposed concrete outfall structures (totaling approximately 2,000 square feet) passing under Burma Road at the south end of the airfield that are within the graded portion of the Runway 18R/36L CZ would be removed and replaced with belowground culverts.



Figure 2-9. Project 6 – 38th Rescue Squadron Parking Lot Construction

2.3.7.1 Project 7, Alternative 1: Airfield Stormwater Repair and Replacement

The DAF would complete a condition survey of all stormwater structures previously located during the 2023 Ground Penetrating Radar Airfield Survey. Based upon existing visual evidence of belowground drainage structure failures, up to 15 percent of the existing stormwater system (i.e., approximately 1,500 linear feet) would be repaired or replaced (**Figure 2-10**). Existing belowground drainage lines consist primarily of concrete, reinforced concrete, corrugated metal, vitrified clay, terra cotta, and cast iron. Approximately 1,500 linear feet of these older belowground structures would be excavated, removed, and replaced with the same-sized stormwater drainage pipe, using concrete, high-density polyethylene, or corrugated metal stormwater pipes. Stormwater system repairs would require excavation within the airfield at select locations to access the belowground stormwater structures, disturbing approximately 7,500 square feet of airfield soils. Excavation, repair, and replacement activities would be coordinated with airfield operations to ensure that at least one Moody AFB runway would always remain operational.

Two concrete stormwater outfall structures located in the CZ would be removed and replaced with belowground culverts. This would remove approximately 700 linear feet of aboveground concrete flow dissipation outfall structures and replace them with either 700 linear feet of belowground concrete, high-density polyethylene or corrugated metal stormwater pipes to disperse stormwater flows passing from the airfield surface through existing culverts located beneath Burma Road.

2.3.7.2 Project 7, No Action Alternative

DAF would not conduct a study to determine where belowground stormwater features require repair and replacement. Damaged and failing stormwater structures in the airfield would remain unchanged. Surface slumping of soils and ground disturbance from the failure of belowground drainage feature would persist on the ground surface at the airfield. Stormwater drainage would remain inefficient. Concrete structures would remain in the CZ, and an airfield waiver with land use compatibility guidelines for the CZ would continue to be required.

2.3.8 Project 8: Mission Lake Water Barrier and Stone Road Repairs

The water barrier for Mission Lake underlies a portion of Stone Road. The Mission Lake water barrier and Stone Road show signs of aging and degradation, and approximately 300 feet of Stone Road adjacent to Mission Lake lacks shoulders, which poses a safety risk for vehicles. Further, a failure of the Mission Lake water barrier would lead to the unwanted and potentially uncontrolled drainage of Mission Lake.

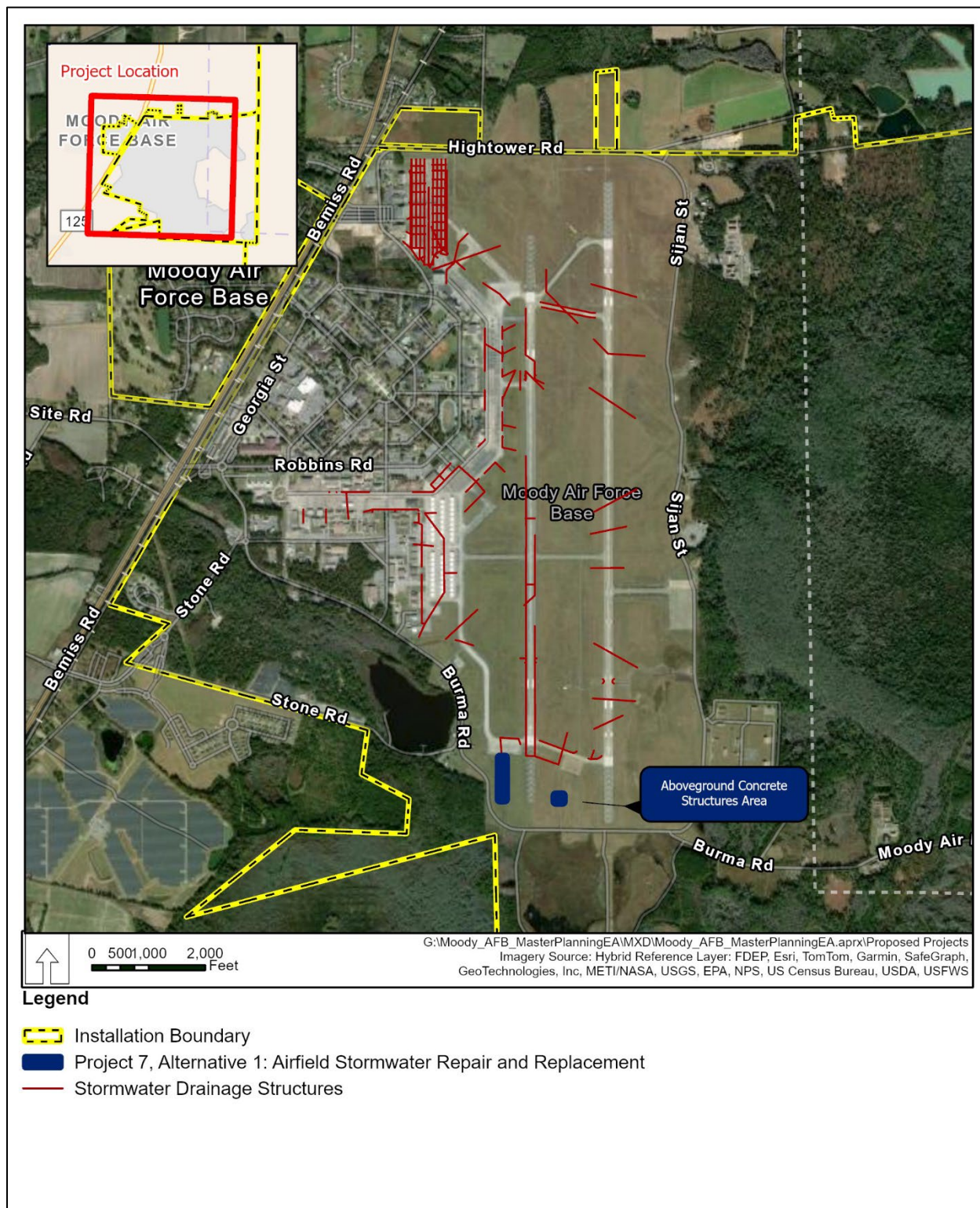


Figure 2-10. Project 7 – Airfield Stormwater Repair and Replacement

The Mission Lake water barrier would be strengthened and stabilized by installing riprap at a width of 20 feet from the toe of the slope on each side of Stone Road for a distance of 300 feet. It is estimated that approximately 3,500 cubic yards of riprap would be used to stabilize the water barrier. Further, Stone Road would be widened to include adequate shoulders; approximately 4,000 cubic yards of clay fill would be used to construct the new Stone Road shoulders on both sides of the road. Approximately 300 feet of the surface of Stone Road at the water barrier would be improved through milling and overlaying of the surface.

2.3.8.1 Project 8, Alternative 1: Mission Lake Water Barrier and Stone Road Repairs – Both Shoulders

DAF would extend the shoulders of Stone Road both to the north and south along an approximately 300-foot section of road currently lacking shoulders (**Figure 2-11**). The water barrier for Mission Lake would be strengthened by installing 3,500 cubic yards of riprap at the toe of slope on both sides of the water barrier. It is estimated that 20 feet of riprap would be placed on both sides of the water barrier and a total of 4,000 cubic yards of clay would be used to backfill over the water barrier to support new shoulders for Stone Road. Stone Road would be closed during the construction of shoulder and water barrier improvements and then repaved prior to reopening the road for travel.

2.3.8.2 Project 8, Alternative 2: Mission Lake Water Barrier and Stone Road Repairs – North Shoulder

Project 8, Alternative 2, would be the same as Project 8, Alternative 1, except for the approximately 300 feet of Stone Road that lacks shoulders. A new shoulder would be constructed only on the north side (Mission Lake side) of Stone Road and not on the south side of Stone Road (**Figure 2-11**), where a parallel drainage channel would potentially be impacted by fill material. Approximately 2,000 cubic yards of clay fill would be required to construct the shoulder on the north side of Stone Road. Stone Road would be closed during the construction of shoulder and water barrier improvements then repaved prior to reopening the road for travel.

2.3.8.3 Project 8, Alternative 3: Repair Mission Lake Water Barrier and Realign Stone Road

DAF would strengthen the water barrier as described for Project 8, Alternative 1. However, instead of widening 300 feet of Stone Road, Stone Road would be realigned to no longer pass over the top of the Mission Lake water barrier (**Figure 2-11**). Approximately 1,800 linear feet of a new two-lane road with shoulders would be constructed to realign Stone Road south of the Mission Lake water barrier and south of the stream channel that originates as the outfall from Mission Lake and runs parallel to and south of the current Stone Road alignment. This would require approximately 1.6 acres of tree removal, grading, and new pavement to realign Stone Road. The former Stone Road alignment would be decommissioned, old pavement removed, and the surface covered in turf grasses or gravel, as necessary to support the Mission Lake water barrier.

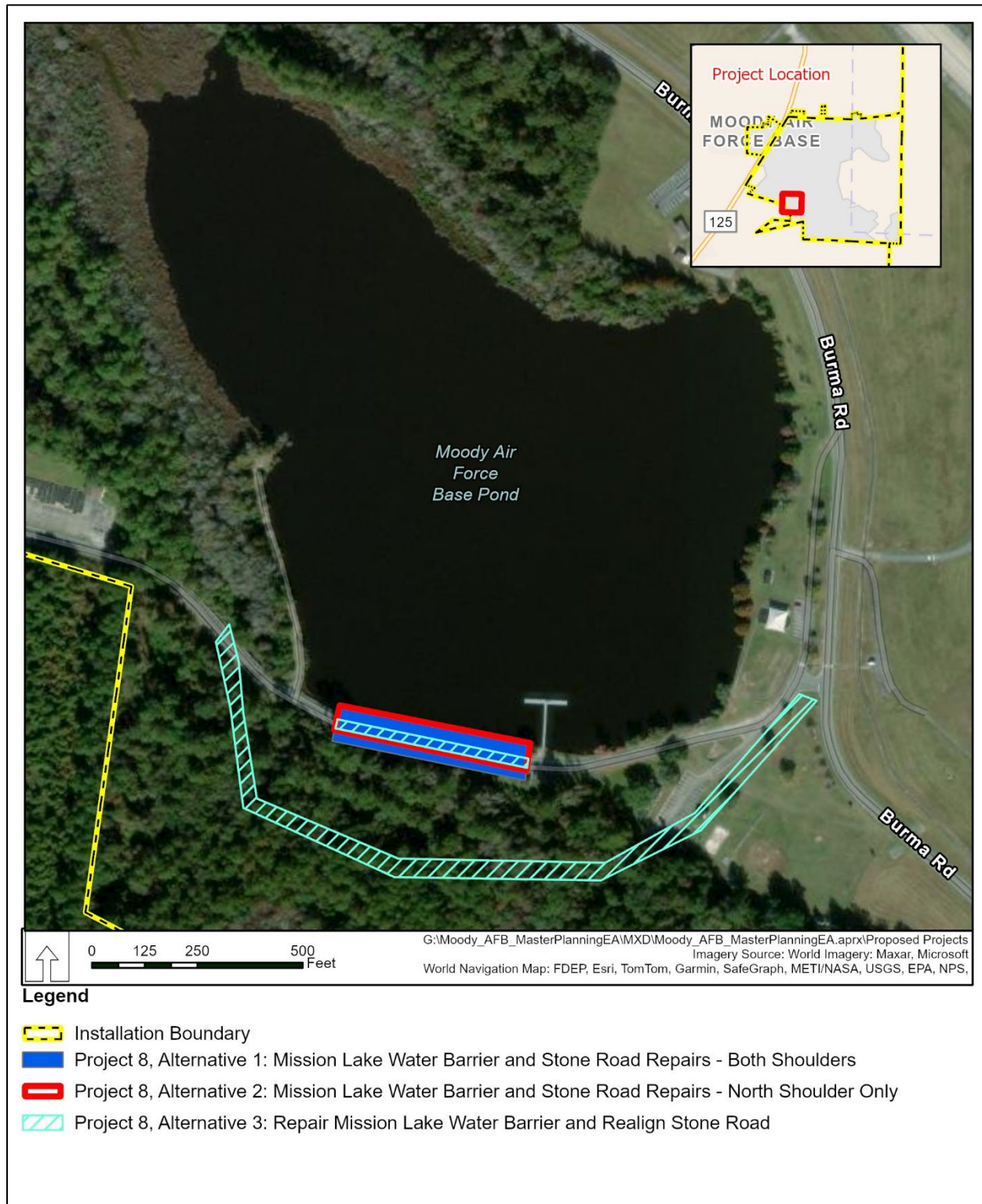


Figure 2-11. Project 8 – Mission Lake Water Barrier and Stone Road Repairs

2.3.8.4 Project 8, No Action Alternative

The Mission Lake water barrier would not be strengthened under the No Action Alternative. The water barrier to Mission Lake would continue to degrade, with a risk of potential future failure, draining Mission Lake. Further, there would be no shoulders on either side of approximately 300 feet of Stone Road along Mission Lake, continuing to make this portion of Stone Road a safety hazard for vehicular travel.

2.3.9 Project 9: Boundary Fence Repair

Portions of the Moody AFB boundary fence along the western Moody AFB boundary contain mature woody vegetation that extends to the fence line. There is no perimeter driving lane parallel to the western Base boundary fence because of this vegetation. Required fence maintenance is difficult without proper access to the fence. Further, the lack of a clear line-of-sight at the boundary fence does not meet AT/FP requirements.

To meet AT/FP requirements, the vegetation would be cleared along the Moody AFB western boundary fence to create a clear line of sight and provide adequate width for a driving lane on the inside of the boundary fence. All stumps and belowground vegetation would be removed on the Moody AFB side of the boundary fence, and a single-lane dirt road (approximately 10 feet wide) would be constructed parallel to the fence line. The existing fence would be repaired as needed in areas that are currently inaccessible due to vegetation encroachment.

2.3.9.1 Project 9, Alternative 1: Boundary Fence Repair with Driving Lane

DAF would remove vegetation along approximately 10,000 linear feet of the Moody AFB boundary fence to create a 16-foot-wide corridor by clearing all vegetation on both sides of the fence (**Figure 2-12**). It is estimated that approximately 3.4 acres of vegetation would be removed. Stumps would be removed, and soils would be prepared to create a driving lane within the 16-foot-wide corridor. This would include grading the roadway through an existing wetland area, placing a culvert in Beatty Branch, and building the driving lane over the culverted Beatty Branch. The driving lane would be approximately 10 feet wide with an unimproved (i.e., dirt) surface. The boundary fence would be repaired in all areas that have been previously inaccessible due to thick vegetation growth.

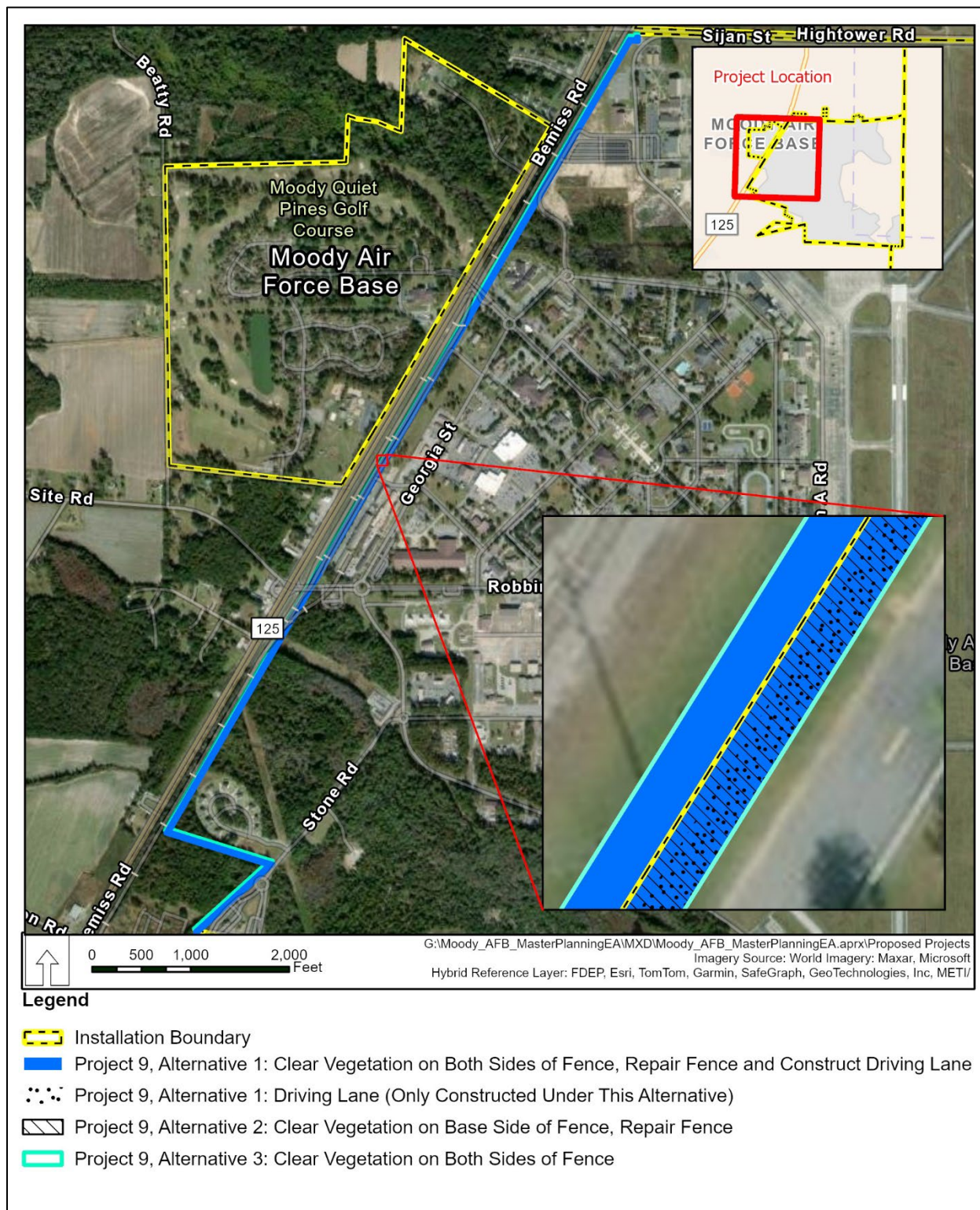


Figure 2-12. Project 9 – Boundary Fence Repair

2.3.9.2 Project 9, Alternative 2: Boundary Fence Repair with Vegetation Clearance on the Base Side of the Fence

DAF would remove all aboveground vegetation along approximately 10,000 linear feet of the Moody AFB boundary fence to create a 16-foot-wide corridor clear of vegetation only on the Moody AFB side of the fence (**Figure 2-12**). It is estimated that approximately 1.7 acres of aboveground vegetation would be removed. Stumps and other belowground vegetation material would be left in place, and no driving lane would be constructed. The boundary fence would be repaired in all areas that have been previously inaccessible due to thick vegetation growth.

2.3.9.3 Project 9, Alternative 3: Boundary Fence Repair with Vegetation Clearance on Both Sides of the Fence

DAF would remove all aboveground vegetation along approximately 10,000 linear feet of the Moody AFB boundary fence to create a 16-foot-wide corridor clear of vegetation on both sides of the Moody AFB boundary fence (**Figure 2-12**). It is estimated that approximately 3.4 acres of vegetation would be removed. Stumps and other belowground vegetation material would be left in place, and no driving lane would be constructed. The boundary fence would be repaired in all areas that have been previously inaccessible due to thick vegetation growth.

2.3.9.4 Project 9, No Action Alternative

Vegetation growth would remain along portions of the Moody AFB boundary fence on the west side of Main Base. Line-of-sight for security personnel along the Moody AFB boundary would continue to be greatly obscured by the vegetation. There would be limited to no access along the entire length of the fence line, and there would be no vehicle access for Moody AFB security officers to patrol the perimeter along the Base boundary fence. Portions of the Base boundary fence would remain in disrepair because those areas cannot be accessed due to dense vegetation.

2.3.10 Project 10: Building Demolition

DAF would demolish 11 buildings that have been determined to be underutilized or no longer needed (**Figure 2-13; Table 2-2**). Demolition activities would remove a total of 8,855 square feet of building space from Moody AFB Main Base.

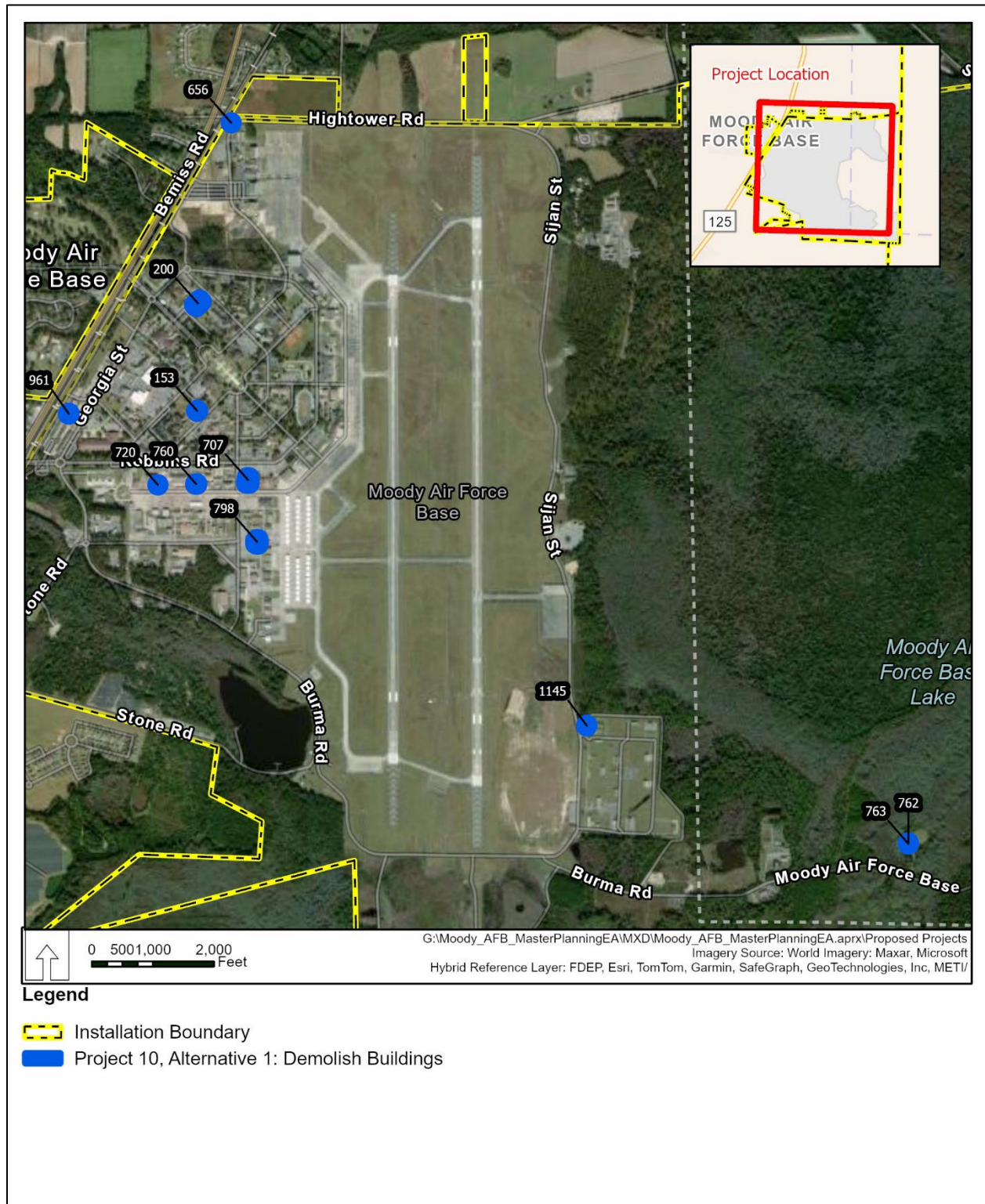


Figure 2-13. Project 10 – Building Demolition

Table 2-2. Project 10, Proposed Building Demolition

Building Number	Building Area (square feet)	Year Built	Functional Status
153	440	2005	Latrine next to dorm facilities
200	264	1992	Unused bathroom at Grand Bay Range
656	76	1996	Damaged and unused guard shack at the Hightower Gate
707	3,042	1987	Human performance optimization; functions would be consolidated to Building 706
720	113	1981	Old air compressor building
760	429	1984	Old Washrack office
762	120	1991	Explosive Ordnance Disposal concrete pebble stone building
763	120	1988	Explosive Ordnance Disposal concrete pebble stone building
798	3,712	2001	Human performance optimization
961	297	1953	Contractor-operated civil engineer supply store storage
1145	242	2003	In-line pump/chlorine injector facility

2.3.10.1 Project 10, Alternative 1: Demolish Eleven Buildings

DAF would demolish 11 buildings that have been determined to be underutilized or no longer needed as described by the Proposed Action (**Figure 2-13; Table 2-2**). All demolished materials and solid waste would be removed from Moody AFB using dump trucks and haul-off debris containers. All demolition debris and other associated solid waste would be transported to the Evergreen Landfill in Valdosta, Georgia. Demolished building locations would either be left with the foundation building pad in place, or the building foundations removed, and the soils revegetated and maintained as grass-covered space.

2.3.10.2 Project 10, No Action Alternative

None of the 11 underutilized buildings on Moody AFB Main would be demolished. The DAF would either mothball the buildings or continue to maintain these underutilized or unneeded facilities, pay for utility costs for heating and air conditioning of the facilities, and manage the overall space utilization of the underperforming facilities.

2.4 Screening of Alternatives

Table 2-3 compares the alternatives that were identified as potentially meeting the purpose of and need for the Proposed Action and whether or not each would meet the selection standards presented in **Section 2.2**. Green indicates that the alternative would fully meet the requirements for that criterion; yellow indicates that the alternative would partially meet the requirements for that criterion; and red indicates that the criterion under consideration would not be met.

Table 2-3. Screening of the Alternatives

Alternatives	Selection Standards				Meets the Purpose and Need
	Mission Support Siting	Compatibility with Planning Guidance and Development Criteria	Sustainability	Capacity	
	A	B	C	D	
Project 1: Guardian Angel Facility Construction and Renovation					
Alternative 1	Yes	Yes	Yes	Yes	Yes
Alternative 2	Yes	Yes	Yes	Yes	Yes
Project 2: Aircraft Fire Training Facility Improvements					
Alternative 1	Yes	Yes	Yes	Yes	Yes
Alternative 2	Yes	Yes	Yes	Yes	Yes
Project 3: Gate Overwatch Position Construction					
Alternative 1	Yes	Yes	Yes	Yes	Yes
Alternative 2	Yes	Partial	Yes	Yes	Yes
Project 4: Aerospace Ground Equipment Facility Consolidation and Demolition					
Alternative 1	Yes	Yes	Yes	Yes	Yes
Alternative 2	Yes	Yes	Yes	Yes	Yes
Project 5: Burma Road Realignment					
Alternative 1	Yes	Yes	Yes	Yes	Yes

Alternatives	Selection Standards				Meets the Purpose and Need
	Mission Support Siting	Compatibility with Planning Guidance and Development Criteria	Sustainability	Capacity	
	A	B	C	D	
Project 6: 38th Rescue Squadron Parking Lot Construction					
Alternative 1	Yes	Yes	Yes	Yes	Yes
Project 7: Airfield Stormwater Repair and Replacement					
Alternative 1	Yes	Yes	Yes	Yes	Yes
Project 8: Mission Lake Water Barrier and Stone Road Repairs					
Alternative 1	Yes	Yes	Yes	Yes	Yes
Alternative 2	Yes	Yes	Yes	Yes	Yes
Alternative 3	Yes	Yes	Yes	Yes	Yes
Project 9: Boundary Fence Repair					
Alternative 1	Yes	Yes	Yes	Yes	Yes
Alternative 2	Yes	Yes	Yes	Yes	Yes
Alternative 3	Yes	Yes	Yes	Yes	Yes
Project 10: Building Demolition					
Alternative 1	Yes	Yes	Yes	Yes	Yes

2.5 Alternative Actions Considered but Eliminated from Further Analysis

Of the alternatives considered for the 10 proposed projects and described in **Section 2.4**, all but one alternative for Project 3 have been carried forward for further analysis in this EA. Proposed projects 1 through 4, 8, and 9 each considered alternatives for implementation, and all alternatives considered meet the selection standards as well as the purpose and need and are carried forward for further analysis. For Project 7, the stormwater drainage repair and replacement activities are proposed for the portions of the belowground stormwater system that are deteriorating or failing. There are no alternatives to repair and replacement of these system components, as belowground stormwater drains are required to properly drain the airfield. For Project 10 there are no alternatives to demolishing the 11 buildings that have been determined by DAF to be underutilized or beyond repair. Each building has been carefully evaluated for potential renovation or reuse, and determined to be beyond its useful and serviceable life. Therefore, the decision for each of the 11 buildings is binary, either to demolish or continue to manage as an unusable building. No further alternatives were considered by DAF for these 11 buildings.

The alternative actions considered but eliminated from further analysis are described in **Section 2.5.1** through **Section 2.5.3**.

2.5.1 Project 5, Burma Road Realignment Permeable Paving Alternative

For Project 5, Burma Road Realignment, DAF considered an alternative paving solution for the realigned Burma Road, using permeable asphalt instead of conventional asphalt. However, upon review, DAF determined that the type of asphalt proposed to be used for Project 5 did not constitute an alternative, but instead is a design option for the proposed project. No other action alternatives for Project 5 were considered, because only by realigning Burma Road and the airfield/Moody AFB boundary fence and removing trees can the airfield obtain an airfield waiver for the CZ as well as comply with UFC 3-260-1.

2.5.2 Project 6, 38 RQS Parking Lot Construction Permeable Paving Alternative

For Project 6, 38 RQS Parking Lot Construction, there are no other alternative locations that could support additional parking for the 38 RQS Operations, which is located in Building 663. The parking to support the building must be proximate to the building or else not be a viable alternative. Further, similar to Project 5, DAF considered an alternative paving solution for the proposed 38 RQS, using permeable asphalt instead of conventional asphalt. However, this was determined to be a design option and not an alternative.

2.5.3 Project 3, Alternative 2: Build Overwatch Positions at Davidson Road Gate Only

The lack of hardened overwatch facilities at the two Moody AFB gates that are used for normal daily operations, the Davidson Road Gate and the Mitchell Boulevard Gate, do not meet applicable DoD AT/FP criteria, including UFC 4 010-01. Project 3, Alternative 2, would only construct an overwatch facility at the Main Gate, leaving the Mitchell Boulevard Gate without adequate AT/FP facilities. Therefore, Project 3, Alternative 2, only partially meets Selection

Standard B, “Compatibility with Planning Guidance and Development Criteria.” Project 3, Alternative 1, includes building an overwatch facility at both the Davidson Road Gate and the Mitchell Boulevard Gate and therefore incorporates the components of Alternative 1 for implementing the proposed project. Therefore, Project 3, Alternative 2, is not carried forward for further evaluation.

2.6 Summary of Potential Environmental Consequences

The potential impacts associated with the Proposed Action and No Action Alternative are summarized in **Table 2-4**. The summary is based on information discussed in detail in **Chapter 3** of the EA and includes a concise definition of the issues addressed and the potential environmental impacts associated with each alternative action.

FORMAT PAGE

Table 2-4. Summary of Potential Environmental Impacts by Project

Table 2-4 is separated into sub-tables that describe the effect each alternative would have on the respective resource areas for each of the 10 proposed projects.

Project 1: Guardian Angel Facility Construction and Renovation

Resource	Alternative 1	Alternative 2	No Action Alternative
Land Use	Long-term, negligible, beneficial impact on land use as the proposed project would be compatible with existing land uses and land use plans.	Long-term, negligible, beneficial impact on land use as the proposed project would be compatible with existing land uses and land use plans.	No impacts on land use would occur.
Noise	Temporary, minor adverse, impacts as a result of noise from the proposed construction activities. At approximately 500 feet from the construction activities, the predicted maximum noise levels would drop below 65 dBA. Noise from construction vehicles would increase on roadways during construction but would cease at the end of those activities. No sensitive noise receptors would be impacted.	Impacts would be similar to those described for Alternative 1, but would include a slightly larger area of construction. No sensitive noise receptors would be impacted.	There would be no change in the noise environment at Moody AFB.
Air Quality, Climate Change, and Greenhouse Gases	Temporary and long-term, minor, adverse impacts on air quality from anticipated increases in temporary construction emissions associated with fugitive dust from grading and trenching activities, operation of diesel-fuel construction equipment and vehicles hauling materials, worker commutes, and asphalt paving operations. Operational emissions increase would occur from a new standby diesel generator.	Temporary and long-term, minor, adverse impacts on air quality from anticipated increases in temporary construction emissions associated with fugitive dust from grading and trenching activities, operation of diesel-fuel construction equipment and vehicles hauling materials, worker commutes, and asphalt paving operations. Criteria pollutant emissions would be slightly higher than Alternative 1. Operational emissions increase would occur from a new standby diesel generator.	No air quality impacts would occur.
Soils	Short-term and long-term minor adverse impacts from 2.93 acres of soil disturbance during construction activities and an increase in impermeable surfaces indirectly causing soil erosion following construction. Erosion and sediment control BMPs would be implemented to reduce impacts on soils.	Impacts on soils would be similar to Alternative 1. There would be 3.51 acres of soil disturbance.	There would be no impacts on soils.
Water Resources	Long-term, minor, adverse impacts on water resources from soil disturbance during construction activities that could impact water quality and increased impermeable areas that could increase stormwater runoff quantities. BMPs would be implemented to reduce impacts on water quality from construction activities.	Impacts would be similar to Alternative 1 but with a slightly greater area of impermeable surfaces following construction activities, increasing the potential volume of stormwater runoff. Potential indirect impacts on adjacent potentially jurisdictional waters of the United States would be avoided through the use of BMPs during construction.	There would be no impacts on water resources.
Biological Resources	Short-term, minor, adverse impacts on biological resources from disturbance to relatively common wildlife from construction noise and equipment movement. BMPs would be implemented to protect aquatic habitat from sedimentation during construction. There would be no effect on any listed species.	Short-term, minor, adverse impacts on biological resources from disturbance to relatively common wildlife from construction noise and equipment movement. BMPs would be implemented to protect aquatic habitat from sedimentation during construction. There would be no effect on any listed species.	There would be no impacts on biological resources.
Cultural Resources	There would be no adverse effects to historic properties. The proposed construction areas for this alternative have been previously surveyed for archaeological resources and no NRHP-eligible sites were identified. The two NRHP-eligible architectural resources are located within Main Base and neither building would be physically altered. There would be no effect on the two NRHP-eligible buildings.	The potential effects to archaeological and architectural resources would be the same as described for Project 1, Alternative 1.	There would be no impacts on cultural resources.
Infrastructure	Short-term, negligible, adverse impacts on transportation and utilities from potential short-term utility interruptions during construction and the disposal of debris and other solid waste generated during construction activities at local landfills. There would be increased vehicle traffic at the Moody AFB gates during construction activities and would cease at the end of construction activities.	The potential impacts on infrastructure and transportation would be similar to those described for Alternative 1 because the 38 RQS operations facility would be constructed at a different location but using similar equipment and materials.	There would be no impacts on infrastructure.

Resource	Alternative 1	Alternative 2	No Action Alternative
Hazardous Materials and Wastes, ERP, and Toxic Substances	Short-term, negligible, adverse impacts on hazardous materials and wastes during construction. All Moody AFB plans for proper handling and disposal of hazardous materials and wastes would be followed. ERP site SS-38 overlaps with the proposed project area; however, contaminated soils and groundwater would be avoided, or a construction waiver granted. ACM and LBP sampling would be conducted prior to renovation activities, and if determined to be present, ACM and LBP would be properly handled and disposed of in accordance with federal, state, and local laws during renovation activities.	Impacts would be similar to Project 1, Alternative 1, but with a slightly larger area of ground disturbance and potentially the use of more hazardous materials during construction.	There would be no impacts on hazardous materials, hazardous wastes, ERP sites, or toxic substances.
Socioeconomics – Income and Employment	Short-term, minor beneficial impact on socioeconomics from increased expenditures during construction activities.	Impacts on socioeconomics would be the same as Project 1, Alternative 1.	There would be no impacts on socioeconomics.
Health and Safety	Short-term, negligible, adverse impacts on health and safety from increased risks associated with construction activities. However, construction personnel would follow federal and state safety regulations and DoD and OSHA safety standards.	Impacts on health and safety would be the same as Alternative 1.	There would be no increased health and safety risk and no impacts on health and safety.

dBA – A-weighted decibel; **BMP** – best management practice; **NRHP** – National Register of Historic Places; **AFB** –Air Force Base; **CWA** - Clean Water Act; **ERP** – Environmental Restoration Program; **ACM** – asbestos-containing materials; **LBP** – lead-based paint; **DoD** – Department of Defense; **OSHA** – Occupational Safety and Health Administration

Project 2: Aircraft Fire Training Facility Improvements

Resource	Alternative 1	Alternative 2	No Action Alternative
Land Use	Long-term, negligible, beneficial impact on land use as the proposed project would be compatible with existing land uses and land use plans.	Long-term, minor adverse impacts on land use as the truck driver training at Moody AFB would not meet the requirements of the Career Field Education and Training Plan and potentially occur in areas with incompatible land use designations.	Long-term, minor adverse impacts on land use at Moody AFB as the AFTF propane tank would continue to be located within the boundary of an existing Q-D arc and truck driver training would potentially occur in areas with incompatible land use designations.
Noise	Temporary, minor adverse, impacts as a result of noise from the proposed construction activities. Noise from construction vehicles would increase on roadways during construction but would cease at the end of those activities. Noise from trucks during driving training, would be consolidated to the AFTF and no longer be present at temporary locations throughout the base. No sensitive noise receptors would be impacted.	Temporary, minor adverse, impacts as a result of noise from the proposed construction activities. Noise from construction vehicles would increase on roadways during construction but would cease at the end of those activities. No sensitive noise receptors would be impacted. Noise from trucks during driver training would continue to be present at temporary locations throughout the base.	There would be no change in the noise environment at Moody AFB.
Air Quality, Climate Change, and Greenhouse Gases	Temporary and long-term, minor, adverse impacts on air quality from anticipated increases in temporary construction emissions associated with fugitive dust from construction activities, operation of diesel-fuel construction equipment and vehicles hauling materials, worker commutes, and asphalt paving operations. Operational emissions increase would occur from an increase in heating square footage from the new facility.	Temporary and long-term, minor, adverse impacts on air quality from anticipated increases in temporary construction emissions associated with fugitive dust from construction activities, operation of diesel-fuel construction equipment and vehicles hauling materials, worker commutes, and asphalt paving operations. Construction emissions would be slightly less than for Alternative 1. Operational emissions increase would occur from an increase in heating square footage from the new facility.	No air quality impacts would occur.
Soils	Short-term and long-term minor adverse impacts from 9.87 acres of soil disturbance during construction activities and an increase in impermeable surfaces indirectly causing soil erosion following construction. Erosion and sediment control BMPs would be implemented to reduce impacts on soils.	Impacts on soils would be similar to Alternative 1. There would be impacts from 6.87 acres of soil disturbance.	There would be no impacts on soils.
Water Resources	Long-term, minor, adverse impacts on water resources from soil disturbance during construction activities that could impact water quality and increased impermeable areas that could increase stormwater runoff quantities. BMPs would be implemented to reduce impacts on water quality from construction activities.	Impacts on water resources would be similar to Alternative 1 but with a slightly smaller impermeable surface area, lessening stormwater runoff potential.	There would be no impacts on water resources.

Resource	Alternative 1	Alternative 2	No Action Alternative
Biological Resources	Short-term, minor, adverse impacts on biological resources from disturbance to relatively common wildlife from construction noise and equipment movement. BMPs would be implemented to protect aquatic habitat from sedimentation during construction. The project area is proximate to gopher tortoise habitat and occupied burrows. Preconstruction surveys for gopher tortoise and eastern indigo snake will be conducted prior to construction. The AFTF improvements may affect but is not likely to adversely affect the eastern indigo snake and have no effects on other listed species.	Impacts on biological resources would be similar to Alternative 1 but would involve a slightly smaller area of ground disturbance. The project area is proximate to gopher tortoise habitat and occupied burrows. Preconstruction surveys for gopher tortoise and eastern indigo snake will be conducted prior to construction. The AFTF improvements may affect but is not likely to adversely affect the eastern indigo snake and have no effects on other listed species.	There would be no impacts on biological resources.
Cultural Resources	There would be no adverse effects to historic properties. The proposed construction areas for this alternative have been previously surveyed for archaeological resources and no NRHP-eligible sites were identified. The two NRHP-eligible architectural resources are located within Main Base, and neither building would be physically altered. There would be no effect on the two NRHP-eligible buildings.	The potential effects to archaeological and architectural resources would be the same as described for Project 2, Alternative 1.	There would be no impacts on cultural resources.
Infrastructure	Short-term, negligible, adverse impacts on transportation and utilities from potential short-term utility interruptions during construction and the disposal of debris and other solid waste generated during construction activities at local landfills. There would be increased vehicle traffic at the Moody AFB gates during construction activities and would cease at the end of construction activities.	The potential impacts on infrastructure and transportation would be similar to those described for Alternative 1 but with a shorter construction timeline and less construction debris generated for disposal in regional landfills.	There would be no impacts on infrastructure.
Hazardous Materials and Wastes, ERP, and Toxic Substances	Short-term, negligible, adverse impacts on hazardous materials and wastes during construction. All Moody AFB plans for proper handling and disposal of hazardous materials and wastes would be followed. ERP site FT-07 overlaps with the proposed project area; however, contaminated groundwater would be avoided, or a construction waiver granted. No impacts from toxic substances.	Impacts would be similar to those described for Alternative 1. With a smaller construction footprint, there would be less hazardous materials and waste generated during construction AFTF construction activities. The potential for impacts from contaminated groundwater from ERP site FT-07 would be the same as Project 2, Alternative 1. There would be no impacts on ACM or LBP.	There would be no impacts on hazardous materials, hazardous waste, ERP sites, or toxic substances.
Socioeconomics- Income and Employment	Short-term, minor beneficial impact on socioeconomics from increased expenditures during construction activities.	Impacts on socioeconomics would be the same as Alternative 1.	There would be no impacts on socioeconomics.
Health and Safety	Short-term, negligible, adverse impacts on health and safety from increased risks associated with construction activities. However, construction personnel would follow federal and state safety regulations and DoD and OSHA safety standards.	Impacts on health and safety would be the same as Alternative 1.	There would be no increased health and safety risk and no impacts on health and safety.

AFTF – Aircraft Fire Training Facility; BMP – best management practice; AFB – Air Force Base; ERP – Environmental Restoration Program; DoD – Department of Defense; OSHA – Occupational Safety and Health Administration

Project 3: Gate Overwatch Position Construction

Resource	Alternative 1	No Action Alternative
Land Use	Long-term, negligible, beneficial impacts on land use as the proposed project would be compatible with existing land uses and land use plans.	The Davidson Road and Mitchell Boulevard Gates would continue to not meet the current AT/FP requirements for additional positions for security personnel.
Noise	Temporary, minor adverse, impacts as a result of noise from the proposed construction activities. At approximately 500 feet from the construction activities, the predicted maximum noise levels would drop below 65 dBA. Noise from construction vehicles would increase on roadways during construction but would cease at the end of those activities. No sensitive noise receptors would be impacted.	There would be no change in the noise environment at Moody AFB.
Air Quality, Climate Change, and Greenhouse Gases	Temporary and long-term, minor, adverse impacts on air quality from anticipated increases in temporary construction emissions associated with fugitive dust from construction activities, operation of diesel-fuel construction equipment and vehicles hauling materials, worker commutes, and asphalt paving operations. Operational emissions increase would occur from an increase in heating square footage from the newly constructed buildings.	There would be no impacts on air quality.

Resource	Alternative 1	No Action Alternative
Soils	Short-term and long-term minor adverse impacts on soils from 0.12 acre of soil disturbance during construction activities and an increase in impermeable surfaces indirectly causing soil erosion following construction. Erosion and sediment control BMPs would be implemented to reduce impacts on soils.	There would be no impacts on soils.
Water Resources	Long-term, negligible, adverse impacts on water resources from soil disturbance during construction activities that could impact water quality and 1,250 square feet of additional impermeable areas that could increase stormwater runoff quantities. BMPs would be implemented to reduce impacts on water quality from construction activities.	There would be no impacts on water resources.
Biological Resources	Short-term, negligible, adverse impacts on biological resources from disturbance to relatively common wildlife from construction noise and equipment movement. There would be no effects on listed species.	There would be no impacts on biological resources.
Cultural Resources	There would be no adverse effects to historic properties. The proposed construction areas for this alternative have been previously surveyed for archaeological resources and no NRHP-eligible sites were identified. The two NRHP-eligible architectural resources are located within Main Base, and neither building would be physically altered. There would be no effect on the two NRHP-eligible buildings.	There would be no impacts on cultural resources.
Infrastructure	Short-term, negligible, adverse impacts on transportation and utilities from potential short-term utility interruptions during construction and the disposal of debris and other solid waste generated during construction activities at local landfills. There would be increased vehicle traffic at the Moody AFB gates during construction activities and would cease at the end of construction activities	There would be no impacts on infrastructure and transportation.
Hazardous Materials and Wastes, ERP, and Toxic Substances	Short-term, negligible, adverse impacts on hazardous materials and wastes during construction. All Moody AFB plans for proper handling and disposal of hazardous materials and wastes would be followed. ERP site SS-39 overlaps with the proposed project area; however, contaminated groundwater would be avoided, or a construction waiver granted. No impacts from toxic substances.	There would be no impacts on hazardous materials, hazardous wastes, ERP sites, or toxic substances.
Socioeconomics – Income and Employment	Short-term, minor beneficial impact on socioeconomics from increased expenditures during construction activities.	There would be no impacts on socioeconomics.
Health and Safety	Short-term, negligible, adverse impacts on health and safety from increased risks associated with construction activities. However, construction personnel would follow federal and state safety regulations and DoD and OSHA safety standards.	There would be no increased health and safety risk and no impacts on health and safety.

dBA – A-weighted decibel; AFB – Air Force Base; BMP – best management practice; ERP – Environmental Restoration Program; NRHP – National Register of Historic Places; DoD – Department of Defense; OSHA – Occupational Safety and Health Administration

Project 4: Aerospace Ground Equipment Facility Construction and Demolition

Resource	Alternative 1	Alternative 2	No Action Alternative
Land Use	Long-term, negligible, beneficial impacts on land use as the proposed project would be compatible with existing land uses and land use plans.	Long-term, negligible, beneficial impacts on land use as the proposed project would be compatible with existing land uses and land use plans.	Long-term, minor, adverse impacts on land use as AGE functions would continue to occur at locations across Moody AFB and without adequate warehouse and office space to support the AGE requirements.
Noise	Temporary, minor adverse, impacts as a result of noise from the proposed construction activities. At approximately 500 feet from the construction activities, the predicted maximum noise levels would drop below 65 dBA. Noise from construction vehicles would increase on roadways during construction but would cease at the end of those activities. No sensitive noise receptors would be impacted.	Impacts would be the same as those described for Alternative 1.	There would be no change in the noise environment at Moody AFB.
Air Quality, Climate Change, and Greenhouse Gases	Temporary and long-term, minor, adverse impacts on air quality from anticipated increases in temporary construction emissions associated with fugitive dust from construction activities, operation of diesel-fuel construction equipment and vehicles hauling materials, worker commutes, and asphalt paving operations. Operational emissions increase would occur from an increase in heating square footage from the new facilities and a standby diesel generator.	Temporary and long-term, minor, adverse impacts on air quality from anticipated increases in temporary construction emissions associated with fugitive dust from construction activities, operation of diesel-fuel construction equipment and vehicles hauling materials, worker commutes, and asphalt paving operations. Construction emissions would be slightly less than Alternative 1. Operational emissions increase would occur from an increase in heating square footage from the new facilities and a standby diesel generator.	There would be no impacts on air quality.

Resource	Alternative 1	Alternative 2	No Action Alternative
Soils	Short-term and long-term minor adverse impacts on soils from 2.36 acres of soil disturbance during construction activities and an increase in impermeable surfaces indirectly causing soil erosion following construction. Erosion and sediment control BMPs would be implemented to reduce impacts on soils.	Impacts on soils would be similar to Alternative 1. There would be 1.99 acres of soil disturbance.	There would be no impacts on soils.
Water Resources	Long-term, minor, adverse impacts on water resources from soil disturbance during construction activities that could impact water quality and increased impermeable areas that could increase stormwater runoff quantities. BMPs would be implemented to reduce impacts on water quality from construction activities.	Impacts on water resources would be similar to those described for Alternative 1. There would be slightly less soil disturbance than under Alternative 1.	There would not be any impacts on water resource.
Biological Resources	Short-term, negligible, adverse impacts on biological resources from disturbance to relatively common wildlife from construction noise and equipment movement. There would be no effects on listed species. Tricolored bats do not typically utilize buildings for roosting in the Tricolored Bat Year-Round Active Zone 2, which includes Moody AFB. Therefore, Project 4, Alternative 1 would have no effect on any federally or state listed species.	Impacts on biological resources would be the same as those described for Alternative 1.	There would not be any impacts on biological resources.
Cultural Resources	There would be no adverse effects to historic properties. The proposed construction areas for this alternative have been previously surveyed for archaeological resources and no NRHP-eligible sites were identified. The two NRHP-eligible architectural resources are located within Main Base and neither building would be physically altered. There would be no effect on the two NRHP-eligible buildings. The project includes demolition of Buildings 732, 752, 755, and 756. Neither Building 732 or Building 752 are 50 years old or will become 50 years old during the course of the proposed project and, therefore, do not require evaluation. Building 755 was constructed in 1962 and was previously determined ineligible. Building 756 was constructed in 1977 and has not yet been evaluated and could potentially turn 50 years old before the Project 4, Alternative 1 is completed. Therefore, Moody AFB will complete an evaluation prior to the proposed building demolition.	There would be adverse effects to historic properties. The proposed construction areas for this alternative have been previously surveyed for archaeological resources and no NRHP-eligible sites were identified. The two NRHP-eligible architectural resources are located within Main Base and neither building would be physically altered. There would be no effect on the two NRHP-eligible buildings. The project includes demolition of Building 755. Building 755 was constructed in 1962 and was previously determined ineligible.	There would be no impacts on cultural resources.
Infrastructure	Short-term, negligible, adverse impacts on transportation and utilities from potential short-term utility interruptions during construction and the disposal of debris and other solid waste generated during construction activities at local landfills. There would be increased vehicle traffic at the Moody AFB gates during construction activities and would cease at the end of construction activities.	The potential impacts on infrastructure and transportation would be similar to those described for Alternative 1. However, less building demolition would occur generating slightly less materials to be transported and disposed of in regional landfills.	There would be no impacts on infrastructure.
Hazardous Materials and Wastes, ERP, and Toxic Substances	Short-term, negligible, adverse impacts on hazardous materials and wastes during construction. All Moody AFB plans for proper handling and disposal of hazardous materials and wastes would be followed. ERP site SS-24 overlaps with the proposed project area; however, contaminated groundwater would be avoided, or a construction waiver granted. ACM has been determined to be present in Building 756. ACM and LBP sampling would be conducted prior to renovation activities in Buildings 755 and 756, and if determined to be present, ACM and LBP would be properly handled and disposed of in accordance with federal, state, and local laws during renovation activities.	Impacts would be the same as those described for Alternative 1.	There would be no impacts on hazardous materials, hazardous waste, ERP sites, or toxic substances.
Socioeconomics – Income and Employment	Short-term, minor beneficial impact on socioeconomics from increased expenditures during construction activities.	Impacts on socioeconomics would be the same as Alternative 1.	There would be no impacts on socioeconomics.

Resource	Alternative 1	Alternative 2	No Action Alternative
Health and Safety	Short-term, negligible, adverse impacts on health and safety from increased risks associated with construction activities. However, construction personnel would follow federal and state safety regulations and DoD and OSHA safety standards.	Impacts would be the same as Alternative 1.	There would be no increased health and safety risk and no impacts on health and safety.

dBA – A-weighted decibel; **ERP** – Environmental Restoration Program; **BMP** – best management practice; **AFB** –Air Force Base; **NRHP** – National Register of Historic Places; **ACM** – asbestos-containing material; **LBP** – lead-based paint; **DoD** – Department of Defense; **OSHA** – Occupational Safety and Health Administration

Project 5: Burma Road Realignment

Resource	Alternative 1	No Action Alternative
Land Use	Long-term, minor, beneficial impacts on land use because Burma Road would be removed from the graded portion of the CZ, trees would be removed from the CZ, and the fence realigned to meet AT/FP standards.	Long-term, minor, adverse impacts on land use as an airfield waiver from the land use compatibility guidelines of the CZ would continue to be required.
Noise	Temporary, minor adverse, impacts as a result of noise from the proposed construction activities. At approximately 500 feet from the construction activities, the predicted maximum noise levels would drop below 65 dBA. Noise from construction vehicles would increase on roadways during construction but would cease at the end of those activities. No sensitive noise receptors would be impacted.	There would be no change in the noise environment at Moody AFB.
Air Quality, Climate Change, and Greenhouse Gases	Temporary, minor, adverse impacts on air quality from anticipated increases in temporary construction emissions associated with fugitive dust from construction activities, operation of diesel-fuel construction equipment and vehicles hauling materials, worker commutes, and asphalt paving operations.	There would be no impacts on air quality.
Soils	Short-term and long-term minor adverse impacts on soils from 7.63 acres of soil disturbance during construction activities and an increase in impermeable surfaces indirectly causing soil erosion following construction. Erosion and sediment control BMPs would be implemented to reduce impacts on soils. If permeable pavement would be used to surface Burma Road, long-term impacts on soils would be reduced.	There would be no impacts on soils.
Water Resources	Long-term, minor, adverse impacts on water resources from soil disturbance during construction activities that could impact water quality and increased impermeable areas that could increase stormwater runoff quantities. BMPs would be implemented to reduce impacts on water quality from construction activities. If permeable pavement was chosen as an option for surfacing Burma Road, the long-term impacts on water resources from increased impermeable surfaces would be reduced.	There would be no impacts on water resources.
Biological Resources	Long-term, minor, adverse impacts on biological resources from removal of 4.6 acres of forested habitat and loss of breeding habitat for some common bird and reptile species. There is a possibility that the tricolored bat could utilize trees at Moody AFB for roosting. Therefore, tree removal would not occur from 1 May to 15 July to avoid the tricolored bat pup season. With the seasonal restrictions on tree removal activities, Project 5, Alternative 1, would not jeopardize the continued existence of the tricolored bat.	There would be no impacts on biological resources.
Cultural Resources	There would be no adverse effects on historic properties. The proposed construction areas for this alternative have been previously surveyed for archaeological resources and no NRHP-eligible sites were identified. The two NRHP-eligible architectural resources are located within Main Base and neither building would be physically altered. There would be no effect on the two NRHP-eligible buildings.	There would be no impacts on cultural resources.
Infrastructure	Short-term, negligible, adverse impacts on transportation and utilities from potential short-term utility interruptions during construction and the disposal of debris and other solid waste generated during construction activities at local landfills. Trees removed from the CZ would be process off-site and used for lumber or mulch. There would be increased vehicle traffic at the Moody AFB gates during construction activities and would cease at the end of construction activities.	There would be no impacts on infrastructure and transportation.
Hazardous Materials and Wastes, ERP, and Toxic Substances	Short-term, negligible, adverse impacts on hazardous materials and wastes during construction. All Moody AFB plans for proper handling and disposal of hazardous materials and wastes would be followed. ERP site LF-01 overlaps with the proposed project area; however, contaminated groundwater would be avoided, or a construction waiver granted. No impacts from toxic substances.	There would be no impacts on hazardous materials, hazardous wastes, ERP sites, or toxic substances.
Socioeconomics – Income and Employment	Short-term, minor beneficial impact on socioeconomics from increased expenditures during construction activities.	There would be no impacts on socioeconomics.

Resource	Alternative 1	No Action Alternative
Health and Safety	Short-term, negligible, adverse impacts on health and safety from increased risks associated with construction activities. However, construction personnel would follow federal and state safety regulations and DoD and OSHA safety standards.	There would be no increased health and safety risk and no impacts on health and safety.

CZ – Clear Zone; **dBA** – A-weighted decibel; **AFB** – Air Force Base; **NRHP** – National Register of Historic Places; **ERP** – Environmental Restoration Program; **DoD** – Department of Defense; **OSHA** – Occupational Safety and Health Administration; **AT/FP** – antiterrorism/force protection

Project 6: 38th Rescue Squadron Parking Lot Construction

Resource	Alternative 1	No Action Alternative
Land Use	Long-term, negligible, adverse, impacts on land use as the proposed parking would replace a fitness track in an area designated for Outdoor Recreation land use.	There would be no impacts on land use.
Noise	Temporary, minor adverse, impacts as a result of noise from the proposed construction activities. At approximately 500 feet from the construction activities, the predicted maximum noise levels would drop below 65 dBA. Noise from construction vehicles would increase on roadways during construction but would cease at the end of those activities. No sensitive noise receptors would be impacted.	There would be no change in the noise environment at Moody AFB.
Air Quality, Climate Change, and Greenhouse Gases	Temporary, minor, adverse impacts on air quality from anticipated increases in temporary construction emissions associated with fugitive dust from construction activities, operation of diesel-fuel construction equipment and vehicles hauling materials, worker commutes, and asphalt paving operations.	There would be no impacts on air quality.
Soils	Short-term and long-term minor adverse impacts on soils from 0.48 acre of soil disturbance during construction activities and an increase in impermeable surfaces indirectly causing soil erosion following construction. Erosion and sediment control BMPs would be implemented to reduce impacts on soils. If permeable pavement would be used to surface the parking lot, long-term impacts on soils would be reduced.	There would be no impacts on soils.
Water Resources	Long-term, minor, adverse impacts on water resources from soil disturbance during construction activities that could impact water quality and increased impermeable areas that could increase stormwater runoff quantities. BMPs would be implemented to reduce impacts on water quality from construction activities. If the permeable pavement option would be used to surface the parking lot, long-term impacts from surface water runoff would be reduced.	There would be no impacts on water resources.
Biological Resources	Short-term, negligible, adverse impacts on biological resources from construction equipment noise and equipment movement that could indirectly disturb some relatively common reptile and bird species. The construction of a parking lot would have no effect on any listed species.	There would be no impacts on biological resources.
Cultural Resources	There would be no adverse effects to historic properties. The proposed construction areas for this alternative have been previously surveyed for archaeological resources and no NRHP-eligible sites were identified. The two NRHP-eligible architectural resources are located within Main Base and neither building would be physically altered. There would be no effect on the two NRHP-eligible buildings.	There would be no impacts on cultural resources.
Infrastructure	Short-term, negligible, adverse impacts on transportation and utilities from potential short-term utility interruptions during construction and the disposal of debris and other solid waste generated during construction activities at local landfills. The electrical use by electric POVs at the 10 electric charging stations would not impact the electrical grid or availability. There would be increased vehicle traffic at the Moody AFB gates during construction activities and would cease at the end of construction activities.	There would be no impacts on infrastructure or transportation.
Hazardous Materials and Wastes, ERP, and Toxic Substances	Short-term, negligible, adverse impacts on hazardous materials and wastes during construction. All Moody AFB plans for proper handling and disposal of hazardous materials and wastes would be followed. No ERP sites would be impacted. No impacts from toxic substances.	There would be no impacts on hazardous materials, hazardous wastes, ERP sites, or toxic substances.
Socioeconomics – Income and Employment	Short-term, minor beneficial impact on socioeconomics from increased expenditures during construction activities.	There would be no impacts on socioeconomics.
Health and Safety	Short-term, negligible, adverse impacts on health and safety from increased risks associated with construction activities. However, construction personnel would follow federal and state safety regulations and DoD and OSHA safety standards.	There would be no increased health and safety risk and no impacts on health and safety.

dBA – A-weighted decibel; **BMP** – best management practice; **NRHP** – National Register of Historic Places; **POV** – personally-operated vehicle; **ERP** – Environmental Restoration Program; **DoD** – Department of Defense; **OSHA** – Occupational Safety and Health Administration

Project 7: Airfield Stormwater Repair and Replacement

Resource	Alternative 1	No Action Alternative
Land Use	Long-term, minor, beneficial impacts on land use as the replacement of failing belowground drainage structures would be compatible with the Airfield Operations and Maintenance land use designation and the removal of two aboveground concrete structures would remove obstructions from the CZ.	Long-term, minor, adverse impacts on land use as aboveground concrete structures would remain in the CZ requiring an airfield waiver from land use compatibility guidelines.
Noise	Temporary, minor adverse, impacts as a result of noise from the proposed construction activities. At approximately 500 feet from the construction activities, the predicted maximum noise levels would drop below 65 dBA. Noise from construction vehicles would increase on roadways during construction but would cease at the end of those activities. No sensitive noise receptors would be impacted.	There would be no change in the noise environment at Moody AFB.
Air Quality, Climate Change, and Greenhouse Gases	Temporary, minor, adverse impacts on air quality from anticipated increases in temporary construction emissions associated with fugitive dust from construction activities, operation of diesel-fuel construction equipment and vehicles hauling materials, worker commutes, and trenching operations.	There would be no air quality impacts.
Soils	Short-term and long-term minor adverse impacts on soils from 0.33 acre of soil disturbance during construction activities and an increase in impermeable surfaces indirectly causing soil erosion following construction. Erosion and sediment control BMPs would be implemented to reduce impacts on soils. Long-term, negligible, beneficial impacts on soils due to a reduction in soil erosion from soil slumping and failure at the belowground stormwater features.	There would be no impacts on soils.
Water Resources	Long-term, minor beneficial impacts on water resources from the repair and replacement of stormwater features. Construction activities could negatively impact water quality through sediment transport in stormwater and transport of POLs from construction equipment. However, BMPs would reduce these impacts. Repairs to degrading stormwater structures would reduce sediment erosion into structures during rain events and reduce sedimentation into water bodies.	There would be no impacts on water resources.
Biological Resources	Short-term, negligible, adverse impacts on biological resources from construction equipment noise and equipment movement that could indirectly disturb some relatively common reptile and bird species. The construction of a parking lot would have no effect on any listed species.	There would be no impacts on biological resources.
Cultural Resources	There would be no adverse effects to historic properties. The proposed construction areas for this alternative have been previously surveyed for archaeological resources and no NRHP-eligible sites were identified. The two NRHP-eligible architectural resources are located within Main Base and neither building would be physically altered. There would be no effect on the two NRHP-eligible buildings.	There would be no impacts on cultural resources.
Infrastructure	Short-term, negligible, adverse impacts on transportation and utilities from potential short-term utility interruptions during construction and the disposal of debris and other solid waste generated during construction activities at local landfills. There would be increased vehicle traffic at the Moody AFB gates during construction activities and would cease at the end of construction activities.	There would be no impacts on infrastructure or transportation.
Hazardous Materials and Wastes, ERP, and Toxic Substances	Short-term, negligible, adverse impacts on hazardous materials and wastes during construction. All Moody AFB plans for proper handling and disposal of hazardous materials and wastes would be followed. ERP site LF-01 overlaps with the proposed project area; however, contaminated groundwater would be avoided, or a construction waiver granted. No impacts from toxic substances.	There would be no impacts on hazardous materials, hazardous wastes, ERP sites, or toxic substances.
Socioeconomics – Income and Employment	Short-term, minor beneficial impact on socioeconomics from increased expenditures during construction activities.	There would be no impacts on socioeconomics.
Health and Safety	Short-term, negligible, adverse impacts on health and safety from increased risks associated with construction activities. However, construction personnel would follow federal and state safety regulations and DoD and OSHA safety standards.	There would be no increased health and safety risk and no impacts on health and safety.

CZ – Clear Zone; **dBA** – A-weighted decibel; **POL** – petroleum, oils and lubricants; **BMP** – best management practice; **NRHP** – National Register of Historic Places; **ERP** – Environmental Restoration Program; **AFB** – Air Force Base; **DoD** – Department of Defense; **OSHA** – Occupational Safety and Health Administration

Project 8: Mission Lake Water Barrier and Stone Road Repairs

Resource	Alternative 1	Alternative 2	Alternative 3	No Action Alternative
Land Use	There would be no impacts on land use.	There would be no impacts on land use.	Long-term, minor, adverse impacts on land use because the realignment of Stone Road would permanently pave a portion of an area designated for Outdoor Recreation land use.	There would be no impacts on land use.
Noise	Temporary, minor adverse, impacts as a result of noise from the proposed construction activities. At approximately 500 feet from the construction activities, the predicted maximum noise levels would drop below 65 dBA. Noise from construction vehicles would increase on roadways during construction but would cease at the end of those activities. No sensitive noise receptors would be impacted.	Noise impacts would be the same as those described for Alternative 1.	Noise impacts would be the same as those described for Alternative 1.	There would be no change in the noise environment at Moody AFB.
Air Quality, Climate Change, and Greenhouse Gases	Temporary, minor, adverse impacts on air quality from anticipated increases in temporary construction emissions associated with fugitive dust from construction activities, operation of diesel-fuel construction equipment and vehicles hauling materials, worker commutes, and asphalt paving operations.	Temporary, minor, adverse impacts on air quality from anticipated increases in temporary construction emissions associated with fugitive dust from construction activities, operation of diesel-fuel construction equipment and vehicles hauling materials, worker commutes, and asphalt paving operations. Construction emissions would be slightly less than those under Alternative 1.	Short-term, minor, adverse impacts on air quality from anticipated increases in short-term construction emissions associated with fugitive dust from construction activities, operation of diesel-fuel construction equipment and vehicles hauling materials, worker commutes, and asphalt paving operations. Construction emissions would be slightly more than Alternatives 1 and 2.	There would be no impacts on air quality.
Soils	Short-term and long-term minor adverse impacts on soils from 0.83 acre of soil disturbance during construction activities and an increase in impermeable surfaces indirectly causing soil erosion following construction. Erosion and sediment control BMPs would be implemented to reduce impacts on soils.	Impacts on soils would be similar to Alternative 1. There would be 0.69 acre of soil disturbance.	Impacts would be similar to Alternative 1; however, there would be 3.70 acres of soil disturbance.	Slow deterioration of the Mission Lake water barrier could erode soils through channeling and gullies at the outfall. This continual soil erosion would have long-term, minor, adverse impacts on soils.
Water Resources	Long-term, direct, minor, adverse impacts and long-term, minor indirect, beneficial impacts on water resources. The repairs to the water barrier and Stone Road shoulders would directly fill 0.48 acre of potentially jurisdictional waters of the US with riprap and clay. To reduce impacts, Moody AFB would obtain a CWA Section 404/401 permit, comply with all permit requirements, and implement any associated mitigation measures. Repairs to the water barrier would provide long-term protection to the waters of Mission Lake and reduce the risk of water barrier failure and associated erosion.	Impacts on water resources would be the same as Alternative 1.	Impacts on water resources would be similar to those described for Project 8, Alternative 1. The realignment of Stone Road and repairs to the Mission Lake water barrier would directly impact 0.76 acre of waters of the US. To reduce these impacts, Moody AFB would obtain a CWA Section 404/401 permit, comply with all permit requirements, and implement any associated mitigation measures. The realignment of Stone Road would create a larger impermeable surface area than Alternatives 1 and 2 leading to greater potential for stormwater runoff. Repairs to the water barrier would provide long-term protection to the waters of Mission Lake and reduce the risk of water barrier failure and associated erosion.	There would be no impacts on water resources.
Biological Resources	Long-term, minor, adverse impacts on biological resources would occur from the installation of riprap at the toe of each slope on either side of Stone Road causing the loss of both wetlands and aquatic habitat. Noise from construction equipment and equipment movement could indirectly disturb some relatively common reptile and bird species. The use of BMPs	Impacts on biological resources would be similar to those described in Alternative 1 but would have a smaller area of aquatic impacts. The proposed project may affect but is not likely to adversely affect the Suwannee alligator snapping turtle.	Impacts on biological resources would be similar but slightly greater than Project 8, Alternatives 1 and 2. In addition to the repair of Mission Lake water barrier, the realignment of an estimated 1,800 linear feet of Stone Road would result in the removal of approximately 1.6 acres of trees south of Mission Lake outfall channel resulting in the loss of breeding and foraging habitat for relatively common reptile and	There would be no impacts on biological resources.

Resource	Alternative 1	Alternative 2	Alternative 3	No Action Alternative
	would ensure construction activities do not adversely impact aquatic species in Mission Lake and Mission Lake outfall channel. There is marginally suitable habitat for the Suwannee alligator snapping turtle. However, its occurrence in the proposed project area would be highly unlikely, especially along the developed edge of Mission Lake at the existing water barrier composed of riprap and Stone Road. Noise and equipment movement during proposed construction activities such as the placement of riprap along the banks and within open-water areas of Mission Lake would further deter the Suwannee alligator snapping turtle from being present in the project area during construction activities. BMPs would be used to ensure construction activities do not substantially increase water turbidity in Mission Lake. Therefore, Project 8, Alternative 1 may affect but is not likely to adversely affect the Suwannee alligator snapping turtle.		bird species. There is a possibility that the tricolored bat could utilize trees at Moody AFB for roosting. Therefore, tree removal would not occur from 1 May to 15 July, to avoid the tricolored bat pup season (USFWS 2024b). With the seasonal restrictions on tree removal activities, Project 8, Alternative 3, would not jeopardize the continued existence of the tricolored bat. Additionally, as described for Project 8, Alternative 1, it is highly unlikely that the Suwannee alligator snapping turtle would be present in Mission Lake proximate to the proposed construction activities, and noise and equipment movement would further deter the Suwannee alligator snapping turtle from being present. Therefore, Project 8, Alternative 3 may affect but is not likely to adversely affect the Suwannee alligator snapping turtle.	
Cultural Resources	There would be no adverse effects to historic properties. The proposed construction areas for this alternative have been previously surveyed for archaeological resources and no NRHP-eligible sites were identified. The two NRHP-eligible architectural resources are located within Main Base and neither building would be physically altered. There would be no effect on the two NRHP-eligible buildings.	The potential effects to historic properties would be the same as described for Alternative 1.	The potential effects to historic properties would be the same as described for Alternative 1.	There would be no impacts on cultural resources.
Infrastructure	Short-term, negligible, adverse impacts on transportation and utilities from potential short-term utility interruptions during construction and the disposal of road material debris and other solid waste generated during construction activities at local landfills. There would be increased vehicle traffic at the Moody AFB gates during construction activities and would cease at the end of construction activities.	The potential impacts on infrastructure and transportation would be similar to those described for Alternative 1. However, less road material construction debris would be generated and transported to local landfills.	The potential impacts on infrastructure and transportation would be similar to those described for Alternative 1. However, less road material construction debris would be generated and transported to local landfills.	There would be no impacts on infrastructure.
Hazardous Materials and Wastes, ERP, and Toxic Substances	Short-term, negligible, adverse impacts on hazardous materials and wastes during construction. All Moody AFB plans for proper handling and disposal of hazardous materials and wastes would be followed. There would be no impacts on ERP sites. No impacts from toxic substances.	Impacts would be the same as those described for Alternative 1.	Impacts would be the same as those described for Alternative 1.	There would be no impacts on hazardous materials, hazardous wastes, ERP sites, or toxic substances.
Socioeconomics – Income and Employment	Short-term, minor beneficial impact on socioeconomics from increased expenditures during construction activities.	Impacts on socioeconomics would be the same as Alternative 1.	Impacts on socioeconomics would be the same as Alternative 1.	There would be no impacts on socioeconomics.
Health and Safety	Short-term, negligible, adverse impacts on health and safety from increased risks associated with construction activities. However, construction personnel would follow federal and state safety regulations and DoD and OSHA safety standards.	Impacts would be the same as Alternative 1.	Impacts would be the same as Alternative 1.	There would be no increased health and safety risk and no impacts on health and safety.

dba – A-weighted decibel; **ERP** – Environmental Restoration Program; **AFB** –Air Force Base; **NRHP** – National Register of Historic Places; **CWA** – Clean Water Act; **GDNR** Georgia Department of Natural Resources; **USFWS** – US Fish and Wildlife Service; **DoD** - Department of Defense; **OSHA** – Occupational Safety and Health Administration

Project 9: Boundary Fence Repair

Resource	Alternative 1	Alternative 2	Alternative 3	No Action Alternative
Land Use	Long-term, minor, beneficial impact on land use by creating a clear line-of-sight along the western boundary fence and fully supporting AT/FP requirements.	Long-term, negligible, beneficial impact on land use with the improved line-of-sight at the western base boundary fence.	Impacts on land use would be similar to Alternative 2, but would provide improved line-of-sight to the base boundary fence relative to Alternative 2.	Long-term, minor, adverse impacts on land use aw the AT/FP requirements for the western base boundary fence would not be met.
Noise	Temporary, minor adverse, impacts as a result of noise from the proposed construction activities. One on-base housing area is proximate to the western base boundary fence; five of these residences are located within 200 feet of the proposed construction corridor and could experience temporary noise levels as high as 80 dBA DNL during construction. However, these impacts would be short term (i.e., less than one month of construction proximate to the housing area), only occur to on-base housing, would occur during daytime hours, and would cease after the completion of vegetation removal and driving lane construction. Noise from construction vehicles would increase on roadways during construction but would cease at the end of those activities.	Impacts from noise would be similar to those described for Alternative 1. Noise impacts would be limited to aboveground woody vegetation removal.	Impacts from noise would be similar to those described for Alternative 1. Noise impacts would be limited to aboveground woody vegetation removal.	There would be no change in the noise environment at Moody AFB.
Air Quality, Climate Change, and Greenhouse Gases	Temporary, minor, adverse impacts on air quality from anticipated increases in temporary construction emissions associated with fugitive dust from construction activities, operation of diesel-fuel construction equipment and vehicles hauling materials, and worker commutes.	Temporary, minor, adverse impacts on air quality from anticipated increases in temporary construction emissions associated with fugitive dust from construction activities, operation of diesel-fuel construction equipment and vehicles hauling materials, and worker commutes. Construction emissions would be less than those under Alternative 1.	Temporary, minor, adverse impacts on air quality from anticipated increases in temporary construction emissions associated with fugitive dust from construction activities, operation of diesel-fuel construction equipment and vehicles hauling materials, and worker commutes. Construction emissions would be less than those under Alternative 1 and similar to those under Alternative 2.	There would be no impacts on air quality.
Soils	Short-term and long-term minor adverse impacts on 3.40 acres of soils from soil disturbance during construction activities and an increase in impermeable surfaces indirectly causing soil erosion following construction. Erosion and sediment control BMPs would be implemented to reduce impacts on soils.	Short-term, negligible, adverse impacts on soils from aboveground woody vegetation removal. There would be some very minor soil disturbance during vegetation removal, but disturbed areas would rapidly revegetate with herbaceous plants after removal activities.	Impacts on soils would be the same as Alternative 2.	There would be no impacts on soils.
Water Resources	Long-term, direct, adverse impacts on water resources from filling of 0.26 acre of potentially jurisdictional waters of the US to create a driving lane. To reduce wetland impacts, Moody AFB would obtain a CWA Section 404/401 permit, comply with all permit requirements, and implement any associated mitigation measures. BMPs would be implemented during construction to reduce short-term impacts.	There would be no impacts on water resources.	There would be no impacts on water resources.	There would be no impacts on water resources.
Biological Resources	Long-term, minor, adverse impacts on biological resources from the permanent loss of forested habitats and construction of a driving lane along the western base boundary. There is a possibility that the	Impacts on biological resources would be similar to those described under Alternative 1. However, there would be very limited soil disturbance and only aboveground woody vegetation would be removed.	Impacts on biological resources would be similar to those described under Alternative 1. However, there would be very limited soil disturbance and only aboveground woody vegetation would be removed.	There would be no impacts on biological resources.

Resource	Alternative 1	Alternative 2	Alternative 3	No Action Alternative
	tricolored bat could utilize trees at Moody AFB for roosting. Therefore, tree removal would not occur from 1 May to 15 July, to avoid the tricolored bat pup season. With the seasonal restrictions on tree removal activities, Project 9, Alternative 1, would not jeopardize the continued existence of the tricolored bat. There is marginally suitable habitat for the Suwannee alligator snapping turtle in Beatty Branch but its occurrence in the project area would be highly unlikely, especially adjacent to the Moody AFB boundary fence. Noise and construction equipment movement would further deter any Suwannee alligator snapping turtles from being present during construction. BMPs would be used to ensure construction activities do not substantially increase water turbidity. Therefore, Project 9, Alternative 1 may affect but is not likely to adversely affect the Suwanee alligator snapping turtle.	There would be no effects on federally listed species and with appropriate scheduling of tree removal, the removal of trees would not jeopardize the continued existence of the tricolored bat.	There would be no effects on federally listed species and with appropriate scheduling of tree removal, the removal of trees would not jeopardize the continued existence of the tricolored bat.	
Cultural Resources	There would be no adverse effects to historic properties. The proposed construction areas for this alternative have been previously surveyed for archaeological resources and no NRHP-eligible sites were identified. The two NRHP-eligible architectural resources are located within Main Base and neither building would be physically altered. There would be no effect on the two NRHP-eligible buildings.	The potential effects to historic properties would be the same as described for Project 9, Alternative 1.	The potential effects to historic properties would be the same as described for Project 9, Alternative 1.	There would be no impacts on cultural resources.
Infrastructure	Short-term, negligible, adverse impacts on transportation and utilities from potential short-term utility interruptions during construction. Trees removed from the boundary fence line would be process off-site and used for mulch or lumber. There would be increased vehicle traffic at the Moody AFB gates during construction activities and would cease at the end of construction activities.	The potential impacts on infrastructure and transportation would be similar to those described for Alternative 1. However, without the construction of a driving lane and removal of half as much woody vegetation, the length of construction activities and associated impacts on the base transportation network would be shorter.	The potential impacts on infrastructure and transportation would be similar to those described for Alternative 1. However, without the construction of a driving lane, the length of construction activities and associated impacts on the base transportation network would be shorter.	There would be no impacts on infrastructure or transportation.
Hazardous Materials and Wastes, ERP, and Toxic Substances	Short-term, negligible, adverse impacts on hazardous materials and wastes during construction. All Moody AFB plans for proper handling and disposal of hazardous materials and wastes would be followed. ERP site SS-39 overlaps with the proposed project area; however, contaminated groundwater would be avoided, or a construction waiver granted. No impacts from toxic substances.	Impacts would be similar to those described for Alternative 1. However, the volume of hazardous materials used and hazardous waste potentially generated would be less.	Impacts would be similar to those described for Alternative 1. However, the volume of hazardous materials used and hazardous waste potentially generated would be less.	There would be no impacts on hazardous materials, hazardous wastes, ERP sites, or toxic substances.
Socioeconomics – Income and Employment	Short-term, minor beneficial impact on socioeconomics from increased expenditures during construction activities.	Impacts on socioeconomics would be the same as Alternative 1.	Impacts on socioeconomics would be the same as Alternative 1.	There would be no impacts on socioeconomics.
Health and Safety	Short-term, negligible, adverse impacts on health and safety from increased risks associated with construction activities. However, construction personnel would follow federal and state safety regulations and DoD and OSHA safety standards.	Impacts would be the same as Alternative 1.	Impacts would be the same as Alternative 1.	There would be no increased health and safety risk and no impacts on health and safety.

AT/FP – antiterrorism/force protection; **dBA** – A-weighted decibel; **DNL** – day-night average sound level; **ERP** – Environmental Restoration Program; **CWA** – Clean Water Act; **AFB** –Air Force Base; **BMP**– best management practice; **NRHP** – National Register of Historic Places; **DoD** – Department of Defense; **OSHA** – Occupational Safety and Health Administration

Project 10: Building Demolition

Resource	Alternative 1	No Action Alternative
Land Use	Long-term, negligible, beneficial impacts with the demolition of 11 buildings reducing the long-term maintenance and management costs of underutilized facilities.	There would be no impacts on land use.
Noise	Temporary, minor adverse, impacts as a result of noise from the proposed demolition activities. At approximately 500 feet from the construction activities, the predicted maximum noise levels would drop below 65 dBA. Noise from construction vehicles would increase on roadways during construction but would cease at the end of those activities. No sensitive noise receptors would be impacted.	There would be no change in the noise environment at Moody AFB.
Air Quality, Climate Change, and Greenhouse Gases	Temporary, minor, adverse impacts on air quality from anticipated increases in temporary construction emissions associated with fugitive dust from construction activities, operation of diesel-fuel construction equipment and vehicles hauling materials, and worker commutes. Long-term negligible beneficial impacts from a net decrease in heated space after the demolition of 11 buildings.	There would be no impacts on air quality.
Soils	Short-term minor adverse impacts on 0.2 acre of soils from soil disturbance during demolition activities. Erosion and sediment control BMPs would be implemented during demolition to reduce impacts on soils. There would be a reduction in impermeable surfaces following demolition providing a long-term, negligible beneficial impact on soils through reduced stormwater runoff and erosion.	There would be no impacts on soils.
Water Resources	There would be no substantial impacts on water resources as the demolition and removal of 11 buildings would decrease the impermeable surface area at Moody AFB in the long term. BMPs would be implemented during demolition activities to reduce constructed-related impacts on water quality.	There would be no impacts on soils.
Biological Resources	Short-term, negligible, adverse impacts on biological resources from noise from construction equipment and equipment movement. No breeding habitat for any species would be lost due to buildings demolition. The demolition of 11 buildings at Moody AFB would have no effect on any listed species. Tricolored bats do not typically utilize buildings for roosting in Tricolored Bat Year-Round Active Zone 2, which includes Moody AFB. Therefore, the demolition of 11 buildings at Moody AFB would have no effect on the tricolored bat.	There would be no impacts on biological resources.
Cultural Resources	There would be no adverse effects to historic properties. The proposed construction areas for this alternative have been previously surveyed for archaeological resources and no NRHP-eligible sites were identified. The two NRHP-eligible architectural resources are located within Main Base and neither building would be physically altered. There would be no effect on the two NRHP-eligible buildings. Buildings 153, 200, 656, 707, 720, 760, 762, 763, 798, 961, and 1145 would be demolished. Except for Building 961, none are presently 50 years of age and will not be 50 years of age prior to the completion of the project. These buildings do not require evaluation at this time and would not be affected by the project. Building 961 was constructed in 1963 and was not identified as a historic property and, therefore, is not eligible for the NRHP.	There would be no impacts on cultural resources.
Infrastructure	Short-term, negligible, adverse impacts on transportation and utilities from potential short-term utility interruptions during demolition and the disposal of debris and other solid waste generated during construction activities at local landfills. There would be increased vehicle traffic at the Moody AFB gates during construction activities and would cease at the end of construction activities.	There would be no impacts on infrastructure and transportation.
Hazardous Materials and Wastes, ERP, and Toxic Substances	Short-term, negligible, adverse impacts on hazardous materials and wastes during construction. All Moody AFB plans for proper handling and disposal of hazardous materials and wastes would be followed. ERP sites SS-24 and SS-38 overlap with the proposed project area; however, contaminated groundwater would be avoided, or a construction waiver granted. There is the potential for short-term, minor, adverse impacts from ACM encountered during the demolition of Buildings 707, 760, 763, and 961, and LBP during the demolition of Building 961. However, ACM and LBP sampling would be conducted prior to demolition activities, and if determined to be present, ACM and LBP would be properly handled and disposed of in accordance with federal, state, and local laws during demolition activities.	There would be no impacts on hazardous materials, hazardous wastes, ERP sites, or toxic substances.
Socioeconomics – Income and Employment	Short-term, minor beneficial impact on socioeconomics from increased expenditures during construction activities.	There would be no impacts on socioeconomics.

Resource	Alternative 1	No Action Alternative
Health and Safety	Short-term, negligible, adverse impacts on health and safety from increased risks associated with construction activities. However, construction personnel would follow federal and state safety regulations and DoD and OSHA safety standards.	There would be no increased health and safety risk and no impacts on health and safety.

dba – A-weighted decibel; **ERP** – Environmental Restoration Program; **AFB** –Air Force Base; **NRHP** – National Register of Historic Places; **ACM** – asbestos-containing material; **LBP** – lead-based paint; **DoD** – Department of Defense; **OSHA** – Occupational Safety and Health Administration

3.0 AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

This chapter describes the environment potentially affected by the Proposed Action and presents an analysis of potential environmental consequences of the identified alternatives for the implementation of the Proposed Action. The NEPA requires that the analysis address those areas and the components of the environment with the potential to be affected; locations and resources with no potential to be affected need not be analyzed in detail. The existing conditions of each relevant environmental resource are described to give the public and agency decision makers a meaningful point from which to compare potential future environmental, social, and economic effects.

The criteria for evaluating impacts and assumptions for the analyses are presented for each resource area. Evaluation criteria for potential impacts were obtained from standard criteria; federal, state, or local agency guidelines and requirements; and/or legislative criteria. Impacts may be direct or indirect and are described in terms of type and degree, which is consistent with the CEQ NEPA regulations. “Direct effects” are caused by an action and occur at the same time and place as the action. “Indirect effects” are caused by the action and occur later in time or are farther removed from the place of impact but are reasonably foreseeable. “Cumulative effects” result from the incremental effects of the action when added to the effects of other past, present, and reasonably foreseeable actions regardless of what agency (federal or nonfederal) or person undertakes such other actions. “Beneficial effects” cause a positive change in the condition or appearance of the resource, or a change that moves the resource toward a desired condition. “Adverse effects: cause a change that moves the resource away from a desired condition, or detracts from its appearance or condition. The definitions of all resources are provided in **Appendix C**. The estimated total areas of disturbance for each proposed project alternative used in evaluating impacts are provided in **Table 3-1**.

3.1 Environmental Resource Areas Not Carried Forward for Detailed Analysis

It was determined that the Proposed Action would not have the potential for direct, indirect, or cumulative impacts associated with the proposed demolition and construction of facilities at Moody AFB on the following resource areas. Therefore, these have not been carried forward for detailed analysis in this EA.

Airspace Management. There would be no changes or modifications to airspace, flight activities, or aircraft training activities as a result of the Proposed Action. The Proposed Action would not change the flight patterns for aircraft at Moody AFB or in the special use airspace used for training activities. There would be no impacts on airspace management as a result of the Proposed Action.

Geology and Topography. The Proposed Action would not change or be impacted by the geology and topography at Moody AFB. All proposed infrastructure construction and modernization projects at Moody AFB would potentially disturb surface soils through grading, contouring, and construction. Soils are analyzed in **Section 3.7**. The underlying geology would not be disturbed, and the topography of Moody AFB would not be altered. Therefore, there would be no impacts on geology and topography as a result of the Proposed Action.

Table 3-1. Estimated Total Area of Impacts for Each Proposed Project Alternative

Proposed Project	Proposed Project Alternative	Estimated Total Area of Disturbance (acre)
Project 1. Guardian Angel Facility Construction and Renovation	Alternative 1. Guardian Angel facility Construction and renovation North Site	2.93
	Alternative 2. Guardian Angel facility Construction and renovation South Site	3.51
Project 2. Aircraft Fire Training Facility Repairs and Construction	Alternative 1. Aircraft Fire Training Facility Improvements with Truck Driving Training	9.87
	Alternative 2. Aircraft Fire Training Facility Repairs and Construction, No Truck Driving Pad	6.87
Project 3. Gate Overwatch Position Construction	Alternative 1. Gate Overwatch Position Construction at Davidson Road and Mitchell Boulevard Gates	0.12
Project 4. Aerospace Ground Equipment Facility Construction and Demolition	Alternative 2. Aerospace Ground Equipment Facility Construction and Demolition with New Shop, Administrative Space, and Covered Storage	2.36
	Alternative 2. Aerospace Ground Equipment Facility Construction and Demolition without New Shop and More Renovated Administrative Space	1.99
Project 5. Burma Road Realignment	Alternative 1. Burma Road Realignment	7.63
Project 6. 38th Rescue Squadron Parking Lot Construction	Alternative 1. 38th Rescue Squadron Parking Lot Construction	0.48
Project 7. Airfield Stormwater Repair and Replacement	Alternative 1. Airfield Stormwater Repair and Replacement	0.33
Project 8. Mission Lake Water Barrier and Stone Road Repairs	Alternative 1. Mission Lake Water Barrier and Stone Road Repairs – Both Shoulders	0.83
	Alternative 2. Mission Lake Water Barrier and Stone Road Repairs – North Shoulder	0.69
	Alternative 3. Repair Mission Lake Water Barrier and Realign Stone Road	3.70
Project 9. Boundary Fence Repair	Alternative 1. Boundary Fence Repair with Driving Lane	3.40
	Alternative 2. Boundary Fence Repair with Vegetation Clearance on the Base Side of the Fence	1.70 (aboveground vegetation only)
	Alternative 3. Boundary Fence Repair with Vegetation Clearance on Both Sides of the Fence	3.40 (aboveground vegetation only)
Project 10. Buildings Demolition	Alternative 1. Demolish Eleven Buildings	0.20

Socioeconomics – Housing and Education. There would be no change in the number of personnel assigned to Moody AFB as a result of the Proposed Action. Therefore, there would be no impacts on housing or school enrollment because of the proposed project. However, other aspects of socioeconomics, which includes income and employment, are analyzed in **Section 3.13**.

3.2 Analyzed Resources and Regions of Influence

The expected geographic scope of potential environmental consequences is referred to as the region of influence (ROI). The ROI boundaries vary depending on the nature of each resource (**Table 3-2**). For example, the ROI for some resources, such as air quality, extends over a large jurisdiction unique to that resource.

Table 3-2. Region of Influence for the Proposed Action by Resource

Resource	Region of Influence
Land Use	Moody AFB
Noise	Moody AFB and Proximate Off-Base Areas
Air Quality, Climate Change, and Greenhouse Gases	Southwest Georgia Intrastate Air Quality Control Region
Soils	Moody AFB
Water Resources	Moody AFB and Proximate Off-Base Areas
Biological Resources	Moody AFB
Cultural Resources	A 100-Foot Buffer Surrounding the Proposed 10 Facility Projects and Implementing Alternatives
Infrastructure	Moody AFB
Hazardous Materials and Wastes, ERP, and Toxic Substances	Moody AFB
Socioeconomics – Income and Employment	Lowndes and Lanier Counties, Georgia
Health and Safety	Moody AFB

AFB – Air Force Base; **ERP** – Environmental Restoration Program

3.3 Reasonably Foreseeable Future Actions

Table 3-3 provides a list of the reasonably foreseeable future actions that could interact with the Proposed Action and were considered when evaluating potential cumulative impacts of the action alternatives. No reasonably foreseeable future off-base actions proximate to Moody AFB were identified.

Table 3-3. Reasonably Foreseeable Future Actions

Project	Project Summary	Anticipated Implementation Date	Relationship to Proposed Action
Moody Air Force Base Future Actions			
F-35A Beddown	Beddown, operate, and construct associated infrastructure for two squadrons of F-35A aircraft to replace the existing A-10 aircraft.	2029 – 2030	Noise, air quality, health and safety, water resources, infrastructure, biological resources, earth resources
Creation of an 820th BDG Campus	Four 14,617 SF squadron buildings, one 6,751 SF armory; and four warehouses would be constructed. The campus would utilize approximately 36 acres.	2030	Noise, water resources, infrastructure, biological resources, earth resources
Make Interior Renovations and Repairs to Building 207	Project is to renovate a portion of the building for a Consolidated Violence Prevention Office and to provide a Childcare Lending Library for the Child Development Center.	2027	Noise, infrastructure
Make Interior Renovations and Repairs to Building 324 (Dormitory)	Project is to replace HVAC and ducts, along with electrical, plumbing, and fire suppression systems.	2025	Noise, infrastructure
Construct Parking at A-10 Area, Main Base	Project is to provide parking for privately owned vehicles that will meet AT/FP standoff requirements of UFC 4-101- 01, DoD Minimum Antiterrorism Standards for Buildings, for maintenance and support personnel in the A-10 area.	2029	Noise, water resources, infrastructure, biological resources, earth resources
Construct Additional Parking at the Golf Course	Project is to provide needed additional parking for golf course patrons, including patrons of the golf course, pro shop or snack bar.	2030	Noise, water resources, infrastructure, biological resources, earth resources
Construct Jogging Trail along Stone Road,	Project is to construct a trail along the east side of Stone	2030	Noise, water resources,

Project	Project Summary	Anticipated Implementation Date	Relationship to Proposed Action
Davidson Road Gate/Stone Road Intersection to Burma Road Traffic Circle	Road to reduce the number of traffic crossings and improve user safety.		infrastructure, biological resources, earth resources
Military Working Dog Kennels	Project is to demolish the existing Building 1708 kennels for the 23 SFS and 820 COS MWDs and build a new facility on the same footprint with an addition to the west side.	2029	Noise, Infrastructure
23 SFS Squadron Operations Building	Project is to build a new Squadron Operations facility for the 23 SFS north of the MWD Kennels.	2029	Noise, infrastructure
Demolish Building 617	Project is to demolish building once the new 23 SFS facility is built to minimize maintenance costs and free up valuable space on the flightline for future operations.	2024	Noise

820th BDG – 820th Base Defense Group; **SF** square feet; **HVAC** – heating, ventilation, and air conditioning; **AT/FP** – antiterrorism/force protection; **UFC** – Unified Facilities Criteria; **DoD** – Department of Defense; **EO** – Executive Order; **MWD** – Military Working Dog; **SFS** – Security Forces Squadron; **COS** – Combat Operations Squadron

3.4 Land Use

See **Appendix C-1** for the definition of the resource.

3.4.1 Affected Environment

Moody AFB includes the Main Base Administrative Area (Main Base), the Grand Bay Range, and the Grassy Pond Recreational Annex. All proposed construction, demolition, and modernization projects would occur on Main Base. Land uses for each of the proposed projects composing the Proposed Action are provided in **Table 3-4** and shown in **Figure 3-1**.

Table 3-4. Land Use Category at the Proposed Action Project Areas

Land Use Category	Proposed Action Project	Area (acres)
Administration	Project 1	1.39
	Project 3	0.83
	Project 9	0.46
	Project 10	0.08
Aircraft Operations & Maintenance	Project 1	1.46
	Project 2	6.25
	Project 4	0.65
	Project 5	3.30
	Project 7	0.25
	Project 9	0.78
	Project 10	0.10
Airfield	Project 10	0.00
Community – Commercial	Project 1	0.12
Community Service	Project 2	2.20
	Project 3	1.05
	Project 9	0.42
	Project 10	0.01
Housing	Project 10	0.15
Industrial	Project 2	4.05
	Project 3	0.19
	Project 4	0.01
	Project 5	0.16
	Project 9	0.21
	Project 10	0.01
Open Space	Project 3	0.34
	Project 9	1.72
	Project 10	0.01
Outdoor Recreation	Project 5	1.13
	Project 6	3.16
	Project 7	0.04
	Project 8	1.10
Water	Project 8	0.32

3.4.2 Environmental Consequences

Potential impacts on land use are based on the level of land use sensitivity in areas potentially affected by the Proposed Action as well as compatibility of those actions with existing conditions. In general, a land use impact would be adverse if it met one of the following criteria:

- Is inconsistent or noncompliant with existing land use plans or policies.
- Precludes the viability of existing land use.

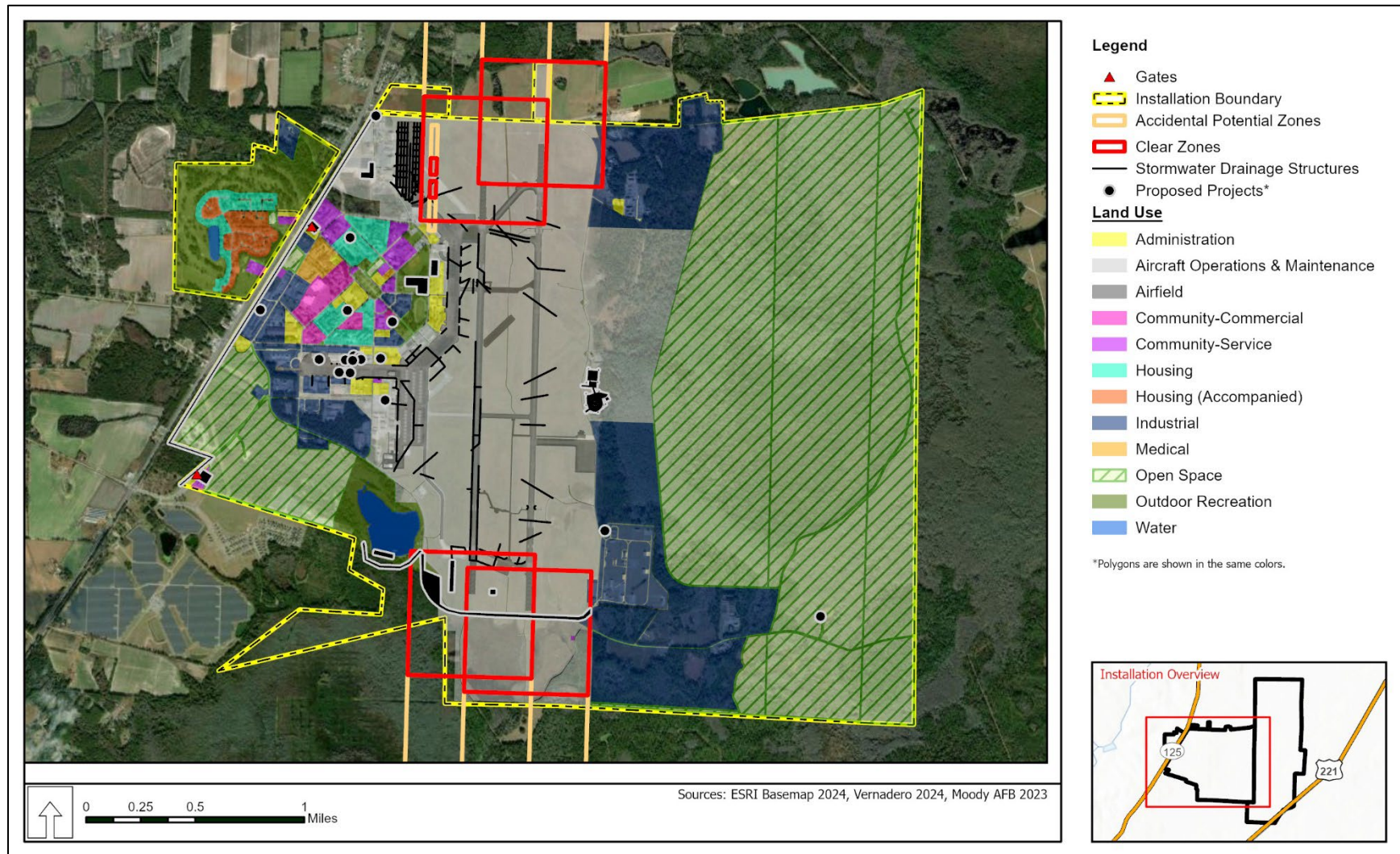


Figure 3-1. Land Use Categories at Moody Air Force Base Main Base

- Precludes continued use or occupation of an area.
- Is incompatible with adjacent land use to the extent that public health or safety is threatened.
- Conflicts with planning criteria established to ensure the safety and protection of human life and property.

None of the proposed projects would occur off-base and therefore would not impact off-base land use planning or zoning requirements by Lowndes and Lanier counties. Under the Proposed Action, there would be no change in land ownership or land use categories. None of the proposed projects would alter the Moody AFB noise contours or be incompatible with the land use restrictions such as structure height limitations, noise exposure, or CZ development restrictions (Moody AFB 2015a).

3.4.2.1 Project 1, Alternative 1: Guardian Angel Facility Construction and Renovation North Site

The construction of a new squadron operations facility, additional pavement and parking, additions to Buildings 663 and 556, and renovation of buildings would have a long-term negligible, beneficial impact on land use at Moody AFB. The proposed project would occur entirely on Moody AFB, consolidate mission functions, and be within areas designated as Administration, Aircraft Operations and Maintenance, and Community – Commercial designated land uses. The proposed project would be compatible with the Moody AFB Installation Development Plan (IDP) and designated land uses. Flightline constraints for Building 663, including a 41-foot height limitation, would be supported with the proposed building addition.

3.4.2.2 Project 1, Alternative 2: Guardian Angel Facility Construction and Renovation South Site

Impacts on land use would be the same as those described for Project 1, Alternative 2. The construction of a new squadron operations facility, additional pavement and parking, additions to Buildings 663 and 556, and renovation of buildings would have a long-term, negligible beneficial impacts on lands at Moody AFB.

3.4.2.3 Project 1, No Action Alternative

Under the No Action Alternative, there would be no construction of a new squadron operations facility, additional pavement and parking, additions to Buildings 663 and 556, or renovation of existing buildings. Therefore, there would be no impacts on land use at Moody AFB.

3.4.2.4 Project 2, Alternative 1: Aircraft Fire Training Facility Improvements with Truck Driving Training

Impacts of the AFTF improvement with a truck driving training pad would have long-term, negligible beneficial impacts on land use. The proposed AFTF improvements would occur entirely on Moody AFB and within areas designated as Aircraft Operations and Maintenance, Community Service, and Industrial designated land uses. The proposed project would be

compatible with the Moody AFB IDP and designated land uses. Further, truck driver training, which is currently conducted at temporary locations, would be consolidated on the proposed training pad in accordance with the Career Field Education and Training Plan, and the propane tank would be relocated beyond the boundary of an existing Q-D arc.

3.4.2.5 Project 2, Alternative 2: Aircraft Fire Training Facility Repairs and Construction, No Truck Driving Pad

AFTF improvements without a truck driving training pad would have long-term, minor adverse impacts on land use. Similar to Project 2, Alternative 2, the proposed AFTF improvements would occur entirely on Moody AFB and within appropriate designated land uses. However, truck driver training would continue to be conducted at temporary locations, would not meet the requirements of the Career Field Education and Training Plan, and temporary locations on Moody AFB for truck driver training would not necessarily be compatible with land use designations at those locations.

3.4.2.6 Project 2, No Action Alternative

Under the No Action Alternative, there would be no AFTF improvements and no construction of a truck driver training pad. Therefore, there would be long-term, minor adverse impacts on land use at Moody AFB. The AFTF propane tank would continue to be located within the boundary of an existing Q-D arc, and truck driver training would occur at temporary locations on Moody AFB that would not necessarily be compatible with existing land use designations.

3.4.2.7 Project 3, Alternative 1: Gate Overwatch Position Construction at Davidson Road and Mitchell Boulevard Gates

The proposed construction of two gate overwatch positions at the Davidson Road and Mitchell Boulevard Gates would have long-term, negligible, beneficial impacts on land use. The proposed overwatch position at the Davidson Road Gate would be within an area with an Administration land use designation and the proposed overwatch position at the Mitchell Boulevard Gate would be within an area with a Community Service land use designation. Therefore, the proposed overwatch facilities would be compatible with the existing land use designations, would meet the planning requirements of the Moody AFB IDP, and would support the current AT/FP additional position for security personnel requirements.

3.4.2.8 Project 3, No Action Alternative

There would be no construction of overwatch positions at the Davidson Road and Mitchell Boulevard Gates. Therefore, the Davidson Road and Mitchell Boulevard Gates would continue to not meet the current AT/FP requirements for additional positions for security personnel.

3.4.2.9 Project 4, Alternative 1: Aerospace Ground Equipment Facility Construction and Demolition with New Shop, Administrative Space, and Covered Storage

The demolition of Buildings 732, 752, 755, and 756 and construction of a new AGE facility, consolidating AGE warehouse, administration, and storage space and operations, would have

long-term, negligible, beneficial impacts on land use. The proposed AGE facility consolidation would be within areas designated for Aircraft Operations and Maintenance and Industrial land uses, which would be compatible with the proposed AGE facility construction and operations. Further, Project 4, Alternative 1, would consolidate AGE functions that are currently in multiple locations on Moody AFB.

3.4.2.10 Project 4, Alternative 2: Aerospace Ground Equipment Facility Construction and Demolition without New Shop and More Renovated Administrative Space

The demolition of Buildings 732 and 756, renovations of Buildings 755 and 752, and construction of construction of covered storage, consolidating AGE warehouse, administration, and storage space and operations, would have long-term, negligible, beneficial impacts on land use. Similar to Project 4, Alternative 2, the proposed AGE facility consolidation would be within areas designated for Aircraft Operations and Maintenance and Industrial land uses, which would be compatible with the proposed AGE facility construction and operations and would consolidate AGE functions that are currently in multiple locations on Moody AFB.

3.4.2.11 Project 4, No Action Alternative

Under the No Action Alternative, there would not be building demolition and construction in support of AGE function consolidation. AGE functions would continue to occur at locations across Moody AFB and without adequate warehouse and office space to support the AGE requirements. Therefore, there would be long-term, minor, adverse impacts on land use under the No Action Alternative.

3.4.2.12 Project 5, Alternative 1: Burma Road Realignment

The realignment of Burma Road would have long-term, minor, beneficial impacts on land use. The proposed realignment of Burma Road would occur in areas designated with Aircraft Operations and Maintenance, Industrial, and Outdoor Recreation land uses. Although the realignment of Burma Road would result in the loss of 1.13 acres of land designated for Outdoor Recreation, the realignment would move Burma Road out of the graded portion of the CZ and remove trees adjacent to Burma Road and within the CZ; these trees do not meet UFC 3-260-1 requirements. Further, the realigned base boundary fence along Burma Road would be constructed to meet AT/FP standards.

3.4.2.13 Project 5, No Action Alternative

Burma Road would not be realigned and trees within the CZ would not be removed. An airfield waiver from the land use compatibility guidelines of the CZ would continue to be required. Further, the boundary fence would not meet current AT/FP standards. Therefore, the No Action Alternative would have long-term, minor, adverse impacts on land use.

3.4.2.14 Project 6, Alternative 1: 38th Rescue Squadron Parking Lot Construction

The proposed construction of a new parking lot to support the 38 RQS operations in Building 663 would have long-term, negligible, adverse, impacts on land use. The proposed parking

would be sited in accordance with the Moody AFB IDP but would replace a fitness track in an area designated for Outdoor Recreation. Although there are adequate recreational facilities on Moody AFB, the parking area would permanently replace a recreational facility in an area on base designated for Outdoor Recreation land use.

3.4.2.15 Project 6, No Action Alternative

There would be no impacts on land use as a new parking lot to support the 38 RQS operations would not be constructed.

3.4.2.16 Project 7, Alternative 1: Airfield Stormwater Repair and Replacement

The repair and replacement of failing belowground stormwater drainage structures, and the removal and replacement of two aboveground concrete stormwater outfall structures, would have long-term, minor, beneficial impacts on land use. The replacement of belowground drainage structures would primarily occur in areas designated as Aircraft Operations and Maintenance land use and would be compatible with continuing to provide adequate stormwater drainage for the airfield and nearby flightline facilities. Further, removing the two aboveground concrete structures at the south end of the airfield would remove obstructions from the CZ.

3.4.2.17 Project 7, No Action Alternative

Aboveground concrete structures would remain in the CZ, requiring an airfield waiver from land use compatibility guidelines in the CZ. Further, there would be continued slumping of surface soils in the airfield area due to belowground stormwater drainage structure failures. The airfield waiver and stormwater structure failures would have long-term, minor, adverse impacts on land use under the No Action Alternative.

3.4.2.18 Project 8, Alternative 1: Mission Lake Water Barrier and Stone Road Repairs – Both Shoulders

The repairs to Stone Road and the Mission Lake water barrier would have no impacts on land use. Impacts on land from the construction activities would be temporary; once the repairs were completed, activities associated with the repair work would cease. The designated land uses at Stone Road and Mission Lake are Outdoor Recreation and Water, and the proposed repairs, would be compatible with these designated land uses.

3.4.2.19 Project 8, Alternative 2: Mission Lake Water Barrier and Stone Road Repairs – North Shoulder

As described for Project 8, Alternative 1, there would be no impacts on land use from the proposed repairs to the Stone Road shoulder and Mission Lake water barrier. The proposed repairs would be compatible with the designated land uses.

3.4.2.20 Project 8, Alternative 3: Repair Mission Lake Water Barrier and Realign Stone Road

The repair of the Mission Lake water barrier and realignment of Stone Road would have long-term, minor, adverse impacts on land use. Although the repair of the Mission Lake water barrier would be compatible with designated land uses and follows the Moody AFB IDP guidance, the realignment of Stone Road would permanently pave a portion of an area with an Outdoor Recreation land use designation. Further, the new alignment of Stone Road would bisect the Outdoor Recreation land use polygon located south of Mission Lake and would reduce its overall usability for outdoor recreational purposes.

3.4.2.21 Project 8, No Action Alternative

There would be no impacts on land use under the No Action Alternative. Stone Road shoulders would remain in disrepair and be a safety hazard for vehicles traveling south of Mission Lake. The Mission Lake water barrier would likely continue to deteriorate.

3.4.2.22 Project 9, Alternative 1: Boundary Fence Repair with Driving Lane

The removal of vegetation along both sides of the boundary fence and construction of a driving lane on the inside of the boundary fence would have a long-term, minor, beneficial impact on land use. The removal of vegetation creating a clear line-of-sight at the western boundary fence as well as constructing a single-lane perimeter dirt road for boundary fence patrols would fully support the AT/FP requirements for the western boundary fence. Areas where vegetation would be removed include Administration, Aircraft Operations and Maintenance, Community Service, Industrial, and Open Space land use designations, all of which would be compatible with the vegetation removal and dirt access road along the perimeter boundary fence.

3.4.2.23 Project 9, Alternative 2: Boundary Fence Repair with Vegetation Clearance on the Base Side of the Fence

The removal of vegetation along the base side of the western base boundary fence would have a long-term, negligible, beneficial impact on land use. The removal of vegetation creating an improved line-of-sight at the boundary fence would partially support the Moody AFB AT/FP requirements for the western boundary fence. Areas where vegetation would be removed include Administration, Aircraft Operations and Maintenance, Community Service, Industrial, and Open Space land use designations, all of which would be compatible with the vegetation removal.

3.4.2.24 Project 9, Alternative 3: Boundary Fence Repair with Vegetation Clearance on Both Sides of the Fence

Impacts on land use would be similar to those described for Project 9, Alternative 2, but would provide improved line-of-sight to the base boundary fence relative to Alternative 2. The removal of vegetation along the base side of the boundary fence would have a long-term negligible beneficial impact on land use.

3.4.2.25 Project 9, No Action Alternative

There would be long-term, minor, adverse impacts on land use under the No Action Alternative. The AT/FP requirements for the western base boundary fence would not be fully met and both line-of-sight and access would remain restricted along the western base boundary of Moody AFB.

3.4.2.26 Project 10, Alternative 1: Demolish Eleven Buildings

There would be negligible, long-term, beneficial impacts on land use from the demolition of 11 buildings at Moody AFB. The demolition of the buildings would be compatible with the planning guidance in the Moody IDP and the land use designations where the 11 buildings are located: Administration, Aircraft Operations and Maintenance, Airfield, Community Service, Housing, Industrial, and Open Space. Demolition of these underused facilities would reduce maintenance costs and management support.

3.4.2.27 Project 10, No Action Alternative

There would be no impacts on land use under the Project 10, No Action Alternative. There would be no changes in land use by maintaining the 11 buildings in their current locations and configurations.

3.4.2.28 Cumulative Actions and Other Considerations

The proposed projects that compose the Proposed Action would be developed and implemented in accordance with the Moody IDP. Further, all other reasonably foreseeable proposed projects on Moody AFB would also be evaluated by base community planners to ensure that they are compatible with existing and future Moody AFB land uses and land use plans. Therefore, the consistency with land uses and land use plans by proposed projects at Moody AFB would have long-term, minor, beneficial cumulative impacts on land use.

The Moody AFB Air Installation Compatibility Use Zones (Moody AFB 2015a) and Lowndes County land use planning efforts ensure that most development projects proximate to Moody AFB remain compatible with DAF operations and functions.

3.5 Noise

See **Appendix C-2** for the definition of the resource.

3.5.1 *Affected Environment*

The noise associated with Moody AFB is dominated by aircraft operations, which include the A-10C and HC-130 fixed-wing aircraft and HH-60 helicopters. Transient aircraft that use the airfield include aircraft such as C-17, KC-10, F-22, F-16, executive jets, helicopters, and various other military aircraft.

Figure 3-2 shows the baseline day-night average sound level (DNL) noise contours for Moody AFB and the Grand Bay Range plotted in 5 decibel (dB) increments, ranging from 65 to 85

A-weighted decibels (dBA) DNL. The noise contours depict operational conditions as outlined in the 2015 Air Installation Compatible Use Zone Study for Moody AFB (Moody AFB 2015a), and there have been no substantial changes in operations or mission since they were developed. The existing 65 dBA DNL noise contour extends approximately 2 miles from both ends of the primary runways at Moody AFB and 1 mile both north and south of the Grand Bay Range.

Additionally, ground training areas on Moody AFB generate small-arms noise on Main Base. **Figure 3-3** shows the 87 and 104 peak decibel (dBP) noise contours for ground training activities on Moody AFB Main Base. Noise-sensitive land uses such as residences, hospitals, and schools are normally not recommended in areas exposed to greater than 87 dBP, and strongly discouraged in areas exposed to greater than 104 dBP (US Army 2007; Hede 1982).

3.5.2 *Environmental Consequences*

Factors considered in determining whether implementing an alternative may have a significant adverse noise impact include the extent or degree to which implementation of an alternative would expose people to noise levels in excess of applicable standards or at levels that may be harmful. All activities associated with the Proposed Action would generate relatively continuous noise throughout demolition, construction, and renovation activities and would then cease after these facility modification activities would be completed. All facilities that would house personnel and located on Moody AFB within greater than 65 dBA noise contours would be designed and constructed with considerations towards recommended noise level reductions as described by the Moody AFB Air Installation Compatible Use Zone Study (Moody AFB 2015a).

3.5.2.1 Project 1, Alternative 1: Guardian Angel Facility Construction and Renovation North Site

The construction of a new squadron operations facility, additional pavement and parking, additions to Buildings 663 and 556, and renovation of buildings would temporarily increase ambient noise levels within the Proposed Action area and in nearby areas during project implementation activities. Relatively continuous noise would be generated during construction. These continuous noise levels would be generated by equipment that has source levels (at 3.28 feet) ranging from approximately 70 to 110 dBA. Typical noise levels of heavy construction equipment are presented in **Table 3-5**. Sound levels decrease with greater distances from a sound source, which is called the attenuation rate. Attenuation rates are highly dependent on the terrain over which the sound is passing and the characteristics of the medium in which it is propagating. The rate used in these estimates represents a decrease in sound level of 4.5 dB per doubling of distance. This average rate has been shown to be an accurate estimate from field data on grassy surfaces (Harris 1998).

Table 3-5. Noise Levels of Heavy Construction Equipment

Construction Category and Equipment	Predicted Noise Level at 50 Feet (dBA)
Front End Loader	79-80
Excavator	81-85
Crane	75-87
Dump Truck	76-84

Source: US Department of Transportation 2017

dBA – A-weighted decibel

There would be temporary, minor adverse, impacts as a result of noise from the proposed squadron operations facility construction activities. At a distance of approximately 500 feet from the construction activities, the predicted maximum noise levels would drop below 65 dBA, a noise level that is equivalent to normal conversation or background music. The proposed project site is not near any off-base buildings or structures; noise levels at or below 65 dBA off base within 500 feet of the proposed construction activities would remain on base, further attenuating construction noise to any off-base receptors. Upon completion of construction, noise from these construction activities would cease.

Construction activities would temporarily increase traffic noise to and from the proposed construction location. Additional traffic noise from POVs operated by construction workers and transport of construction equipment would be limited to existing roadways that approach Moody AFB gates and on-base roadways. Traffic noise would be temporary and would cease at the end of construction activities. Noise from the increased traffic in support of the construction activities would not be perceptible and would not contribute to off-base noise increases.

3.5.2.2 Project 1, Alternative 2: Guardian Angel Facility Construction and Renovation South Site

Noise impacts under Project 1, Alternative 2, would be the similar to those described for Project 1, Alternative 1, but would include a slightly larger area for construction activities. However, all construction would occur on Moody AFB, would be temporary in nature, and would not impact any off-base sensitive noise receptors. Traffic noise would be temporary, limited to existing roadways, and would not be perceptible. Upon the completion of building construction and renovation activities, construction noise activities would cease.

3.5.2.3 Project 1, No Action Alternative

Under the No Action Alternative, there would be no construction of a new squadron operations facility, additional pavement and parking, additions to Buildings 663 and 556, and renovation of existing buildings. The noise environment would remain unchanged. Therefore, there would be no impacts from noise.

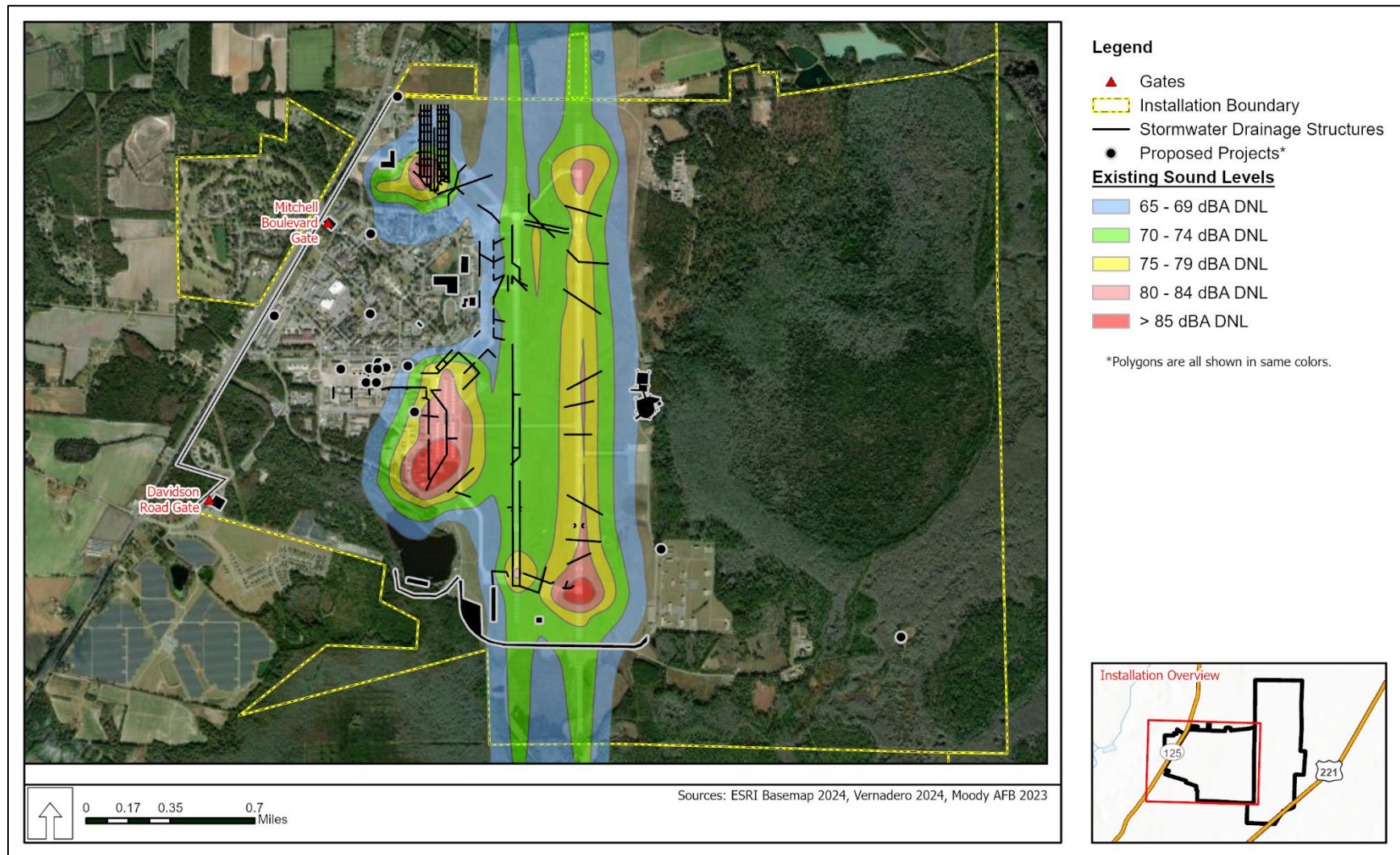


Figure 3-2. Aircraft Noise Contours for Moody Air Force Base Main Base

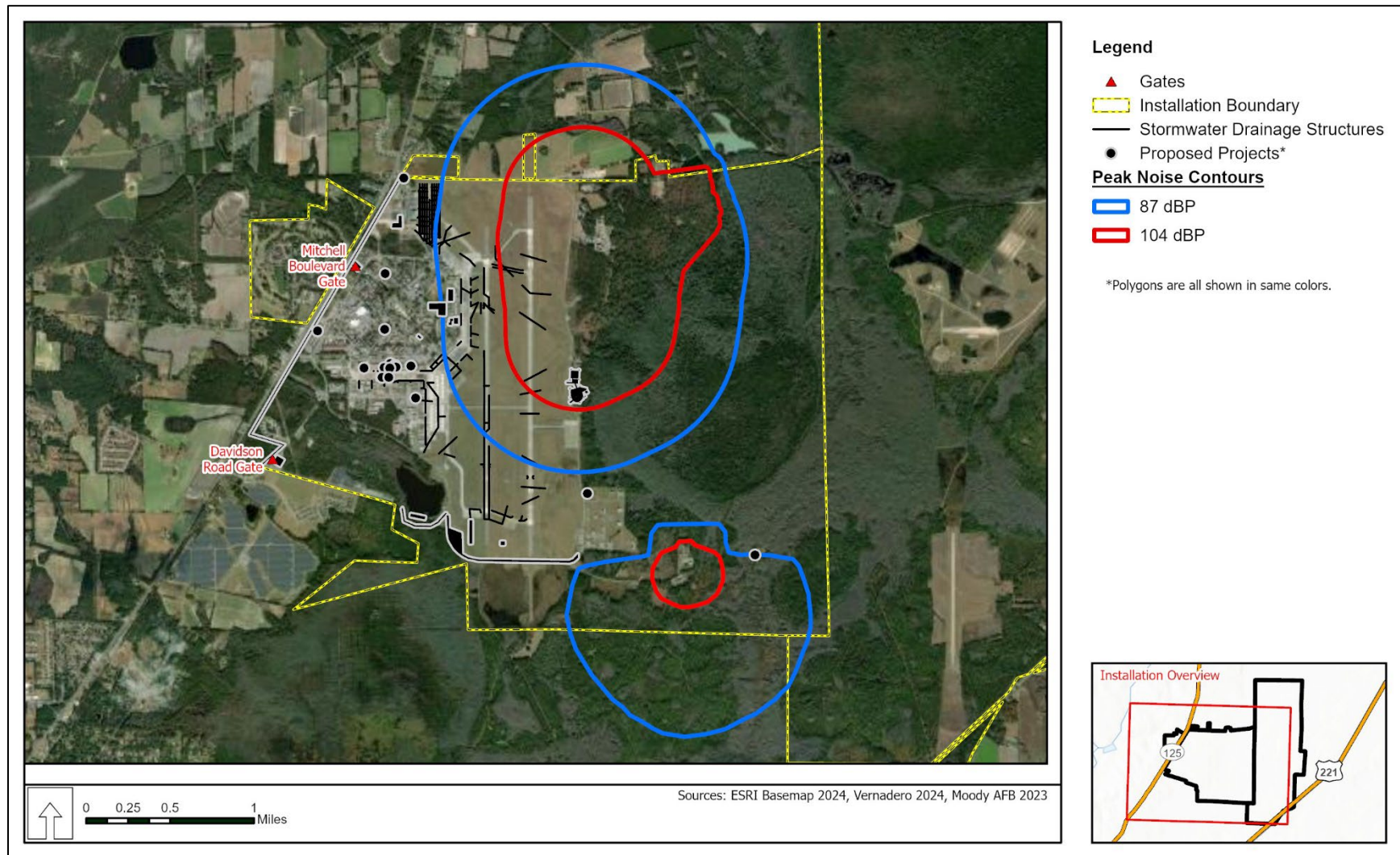


Figure 3-3. Small-Arms Noise Contours at Moody Air Force Base Main Base

3.5.2.4 Project 2, Alternative 1: Aircraft Fire Training Facility Improvements with Truck Driving Training

As described for Project 1, Alternative 1, there would be temporary, minor, adverse impacts as a result of noise from the proposed construction of AFTF improvements and the truck driving training pad. All construction would occur within the boundaries of Moody AFB, be temporary in nature, and not impact any off-base sensitive noise receptors. Traffic noise would be temporary, limited to existing roadways, and would not be perceptible. There would be no changes in the truck driving training operations on base, but instead those operations would be consolidated to the AFTF, and all associated noise from truck driving would be consolidated to the AFTF as well. Aircraft operations and small-arms use during ground training activities would continue to be the predominant noise sources at the AFTF location.

3.5.2.5 Project 2, Alternative 2: Aircraft Fire Training Facility Repairs and Construction, No Truck Driving Pad

Impacts on noise would be similar to those described for Project 1, Alternative 1. However, noise from trucks during truck driving training would continue to be spread out across Moody AFB at various available temporary truck driving training locations.

3.5.2.6 Project 2, No Action Alternative

There would be no impacts on noise under the No Action Alternative. There would be no construction or modification of the AFTF and noise from trucks during driver training would occur at temporary locations throughout the base.

3.5.2.7 Project 3, Alternative 1: Gate Overwatch Position Construction at Davidson Road and Mitchell Boulevard Gates

Noise impacts under Project 3, Alternative 1, would be similar to those described for Project 1, Alternative 1. All construction would occur within the boundaries of Moody AFB, be temporary in nature, and not impact any off-base sensitive noise receptors. There is residential housing both on-base and off-base proximate to the Davidson Road Gate. However, all residential housing is greater than 500 feet from the proposed overwatch position construction area and noise from construction activities would not exceed 65 dBA at these residences. Traffic noise would be temporary, limited to existing roadways, and would not be perceptible.

3.5.2.8 Project 3, No Action Alternative

Under the No Action Alternative, there would be no construction of overwatch positions at the Davidson and Mitchell Boulevard gates. The noise environment would remain unchanged. Therefore, there would be no impacts from noise.

3.5.2.9 Project 4, Alternative 1: Aerospace Ground Equipment Facility Construction and Demolition with New Shop, Administrative Space, and Covered Storage

Noise impacts under Project 4, Alternative 1, would be similar to those described for Project 1, Alternative 1, but at a different location on Main Base. All construction, demolition, and renovation would occur within the boundaries of Moody AFB, be temporary in nature, and not impact any off-base sensitive noise receptors. Traffic noise would be temporary, limited to existing roadways, and would not be perceptible. Aircraft operations would continue to be the predominant noise source.

3.5.2.10 Project 4, Alternative 2: Aerospace Ground Equipment Facility Construction and Demolition without New Shop and More Renovated Administrative Space

Noise impacts under Project 4, Alternative 2, would be the same as those described for Project 4, Alternative 1. All construction, demolition, and renovation would occur within the boundaries of Moody AFB, be temporary in nature, and not impact any off-base sensitive noise receptors. Traffic noise would be temporary, limited to existing roadways, and would not be perceptible. Aircraft operations would continue to be the predominant noise source.

3.5.2.11 Project 4, No Action Alternative

Under the No Action Alternative, there would be no construction, demolition, and renovation activities to support the AGE functions consolidation. The noise environment would remain unchanged. Therefore, there would be no impacts from noise.

3.5.2.12 Project 5, Alternative 1: Burma Road Realignment

Noise impacts under Project 5, Alternative 1, would be similar to those described for Project 1, Alternative 1, but at a different location on Main Base. All road and fence construction and tree removal would occur within the boundaries of Moody AFB, be temporary in nature, and not impact any off-base sensitive noise receptors. Traffic noise would be temporary, limited to existing roadways, and would not be perceptible. Vehicle operations on Burma Road following realignment would be unchanged.

3.5.2.13 Project 5, No Action Alternative

Under the No Action Alternative, there would be no road and fence construction or tree removal to support the Burma Road realignment. The noise environment would remain unchanged. Therefore, there would be no impacts from noise.

3.5.2.14 Project 6, Alternative 1: 38th Rescue Squadron Parking Lot Construction

Noise impacts under Project 6, Alternative 1, would be similar to those described for Project 1, Alternative 1, but at a different location on Main Base. The parking lot construction would occur within the boundaries of Moody AFB, be temporary in nature, and not impact any off-base sensitive noise receptors. Construction traffic noise would be temporary, limited to existing

roadways, and would not be perceptible. Aircraft operations and small-arms use from ground training activities would continue to be the predominant noise sources.

3.5.2.15 Project 6, No Action Alternative

Under the No Action Alternative, there would be no parking lot construction to support the 38 RQS. The noise environment would remain unchanged. Therefore, there would be no impacts from noise.

3.5.2.16 Project 7, Alternative 1: Airfield Stormwater Repair and Replacement

Noise impacts under Project 7, Alternative 1, would be similar to those described for Project 1, Alternative 1, but at a different location on Main Base. The stormwater system repairs, and removal of concrete structures would occur within the boundaries of Moody AFB, be temporary in nature, and not impact any off-base sensitive noise receptors. Construction traffic noise would be temporary, limited to existing roadways, and would not be perceptible. Aircraft operations and small-arms use from ground training activities would continue to be the predominant noise sources.

3.5.2.17 Project 7, No Action Alternative

Under the No Action Alternative, there would be no construction activities associated with stormwater system repairs or removal of the concrete structures south of the airfield. The noise environment would remain unchanged. Therefore, there would be no impacts from noise.

3.5.2.18 Project 8, Alternative 1: Mission Lake Water Barrier and Stone Road Repairs – Both Shoulders

Noise impacts under Project 8, Alternative 1, would be similar to those described for Project 1, Alternative 1, but occur at a different location on Main Base. The Mission Lake water barrier and Stone Road repairs would occur within the boundaries of Moody AFB, be temporary in nature, and not impact any off-base sensitive noise receptors. Construction traffic noise would be temporary, limited to existing roadways, and would not be perceptible.

3.5.2.19 Project 8, Alternative 2: Mission Lake Water Barrier and Stone Road Repairs – North Shoulder

Noise impacts under Project 8, Alternative 2, would be the same as those described for Project 8, Alternative 1. The Mission Lake water barrier and Stone Road repairs would occur within the boundaries of Moody AFB, be temporary in nature, and not impact any off-base sensitive noise receptors. Construction traffic noise would be temporary, limited to existing roadways, and would not be perceptible.

3.5.2.20 Project 8, Alternative 3: Repair Mission Lake Water Barrier and Realign Stone Road

Noise impacts under Project 8, Alternative 3, would be the same as those described for Project 8, Alternative 1. The Mission Lake water barrier and Stone Road repairs would occur within the

boundaries of Moody AFB, be temporary in nature, and not impact any off-base sensitive noise receptors. Construction traffic noise would be temporary, limited to existing roadways, and would not be perceptible.

3.5.2.21 Project 8, No Action Alternative

Under the No Action Alternative, there would be no construction activities repairs of the Mission Lake water barrier or Stone Road. The noise environment would remain unchanged. Therefore, there would be no impacts from noise.

3.5.2.22 Project 9, Alternative 1: Boundary Fence Repair with Driving Lane

Noise impacts under Project 9, Alternative 1, would be similar to those described for Project 1, Alternative 1. The removal of vegetation and construction of driving lane along the base boundary fence would occur within the boundaries of Moody AFB and be temporary in nature. Construction traffic noise would be temporary, limited to existing roadways, and would not be perceptible.

All off-base residential areas proximate to the western base boundary fence are located west of Bemiss Road, and construction noise would attenuate to less than 65 dBA DNL due to distance from the construction at all off-base residences. Noise from vehicular traffic on Bemiss Road would likely exceed the noise from construction activities along the base boundary fence.

One on-base housing area is located along Chennault Lane and proximate to the western base boundary fence. Five of these residences are located within 200 feet of the proposed construction corridor along the western base boundary fence and could experience temporary noise levels as high as 80 dBA DNL during construction. However, these impacts would be temporary (i.e., less than one month of construction proximate to the housing area), only occur to on-base housing, would occur during daytime hours, and would cease after the completion of vegetation removal and driving lane construction.

3.5.2.23 Project 9, Alternative 2: Boundary Fence Repair with Vegetation Clearance on the Base Side of the Fence

Noise impacts under Project 9, Alternative 2, would be similar to those described for Project 9, Alternative 1. The removal of vegetation along the base boundary fence would occur within the boundaries of Moody AFB and be temporary in nature. Construction traffic noise would be temporary, limited to existing roadways, and would not be perceptible. The only residential area that would experience a temporary noise increase includes approximately five residences located along Chennault Lane proximate to the western base boundary fence.

3.5.2.24 Project 9, Alternative 3: Boundary Fence Repair with Vegetation Clearance on Both Sides of the Fence

Noise impacts under Project 9, Alternative 1, would be similar to those described for Project 9, Alternative 3. The removal of vegetation along the base boundary fence would occur within the boundaries of Moody AFB and be temporary in nature. Construction traffic noise would be

temporary, limited to existing roadways, and would not be perceptible. The only residential area that would experience a temporary noise increase includes approximately five residences located along Chennault Lane proximate to the western base boundary fence.

3.5.2.25 Project 9, No Action Alternative

Under the No Action Alternative, there would be no construction activities associated with vegetation removal and development of a driving lane along the western base boundary fence. The noise environment would remain unchanged. Therefore, there would be no impacts from noise.

3.5.2.26 Project 10, Alternative 1: Demolish Eleven Buildings

Noise impacts under Project 10, Alternative 1, would be similar to those described for Project 1, Alternative 1, but would occur at different locations throughout Main Base. The demolition of 11 buildings would occur within the boundaries of Moody AFB and be temporary in nature. Noise from demolition activities would not impact any off-base sensitive noise receptors. Construction traffic noise would be temporary, limited to existing roadways, and would not be perceptible.

3.5.2.27 Project 10, No Action Alternative

Under the No Action Alternative, there would be no construction activities associated with vegetation removal and development of a driving lane along the western base boundary fence. The noise environment would remain unchanged. Therefore, there would be no impacts from noise.

3.5.2.28 Cumulative Actions and Other Considerations

Noise from the demolition, renovation, and construction activities associated with the proposed projects composing the Proposed Action in combination with other proposed construction projects on Moody AFB would have temporary noise impacts that would end when the construction or demolition activities end. There are no sensitive receptors proximate to these proposed construction projects on Moody AFB that would be affected by these temporary increases in the noise environment. On the base, noise levels from all the proposed projects would be similar to or less than the ambient noise levels from aircraft operations and small-arms range use during ground training operations.

The proposed F-35A beddown at Moody AFB has the potential to substantially alter the noise environment on and off Moody AFB. The proposed change from primarily A-10 aircraft operations to primarily F-35A aircraft operations would likely increase noise from aircraft operations during takeoffs and landings. However, under a separate NEPA analysis, DAF would model the anticipated changes to the noise environment from the proposed F-35A operations, would assess the potential impacts from any changes, and recommend measures to reduce noise impacts on sensitive noise receptors, if any.

3.6 Air Quality, Climate Change, and Greenhouse Gases

Detailed information on air quality regulations and general conformity is provided in **Appendix C**.

3.6.1 Affected Environment

The regional climate of south-central Georgia, where Moody AFB is located, is classified as humid subtropical and is characterized by hot, humid summers and no distinct dry season (rainfall occurs year round). Summers are hot and muggy with frequent thunderstorms. Winters are mild with precipitation, although frosts are not uncommon. In Valdosta, Georgia (nearest city to Moody AFB), the warmest month in the region is July, with average high and low temperatures of 91.4 degrees Fahrenheit (°F) and 71.1°F, respectively. January is the coldest month, with an average high temperature of 61.9°F and average low temperature of 38.8°F. The wettest month by average precipitation is June, with an average of 8 inches of rain. The driest months are October through December, with an average of 3.2 inches of precipitation per month (Weatherbase 2024).

Moody AFB, in Lowndes and Lanier counties, Georgia, is located within the Southwest Georgia Intrastate Air Quality Control Region (40 CFR § 81.238), which serves as the ROI for this air quality analysis.

The Georgia Environmental Protection Division (GEPD) Air Protection Branch has adopted the federal National Ambient Air Quality Standards (NAAQS) (**Table 3-6**), thereby requiring the use of the standards within Georgia (Part 1 of Chapter 9 of Title 12 of the Official Code of Georgia Annotated). The GEPD administers the air permit program and is responsible for issuance of permits to construct, modify, or operate stationary air emissions sources. Moody AFB operates under a synthetic minor air permit issued by the GEPD for construction and operation of stationary air emissions sources.

Table 3-6. National Ambient Air Quality Standards

Pollutant	Standard Value ⁷		Standard Type
Carbon Monoxide (CO)			
8-hour average	9 ppm	(10 mg/m ³)	Primary
1-hour average	35 ppm	(40 mg/m ³)	Primary
Nitrogen Dioxide (NO ₂)			
Annual arithmetic mean	0.053 ppm	(100 µg/m ³)	Primary and Secondary
1-hour average ¹	0.100 ppm	(188 µg/m ³)	Primary
2015 Ozone (O ₃)			
8-hour average ^{2,3}	0.070 ppm	(137 µg/m ³)	Primary and Secondary

Pollutant	Standard Value ⁷		Standard Type
2008 Ozone (O ₃)			
8-hour average	0.075 ppm	-	Primary and Secondary
1997 Ozone (O ₃)			
8-hour average	0.08 ppm	-	Primary and Secondary
Lead (Pb)			
3-month average ⁴		0.15 µg/m ³	Primary and Secondary
Particulate ≤10 Micrometers (PM ₁₀)			
24-hour average ⁵		150 µg/m ³	Primary and Secondary
Particulate ≤2.5 Micrometers (PM _{2.5})			
Annual arithmetic mean ⁵		9 µg/m ³	Primary
Annual arithmetic mean ⁵		15 µg/m ³	Secondary
24-hour average ⁵		35 µg/m ³	Primary and Secondary
Sulfur Dioxide (SO ₂)			
1-hour average ⁶	0.075 ppm	(196 µg/m ³)	Primary
3-hour average ⁶	0.5 ppm	(1,300 µg/m ³)	Secondary

Source: US Environmental Protection Agency (USEPA) 2018, 2020

ppm – part(s) per million; **mg/m³** – milligram(s) per cubic meter; **µg/m³** – microgram(s) per cubic meter

Notes:

- 1 In February 2010, the USEPA established a new 1-hour standard for NO₂ at a level of 0.100 ppm, based on the 3-year average of the 98th percentile of the yearly distribution concentration, to supplement the then-existing annual standard.
- 2 In October 2015, the USEPA revised the level of the 8-hour standard to 0.070 ppm, based on the annual fourth-highest daily maximum concentration, averaged over 3 years; the regulation became effective on 28 December 2015. The previous (2008) standard of 0.075 ppm remains in effect for some areas. A 1-hour standard no longer exists.
- 3 Annual fourth-highest daily maximum 8-hour average concentration, averaged over 3 years.
- 4 In November 2008, USEPA revised the primary lead standard to 0.15 µg/m³. USEPA revised the averaging time to a rolling 3-month average.
- 5 In October 2006, USEPA revised the level of the 24-hour PM_{2.5} standard to 35 µg/m³ and retained the level of the annual PM_{2.5} standard at 15 µg/m³. In 2012, USEPA split standards for primary and secondary annual PM_{2.5}. All are averaged over 3 years, with the 24-hour average determined at the 98th percentile for the 24-hour standard. USEPA retained the 24-hour primary standard and revoked the annual primary standard for PM₁₀.
- 6 In 2012, the USEPA retained a secondary 3-hour standard, which is not to be exceeded more than once per year. In June 2010, USEPA established a new 1-hour SO₂ standard at a level of 75 ppb, based on the 3-year average of the annual 99th percentile of 1-hour daily maximum concentrations.
- 7 Parenthetical value is an approximately equivalent concentration for NO₂, O₃, and SO₂.

The US Environmental Protection Agency (USEPA) designates areas as having air quality better than (attainment) the NAAQS, worse than (nonattainment) the NAAQS, and unclassifiable (see **Appendix C**). Per the Air Force Civil Engineer Center (AFCEC), both Lowndes and Lanier counties are in attainment for all criteria pollutants. As a result, the General Conformity Rule (see **Appendix C**) does not apply, and a General Conformity Applicability Analysis is not required.

Climate Change and Greenhouse Gases. Like many locations in the country, climate trends within the southeastern US could be adversely affected by global climate change. Georgia's climate is changing, and the state has warmed less than most of the nation over the last 120 years. Throughout this region, heat waves are becoming more common, and tropical storms and hurricanes have become more intense. Higher water levels are eroding beaches, submerging lowlands, exacerbating coastal flooding, and increasing the salinity of estuaries and aquifers. The southeastern US' changing climate is likely to reduce crop yields, harm livestock, increase the number of unpleasantly hot days, and increase the risk of heatstroke and other heat-related illnesses. Warmer air can also increase the formation of ground-level ozone (O₃), a key component of smog. O₃ aggravates lung diseases such as asthma and increases the risk of premature death from heart or lung disease. There is also risk of severe droughts becoming more intense, and this will increase the risk of wildfires. Rising temperatures and the resulting increase in evaporation will accelerate the rate at which soils dry out. Thus, naturally occurring droughts in Georgia will be more severe (USEPA 2016).

Greenhouse gases (GHGs) are gases, occurring from natural processes and human activities, that trap heat in the atmosphere. Natural sources of GHGs include land use, such as through deforestation, land clearing for agriculture, and degradation of soils. The largest source of GHGs from human activities in the US is from burning fossil fuels for electricity, heat, and transportation. Combustion of fossil fuels (coal, oil, natural gas) primarily generate three main GHGs: carbon dioxide (CO₂), methane (CH₄), and nitrous oxide (N₂O). These three GHGs alone represent more than 97 percent of the US total GHG emissions (USEPA 2024). The total CO₂ emissions (in million metric tons of energy-related CO₂) generated by Georgia in 2021 was reported to be 124.1. Total state CO₂ emissions include CO₂ emissions from direct fuel use across all sectors, including residential, commercial, industrial, and transportation, as well as primary fuels consumed for electricity generation. In 2022, natural gas accounted for 47 percent of Georgia's total electricity net generation, and nuclear power accounted for 27 percent. Coal accounted for about 13 percent and renewable energy, including hydroelectric power and small-scale solar, accounted for nearly 13 percent (US Energy Information Administration 2021).

As a part of the Inflation Reduction Act, the Climate Pollution Reduction Grant Program provides states, local governments, territories, and tribes with funds to develop and implement plans to mitigate climate impacts through the reduction of GHG emissions and other harmful air pollutants. Georgia developed the Peach State Voluntary Emission Reduction Plan, which identifies Georgia's highest-priority state and local GHG reduction measures (GEPD 2024).

3.6.2 *Environmental Consequences*

Lowndes and Lanier counties are designated as attainment (or unclassifiable) for all criteria pollutants. As such, the General Conformity Rule is not applicable to emissions from the Proposed Action and is not addressed in this air quality analysis.

Based on guidance in Chapter 4 of the *Air Force Air Quality EIAP Guide, Volume II – Advanced Assessments*, estimated criteria pollutant emissions from the Proposed Action were compared against the insignificance indicator of 250 tons per year (tpy; 25 tpy for lead). Prevention of

Significant Deterioration (PSD) major source permitting threshold for actions occurring in areas that are in attainment for all criteria pollutants (US Air Force 2020). These “Insignificance Indicators” were used in the analysis to provide an indication of the significance of potential impacts on air quality based on current ambient air quality relative to the NAAQS. These insignificance indicators do not define a significant impact; rather, they provide a threshold to identify actions that are insignificant. Any action with net emissions below the insignificance indicators for a criteria pollutant indicates that the action would not cause or contribute to emissions that would exceed one or more NAAQS.

For GHG emissions evaluation, the PSD threshold of 75,000 tpy of CO₂ equivalents (CO₂e), or 68,039 metric tons per year (mton/year) was used as an insignificance indicator to evaluate air quality impacts in all areas. A GHG emissions evaluation establishes the quantity of speciated GHGs and CO₂e, determines if an action’s emissions are insignificant, and provides a relative significance comparison. Actions with a net change in GHG (i.e., CO₂e) emissions below the insignificance indicator (threshold) are considered too insignificant on a global scale to warrant any further analysis. Actions with GHG emissions above the insignificance indicator (threshold) are only considered potentially significant and require further assessment to determine if the action poses a significant impact (AFCEC Compliance Technical Support Branch 2023).

ACAM version 5.0.23a was used to estimate the total direct and indirect emissions from the Proposed Action projects. The projects mainly include construction (that includes new construction, additions, and renovations), demolition of buildings, and asphalt paving of parking lots or roads. Project criteria pollutant emissions estimated using ACAM would primarily be associated with earth disturbance, operation of diesel-fuel construction equipment and vehicles hauling materials, worker trips on the site, and paving and architectural coating applications. CO₂ emissions would be mainly from fuel combustion from equipment and worker vehicles during construction, demolition, and renovation activities. Operational emissions are estimated for comfort heating (e.g., boilers and heaters), which would come into effect once construction ends, and the facility is operational.

For all construction projects, reasonable precautions to reduce fugitive dust (PM₁₀) during demolition, building construction, grading, and land clearing would typically be followed. These precautions may include regular spraying of water or approved chemical dust suppressants on exposed soil and on unpaved roads; proper soil stockpiling methods, including installation of windbreaks around soil storage piles; and replacement of ground cover. Additional measures, such as use of efficient grading practices, proper use of equipment per manufacturer’s instructions, and lower engine idling times would further reduce combustion emissions. Such measures, if implemented, would reduce dust and other pollutant emissions to levels far below those estimated.

Even though the project alternatives would be implemented over a five-year period, to be conservative, and following AFCEC policy, all construction activities are assumed to occur within a single calendar year in 2025. Operational emissions are assumed to start in 2026 after construction ends and would occur indefinitely (represents “steady state” emissions). Moderate

changes in the types and number of equipment used is not expected to substantially change the emissions estimates in any meaningful way.

ACAM model assumptions, ACAM detail emissions calculations, and ACAM summary results are provided in **Appendix D**.

3.6.2.1 Project 1, Alternative 1: Guardian Angel Facility Construction and Renovation North Site

Table 3-7 presents estimated emissions from construction activities associated with Project 1, Alternative 1. There would be temporary and long-term, minor, adverse impacts on air quality from the proposed construction activities.

An anticipated increase in construction emissions would be associated with fugitive dust from grading and trenching activities for pavement construction, operation of diesel-fuel construction equipment and vehicles hauling materials, worker commutes, and asphalt paving operations. These emissions would be temporary, occurring only for the duration of construction. Estimated emissions from construction emissions would be well below the insignificance indicator for all criteria pollutants and GHGs. Therefore, impact on air quality would be insignificant. All reasonable precautions to reduce fugitive dust (PM₁₀) during construction, grading, and land clearing would be followed, potentially resulting in further reduction in estimated emissions.

Anticipated increase in operational emissions would be due to an increase in heating square footage at the newly constructed facility and addition of a new standby diesel generator. Operational emissions would be expected to continue indefinitely after the construction phase ends. As seen in **Table 3-7**, operational emissions would be negligible relative to the indicator value and as a result, impact on air quality would be insignificant.

The total net change in GHG emissions from Project 1, Alternative 1, would account for less than 0.00078714 percent of the state annual CO₂e emissions and less than 0.00002053 percent of US annual CO₂e emissions. As a result, the emissions of CO₂e are considered too small on a regional and national scale for further analysis.

Table 3-7. Estimated Air Emissions for Project 1, Alternative 1

Activity	Emissions (tpy) ¹								
	VOC	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}	Pb	NH ₃	CO ₂ e
Construction	3.005	1.817	2.246	0.004	6.787	0.064	0.000	0.007	439.368
Operational	0.039	0.628	0.524	0.008	0.051	0.051	0.000	0.000	729.256
Insignificance Indicator	250	250	250	250	250	250	25	250	75,000
Exceeds Indicator Level?	No	No	No	No	No	No	No	No	No

tpy – tons per year; **VOC** – volatile organic compound; **NO_x** – nitrogen oxides; **CO** – carbon monoxide; **SO_x** – sulfur oxides; **PM₁₀** – particulate matter less than 10 microns; **PM_{2.5}** – particulate matter less than 2.5 microns; **Pb** – lead; **NH₃** – ammonia; **CO₂e** – carbon dioxide equivalent; **N/A** – not applicable

¹ Estimated ACAM output results (see Appendix D)

3.6.2.2 Project 1, Alternative 2: Guardian Angel Facility Construction and Renovation South Site

Table 3-8 presents estimated emissions from construction activities associated with Project 1, Alternative 2. Similar to Project 1, Alternative 1, there would be temporary and long-term, minor adverse impacts on air quality from the proposed construction activities.

The area proposed for construction of additional parking under Project 1, Alternative 2, is slightly more than for Project 1, Alternative 1. Emissions generated from earth-moving and paving activities for pavement construction are a function of the size of the construction area. As a result, criteria pollutant emissions, especially PM₁₀, are nominally (approximately 0.5 tpy) higher than those estimated for Project 1, Alternative 1. Estimated emissions for all pollutants would be well below insignificance indicator levels. Therefore, there would be insignificant impact on air quality. Estimated operational emissions would be the same as for Project 1, Alternative 1, and impact on air quality would be insignificant.

The total net change in GHG emissions from Project 1, Alternative 2, would account for less than 0.00080547 percent of the state annual CO₂e emissions and less than 0.00002101 percent of US annual CO₂e emissions. As a result, the emissions of CO₂e are considered too small on a regional and national scale for further analysis.

Table 3-8. Estimated Air Emissions for Project 1, Alternative 2

Activity	Emissions (tpy) ¹								
	VOC	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}	Pb	NH ₃	CO ₂ e
Construction	3.016	1.911	2.378	0.004	7.294	0.067	0.000	0.008	466.617
Operational	0.039	0.628	0.524	0.008	0.051	0.051	0.000	0.000	729.256
Insignificance Indicator	250	250	250	250	250	250	25	250	75,000
Exceeds Indicator Level?	No	No	No	No	No	No	No	No	No

tpy – tons per year; **VOC** – volatile organic compound; **NO_x** – nitrogen oxides; **CO** – carbon monoxide; **SO_x** – sulfur oxides; **PM₁₀** – particulate matter less than 10 microns; **PM_{2.5}** – particulate matter less than 2.5 microns; **Pb** – lead; **NH₃** – ammonia; **CO₂e** – carbon dioxide equivalent

¹ Estimated ACAM output results (see Appendix D)

3.6.2.3 Project 1, No Action Alternative

Under the No Action Alternative, the squadron operations facility would not be constructed. No additional emissions would be generated; as a result, existing conditions would remain unchanged. No air quality impacts would be anticipated.

3.6.2.4 Project 2, Alternative 1: Aircraft Fire Training Facility Improvements with Truck Driving Training

Table 3-9 presents estimated emissions from construction activities associated with Project 2, Alternative 1. There would be temporary and long-term, minor, adverse impacts on air quality from the proposed construction activities.

Estimated GHG and criteria pollutant emissions would be generated from the proposed construction of the new training facility and the construction of concrete pads around the AFTF and for truck driving. Estimated emissions would be well below the insignificance indicator values for all criteria pollutants and GHGs. Therefore, impacts on air quality would be insignificant. There would be operational emissions generated due to a small increase in heating square footage at the newly constructed facility. As seen in **Table 3-9**, the emissions increase from operational activities would be nominal relative to the indicator value and therefore impacts on air quality would be insignificant.

The total net change in GHG emissions from Project 2, Alternative 1, would account for less than 0.00038153 percent of the state annual CO₂e emissions and less than 0.00000995 percent of US annual CO₂e emissions. As a result, the emissions of CO₂e are considered too small on a regional and national scale for further analysis.

Table 3-9. Estimated Air Emissions for Project 2, Alternative 1

Activity	Emissions (tpy) ¹								
	VOC	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}	Pb	NH ₃	CO ₂ e
Construction	0.354	2.046	2.695	0.004	0.631	0.068	0.000	0.011	526.568
Operational	0.002	0.033	0.028	0.000	0.003	0.003	0.000	0.000	39.762
Insignificance Indicator	250	250	250	250	250	250	25	250	75,000
Exceeds Indicator Level?	No	No	No	No	No	No	No	No	No

tpy – tons per year; VOC – volatile organic compound; NO_x – nitrogen oxides; CO – carbon monoxide; SO_x – sulfur oxides; PM₁₀ – particulate matter less than 10 microns; PM_{2.5} – particulate matter less than 2.5 microns; Pb – lead; NH₃ – ammonia; CO₂e – carbon dioxide equivalent

¹ Estimated ACAM output results (see Appendix D)

3.6.2.5 Project 2, Alternative 2: Aircraft Fire Training Facility Repairs and Construction, No Truck Driving Pad

Table 3-10 presents estimated emissions from construction activities associated with Project 2, Alternative 2. Estimated construction and operational emissions for all pollutants and GHGs would be well below the insignificance indicator values, and therefore there would be temporary and long-term, minor, adverse impacts on air quality from the proposed construction activities.

The area proposed for construction of concrete pads under Project 1, Alternative 2, is less than for Project 1, Alternative 1. Consequently, estimated construction emissions would be slightly lower for all pollutants compared to those estimated for Project 2, Alternative 1. New building heating square footage would remain unchanged; therefore, operational emissions and its impact on air quality would be the same as for Project 2, Alternative 1.

The total net change in GHG emissions from Project 2, Alternative 2, would account for less than 0.00027664 percent of the state annual CO₂e emissions and less than 0.00000721 percent of US annual CO₂e emissions. As a result, the emissions of CO₂e are considered too small on a regional and national scale for further analysis.

Table 3-10. Estimated Air Emissions for Project 2, Alternative 2

Activity	Emissions (tpy) ¹								
	VOC	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}	Pb	NH ₃	CO _{2e}
Construction	0.288	1.473	1.931	0.003	0.611	0.050	0.000	0.007	370.875
Operational	0.002	0.033	0.028	0.000	0.003	0.003	0.000	0.000	39.762
Insignificance Indicator	250	250	250	250	250	250	25	250	75,000
Exceeds Indicator Level?	No	No	No	No	No	No	No	No	No

tpy – tons per year; VOC – volatile organic compound; NO_x – nitrogen oxides; CO – carbon monoxide; SO_x – sulfur oxides; PM₁₀ – particulate matter less than 10 microns; PM_{2.5} – particulate matter less than 2.5 microns; Pb – lead; NH₃ – ammonia; CO_{2e} – carbon dioxide equivalent

¹ Estimated ACAM output results (see Appendix D)

3.6.2.6 Project 2, No Action Alternative

Under the No Action Alternative, the proposed AFTF improvements would not be constructed. No additional emissions would be generated; as a result, existing conditions would remain unchanged. No air quality impacts would be anticipated.

3.6.2.7 Project 3, Alternative 1: Gate Overwatch Position Construction at Davidson Road and Mitchell Boulevard Gates

Table 3-11 presents estimated emissions from construction activities associated with Project 3, Alternative 1. There would be temporary and long-term, minor, adverse impacts on air quality from the proposed construction activities.

Potential temporary impacts would result from anticipated increases in construction emissions associated mainly with operation of diesel-fuel construction equipment and vehicles hauling materials, and worker commutes. There would be long-term, minor, adverse impacts to air quality from operational activities due to the slight increase in heating square footage from newly constructed buildings. Estimated emissions for construction and operational emissions are well under the insignificant indicator values for all pollutants and GHGs. As a result, impacts on air quality would be insignificant.

The total net change in GHG emissions from Project 3, Alternative 1, would account for less than 0.00007660 percent of the state annual CO_{2e} emissions and less than 0.00000200 percent of US annual CO_{2e} emissions. As a result, the emissions of CO_{2e} are considered too small on a regional and national scale for further analysis.

Table 3-11. Estimated Air Emissions for Project 3, Alternative 1

Activity	Emissions (tpy) ¹								
	VOC	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}	Pb	NH ₃	CO _{2e}
Construction	0.083	0.469	0.601	0.001	0.124	0.019	0.000	0.001	100.1
Operational	0.001	0.011	0.009	0.000	0.001	0.001	0.000	0.000	13.6
Insignificance Indicator	250	250	250	250	250	250	25	250	75,000
Exceeds Indicator Level?	No	No	No	No	No	No	No	No	No

tpy – tons per year; VOC – volatile organic compound; NO_x – nitrogen oxides; CO – carbon monoxide; SO_x – sulfur oxides; PM₁₀ – particulate matter less than 10 microns; PM_{2.5} – particulate matter less than 2.5 microns; Pb – lead; NH₃ – ammonia; CO_{2e} – carbon dioxide equivalent

¹ Estimated ACAM output results (see Appendix D)

3.6.2.8 Project 3, No Action Alternative

Under the No Action Alternative, the proposed overwatch positions would not be constructed. No additional emissions would be generated; as a result, existing conditions would remain unchanged. No air quality impacts would be anticipated.

3.6.2.9 Project 4, Alternative 1: Aerospace Ground Equipment Facility Construction and Demolition with New Shop, Administrative Space, and Covered Storage

Table 3-12 presents estimated emissions from construction activities associated with Project 4, Alternative 1. There would be temporary and long-term, minor, adverse impacts on air quality from the proposed construction activities.

Construction would be primarily associated with the operation of diesel-fuel construction equipment and vehicles hauling materials, worker commutes and architectural coating. Estimated construction emissions are well under the insignificant indicator values for all pollutants and GHGs. As a result, impact on air quality would be insignificant.

There would be an increase in emissions from the proposed addition of a new standby diesel generator. Also, there would be a net decrease in heating square footage area because heating area removed due to the proposed demolition exceeds heating the area proposed to be added for newly constructed facilities. The increase in emissions from the new standby diesel generator combined with the net decrease in heating area emissions would result in a negligible net increase in total annual operational emissions for all criteria pollutants. Estimated net GHG emissions would decrease marginally (indicated with a “minus” sign in **Table 3-12**), but it would not result in a significant beneficial impact on air quality.

The total net change in GHG emissions from Project 4, Alternative 1, would account for less than 0.00016780 percent of the state annual CO_{2e} emissions and less than 0.00000438 percent of US annual CO_{2e} emissions. As a result, the emissions of CO_{2e} are considered too small on a regional and national scale for further analysis.

Table 3-12. Estimated Air Emissions for Project 4, Alternative 1

Activity	Emissions (tpy) ¹								
	VOC	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}	Pb	NH ₃	CO _{2e}
Construction	0.785	1.093	1.368	0.002	1.055	0.039	0.000	0.004	251.094
Operational	0.005	0.019	0.012	0.005	0.005	0.005	0.000	0.000	-2.022
Insignificance Indicator	250	250	250	250	250	250	25	250	75,000
Exceeds Indicator Level?	No	No	No	No	No	No	No	No	No

tpy – tons per year; VOC – volatile organic compound; NO_x – nitrogen oxides; CO – carbon monoxide; SO_x – sulfur oxides; PM₁₀ – particulate matter less than 10 microns; PM_{2.5} – particulate matter less than 2.5 microns; Pb – lead; NH₃ – ammonia; CO_{2e} – carbon dioxide equivalent

¹ Estimated ACAM output results (see Appendix D)

3.6.2.10 Project 4, Alternative 2: Aerospace Ground Equipment Facility Construction and Demolition without New Shop and More Renovated Administrative Space

Table 3-13 presents estimated emissions from construction activities associated with Project 4, Alternative 2. There would be temporary and long-term, minor, adverse impacts on air quality from the proposed construction activities.

The area proposed for demolition of buildings under Project 4, Alternative 2, would be less than for Project 4, Alternative 1. Consequently, construction emissions generated from fuel combustion equipment and vehicles would be lower for all pollutants compared to those estimated for Project 4, Alternative 1. Estimated net GHG operational emissions would decrease marginally (indicated with a “minus” sign in **Table 3-13**) and at such low emissions, there would be negligible beneficial impact on air quality.

The total net change in GHG emissions from Project 4, Alternative 2, would account for less than 0.00015258 percent of the state annual CO_{2e} emissions and less than 0.00000398 percent of US annual CO_{2e} emissions. As a result, the emissions of CO_{2e} are considered too small on a regional and national scale for further analysis.

Table 3-13. Estimated Air Emissions for Project 4, Alternative 2

Activity	Emissions (tpy) ¹								
	VOC	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}	Pb	NH ₃	CO _{2e}
Construction	0.721	1.059	1.345	0.002	0.775	0.038	0.000	0.003	233.041
Operational	0.005	0.016	0.009	0.005	0.004	0.004	0.000	0.000	-6.551
Insignificance Indicator	250	250	250	250	250	250	25	250	75,000
Exceeds Indicator Level?	No	No	No	No	No	No	No	No	No

tpy – tons per year; VOC – volatile organic compound; NO_x – nitrogen oxides; CO – carbon monoxide; SO_x – sulfur oxides; PM₁₀ – particulate matter less than 10 microns; PM_{2.5} – particulate matter less than 2.5 microns; Pb – lead; NH₃ – ammonia; CO_{2e} – carbon dioxide equivalent

¹ Estimated ACAM output results (see Appendix D)

3.6.2.11 Project 4, No Action Alternative

Under the No Action Alternative, the proposed consolidated AGE facility would not be constructed. No additional emissions would be generated; as a result, existing conditions would remain unchanged. No air quality impacts would be anticipated.

3.6.2.12 Project 5, Alternative 1: Burma Road Realignment

Table 3-14 presents estimated emissions from construction activities associated with Project 5, Alternative 2. There would be temporary, minor, adverse impacts on air quality from the proposed construction activities.

Under Project 5, Alternative 1, the proposed clearing of trees and the construction of a new road would mainly result in increases in fugitive dust (PM₁₀) emissions associated with grading and trenching activities. Construction activity emissions would be temporary, lasting only for the duration of construction. All reasonable precautions to reduce fugitive dust (PM₁₀) during construction, grading, and land clearing would be followed, potentially resulting in further reduction in estimated emissions. The estimated emissions for each pollutant would be less than its respective insignificance indicator. Therefore, impacts on air quality would be insignificant.

The total net change in GHG emissions from Project 5, Alternative 1, would account for less than 0.00011722 percent of the state annual CO₂e emissions and less than 0.00000306 percent of US annual CO₂e emissions. As a result, the emissions of CO₂e are considered to be too small on a regional and national scale for further analysis.

Table 3-14. Estimated Air Emissions for Project 5, Alternative 1

Activity	Emissions (tpy) ¹								
	VOC	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}	Pb	NH ₃	CO ₂ e
Construction	0.089	0.748	0.961	0.001	8.637	0.028	0.000	0.003	173.990
Insignificance Indicator	250	250	250	250	250	250	25	250	75,000
Exceeds Indicator Level?	No	No	No	No	No	No	No	No	No

tpy – tons per year; **VOC** – volatile organic compound; **NO_x** – nitrogen oxides; **CO** – carbon monoxide; **SO_x** – sulfur oxides; **PM₁₀** – particulate matter less than 10 microns; **PM_{2.5}** – particulate matter less than 2.5 microns; **Pb** – lead; **NH₃** – ammonia; **CO₂e** – carbon dioxide equivalent

¹ Estimated ACAM output results (see Appendix D)

3.6.2.13 Project 5, No Action Alternative

Under the No Action Alternative, Burma Road would not be realigned. No additional emissions would be generated; as a result, existing conditions would remain unchanged. No air quality impacts would be anticipated.

3.6.2.14 Project 6, Alternative 1: 38th Rescue Squadron Parking Lot Construction

Table 3-15 presents estimated emissions from construction activities associated with Project 6, Alternative 1. There would be temporary, minor, adverse impacts on air quality from the proposed construction activities.

Under Project 6, Alternative 1, there would be construction of a POV parking lot, installation of electric charging stations, and trenching of electric utilities. Potential impacts would result from anticipated increases in temporary construction emissions associated with fugitive dust from grading and trenching activities, operation of diesel-fuel construction equipment and vehicles hauling materials, worker commutes, and asphalt paving operations. Construction activity emissions would be temporary, lasting only for the duration of construction. All reasonable precautions to reduce fugitive dust (PM₁₀) during construction, grading, and land clearing would be followed, potentially resulting in further reduction in estimated emissions. Estimated criteria air pollutant emissions and GHGs would be minor, therefore, impacts on air quality would be insignificant.

The total net change in GHG emissions from Project 6, Alternative 1, would account for less than 0.00011217 percent of the state's annual CO₂e emissions and less than 0.00000293 percent of US annual CO₂e emissions. As a result, the emissions of CO₂e are considered too small on a regional and national scale for further analysis.

Table 3-15. Estimated Air Emissions for Project 6, Alternative 1

Activity	Emissions (tpy) ¹								
	VOC	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}	Pb	NH ₃	CO ₂ e
Construction	0.089	0.744	1.007	0.002	0.451	0.030	0.000	0.002	166.493
Insignificance Indicator	250	250	250	250	250	250	25	250	75,000
Exceeds Indicator Level?	No	No	No	No	No	No	No	No	No

tpy – tons per year; **VOC** – volatile organic compound; **NO_x** – nitrogen oxides; **CO** – carbon monoxide; **SO_x** – sulfur oxides; **PM₁₀** – particulate matter less than 10 microns; **PM_{2.5}** – particulate matter less than 2.5 microns; **Pb** – lead; **NH₃** – ammonia; **CO₂e** – carbon dioxide equivalent

¹ Estimated ACAM output results (see Appendix D)

3.6.2.15 Project 6, No Action Alternative

Under the No Action Alternative, the proposed parking lot would not be constructed. No additional emissions would be generated; as a result, existing conditions would remain unchanged. No air quality impacts would be anticipated.

3.6.2.16 Project 7, Alternative 1: Airfield Stormwater Repair and Replacement

Table 3-16 presents estimated emissions from construction activities associated with Project 7, Alternative 1. There would be temporary, minor, adverse impacts on air quality from the proposed construction activities.

Potential impacts would result from anticipated increases in temporary construction emissions associated with fugitive dust from grading and trenching activities, operation of diesel-fuel

construction equipment and vehicles hauling materials, and worker commutes. Construction activity emissions would be temporary, lasting only for the duration of construction. All reasonable precautions to reduce fugitive dust (PM₁₀) during construction, grading, and land clearing would be followed, potentially resulting in further reduction in estimated emissions. Estimated criteria air pollutant emissions and GHGs would be minor, therefore, impacts on air quality would be insignificant.

The total net change in GHG emissions from Project 7, Alternative 1, would account for less than 0.00005955 percent of the state annual CO₂e emissions and less than 0.00000155 percent of US annual CO₂e emissions. As a result, the emissions of CO₂e are considered too small on a regional and national scale for further analysis.

Table 3-16. Estimated Air Emissions for Project 7, Alternative 1

Activity	Emissions (tpy) ¹								
	VOC	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}	Pb	NH ₃	CO ₂ e
Construction	0.049	0.426	0.536	0.001	0.457	0.017	0.000	0.001	88.399
Insignificance Indicator	250	250	250	250	250	250	25	250	75,000
Exceeds Indicator Level?	No	No	No	No	No	No	No	No	No

tpy – tons per year; VOC – volatile organic compound; NO_x – nitrogen oxides; CO – carbon monoxide; SO_x – sulfur oxides; PM₁₀ – particulate matter less than 10 microns; PM_{2.5} – particulate matter less than 2.5 microns; Pb – lead; NH₃ – ammonia; CO₂e – carbon dioxide equivalent

¹ Estimated ACAM output results (see Appendix D)

3.6.2.17 Project 7, No Action Alternative

Under the No Action Alternative, the proposed airfield stormwater repairs would not occur. No additional emissions would be generated; as a result, existing conditions would remain unchanged. No air quality impacts would be anticipated.

3.6.2.18 Project 8, Alternative 1: Mission Lake Water Barrier and Stone Road Repairs – Both Shoulders

Table 3-17 presents estimated emissions from construction activities associated with Project 8, Alternative 1. There would be temporary, minor adverse impacts on air quality from the proposed construction activities.

Under Project 8, Alternative 1, there would be repairs to Stone Road and the Mission Lake water barrier. Potential impacts would result from anticipated increases in temporary construction emissions associated mainly with fugitive dust from trenching activities. Construction activity emissions would be temporary, lasting only for the duration of construction. All reasonable precautions to reduce fugitive dust (PM₁₀) during construction, grading, and land clearing would be followed, potentially resulting in further reduction in estimated emissions. Estimated criteria air pollutant emissions and GHGs would be well below indicator values, therefore, impacts on air quality would be insignificant.

The total net change in GHG emissions from Project 8, Alternative 1, would account for less than 0.00005594 percent of the state annual CO₂e emissions and less than 0.00000146 percent

of US annual CO₂e emissions. As a result, the emissions of CO₂e are considered too small on a regional and national scale for further analysis.

Table 3-17. Estimated Air Emissions for Project 8, Alternative 1

Activity	Emissions (tpy) ¹								
	VOC	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}	Pb	NH ₃	CO ₂ e
Construction	0.038	0.318	0.465	0.001	0.729	0.011	0.000	0.001	83.033
Insignificance Indicator	250	250	250	250	250	250	25	250	75,000
Exceeds Indicator Level?	No	No	No	No	No	No	No	No	No

tpy – tons per year; VOC – volatile organic compound; NO_x – nitrogen oxides; CO – carbon monoxide; SO_x – sulfur oxides; PM₁₀ – particulate matter less than 10 microns; PM_{2.5} – particulate matter less than 2.5 microns; Pb – lead; NH₃ – ammonia; CO₂e – carbon dioxide equivalent

¹ Estimated ACAM output results (see Appendix D)

3.6.2.19 Project 8, Alternative 2: Mission Lake Water Barrier and Stone Road Repairs – North Shoulder

Table 3-18 presents estimated emissions from construction activities associated with Project 8, Alternative 2. There would be temporary, minor, adverse impacts on air quality from the proposed construction activities.

Under Project 8, Alternative 2, the net area proposed for road widening of Stone Road would be reduced slightly compared to Project 8, Alternative 1, therefore resulting in relatively minor decreases in fugitive dust (PM₁₀) emissions from trenching. Therefore, impacts on air quality under Project 8, Alternative 2, would be comparable to those discussed for Project 8, Alternative 1.

The total net change in GHG emissions from Project 8, Alternative 2, would account for less than 0.00005394 percent of the state annual CO₂e emissions and less than 0.00000141 percent of US annual CO₂e emissions. As a result, the emissions of CO₂e are considered too small on a regional and national scale for further analysis.

Table 3-18. Estimated Air Emissions for Project 8, Alternative 2

Activity	Emissions (tpy) ¹								
	VOC	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}	Pb	NH ₃	CO ₂ e
Construction	0.038	0.313	0.462	0.001	0.639	0.011	0.000	0.001	80.065
Insignificance Indicator	250	250	250	250	250	250	25	250	75,000
Exceeds Indicator Level?	No	No	No	No	No	No	No	No	No

tpy – tons per year; VOC – volatile organic compound; NO_x – nitrogen oxides; CO – carbon monoxide; SO_x – sulfur oxides; PM₁₀ – particulate matter less than 10 microns; PM_{2.5} – particulate matter less than 2.5 microns; Pb – lead; NH₃ – ammonia; CO₂e – carbon dioxide equivalent

¹ Estimated ACAM output results (see Appendix D)

3.6.2.20 Project 8, Alternative 3: Repair Mission Lake Water Barrier and Realign Stone Road

Table 3-19 presents estimated emissions from construction activities associated with Project 8, Alternative 3. There would be temporary, minor adverse impacts on air quality from the proposed construction activities.

The realignment of Stone Road under Project 8, Alternative 3, would result in an increase in construction emissions relative to Project 8, Alternatives 1 and 2. The increase in PM₁₀ (dust) emissions would be associated with a relative increase in earth-moving activities that would be carried out for realignment of Stone Road. Emissions of CO, nitrous oxides (NO_x) and GHGs would also increase under Project 8, Alternative 3, because of increase in operation of diesel-fuel construction equipment and vehicles hauling materials, worker commutes for building of the new road, and associated land clearing. Estimated criteria air pollutant emissions and GHGs would still be well below indicator values, therefore, impacts on air quality would be insignificant.

The total net change in GHG emissions from Project 8, Alternative 3, would account for less than 0.00021127 percent of the state annual CO₂e emissions and less than 0.00000551 percent of US annual CO₂e emissions. As a result, the emissions of CO₂e are considered too small on a regional and national scale for further analysis.

Table 3-19. Estimated Air Emissions for Project 8, Alternative 3

Activity	Emissions (tpy) ¹								
	VOC	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}	Pb	NH ₃	CO ₂ e
Construction	0.178	1.429	1.853	0.003	4.167	0.051	0.000	0.004	313.599
Insignificance Indicator	250	250	250	250	250	250	25	250	75,000
Exceeds Indicator Level?	No	No	No	No	No	No	No	No	No

tpy – tons per year; VOC – volatile organic compound; NO_x – nitrogen oxides; CO – carbon monoxide; SO_x – sulfur oxides; PM₁₀ – particulate matter less than 10 microns; PM_{2.5} – particulate matter less than 2.5 microns; Pb – lead; NH₃ – ammonia; CO₂e – carbon dioxide equivalent

¹ Estimated ACAM output results (see Appendix D)

3.6.2.21 Project 8, No Action Alternative

Under the No Action Alternative, the proposed project would not be implemented. No additional emissions would be generated; as a result, existing conditions would remain unchanged. No air quality impacts would be anticipated.

3.6.2.22 Project 9, Alternative 1: Boundary Fence Repair with Driving Lane

Table 3-20 presents estimated emissions from construction activities associated with Project 9, Alternative 1. There would be temporary, minor, adverse impacts on air quality from the proposed construction activities.

Air emissions from construction would be primarily associated with fugitive dust (PM₁₀) from grading and trenching activities to implement the construction of a driving lane and for the removal of vegetation to create a corridor along the western boundary fence. Construction activity emissions would be temporary, lasting only for the duration of construction. All reasonable precautions to reduce fugitive dust (PM₁₀) during construction, grading, and land clearing would be followed, potentially resulting in further reduction in estimated construction emissions. The estimated increase in GHG and other regulated pollutants would not exceed indicator values. Therefore, impacts on air quality would be insignificant.

The total net change in GHG emissions from Project 9, Alternative 1, would account for less than 0.00012393 percent of the state annual CO₂e emissions and less than 0.00000323 percent of US annual CO₂e emissions. As a result, the emissions of CO₂e are considered too small on a regional and national scale for further analysis.

Table 3-20. Estimated Air Emissions for Project 9, Alternative 1

Activity	Emissions (tpy) ¹								
	VOC	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}	Pb	NH ₃	CO ₂ e
Construction	0.091	0.800	1.073	0.002	11.949	0.029	0.000	0.003	183.955
Insignificance Indicator	250	250	250	250	250	250	25	250	75,000
Exceeds Indicator Level?	No	No	No	No	No	No	No	No	No

tpy – tons per year; VOC – volatile organic compound; NO_x – nitrogen oxides; CO – carbon monoxide; SO_x – sulfur oxides; PM₁₀ – particulate matter less than 10 microns; PM_{2.5} – particulate matter less than 2.5 microns; Pb – lead; NH₃ – ammonia; CO₂e – carbon dioxide equivalent

¹ Estimated ACAM output results (see Appendix D)

3.6.2.23 Project 9, Alternative 2: Boundary Fence Repair with Vegetation Clearance on the Base Side of the Fence

Table 3-21 presents estimated emissions from construction activities associated with Project 9, Alternative 2. There would be temporary, minor, adverse impacts on air quality from the proposed construction activities.

Under Project 9, Alternative 2, construction of the driving lane would not take place. Also, the area proposed for vegetation clearing would be reduced relative to the vegetation clearing area proposed for Project 9, Alternative 1. For these reasons, fugitive dust (PM₁₀) emissions generated from earth-moving activities under Project 9, Alternative 2, would be reduced by almost 9.0 tpy when compared to Project 9, Alternative 1. All reasonable precautions to reduce fugitive dust (PM₁₀) during construction, grading, and land clearing would be followed, potentially resulting in further reduction in estimated construction emissions. The estimated increase in GHG and other regulated pollutants would be well below indicator values. Therefore, impacts on air quality would be insignificant.

The total net change in GHG emissions from Project 9, Alternative 2, would account for less than 0.00006714 percent of the state annual CO₂e emissions and less than 0.00000175 percent of US annual CO₂e emissions. As a result, the emissions of CO₂e are considered too small on a regional and national scale for further analysis.

Table 3-21. Estimated Air Emissions for Project 9, Alternative 2

Activity	Emissions (tpy) ¹								
	VOC	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}	Pb	NH ₃	CO _{2e}
Construction	0.050	0.447	0.550	0.001	3.006	0.018	0.000	0.001	99.666
Insignificance Indicator	250	250	250	250	250	250	25	250	75,000
Exceeds Indicator Level?	No	No	No	No	No	No	No	No	No

tpy – tons per year; VOC – volatile organic compound; NO_x – nitrogen oxides; CO – carbon monoxide; SO_x – sulfur oxides; PM₁₀ – particulate matter less than 10 microns; PM_{2.5} – particulate matter less than 2.5 microns; Pb – lead; NH₃ – ammonia; CO_{2e} – carbon dioxide equivalent

¹ Estimated ACAM output results (see Appendix D)

3.6.2.24 Project 9, Alternative 3: Boundary Fence Repair with Vegetation Clearance on Both Sides of the Fence

Table 3-22 presents estimated emissions from construction activities associated with Project 9, Alternative 3. Impacts on air quality under Project 9, Alternative 3, would be comparable to those outlined for Project 9, Alternative 2.

While there would be minor increases in fugitive dust (PM₁₀) and other pollutants compared to Project 9, Alternative 2, the estimated total emissions would not exceed indicator values. Therefore, impacts on air quality would be insignificant.

The total net change in GHG emissions from Project 9, Alternative 3, would account for less than 0.00011211 percent of the state annual CO_{2e} emissions and less than 0.00000292 percent of US annual CO_{2e} emissions. As a result, the emissions of CO_{2e} are considered too small on a regional and national scale for further analysis.

Table 3-22. Estimated Air Emissions for Project 9, Alternative 3

Activity	Emissions (tpy) ¹								
	VOC	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}	Pb	NH ₃	CO _{2e}
Construction	0.083	0.757	0.909	0.001	4.492	0.030	0.000	0.002	166.404
Insignificance Indicator	250	250	250	250	250	250	25	250	75,000
Exceeds Indicator Level?	No	No	No	No	No	No	No	No	No

tpy – tons per year; VOC – volatile organic compound; NO_x – nitrogen oxides; CO – carbon monoxide; SO_x – sulfur oxides; PM₁₀ – particulate matter less than 10 microns; PM_{2.5} – particulate matter less than 2.5 microns; Pb – lead; NH₃ – ammonia; CO_{2e} – carbon dioxide equivalent

¹ Estimated ACAM output results (see Appendix D)

3.6.2.25 Project 9, No Action Alternative

Under the No Action Alternative, the proposed vegetation clearing along the western base boundary fence would not occur. No additional emissions would be generated; as a result, existing conditions would remain unchanged. No air quality impacts would be anticipated.

3.6.2.26 Project 10, Alternative 1: Demolish Eleven Buildings

Table 3-23 presents estimated emissions from construction activities associated with Project 10, Alternative 1. There would be temporary, minor adverse impacts and long-term, negligible beneficial impacts on air quality from the proposed construction activities.

Under Project 10, Alternative 1, air emissions from construction would be mainly associated with operation of diesel-fuel construction equipment for demolition activity, vehicles hauling materials, and worker commutes. The estimated increase in GHG and other regulated pollutants would be well below indicator values. Therefore, impacts on air quality would be insignificant.

Operational emissions would occur because there would be a net decrease (indicated with a “minus” sign in **Table 3-23**) in heated space due to the proposed demolition of 11 buildings. No increases in long-term emissions are anticipated.

The total net change in GHG emissions from Project 10, Alternative 1, would account for less than 0.00001976 percent of the state annual CO₂e emissions and less than 0.00000052 percent of US annual CO₂e emissions. As a result, the emissions of CO₂e are considered too small on a regional and national scale for further analysis.

Table 3-23. Estimated Air Emissions for Project 10, Alternative 1

Activity	Emissions (tpy) ¹								
	VOC	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}	Pb	NH ₃	CO ₂ e
Construction	0.034	0.291	0.426	0.001	0.038	0.010	0.000	0.001	64.531
Operational	-0.002	-0.029	-0.025	0.000	-0.002	-0.002	0.000	0.000	-35.209
Insignificance Indicator	250	250	250	250	250	250	25	250	75,000
Exceeds Indicator Level?	No	No	No	No	No	No	No	No	No

tpy – tons per year; VOC – volatile organic compound; NO_x – nitrogen oxides; CO – carbon monoxide; SO_x – sulfur oxides; PM₁₀ – particulate matter less than 10 microns; PM_{2.5} – particulate matter less than 2.5 microns; Pb – lead; NH₃ – ammonia; CO₂e – carbon dioxide equivalent

¹ Estimated ACAM output results (see Appendix D)

3.6.2.27 Project 10, No Action Alternative

Under the No Action Alternative, the proposed demolition of buildings would not occur. No additional emissions would be generated; as a result, existing conditions would remain unchanged. No air quality impacts would be anticipated.

3.6.2.28 Cumulative Actions and Other Considerations

Any of the Proposed Action projects, in addition to the reasonably foreseeable future actions listed in **Table 3-3**, may result in additional impacts on air quality. Many of the Moody AFB proposed future actions listed in **Table 3-3** are construction projects. With the addition of ongoing and proposed construction, renovation, and demolition projects at Moody AFB, local air quality may be impacted as fugitive dust and other criteria pollutant emissions may increase; however, these increases would be localized and temporary. Thus, the potential incremental impact on air quality would be negligible, and the impact on air quality would not be significant.

Also, emissions from construction projects can be well mitigated by following standard best practices for fugitive dust mitigation and emissions control. Such measures would significantly reduce particulate dust and other pollutants if several projects occur simultaneously.

Any of the 10 Proposed Action projects, in addition to the longer-term construction projects listed in **Table 3-3**, may result in further impacts to air quality. However, they would be temporary and would last only until construction ends and would be mitigated. Each new future action would be assessed for air quality impacts independently. Any incremental emissions that would be generated from construction of reasonably foreseeable actions would be compared against PSD insignificance indicators independently and would not be combined with emissions that may be generated by the Proposed Action.

Long-term emissions from proposed project worst-case alternatives independently or combined (**Table 3-24**) would be negligible; thus, it would not add to any longer-term emissions that would be generated by reasonably foreseeable actions.

Table 3-24. Estimated Air Emissions for All 10 Proposed Projects Combined

Activity	Emissions (tpy) ¹								
	VOC	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}	Pb	NH ₃	CO _{2e}
Construction	4.769	9.957	12.900	0.020	34.803	0.360	0.000	0.037	2,335
Insignificance Indicator	250	250	250	250	250	250	25	N/A	75,000
Exceeds Indicator Level?	No	No	No	No	No	No	No	N/A	N/A

tpy – tons per year worst-case alternative; **VOC** – volatile organic compound; **NO_x** – nitrogen oxides; **CO** – carbon monoxide; **SO_x** – sulfur oxides; **PM₁₀** – particulate matter less than 10 microns; **PM_{2.5}** – particulate matter less than 2.5 microns; **Pb** – lead; **NH₃** – ammonia; **CO_{2e}** – carbon dioxide equivalent; **N/A** – not applicable

a. Estimated ACAM output results (see Appendix D)

3.7 Soils

See **Appendix C-4** for the definition of this resource.

3.7.1 Affected Environment

Soil units on the Moody AFB Main Base are shown on **Figure 3-4**. A total of 17 soil units underlies the proposed projects on Main Base (**Table 3-25**).

The Farmland Protection Policy Act (7 USC Section 4201 et seq.) protects important farmland categorized as prime farmland, unique farmland, and farmland of statewide or local importance. The purpose of the Farmland Protection Policy Act is to minimize the extent that federal programs contribute to the unnecessary and irreversible conversion of farmland to nonagricultural uses. Although some of the soil types on Moody AFB are designated as prime or unique farmland soils, construction for national defense purposes and construction within an existing right-of-way purchased on or before 4 August 1984 are activities not subject to the Farmland Protection Policy Act. The Proposed Action would construct facilities for national defense purposes on land acquired by the DoD prior to 1984.

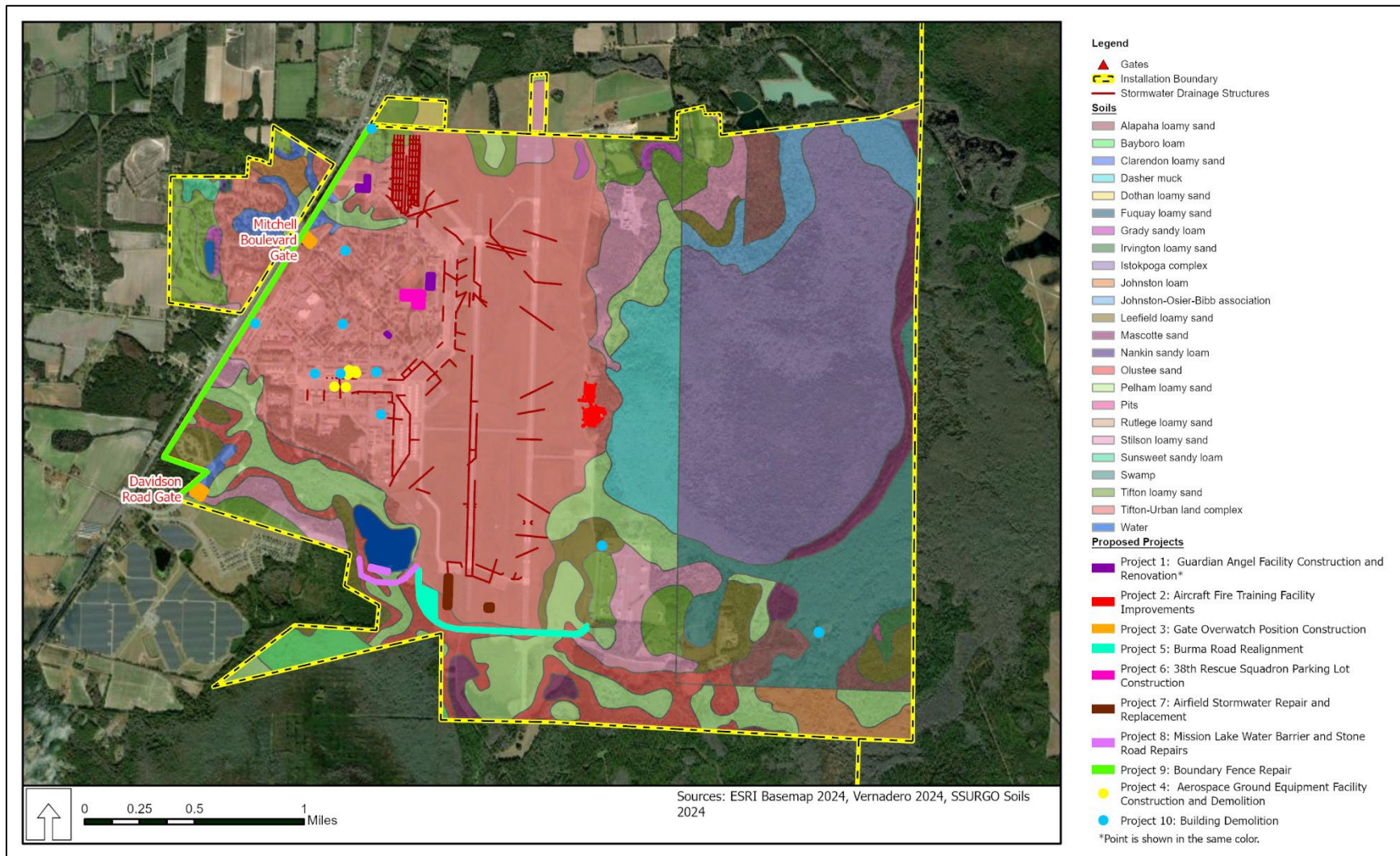


Figure 3-4. Soil Units on Moody Air Force Base Main Base

Table 3-25. Soil Units at the Proposed Projects on Moody Air Force Base Main Base

Soil Map Unit	Soil Description	Proposed Project	Area (acres)
Clarendon loamy sand	Moderately well drained, nearly level soil, found on 0 to 3 percent slopes, but dominantly less than 2 percent slopes.	Project 3	1.31
		Project 9	1.00
Leefield loamy sand	Somewhat poorly drained, nearly level soil on low uplands with 0 to 2 percent slopes.	Project 5	0.00
		Project 8	0.08
		Project 9	0.43
		Project 10	0.01
Olustee sand	Poorly drained, nearly level soil on low uplands with 0 to 2 percent slopes, but with most slopes less than 1 percent,	Project 5	9.21
		Project 7	0.22
		Project 8	1.25
Pelham loamy sand	Poorly drained, nearly level soil found on broad flats and in depressions and drainages, and with 0 to 2 percent slopes, with most slopes being less than 1 percent.	Project 9	0.46
		Project 1	0.06
		Project 5	0.83
		Project 8	0.69
Stilson loamy sand	Deep, moderately drained soil on low uplands, ranging from 0 to 2 percent slopes.	Project 9	0.52
		Project 5	0.25
Swamp	Poorly drained soil found in depressional areas with slopes of less than 2 percent.	Project 9	0.57
		Project 10	0.01
Tifton loamy sand, 0 to 2 percent slopes	Deep, well-drained soil found in uplands	Project 10	0.01
		Project 9	0.16
Tifton loamy sand, 2 to 5 percent slopes	Deep, well-drained soil found on ridgetops and side slopes on the Coastal Plain uplands	Project 10	0.00
Tifton-Urban land complex	Complex of Tifton soils and Urban land that could not be separated at a scale for mapping and is found on smooth slopes.	Project 9	0.82
		Project 1	2.91
		Project 2	6.25
		Project 3	0.88
		Project 4	0.66
		Project 5	0.64
		Project 6	3.16
		Project 7	0.07
		Project 8	0.10
		Project 9	2.58
		Project 10	0.33

Source: US Department of Agriculture 1979

3.7.2 Environmental Consequences

Factors considered in determining whether implementing an alternative may have a significant adverse impact on soils include the extent or degree to which implementation of an alternative would do the following:

- Result in substantial soil erosion or the loss of topsoil, or
- Expose people or structures to potential substantial adverse effects, involving construction of facilities on inappropriate soil types.

3.7.2.1 Project 1, Alternative 1: Guardian Angel Facility Construction and Renovation North Site

The construction of a new squadron operations facility, parking areas, and building additions would have short- and long-term, minor, adverse impacts on soils. The primary short-term effects would occur during construction activities when vegetation is cleared and approximately 2.93 acres of soil is bare; however, even though soils have been previously disturbed in some areas, effects are expected to be moderate due to the removal of existing vegetation covering soils in the proposed project area. Removal of vegetation for construction would increase surface runoff and the potential for increased sediment transport in stormwaters. In the long term, increased impermeable surfaces could increase surface-water runoff indirectly impacting soils through erosion in downgradient areas. However, appropriate sediment and erosion controls would be implemented and maintained prior to and throughout all construction phases to minimize these effects. Examples of erosion and sediment control best management practices (BMPs) include soil erosion control mats, silt fences, straw bales, diversion ditches, riprap channels, water bars, water spreaders, and sediment basins. Disturbed soils would be revegetated following all construction and renovation activities to reduce the likelihood of long-term soil erosion.

3.7.2.2 Project 1, Alternative 2: Guardian Angel Facility Construction and Renovation South Site

Impacts on soils from construction and renovation activities under Project 1, Alternative 2, would be similar to those described for Project 1, Alternative 1. Approximately 3.51 acres of soils would be disturbed during construction. BMPs and disturbed soil revegetation would be implemented to minimize soil erosion during and following construction activities.

3.7.2.3 Project 1, No Action Alternative

There would be no soil disturbance under the No Action Alternative and no impacts on soils.

3.7.2.4 Project 2, Alternative 1: Aircraft Fire Training Facility Improvements with Truck Driving Training

Impacts on soils from construction of the AFTF improvements and truck driving training would be similar to those described for Project 1, Alternative 1. Approximately 9.87 acres of soils would be disturbed during construction. BMPs and revegetation of disturbed soils would be implemented to minimize soil erosion during and following construction activities.

3.7.2.5 Project 2, Alternative 2: Aircraft Fire Training Facility Repairs and Construction, No Truck Driving Pad

Impacts on soils from construction of the AFTF improvements would be similar to those described for Project 1, Alternative 1. Approximately 6.87 acres of soils would be disturbed during construction. BMPs and disturbed soil revegetation would be implemented to minimize soil erosion during and following construction activities.

3.7.2.6 Project 2, No Action Alternative

There would be no soil disturbance from construction activities under the No Action Alternative and no impacts on soils.

3.7.2.7 Project 3, Alternative 1: Gate Overwatch Position Construction at Davidson Road and Mitchell Boulevard Gates

Impacts on soils from construction of the gate overwatch positions at the Davidson Road and Mitchell Boulevard Gates would be similar to those described for Project 1, Alternative 1. Approximately 0.12 acre of soils would be disturbed during construction. BMPs and disturbed soil revegetation would be implemented to minimize soil erosion during and following construction activities.

3.7.2.8 Project 3, No Action Alternative

There would be no soil disturbance from construction activities under the No Action Alternative and no impacts on soils.

3.7.2.9 Project 4, Alternative 1: Aerospace Ground Equipment Facility Construction and Demolition with New Shop, Administrative Space, and Covered Storage

Impacts on soils from construction of AGE consolidation facilities would be similar to those described for Project 1, Alternative 1. Approximately 2.36 acres of soils would be disturbed during construction. BMPs and revegetation of disturbed soils would be implemented to minimize soil erosion during and following construction activities.

3.7.2.10 Project 4, Alternative 2: Aerospace Ground Equipment Facility Construction and Demolition without New Shop and More Renovated Administrative Space

Impacts on soils from construction of AGE consolidation facilities would be similar to those described for Project 1, Alternative 1. Approximately 1.99 acres of soils would be disturbed during construction. BMPs and revegetation of disturbed soils would be implemented to minimize soil erosion during and following construction activities.

3.7.2.11 Project 4, No Action Alternative

There would be no soil disturbance from construction activities under the No Action Alternative and no impacts on soils.

3.7.2.12 Project 5, Alternative 1: Burma Road Realignment

Impacts on soils from the realignment of Burma Road and removal of trees in the CZ would be similar to those described for Project 1, Alternative 1. Approximately 7.63 acres of soils would be disturbed during construction. BMPs and revegetation of disturbed soils would be implemented to minimize soil erosion during and following construction activities. If permeable pavement would be utilized for the surfacing of Burma Road, the volume of stormwater runoff would be further reduced, decreasing the potential for soil erosion adjacent to the roadway.

3.7.2.13 Project 5, No Action Alternative

There would be no soil disturbance from road realignment and tree removal activities under the No Action Alternative and no impacts on soils.

3.7.2.14 Project 6, Alternative 1: 38th Rescue Squadron Parking Lot Construction

Impacts on soils from the construction of a parking to support the 38 RQS would be similar to those described for Project 1, Alternative 1. Approximately 0.48 acre of soils would be disturbed during construction. BMPs and disturbed soil revegetation would be implemented to minimize soil erosion during and following construction activities. If permeable pavement would be used for surfacing the parking lot, the volume of stormwater runoff would be further reduced, decreasing the potential for soil erosion adjacent to the parking area.

3.7.2.15 Project 6, No Action Alternative

There would be no soil disturbance from the parking lot construction under the No Action Alternative and no impacts on soils.

3.7.2.16 Project 7, Alternative 1: Airfield Stormwater Repair and Replacement

Short-term impacts on soils from the excavation and repair of belowground stormwater features and removal of the two aboveground concrete structures would be similar to those described for Project 1, Alternative 1. Approximately 0.33 acre of soils would be disturbed during construction. BMPs and disturbed soil revegetation would be implemented to minimize soil erosion during and following construction activities. There would be long-term, negligible, beneficial impacts on soils due to a reduction in soil erosion from soil slumping and failure at the belowground stormwater features that require repair.

3.7.2.17 Project 7, No Action Alternative

There would be no soil disturbance from repairs of belowground stormwater structures and removal of two aboveground concrete stormwater features under the No Action Alternative. Therefore, there would be no impacts on soils.

3.7.2.18 Project 8, Alternative 1: Mission Lake Water Barrier and Stone Road Repairs – Both Shoulders

Impacts on soils from the repairs of the Mission Lake water barrier and the Stone Road shoulders would be similar to those described for Project 1, Alternative 1. Approximately 0.83 acre of soils would be disturbed during construction. BMPs and revegetation of disturbed soils would be implemented to minimize soil erosion during and following construction activities.

3.7.2.19 Project 8, Alternative 2: Mission Lake Water Barrier and Stone Road Repairs – North Shoulder

Impacts on soils from the repair of the Mission Lake water barrier and the Stone Road shoulders would be similar to those described for Project 1, Alternative 1. Approximately 0.69 acre of soils

would be disturbed during construction. BMPs and disturbed soil revegetation would be implemented to minimize soil erosion during and following construction activities.

3.7.2.20 Project 8, Alternative 3: Repair Mission Lake Water Barrier and Realign Stone Road

Impacts on soils from the repair of the Mission Lake water barrier and realignment of Stone Road would be similar to those described for Project 1, Alternative 1. Approximately 3.70 acres of soils would be disturbed during construction. BMPs and disturbed soil revegetation would be implemented to minimize soil erosion during and following construction activities.

3.7.2.21 Project 8, No Action Alternative

There would be no direct soil disturbance the repair of the Mission Lake water barrier and Stone Road shoulder repairs under the No Action Alternative. However, if the Mission Lake water barrier were to fail, although it is unlikely that it would be a catastrophic failure, slow deterioration of the water barrier could cause uncontrolled releases from Mission Lake, eroding soils through channeling and gullies at the outfall. This continual erosion would have long-term, minor, adverse impacts on soils.

3.7.2.22 Project 9, Alternative 1: Boundary Fence Repair with Driving Lane

Impacts on soils from the removal of vegetation on both sides of the Moody AFB boundary fence and construction of a driving lane would be similar to those described for Project 1, Alternative 1. Approximately 3.70 acres of soils would be disturbed during construction. BMPs and disturbed soil revegetation would be implemented to minimize soil erosion during and following construction activities.

3.7.2.23 Project 9, Alternative 2: Boundary Fence Repair with Vegetation Clearance on the Base Side of the Fence

The removal of the aboveground woody vegetation (i.e., trees and shrubs) on both sides of the western base boundary fence would have short-term, negligible adverse impacts on soils. There would be some very limited ground disturbance for vehicular and equipment access to clear the aboveground vegetation, which could expose some surface soils to erosion. However, the effects on soils would be negligible due to the limited amount of ground disturbance, and all disturbed soils would be allowed to revegetate with herbaceous plant species following woody vegetation removal activities.

3.7.2.24 Project 9, Alternative 3: Boundary Fence Repair with Vegetation Clearance on Both Sides of the Fence

Impacts on soils from the removal of vegetation on both sides of the Moody AFB boundary fence would be similar to those described for Project 9, Alternative 2. BMPs and disturbed soil revegetation would be implemented to minimize soil erosion during and following construction activities.

3.7.2.25 Project 9, No Action Alternative

There would be no soil disturbance from vegetation removal and the construction of a driving lane under the No Action Alternative. Therefore, there would be no impacts on soils.

3.7.2.26 Project 10, Alternative 1: Demolish Eleven Buildings

Short-term impacts on soils from the demolition of 11 buildings would be similar to those described for Project 1, Alternative 1. BMPs and revegetation of disturbed soils would be implemented to minimize soil erosion during and following demolition activities. There would be a reduction in impermeable surfaces following demolition providing a long-term, negligible, beneficial impact on soils through reduced stormwater runoff and erosion.

3.7.2.27 Project 10, No Action Alternative

There would be no soil disturbance from building demolition under the No Action Alternative. Therefore, there would be no impacts on soils.

3.7.2.28 Cumulative Actions and Other Considerations

The Proposed Action in combination with other projects proposed at Moody AFB as well as the road repair and maintenance projects ongoing and proposed off base would have a long-term, minor, cumulative impact on soils from soil disturbance during construction activities and increased impermeable surfaces. Increased runoff rates during stormwater events could increase soil erosion and sediment transport. However, all projects proposed at Moody AFB would be subject to BMPs as described by the projects' Stormwater Pollution Prevention Plan (SWPPP), which would be developed for each project prior to construction, and would greatly reduce the likelihood of soil erosion and loss.

3.8 Water Resources

See **Appendix C-5** for the definition of this resource.

3.8.1 *Affected Environment*

Moody AFB is located within the Suwannee River Basin, which discharges to the northeastern Gulf of Mexico (Moody AFB 2024). Major drainages in the basin that affect Moody AFB include the Withlacoochee River to the west and the Alapaha River to the east. A major feature of the Suwannee River basin is the Grand Bay-Banks Lake wetland complex, which is partially within the Moody AFB boundary. The 1,255-acre Banks Lake is the only major body of water within the wetland complex. Shiner Pond, which is located in the central-northern boundary of the Moody AFB, is another, smaller, open-water feature, covering 65 acres. The wetland system is primarily recharged by precipitation falling within the catchment basin, although the bays may receive a portion of their recharge water from adjacent shallow groundwater sources. Recharge by precipitation occurs mainly from December through March, when rainfall is typically heavy, and evapotranspiration is low. Heavy rainfall from tropical weather systems, typically occurring in early fall, can also result in significant recharge to the Grand Bay wetland complex. Water

flow through the Grand Bay Lake wetland complex is generally southeastern and southward although the northern portion drains to the northeast (Moody AFB 2024).

Stormwater from the Main Base area is discharged by a series of drainage ditches and underground stormwater conveyances. Five major storm drain outfalls occur along Burma Road, with water from these outfalls draining into Mission Lake. Stormwater from the northwestern portion of the airfield forms the headwaters of Beatty Branch, eventually draining through Cat Creek to the Withlacoochee River. Overall, there are about 6,166 acres of wetlands located within the boundary of Moody AFB, with the majority of these within the Grand Bay-Banks Lake wetland complex (Moody AFB 2024).

Mission Lake is an approximately 30-acre human-made lake located on Main Base that is primarily used for recreational activities, such as boating and fishing. Mission Lake is a component of the stormwater system at Moody AFB and in part, receives water from a network of drop inlets, underground storm sewers, and aboveground ditches and swales. Drainage from Mission Lake flows to the Grand Bay Watershed (Moody AFB 2024).

Wetlands have been generally mapped at Moody AFB (**Figure 3-5**). In January 2024, a wetland delineation was conducted in the Proposed Action area to determine if there were any potentially jurisdictional waters of the US, including wetlands (USACE 2010, Environmental Laboratory 1987). Based on the findings of the wetland delineation, approximately 4.63 acres of potentially regulated wetlands and surface waters, occur in the Proposed Action areas (**Appendix B**). The delineation was submitted to and reviewed by the USACE to be considered a delineation of waters of the US. The verification of the jurisdictional determination by USACE was provided on 27 June 2024 (File Number SAS-2024-00413).

A significant portion of the Moody AFB and Grand Bay Range is located within the 100-year (1 percent annual exceedance probability) floodplain (**Figure 3-6**). The 100-year floodplain on Main Base is located east of the airfield and extends into the Grand Bay Range and Grand Bay Wildlife Management Area (WMA). The Federal Emergency Management Agency has not mapped the 500-year (0.2 percent annual exceedance probability) floodplain for Moody AFB.

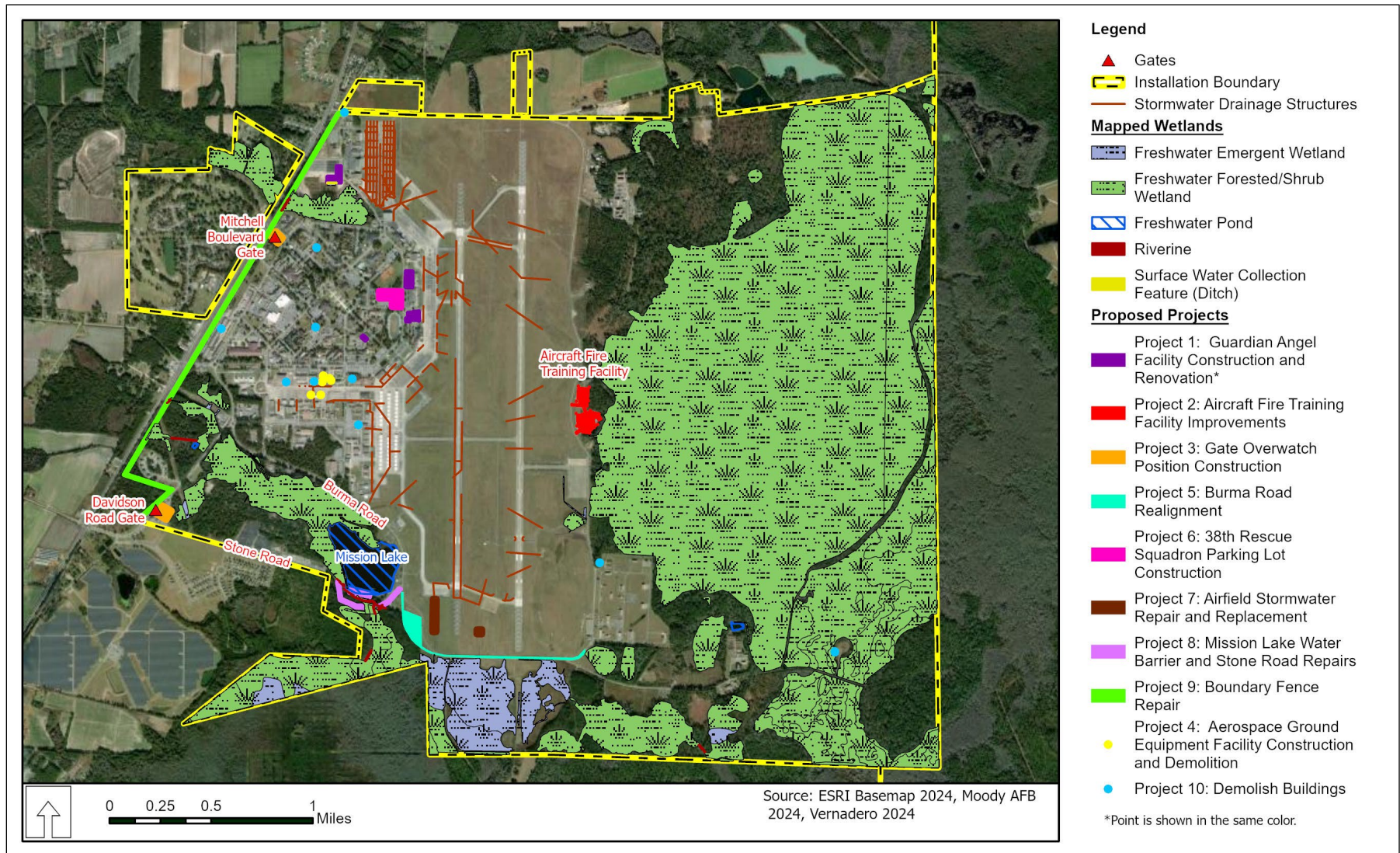


Figure 3-5. Wetlands at Moody Air Force Base Main Base

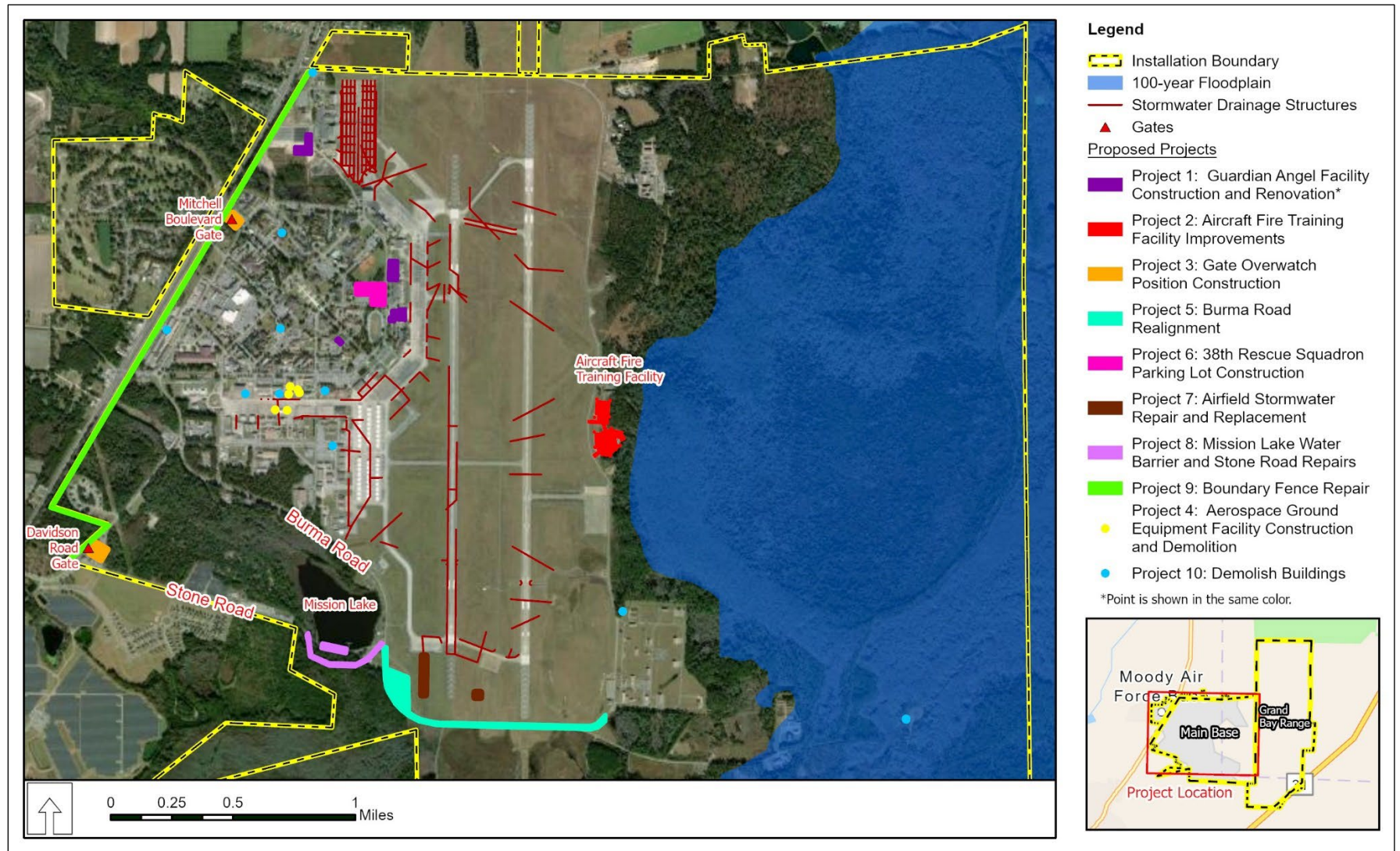


Figure 3-6. 100-Year Floodplain at Moody Air Force Main Base

Groundwater near Moody AFB occurs within two major water-bearing zones, the surficial aquifer system and the Floridan aquifer system. The surficial aquifer is generally 10 to 20 feet below the ground surface and is composed of fine to coarse sands, gravels, silt, clayey silt, and clays. Water quality is generally good, and yields are usually less than 50 gallons per minute. The Floridan aquifer is the primary water-bearing system in the area. The Floridan aquifer generally provides a good quality and quantity of water for almost all local commercial, industrial, domestic, irrigation, and municipal use. The Floridan aquifer is typically encountered at depth of 150 feet and is usually under artesian conditions. Water analyses have confirmed that several metals, barium, cadmium, copper, iron, manganese, and zinc occur at recordable levels (Moody AFB 2024). Shallow groundwater contaminants have been detected at several Environmental Restoration Program (ERP) sites located throughout Main Base. These ERP sites include groundwater contaminants such as volatile organic compounds, semivolatile organic compounds, trichloroethene, and metals. Groundwater monitoring and remediation activities are ongoing at these active ERP sites where groundwater contaminants are present. See **Section 3.12** for more detail on ERP sites and associated groundwater restrictions relevant to the proposed facility and infrastructure projects.

3.8.2 *Environmental Consequences*

Evaluation criteria for potential impacts on water resources are based on water availability, quality, and use; existence of floodplains; and associated regulations. Adverse impacts on water resources would occur if the Proposed Action were to do any of the following:

- Reduce water availability or supply to existing users.
- Cause overdrafts of groundwater basins.
- Exceed safe annual yield of water supply sources.
- Affect water quality adversely.
- Endanger public health by creating or worsening health hazard conditions.
- Violate established laws or regulations adopted to protect water resources.

Potential impacts related to flood hazards can be significant if such actions are proposed in areas with high probabilities of flooding; however, all impacts can be mitigated through the use of design features to minimize the effects of flooding.

3.8.2.1 Project 1, Alternative 1: Guardian Angel Facility Construction and Renovation North Site

The proposed squadron operations facility construction would have long-term, minor, adverse impacts on water resources. Construction activities would disturb soils, potentially transporting sediments and other material in stormwater into the wetlands located south of the construction area, and subsequently into Beatty Branch and associated wetlands. Stormwater could also transport hazardous materials used during the construction activities, such as petroleum, oil, and lubricants (POLs) used in construction equipment. POLs have the potential to impact both surface water and groundwater quality. Furthermore, the increase in impervious surface areas would cause greater runoff potential. However, since 1999, development of the surrounding area resulted in portions of the wetlands to be replaced by culverted conveyance, minimizing

the impacts on surface water runoff volume from impervious surfaces and accommodating the potentially increased runoff. Further, facility designs would implement green infrastructure and low-impact development (GI/LID) tools to reduce stormwater runoff in compliance with Section 438 of the Energy Independence and Security Act (EISA), reducing impacts on surface water from stormwater runoff.

Individual projects disturbing more than 1 acre would be required to comply with National Pollutant Discharge Elimination System (NPDES) General Permit as well as Georgia NPDES (i.e., the delegated authority to issue NPDES permits) and Lowndes County Land Disturbance Permit for construction activities. Therefore, the squadron operations facility construction and renovation would implement BMPs to reduce impacts on water quality as identified in a SWPPP.

3.8.2.2 Project 1, Alternative 2: Guardian Angel Facility Construction and Renovation South Site

The construction of the squadron operations facility at the south site would have long-term, minor, adverse impacts on water resources, including impacts on potentially jurisdictional wetlands. Impacts on water resources under Project 1, Alternative 2, would comparatively be greater than Project 1, Alternative 1, due to a larger impermeable surface area following construction with the potential for increased surface water runoff. The construction activities would occur adjacent to a potentially jurisdictional freshwater emergent wetland surface-water collection feature. However, BMPs implemented during construction activities would avoid indirect impacts on these potentially jurisdictional waters of the US. Facility designs would implement GI/LID tools in compliance with Section 438 of the EISA, reducing impacts on surface water from stormwater runoff.

3.8.2.3 Project 1, No Action Alternative

Under the No Action Alternative, there would be no squadron operations facility construction and renovation. Therefore, there would be no impacts on water resources.

3.8.2.4 Project 2, Alternative 1: Aircraft Fire Training Facility Improvements with Truck Driving Training

The modernization of the existing AFTF by constructing a new 10,000-square-foot training facility, a 6-acre concrete pad around the AFTF, and a 3-acre pad for truck driving training would have long-term, minor, adverse impacts on water resources. Construction activities that disturb surface soils could transport sediments and other material into the 100-year floodplain located east of the construction area. Stormwater could also transport hazardous materials used during the construction activities, such as POLs used in construction equipment, which have the potential to impact both surface-water and groundwater quality. There would be an increase of 9 acres (approximately 392,040 square feet) of impervious surface area following the modernization of the AFTF. The increased impervious area would cause greater runoff potential. However, this increased impervious surface impact would be minimized with the implementation of low-impact development techniques and stormwater discharge management. The proposed training facility would be designed to implement GI/LID tools in compliance with

Section 438 of the EISA, reducing impacts on surface-water quality and quantity. As an individual project disturbing more than 1 acre, Project 2, Alternative 1 would be required to comply with NPDES General Permit as well as Georgia NPDES and Lowndes County Land Disturbance Permit for construction activities and implement BMPs identified in a SWPPP.

3.8.2.5 Project 2, Alternative 2: Aircraft Fire Training Facility Repairs and Construction, No Truck Driving Pad

The modernization of the AFTF would have similar impacts on water resources as described for Project 2, Alternative 1. Although no truck driving pad would be constructed under Project 2, Alternative 2, the increase in impervious surfaces from the construction of a pad around the AFTF would have long-term, minor, adverse impacts on water resources. The proposed training facility would be designed to implement GI/LID tools in compliance with Section 438 of the EISA, reducing impacts on surface-water quality and quantity. This project would also comply with NPDES General Permit as well as Georgia NPDES and Lowndes County Land Disturbance Permit for construction activities, and would implement BMPs identified in a SWPPP.

3.8.2.6 Project 2, No Action Alternative

Under No Action Alternative, there would be no construction of new facilities or renovation of existing facilities. Therefore, there would be no impacts on water resources.

3.8.2.7 Project 3, Alternative 1: Gate Overwatch Position Construction at Davidson Road and Mitchell Boulevard Gates

The construction of a two overwatch position buildings at Moody AFB gates would have long-term, negligible, adverse impacts on water resources. Construction activities that disturb surface soils, which could transport sediments and other material into the stormwater drainage system, and stormwater can also transport hazardous materials used during the construction activities, such as POLs used in construction equipment. There would be an increase of approximately 1,250 square feet of impervious surface area following the construction of the overwatch building. The increased impervious surface would cause a minimal increase in runoff potential. This increased impervious surface impacts would be minimized with the implementation of a low-impact development techniques and stormwater discharge management.

3.8.2.8 Project 3, No Action Alternative

Under the No Action Alternative, there would be no construction of overwatch positions at Moody AFB gates. Therefore, there would be no impacts on water resources.

3.8.2.9 Project 4, Alternative 1: Aerospace Ground Equipment Facility Construction and Demolition with New Shop, Administrative Space, and Covered Storage

The demolition of Buildings 732, 752, 755, and 756 and replacement with a new consolidated AGE facility would have similar impacts on water resources as described for Project 1, Alternative 1, as there would be an increase in impermeable surfaces following construction. The proposed new building space would be designed to implement GI/LID tools in compliance

with Section 438 of the EISA, reducing impacts on surface-water quality and quantity. There would be long-term, minor, adverse impacts on water resources at Moody AFB.

3.8.2.10 Project 4, Alternative 2: Aerospace Ground Equipment Facility Construction and Demolition without New Shop and More Renovated Administrative Space

The demolition of Buildings 732 and 756, modification of Building 755, renovation of Building 752, and the construction of a new parts-support section would have similar impacts on water resources as Project 1, Alternative 1, as there would be an increase in impermeable surfaces following construction. There would be long-term, minor, adverse impacts on water resources at Moody AFB.

3.8.2.11 Project 4, No Action Alternative

Under the No Action Alternative, there would be no consolidated AGE facility constructed. Therefore, there would be no impacts on water resources.

3.8.2.12 Project 5, Alternative 1: Burma Road Realignment

The realignment and paving of approximately 6,000 linear feet of Burma Road would have long-term, minor, adverse impacts on water resources. Construction activities that disturb surface soils could transport sediments and other material into the wetlands located west and southwest of the construction area. Stormwater could also transport hazardous materials used during construction activities, such as POLs used in construction equipment. However, BMPs would be implemented to reduce impacts on water quality from construction activities. An increase in water surface runoff would occur from a slightly larger impermeable surface area following the Burma Road realignment and tree removal activities. If the option to use permeable pavement were selected, the amount of impermeable surface area would not change substantially and there would be no long-term impacts on water resources.

3.8.2.13 Project 5, No Action Alternative

Under the No Action Alternative, there would be no realignment of Burma Road. Therefore, there would be no impacts on water resources.

3.8.2.14 Project 6, Alternative 1: 38th Rescue Squadron Parking Lot Construction

The construction of a new parking lot would have long-term, minor, adverse impacts on water resources. Construction activities could disturb surface soils, which would transport sediment and other material into the stormwater drainage system. Stormwater can also transport hazardous materials used during construction activities, such as POLs used in construction equipment. POLs have the potential to impact both surface-water and groundwater quality. However, BMPs would be implemented during construction to reduce the impacts on water quality. The increased impervious surface would cause greater runoff potential. However, if the option to pave the parking lot with permeable asphalt were to be selected, then the long-term impacts from surface water runoff from impermeable surfaces would be reduced.

3.8.2.15 Project 6, No Action Alternative

Under the No Action Alternative, there would be no construction of a new parking lot in support of the 38 RQS. Therefore, there would be no impacts on water resources.

3.8.2.16 Project 7, Alternative 1: Airfield Stormwater Repair and Replacement

The airfield stormwater system repair and replacement would have long-term, minor beneficial impacts on water resources. Construction activities that disturb soils such as the repair and replacement of belowground stormwater conveyance structures could negatively impact water quality through sediment transport in stormwater and transport of POLs from construction equipment. However, BMPs implemented as part of the project's SWPPP would reduce these impacts. In the long term, repairs to degrading stormwater structures would reduce sediment erosion into structures during rain events and reduce sedimentation into water bodies.

3.8.2.17 Project 7, No Action Alternative

Under the No Action Alternative, there would be no airfield stormwater drainage system repair and replacement at Moody AFB. Therefore, there would be no impacts on water resources.

3.8.2.18 Project 8, Alternative 1: Mission Lake Water Barrier and Stone Road Repairs – Both Shoulders

The repairs to the Mission Lake water barrier and Stone Road would have long-term, minor direct, adverse impacts and long-term, indirect, beneficial impacts on water resources. The installation of riprap at the toe of the slope on the northern portion of the water barrier would directly place an estimated 3,500 cubic yards of riprap into the Mission Lake waters. The installation of 20 feet of riprap at the toe of the slope on the southern portion of the water barrier would place an estimated additional 3,500 cubic yards of riprap into a portion of the Mission Lake outfall channel and into adjacent wetlands. This fill material would permanently impact 0.48 acre of potentially jurisdictional waters of the US. To reduce these impacts, Moody AFB would obtain a CWA Section 404/401 permit from the USACE and GDNR, comply with all permit requirements, and implement any associated wetland mitigation measures, such as purchasing mitigation credits through an approved wetland mitigation bank. Through the CWA Section 404/401 permitting process, including implementation of required surface water mitigation measures, impacts on potentially jurisdictional waters of the US would be reduced.

Stone Road shoulder repairs would overlap with the fill material for the water barrier repairs. Construction activities would disturb surface soils that could transport sediments and other material into the wetlands located west and southwest of the construction area. Stormwater could also transport hazardous materials used during the construction activities, such as POLs used in construction equipment. However, impacts on water quality from construction activities would be reduced through the use of BMPs during construction as described in the project's SWPPP.

Benefits to water quality would be achieved in the long term through the repair of the Mission Lake water barrier and the associated reduction in risk of the water barrier failure. Although a catastrophic failure of the water barrier would be unlikely, the barrier could slowly erode, leading to soil erosion and sediment transport into adjacent water bodies, including wetlands.

3.8.2.19 Project 8, Alternative 2: Mission Lake Water Barrier and Stone Road Repairs – North Shoulder

Impacts on water resources would be the same as described for Project 8, Alternative 1. The repairs to the Mission Lake water barrier and Stone Road would have long-term, minor, direct, adverse impacts and long-term, indirect, beneficial impacts on water resources. There would be 0.48 acre of direct impacts on waters of the US, and a CWA Section 404/401 permit would be required; Moody AFB would implement all required mitigation measures as specified in the permit, such as purchasing mitigation credits through an approved mitigation bank.

3.8.2.20 Project 8, Alternative 3: Repair Mission Lake Water Barrier and Realign Stone Road

Impacts on water resources would be similar to those described for Project 8, Alternative 1. The repairs to the Mission Lake water barrier and Stone Road would have long-term, minor, direct, adverse impacts and long-term, indirect, beneficial impacts on water resources. The realignment of Stone Road and repairs to the Mission Lake water barrier would directly impact 0.76 acre of potentially jurisdictional waters of the US, including 0.48 acre of surface waters at the Mission Lake water barrier and 0.28 acre of freshwater forested/shrub wetland and perennial stream. Moody AFB would obtain a CWA Section 404/401 permit from the USACE and GDNR, comply with all permit requirements, and implement any associated mitigation measures, such as purchasing mitigation credits through an approved mitigation bank. Through the CWA Section 404/401 permitting process impacts on waters of the US would be reduced.

Additionally, the realignment of Stone Road would remove approximately 1.6 acres of forested area and replace that area with the realigned Stone Road. The greater impermeable area associated with the realigned Stone Road would impact water resources through increased stormwater runoff velocity and the potential for associated sedimentation of adjacent water bodies including wetlands.

As described for Project 8, Alternative 1, the repairs to Mission Lake water barrier would provide a long-term beneficial impact by reducing the risk of the water barrier failure and associated soil erosion and uncontrolled water runoff.

3.8.2.21 Project 8, No Action Alternative

Under the No Action Alternative, there would be no repairs to Stone Road and the Mission Lake water barrier. Therefore, there would be no impacts on water resources.

3.8.2.22 Project 9, Alternative 1: Boundary Fence Repair with Driving Lane

The removal of approximately 3.4 acres of vegetation along 10,000 linear feet of the western base boundary fence and the creation of a driving lane would have long-term, minor, adverse

impacts on water resources. The creation of a driving lane within the 16-foot-wide corridor would result in potential surface runoff increase. Construction activities disturbing surface soils could transport sediments and other material into Beatty Branch and associated wetlands. Stormwater could also transport hazardous materials used during the construction activities, such as POLs used in construction equipment. However, the project would be required to comply with the NPDES General Permit as well as Georgia NPDES (i.e., the delegated authority to issue NPDES permits) and Lowndes County Land Disturbance Permit for construction activities and implement BMPs identified in a SWPPP.

The construction of a driving lane, including the placement of a culvert for the crossing of Beatty Branch, would permanently impact 0.26 acre of waters of the US, including freshwater forested/shrub wetlands and riverine features. To reduce these impacts, Moody AFB would obtain a CWA Section 404/401 permit from the USACE and GDNR, comply with all permit requirements, and implement any associated mitigation measures, such as purchasing mitigation credits through an approved mitigation bank. Through the CWA Section 404/401 permitting process impacts on waters of the US would be reduced.

3.8.2.23 Project 9, Alternative 2: Boundary Fence Repair with Vegetation Clearance on the Base Side of the Fence

The removal of an approximate 1.7 acres of aboveground vegetation along 10,000 linear feet on the western base boundary fence would have no impacts on water resources. Ground disturbance would be minimized during vegetation clearance activities, and no belowground vegetation (i.e., stumps) would be removed. No impacts on waters of the US would occur.

3.8.2.24 Project 9, Alternative 3: Boundary Fence Repair with Vegetation Clearance on Both Sides of the Fence

The removal of an approximate 3.4 acres of vegetation along 10,000 linear feet on the western base boundary fence would have no impacts on water resources. Ground disturbance would be minimized during vegetation clearance activities, and no belowground vegetation (i.e., stumps) would be removed. No impacts on waters of the US would occur.

3.8.2.25 Project 9, No Action Alternative

Under the No Action Alternative, there would be no vegetation clearing and no creation of a 16-foot-wide corridor and driving lane along the Moody AFB boundary fence. Therefore, there would be no impacts on water resources.

3.8.2.26 Project 10, Alternative 1: Demolish Eleven Buildings

The demolition of 11 buildings would have no substantial impacts on water resources. Construction activities could disturb surface soils, which would transport sediment and other material into the stormwater drainage system and nearby wetlands. Stormwater can also transport hazardous materials used during construction activities, such as POLs that can contaminate surface water and groundwater. However, BMPs would be implemented during

demolition activities to reduce these construction-related impacts. There would be a long-term decrease in impermeable surface area with the demolition of the 11 buildings. Therefore, there would be no long-term impacts on water resources.

3.8.2.27 Project 10, No Action Alternative

Under the No Action Alternative, the buildings would not be demolished. Therefore, there would be no impacts on water resources.

3.8.2.28 Cumulative Actions and Other Considerations

The Proposed Action, in combination with other proposed projects on Moody AFB and the off-base highway maintenance projects, would cumulatively adversely impact surface-water and groundwater quality from sedimentation and transport of POLs from construction equipment in stormwater. However, these proposed projects composing the Proposed Action in combination with other reasonably foreseeable construction projects on Moody AFB would all be subject to the Moody AFB SWPPPs, including the implementation of BMPs to protect surface water. However, following the completion of these various proposed construction projects at Moody AFB, there would be more impervious surface area, increasing the rate of stormwater discharge into Beatty Branch, Mission Lake outfall channel, and surrounding wetlands, during rain events. Therefore, the Proposed Action in combination with other proposed construction projects on Moody AFB would have long-term, minor, adverse cumulative impacts on water resources.

3.9 Biological Resources

See **Appendix C-6** for the definition of this resource.

3.9.1 *Affected Environment*

The information presented in this section was gathered from Moody AFB's Integrated Natural Resources Management Plan (Moody AFB 2024). The status of federal listed species was validated using the USFWS Information for Planning and Consultation system (USFWS 2024a).

Vegetation. Moody AFB and the Grand Bay Range are located within the Outer Coastal Plain Mixed Province of the Lowland Ecoregion (Bailey 1995). The province is dominated by temperate evergreen forests and laurel forests. Historically, the vegetation consisted of upland area dominated by longleaf pine forests mixed with slashed pines, with mesic longleaf pine savannas located on Main Base, and wet-mesic longleaf pine savannas and mixed-pine savannas in the Grand Bay Range. The current vegetation at Moody AFB is primarily the result of the management practices and actions taken during the construction of the base during the 1940s. Currently, the unimproved areas of Moody AFB and Grand Bay Range include several distinct natural communities and ecosystems that are the results of human activities. Natural communities on Moody AFB and Grand Bay Range include upland pine forests, pine flatwoods, and extensive areas composed of various wetland communities. A vast proportion of the upland habitat has been converted to the Loblolly Pine Plantation community type, replacing the traditionally present longleaf or longleaf/slash pine flatwood forests. The primary key ecological

feature at Moody AFB is the area contained in wetlands which covers approximately 6,166 acres, or nearly 60 percent of the Grand Bay Range area.

Fish and Wildlife. Moody AFB and the Grand Bay Range are within the lower coastal plains and flatwoods section of the Southern Coastal Plain ecoregion (Bailey 1995), which supports a diverse complex of habitat which in turn supports a high diversity of faunal species. These habitats can be simplified into two main types: Upland Forests community type and the Carolina Bay Swamp Complex. Common fish and wildlife species found on Moody AFB are listed in **Table 3-26.**

**Table 3-26. Representative Wildlife Species
Occurring on Moody Air Force Base**

Common Name	Scientific Name
Mammals	
Virginia Opossum	<i>Didelphis virginiana</i>
Raccoon	<i>Procyon lotor</i>
Striped Skunk	<i>Mephitis mephitis</i>
Gray Fox	<i>Urocyon cinereoargenteus</i>
Eastern Gray Squirrel	<i>Sciurus carolinensis</i>
Eastern Fox Squirrel	<i>Sciurus niger</i>
Eastern Cottontail Rabbit	<i>Sylvilagus floridanus</i>
White-Tailed Deer	<i>Odocoileus virginianus</i>
Beaver	<i>Castor canadensis</i>
Round-Tailed Muskrat	<i>Neofiber alleni</i>
Bobcat	<i>Lynx rufus</i>
Golden Mouse	<i>Ochrothomys nuttalli</i>
Birds	
Northern Bobwhite Quail	<i>Colinus virginianus</i>
Red-Shouldered Hawk	<i>Buteo lineatus</i>
Yellow-Billed Cuckoo	<i>Coccyzus americanus</i>
Ruby-Throated Hummingbird	<i>Archilocus colubris</i>
Downy Woodpecker	<i>Dryobates pubescens</i>
Red-Bellied Woodpecker	<i>Melanerpes carolinus</i>
Red-Headed Woodpecker	<i>Melanerpes erythrocephalus</i>
Northern-Flicker	<i>Colaptes auratus</i>
Pileated Woodpecker	<i>Drycopus pileatus</i>
Yellow-Bellied Sapsucker	<i>Sphyrapicus varius</i>
American Crow	<i>Corvus brachyrhynchos</i>
Carolina Chickadee	<i>Poecile carolinensis</i>
Tufted Titmouse	<i>Baeolophus bicolor</i>
Brown-Headed Nuthatch	<i>Sitta pusilla</i>
Carolina Wren	<i>Thryothorus ludovicianus</i>
Blue-Gray Gnatcatcher	<i>Polioptila caerulea</i>
Ruby-Crowned Kinglet	<i>Regulus calendula</i>
White-Eyed Vireo	<i>Vireo griseus</i>
Red-Eyed Vireo	<i>Vireo olivaceus</i>
Northern Parula	<i>Setophaga americana</i>
Common Grackle	<i>Quiscalus quiscula</i>
Summer Tanager	<i>Piranga rubra</i>

Common Name	Scientific Name
Eastern Towhee	<i>Pipilo erythrophthalmus</i>
Wild Turkey	<i>Meleagris gallopavo</i>
White-Throated Sparrow	<i>Zonotrichia albicollis</i>
Prothonotary Warbler	<i>Protonotaria citrea</i>
Hooded Warbler	<i>Setophaga citrina</i>
Swainson's Warbler	<i>Limnothlypis swainsonii</i>
Common Yellowthroat	<i>Geothlypis trichas</i>
Gray Catbird	<i>Dumetella carolinensis</i>
Northern Cardinal	<i>Cardinalis cardinalis</i>
Indigo Bunting	<i>Passerina cyanea</i>
Blue Jay	<i>Cyanocitta cristata</i>
Brown Thrasher	<i>Toxostoma rufum</i>
Wood Duck	<i>Aix sponsa</i>
Belted Kingfisher	<i>Megaceryle alcyon</i>
Eastern Kingbird	<i>Tyrannus tyrannus</i>
Reptiles	
Eastern Fence Lizard	<i>Sceloporus undulatus</i>
Five-Lined Skink	<i>Plestiodon inexpectatus</i>
Timber Rattlesnake	<i>Crotalus horridus</i>
Florida Cottonmouth	<i>Agkistrodon conanti</i>
Southern Black Racer	<i>Coluberconstrictor priapus</i>
Common Rainbow Snake	<i>Farancia erytrogramma erytrogramma</i>
Gopher Tortoise	<i>Gopherus polyphemus</i>
Eastern Box Turtle	<i>Terrapene carolina</i>
American Alligator	<i>Alligator mississippiensis</i>
Amphibians	
Spotted Salamander	<i>Ambystoma maculatum</i>
Green Treefrog	<i>Dryophytes cinerea</i>
Little Grass Frog	<i>Pseudacris ocularis</i>
Squirrel Treefrog	<i>Dryophytes squirellus</i>
Eastern Spadefoot Toad	<i>Scaphiopus holbrookii</i>
Southern Toad	<i>Anaxyrus terrestris</i>
American Bullfrog	<i>Lithobates catesbeianus</i>
Pig Frog	<i>Rana grylio</i>
Fish	
Warmouth	<i>Lepomis gulosus</i>
Redbreast Sunfish	<i>Lepomis auritus</i>
Redfin Pickerel	<i>Esox americanus</i>
Yellow Bullhead	<i>Ameiurus natalis</i>
Bowfin	<i>Amia calva</i>
Largemouth Bass	<i>Microchirus salmoides</i>

Invasive Species. An invasive species survey was recently conducted on 380 acres on Main Base. A targeted survey was also conducted along several roads, ditches, and power-line rights of ways. Chinese privet (*Ligustrum sinense*), Chinese tallow (*Triadica sebifera*), chinaberry tree (*Melia azedarach* L.), wisteria (*Wisteria* sp.), Japanese climbing fern (*Lygodium japonicum*), tungoil tree (*Vernicia fordii*), and mimosa (*Mimosa* sp.) were documented at Moody AFB. Most of the forest land has not been surveyed at Moody AFB, and exotic invasive vegetative species are mostly treated on a case-by-case basis as they are discovered. The primary aquatic

invasive plant species at Moody AFB is hyacinth (*Eichhornia crassipes*). Both chemical and mechanical approaches are used to control and limit the spread of those species (Moody AFB 2024). Only one animal species, the feral hog (*Sus scrofa*), is considered invasive at Moody AFB. Feral hogs were first detected on base in 2005. Currently, the US Department of Agriculture's Wildlife Services biologist, in conjunction with hunters, are removing feral hogs on both Main Base and Grand Bay Range (Moody AFB 2024).

Threatened and Endangered Species. The Moody AFB Integrated Natural Resources Management Plan (Moody AFB 2024), USFWS Information for Planning and Consultation System (USFWS 2024a), and the Georgia Rare Element Natural Data Portal were reviewed for the most up-to-date information concerning federally and state threatened and endangered species on Moody AFB Main Base. The USFWS Information for Planning and Consultation database search identified three threatened, one proposed endangered, one candidate, and one experimental, nonessential species that could occur on Moody AFB:

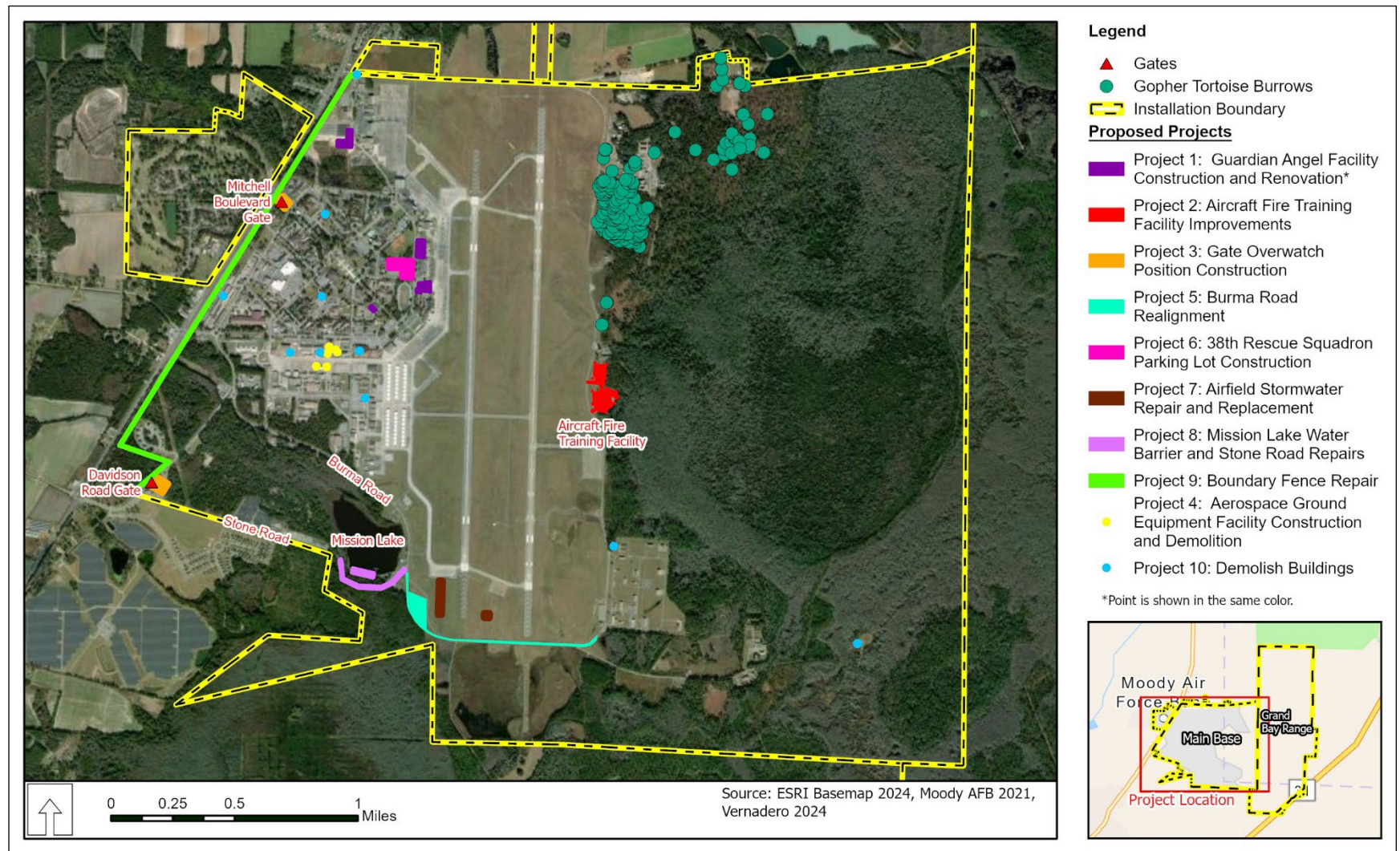
- Eastern indigo snake (*Drymarchon couperi*) – Threatened
- Wood stork (*Mycteria americana*) – Threatened
- Tricolored bat (*Perimyotis subflavus*) – Proposed Endangered
- Suwannee alligator snapping turtle (SAST; *Macrochelys suwanniensis*) –Threatened
- Monarch butterfly (*Danaus plexippus*) – Candidate
- Whooping crane (*Grus americana*) – Experimental, Nonessential

Five species are listed as threatened or endangered on the state level:

- Gopher tortoise (*Gopherus polyphemus*) – Threatened
- Eastern indigo snake – Threatened
- SAST – Threatened
- Bald eagle (*Haliaeetus leucocephalus*) – Threatened
- Round-tailed muskrat (*Neofiber alleni*) – Threatened

There is no designated critical habitat for any listed species on Moody AFB (USFWS 2024a). The approved Moody AFB Integrated Natural Resources Management Plan benefits federally listed species and precludes the designation of critical habitat on Moody AFB lands (see **Appendix C, Section C-6**, for more information).

Gopher tortoises are known to occur on Moody AFB (**Figure 3-7**). The gopher tortoise, a keystone species, and the federally threatened eastern indigo snake are known to coexist throughout their range. The gopher tortoise occurs from the coastal plain from South Carolina and westward to eastern Louisiana. This species is characteristic of the rapidly disappearing longleaf pine and wiregrass communities, which includes sandhill dry flatwoods and turkey oak scrub. The eastern indigo snake's range extends from peninsular Florida to southeastern Georgia, where it inhabits the pine flatwoods, hardwood forests, moist hammocks, and areas that surround cypress swamps. Importantly, the eastern indigo snake is known to use the burrow of gopher tortoises as refugia, hence the importance of this particular tortoise as a species of concern at Moody AFB.



The tricolored bat occurs in forested habitats across the eastern US and roosts in trees, primarily among leaves, during the spring, summer, and fall. In winter, tricolored bats roost in caves and mines or in human-made structures such as culverts. Tricolored bats are one of the smallest bats in North America, and populations have declined dramatically as a result of white-nose syndrome, a disease caused by a fungal pathogen. Moody AFB is in the tricolored bat Year-Round Active Zone 2, and the USFWS therefore recommends avoiding the removal of known and suitable roost trees during the tricolored bat pup season, from 1 May to 15 July, in this zone (USFWS 2024b). The tricolored bat occurs seasonally at Moody AFB and has been detected during surveys. However, the tricolored bat is a proposed endangered species under the ESA, so consultation with the USFWS under Section 7 of the ESA is not required.

The alligator snapping turtle was considered to be a single wide-ranging species until recent analyses of morphological variation and genetic structure described two new species, one of which is the SAST. The SAST is in the genus *Macrochelys*, which includes the largest freshwater turtle species in size in North America. They are highly aquatic and secretive turtles. Their distribution is primarily limited to the Suwannee River basin in south Georgia and north Florida, and they are associated with deeper-water habitats such as larger rivers, canals, lakes, ponds, and oxbows. The SAST is an opportunistic scavenger and primarily feeds on fish, crayfish, mollusks, smaller turtles, insects, snakes, birds, and some vegetation (USFWS 2020). Both eDNA and trapping surveys have been conducted on Main Base for SAST, and there have not been any SAST detections on Main Base. However, there is marginally suitable habitat for the SAST in Mission Lake and Beatty Branch. The SAST is a threatened species under the ESA.

The monarch butterfly is a butterfly species with a broad global distribution and extensive migratory pathways in North American populations. The monarch butterfly is dependent on milkweed plant species (*Asclepias* spp.) as its larval host plant. The species may occur seasonally in suitable habitats on Moody AFB during migrations. However, the monarch butterfly is a candidate species under the ESA, so consultation with the USFWS under Section 7 of the ESA is not required.

There is no suitable habitat on Main Base for the wood stork, bald eagle, round-tailed muskrat, or whooping crane; therefore, these species would not be expected to occur in the proposed project areas.

3.9.2 Environmental Consequences

To evaluate the potential impacts on the biological resources, the level of impact on biological resources is based on the following:

- Importance (i.e., legal, commercial, recreational, ecological, or scientific) of the resource
- Proportion of the resource that would be affected relative to its occurrence in the region
- Sensitivity of the resource to the proposed activities
- Duration of potential ecological ramifications

The impacts on biological resources are adverse if species or habitats of high concern are negatively affected over relatively large areas. Impacts are also considered adverse if disturbances cause reductions in population size or distribution of a species of high concern.

As a requirement under the ESA, federal agencies must provide documentation that ensures that agency actions do not adversely affect the existence of any threatened or endangered species. The ESA requires that all federal agencies avoid “taking” threatened or endangered species (which includes jeopardizing threatened or endangered species habitat). Section 7 of the ESA establishes a consultation process with USFWS that ends with USFWS' concurrence or a determination of the risk of jeopardy from a federal agency project. The DAF has determined that the Proposed Action may affect, but is not likely to adversely affect, the indigo snake and would have no effects on any other federally listed species. Further, the Proposed Action would not jeopardize the continued existence of the tricolored bat or the SAST. In accordance with Section 7 of the ESA, the DAF initiated informal consultation with the USFWS on 13 November 2024. The USFWS concurrence with DAF's determinations was received on 29 January 2025 (**Appendix A**).

3.9.2.1 Project 1, Alternative 1: Guardian Angel Facility Construction and Renovation North Site

The construction of both a new squadron operations facility and the addition of a paved area would have short-term, minor, adverse impacts on biological resources. Noise from construction equipment and equipment movement could indirectly disturb some relatively common reptile and bird species present in the project area during construction. However, no breeding habitat for any species would be lost due to the construction activities. The use of BMPs would ensure that construction activities do not adversely impact aquatic species in wetlands located south of the proposed project area, and subsequently in Beatty Branch. There is no habitat supporting any federally or state listed species in the proposed squadron operation facility building footprint. Therefore, the construction of a new squadron operation facility and its associated additional pavement at Moody AFB would have no effect on any federally or state listed species.

3.9.2.2 Project 1, Alternative 2: Guardian Angel Facility Construction and Renovation South Site

Impacts on biological resources would be the same as described for Project 1, Alternative 1. Only short-term, minor, adverse impacts on biological resources would occur. The construction of a new squadron operation facility and its associated additional pavement at Moody AFB would have no effect on any federally or state listed species.

3.9.2.3 Project 1, No Action Alternative

Under the No Action Alternative, there would be no construction of a new squadron operation facility and associated additional pavement at Moody AFB. Therefore, there would be no impacts on biological resources.

3.9.2.4 Project 2, Alternative 1: Aircraft Fire Training Facility Improvements with Truck Driving Training

The modernization and construction of a new training facility and a 6-acre concrete pad around the AFTF would have short-term, minor, adverse impacts on biological resources. Direct impacts on vegetation and wildlife would occur from the conversion of turf grasses into a concrete pad. Noise from construction equipment and equipment movement could indirectly disturb some relatively common reptile and bird species present in the project area during construction. No breeding habitat for any species would be lost due to the concrete pad construction. The use of BMPs would ensure that construction activities do not adversely impact species in wetlands located east of the proposed project area.

Known gopher tortoise burrows and gopher tortoise habitat are located proximate to the AFTF; however, there is no known habitat supporting any federally listed species, including the gopher tortoise and indigo snake in the AFTF improvement footprint (Moody AFB 2024). However, because of the proximity to burrows and occupied habitat, there is a chance that the gopher tortoise could be present at the project area, and because eastern indigo snakes are associated with gopher tortoise habitat, there is also the potential for indigo snake occurrence. Further, surveys have verified the presence of these species on Moody AFB, although the eastern indigo snake has not been officially sighted since 1996. Therefore, species-specific surveys would be conducted by a qualified biologist prior to the start of any construction-related activities. If a gopher tortoise or an indigo snake were to be detected during surveys, Moody AFB would coordinate with GDNr and USFWS to relocate captured tortoises and indigo snakes outside of the construction zone. No other federally or state listed species would occur in the proposed project area. Therefore, Project 2, Alternative 1, may affect but is not likely to adversely affect the eastern indigo snake and would have no effect on all other federally listed species.

3.9.2.5 Project 2, Alternative 2: Aircraft Fire Training Facility Repairs and Construction, No Truck Driving Pad

Impacts on biological resources would be similar to those described for Project 2, Alternative 1, but would involve a slightly smaller area of ground disturbance. Only short-term, negligible, adverse impacts on biological resources would occur. Project 2, Alternative 2, may affect but is not likely to adversely affect the eastern indigo snake and would have no effect on all other federally listed species.

3.9.2.6 Project 2, No Action Alternative

Under the No Action Alternative, there would be no improvements to the AFTF at Moody AFB. Therefore, there would be no impacts on biological resources.

3.9.2.7 Project 3, Alternative 1: Gate Overwatch Position Construction at Davidson Road and Mitchell Boulevard Gates

The construction of a two-story overwatch building at Moody AFB gates would have short-term, negligible, adverse impacts on biological resources. Direct impacts on vegetation and wildlife

would occur from the conversion of turf grasses into two-story overwatch buildings at the Davidson Road and Mitchell Boulevard gates. Noise from construction equipment and equipment movement could indirectly disturb some relatively common reptile and bird species present in the project area during construction. No breeding habitat for any species would be lost due to the construction activities. There is no habitat supporting any federally or state listed species in the proposed buildings footprints. Therefore, the construction of a two-story overwatch buildings at Moody AFB gates would have no effect on any federally listed species.

3.9.2.8 Project 3, No Action Alternative

Under the No Action Alternative, there would be no construction of overwatch positions at Moody AFB gates. Therefore, there would be no impacts on biological resources.

3.9.2.9 Project 4, Alternative 1: Aerospace Ground Equipment Facility Construction and Demolition with New Shop, Administrative Space, and Covered Storage

The demolition of Buildings 732, 752, 755, 756, and the construction of a new AGE facility would have short-term, negligible, adverse impacts on biological resources. Noise from construction equipment and equipment movement could indirectly disturb some relatively common reptile and bird species present in the project area during construction. No breeding habitat for any species would be lost due to the construction of a new AGE facility. There is no habitat supporting any federally listed species in the footprint of the proposed new AGE facility. Tricolored bats do not typically utilize buildings for roosting in the Tricolored Bat Year-Round Active Zone 2 (USFWS 2024b), which includes Moody AFB. Therefore, the construction of a new AGE facility at Moody AFB would have no effect on any federally or state listed species.

3.9.2.10 Project 4, Alternative 2: Aerospace Ground Equipment Facility Construction and Demolition without New Shop and More Renovated Administrative Space

Impacts on biological resources would be the same as described for Project 4, Alternative 1. Only short-term, negligible, adverse impacts on biological resources would occur. The construction of a new AGE facility would have no effect on any federally listed species.

3.9.2.11 Project 4, No Action Alternative

Under the No Action Alternative, there would be no construction of a new AGE facility at Moody AFB. Therefore, there would be no impacts on biological resources.

3.9.2.12 Project 5, Alternative 1: Burma Road Realignment

The realignment and repaving of Burma Road would have long-term, minor impacts on biological resources. Direct impacts on vegetation and wildlife would occur from the conversion of 4.6 acres of forested area, primarily dominated by loblolly pines, into a paved road and turf area. Noise from construction equipment and equipment movement could indirectly disturb some relatively common reptile and bird species present in the project area during construction. Loss of breeding habitat for some relatively common reptile and bird species would occur due to the conversion of a forested area into an open, partially paved area. The use of BMPs during

construction would ensure that construction activities do not adversely impact aquatic species in the Mission Lake outfall channel and wetlands located west of the construction area.

There is no habitat supporting any federally or state listed species in the Burma Road realignment footprint. Therefore, realignment of the Burma Road at Moody AFB would have no effect on any federally listed species. However, there is a possibility that the tricolored bat could utilize trees at Moody AFB for roosting. Therefore, tree removal would not occur from 1 May to 15 July to avoid the tricolored bat pup season (USFWS 2024b). With the seasonal restrictions on tree removal activities, Project 5, Alternative 1, would not jeopardize the continued existence of the tricolored bat.

3.9.2.13 Project 5, No Action Alternative

Under the No Action Alternative, there would be no realignment of Burma Road. Therefore, there would be no impacts on biological resources.

3.9.2.14 Project 6, Alternative 1: 38th Rescue Squadron Parking Lot Construction

The construction of a parking lot to support the 38 RQS operation would have short-term, negligible, adverse impacts on biological resources. Direct impacts on vegetation and wildlife would occur from the conversion of turf grasses to a paved parking area. Noise from construction equipment and equipment movement could indirectly disturb some relatively common reptile and bird species present in the project area during construction. No breeding habitat for any species would be lost due to the parking lot construction. There is no habitat supporting any federally listed species in the footprint of the proposed parking lot. Therefore, the construction of a parking lot would have no effect on any listed species.

3.9.2.15 Project 6, No Action Alternative

Under the No Action Alternative, there would be no parking lot construction in support of the 38 RQS operation at Moody AFB. Therefore, there would be no impacts on biological resources.

3.9.2.16 Project 7, Alternative 1: Airfield Stormwater Repair and Replacement

The airfield stormwater repair and replacement would have short-term, negligible, adverse impacts on biological resources. Noise from construction equipment and equipment movement could indirectly disturb some relatively common reptile and bird species present in the project area during construction. No breeding habitat for any species would be lost due to the airfield stormwater repair and replacement lot construction. The use of BMPs would ensure construction activities do not adversely impact aquatic species in the wetlands directly south of the airfield stormwater repair and replacement area. There is no habitat supporting any federally listed species in the footprint of the proposed airfield stormwater repair and replacement. Therefore, the airfield stormwater repair and replacement would have no effect on any listed species.

3.9.2.17 Project 7, No Action Alternative

Under the No Action Alternative, there would be no airfield stormwater system repair and replacement. Therefore, there would be no impacts on biological resources.

3.9.2.18 Project 8, Alternative 1: Mission Lake Water Barrier and Stone Road Repairs – Both Shoulders

The Mission Lake water barrier and Stone Road repair would have long-term, minor, adverse impacts on biological resources. Direct impacts on vegetation and wildlife and aquatic habitats would occur from the installation of riprap at the toe of each slope on either side of Stone Road. The construction of shoulders along Stone Road at Mission Lake would result in the loss of both wetlands and aquatic habitat. Noise from construction equipment and equipment movement could indirectly disturb some relatively common reptile and bird species present in the project area during construction. However, the use of BMPs would ensure construction activities do not adversely impact aquatic species in Mission Lake and Mission Lake outfall channel.

Although the threatened SAST has never been detected on Main Base, including in Mission Lake, there is marginally suitable habitat in Mission Lake for the SAST. Therefore, its occurrence in the proposed project area would be highly unlikely, especially along the developed edge of Mission Lake at the existing water barrier composed of riprap and Stone Road. Noise and equipment movement from proposed construction activities such as the placement of riprap along the banks and within open-water areas of Mission Lake would further deter any SASTs from being present in the project area during construction activities. BMPs would be used to ensure construction activities do not substantially increase water turbidity in Mission Lake. Therefore, the Mission Lake water barrier and Stone Road repair may affect but is not likely to adversely affect the SAST.

3.9.2.19 Project 8, Alternative 2: Mission Lake Water Barrier and Stone Road Repairs – North Shoulder

Impacts on biological resources would be the similar to those described in Project 8, Alternative 1, but would have a smaller area of aquatic impacts. Long-term, minor, adverse impacts on biological resources would occur. As described for Project 8, Alternative 1, it is highly unlikely that SAST would be present in Mission Lake proximate to the proposed construction project activities. Noise and equipment movement would further deter the SAST from being present in the project area during construction. BMPs would be used to ensure construction activities do not substantially increase water turbidity in Mission Lake. Therefore, the Mission Lake water barrier and Stone Road repair may affect but is not likely to adversely affect the SAST.

3.9.2.20 Project 8, Alternative 3: Repair Mission Lake Water Barrier and Realign Stone Road

Although similar in nature, adverse impacts on biological resources would be slightly greater than for Project 8, Alternatives 1 and 2. In addition to the repair of Mission Lake water barrier, the realignment of an estimated 1,800 linear feet of Stone Road would result in the removal of

approximately 1.6 acres of trees south of the Mission Lake outfall channel. This would result in the permanent loss of breeding and foraging habitat for some relatively common reptile and bird species; this would occur due to the conversion of forested area and wetlands into an open, partially paved area.

There is a possibility that the tricolored bat could utilize trees at Moody AFB for roosting. Therefore, tree removal would not occur from 1 May to 15 July, to avoid the tricolored bat pup season (USFWS 2024b). With the seasonal restrictions on tree removal activities, Project 8, Alternative 3, would not jeopardize the continued existence of the tricolored bat. Additionally, as described for Project 8, Alternative 1, it is highly unlikely that SAST would be present in Mission Lake proximate to the proposed construction project activities. Noise and equipment movement would further deter the SAST from being present in the project area during construction. BMPs would be used to ensure construction activities do not substantially increase water turbidity in Mission Lake. Therefore, the Mission Lake water barrier and Stone Road repair may affect but is not likely to adversely affect the SAST.

3.9.2.21 Project 8, No Action Alternative

Under the No Action Alternative, there would be no Mission Lake water barrier and Stone Road repairs at Moody AFB. Therefore, there would be no impacts on biological resources.

3.9.2.22 Project 9, Alternative 1: Boundary Fence Repair with Driving Lane

The removal of woody vegetation, creating a cleared corridor, and subsequent construction of a driving lane would have long-term, minor, adverse impacts on biological resources. Direct impacts on vegetation and wildlife would occur from the conversion of forested area, turf grasses, and wetlands to a driving lane. Noise from construction equipment and equipment movement could indirectly disturb some relatively common reptile and bird species present in the project area during construction. Breeding habitat would be lost due to the removal of vegetation. Noise from construction equipment and equipment movement could indirectly disturb some relatively common reptile and bird species present in the project area during construction. The use of BMPs would ensure construction activities do not adversely impact aquatic species in Beatty Branch and associated wetlands.

There is a possibility that the tricolored bat could utilize trees at Moody AFB for roosting. Therefore, under Project 9, Alternative 1, tree removal would not occur from 1 May to 15 July, to avoid tricolored bat pup season (USFWS 2024b). With the seasonal restrictions on tree removal activities, Project 9, Alternative 1 would not jeopardize the continued existence of the tricolored bat.

Although the threatened SAST has never been detected on Main Base, including in Beatty Branch, there is marginally suitable habitat in Beatty Branch for the SAST. Therefore, its occurrence in the proposed project area would be highly unlikely, especially adjacent to the Moody AFB boundary fence where the proposed placement of a culvert in Beatty Branch and construction of a driving lane would occur. Noise and equipment movement from proposed construction activities such as tree removal and culvert placement would further deter any

SASTs from being present in the project area during construction activities. BMPs would be used to ensure construction activities do not substantially increase water turbidity in Beatty Branch. Therefore, the placement of a culvert in Beatty Branch may affect but is not likely to adversely affect the SAST.

3.9.2.23 Project 9, Alternative 2: Boundary Fence Repair with Vegetation Clearance on the Base Side of the Fence

Although impacts on vegetation and wildlife would be the same as described in Project 9, Alternative 1, the surface area impacted by woody vegetation removal would be half the size and no driving lane would be constructed. Long-term, minor, adverse impacts on biological resources would occur. The boundary fence repair and woody vegetation clearing would have no effect on any listed species. However, there is a possibility that the tricolored bat could utilize trees at Moody AFB for roosting. Therefore, tree removal would not occur from 1 May to 15 July, to avoid the tricolored bat pup season (USFWS 2024b). With the seasonal restrictions on tree removal activities, Project 9, Alternative 2, would not jeopardize the continued existence of the tricolored bat.

3.9.2.24 Project 9, Alternative 3: Boundary Fence Repair with Vegetation Clearance on Both Sides of the Fence

Although no driving lane would be constructed, and only aboveground woody vegetation would be removed, impacts on vegetation and wildlife would be the same as described as in Project 9, Alternative 1. Long-term, minor, adverse impacts on biological resources would occur. The boundary fence repair and vegetation clearance would have no effect on any listed species. However, there is a possibility that the tricolored bat could utilize trees at Moody AFB for roosting. Therefore, tree removal would not occur from 1 May to 15 July, to avoid tricolored bat pup season (USFWS 2024b). With the seasonal restrictions on tree removal activities, Project 9, Alternative 3, would not jeopardize the continued existence of the tricolored bat.

3.9.2.25 Project 9, No Action Alternative

Under the No Action Alternative, there would be no boundary fence repair and vegetation clearance at Moody AFB. Therefore, there would be no impacts on biological resources.

3.9.2.26 Project 10, Alternative 1: Demolish Eleven Buildings

The demolition of 11 buildings would have short-term, negligible, adverse impacts on biological resources. Noise from construction equipment and equipment movement could indirectly disturb some relatively common reptile and bird species present in the project area during buildings demolition. No breeding habitat for any species would be lost due to buildings demolition.

There is no habitat supporting any federally listed species in the footprint of the 11 buildings to be demolished. Tricolored bats do not typically utilize buildings for roosting in Tricolored Bat Year-Round Active Zone 2 (USFWS 2024b), which includes Moody AFB. Therefore, the demolition of 11 buildings at Moody AFB would have no effect on any listed species.

3.9.2.27 Project 10, No Action Alternative

Under the No Action Alternative, there would be no building demolition at Moody AFB. Therefore, there would be no impacts on biological resources.

3.9.2.28 Cumulative Actions and Other Considerations

The Proposed Action, in combination with reasonably foreseeable future actions on and off Moody AFB including the off-base road maintenance projects, would potentially result in long-term, minor, cumulative adverse impacts on vegetation and wildlife due to a direct loss of vegetation from construction activities and loss of habitat from the removal of trees and other vegetation. However, no sensitive plant or wildlife resources would be impacted as a result of the Proposed Action or other proposed projects. All noise impacts from proposed construction projects would be short term. Habitat loss would be minimal and would impact primarily common wildlife species. Any potential effects on federally listed species from other reasonably foreseeable projects on Moody AFB would be evaluated under Section 7 of the ESA. Therefore, there would be no cumulative effects on any federally listed species as all proposed projects on Moody AFB would fully comply with the requirements of the ESA.

3.10 Cultural Resources

The Proposed Action is considered an undertaking for the purposes of Section 106. The area of potential effect (APE) for this undertaking consists of a 100-foot buffer around the limits of disturbance for each of the seven discontinuous projects and alternatives described in **Chapter 2.0**. The DAF initiated consultation with the Georgia SHPO on 18 November 2024 in accordance with Section 106 and requested concurrence with the APE; SHPO concurrence with the APE is pending. Copies of relevant Section 106 correspondence are provided in **Appendix A**.

The DAF has initiated government-to-government consultation with Native American tribes having historic, cultural, and religious ties to Moody AFB. Copies of relevant government-to-government correspondence are included in **Appendix A**.

See **Appendix C-7** for the definition of this resource.

3.10.1 Affected Environment

Moody AFB was established in early 1942 as the wartime Moody Field Advanced Pilot Training School. Previous archaeological investigations at Moody AFB have located 61 archaeological sites and 63 isolated finds (DAF 2024; see **Appendix C-7** for detailed discussion). The physical areas included within the expanded ground training areas were all investigated under the installation's comprehensive 1996 archaeological survey (Grover et al. 1996), and many of these areas were revisited in a 2021-2022 resurvey (Reynolds et al. 2022). No archaeological sites have been identified within the footprint of the proposed project construction areas or within 100 feet of the 10 proposed project areas composing the Proposed Action. Moody AFB has two NRHP-eligible archaeological sites and four sites that require additional testing. Sites 9LW63 and 9LW71 are both prehistoric artifact scatters located on the Main Base east of the

runway (DAF 2024). Both are outside of the footprint of the proposed projects APEs. The four sites requiring testing (i.e., 9LW230, 9LW231, 9LW235, and 9LW237) are all located at the Grassy Pond geographically separated unit (GSU) and therefore have no potential to be affected by the proposed project.

Numerous comprehensive surveys of World War II- and Cold War-era buildings and structures at Moody AFB have been undertaken since 1997 (**Table 3-27**; see **Appendix C-7**). No intact historic districts have been identified. Only two structures have been determined to be eligible for inclusion in the NRHP. Facility 618, constructed in 1941, is a steel water tower with a 200,000-gallon capacity. It was determined to be eligible for inclusion in the NRHP in 1999 (DAF 2024). Building 110 is a chapel built in 1971. Significant for its midcentury modern architectural design, the chapel was determined to be eligible for inclusion in the NRHP in May 2017. Both have lost integrity of setting due to the historic and ongoing construction and demolition within the main cantonment. Both eligible buildings are outside of the proposed projects' APEs.

No traditional cultural properties have been identified on Moody AFB through previous consultation efforts. No federally recognized tribes have identified traditional cultural properties (**Appendix C-7**).

Based on the location of the projects, the coverage of previous archaeological surveys, and lack of issues raised by tribes, the DAF has determined that the proposed project areas APEs contain no identified archaeological sites eligible for listing on the NRHP, historic districts, cemeteries, sacred sites, traditional cultural properties, or other tribal resources.

Table 3-27. Summary of Cultural Resource Investigations on Moody Air Force Base

Reference	Investigation	Results
Archaeological Surveys		
Wright 1985	350 acres of Grand Bay Range focused on high-probability areas	Four sites identified; one site (9LN4) recommended for testing.
National Park Service 1986	Preliminary cultural resource reconnaissance of Moody AFB and Grassy Pond Recreation Area	One site recorded and determined not eligible for the NRHP.
Grover et al. 1996	Survey of Grand Bay Ordnance Range and Moody AFB, total 3,600 acres	21 sites and 39 isolated finds recorded. Five sites considered potentially eligible (9LW62, 9LW52, 9LW67, 9LN17, and 9LW71); remainder determined not eligible.
Morgan 1998	Survey of Southwest Land Gift (49.5 acres)	Two sites recorded and determined not eligible for NRHP.
Jones et al. 1999	Phase II Testing of Site 9LW71	Sites 9LW70 and 9LW71 determined to be one consolidated site (9LW71); site 9LW71 determined eligible for NRHP.
Warhop et al. 2007	Phase II Testing of 9LN17	Site determined not eligible for NRHP.

Reference	Investigation	Results
Warhop et al. 2010	Phase II Testing of 9LW63	Site 9LW63 determined eligible for NRHP.
Warhop and Raymer 2010	Testing of Site 9LW67	Inconclusive; additional testing recommended.
Lindemuth and Somers 2011	Survey of Personnel Recovery Campus	No sites identified.
Schneider et al. 2013	Phase II Testing of Sites 9LW52 and 9LW67	Sites determined not eligible for NRHP.
Lowrey 2017	Survey of 106.1 Acres of New Southwest Land Purchase	Two isolated finds identified; not eligible for the NRHP.
Reynolds et al. 2022	Phase I Archaeological Survey of 3,119 Acres	Seven of 11 sites relocated; Site 9LW63 remained eligible. A total of 40 new sites recorded; 36 not eligible; additional testing recommended at 9LW230, 9LW231, 9LW235, and 9LW237 (all located at Grassy Pond GSU).
Architectural Studies		
Patterson et al. 1997	Context of Cold War Material Culture; Baseline Inventory of 137 Buildings	No buildings eligible for NRHP for Cold War significance.
Moody AFB 1996-1997 (see ICRMP, Air Force 2022)	Consultation for Buildings 701, 609, and 621	Buildings determined not eligible for the NRHP.
Messick et al. 1999	Evaluation of 223 Buildings, including Cold War Assets	Water Tower (Facility 618) eligible for NRHP; remaining buildings not eligible.
Hersch 2011	Evaluation of 42 Cold War-Era Resources	Resources not eligible for the NRHP.
Scherer 2015	Evaluation of Buildings 1500 and 1501	Buildings not eligible for NRHP.
Amec Foster Wheeler Environment and Infrastructure Inc. 2016	Evaluation of Buildings 325, 328, 621, 658, 704, 753, 785, and 901	Buildings not eligible for NRHP.
Reed et al. 2017	Reevaluation of 210 Cold War-Era Facilities 45 Years or Older, including Cantonment, Grand Bay Weapons Range, Grassy Pond Annex, and NEXRAD Radar Site	Base Chapel (Building 110) eligible for NRHP; no intact districts present; all other buildings not eligible.

AFB – Air Force Base; **NRHP** – National Register of Historic Places; **GSU** – geographically separated unit; **ICRMP** – Integrated Cultural Resources Management Plan

3.10.2 Environmental Consequences

Section 106 of the NHPA requires all federal agencies to assess the effects of their undertakings on historic properties and seek to avoid, minimize, or mitigate adverse effects on those properties [36 CFR 800.1(a)]. The APE is defined as the “geographic area or areas within which an undertaking may directly or indirectly cause alterations in the character or use of

historic properties, if any such properties exist” (36 CFR 800.16[d]). Adverse impacts on cultural resources could include altering characteristics of the resource that make it eligible for listing in the NRHP. Such impacts could include introducing visual or audible elements that are out of character with the property or its setting; neglecting the resource to the extent that it deteriorates or is destroyed; or the sale, transfer, or lease of the property out of agency ownership (or control) without adequate enforceable restrictions or conditions to ensure preservation of the property’s historic significance. For the purposes of this EA, an effect is considered adverse if it would alter the integrity of a NRHP-listed or -eligible resource or if it has the potential to adversely affect traditional cultural properties and the practices associated with the property. For the proposed projects and alternatives described below, should inadvertent discovery of archaeological deposits be made during construction, the DAF will follow standard operating procedures for Discoveries of Archaeological Resources and Native American Graves Protection and Repatriation Act (NAGPRA) Cultural Items as detailed in the Moody AFB Integrated Cultural Resources Management Plan (DAF 2024:15). DAF requested concurrence from the SHPO on their no effect to historic properties determination on 18 November 2024. Concurrence from the SHPO on the DAF’s determination was received on 9 and 10 December 2024, and 24 March 2025 (**Appendix A**).

3.10.2.1 Project 1, Alternative 1: Guardian Angel Facility Construction and Renovation North Site

Project 1, Alternative 1, would not result in adverse effects historic properties. The proposed construction areas for this alternative have been previously surveyed for archaeological resources and no NRHP-eligible sites were identified (Grover et al. 1996; Reynolds et al. 2022). The closest recorded archaeological site is Site 9LN245, located approximately 800 feet from the proposed project area. Recorded by Reynolds et al. (2022), it was determined to not be eligible for the NRHP. Moody AFB’s two NRHP-eligible sites, 9LW63 and 9LW71, are located east of the runway and are not proximate to Project 1, Alternative 1. Therefore, Project 1, Alternative 1, would not physically affect any NRHP-eligible archaeological sites.

The two NRHP-eligible architectural resources (Facility 618 and Building 110) are located within Main Base. Neither building would be physically altered for Project 1, Alternative 1. The nearest Project 1 activities, which would include renovations and additions to Buildings 556, 663, 606, 607, and 609, would occur more than 800 feet from the two NRHP-eligible resources. Of the buildings slated for renovation, Buildings 556 and 609 were both constructed in 1941 and are therefore more than 50 years of age. Building 609 was determined to be ineligible in 1997 (see Appendix B in Messick 1999), and Building 556 was determined to be ineligible in 1999 (Messick 1999). Buildings 606, 607, and 663 were constructed in 2005, 2005, and 2000, respectively, and do not require evaluation at this time. Therefore, Project 1, Alternative 1, would have no effect on the two NRHP-eligible buildings.

3.10.2.2 Project 1, Alternative 2: Guardian Angel Facility Construction and Renovation South Site

Project 1, Alternative 2, would not result in adverse effects to historic properties. The potential effects to archaeological and architectural resources would be the same as described for Project 1, Alternative 1.

3.10.2.3 Project 1, No Action Alternative

Under the No Action Alternative, there would be no effect on any cultural resources because there would be no construction or ground-disturbing activities.

3.10.2.4 Project 2, Alternative 1: Aircraft Fire Training Facility Improvements with Truck Driving Training

Project 2, Alternative 1, would not result in adverse effects to historic properties. The proposed construction areas for this alternative have been previously surveyed for archaeological resources, and no NRHP-eligible sites were identified (Grover et al. 1996; Reynolds et al. 2022). The closest recorded archaeological site is Site 9LW72, located 1,000 feet from the AFTF; this site has been determined to be ineligible (Grover et al. 1996). Moody AFB's two NRHP-eligible sites, 9LW63 and 9LW71, are located more than 2,300 feet from the AFTF. Therefore, Project 2, Alternative 1, would not physically affect any NRHP-eligible archaeological sites.

The two NRHP-eligible architectural resources (Facility 618 and Building 110) at Moody AFB are located within Main Base on the west side of the runway. Neither building would be physically altered by Project 2, Alternative 1. The new construction associated with the proposed project would be approximately 4,000 feet to the east and would not be visible from either resource. Therefore, Project 2, Alternative 1, would have no effect on the two NRHP eligible buildings.

3.10.2.5 Project 2, Alternative 2: Aircraft Fire Training Facility Repairs and Construction, No Truck Driving Pad

Project 2, Alternative 2 would not result in adverse effects to historic properties. The potential effects to archaeological and architectural resources would be the same as described for Project 2, Alternative 1.

3.10.2.6 Project 2, No Action Alternative

Under the No Action Alternative, there would be no effect on any cultural resources because there would be no construction or ground-disturbing activities.

3.10.2.7 Project 3, Alternative 1: Gate Overwatch Position Construction at Davidson Road and Mitchell Boulevard Gates

Project 3, Alternative 1, would not result in adverse effects to historic properties. The proposed construction areas for this alternative have been previously surveyed for archaeological resources and no NRHP-eligible sites were identified (Grover et al. 1996; Reynolds et al. 2022).

The closest recorded archaeological site to either construction area is Site 9LW73, located 500 feet northwest of the Davidson Road Gate. This site was determined to be ineligible in 1998 (Morgan 1998). The installation's two NRHP-eligible sites, 9LW63 and 9LW71, are on the east side of the runways and are not proximate to the proposed project. Therefore, Project 3, Alternative 1, will not physically affect any NRHP-eligible archaeological sites.

The two NRHP-eligible architectural resources (Facility 618 and Building 110) are located within Main Base. Neither building would be physically altered for Project 3, Alternative 1. At its closest point, the overwatch positions would be approximately 2,000 feet to the east of the Mitchell Boulevard Gate construction area. Therefore, Project 3, Alternative 1, would have no effect on the two NRHP-eligible buildings.

3.10.2.8 Project 3, No Action Alternative

Under the No Action Alternative, there would be no effect on any cultural resources because there would be no construction, ground-disturbing activities, or increased training actions.

3.10.2.9 Project 4, Alternative 1: Aerospace Ground Equipment Facility Construction and Demolition with New Shop, Administrative Space, and Covered Storage

Project 4, Alternative 1, would not result in adverse effects to historic properties. The proposed construction areas for this alternative have been previously surveyed for archaeological resources, and no NRHP-eligible sites were identified within Main Base due to a high degree of previous disturbance and presence of impervious surfaces (Grover et al. 1996; Reynolds et al. 2022). The installation's two NRHP-eligible sites, 9LW63 and 9LW71, are on the east side of the runways and are not in proximity to the project. Therefore, Project 4, Alternative 1, would not physically affect any NRHP-eligible archaeological sites.

The project includes demolition of Buildings 732, 752, 755, and 756. Buildings 732 and 752 were constructed in 1997 and 1994, respectively. Neither building is 50 years old or will become 50 years old during the course of the proposed project and, therefore, do not require evaluation. Building 755 was constructed in 1962 and was previously determined ineligible (Hersch 2011). Building 756 was constructed in 1977 and has not yet been evaluated and could potentially turn 50 years old before the Project 4, Alternative 1, is completed. Therefore, Moody AFB will complete an evaluation prior to the proposed building demolition.

The two NRHP-eligible architectural resources (Facility 618 and Building 110) would not be physically altered for Project 4, Alternative 1. At its closest point, the proposed new construction would be approximately 1,300 feet southeast of the water tower (Facility 618). Therefore, Project 4, Alternative 1, will have no effect on the two NRHP-eligible buildings.

3.10.2.10 Project 4, Alternative 2: Aerospace Ground Equipment Facility Construction and Demolition without New Shop and More Renovated Administrative Space

Project 4, Alternative 2, would not result in adverse effects to historic properties. The proposed construction areas have been previously surveyed for archaeological resources and no NRHP-eligible sites were identified within the cantonment area due to a high degree of previous

disturbance and presence of impervious surfaces (Grover et al. 1996; Reynolds et al. 2022). The two NRHP-eligible sites, 9LW63 and 9LW71, are on the east side of the runways and are not proximate to the project. Therefore, Project 4, Alternative 2, would not physically affect any NRHP-eligible archaeological sites.

This alternative would include demolition of Building 755 only and construction of an adjacent shop. Building 755 was constructed in 1962 and was previously determined to be ineligible for the NRHP (Hersch 2011). The two NRHP-eligible architectural resources (Facility 618 and Building 110) would not be physically altered for Project 4, Alternative 2. At its closest point, new construction associated with the proposed project would be approximately 1,300 feet southeast of the water tower (Facility 618). Therefore, Project 4, Alternative 2, would have no effect on the two NRHP-eligible buildings.

3.10.2.11 Project 4, No Action Alternative

Under the No Action Alternative, there would be no effect on any cultural resources because there would be no construction, ground-disturbing activities, or increased personnel activities.

3.10.2.12 Project 5, Alternative 1: Burma Road Realignment

Project 5, Alternative 1, would not result in adverse effects to historic properties. The proposed construction areas have been previously surveyed for archaeological resources, and no NRHP-eligible sites were identified within the construction footprint or within 100 feet (Grover et al. 1996; Reynolds et al. 2022). The nearest site to the proposed Burma Road realignment construction area is Site 9LW225, located approximately 275 feet to the southeast. This site was determined to be ineligible for the NRHP (Reynolds et al. 2022). The installation's two NRHP-eligible sites, 9LW63 and 9LW71, are also not within potential disturbance areas. Site 9LW63 is located more than 500 feet to the east and would not be physically impacted. Therefore, Project 5, Alternative 1, would not physically affect any NRHP-eligible archaeological sites.

Moody AFB's only two NRHP-eligible architectural resources (Facility 618 and Building 110) would not be physically altered by the project. In addition, the eligible buildings are approximately 1 mile north of any proposed construction activities. Therefore, Project 5, Alternative 1, would have no effect on the two NRHP-eligible buildings.

3.10.2.13 Project 5, No Action Alternative

Under the No Action Alternative, there would be no effect on any cultural resources because there would be no construction, ground-disturbing activities, or increased personnel activities.

3.10.2.14 Project 6, Alternative 1: 38th Rescue Squadron Parking Lot Construction

Project 6, Alternative 1, would not result in adverse effects to historic properties. The proposed construction area for the parking lot has been previously surveyed for archaeological resources and no sites were identified within the construction footprint or within 100 feet (Grover et al. 1996; Reynolds et al. 2022). Moody AFB's two NRHP-eligible sites, 9LW63 and 9LW71, are

both located on the east side of the runway and are not proximate to the proposed construction area. Therefore, Project 6, Alternative 1, would not physically affect any NRHP-eligible archaeological sites.

The only two NRHP-eligible architectural resources (Facility 618 and Building 110) would not be physically altered by the proposed project. Building 110 is located approximately 350 feet to the west of the proposed parking lot and Facility 618 is located approximately 1,000 feet south. As noted in previous architectural surveys, the installation has an evolving built environment with newer construction proximate to both NRHP-eligible buildings. Construction of the parking lot has no potential to result in an adverse visual effect. Therefore, Project 6, Alternative 1, would have no effect on the two NRHP-eligible buildings.

3.10.2.15 Project 6, No Action Alternative

Under the No Action Alternative, there would be no effect on any cultural resources because there would be no construction, ground-disturbing activities, or increased personnel activities.

3.10.2.16 Project 7, Alternative 1: Airfield Stormwater Repair and Replacement

Project 7, Alternative 1, would not result in adverse effects to historic properties. The drainage improvement areas include areas where subsurface structures would be repaired or replaced within their existing footprint. Two small aboveground components would be demolished in the southern part of the airfield. All areas proposed for ground disturbance have been previously surveyed for archaeological sites. No sites were identified within the construction footprint of the drainage areas or within 100 feet (Grover et al. 1996; Reynolds et al. 2022). The two NRHP-eligible sites, 9LW63 and 9LW71, are both located on the east side of the runway and are more than 500 feet from any proposed ground disturbance or construction areas. Therefore, Project 7, Alternative 1, would not physically affect any NRHP-eligible archaeological sites.

The two NRHP-eligible architectural resources (Facility 618 and Building 110) would not be physically altered by the project. Facility 618 is the closest resource to the drainage improvement areas and is located approximately 350 feet to the northwest. As noted in previous architectural surveys, the installation has an evolving built environment with newer construction proximate to both NRHP-eligible buildings. Therefore, Project 7, Alternative 1, would have no effect on the two NRHP-eligible resources.

3.10.2.17 Project 7, No Action Alternative

Under the No Action Alternative, there would be no effect on any cultural resources because there would be no construction or ground-disturbing activities.

3.10.2.18 Project 8, Alternative 1: Mission Lake Water Barrier and Stone Road Repairs – Both Shoulders

Project 8, Alternative 1, would not result in adverse effects to historic properties. The proposed Mission Lake water barrier and Stone Road repairs are in areas that have been previously surveyed for archaeological sites. No sites were identified within the construction footprint within

100 feet (Grover et al. 1996; Reynolds et al. 2022). The nearest archaeological site is 9LW87, approximately 900 feet to the south. This site is located off Moody AFB property and was determined to be ineligible for the NRHP (Hendryx et al. 2005). The two NRHP-eligible sites, 9LW63 and 9LW71, are both located on the east side of the runway and more than 4,000 feet east from any proposed ground disturbance or construction areas. Therefore, Project 8, Alternative 1, would not physically affect any NRHP-eligible archaeological sites.

The two NRHP-eligible architectural resources (Facility 618 and Building 110) would not be physically altered by the project, and both are located beyond the visibility of the proposed project. Therefore, Project 8, Alternative 1, would have no effect on the two NRHP-eligible resources.

3.10.2.19 Project 8, Alternative 2: Mission Lake Water Barrier and Stone Road Repairs – North Shoulder

Project 8, Alternative 2, would not result in adverse effects to historic properties. The potential effects to historic properties would be the same as described for Project 8, Alternative 1.

3.10.2.20 Project 8, Alternative 3: Repair Mission Lake Water Barrier and Realign Stone Road

Project 8, Alternative 3 would not result in adverse effects to historic properties. The potential effects to historic properties would be the same as described for Project 8, Alternative 1.

3.10.2.21 Project 8, No Action Alternative

Under the No Action Alternative, there would be no effect on any cultural resources because there would be no construction or ground-disturbing activities.

3.10.2.22 Project 9, Alternative 1: Boundary Fence Repair with Driving Lane

Project 9, Alternative 1 would not result in adverse effects to historic properties. The proposed construction areas for this alternative have been previously surveyed for archaeological resources and no NRHP-eligible sites were identified (Grover et al. 1996; Reynolds et al. 2022). The closest recorded archaeological site to any part of the construction area is Site 9LW220, located in a wooded area approximately 50 feet east of the southern fence line. Recorded by Reynolds et al. (2022), it was determined to be ineligible for the NRHP. Site 9LW245, also recorded by Reynolds et al. (2022), is located within 200 feet of the northern portion of the fence line, but it is on the west side of Bemiss Road. It was also determined to be ineligible for the NRHP. The installation's two NRHP-eligible sites, 9LW63 and 9LW71, are on the east side of the runways and are not proximate to the project. Therefore, Project 9, Alternative 1, would not physically affect any NRHP-eligible archaeological sites.

The two NRHP-eligible architectural resources (Facility 618 and Building 110) would not be physically altered for Project 9, Alternative 1. At its closest point, vegetation removal and driving lane construction would be approximately 2,500 feet east of the proposed project area. Therefore, Project 9, Alternative 1, would have no effect on the two NRHP-eligible buildings.

3.10.2.23 Project 9, Alternative 2: Boundary Fence Repair with Vegetation Clearance on the Base Side of the Fence

Project 9, Alternative 2, would not result in adverse effects to historic properties. The potential effects to historic properties would be the same as described for Project 9, Alternative 1.

3.10.2.24 Project 9, Alternative 3: Boundary Fence Repair with Vegetation Clearance on Both Sides of the Fence

Project 9, Alternative 3, would not result in adverse effects to historic properties. The potential effects to historic properties would be the same as described for Project 9, Alternative 1.

3.10.2.25 Project 9, No Action Alternative

Under the No Action Alternative, there would be no effect on any cultural resources because there would be no construction or ground-disturbing activities.

3.10.2.26 Project 10, Alternative 1: Demolish Eleven Buildings

Project 10, Alternative 1, would not result in adverse effects to historic properties. The proposed demolition areas have been previously surveyed for archaeological resources and no NRHP-eligible sites were identified due to a high degree of previous disturbance and presence of impervious surfaces (Grover et al. 1996; Reynolds et al. 2022). The two NRHP-eligible sites, 9LW63 and 9LW71, are on the east side of the runways and are not proximate to the project. One small building (Building 1145) is located approximately 500 feet to the southeast of Site 9LW71; however, no demolition activities would occur within or near the eligible site. Therefore, Project 10, Alternative 1, would not physically affect any NRHP-eligible archaeological sites.

The project includes demolition of Buildings 153, 200, 656, 707, 720, 760, 762, 763, 798, 961, and 1145. All the buildings except for 961 were constructed in 1981 or later (see **Table 2-2**). None are presently 50 years of age and will not be 50 years of age prior to the completion of the project. Most buildings are also small (less than 500 square feet) support buildings. These buildings do not require evaluation at this time and would not be affected by the project. Building 961 was constructed in 1963; this is a small structure (less than 300 square feet) that was near 50 years of age during the Messick (1999) survey. It was not identified as a historic property and, therefore, is not eligible for the NRHP.

The two NRHP-eligible architectural resources (Facility 618 and Building 110) would not be physically altered for Project 10, Alternative 1. No demolition activities would occur within 900 feet of either eligible resource. Therefore, Project 10, Alternative 1, would have no effect on the two NRHP-eligible buildings.

3.10.2.27 Project 10, No Action Alternative

Under the No Action Alternative, there would be no effect on any cultural resources because there would be no construction, ground-disturbing activities, or clearance of vegetation.

3.10.2.28 Cumulative Actions and Other Considerations

There would be no reasonably foreseeable impacts on cultural resources from the proposed construction, renovation, repair, and demolition of facilities and infrastructure at Moody AFB. All reasonably foreseeable projects proposed on Moody AFB would be subject to Section 106 of the NHPA, and each proposed project would be evaluated to ensure no adverse effects on historic properties. Impacts on cultural resources from proposed highway maintenance projects off-base could occur; however, the maintenance projects are proposed within existing highway rights-of-way in previously disturbed areas making impacts on cultural resources unlikely.

3.11 Infrastructure

See **Appendix C-8** for the definition of this resource.

3.11.1 Affected Environment

Electrical System. Electricity is provided to Moody AFB via two 115-kilovolt feeders that supply power from Georgia Transmission-owned substations located off the base. A single, three-phase, 12-megavolt-ampere transformer steps the voltage down from 115 kilovolts to 12,470 volts for distribution throughout the base via five primary circuits. These circuits are sized so that each can assume at least one additional circuit load. With some load shed, three circuits can assume the load of all five circuits even in the most heavily loaded season (Moody AFB 2015b).

Although there are two connections to the grid, the lone transformer acts as a single point of failure for the base. Backup generation capacity is available for mission-critical buildings for three to seven days, and some of the larger buildings utilize generators for load shedding. It is estimated that in case of failure, a backup transformer would be in place in less than six hours.

Overall, the electrical distribution system is in good condition. The majority of the distribution is underground (Moody AFB 2015b).

Natural Gas System. Natural gas at Moody AFB is supplied through a contract managed by the Defense Energy Support Center and is distributed through approximately 10.6 miles of gas line on the Main Base. In addition, when high regional demand reduces the availability of natural gas, a propane-air mix system is utilized to meet the thermal energy demands of the base (Moody AFB 2015b).

Family housing gas distribution was privatized in 2004 and has approximately 5 miles of natural gas line. The facilities east of the flight line are currently served by individual propane tanks as there is no natural gas connection.

Gas is supplied to Moody AFB through the utility's regulator and metering station via an 8-inch-diameter buried polyvinyl chloride (PVC) line. System pressure is maintained at about 120 pounds per square inch in winter and summer. The Main Base consumes approximately 27.16 million thousand cubic feet annually, based on average consumption for fiscal years 2012 and 2013. Peak average consumption of approximately 7.98 million thousand cubic feet per month occurs in December, January, and February, and the average base gas demand of

approximately 2.23 million thousand cubic feet per month occurs in June through September (Moody AFB 2015b).

Approximately 90 percent of the main lines in the Administrative Area are polyethylene plastic and in excellent condition. An engineering condition assessment conducted in the early 2000s verified that the gas mains on the base are in adequate condition. The small remaining sections of steel pipe are planned to be replaced by polyethylene pipe in upcoming projects (Moody AFB 2015b).

Liquid Fuel. Moody AFB's existing petroleum distribution system was developed to accommodate multiple flying missions, and since construction it has accommodated a variety of training and combat aircraft. JP-8 fuel storage consists of four steel aboveground storage tanks (ASTs) for jet fuel that total more than 945,000 gallons and were constructed in 1953, then upgraded for operational and environmental needs in 2006. A 5,000-gallon JP-8 tank was also built in 1977. The fill-stand system consists of four 600-gallon-per-minute pumps; four 600-gallon-per-minute filter separators; a combination of aboveground and underground piping; and pantograph issue points with isolation valves and ground prover systems. A JP-8 100 injector system was removed in early 2014.

The military service station was demolished and replaced with a modern four-tank/four-fuel (motor gasoline, E-85, diesel, and biodiesel) facility. The Army/Air Force Exchange Service fueling station has three 12,000-gallon unleaded underground storage tanks (USTs) with six dual dispensing units (Moody AFB 2015b).

Potable Water System. The abundant aquifer water supply is available year round and is currently accessed via three main wells operating at less than 50 percent capacity (estimated) and six secondary wells throughout the base. The well water is made safe as a potable source by Moody AFB's nanofiltration plant, which removes organic carbon to eliminate the formation of trihalomethanes. Moody AFB can currently supply a maximum of approximately 750,000 gallons per day from the aquifer to meet peak demands. Moody AFB's estimated peak demand is approximately 230,000 gallons per day, and average demand is 200,000 gallons per day. Nonpotable water byproducts of the filtration process are utilized for site irrigation, lowering the site's demand for potable water.

The water storage capacity of 11.4 million gallons and the Main Base's distribution network of 10- and 12-inch-diameter pipes are adequate to meet existing needs and accommodate significant future growth. The original water distribution system was constructed in the 1950s. Throughout the history of the base, portions of the original system have been replaced; however, some of the water lines still in use were installed in the 1970s or earlier. The distribution pipe is generally in adequate condition (Moody AFB 2015b).

Wastewater System. The wastewater treatment facility and infrastructure were initially installed in the 1940s, and the facility underwent significant upgrades in 1995, 2012, and 2023. The upgrades increased the capacity of the system to 750,000 gallons per day, with additional space available in the facility for future capacity expansion if required. A project included the addition of a lift station. The wastewater treatment plant had a significant upgrade in 2023 to install an

ammonia polisher and a sulfuric acid injection facility to meet new permit effluent limits. A NPDES permit was issued for the facility, allowing effluent discharge at an average rate of 0.75 million gallons per day with a maximum of 1.125 million gallons per day, equivalent to the capacity of the plant. The current demand is approximately 180,000 gallons per day; therefore, the wastewater system is capable of fully supporting the current mission of assigned units, organizations, and tenants with no workarounds, and offers additional capacity to meet potential future mission requirements (Moody AFB 2015b).

There are approximately 131,500 linear feet of sewer lines, composed mostly of cast-iron, PVC, and asbestos cement and supported by 27 lift stations. Wastewater collection infrastructure is in good condition; however, because all collection lines utilize a single lift station in the northwest portion of the base (near Building 207), the system could suffer significant disruption if that station were to go offline. After treatment, the wastewater is discharged into Beatty Branch.

A few facilities on the base are still using on-site wastewater treatment systems. There are two functional septic tanks at Moody AFB located at Building 1720 at the south end of the airfield and at Building 1501, a communications receiver building to the east of the airfield runways. There are eight wastewater collection tanks at Moody AFB that are associated primarily with industrial facilities (Moody AFB 2015b).

Solid Waste Management. The Evergreen Municipal Solid Waste Landfill, located in Lowndes County, is utilized by Moody AFB for disposal of municipal solid waste, which includes household refuse. This landfill receives an average of 1,223 tons per day and has a projected life expectancy of 45 years (GEPD 2022). In addition, the Atkinson County Landfill and the Fitzgerald Landfill located in Ben Hill County, Georgia, are permitted to accept construction debris. Construction debris includes waste building materials and rubble resulting from construction activities. These landfills also accept tree trimmings and wood debris. The average daily tonnage and life expectancy for the Atkinson County Construction and Debris Landfill is 113 tons per day for 1 year, and for the Fitzgerald Construction and Demolition Landfill is 4.17 tons per day for 15 years (GEPD 2022).

Communications System. Moody AFB meets all radio frequency requirements for all very-high-frequency and high-frequency bands. Tactical land mobile radio, air-to-ground, point-to-point, navigational aid systems, nontactical land mobile radio, and long-haul communications: all are capable of supporting the current mission of assigned units, organizations, and tenants with minimal workarounds (Moody AFB 2015b).

Moody AFB has expanded the use of fiber-optic cable significantly, including a connection to the range. New buildings have voice-over-internet-protocol (VoIP) systems, nonclassified Internet protocol router networks (known as NIPRNet) for all workstations, and mass notification systems. Bandwidth on the secret internet protocol router network (i.e., SIPRNET) is being expanded, and voice-over-secure-internet-protocol (VoSIP) systems are being installed. Uptime for the communications systems hovers right around 98 to 99 percent. The Communications Squadron is continually building infrastructure to improve connectivity throughout the

installation. There is sufficient capacity in the main communications hub for further expansion of the network (Moody AFB 2015b).

Transportation. The area surrounding Moody AFB is rural. The primary access road to Moody AFB is Georgia State Route 125, which runs south to the city of Valdosta and connects to Interstate 75 (**Figure 3-8**). There are approximately 39 miles of roads on Moody AFB laid out in a wagon wheel design bounded by Robbins Road, Savannah Street, and Georgia Street. The existing training areas are serviced by secondary and tertiary roadways within the installation. These access roads have limited use and are free from congestion. There are no major road capacity issues on roadways on or adjacent to Moody AFB (Moody AFB 2015b).

There are four operational entry control facilities at Moody AFB (**Figure 3-8**). The Davidson Road Gate, which is located at the south end of the base, is accessible by Davidson Road from State Route 125 and is used by base personnel, visitors, and commercial vehicles. The Davidson Road Gate receives the majority of noncommercial and nonvisitor traffic, as most personnel live south of Moody AFB. The secondary public point of entry is the Mitchell Boulevard Gate, located to the north at the intersection of Mitchell Boulevard and State Route 125. The Robbins Road Gate is only open from 4:00 p.m. to 6:00 p.m. weekdays, and the Cemetery Gate is used only for special events, such as the air show. A fifth gate, the Contractor's Gate, is east on Hightower Road, and is used on a limited basis to allow contractor vehicles access to the east side of the airfield. Traffic flow at the gates is adequate, with some congestion during the a.m. and p.m. peak traffic periods (Moody AFB 2015b).

3.11.2 Environmental Consequences

Impacts on infrastructure from the Proposed Action are evaluated for their potential to disrupt or improve existing levels of service in the ROI, as well as generate additional requirements for energy or water consumption, and for impacts on resources such as sanitary sewer systems. The Proposed Action would result in an adverse impact to utilities or services if the project required more than the existing infrastructure could provide or required services in conflict with adopted plans and policies for the area. The effects on transportation and traffic would be considered significant if an alternative resulted in (1) a substantial increase in on- or off-base traffic or (2) substantial congestion on or around Moody AFB.

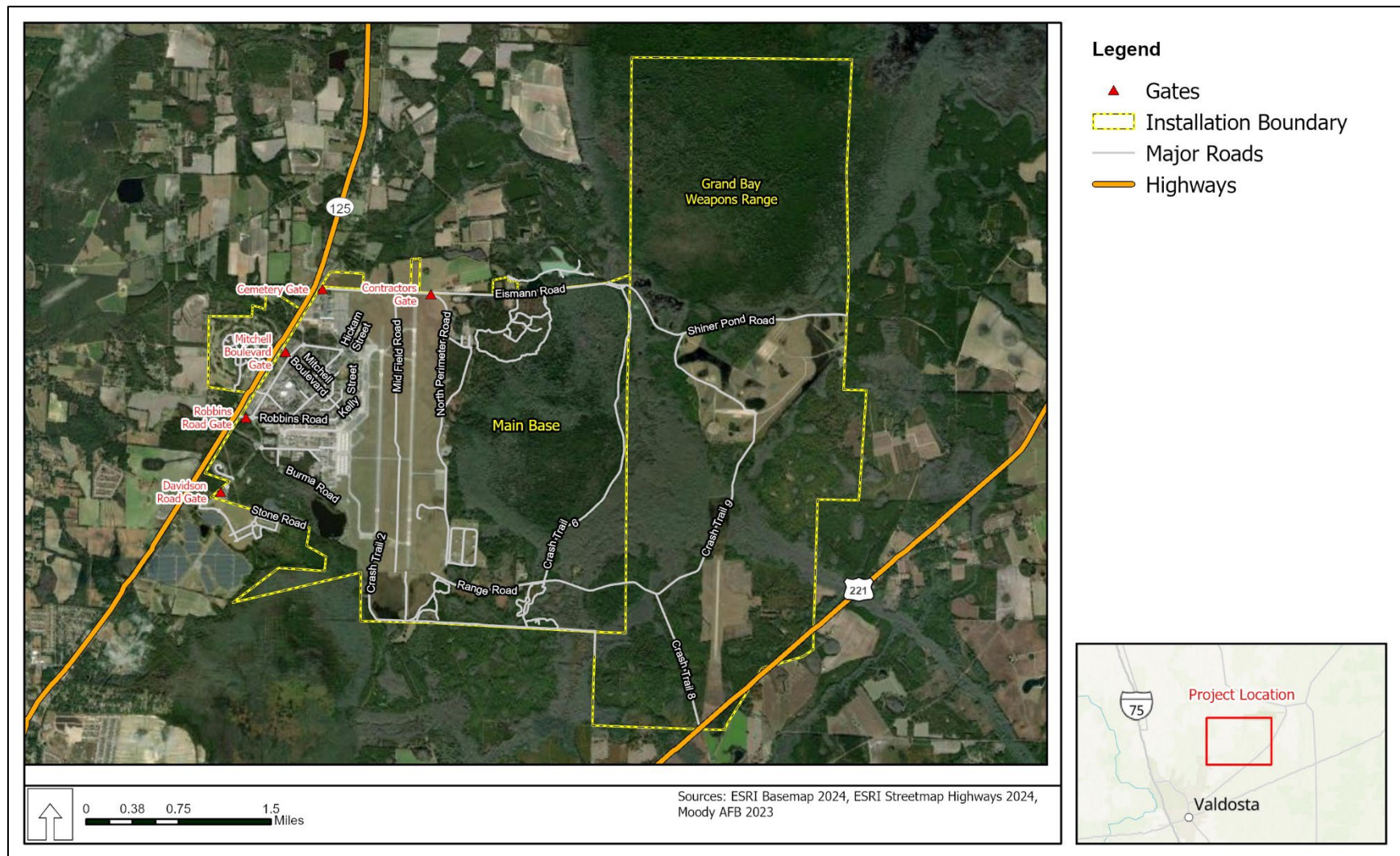


Figure 3-8. Transportation Network at Moody Air Force Base, Georgia

3.11.2.1 Project 1, Alternative 1: Guardian Angel Facility Construction and Renovation North Site

The construction of a squadron operations facility, building additions, and building renovations would have short-term, negligible, adverse impacts on transportation and utilities. There would be no modification or change in use of Moody AFB's electric, natural gas, communication distribution, or water and wastewater systems. However, short-term utility interruptions could occur as electric, water, sewer, gas, and communication lines are brought to the 38 RQS facility. There would be no long-term change in Moody AFB's solid waste management. Some debris and other solid waste would be generated during construction activities; however, construction debris would be disposed of at the Evergreen Landfill, Atkinson County Landfill, or the Fitzgerald Landfill. The construction and use of consolidated squadron operations facility would not modify these systems or place additional strain on their capacity.

There would be increased vehicle traffic at the Moody AFB gates during construction activities. This would include POVs used by construction workers, and trucks hauling materials and equipment. This impact on vehicle traffic at the Moody AFB gates would be limited to the period of construction and would cease at the end of construction activities.

3.11.2.2 Project 1, Alternative 2: Guardian Angel Facility Construction and Renovation South Site

The impacts on infrastructure, including transportation, would be similar to those described for Project 1, Alternative 1, because a 38 RQS operations facility would be constructed at different location but using similar equipment and materials. There would be short-term, negligible, adverse impacts on transportation and utilities.

3.11.2.3 Project 1, No Action Alternative

Under the No Action Alternative, there would be no construction of a consolidated 38 RQS operations facility. Therefore, there would be no impacts on infrastructure at Moody AFB

3.11.2.4 Project 2, Alternative 1: Aircraft Fire Training Facility Improvements with Truck Driving Training

The impacts on infrastructure, including transportation, would be similar to those described for Project 1, Alternative 1, because additional paved areas and new facilities would be constructed using similar equipment and materials. However, there would be a shorter construction timeline and less construction debris generated for disposal in regional landfills than Project 1, Alternative 1. There would be short-term, negligible, adverse impacts on transportation and utilities.

3.11.2.5 Project 2, Alternative 2: Aircraft Fire Training Facility Repairs and Construction, No Truck Driving Pad

The impacts on infrastructure, including transportation, would be similar to those described for Project 2, Alternative 1, but with a slightly shorter construction time period without the

construction of a truck driving pad. There would be short-term, negligible, adverse impacts on transportation and utilities.

3.11.2.6 Project 2, No Action Alternative

Under the No Action Alternative, there would be no construction of AFTF improvements. Therefore, there would be no impacts on infrastructure at Moody AFB.

3.11.2.7 Project 3, Alternative 1: Gate Overwatch Position Construction at Davidson Road and Mitchell Boulevard Gates

The impacts on infrastructure, including transportation, would be similar to those described for Project 1, Alternative 1, because additional new facilities would be constructed using similar equipment and materials. However, there would be less construction debris generated for disposal in regional landfills than Project 1, Alternative 1, because no existing facilities would be renovated or demolished, and the overwatch position facilities are smaller in size. There would be short-term, negligible, adverse impacts on transportation and utilities.

3.11.2.8 Project 3, No Action Alternative

Under the No Action Alternative, there would be no construction of gate overwatch positions. Therefore, there would be no impacts on infrastructure at Moody AFB.

3.11.2.9 Project 4, Alternative 1: Aerospace Ground Equipment Facility Construction and Demolition with New Shop, Administrative Space, and Covered Storage

The impacts on infrastructure, including transportation, would be similar to those described for Project 1, Alternative 1, because additional new facilities would be constructed using similar equipment and materials. However, there would be more construction debris generated for disposal in regional landfills than Project 1, Alternative 1, because more buildings would be demolished to construct the consolidated AGE facility. There would be short-term, negligible, adverse impacts on transportation and utilities.

3.11.2.10 Project 4, Alternative 2: Aerospace Ground Equipment Facility Construction and Demolition without New Shop and More Renovated Administrative Space

The impacts on infrastructure, including transportation, would be similar to those described for Project 4, Alternative 1, because additional new facilities would be constructed using similar equipment and materials. However, less building demolition would occur generating slightly less materials to be transported and disposed of in regional landfills. There would be short-term, negligible, adverse impacts on transportation and utilities.

3.11.2.11 Project 4, No Action Alternative

Under the No Action Alternative, there would be no construction of a consolidated AGE facility. Therefore, there would be no impacts on infrastructure at Moody AFB.

3.11.2.12 Project 5, Alternative 1: Burma Road Realignment

The construction of the Burma Road realignment and tree removal would have short-term, negligible, adverse impacts on transportation and no impacts on utilities. There would be no modification or change in use of Moody AFB's electric, natural gas, communication distribution, or water and wastewater systems. There would be no long-term change in Moody AFB's solid waste management. Debris from the road removal would be generated during construction activities; however, construction debris would be disposed of at the Evergreen Landfill, Atkinson County Landfill, or the Fitzgerald Landfill. Trees removed from the CZ would be processed off the site, used for lumber or mulch, and most of the woody material would not end up in a landfill.

There would be increased vehicle traffic at the Moody AFB gates during construction activities. This would include POVs used by construction workers, and trucks hauling materials and equipment. This impact on vehicle traffic at the Moody AFB gates would be limited to the period of construction and would cease at the end of construction activities.

3.11.2.13 Project 5, No Action Alternative

Under the No Action Alternative, there would be no realignment of Burma Road and removal of trees in the CZ. Therefore, there would be no impacts on infrastructure at Moody AFB.

3.11.2.14 Project 6, Alternative 1: 38th Rescue Squadron Parking Lot Construction

The construction of a new parking lot to support the 38 RQS, including 10 electric charging stations for POVs, would have short-term, negligible, adverse impacts on transportation and utilities. There would be no modification or change in use of Moody AFB's natural gas, communication distribution, solid waste, or water and wastewater systems. However, short-term utility interruptions could occur as electric lines are brought to the 10 electric charging stations. The electrical use by electric POVs at the 10 electric charging stations would not have any impact on the electrical grid or availability at Moody AFB as there is adequate supply and distribution to support this additional use.

There would be increased vehicle traffic at the Moody AFB gates during construction activities. This would include POVs used by construction workers, and trucks hauling materials and equipment. This impact on vehicle traffic at the Moody AFB gates would be limited to the period of construction and would cease at the end of construction activities.

3.11.2.15 Project 6, No Action Alternative

Under the No Action Alternative, there would be no new parking lot construction to support the 38 RQS. Therefore, there would be no impacts on infrastructure at Moody AFB.

3.11.2.16 Project 7, Alternative 1: Airfield Stormwater Repair and Replacement

The repairs to the airfield stormwater system would have short-term, negligible, adverse impacts on transportation; long-term, minor, beneficial impacts on the stormwater system; and no impacts on utilities. There would be no modification or change in use of Moody AFB's electric,

natural gas, communication distribution, or water and wastewater systems. The repairs to belowground stormwater structures would improve stormwater flow throughout the airfield.

There would be no long-term change in Moody AFB's solid waste management. Debris from the removal of belowground culverts and drainage features and the removal of the two concrete structures in the CZ would be generated during construction activities; however, construction debris would be disposed of at the Evergreen Landfill, Atkinson County Landfill, or the Fitzgerald Landfill.

There would be increased vehicle traffic at the Moody AFB gates during construction activities. This would include POVs used by construction workers, and trucks hauling materials and equipment. This impact on vehicle traffic at the Moody AFB gates would be limited to the period of construction and would cease at the end of construction activities.

3.11.2.17 Project 7, No Action Alternative

There would be no repairs to the belowground stormwater structures at the airfield under the Proposed Action. Therefore, there would be no impacts on infrastructure at Moody AFB.

3.11.2.18 Project 8, Alternative 1: Mission Lake Water Barrier and Stone Road Repairs – Both Shoulders

The impacts on infrastructure, including transportation, would be similar to those described for Project 5, Alternative 1, because repairs to the Mission Lake water barrier and Stone Road would occur using similar equipment and materials. However, the construction debris to be disposed of would consist entirely of road materials such as concrete and asphalt. There would be short-term, negligible, adverse impacts on transportation and no impacts on other infrastructure.

3.11.2.19 Project 8, Alternative 2: Mission Lake Water Barrier and Stone Road Repairs – North Shoulder

The impacts on infrastructure, including transportation, would be similar to those described for Project 8, Alternative 1, because repairs to the Mission Lake water barrier and Stone Road would occur using similar equipment and materials. However, less road material construction debris would be generated and transported to local landfills. There would be short-term, negligible, adverse impacts on transportation and no impacts on other infrastructure.

3.11.2.20 Project 8, Alternative 3: Repair Mission Lake Water Barrier and Realign Stone Road

The impacts on infrastructure, including transportation, would be similar to those described for Project 8, Alternative 1, because repairs to the Mission Lake water barrier and Stone Road would occur using similar equipment and materials. However, less road material construction debris would be generated and transported to local landfills. There would be short-term, negligible, adverse impacts on transportation and no impacts on other infrastructure.

3.11.2.21 Project 8, No Action Alternative

There would be no repairs to the Mission Lake water barrier and Stone Road under the No Action Alternative. Without the repairs, the Mission Lake water barrier would degrade and further damage to Stone Road would occur. The portion of Stone Road that crosses the Mission Lake water barrier would become too unsafe for vehicular travel and be closed. Therefore, the No Action Alternative would have a long-term, minor, adverse impact on transportation at Moody AFB and no impact on other infrastructure.

3.11.2.22 Project 9, Alternative 1: Boundary Fence Repair with Driving Lane

The impacts on infrastructure, including transportation, would be similar to those described for Project 5, Alternative 1, because the removal of woody vegetation and construction of a driving lane along the western base boundary fence would occur using similar equipment and materials. Trees removed from the boundary fence line would be processed off the site and used for mulch or lumber. There would be less construction debris disposed of at local landfills than under Project 5, Alternative 1. There would be short-term, negligible, adverse impacts on transportation and no impacts on other infrastructure.

3.11.2.23 Project 9, Alternative 2: Boundary Fence Repair with Vegetation Clearance on the Base Side of the Fence

The impacts on infrastructure, including transportation, would be similar to those described for Project 9, Alternative 1, because the removal of woody vegetation would occur using similar equipment and materials. However, without the construction of a driving lane and removal of half as much woody vegetation, the length of construction activities and associated impacts on the base transportation network would be shorter. There would be short-term, negligible, adverse impacts on transportation and no impacts on other infrastructure.

3.11.2.24 Project 9, Alternative 3: Boundary Fence Repair with Vegetation Clearance on Both Sides of the Fence

The impacts on infrastructure, including transportation, would be similar to those described for Project 9, Alternative 1, because the removal of woody vegetation would occur using similar equipment and materials. However, without the construction of a driving lane, the length of construction activities and associated impacts on the base transportation network would be shorter. There would be short-term, negligible, adverse impacts on transportation and no impacts on other infrastructure.

3.11.2.25 Project 9, No Action Alternative

Under the Proposed Action, there would be no vegetation clearance or construction of a driving lane along the western base boundary fence. Therefore, there would be no impacts on infrastructure at Moody AFB.

3.11.2.26 Project 10, Alternative 1: Demolish Eleven Buildings

The impacts on infrastructure, including transportation, would be similar to those described for Project 1, Alternative 1, because the demolition of 11 buildings would occur at different locations but using similar equipment and materials. There would be short-term, negligible, adverse impacts on transportation and utilities.

3.11.2.27 Project 10, No Action Alternative

Under the No Action Alternative, there would be no demolition of the 11 buildings on Moody AFB. Therefore, there would be no impacts on transportation or utilities.

3.11.2.28 Cumulative Actions and Other Considerations

Construction and demolition activities associated with the 10 proposed projects composing the Proposed Action, in combination with other reasonably foreseeable infrastructure construction projects at Moody AFB as well as off-base proposed transportation maintenance projects, would have short-term, minor, cumulative adverse impacts on transportation and other utilities, including solid waste management. Assuming the Proposed Action and the other proposed construction projects at Moody AFB occur simultaneously, there would be an increase in POV and construction equipment traffic at Moody AFB gates. Typically, construction worker commutes occur at times that are earlier than both the morning and afternoon commute times, reducing some of the potential adverse impacts this vehicular traffic would have at the Moody AFB gates. When these construction activities cease, so would the associated increase in vehicular traffic.

Additionally, these construction projects would generate construction and demolition debris that would adversely impact solid waste management. The local landfills that accept construction and demolition materials have the capacity to handle any excess debris that cannot be reused on the base for other projects. Regardless, the large volume of additional debris material brought to the landfill would have a short-term, cumulative impact on landfill management.

All other base infrastructure has adequate capacity to handle the proposed projects, and there would not be any long-term cumulative impacts on heating and cooling systems, electrical systems, communication systems, potable water and wastewater systems, or stormwater systems.

3.12 Hazardous Materials and Wastes, Environmental Restoration Program, and Toxic Substances

See **Appendix C-9** for the definition of this resource.

3.12.1 Affected Environment

Hazardous Materials. Hazardous and toxic material procurements at Moody AFB are approved and tracked by the Moody AFB 23d Civil Engineer Squadron, Installation Management Flight, Environmental Management Element (CES/CEIE), which has overall management responsibility

for the installation environmental program. The Bioenvironmental Engineering Element of Preventative Medicine Flight provides support from a strictly health perspective and participates in the Hazardous Materials Management Process (US Air Force 2016).

The Hazardous Materials Management Program includes a network of safety, environmental, and logistics experts working with hazardous materials managers, unit environmental coordinators, and other hazardous materials users to ensure safe and compliant hazardous materials management throughout the base. A contracted hazardous material pharmacy (HAZMART) ensures that only the smallest quantities of hazardous materials necessary to accomplish the mission are purchased and used. HAZMART is located at 4393 Georgia Street.

The 23d CES/CEIE maintains the Hazardous Waste Management Plan (US Air Force 2016) as directed by AFMAN 32-7002, *Environmental Compliance and Pollution Prevention*, and complies with 40 CFR 260 to 272. This plan prescribes the roles and responsibilities of all members of the Hazardous Materials Management Program with respect to the waste stream inventory, Waste Analysis Plan, hazardous waste management procedures, training, emergency response, and pollution prevention. The Hazardous Waste Management Plan establishes the procedures to comply with applicable federal, state, and local standards for solid waste and hazardous waste management. The plan outlines procedures for transport, storage, and disposal of hazardous wastes. Hazardous materials and petroleum products such as fuels, flammable solvents, paints, corrosives, pesticides, deicing fluid, refrigerants, and cleaners are used throughout Moody AFB for various functions, including aircraft maintenance, aircraft ground equipment maintenance, and ground vehicle, communications infrastructure, and facilities maintenance. Hazardous materials at Moody AFB are managed by the HAZMART. The Enterprise Environmental, Safety, and Occupational Health Management Information System tracks acquisition and inventory control of hazardous materials for units based at Moody AFB.

Hazardous Waste. Hazardous wastes generated at Moody AFB include flammable solvents, contaminated fuels and lubricants, paint/coating, stripping chemicals, oils, paint-related materials, mixed solid waste, and other miscellaneous wastes. Certain types of hazardous wastes are subject to special management provisions intended to ease the management burden and facilitate the recycling of such materials. These are called “universal wastes,” and their associated regulatory requirements are specified in 40 CFR 273. Types of waste currently covered under the universal waste regulations include fluorescent light tubes, hazardous waste batteries, hazardous waste thermostats, hazardous waste lamps, and aerosol cans.

Facilities at Moody AFB generate varying amounts of hazardous waste as a large-quantity generator as defined by the USEPA (40 CFR 260.10). Moody AFB operates 74 satellite accumulation points where up to 55 gallons of “total regulated hazardous wastes” or up to 1-quart of “acutely hazardous wastes” are accumulated. The installation operates one 90-day central accumulation point, where hazardous waste accumulates before being transported off-installation for ultimate disposal (US Air Force 2016). Four of the facilities in the ROI contain satellite accumulation points (Buildings 606, 609, 663, and 755).

An inventory of ASTs and USTs is maintained at Moody AFB and includes the location, contents, capacity, containment measures, status, and installation dates (US Air Force 2016). Management of all oil handling, storage, and transfer activities on Moody AFB and for oil pollution prevention both on and off Moody AFB is conducted following the requirements of the *23d Wing Integrated Contingency Plan* (Moody AFB 2020). The inventory of ASTs and USTs was evaluated relative to the proposed projects, and a used oil storage tank and a small oil/water separator tank are located between Buildings 755 and 805, and Buildings 756 and 805, respectively. Neither of these tanks would be impacted or modified by the proposed projects.

Environmental Restoration Program/Military Munitions Response Program. Moody AFB began its ERP in 1982 with environmental assessment and restoration activities; today Moody AFB has 31 closed ERP sites and 1 closed Military Munitions Response Program site, none of which required remediation. An additional 11 ERP sites have ongoing corrective action and have Land Use Controls associated with them.

Five ERP sites overlap with the proposed projects (**Figure 3-9** and **Table 3-28**).

Toxic Substances. Toxic substances might pose a risk to human health but are not regulated as contaminants under the hazardous waste statutes. Included in this category are asbestos-containing materials (ACM), lead-based paint (LBP), radon, and polychlorinated biphenyls (PCBs). Asbestos has not been used in construction materials since 1989, and lead has not been used as an additive to paint and pigment since 1978. Only buildings older than these dates have the potential to contain ACM and LBP; this includes Buildings 556, 609, 755, 756, and 961 for both ACM and LBP, and Buildings 707, 720, 760, and 763 for ACM only. Building 720 is a metal shed on a concrete slab; because of the type of construction, there are no ACM concerns with this building. Building 756 was sampled for ACM in 2007, and one of the sampled materials contained asbestos. The remaining buildings have not been tested for ACM or LBP.

Moody AFB is in radon zone 3, which is the lowest USEPA level with expected radon levels at or below 2 picocuries per liter (pCi/L); radon is not a toxic substance of concern at facilities at Moody AFB. Moody AFB has been considered PCB free since 1991 (US Air Force 1991). Therefore, the impacts of PCBs are not considered further.

3.12.2 Environmental Consequences

Impacts on hazardous materials management would be considered adverse if the federal action resulted in noncompliance with applicable federal and state regulations or increased the amounts of hazardous waste generated or hazardous materials procured beyond current waste management procedures and capacities at the installation. Impacts on the ERP would be considered adverse if the federal action disturbed (or created) contaminated sites, resulting in negative effects on human health or the environment.

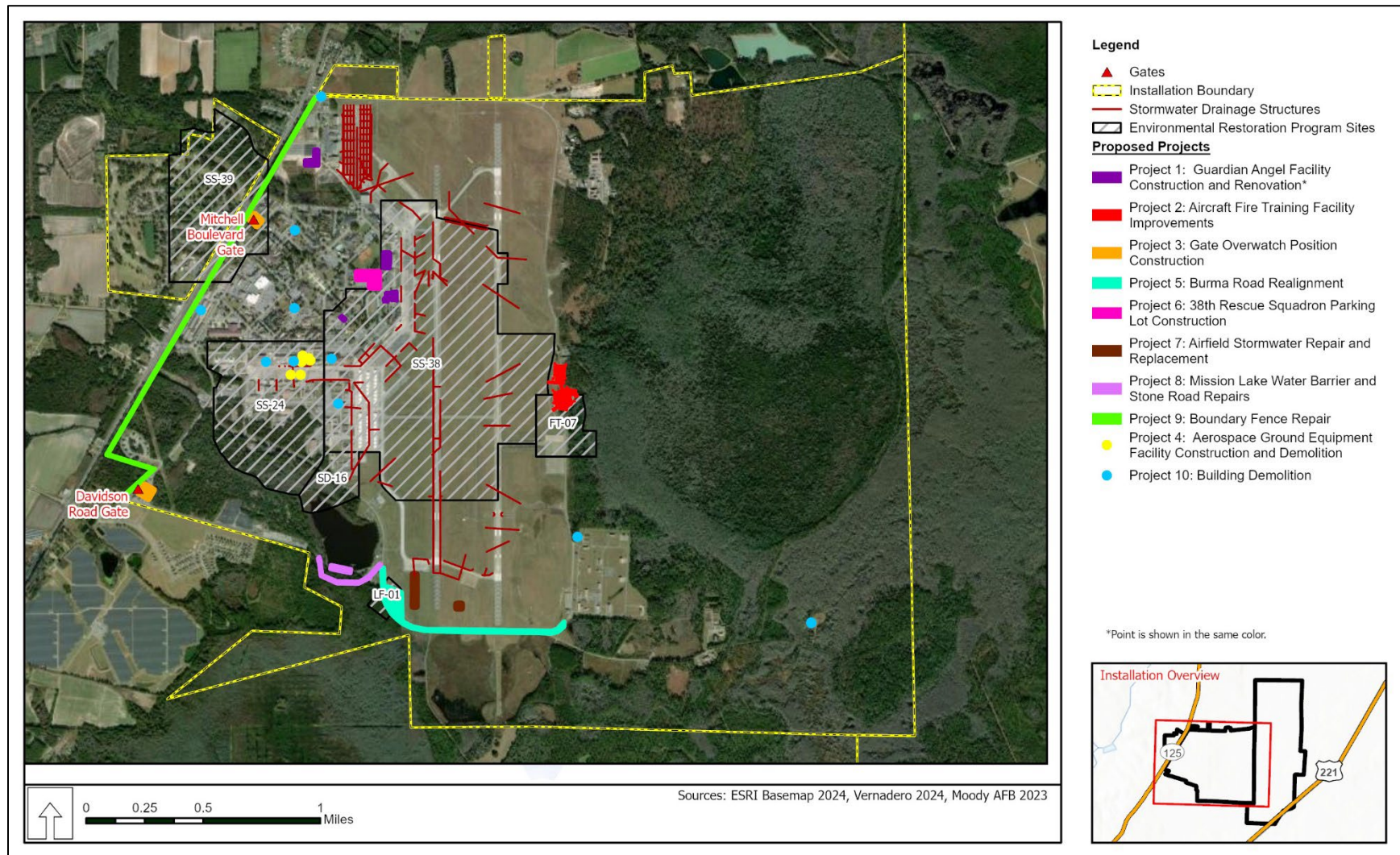


Figure 3-9. Environmental Restoration Program Sites Proximate to the Proposed Projects at Moody Air Force Base

**Table 3-28. Environmental Restoration Program Sites
Associated with the Proposed Action**

Site Identification	Site Description	Land Use Controls	Overlapping Proposed Projects
FT-07, Former Fire Training Area	FT-07 groundwater is divided into two areas, designated as Areas 1 and 2. Area 2 includes two treatment locations, A and B. The primary contaminants in Area 1 are benzene and trichloroethylene (TCE), and the primary contaminants in Area 2 are TCE, cis-1,1-dichloroethene (DCE), and associated biodegradation products. Groundwater monitoring is ongoing at this site.	Land disturbance is restricted and groundwater use is prohibited.	Project 2
LF-01, Burma Road Landfill	LF-01 was the main sanitary landfill for Moody AFB from 1941 to 1946. From 1946 to 1951, Moody AFB and the landfill were closed. In 1951, when Moody AFB was reactivated, the landfill was reopened until 1953, when it was closed permanently. The LF-01 site contains groundwater impacted with dissolved-phase volatile organic compounds. Corrective actions and performance-monitoring activities are ongoing.	Land disturbance is restricted and groundwater use is prohibited.	Projects 5 and 7
SS-24, Engine Maintenance Shop (Building 785)	SS-24 is an industrial area located west of the airfield and north of Mission Lake. Multiple buildings are located throughout the industrial area that house Moody AFB operations. Ground surfaces are mostly paved, although the southern portion of the SS-24 site consists of wetlands located to the northeast of Mission Lake. Historically, the industrial area contained 11 sites that were identified as having used or stored hazardous chemicals and/or fuels. The primary constituents of concern detected in groundwater have historically been trichloroethene TCE and DCE; however, dissolved-phase tetrachloroethene (PCE), 1,1-DCE, vinyl chloride, carbon tetrachloride, and benzene have also frequently been detected at concentrations above USEPA drinking water maximum contaminant levels. Groundwater has been treated and monitored and in situ enhanced bioremediation injections may resume if warranted.	Groundwater use is prohibited.	Projects 4 and 10
SS-38, Flightline Area (Apron A/B)	SS-38 site historically encompassed approximately 560 acres including most of the flightline support facilities, associated taxiways, and the areas extending to the east across the runways towards the Former Fire Training Area (FT-07) site and Grand Bay Swamp. With the inclusion of the former SD-16 site (which encompassed approximately 31-acres, including the Hush House areas and the Flightline storm drain outfall), the SS-38 site now covers approximately 591 acres and extends further to the south across Burma Road towards Mission Lake. Groundwater at the combined SS-38 site is impacted with chlorinated volatile organic compounds and in situ enhanced bioremediation was implemented at both sites. Corrective actions and monitoring are ongoing.	Groundwater use is prohibited.	Projects 1 and 10

Site Identification	Site Description	Land Use Controls	Overlapping Proposed Projects
SS-39, Golf Course Area Plume	SS-39 is located predominantly within a residential and golf course area on the northwest side of Bemiss Road. The chlorinated hydrocarbon groundwater plume associated with the SS-39 site was originally identified during investigation activities for a benzene plume at the former Base Exchange Service Station at Moody AFB. Upon further evaluation, the benzene and chlorinated contaminant plumes were confirmed to be unrelated, and the source of the chlorinated compounds detected in groundwater was attributed to historical operations at the former Radar Approach Control facility. However, based on the current distribution of TCE in groundwater, there were likely surface spills and releases from unidentified locations along historical sanitary and sewer lines that have since been replaced. Groundwater monitoring and remediation activities are ongoing.	Groundwater use is prohibited.	Projects 3 and 9

Sources: Tepas/ARCADIS 2022, 2023a, 2023b, 2023c; ARCADIS 2018

TCE – trichloroethylene; **DCE** – cis-1,1-dichloroethene; **AFB** – Air Force Base; **PCE** – dissolved-phase tetrachloroethene; **USEPA** – US Environmental Protection Agency

3.12.2.1 Project 1, Alternative 1: Guardian Angel Facility Construction and Renovation North Site

Hazardous Materials and Wastes. There would be a short-term, negligible, adverse impact on hazardous materials and wastes due to the construction of a new squadron operations facility. The quantity of hazardous materials such as POLs used in vehicles and equipment would increase on Moody AFB during construction. However, all hazardous materials required for construction operations would be properly tracked and maintained, and only the smallest quantities necessary to support the construction would be used. Further, all hazardous waste generated as a result of construction activities would be disposed of properly and in accordance with federal, state, and local regulations. Following the hazardous materials management and hazardous waste disposal requirements during construction activities would ensure the proper handling of hazardous materials and disposal of hazardous wastes.

Environmental Restoration Program. There is one active ERP site that overlaps the proposed squadron facility. SS-38, Flightline Area (Apron A/B) is undergoing active monitoring and corrective actions. However, impacts on SS-38 would not be expected as all contaminated soils, groundwater, and monitoring wells would be either avoided during demolition and construction activities or prior to the disturbance of any potentially affected soils the GEPD would notified, and a construction waiver generated by the Moody AFB ERP Office, which would coordinate with the GEPD regarding the proposed project and potential impacts. Before construction begins, construction workers would be informed of the potential presence of hazardous constituents in soils or groundwater. Construction workers would also be provided material safety data sheets and descriptions of safe work practices, including the use of personal protective equipment. Should contaminated soils be removed, transported, treated, and/or

disposed of, Resource Conservation and Recovery Act (RCRA) regulations would apply to the characterization, transportation, and disposal of this material. No per- and polyfluoroalkyl substances (PFAS) contamination has been identified proximate to the proposed government-owned-vehicle parking lot. If PFAS contamination is discovered, a Media Management Plan would be developed and implemented to remediate any PFAS-contaminated solid or aqueous media prior to the implementation of construction.

Toxic Substances. There is the potential for short-term, minor, adverse impacts from ACM and LBP encountered during the renovation of Buildings 556 and 609. However, ACM and LBP sampling would be conducted prior to renovation activities, and if determined to be present, ACM and LBP would be properly handled and disposed of in accordance with federal, state, and local laws during renovation activities.

3.12.2.2 Project 1, Alternative 2: Guardian Angel Facility Construction and Renovation South Site

The impacts from the construction of a new squadron operations facility would be similar to those described for Project 1, Alternative 1, but with a slightly larger area of ground disturbance and potentially the use of more hazardous materials during construction. There would be the potential for short-term, minor, adverse impacts on hazardous materials and waste generated during construction and renovation, the potential for impacts from contaminated soils and groundwater from ERP site SS-38, and the potential for short-term, minor, adverse impacts from ACM and LBP during the renovation of Buildings 556 and 609.

3.12.2.3 Project 1, No Action Alternative

The squadron operations facility would not be constructed under the No Action Alternative. Therefore, there would be no impacts on hazardous materials and wastes, ERP sites, or toxic substances.

3.12.2.4 Project 2, Alternative 1: Aircraft Fire Training Facility Improvements with Truck Driving Training

Hazardous Materials and Wastes. Impacts would be the same as those described for Project 1, Alternative 1. There would be a short-term, negligible, adverse impact on hazardous materials and wastes with the construction AFTF improvements and truck driving training pad. There would be an increase in the quantity of hazardous materials such as POLs used in equipment during construction and the potential for an increase in hazardous wastes.

Environmental Restoration Program. There is one active ERP site, FT-07, that could be impacted during the construction of the AFTF improvements. However, impacts on site FT-07 would not be expected. Monitoring wells at FT-07, which are currently used to detect TCE from SS-38 to the west of the runway, would be avoided or relocated. All contaminated groundwater would be either avoided during construction or, prior to the disturbance of any potentially affected groundwater, the GEPD would be notified, and a construction waiver generated by the Moody AFB ERP Office. The Moody ERP Office would then coordinate with the GEPD

regarding the proposed project and potential impacts. Before construction begins, construction workers would be informed of the potential presence of hazardous constituents in groundwater. Construction workers would also be provided material safety data sheets and descriptions of safe work practices, including the use of personal protective equipment. PFOA contamination has been identified proximate to proposed AFTF area. The proposed project would cap the PFOA-contaminated soils with concrete to eliminate surface exposures.

Toxic Substances. No impacts from ACM or LBP would occur as no facilities would be demolished or renovated.

3.12.2.5 Project 2, Alternative 2: Aircraft Fire Training Facility Repairs and Construction, No Truck Driving Pad

The impacts from the construction of AFTF improvements without a truck driving pad would be similar to those described for Project 2, Alternative 1. With a smaller construction footprint, there would be less hazardous materials and waste generated during construction AFTF construction activities. The potential for impacts from contaminated groundwater from ERP site FT-07 would be the same as Project 2, Alternative 1. There would be no impacts on ACM or LBP.

3.12.2.6 Project 2, No Action Alternative

Under the No Action Alternative, there would be no construction or improvements to the AFTF or a truck driving pad. Therefore, there would be no impacts on hazardous materials and wastes, ERP sties, or toxic substances.

3.12.2.7 Project 3, Alternative 1: Gate Overwatch Position Construction at Davidson Road and Mitchell Boulevard Gates

Hazardous Materials and Wastes. Impacts would be similar to those described for Project 1, Alternative 1. There would be a short-term, negligible, adverse impact on hazardous materials and wastes with the construction of the overwatch positions at the two gates. There would be an increase in the quantity of hazardous materials such as POLs used in equipment during construction and the potential for an increase in hazardous wastes.

Environmental Restoration Program. There is one active ERP site, SS-39, that could be impacted during the construction of overwatch position at the Mitchell Boulevard Gate. However, impacts on Site SS-39 would not be expected. All contaminated groundwater would be either avoided during construction or prior to the disturbance of any potentially affected groundwater the GEPD would be notified, and a construction waiver generated by the Moody AFB ERP Office. The Moody ERP Office would then coordinate with the GEPD regarding the proposed project and potential impacts. Before construction begins, construction workers would be informed of the potential presence of hazardous constituents in groundwater. Construction workers would also be provided material safety data sheets and descriptions of safe work practices, including the use of personal protective equipment. No PFAS contamination has been identified proximate to proposed AFTF area. If PFAS contamination is discovered, a Media

Management Plan would be developed and implemented to remediate any PFAS-contaminated solid or aqueous media prior to the implementation of demolition and construction.

Toxic Substances. No impacts from ACM or LBP would occur as no facilities would be demolished or renovated.

3.12.2.8 Project 3, No Action Alternative

Under the No Action Alternative, there would be no overwatch positions constructed at the Davidson Road or Mitchell Boulevard gates. Therefore, there would be no impacts on hazardous materials and wastes, ERP sites, or toxic substances.

3.12.2.9 Project 4, Alternative 1: Aerospace Ground Equipment Facility Construction and Demolition with New Shop, Administrative Space, and Covered Storage

Hazardous Materials and Wastes. Impacts would be similar to those described for Project 1, Alternative 1. There would be a short-term, negligible, adverse impact on hazardous materials and wastes with the construction of the consolidated AGE facility. There would be an increase in the quantity of hazardous materials such as POLs used in equipment during construction and the potential for an increase in hazardous wastes.

Environmental Restoration Program. There is one active ERP site, SS-24, that could be impacted during the construction of consolidated AGE facility. However, impacts on Site SS-24 would not be expected. Injection and monitoring wells at SS-24 would be avoided or relocated. All contaminated groundwater would be either avoided during construction or prior to the disturbance of any potentially affected groundwater the GEPD would be notified, and a construction waiver generated by the Moody AFB ERP Office. The Moody ERP Office would then coordinate with the GEPD regarding the proposed project and potential impacts. Before construction begins, construction workers would be informed of the potential presence of hazardous constituents in groundwater. Construction workers would also be provided material safety data sheets and descriptions of safe work practices, including the use of personal protective equipment. No PFAS contamination has been identified proximate to proposed AFTF area. If PFAS contamination is discovered, a Media Management Plan would be developed and implemented to remediate any PFAS-contaminated solid or aqueous media prior to the implementation of demolition and construction.

Toxic Substances. There is the potential for short-term, minor, adverse impacts from ACM and LBP encountered during the renovation of Buildings 755 and 756. ACM has been determined to be present in Building 756. ACM and LBP sampling would be conducted prior to renovation activities, and if determined to be present, ACM and LBP would be properly handled and disposed of in accordance with federal, state, and local laws during renovation activities.

3.12.2.10 Project 4, Alternative 2: Aerospace Ground Equipment Facility Construction and Demolition without New Shop and More Renovated Administrative Space

The impacts from the construction of a consolidated AGE facility would be the same as those described for Project 4, Alternative 1, and there would be the potential for short-term, minor, adverse impacts on hazardous materials and waste generated during construction and renovation, the potential for impacts from contaminated groundwater from ERP site SS-24, and the potential for short-term, minor, adverse impacts from ACM and LBP during the demolition of Building 756 and renovation of Building 755.

3.12.2.11 Project 4, No Action Alternative

Under the No Action Alternative, there would be no construction of a consolidated AGE facility, including no demolition or renovation of existing buildings. Therefore, there would be no impacts on hazardous materials and wastes, ERP sites, or toxic substances.

3.12.2.12 Project 5, Alternative 1: Burma Road Realignment

Hazardous Materials and Wastes. Impacts would be similar to those described for Project 1, Alternative 1. There would be a short-term, negligible, adverse impact on hazardous materials and wastes with the construction of Burma Road and removal of trees in the CZ. There would be an increase in the quantity of hazardous materials such as POLs used in equipment during construction and the potential for an increase in hazardous wastes.

Environmental Restoration Program. There is one active ERP site, LF-01, that could be impacted during the realignment of Burma Road and removal of trees in the CZ. However, impacts on site LF-01 would not be expected. All landfill waste has been removed from LF-01. Monitoring wells would be avoided or relocated. All contaminated groundwater would be either avoided during construction or prior to the disturbance of any potentially affected groundwater the GEPD would be notified, and a construction waiver generated by the Moody AFB ERP Office. The Moody ERP Office would then coordinate with the GEPD regarding the proposed project and potential impacts. Before construction begins, construction workers would be informed of the potential presence of hazardous constituents in groundwater. Construction workers would also be provided material safety data sheets and descriptions of safe work practices, including the use of personal protective equipment. No PFAS contamination has been identified proximate to proposed Burma Road realignment area. If PFAS contamination is discovered, a Media Management Plan would be developed and implemented to remediate any PFAS-contaminated solid or aqueous media prior to the implementation of demolition and construction.

Toxic Substances. No impacts from ACM or LBP would occur as no facilities would be demolished or renovated.

3.12.2.13 Project 5, No Action Alternative

Under the No Action Alternative, there would be no realignment of Burma Road. Therefore, there would be no impacts on hazardous materials and wastes, ERP sites, or toxic substances.

3.12.2.14 Project 6, Alternative 1: 38th Rescue Squadron Parking Lot Construction

Hazardous Materials and Wastes. Impacts would be similar to those described for Project 1, Alternative 1. There would be a short-term, negligible, adverse impact on hazardous materials and wastes with the construction of a new parking lot to support the 38 RQS. There would be an increase in the quantity of hazardous materials such as POLs used in equipment during construction and the potential for an increase in hazardous wastes.

Environmental Restoration Program. There are no ERP sites located proximate to the proposed parking lot construction area. Therefore, there would be no impacts from potentially contaminated soils or groundwater, or impacts on an active ERP site. No PFAS contamination has been identified proximate to proposed 38 RQS parking lot construction area. If PFAS contamination is discovered, a Media Management Plan would be developed and implemented to remediate any PFAS-contaminated solid or aqueous media prior to the implementation of demolition and construction.

Toxic Substances. No impacts from ACM or LBP would occur as no facilities would be demolished or renovated. No PCBs would be disturbed during construction activities.

3.12.2.15 Project 6, No Action Alternative

Under the No Action Alternative, there would be no construction of a parking lot to support the 38 RQS. Therefore, there would be no impacts on hazardous materials and wastes, ERP sites, or toxic substances.

3.12.2.16 Project 7, Alternative 1: Airfield Stormwater Repair and Replacement

Hazardous Materials and Wastes. Impacts would be similar to those described for Project 1, Alternative 1. There would be a short-term, negligible, adverse impact on hazardous materials and wastes with the repair and replacement of belowground stormwater features and the two aboveground concrete structures. There would be an increase in the quantity of hazardous materials such as POLs used in equipment during construction and the potential for an increase in hazardous wastes.

Environmental Restoration Program. There is one active ERP site, LF-01, that partially overlaps the airfield stormwater system and could be impacted during the repair of stormwater features. However, impacts on Site LF-01 would not be expected. Existing monitoring wells would be avoided. All contaminated groundwater would be either avoided during construction or prior to the disturbance of any potentially affected groundwater the GEPD would be notified, and a construction waiver generated by the Moody AFB ERP Office. The Moody ERP Office would then coordinate with the GEPD regarding the proposed project and potential impacts. Before construction begins, construction workers would be informed of the potential presence of

hazardous constituents in groundwater. Construction workers would also be provided material safety data sheets and descriptions of safe work practices, including the use of personal protective equipment. No PFAS contamination has been identified proximate to proposed stormwater repair areas. If PFAS contamination is discovered, a Media Management Plan would be developed and implemented to remediate any PFAS-contaminated solid or aqueous media prior to the implementation of demolition and construction.

Toxic Substances. No impacts from ACM or LBP would occur as no facilities would be demolished or renovated.

3.12.2.17 Project 7, No Action Alternative

Under the No Action Alternative, there would be no repairs to stormwater features in the airfield. Therefore, there would be no impacts on hazardous materials and wastes, ERP sites, or toxic substances.

3.12.2.18 Project 8, Alternative 1: Mission Lake Water Barrier and Stone Road Repairs – Both Shoulders

Hazardous Materials and Wastes. Impacts would be similar to those described for Project 1, Alternative 1. There would be a short-term, negligible, adverse impact on hazardous materials and wastes with the repairs to the Mission Lake water barrier and Stone Road. There would be an increase in the quantity of hazardous materials such as POLs used in equipment during construction and the potential for an increase in hazardous wastes.

Environmental Restoration Program. There are no ERP sites located proximate to the proposed Mission Lake water barrier and Stone Road repair locations. Therefore, there would be no impacts from potentially contaminated soils or groundwater, or impacts on an active ERP site. No PFAS contamination has been identified proximate to proposed water barrier and Stone Road repair locations. If PFAS contamination is discovered, a Media Management Plan would be developed and implemented to remediate any PFAS-contaminated solid or aqueous media prior to the implementation of demolition and construction.

Toxic Substances. No impacts from ACM or LBP would occur as no facilities would be demolished or renovated. No PCBs would be disturbed during construction activities.

3.12.2.19 Project 8, Alternative 2: Mission Lake Water Barrier and Stone Road Repairs – North Shoulder

The impacts from the repairs to the Mission Lake water barrier and Stone Road would be the same as those described for Project 8, Alternative 1. There would be the potential for short-term, minor, adverse impacts on hazardous materials and waste generated during construction. There are no ERP sites proximate to the project area, and no impacts from potentially contaminated soils and groundwater or impacts on ERP sites. There would be no potential impacts from ACM or LBP, as no facilities would be demolished or renovated.

3.12.2.20 Project 8, Alternative 3: Repair Mission Lake Water Barrier and Realign Stone Road

The impacts from the repairs to the Mission Lake water barrier and realignment of Stone Road would be the same as those described for Project 8, Alternative 1. There would be the potential for short-term, minor, adverse impacts on hazardous materials and waste generated during construction. There are no ERP sites proximate to the project area and no impacts from potentially contaminated soils and groundwater or impacts on ERP sites. There would be no potential impacts on ACM or LBP, as no facilities would be demolished or renovated.

3.12.2.21 Project 8, No Action Alternative

Under the No Action Alternative, there would be no repairs to the Mission Lake water barrier or Stone Road. Therefore, there would be no impacts on hazardous materials and wastes, ERP sites, or toxic substances.

3.12.2.22 Project 9, Alternative 1: Boundary Fence Repair with Driving Lane

Hazardous Materials and Wastes. Impacts would be similar to those described for Project 1, Alternative 1. There would be a short-term, negligible, adverse impact on hazardous materials and wastes with the removal of vegetation and construction of a driving lane along the western base boundary fence. There would be an increase in the quantity of hazardous materials such as POLs used in equipment during tree removal and construction of a driving lane and the potential for an increase in hazardous wastes.

Environmental Restoration Program. There is one active ERP site, SS-39, that partially overlaps the western boundary fence project corridor. However, impacts on Site SS-39 would not be expected. Monitoring wells would be avoided. All contaminated groundwater would be either avoided during construction or prior to the disturbance of any potentially affected groundwater the GEPD would be notified, and a construction waiver generated by the Moody AFB ERP Office. The Moody ERP Office would then coordinate with the GEPD regarding the proposed project and potential impacts. Before construction begins, construction workers would be informed of the potential presence of hazardous constituents in groundwater. Construction workers would also be provided material safety data sheets and descriptions of safe work practices, including the use of personal protective equipment. No PFAS contamination has been identified proximate to proposed western boundary fence project area. If PFAS contamination is discovered, a Media Management Plan would be developed and implemented to remediate any PFAS-contaminated solid or aqueous media prior to the implementation of demolition and construction.

Toxic Substances. No impacts from ACM or LBP would occur as no facilities would be demolished or renovated.

3.12.2.23 Project 9, Alternative 2: Boundary Fence Repair with Vegetation Clearance on the Base Side of the Fence

The impacts from the vegetation removal along the western base boundary fence would be similar to those described for Project 9, Alternative 1. There would be the potential for short-term, minor, adverse impacts on hazardous materials and waste generated during construction, but the volume of hazardous materials used and hazardous waste potentially generated would be less. ERP site SS-39, which partially overlaps the project area, would be avoided, as no ground-disturbing activities would occur under this alternative. There would be no potential impacts from ACM or LBP, as no facilities would be demolished or renovated.

3.12.2.24 Project 9, Alternative 3: Boundary Fence Repair with Vegetation Clearance on Both Sides of the Fence

The impacts from the vegetation removal along the western base boundary fence would be similar to those described for Project 9, Alternative 1. There would be the potential for short-term, minor, adverse impacts on hazardous materials and waste generated during construction. However, the volume of hazardous materials used and hazardous waste potentially generated would be less. ERP site SS-39, which partially overlaps the project area, would be avoided, as no ground-disturbing activities would occur under this alternative. There would be no potential impacts from ACM or LBP, as no facilities would be demolished or renovated.

3.12.2.25 Project 9, No Action Alternative

Under the No Action Alternative, there would be no vegetation removal and construction of a driving lane along the western base boundary fence. Therefore, there would be no impacts on hazardous materials and wastes, ERP sites, or toxic substances.

3.12.2.26 Project 10, Alternative 1: Demolish Eleven Buildings

Hazardous Materials and Wastes. Impacts would be similar to those described for Project 1, Alternative 1. There would be a short-term, negligible, adverse impact on hazardous materials and wastes with the demolition of 11 buildings. There would be an increase in the quantity of hazardous materials such as POLs used in equipment during construction and the potential for an increase in hazardous wastes.

Environmental Restoration Program. There are two active ERP sites, SS-24 and SS-38, that could be impacted during the demolition of 4 of the 11 buildings (Buildings 707, 720, 760, and 798). However, impacts on Sites SS-24 and SS-38 would not be expected. Existing ejection and monitoring wells would be avoided. All contaminated groundwater would be either avoided during construction or prior to the disturbance of any potentially affected groundwater the GEPD would be notified, and a construction waiver generated by the Moody AFB ERP Office. The Moody ERP Office would then coordinate with the GEPD regarding the proposed project and potential impacts. Before construction begins, construction workers would be informed of the potential presence of hazardous constituents in groundwater. Construction workers would also be provided material safety data sheets and descriptions of safe work practices, including the

use of personal protective equipment. No PFAS contamination has been identified proximate to the 11 buildings proposed for demolition. If PFAS contamination is discovered, a Media Management Plan would be developed and implemented to remediate any PFAS-contaminated solid or aqueous media prior to the implementation of demolition and construction.

Toxic Substances. There is the potential for short-term, minor, adverse impacts from ACM encountered during the demolition of Buildings 707, 760, 763, and 961, and LBP during the demolition of Building 961. However, ACM and LBP sampling would be conducted prior to demolition activities, and if determined to be present, ACM and LBP would be properly handled and disposed of in accordance with federal, state, and local laws during demolition activities.

3.12.2.27 Project 10, No Action Alternative

Under the No Action Alternative, there would be no demolition of existing buildings. Therefore, there would be no impacts on hazardous materials and wastes, ERP sites, or toxic substances.

3.12.2.28 Cumulative Actions and Other Considerations

Hazardous Materials and Wastes. There would be short-term, negligible, adverse cumulative impacts on hazardous materials and wastes with the implementation of the 10 projects included in the Proposed Action in combination with other proposed construction projects on Moody AFB, and the proposed off-base transportation maintenance projects. The quantity of hazardous materials such as POLs used in vehicles and equipment would increase cumulatively on Moody AFB during construction of these facilities and regionally with the highway maintenance projects. However, all hazardous materials required for construction, renovation, and demolition activities would be properly tracked and maintained. On Moody AFB, only the smallest quantities necessary to support each proposed project would be used. Further, all hazardous waste generated as a result of the proposed construction and demolition activities would be disposed of properly and in accordance with the *Moody AFB Hazardous Waste Management Plan* (US Air Force 2016). Following the requirements of federal, state, and local regulations during all proposed project construction and demolition activities on Moody AFB would ensure the proper handling of hazardous materials and disposal of hazardous wastes. For the construction of off-base highway maintenance projects, the use and tracking of all hazardous materials and disposal of hazardous waste would follow local, state, and federal regulations.

Environmental Restoration Program. All active ERP sites would be continuously monitored, and remediation activities implemented as required by each site's corrective action plan. All proposed projects on Moody AFB, including the 10 projects comprising the Proposed Action and reasonably foreseeable future projects would avoid impacts on known contaminated soils or groundwater or prior to the disturbance of any potentially affected groundwater the GEPD would be notified, and a construction waiver would be generated by the Moody AFB ERP Office. The Moody AFB ERP Office would coordinate with the GEPD regarding the proposed project and potential impacts. This would ensure that there would be no cumulative impacts from ERP sites on proposed projects or to ERP sites from proposed project construction activities.

Toxic Substances. There is the potential for short-term, minor, adverse cumulative impacts from either ACMs or LBP or both that could be encountered during the demolition, renovation, and construction activities proposed at Moody AFB. However, prior to any demolition or renovation of existing facilities, ACMs and LBP surveys would be conducted if those surveys have not been previously completed. All ACMs and LBP detected would be properly handled and disposed of in accordance with federal, state, and local laws during demolition activities.

3.13 Socioeconomics – Income and Employment

See **Appendix C-10** for the definition of this resource.

3.13.1 Affected Environment

The populations of Lowndes and Lanier counties were 119,499 and 10,177, respectively, in the 2022 US census. These were 8.6 and 1.0 percent increases, respectively from the 2010 US census population estimated for Lowndes and Lanier counties (US Census Bureau 2024). Further, the city of Valdosta increased in population by 1.0 percent during that same period. The state of Georgia's population totaled 10,913,150 in 2022, which was a 11.2 percent increase over the 2010 US census population of the state. The population growth rates of Lowndes and Lanier counties were less than the growth rate for the state of Georgia. The rate of growth for Lowndes County was similar to that of the US; the rate of growth for Lanier County was substantially lower than that of the US (**Table 3-29**).

**Table 3-29. Population in the Moody Air Force Base
Region of Influence as Compared to Georgia
and the United States (2010 – 2022)**

Location	2010	2022	Percent Change (2010 – 2023)
United States	308,745,538	333,271,411	7.9%
Georgia	9,687,653	10,913,150	11.2%
Valdosta	54,518	55,074	1.0%
Lowndes County	109,233	119,499	8.6%
Lanier County	10,078	10,177	1.0%

Source: US Census Bureau 2024

The median income of Lowndes and Lanier counties in 2022 was \$52,821 and \$39,971, respectively. The median income of the city of Valdosta was \$41,365 in 2022. The median incomes of Lowndes and Lanier counties and the city of Valdosta were lower than the state of Georgia at \$71,355 and the US at \$75,149 (US Census Bureau 2024). The unemployment rates for Lowndes and Lanier counties were 3.4 percent and 3.5 percent in February 2021. This was similar to the unemployment rate of 3.1 percent for Georgia (US Bureau of Labor Statistics 2024).

A total of 4,497 active duty and 184 reserve military personnel are stationed at Moody AFB and another 821 civilian personnel work there. The total annual payroll is estimated to be approximately \$300 million, and the total economic impact to the state of Georgia is estimated to be \$431 million (Moody AFB 2015c).

3.13.2 Environmental Consequences

Consequences to socioeconomic resources were assessed in terms of the potential impacts on the local economy from the Proposed Action. The level of impacts associated with construction expenditure is assessed in terms of direct effects on the local economy and related effects on other socioeconomic resources (e.g., housing, employment, community resources). The magnitude of potential impacts can vary greatly, depending on the location of an action. For example, implementation of an action that creates 10 employment positions might be unnoticed in an urban area, but it might have significant impacts in a rural region.

In addition, if potential socioeconomic changes resulting from other factors were to result in substantial shifts in population trends or in adverse effects on regional spending and earning patterns, they may be considered adverse.

3.13.2.1 Project 1, Alternative 1: Guardian Angel Facility Construction and Renovation North Site

Additional materials and labor for the proposed squadron operations facility construction would have a short-term, minor, beneficial impact on the socioeconomic condition of the region. There would be increased expenditures in the region during these construction activities, but expenditures such as increased payroll tax revenue and the purchase of additional equipment, materials, and fuel would cease at the end of construction.

3.13.2.2 Project 1, Alternative 2: Guardian Angel Facility Construction and Renovation South Site

Impacts would be the same as Project 1, Alternative 1, as additional materials and labor for the proposed squadron operations facility would have a short-term, minor beneficial impact on the socioeconomic condition of the region.

3.13.2.3 Project 1, No Action Alternative

Under the No Action Alternative, there would be no construction of a new squadron operations facility. Therefore, there would be no impacts on socioeconomics.

3.13.2.4 Project 2, Alternative 1: Aircraft Fire Training Facility Improvements with Truck Driving Training

Impacts would be the same as Project 1, Alternative 1, as additional materials and labor for the proposed AFTF improvements would have a short-term, minor beneficial impact on the socioeconomic condition of the region.

3.13.2.5 Project 2, Alternative 2: Aircraft Fire Training Facility Repairs and Construction, No Truck Driving Pad

Impacts would be the same as Project 1, Alternative 1, as additional materials and labor for the proposed AFTF improvements would have a short-term, minor beneficial impact on the socioeconomic condition of the region.

3.13.2.6 Project 2, No Action Alternative

Under the No Action Alternative, there would be no improvements to the AFTF. Therefore, there would be no impacts on socioeconomics.

3.13.2.7 Project 3, Alternative 1: Gate Overwatch Position Construction at Davidson Road and Mitchell Boulevard Gates

Impacts would be the same as Project 1, Alternative 1, as additional materials and labor for the proposed construction of gate overwatch positions would have a short-term, minor, beneficial impact on the socioeconomic condition of the region.

3.13.2.8 Project 3, No Action Alternative

Under the No Action Alternative, there would be no construction of gate overwatch positions. Therefore, there would be no impacts on socioeconomics.

3.13.2.9 Project 4, Alternative 1: Aerospace Ground Equipment Facility Construction and Demolition with New Shop, Administrative Space, and Covered Storage

Impacts would be the same as Project 1, Alternative 1, as additional materials and labor for the proposed construction of a consolidated AGE facility would have a short-term, minor, beneficial impact on the socioeconomic condition of the region.

3.13.2.10 Project 4, Alternative 2: Aerospace Ground Equipment Facility Construction and Demolition without New Shop and More Renovated Administrative Space

Impacts would be the same as Project 1, Alternative 1, as additional materials and labor for the proposed construction of a consolidated AGE facility would have a short-term, minor, beneficial impact on the socioeconomic condition of the region.

3.13.2.11 Project 4, No Action Alternative

Under the No Action Alternative, there would be no construction of a consolidated AGE facility. Therefore, there would be no impacts on socioeconomics.

3.13.2.12 Project 5, Alternative 1: Burma Road Realignment

Impacts would be the same as Project 1, Alternative 1, as additional materials and labor for the proposed realignment of Burma Road and removal of trees in the CZ would have a short-term, minor, beneficial impact on the socioeconomic condition of the region.

3.13.2.13 Project 5, No Action Alternative

Under the No Action Alternative, there would be no realignment of Burma Road. Therefore, there would be no impacts on socioeconomics.

3.13.2.14 Project 6, Alternative 1: 38th Rescue Squadron Parking Lot Construction

Impacts would be the same Project 1, Alternative 1, as additional materials and labor for the proposed construction of a new parking lot to support the 38 RQS would have a short-term, minor, beneficial impact on the socioeconomic condition of the region.

3.13.2.15 Project 6, No Action Alternative

Under the No Action Alternative, there would be no parking lot construction. Therefore, there would be no impacts on socioeconomics.

3.13.2.16 Project 7, Alternative 1: Airfield Stormwater Repair and Replacement

Impacts would be the same as Project 1, Alternative 1, as additional materials and labor for the proposed repairs to the airfield stormwater system would have a short-term, minor, beneficial impact on the socioeconomic condition of the region.

3.13.2.17 Project 7, No Action Alternative

Under the No Action Alternative, there would be no repairs to the airfield stormwater system. Therefore, there would be no impacts on socioeconomics.

3.13.2.18 Project 8, Alternative 1: Mission Lake Water Barrier and Stone Road Repairs – Both Shoulders

Impacts would be the same as Project 1, Alternative 1, as additional materials and labor for the proposed Mission Lake water barrier and Stone Road repairs would have a short-term, minor, beneficial impact on the socioeconomic condition of the region.

3.13.2.19 Project 8, Alternative 2: Mission Lake Water Barrier and Stone Road Repairs – North Shoulder

Impacts would be the same as Project 1, Alternative 1, as additional materials and labor for the proposed Mission Lake water barrier and Stone Road repairs would have a short-term, minor, beneficial impact on the socioeconomic condition of the region.

3.13.2.20 Project 8, Alternative 3: Repair Mission Lake Water Barrier and Realign Stone Road

Impacts would be the same as Project 1, Alternative 1, as additional materials and labor for the proposed Mission Lake water barrier and Stone Road realignment would have a short-term, minor, beneficial impact on the socioeconomic condition of the region.

3.13.2.21 Project 8, No Action Alternative

Under the No Action Alternative, there would be no repairs to the Mission Lake water barrier or Stone Road. Therefore, there would be no impacts on socioeconomics.

3.13.2.22 Project 9, Alternative 1: Boundary Fence Repair with Driving Lane

Impacts would be the same as Project 1, Alternative 1, as additional materials and labor for the proposed vegetation removal and driving lane construction along the western base boundary fence would have a short-term, minor beneficial impact on the socioeconomic condition of the region.

3.13.2.23 Project 9, Alternative 2: Boundary Fence Repair with Vegetation Clearance on the Base Side of the Fence

Impacts would be the same as Project 1, Alternative 1, as additional materials and labor for the proposed vegetation removal along the western base boundary fence would have a short-term, minor, beneficial impact on the socioeconomic condition of the region.

3.13.2.24 Project 9, Alternative 3: Boundary Fence Repair with Vegetation Clearance on Both Sides of the Fence

Impacts would be the same as Project 1, Alternative 1, as additional materials and labor for the proposed vegetation removal along the western base boundary fence would have a short-term, minor, beneficial impact on the socioeconomic condition of the region.

3.13.2.25 Project 9, No Action Alternative

Under the No Action Alternative, there would be no vegetation removal or construction of a driving lane along the western base boundary fence. Therefore, there would be no impacts on socioeconomics.

3.13.2.26 Project 10, Alternative 1: Demolish Eleven Buildings

Impacts would be the same as Project 1, Alternative 1, as additional materials and labor for the proposed demolition of 11 buildings would have a short-term, minor beneficial impact on the socioeconomic condition of the region.

3.13.2.27 Project 10, No Action Alternative

Under the No Action Alternative, there would be no building demolition. Therefore, there would be no impacts on socioeconomics.

3.13.2.28 Cumulative Actions and Other Considerations

There would be short-term, minor beneficial cumulative impacts from the additional materials and labor associated with the 10 projects composing the Proposed Action in combination with other proposed construction projects on Moody AFB. Collectively these proposed construction

and improvement projects would provide benefits to the socioeconomic condition of Lowndes and Lanier counties, Georgia. There would be increased expenditures in the region during these construction activities, but expenditures such as increased payroll tax revenue and the purchase of additional equipment, materials, and fuel would cease at the end of construction of the Proposed Action and other reasonably foreseeable on-base and off-base projects.

3.14 Health and Safety

See **Appendix C-11** for the definition of this resource.

3.14.1 Affected Environment

Daily training activities and maintenance operations conducted on Moody AFB are performed in accordance with applicable Air Force safety regulations, Air Force technical guidance, and the standards stipulated in Air Force Occupational Safety and Health requirements. Construction and demolition activities are common on Moody AFB and have associated inherent risks such as chemical (e.g., asbestos, lead, hazardous materials) and physical (e.g., noise propagation, falling, electrocution, collisions with equipment) sources. Companies and individuals contracted to perform construction activities on Air Force installations are responsible for adhering to Occupational Safety and Health Administration (OSHA) requirements to mitigate these hazards. Industrial hygiene programs address exposure to hazardous materials, use of personal protective equipment, and the availability and use of safety data sheets, the latter of which are also the responsibility of construction contractors to provide to workers. Federal civilian and military personnel that have a need to enter areas under construction should be familiar with and adhere to OSHA and Air Force Occupational Safety and Health requirements, as well as applicable industrial hygiene programs. Individuals tasked to operate and maintain equipment, such as power generators, are responsible for following all applicable technical guidance, as well as adhering to established OSHA and Air Force safety guidelines.

Health and safety hazards can be identified and subsequently reduced or eliminated before an activity begins. Necessary elements for an accident-prone situation or environment include the presence of the hazard itself, together with the exposed population. The degree of exposure to hazards depends primarily on the proximity of the hazard to the population. Hazards include transportation, maintenance and repair activities, noise, and fire. The proper operation, maintenance, and repair of vehicles and equipment are important for reducing safety risks. Any facility or human-use area with potential explosive or other rapid oxidation process creates unsafe environments due to noise and fire hazards for nearby populations. Noise environments can also mask verbal or mechanical warning signals such as horns and sirens.

3.14.2 Environmental Consequences

Impacts that pose a long-term risk to human health or safety are evaluated. Impacts would be considered significant if federal civilian, military, or contractor personnel did not comply with established OSHA and DAF safety guidelines. There are potential health and safety concerns with proposed construction and demolition activities. Munitions operations would remain

unchanged under the Proposed Action. All management and mitigation of risk from munitions handling and storage would remain the same under the Proposed Action.

The health and safety of on-site military and civilian workers are safeguarded by numerous DoD and military-branch-specific requirements designed to comply with standards issued by federal OSHA, USEPA, and state occupational safety and health agencies. These standards specify health and safety requirements, the amount and type of training required for workers, the use of personal protective equipment, administrative controls, engineering controls, and permissible exposure limits for workplace stressors.

3.14.2.1 Project 1, Alternative 1: Guardian Angel Facility Construction and Renovation North Site

There would be short-term, negligible, adverse impacts on health and safety as a result of the construction of a new squadron operations facility. Construction activities inherently pose increased health and safety risks to workers, military personnel, or the public. However, all construction personnel would be responsible for following federal and state safety regulations and DoD and OSHA safety standards and would be required to conduct construction activities in a manner that does not increase risk to workers, military personnel, or the public.

3.14.2.2 Project 1, Alternative 2: Guardian Angel Facility Construction and Renovation South Site

Impacts would be the same as those described for Project 1, Alternative 1. There would be short-term, negligible, adverse impacts on health and safety as all construction personnel would be responsible for following federal and state safety regulations and DoD and OSHA safety standards.

3.14.2.3 Project 1, No Action Alternative

There would be no construction of a squadron operations facility under the No Action Alternative. Therefore, there would be no change in health and safety risks to workers, military personnel, or the public.

3.14.2.4 Project 2, Alternative 1: Aircraft Fire Training Facility Improvements with Truck Driving Training

Impacts would be the same as those described for Project 1, Alternative 1. There would be short-term, negligible, adverse impacts on health and safety as all construction personnel would be responsible for following federal and state safety regulations and DoD and OSHA safety standards.

3.14.2.5 Project 2, Alternative 2: Aircraft Fire Training Facility Repairs and Construction, No Truck Driving Pad

Impacts would be the same as those described for Project 1, Alternative 1. There would be short-term, negligible, adverse impacts on health and safety as all construction personnel would

be responsible for following federal and state safety regulations and DoD and OSHA safety standards.

3.14.2.6 Project 2, No Action Alternative

There would be no AFTF improvements under the No Action Alternative. Therefore, there would be no change in health and safety risks to workers, military personnel, or the public.

3.14.2.7 Project 3, Alternative 1: Gate Overwatch Position Construction at Davidson Road and Mitchell Boulevard Gates

Impacts would be the same as those described for Project 1, Alternative 1. There would be short-term, negligible, adverse impacts on health and safety as all construction personnel would be responsible for following federal and state safety regulations and DoD and OSHA safety standards.

3.14.2.8 Project 3, No Action Alternative

There would be no construction of a overwatch positions under the No Action Alternative. Therefore, there would be no change in health and safety risks to workers, military personnel, or the public.

3.14.2.9 Project 4, Alternative 1: Aerospace Ground Equipment Facility Construction and Demolition with New Shop, Administrative Space, and Covered Storage

Impacts would be the same as those described for Project 1, Alternative 1. There would be short-term, negligible, adverse impacts on health and safety as all construction personnel would be responsible for following federal and state safety regulations and DoD and OSHA safety standards.

3.14.2.10 Project 4, Alternative 2: Aerospace Ground Equipment Facility Construction and Demolition without New Shop and More Renovated Administrative Space

Impacts would be the same as those described for Project 1, Alternative 1. There would be short-term, negligible, adverse impacts on health and safety as all construction personnel would be responsible for following federal and state safety regulations and DoD and OSHA safety standards.

3.14.2.11 Project 4, No Action Alternative

There would be no construction of a consolidated AGE facility under the No Action Alternative. Therefore, there would be no change in health and safety risks to workers, military personnel, or the public.

3.14.2.12 Project 5, Alternative 1: Burma Road Realignment

Impacts would be the same as those described for Project 1, Alternative 1. There would be short-term, negligible, adverse impacts on health and safety as all construction personnel would

be responsible for following federal and state safety regulations and DoD and OSHA safety standards.

3.14.2.13 Project 5, No Action Alternative

There would be no realignment of Burma Road and removal of trees from the CZ under the No Action Alternative. Therefore, there would be no change in health and safety risks to workers, military personnel, or the public.

3.14.2.14 Project 6, Alternative 1: 38th Rescue Squadron Parking Lot Construction

Impacts would be the same as those described for Project 1, Alternative 1. There would be short-term, negligible, adverse impacts on health and safety as all construction personnel would be responsible for following federal and state safety regulations and DoD and OSHA safety standards.

3.14.2.15 Project 6, No Action Alternative

There would be no construction of a parking lot under the No Action Alternative. Therefore, there would be no change in health and safety risks to workers, military personnel, or the public.

3.14.2.16 Project 7, Alternative 1: Airfield Stormwater Repair and Replacement

Impacts would be the same as those described for Project 1, Alternative 1. There would be short-term, negligible, adverse impacts on health and safety as all construction personnel would be responsible for following federal and state safety regulations and DoD and OSHA safety standards. All airfield restrictions for construction activities would be followed during the stormwater repair and replacement work activities.

3.14.2.17 Project 7, No Action Alternative

There would be no repairs to the stormwater system at the airfield under the No Action Alternative. Therefore, there would be no change in health and safety risks to workers, military personnel, or the public.

3.14.2.18 Project 8, Alternative 1: Mission Lake Water Barrier and Stone Road Repairs – Both Shoulders

Impacts would be the same as those described for Project 1, Alternative 1. There would be short-term, negligible, adverse impacts on health and safety as all construction personnel would be responsible for following federal and state safety regulations and DoD and OSHA safety standards.

3.14.2.19 Project 8, Alternative 2: Mission Lake Water Barrier and Stone Road Repairs – North Shoulder

Impacts would be the same as those described for Project 1, Alternative 1. There would be short-term, negligible, adverse impacts on health and safety as all construction personnel would

be responsible for following federal and state safety regulations and DoD and OSHA safety standards.

3.14.2.20 Project 8, Alternative 3: Repair Mission Lake Water Barrier and Realign Stone Road

Impacts would be the same as those described for Project 1, Alternative 1. There would be short-term, negligible, adverse impacts on health and safety as all construction personnel would be responsible for following federal and state safety regulations and DoD and OSHA safety standards.

3.14.2.21 Project 8, No Action Alternative

There would be no repairs to the Mission Lake water barrier or Stone Road under the No Action Alternative. Therefore, there would be no change in health and safety risks to workers, military personnel, or the public.

3.14.2.22 Project 9, Alternative 1: Boundary Fence Repair with Driving Lane

Impacts would be the same as those described for Project 1, Alternative 1. There would be short-term, negligible, adverse impacts on health and safety as all construction personnel would be responsible for following federal and state safety regulations and DoD and OSHA safety standards.

3.14.2.23 Project 9, Alternative 2: Boundary Fence Repair with Vegetation Clearance on the
Base Side of the Fence

Impacts would be the same as those described for Project 1, Alternative 1. There would be short-term, negligible, adverse impacts on health and safety as all construction personnel would be responsible for following federal and state safety regulations and DoD and OSHA safety standards.

3.14.2.24 Project 9, Alternative 3: Boundary Fence Repair with Vegetation Clearance on Both
Sides of the Fence

Impacts would be the same as those described for Project 1, Alternative 1. There would be short-term, negligible, adverse impacts on health and safety as all construction personnel would be responsible for following federal and state safety regulations and DoD and OSHA safety standards.

3.14.2.25 Project 9, No Action Alternative

There would be no vegetation removal or construction of a driving lane along the western base boundary fence under the No Action Alternative. Therefore, there would be no change in health and safety risks to workers, military personnel, or the public.

3.14.2.26 Project 10, Alternative 1: Demolish Eleven Buildings

Impacts would be the same as those described for Project 1, Alternative 1. There would be short-term, negligible, adverse impacts on health and safety as all construction personnel would be responsible for following federal and state safety regulations and DoD and OSHA safety standards.

3.14.2.27 Project 10, No Action Alternative

There would be no demolition of 11 buildings under the No Action Alternative. Therefore, there would be no change in health and safety risks to workers, military personnel, or the public.

3.14.2.28 Cumulative Actions and Other Considerations

The implementation of 10 projects composing the Proposed Action in combination with other reasonably foreseeable projects at or near Moody AFB, including the proposed off-base highway maintenance projects, would have a negligible, cumulative, adverse impact on health and safety due to the inherent increase in health and safety risks associated with conducting construction projects. All proposed construction and demolition projects implemented on Moody AFB would follow federal and state safety regulations and DoD and OSHA safety standards. All other proposed construction and demolition projects would be required to conduct construction activities in a manner that does not increase risk to workers, military personnel, or the public.

The proposed highway maintenance projects at Hightower and Bemiss Roads would be constructed following all federal and state safety regulations, including those required by the Federal Highways Administration and the Georgia Department of Transportation. All OSHA safety standards would be followed, and highway construction activities would be completed in a manner that does not increase risk to workers and the public.

FORMAT PAGE

4.0 LIST OF PREPARERS

The following government agency individuals supported the preparation of this Environmental Assessment.

Lorence Busker
Moody AFB
Environmental Planning Function
Contribution: Planning and EA Development

Anna Butler, PG
US Army Corps of Engineers
Contribution: Project Manager and Contracting Officers Representative

Kristen Varney
Moody AFB
Community Planner
Contribution: Planning and Description of Proposed Action and Alternatives Development

Table 4-1 provides the list of preparers from the contractor team for this Environmental Assessment.

Table 4-1. List of Preparers

Name	Affiliation	Education	Years of Experience	Contribution
Dan Becker, GISP	Vernadero Group Inc.	MA Geography BA, Geography	11	Spatial Analyses, Maps
Rahul Chettri	Versar Inc.	MS, Environmental Studies BS, Economics	35	Air Quality
Maggie Fulton	Vernadero Group Inc.	BS, English	34	Technical Editing, Formatting, Production
Katharine Hewlings	Vernadero Group Inc.	MS, Architecture MA, Museum Studies BA, Anthropology	3	GIS and Cartography
Arnaud Kerisit	Vernadero Group Inc.	MS, Earth and Environmental Science, Aquatic Ecology Concentration BS, Earth and Environmental Science, Aquatic Ecology Concentration	13	Biological Resources and Water Resources
Radhika Narayanan	Versar Inc.	MS, Environmental Science BS, Chemistry	30	Air Quality
Crystal Ramey	Vernadero Group Inc.	BA, Visual Arts	23	Document Production and Section 508 Compliance
F. Patricia Stallings	Brockington and Associates Inc.	MA, History BA, History	27	Cultural Resources
Christa Stumpf	Versar Inc.	MS, Forest Resource and Land Use Planning BS, Wildland Management	28	Quality Assurance/Quality Control Review
Eric Webb, PhD	Vernadero Group Inc.	PhD, Oceanography and Coastal Sciences MS, Biology BS, Biology	28	Project Management, Soils, Socioeconomics, Health and Safety

5.0 REFERENCES

- Air Force Civil Engineer Center (AFCEC), Compliance Technical Support Branch. 2023. *DAF Greenhouse Gas (GHG) & Climate Change Assessment Guide*. December 2023. <<https://www.aqhelp.com/AQdocs.html>>. Accessed January 2024.
- ARCADIS. 2018. *Thirteenth Annual Corrective Action Plan Progress Report for the Golf Course Area Plume (SS-39). Performance-Based Remediation, Moody Air Force Base, Georgia*. September.
- Bailey, R.G. 1995. Description of the Ecoregions of the United States. US Department of Agriculture Forest Service Publication 1391. Washington DC.
- Department of the Air Force (DAF). 2024. *Integrated Cultural Resources Management Plan*. Moody Air Force Base and Grand Bay Range. Installation Supplement. 4 February.
- Environmental Laboratory. 1987. *Corps of Engineers Wetlands Delineation Manual*. Technical Report Y-87-1. US Army Engineer Waterways Experiment Station, Environmental Laboratory, Vicksburg, Mississippi.
- Georgia Environmental Protection Division (GEPD). 2022. Regulated Solid Waste Facilities. 2022 Remaining Landfill Capacity Excel File.
- Georgia Environmental Protection Division (GEPD) 2024. Peach State Voluntary Emission Reduction Plan, Georgia Climate Pollution Reduction Grant. Webpage. <<https://epd.georgia.gov/georgia-climate-pollution-reduction-grant>>. Accessed 13 May 2024.
- Grover, Jennifer E., Terry L. Lolley, Kenny R. Pearce, and Jeffrey P. Blick. 1996. *Cultural Resources Survey, Grand Bay Ordnance Range, Moody Air Force Base, Georgia*. Report submitted to the Department of the Army, US Army Corps of Engineers, Savannah District. Report prepared by Panamerican Consultants Inc. Tuscaloosa.
- Harris, C.M. 1998. Handbook of Acoustical Measurements and Noise Control. Third edition. McGraw Hill, New York, New York.
- Hede, A.J. 1982. "Community Reaction to Noise from a Suburban Rifle Range." National Acoustic Laboratories, Sydney, Australia. *Journal of Sound and Vibration*. 8 May.
- Hendryx, Greg S., Ryan O. Sipe and Arthur A. Kuhner, Jr. 2005. An Intensive Archeological Assessment of the Magnolia Grove Tract, Lowndes County, Georgia. Prepared by ESI for American Eagle Design Studio LLC, Dallas, Texas.
- Hersch, B. 2011. Moody Air Force Base: World War II and Cold War-Era Historic Property Survey. Report prepared by Geo-Marine, Inc.

- Messick, D.P. 1999. Survey of Historic Buildings and Structures at Moody Air Force Base, Lowndes and Lanier Counties, Georgia. Report submitted to the US Army Corps of Engineers, Savannah District, prepared by New South Associates, Stone Mountain.
- Moody Air Force Base (AFB). 2015a. *Moody Air Force Base Air Installation Compatibility Use Zone Study*. July.
- Moody Air Force Base (AFB). 2015b. Installation Development Plan, Moody Air Force Base. Prepared by AECOM. November.
- Moody Air Force Base (AFB). 2015c. *Economic Impact Statement, Moody Air Force Base, Georgia*. Data as of 30 September 2015.
- Moody Air Force Base (AFB). 2020. *23d Wing Integrated Contingency Plan*. Updated April 2020.
- Moody Air Force Base (AFB). 2023. *Installation Development Plan*. Moody Air Force Base, Georgia.
- Moody Air Force Base (AFB). 2024. Integrated Natural Resources Management Plan, Plan Years FY2024 – FY2028, Moody AFB, Georgia.
- Morgan, J.A. 1998. *A Phase I Cultural Resources Survey of the Southwest Land Gift, Lowndes County, Georgia*. Report submitted to Moody Air Force Base, Georgia, prepared by the US Army Corps of Engineers, Savannah District.
- Reynolds, Tim, Marc Wampler, Bridget Mohr, Allison Soergel, Richard Herndon, Dawn Bradley, Jacob Jepson, Clay Cantrell, and Forest Kelly. 2022. *Phase I Archaeological Survey - Identification and Evaluation of Archaeological Sites on 3,119 Acres on Moody Air Force Base and Grassy Pond Recreation Annex, Lanier and Lowndes Counties, Georgia*. Prepared by Wood Environment and Infrastructure Solutions for Moody AFB, Argonne National Laboratory.
- TepaEC/ARCADIS. 2022. Sixteenth Annual Corrective Action Plan Progress Report for the Industrial Area (SS-24). Optimized Remediation Contract, Moody Air Force Base, Georgia. October.
- TepaEC/ARCADIS 2023a. Sixteenth Annual Corrective Action Plan Progress Report for the Former Fire Training Area (FT-07). Optimized Remediation Contract, Moody Air Force Base, Georgia. January.
- TepaEC/ARCADIS 2023b. Eighteenth Annual Corrective Action Plan Progress Report for the Burma Road Landfill (LF-01). Optimized Remediation Contract, Moody Air Force Base, Georgia. April.

- TepaEC/ARCADIS 2023c. Eighteenth Annual Corrective Action Plan Progress Report for the Flightline Area (Apron A/B)(SS-38). Optimized Remediation Contract, Moody Air Force Base, Georgia. October.
- United States Air Force. 1991. Discontinuation of Building 1703, PCB Storage. Memorandum, Mr. Lowell D. Klepper, Professional Engineer (PE), Deputy Base Civil engineer, Department of the Air Force, 347th Combat Engineering Squadron (TAC), Moody Air Force Base. 28 February.
- United States Air Force. 2011. US Air Force Civil Engineering Strategic Plan. April.
- United States Air Force. 2015. US Air Force Strategic Master Plan. May. 65 pages.
- United States Air Force. 2016. *23d Wing Moody AFB Georgia Waste Management Plan*. 5 August 2013; updated 10 May 2016.
- United States Air Force. 2020. *Air Force Air Quality EIAP Guide, Volume II - Advanced Assessments*. July 2020.
- United States Air Force. No date. US Air Force Installation Force Protection Guide. 44 pages.
- United States Army. 2007. Army Regulation 200-1. Environmental Protection and Enhancement. 27 December.
- United States Army Corps of Engineers (USACE). 2010. *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Atlantic and Gulf Coastal Plain Region (Version 2.0)*. Eds. J. S. Wakeley, R. W. Lichvar, and C. V. Noble. ERDC/EL TR-10-20. Vicksburg, MS. US Army Engineer Research and Development Center.
- United States Bureau of Labor Statistics. 2024. Local Area Unemployment Statistics. Webpage. <<https://www.bls.gov/lau>>. Accessed May 2024.
- United States Census Bureau. 2024. QuickFacts. Web portal. <<https://www.census.gov/quickfacts/fact/table/US/PST045222>>. Accessed May 2024.
- United States Department of Agriculture. 1979. Soil Survey of Lowndes County, Georgia. August.
- United States Department of Transportation. 2017. Construction Noise Handbook. Federal Highways Administration. Updated 14 August 2017.
- United States Energy Information. 2021. *Energy-Related CO₂ Emission Data Tables, 2000-2021*. Administration (USEIA). <<https://www.eia.gov/environment/emissions/state/>> Accessed May 2024.
- United States Environmental Protection Agency (USEPA). 2016. What Climate Change Means for Georgia. <<https://19january2017snapshot.epa.gov/sites/production/files/2016-09/documents/climate-change-ga.pdf>>. Accessed May 2024.

- United States Environmental Protection Agency (USEPA). 2018. NAAQS Table. <<https://www.epa.gov/ground-level-ozone-pollution/table-historical-ozone-national-ambient-air-quality-standards-naaqs>>. 20 February.
- United States Environmental Protection Agency (USEPA). 2020. NAAQS Table. <<https://www.epa.gov/criteria-air-pollutants/naaqs-table>>. 07 March.
- United States Environmental Protection Agency (USEPA). 2024. Overview of Greenhouse Gases. <<https://www.epa.gov/ghgemissions/overview-greenhouse-gases>>. Accessed 12 December 2024.
- United States Fish and Wildlife Service (USFWS). 2020. Species Status Assessment Report for the Suwannee Alligator Snapping Turtle (*Macrochelys suwanniensis*). Version 1.1. July.
- United States Fish and Wildlife Service (USFWS). 2024a. Information for Planning and Consultation. Web portal. <<https://ipac.ecosphere.fws.gov>>. Accessed April 2024.
- United States Fish and Wildlife Service (USFWS). 2024b. Northern Long-Eared Bat and Tricolored Bat Voluntary Environmental Review Process for Development Projects, Version 1.0. April.
- Weatherbase. 2024. Weather Summary, Valdosta, Georgia. <<https://www.weatherbase.com/weather/weather-summary.php3?s=18747&cityname=Valdosta%2C+Georgia%2C+United+States+of+America&units=>>>. Accessed 10 May 2024.