

**Final
Environmental Assessment
Proposed Installation Development Plan Projects at
Creech Air Force Base, Clark County, Nevada**

December 2025



**Prepared for:
United States Department of the Air Force
432d Wing
432d Air Expeditionary Wing**



PRIVACY ADVISORY

This Environmental Assessment (EA) was provided for public comment in accordance with the National Environmental Policy Act (NEPA).

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 any public meetings or hearings or to fulfill requests for copies of the EA or associated documents. Private addresses will be compiled to develop a mailing list for those requesting copies of the EA; however, only the names of the individuals making comments and specific comments will be disclosed. Personal home addresses and phone numbers will not be published in the EA.

COMPLIANCE

This document has been certified that it does not exceed 75 pages, excluding citations and appendices, in accordance with Paragraph (e)(2) of NEPA (42 USC § 4336a). Generally, a “page” means 500 words and does include maps, diagrams, graphs, tables, and other means of graphically displaying quantitative or geospatial information.

ACCESSIBILITY NOTICE

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.

FINAL FINDING OF NO SIGNIFICANT IMPACT (FONSI)
PROPOSED INSTALLATION DEVELOPMENT PLAN PROJECTS
CREECH AIR FORCE BASE, NEVADA

Pursuant to provisions of the *National Environmental Policy Act* (NEPA), as amended by the *Fiscal Responsibility Act of 2023* (FRA) (Public Law 118-5) and the United States (US) Department of Defense’s (DoD) NEPA implementing procedures issued 30 June 2025, to the extent they are consistent with NEPA as revised by the FRA, the US Department of the Air Force (DAF) prepared the attached Environment Assessment (EA) to address the potential environmental impacts on the human environment, including the natural environment, associated with proposed Installation Development Plan (IDP) projects at Creech Air Force Base (AFB), Clark County, Nevada.

As described in greater detail below, the Proposed Action would involve 36 short-term IDP projects that would occur over the five-year period from approximately fiscal year (FY) 2026 to FY 2031.

Purpose and Need

The purpose of the Proposed Action is to support Creech AFB’s current and future mission of remotely piloted aircraft employment and Aircrew training. The Proposed Action would ensure the continued operational abilities of Creech AFB through the development of facilities and infrastructure supporting the training and flight programs.

The Proposed Action is needed to address deficiencies and degradation of the support facilities at Creech AFB. Left unchecked, deficiencies in facilities and infrastructure would degrade the Installation’s ability to meet the DAF’s current and future needs. Demolition of aging facilities, new facility construction, facility upgrades, facility repair and renovation, utilities upgrades, community facility upgrades, infrastructure improvement, recreational upgrades, natural infrastructure management projects, and strategic sustainability performance projects are all needed to continue to meet the mission requirements of the 432d Wing and 432d Air Expeditionary Wing at Creech AFB.

Individual purpose and need statements for each of the 36 projects proposed are included in **Appendix E** of the EA, which is incorporated herein by reference. The 36 projects are defined as either construction, infrastructure, or demolition projects. Of the 36 projects, there are 27 construction projects, 5 infrastructure projects, and 4 demolition projects.

Description of Proposed Action and Alternatives

The Proposed Action would incorporate the planning considerations addressed in Creech AFB planning documents. For example, the Proposed Action would adhere to project-specific development standards, including land use constraints for siting the new facilities, and regulate design parameters such as height, scale, and orientation.

Alternative 1

Creech AFB proposes to implement 36 short-term development projects, including demolition of aging facilities, new facility construction, facility upgrades, facility repair and renovation, utilities upgrades, community facility upgrades, infrastructure improvement, recreational upgrades, natural infrastructure management projects, and strategic sustainability performance projects to be completed or implemented over approximately five years (FY 2026–2031). The projects would occur in multiple planning districts throughout Creech AFB.

Alternative 2

Under Alternative 2, all projects would be the same as under Alternative 1 with the exception of Project C11, which would be constructed on **Site B** within the Community Support District.

Alternative 3

Under Alternative 3, all projects would be the same as under Alternative 1 with the exception of Project C11, which would be constructed on **Site C** within the Community Support District.

No Action Alternative

Under the No Action Alternative, the DAF would not implement the proposed Installation development projects and Creech AFB would continue to operate under current conditions. The facility and infrastructure assets of Creech AFB would continue to degrade. Infrastructure would not be maintained or improved to support the growing mission requirements. In the short term, military training and operations would continue at Creech AFB in accordance with the status quo. Over time, the mission support capabilities of the Installation would diminish along with its ability to support the future missions and requirements of the 432d Wing and 432d Air Expeditionary Wing.

Summary of Findings

Potentially affected environmental resources were identified through communications with state and federal agencies and review of environmental documentation. The attached EA analyzes potential environmental consequences of the following resource areas: land use, earth resources, air quality, water resources, biological/natural resources, cultural resources, infrastructure/utilities (including transportation), noise/acoustic environment, hazardous materials and waste, safety and occupational health, and socioeconomics.

Land Use

Under **Alternative 1**, there would be no change to the current land use at Creech AFB. All projects are compatible and consistent with existing and future Installation land use planning guidance as identified in the Installation IDP and Area Development Plan. Implementation of **Alternatives 2** and **3** would be compatible and consistent with existing and future Installation land use planning guidance.

Earth Resources

Under **Alternative 1**, there would be no impacts to geology; short-term, negligible, adverse impacts to topography; and short-term, moderate, adverse impacts to soils. Implementation of **Alternatives 2** and **3** would be anticipated to have the same impacts as **Alternative 1**.

Air Quality

Under **Alternative 1**, there would be short-term, minor, adverse impacts to air quality. Short-term emissions resulting from construction would remain below the applicable thresholds for air quality standards. Implementation of **Alternatives 2** and **3** would be anticipated to have the same impacts as **Alternative 1**.

Water Resources

Under **Alternative 1**, there would be both long-term and short-term, minor, adverse impacts to surface water during construction activities; long-term, minor, adverse impacts to stormwater as a result of increased impervious surface; long-term, negligible, adverse impacts to floodplains; and no impacts to groundwater or wetlands. Implementation of **Alternatives 2** and **3** would be anticipated to have the same impacts as **Alternative 1**.

Biological/Natural Resources

Under **Alternative 1**, there would be long-term, negligible, adverse impacts to vegetation; short-term, negligible impacts to wildlife; short-term, minor impacts to invasive species; and “no effect” to threatened, endangered, and other protected species. Implementation of **Alternatives 2 and 3** would be anticipated to have the same impacts as **Alternative 1**. The US Fish and Wildlife Service (USFWS) does not consult on determinations of “no effect.” As such, no USFWS concurrence was required.

Cultural Resources

Under **Alternative 1**, there would be long-term, minor impacts, both adverse and beneficial, to architectural properties. There would be no impacts to archaeological properties or Traditional Cultural Properties. On 20 October 2025, the State Historic Preservation Office (SHPO) issued a determination that the DAF has no further Section 106 responsibilities for this undertaking. This determination fulfills the requirements for Section 106 consultation associated with the determinations made in **Section 3.9** of the attached EA. Relevant correspondence with the SHPO and federally recognized Native American tribes is included in **Appendix A** of the EA. Should there be an unanticipated discovery of an archaeological resource, Creech AFB would suspend construction activities and initiate the unanticipated discoveries procedures outlined in the Integrated Cultural Resources Management Plan. Implementation of **Alternatives 2 and 3** would be anticipated to have the same impacts as **Alternative 1**.

Infrastructure/Utilities (including Transportation)

Under **Alternative 1**, there would be long-term, beneficial impacts to transportation, electricity, potable water, and communications systems; short-term, negligible impacts to the sanitary sewer/wastewater system; and short-term, moderate, adverse impacts to solid waste management. There are no natural gas systems within the region of influence; therefore, there would be no related impacts. Implementation of **Alternatives 2 and 3** would be anticipated to have the same impacts as **Alternative 1**.

Noise/Acoustic Environment

Under **Alternative 1**, noise levels would not exceed current levels and there would be no impacts to noise-sensitive receptors; therefore, there would be no impacts to noise. Implementation of **Alternatives 2 and 3** would be anticipated to have the same impacts as **Alternative 1**.

Hazardous Materials and Waste

Under **Alternative 1**, there would be short-term, minor, adverse impacts to hazardous materials and wastes; no impacts to fuel storage, radon, or Environmental Restoration Program sites; short-term, minor, adverse impacts from pesticide usage; and short-term, moderate, adverse impacts to aqueous film forming foam sites. Implementation of **Alternatives 2 and 3** would be anticipated to have the same impacts as **Alternative 1**.

Safety and Occupational Health

Under **Alternative 1**, there would be long-term, minor, beneficial impacts to ground and construction safety and long-term, moderate, beneficial impacts related to flight safety, explosives safety, and bird and wildlife aircraft strike hazards. Implementation of **Alternatives 2 and 3** would be anticipated to have the same impacts as **Alternative 1**.

Socioeconomics

Under **Alternative 1**, there would be short-term, minor, beneficial impacts to socioeconomics. Implementation of **Alternatives 2** and **3** would be anticipated to have the same impacts as **Alternative 1**.

Reasonably Foreseeable Actions and Impacts

The EA considered reasonably foreseeable effects, which are effects on the environment that result from the Proposed Action when combined with other past, present, and reasonably foreseeable actions near Creech AFB, regardless of what agency or person undertakes such other actions. When considered in conjunction with the effects of other past, present, and reasonably foreseeable actions at Creech AFB, no significant reasonably foreseeable impacts would be anticipated to occur with implementation of the Proposed Action.

Mitigation

The EA analysis concluded that the Proposed Action would not result in significant environmental impacts; therefore, no mitigation measures are required. Best management practices are described and recommended in the EA where applicable.

Conclusion

Finding of No Significant Impact. After review of the attached EA prepared in accordance with the requirements of NEPA and DoD NEPA implementing procedures and which is hereby incorporated by reference, I have determined that the Proposed Action would not have a significant impact on the quality of the human environment, including the natural environment. Accordingly, an Environmental Impact Statement will not be prepared.



TREVOR T. MERRELL
Colonel, USAF Commander



DATE

COVER SHEET

**Final Environmental Assessment for
Proposed Installation Development Plan Projects at
Creech Air Force Base, Clark County, Nevada**

- a. Responsible Agency: United States Air Force*
- b. Location: Creech Air Force Base, Nevada*
- c. Designation: Final Environmental Assessment*
- d. Point of Contact: Sean Dorrough, Department of the Air Force,
sean.dorrough.1@us.af.mil*

Abstract:

This Environmental Assessment (EA) has been prepared pursuant to provisions of the *National Environmental Policy Act* (NEPA), as amended by the Fiscal Responsibility Act of 2023 (Public Law 118-5), and United States Department of Defense NEPA implementing procedures. 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; air quality; earth, water, biological, and cultural resources; infrastructure and utilities (including transportation); noise/acoustic environment; hazardous materials and waste; safety and occupational health; and socioeconomics.

The purpose of the Proposed Action is to support Creech Air Force Base's (AFB) current and future mission of remotely piloted aircraft employment and Aircrew training. The Proposed Action would ensure the continued operational abilities of Creech AFB through the development of facilities and infrastructure supporting the training and flight programs.

The Proposed Action is needed to address deficiencies and degradation of the support facilities at Creech AFB. Left unchecked, deficiencies in facilities and infrastructure would degrade the Installation's ability to meet the Department of the Air Force's (DAF's) current and future needs. Demolition of aging facilities, new facility construction, facility upgrades, facility repair and renovation, utilities upgrades, community facility upgrades, infrastructure improvement, recreational upgrades, natural infrastructure management projects, and strategic sustainability performance projects are all needed to continue to meet the mission requirements of the 432d Wing and 432d Air Expeditionary Wing at Creech AFB.

The analysis of the affected environment and environmental consequences of implementing the Proposed Action Alternatives concluded that by implementing standing environmental protection measures and best management practices, there would be no significant adverse impacts from the actions at Creech AFB on the environmental resources. Creech AFB is an active DAF installation with ongoing equipment operations, demolition, and new construction actions as well as future development currently in the planning phase. Impacts associated with construction, demolition, and renovation would be minor; therefore, significant reasonably foreseeable impacts are not anticipated with implementation of the Proposed Action when added to the effects of other past, present, and reasonably foreseeable actions at Creech AFB.

This page intentionally left blank

TABLE OF CONTENTS

CHAPTER 1 PURPOSE AND NEED FOR THE PROPOSED ACTION	1-1
1.1 INTRODUCTION	1-1
1.2 CREECH AIR FORCE BASE.....	1-1
1.2.1 <i>Airfield District</i>	1-2
1.2.2 <i>Community Support District</i>	1-2
1.2.3 <i>Mission Operations Complex District</i>	1-2
1.2.4 <i>Munitions Storage Area District</i>	1-2
1.2.5 <i>Southside Operations District</i>	1-2
1.2.6 <i>T-Shirt District</i>	1-3
1.2.7 <i>Off-Base Support Operations District</i>	1-3
1.3 PURPOSE AND NEED.....	1-3
1.4 INTERGOVERNMENTAL COORDINATION, PUBLIC AND AGENCY PARTICIPATION	1-3
1.4.1 <i>Government-to-Government Consultation</i>	1-3
1.4.2 <i>Agency Consultations and Coordination</i>	1-4
1.5 PUBLIC AND AGENCY REVIEW	1-5
1.6 DECISION TO BE MADE	1-5
1.7 SCOPE OF THE ENVIRONMENTAL ASSESSMENT	1-6
1.8 APPLICABLE LAWS AND ENVIRONMENTAL REGULATIONS.....	1-6
CHAPTER 2 DESCRIPTION OF THE PROPOSED ACTION AND ALTERNATIVES.....	2-1
2.1 INTRODUCTION	2-1
2.2 DESCRIPTION OF THE PROPOSED ACTION.....	2-1
2.3 SELECTIONS STANDARDS FOR ALTERNATIVE SCREENING	2-1
2.4 ALTERNATIVES	2-2
2.4.1 <i>Alternative 1</i>	2-2
2.4.2 <i>Alternative 2</i>	2-2
2.4.3 <i>Alternative 3</i>	2-3
2.5 ALTERNATIVES CONSIDERED BUT ELIMINATED FROM FURTHER ANALYSIS	2-3
2.6 ALTERNATIVES RETAINED FOR DETAILED ANALYSIS	2-3
2.6.1 <i>No Action Alternative</i>	2-3
2.7 SUMMARY OF ENVIRONMENTAL CONSEQUENCES	2-4
CHAPTER 3 EXISTING CONDITIONS AND ENVIRONMENTAL CONSEQUENCES.....	3-1
3.1 FRAMEWORK FOR ANALYSIS	3-1
3.2 RESOURCES CONSIDERED BUT ELIMINATED FROM DETAILED ANALYSIS	3-1
3.3 RESOURCES CARRIED FORWARD FOR DETAILED ANALYSIS	3-1
3.4 LAND USE.....	3-2
3.4.1 <i>Definition of the Resource</i>	3-2
3.4.2 <i>Existing Conditions</i>	3-2
3.4.3 <i>Environmental Consequences</i>	3-2
3.5 EARTH RESOURCES.....	3-5
3.5.1 <i>Definition of the Resource</i>	3-5
3.5.2 <i>Existing Conditions</i>	3-5
3.5.3 <i>Environmental Consequences</i>	3-6

3.6	AIR QUALITY	3-7
3.6.1	<i>Definition of the Resource</i>	3-7
3.6.2	<i>Existing Conditions</i>	3-10
3.6.3	<i>Environmental Consequences</i>	3-11
3.7	WATER RESOURCES.....	3-13
3.7.1	<i>Definition of the Resource</i>	3-13
3.7.2	<i>Existing Conditions</i>	3-15
3.7.3	<i>Environmental Consequences</i>	3-16
3.8	BIOLOGICAL/NATURAL RESOURCES	3-19
3.8.1	<i>Definition of the Resource</i>	3-19
3.8.2	<i>Existing Conditions</i>	3-21
3.8.3	<i>Environmental Consequences</i>	3-24
3.9	CULTURAL RESOURCES	3-28
3.9.1	<i>Definition of the Resource</i>	3-28
3.9.2	<i>Region of Influence</i>	3-29
3.9.3	<i>Existing Conditions</i>	3-29
3.9.4	<i>Environmental Consequences</i>	3-31
3.10	INFRASTRUCTURE/UTILITIES (INCLUDING TRANSPORTATION).....	3-36
3.10.1	<i>Definition of the Resource</i>	3-36
3.10.2	<i>Existing Conditions</i>	3-36
3.10.3	<i>Environmental Consequences</i>	3-37
3.11	NOISE/ACOUSTIC ENVIRONMENT.....	3-41
3.11.1	<i>Definition of the Resource</i>	3-41
3.11.2	<i>Existing Conditions</i>	3-42
3.11.3	<i>Environmental Consequences</i>	3-42
3.12	HAZARDOUS MATERIALS AND WASTE.....	3-43
3.12.1	<i>Definition of the Resource</i>	3-43
3.12.2	<i>Existing Conditions</i>	3-45
3.12.3	<i>Environmental Consequences</i>	3-48
3.13	SAFETY AND OCCUPATIONAL HEALTH	3-51
3.13.1	<i>Definition of the Resource</i>	3-51
3.13.2	<i>Existing Conditions</i>	3-51
3.13.3	<i>Environmental Consequences</i>	3-53
3.14	SOCIOECONOMICS.....	3-56
3.14.1	<i>Definition of the Resource</i>	3-56
3.14.2	<i>Existing Conditions</i>	3-56
3.14.3	<i>Environmental Consequences</i>	3-58
CHAPTER 4 LIST OF PREPARERS.....		4-1
4.1	GOVERNMENT CONTRIBUTORS	4-2
CHAPTER 5 REFERENCES.....		5-1

APPENDICES

APPENDIX A. Intergovernmental Coordination, Public and Agency Participation

APPENDIX B. Public Notices

APPENDIX C. Air Conformity Applicability Model Analysis

APPENDIX D. Figures

APPENDIX E. Tables

This page intentionally left blank

LIST OF ACRONYMS AND ABBREVIATIONS

AARG	average annual growth rate
ACAM	Air Conformity Applicability Model
ACM	asbestos-containing materials
ADP	Area Development Plan
AFB	Air Force Base
AFCEC	Air Force Civil Engineer Center
AFFF	aqueous film forming foam
AFI	Air Force Instruction
AFMAN	Air Force Manual
AFPD	Air Force Policy Directive
AGE	aerospace ground equipment
APE	Area of Potential Effects
APZ	accident potential zone
AST	aboveground storage tank
AQCR	Air Quality Control Region
B	Building (as in B1209)
BASH	Bird and Wildlife Aircraft Strike Hazard
BGEPA	Bald and Golden Eagle Protection Act
BLM	United States Bureau of Land Management
BMP	best management practice
CAA	Clean Air Act
CAT/EOC	Crisis Action Team/Emergency Operations Center
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFR	Code of Federal Regulations
CGP	Construction General Permit
CO _{2e}	carbon dioxide-equivalent
CWA	Clean Water Act
CZ	clear zone
DAF	Department of the Air Force
DAFMAN	Department of the Air Force Manual
DAFPD	Department of the Air Force Policy Directive
dB	decibel
dBA	A-weighted decibel
DNL	Day-Night Average Sound Level
DoD	Department of Defense
EA	Environmental Assessment
ECP	entry control point
EIS	Environmental Impact Statement
EO	Executive Order
ERP	Environmental Restoration Program
ESA	Endangered Species Act
ESQD	Explosives quantity-distance arc
FEMA	Federal Emergency Management Agency
FONSI	Finding of No Significant Impact

FRA	Fiscal Responsibility Act
ft ²	square foot/feet
FY	fiscal year
GDT	Ground Data Terminal
GHG	greenhouse gas
HAZMAT	hazardous materials
HQ	Headquarters
I-11	United States Interstate 11
ICRMP	Integrated Cultural Resource Management Plan
IDP	Installation Development Plan
IPaC	Information for Planning and Consultation
lf	linear foot/feet
Jet-A	aviation fuel
Jet-B	jet fuel
JP-4	jet fuel
LBP	lead-based paint
lbs	pounds
LRS	Logistics Readiness Squadron
LVIAQCR	Las Vegas Intrastate Air Quality Control Region
MBTA	Migratory Bird Treaty Act
MW	megawatt
NAAQS	National Ambient Air Quality Standards
NDEP	Nevada Division of Environmental Protection
NDOW	Nevada Department of Wildlife
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NPDES	National Pollutant Discharge Elimination System
NRHP	National Register of Historic Places
NTTR	Nevada Test and Training Range
NVCRIS	Nevada Cultural Resources Information System
OSHA	Occupational Safety and Health Administration
OWS	oil and water separator
PCB	polychlorinated biphenyls
pCi/L	picocuries per liter
PFAS	per- and polyfluoroalkyl substances
PFOS	perfluorooctane sulfonate
PFOA	perfluorooctanoic acid
PM _{2.5}	particulate matter less than or equal to 2.5 microns in diameter
PM ₁₀	particulate matter less than or equal to 10 microns in diameter
ppm	parts per million
PSD	Prevention of Significant Deterioration
PV	photovoltaic
RCRA	Resource Conservation and Recovery Act
ROI	Region of Influence
RPA	remotely piloted aircraft
SARA	Superfund Amendments and Reauthorization Act

SGCN	species of greatest conservation need
SHPO	State Historic Preservation Officer
TCP	Traditional Cultural Properties
tpy	tons per year
US	United States
US-95	United States Highway 95
USC	United States Code
USCB	United States Census Bureau
USEPA	United States Environmental Protection Agency
USFWS	United States Fish and Wildlife Service
UST	underground storage tank
WRM	War Reserve Materiel

This page intentionally left blank

CHAPTER 1 PURPOSE AND NEED FOR THE PROPOSED ACTION

1.1 INTRODUCTION

Creech Air Force Base, hereinafter referred to as “Creech AFB” or the “Installation,” is the main operating base of the 432d Wing and 432d Air Expeditionary Wing and is located 1 mile northwest of Indian Springs, Nevada, and 35 miles northwest of Las Vegas, Nevada (**Figure 1-1, Appendix D**) (DAF, 2019a). These Wings are collectively known as the “Hunters” and support the training and employment of remotely piloted aircraft (RPA) for the United States (US) Department of the Air Force (DAF). Creech AFB also supports various operations such as the 556th Test and Evaluation Squadron, the DAF Reserve’s 91st Attack Squadron, and the DAF Reserve’s 78th Attack Squadron (DAF, 2019b). The Installation occupies 2,085 acres of land in Clark County, Nevada, on the north side of US Highway 95 (US-95); an additional 80 acres of land is owned by Creech AFB south of US-95. To sustain the Installation’s training and employment missions, the 432d Wing proposes to implement development projects at Creech AFB over the five-year period from approximately fiscal year (FY) 2026 to FY 2031. The proposed development projects would modernize and improve operations facilities, pavements, security, and communication facilities, and would improve the overall function of the Installation. This Environmental Assessment (EA) evaluates environmental effects of the proposed development projects at Creech AFB. These projects are further described throughout this EA and collectively referred to as the “Proposed Action.”

This EA was prepared in accordance with the *National Environmental Policy Act of 1969*, ([42 United States Code \[USC\] § 4321](#) et seq.) (NEPA), as amended by the *Fiscal Responsibility Act of 2023* (FRA) ([Public Law 118-5](#)), and the US Department of Defense (DoD) NEPA implementing procedures issued 30 June 2025, to the extent they are consistent with NEPA as revised by the FRA. These federal regulations provide purpose and direction for streamlining the NEPA process. This EA satisfies the requirements of NEPA and DoD NEPA implementing procedures. To render this document more concise, links are provided to online data sources to which the reader can refer for more information.

1.2 CREECH AIR FORCE BASE

Creech AFB provides RPA Aircrew training and supports the global RPA mission. This includes supporting, directing, and coordinating RPA combat sorties. The Installation also functions as the DAF’s Thunderbirds’ aerial demonstration site and as the home base of daily overseas Contingency Operations for RPAs (DAF, 2019b).

Creech AFB is subdivided into seven unique planning districts: Airfield, Community Support, Mission Operations Complex, Munitions Storage Area, Southside Operations, T-Shirt, and Off-Base Support Operations. The Proposed Action would include implementation of projects in each district, with the exception of the Off-Base Support Operations district. Most training and operations at Creech AFB occur on the main Installation, north of US-95 (**Figure 1-2, Appendix D**). Several components of the Installation are located on the southern side of US-95, adjacent to the town of Indian Springs, Nevada, in the T-Shirt District.

The area surrounding the Installation to the north and west is primarily managed by the Bureau of Land Management (BLM) and the Nevada Test and Training Range (NTTR). Areas to the north and east of the Installation are designated as the Desert National Wildlife Range for threatened and endangered species. Runways for the airfield are aligned east to west, parallel to US-95, and

perpendicular to the northeast and northwest. Some of Creech AFB's operations are located south of the airfield in the Southside Operations District between the airfield and US-95; recreation, operations, and dining services are centered in the northeast corner, northeast of the airfield in the Mission Operations Complex and Community Support districts (DAF, 2015).

To sustain the long-term mission of support and training for future RPA activities for the DAF, Creech AFB prepared an Installation Development Plan (IDP) in 2015 and an Area Development Plan (ADP) in 2019 as blueprints to help inform future proposals regarding Installation development needed to meet and sustain its mission capability (DAF, 2015, 2019b). The IDP helps to identify short-, mid-, and long-term needs that support the mission requirements, increase efficiencies, and support growth at Creech AFB. Similar to the IDP, the ADP helps identify future planning needs within specific districts that are generally characterized by current mission function. The ADP used to support this EA is specific to the Mission Operations Complex District; at this time, no other districts have their own ADP.

1.2.1 Airfield District

The Airfield District bisects the center of the Installation. This district consists of industrial and utilitarian components associated with aircraft operations and associated cargo and contains two intersecting runways, taxiways, ramps, aprons, ground data terminals, and a hazardous cargo pad (DAF, 2015).

1.2.2 Community Support District

The Community Support District is located in the northeast corner of Creech AFB and contains mission support and quality-of-life facilities. Recreational facilities, food services, and associated parking also contribute to the function of this district (DAF, 2015).

1.2.3 Mission Operations Complex District

The Mission Operations Complex District occupies 222 acres in the northeast corner of Creech AFB. This district supports airfield operations, industrial uses such as vehicle maintenance and storage, administrative duties, and medical space. An interior security fence reduces and restricts access to the Mission Operations Complex District for general Installation personnel. Within the interior security fence, various combat operations and combat support missions occur. Outside of the security fence, this district is home to the 432d Wing Headquarters and dining facility (DAF, 2015).

1.2.4 Munitions Storage Area District

The Munitions Storage Area District houses the Installation's storage igloos and munitions magazines. Located in the northwest corner of Creech AFB, Perimeter Road defines the southern boundary of the district, which is heavily industrial (DAF, 2015).

1.2.5 Southside Operations District

The Southside Operations District contains small administrative facilities that support the flying operations and training at Creech AFB. This district also contains maintenance and associated maintenance yard areas for aircraft (DAF, 2015).

1.2.6 T-Shirt District

The 80-acre T-Shirt District of Creech AFB, located south of US-95, was once used as Creech AFB housing. Housing facilities within the T-Shirt District have since been demolished and the district lies mostly vacant; no Creech AFB housing exists, and most personnel live in northwest Las Vegas or on Nellis AFB in unaccompanied housing (DAF, 2015).

1.2.7 Off-Base Support Operations District

The Off-Base Support Operation District does not occur within the boundaries of Creech AFB but rather represents an opportunity for future partnerships with surrounding parts of the Las Vegas metropolitan area (DAF, 2015). The Proposed Action would not occur in the Off-Base Support Operation District; therefore, this EA does not discuss this district further.

1.3 PURPOSE AND NEED

The purpose of the Proposed Action is to support Creech AFB's current and future mission of RPA employment and Aircrew training. The Proposed Action would ensure the continued operational abilities of Creech AFB through the development of facilities and infrastructure supporting the training and flight programs.

The Proposed Action is needed to address deficiencies and degradation of the support facilities at Creech AFB. Left unchecked, deficiencies in facilities and infrastructure would degrade the Installation's ability to meet the DAF's current and future needs. Demolition of aging facilities, new facility construction, facility upgrades, facility repair and renovation, utilities upgrades, community facility upgrades, infrastructure improvement, recreational upgrades, natural infrastructure management projects, and strategic sustainability performance projects are all needed to continue to meet the mission requirements of the 432d Wing and 432d Air Expeditionary Wing at Creech AFB.

This EA evaluates 36 short-term (one- to five-year) installation development projects at Creech AFB identified through a collaborative planning process (DAF, 2019b). Individual purpose and need statements for the 36 projects are provided in Table 1-1 (**Appendix E**).

1.4 INTERGOVERNMENTAL COORDINATION, PUBLIC AND AGENCY PARTICIPATION

NEPA guidance includes public and agency review of information pertinent to a proposed action and alternatives. The DAF's compliance with the requirement for intergovernmental coordination and agency participation begins with the scoping¹ process. Accordingly, and per [Executive Order \(EO\) 12372](#), *Intergovernmental Review of Federal Programs*, the DAF notified federal, state, and local agencies and tribal governments with jurisdiction that could potentially be affected by the Proposed Action and Alternatives via written correspondence throughout the development of this EA. A mailing list of agencies the DAF coordinated with is included in **Appendix A**.

1.4.1 Government-to-Government Consultation

The *National Historic Preservation Act* ([54 USC §§ 300101–320101](#)) (NHPA) and its regulations at 36 CFR Part 800 direct federal agencies to consult with federally recognized Native American tribes when a proposed action or alternatives may have an effect on tribal lands or on properties of religious and cultural significance to a tribe. Consistent with the NHPA, [US Department of](#)

¹ Scoping is a process for determining the extent of issues to be addressed and analyzed in a NEPA document.

[Defense \(DoD\) Instruction \(DODI\) 4710.02](#), *DoD Interactions with Federally Recognized Tribes*, and [DAF Instruction \(DAFI\) 90-2002](#), *Air Force Interaction with Federally Recognized Tribes*, the DAF has invited federally recognized tribes that are historically affiliated with lands in the vicinity of the Proposed Action and Alternatives to consult on all proposed undertakings that have a potential to affect properties of cultural, historical, or religious significance to the tribes. The tribal consultation process is distinct from NEPA consultation and requires separate notification to all relevant tribes. The timelines for tribal consultation are also distinct from those of NEPA consultation. The Creech AFB point of contact for Native American tribes is the Installation Commander. The point of contact for consultation with the Tribal Historic Preservation Officer and the State Historic Preservation Officer (SHPO) is the Creech AFB Cultural Resources Manager. A sample of the outgoing correspondence to the tribes and all responses are included in **Appendix A**.

1.4.2 Agency Consultations and Coordination

Implementation of the Proposed Action involves coordination with several organizations and agencies. Compliance with Section 7 of the *Endangered Species Act of 1973*, as amended ([16 USC § 1531](#) et seq.) (ESA), and implementing regulations ([50 CFR Part 402](#)), requires communication with the US Fish and Wildlife Service (USFWS) and/or National Oceanic and Atmospheric Administration National Marine Fisheries Service in cases where a federal action could affect listed threatened or endangered species, species proposed for listing, or candidates for listing. The primary focus of this coordination is to request a determination of whether any of these species occurs in the proposal area. If any protected species is present, a determination would be made of any potential adverse effects on the species. Should no species protected by the ESA be affected by the Proposed Action or Alternatives, no additional consultation would be required. Because of the location of the Creech AFB, USFWS is the appropriate consulting organization for the Proposed Action. The DAF's determination is described in detail in **Section 3.8.3**.

On 14 December 2023, the DAF initiated Section 7 consultation under the ESA for the Proposed Action using the USFWS's Information for Planning and Consultation (IPaC) tool. Basic information concerning the location and nature of the projects included in the Proposed Action was input into IPaC to obtain an official species list from the USFWS. The list identifies threatened and endangered species and other protected species (e.g., migratory birds) with potential to be affected by the Proposed Action. This information is included in **Appendix A** and incorporated into this EA where applicable.

The DAF coordinated with the following state agencies regarding potential effects from the Proposed Action and Alternatives.

- NHPA Section 106 compliance – SHPO and implementing regulations (36 CFR Part 800)
- Air and water quality effects – Nevada Department of Conservation and Natural Resources, Division of Environmental Protection (NDEP)
- Habitat and species of concern – Nevada Department of Wildlife (NDOW), Nevada Department of Conservation and Natural Resources

Finally, notice of the Proposed Action and Alternatives was provided to elected officials that represent the state at the federal and local levels. A sample of agency correspondence and all responses are included in **Appendix A**.

On 20 October 2025, the SHPO issued a determination that the DAF has no further Section 106 responsibilities for this undertaking. This determination fulfills the requirements for Section 106 consultation associated with the determinations made in **Section 3.9** of this EA (**Appendix A**). USFWS does not consult on determinations of “no effect.” As such, no USFWS concurrence was required.

1.5 PUBLIC AND AGENCY REVIEW

The DAF invited the public and other interested stakeholders to review and comment on the Draft EA. Accordingly, a notice of availability of the Draft EA and Draft FONSI was published on 7 and 8 February 2025 in the *Las Vegas Review Journal* to commence a 30-day public comment period (**Appendix B**).

The public comment period of the Draft EA and Draft FONSI concluded on 8 March 2025. During the public comment period, the Draft EA and Draft FONSI were available online for view or download at <https://www.creech.af.mil/>. Additionally, printed copies of the Draft EA and Draft FONSI were available at the following area libraries for review:

- Centennial Hills Library
- Indian Springs Library

The DAF received comments on the Draft EA from the USEPA, USFWS, and Nevada SHPO. These comments are addressed in **Sections 3.7.3.2, 3.8.3.2, 3.9, and 3.12.3.2** of this Final EA. Complete comment documents are included in **Appendix A**.

1.6 DECISION TO BE MADE

This EA analyzes the potential environmental consequences of the Proposed Action and Alternatives. The Proposed Action involves demolition of aging facilities, new facility construction, facility upgrades, facility repair and renovation, utilities upgrades, community facility upgrades, infrastructure improvement, recreational upgrades, natural infrastructure management projects, and strategic sustainability performance projects. Should the DAF choose to implement the Proposed Action, this EA will assist in determining an appropriate scope of action to minimize potential adverse environmental impacts and allow for additional, project-specific environmental review in compliance with NEPA.

Based on the analysis in this EA, the DAF will make one of three decisions regarding the Proposed Action:

- 1) Choose to implement one of the alternatives and sign a FONSI, allowing implementation of the Preferred Alternative;
- 2) Initiate preparation of an EIS if it is determined that implementation of the Proposed Action and Alternatives would cause significant impacts to the human and natural environment;
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.

Should the DAF decide to implement the Proposed Action as noted above, this EA will identify any actions the DAF will commit to undertake to minimize environmental effects and comply with NEPA.

1.7 SCOPE OF THE ENVIRONMENTAL ASSESSMENT

This EA evaluates the potential environmental consequences of implementing the Proposed Action and Alternatives for installation development projects at Creech AFB. This EA has been prepared in accordance with NEPA and DoD NEPA implementing procedures. NEPA is the basic national requirement for identifying environmental consequences of federal decisions. NEPA ensures that environmental information, including the anticipated environmental consequences of a proposed action, is available to the public, federal and state agencies, and the decision-maker before decisions are made and before actions are taken.

NEPA requires federal agencies to consider alternatives to the Proposed Action and to analyze potential impacts of alternative actions. Potential impacts of the Proposed Action and Alternatives described in this EA will be assessed in accordance with federal regulations, which require that federal agencies analyze the potentially affected environment and degree of the effects of the action.

1.8 APPLICABLE LAWS AND ENVIRONMENTAL REGULATIONS

Other laws and regulations applicable to the Proposed Action include, but are not limited to, the following:

- *Clean Water Act* (33 USC § 1251 et seq.) (CWA)
- Resource Conservation and Recovery Act (42 USC § 6901 et seq.) (RCRA)
- Section 438 of the *Energy Independence and Security Act* (Public Law 110-140)
- Comprehensive Environmental Response, Compensation, and Liability Act (42 USC § 9601 et seq.) (CERCLA)
- Federal *Clean Air Act* (42 USC § 7401 et seq., as amended) (CAA)
- *Migratory Bird Treaty Act* (16 USC § 703–312) (MBTA)
- *Toxic Substances Control Act* (15 USC § 2601 et seq.) (TSCA)
- EO 13045, Protection of Children from Environmental Health Risks and Safety Risks (1997), as amended by EO 13296 (2003)

CHAPTER 2 DESCRIPTION OF THE PROPOSED ACTION AND ALTERNATIVES

2.1 INTRODUCTION

The installation development projects included as part of the Proposed Action were selected based on current and future needs at Creech AFB identified through the installation planning process, as required by [DAFI 32-1015](#), *Integrated Installation Planning*. Each of the proposed projects would support the overall purpose and need for installation development as outlined in **Section 1.3**.

2.2 DESCRIPTION OF THE PROPOSED ACTION

The Proposed Action would incorporate the planning considerations addressed in Creech AFB planning documents. For example, the Proposed Action would adhere to project-specific development standards, including land use constraints for siting the new facilities, and regulate design parameters such as height, scale, and orientation.

Creech AFB proposes to implement 36 short-term development projects, including demolition of aging facilities, new facility construction, facility upgrades, facility repair and renovation, utilities upgrades, community facility upgrades, infrastructure improvement, recreational upgrades, natural infrastructure management projects, and strategic sustainability performance projects to be completed or implemented over approximately five years (FY 2026–2031). This EA describes the scope, location, and objectives of each project under the Proposed Action, grouped by project type (i.e., construction, demolition, infrastructure) and provides details of projects under the Proposed Action (**Table 1-1, Appendix E**). The projects may occur in multiple districts where noted; however, they are presented under the district in which they primarily occur. Of particular note, Project C11 involves three alternative sites. **Figure 2-1, Appendix D** depicts the locations of the proposed projects.

2.3 SELECTIONS STANDARDS FOR ALTERNATIVE SCREENING

The DAF established selection standards as a means for determining the reasonableness of an alternative to the Proposed Action and whether an alternative should be carried forward for further analysis in the EA. Potential alternatives to the Proposed Action were evaluated based on universal selection standards, which were applied to all alternatives. The following selection standards meet the purpose of and need for the Proposed Action and were used to identify reasonable alternatives for analysis in the EA:

- 1) Remedy facilities and infrastructure deficiencies to adequately support the training and flight programs at Creech AFB.
- 2) Meet the mission requirements of the 432d Wing and 432d Air Expeditionary Wing at Creech AFB by deconflicting current and future planned facility siting, accommodating adequate facility size, and providing compliance with airfield safety standards. Be consistent with land use requirements, antiterrorism/force protection standards, and planning concepts as defined in the ADP for the Mission Operations Complex District.
- 3) Ability to be completed within a five-year period (approximately FY 2026–2031)
- 4) Comply with airfield operations security requirements and operational safety standards.

- 5) Comply with federal and DAF mandates for sustainable design and development by reducing the number of unused buildings, consolidating where appropriate, and maximizing the use of each facility.

Based on the selection standards, several alternatives for the components of the Proposed Action were eliminated from detailed analysis in this EA. A discussion of alternatives eliminated from detailed analysis is provided in **Section 2.5**.

2.4 ALTERNATIVES

NEPA mandates the consideration of reasonable alternatives to the Proposed Action. “Reasonable alternatives” are those that could also be utilized to meet the purpose of and need for the Proposed Action. Alternatives were considered for each of the proposed projects. The DAF uses several guidelines and instructions in determining the best approach for construction, renovation, and demolition. [Air Force Instruction \(AFI\) 32-1023](#), *Designing and Constructing Military Construction Projects*, implements [DAF Policy Directive 32-10](#), *Installations and Facilities*, and Military Standard 3007F, *Standard Practice for Unified Facilities Criteria and Unified Facilities Guide Specifications*. AFI 32-1023 provides general design criteria and standards and information on design and construction management. This document provides guidance governing DAF military construction projects. [DAF Manual \(DAFMAN\) 32-1084](#), *Standard Facility Requirements*, supplements AFI 32-1084, *Standard Facility Requirements*, and provides guidance for determining space allocations for DAF facilities and may be used to program new facilities or evaluate existing spaces.

The NEPA process is intended to support flexible, informed decision-making; the analysis provided by this EA and feedback from stakeholders will inform decisions made about whether, when, and how to execute the Proposed Action. Among the alternatives evaluated for each project is a No Action Alternative, which evaluates the potential consequences of not undertaking the Proposed Action and serves to establish a comparative baseline for analysis.

This section presents reasonable alternatives for projects where multiple, viable courses of action exist. Each alternative is assessed relative to the selection standards (see **Section 2.3**). Each of the alternatives would include implementation of each of the projects listed in **Table 2-1, Appendix E** and outlined in **Section 2.2**; only the project location for Project C11, installation of solar and battery systems, would change under the alternatives.

2.4.1 Alternative 1

Under Alternative 1, all proposed projects would meet the selection standards listed in **Section 2.3**, would increase operational efficiencies and sustainable development, and improve quality of life. Under Alternative 1, Project C11, installation of solar and battery systems, would be constructed on **Site A** within the Mission Operations Complex District (**Figure 2-1, Appendix D**).

2.4.2 Alternative 2

As under Alternative 1, all proposed projects under Alternative 2 would meet the selection standards listed in **Section 2.3**, would increase operational efficiencies and sustainable development, and improve quality of life. Under Alternative 2, Project C11 would be constructed on **Site B** within the Community Support District (**Figure 2-1, Appendix D**).

2.4.3 Alternative 3

As under Alternative 1, all proposed projects under Alternative 3 would meet the selection standards listed in **Section 2.3**, would increase operational efficiencies and sustainable development, and improve quality of life. Under Alternative 3, Project C11 would be constructed on **Site C** within the Community Support District (**Figure 2-1, Appendix D**).

2.5 ALTERNATIVES CONSIDERED BUT ELIMINATED FROM FURTHER ANALYSIS

Eight additional alternatives were considered for the location of Project C11. Six of these proposed locations—Sites C1, C2, C3, C4, G2, and G4—are in the northeastern corner of the Installation in the Community Support District and Mission Operations Complex District. Sites C1, C2, C3, and C4 were eliminated from further consideration by Installation leadership due to insufficient size; Sites G2 and G4 were chosen as the preferred locations for other facilities. Sites G6 and G7 are located in the southern portion of the Installation within the Airfield District and Southside Operations District, respectively. Site G6 was eliminated from consideration because it is within the accident potential zone (APZ) for the southwest-northeast flight path; Site G7 was eliminated because it is reserved for future use of airfield facilities. The alternatives considered but eliminated from further analysis do not meet selection standards to support current and future 432d Wing and 432 Air Expeditionary Wing mission standards (Selection Standards 1 and 2), airfield operations security requirements and operational safety standards (Selection Standard 4), nor do they comply with federal and DAF mandates for sustainable design and development (Selection Standard 5), as described in **Section 2.3**.

A parallel runway was considered for Project C1 but was dismissed due to the need for aircraft to successfully taxi from the runway. Currently, and with a parallel runway, aircraft would need to back-taxi on the runway, which would cause delays to aircraft traffic. This alternative does not meet selection standards for airfield operations safety standards (Selection Standard 4) or sustainable design and development (Selection Standard 5).

The remaining 35 projects were determined to have no other practicable alternatives, and the analysis in this EA considers either implementation or no action.

2.6 ALTERNATIVES RETAINED FOR DETAILED ANALYSIS

Because the installation development projects under the Proposed Action are products of the IDP and ADP planning processes, the alternatives screening and evaluation processes for each of these planning documents are applicable to this EA. As described above and in **Chapter 3**, where appropriate, Alternatives 1, 2, and 3 are retained for detailed analysis for each of the components of the Proposed Action, as well as the No Action Alternative. Project details for each project included under the Proposed Action would remain the same across all alternatives; only the location of Project C11 would change. Therefore, proposed Sites A, B, and C for Project C11 are retained for detailed analysis under Alternatives 1, 2, and 3, respectively.

2.6.1 No Action Alternative

Under the No Action Alternative, the DAF would not implement the proposed installation development projects and Creech AFB would continue to operate under current conditions. The facility and infrastructure assets of Creech AFB would continue to degrade. Infrastructure would not be maintained or improved to support the growing mission requirements. In the short term, military training and operations would continue at Creech AFB in accordance with the status quo.

Over time, the mission support capabilities of the Installation would diminish along with its ability to support the future missions and requirements of the 432d Wing and 432d Air Expeditionary Wing.

While the No Action Alternative would not satisfy the purpose of and need for the Proposed Action, this alternative is retained to provide a comparative baseline against which to analyze the effects of the Proposed Action. The No Action Alternative reflects the status quo and serves as a benchmark against which the effects of the Proposed Action can be evaluated.

2.7 SUMMARY OF ENVIRONMENTAL CONSEQUENCES

The potential impacts under the Proposed Action and the No Action Alternative are summarized in **Table 2-1, Appendix E**. The summary is based on information discussed in detail in **Chapter 3** of this EA and includes a concise definition of the issues addressed and the potential environmental impacts associated with each alternative.

CHAPTER 3 EXISTING CONDITIONS AND ENVIRONMENTAL CONSEQUENCES

3.1 FRAMEWORK FOR ANALYSIS

To provide a framework for the analyses in this EA, the DAF defined a study area specific to each resource or sub-resource area. Referred to as a Region of Influence (ROI), these areas delineate a boundary where possible effects from the considered alternatives would have a reasonable likelihood to occur. Beyond these ROIs, potential adverse effects on resources would not be anticipated. For the purposes of analysis, potential effects are described as follows:

- **Beneficial** – positive effects that improve or enhance resource conditions
- **Adverse** – negative or harmful results
- **Negligible** – effects likely to occur but at levels not readily observable by evaluation
- **Minor** – observable, measurable, tangible effects qualified as below one or more significance threshold(s)
- **Moderate** – tangible effects that are readily apparent, qualified as below one or more significance threshold(s)
- **Significant** – obvious, observable, verifiable effects qualified as above one or more significance threshold(s); not mitigable to below significance

When relevant to the analyses in this EA, potential effects are further defined as direct or indirect; short- or long-term; and temporary, intermittent, or permanent.

To determine the potential for “significant” effects under the Proposed Action, the DAF defined impact thresholds to support the analyses in this EA. Based upon the nature of the Proposed Action and the affected environment, both qualitative and quantitative thresholds were used as benchmarks to qualify effects. Further, each resource analysis section (i.e., **Sections 3.4–3.14**) concludes with an analysis of reasonably foreseeable effects that considers the effects of the Proposed Action when combined with other past, present, and reasonably foreseeable actions near Creech AFB. **Table 3-1, Appendix E** summarizes past, present, and reasonably foreseeable planned actions at Creech AFB.

3.2 RESOURCES CONSIDERED BUT ELIMINATED FROM DETAILED ANALYSIS

The DAF considered but eliminated from further analysis the following environmental resource area for the stated reason:

- **Visual Resources** – The Proposed Action would result in no changes to the current visual landscape of Creech AFB or surrounding areas.

3.3 RESOURCES CARRIED FORWARD FOR DETAILED ANALYSIS

Based on the results of internal and external scoping (see **Section 1.4**), the following resources were carried forward for analysis: land use, earth resources, air quality, water resources, biological/natural resources, cultural resources, infrastructure/utilities (including transportation), noise/acoustic environment, hazardous materials and waste, safety and occupational health, and socioeconomics.

3.4 LAND USE

3.4.1 Definition of the Resource

Land use is the natural or developed condition of a given parcel of land or area and the type of functions and structures it supports. Land use designations vary by jurisdiction, but common terms include residential, commercial, industrial, agricultural, and recreational space. Land use is typically guided and regulated by management plans, policies, regulations, and ordinances that determine the type and extent of land use allowable in specific areas, including specially designated land uses or environmental conservation lands. Land use within Creech AFB is broadly classified and is generally described by using a district construct as described in **Section 1.2**, which are areas that contain common functions and types of operational activities.

The ROI for land use is Creech AFB.

3.4.2 Existing Conditions

Creech AFB occupies approximately 2,085 acres in Clark County, located in southern Nevada. The Installation is located 1 mile northwest of Indian Springs and is approximately 53 miles northwest of Nellis AFB. Creech AFB is generally organized into six planning districts based on mission function: the Airfield District, the Community Support District, the Mission Operations Complex District, Munitions Storage Area District, Southside Operations District, and the T-Shirt District. Several plans and programs guide Creech AFB's planning strategies within these districts to support the military mission. The function of each of these districts is described in **Section 1.2** and the locations of each district within the boundaries of Creech AFB are shown in **Figure 1-2, Appendix D** (DAF, 2015). Land surrounding the Installation to the north, east, and west is undeveloped. The land to the west of the Installation is owned by the BLM. The northern portion has been withdrawn for use by the DAF and is part of NTTR and the Desert National Wildlife Refuge. The land is currently undeveloped. The southern portion remains BLM-owned land (DAF, 2022a). The town of Indian Springs is located south of the main Installation, across US-95 and east of the Installation's T-Shirt District.

3.4.3 Environmental Consequences

3.4.3.1 Evaluation Criteria

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

- is inconsistent or noncompliant with mandatory land use requirements,
- precludes the viability of existing land use,
- precludes continued use or occupation of an area,
- is incompatible with adjacent land use to the extent that public health or safety is threatened, or
- conflicts with planning criteria established to ensure the safety and protection of human life and property.

3.4.3.2 Alternative 1

Under Alternative 1, 34 of the proposed projects would occur within the districts. Projects C26 and C27 would be located along the western boundary of the Installation and would fall outside the boundary of the districts.

Projects C1–C9, I1, I2, I4, and I5 would occur within the Airfield District. Projects C1–C5 are related to airfield operations and maintenance, industrial, or light industrial use, all of which are compatible with current mission functions of this district. Projects C6–C9 are fencing projects and would not change the overall use of the district. Projects I1, I2, I4, and I5 would repair existing infrastructure and would not result in changes or modifications to current land use within the district.

Projects C9 and C10 would occur within the Community Support District. The north side of the electric loop associated with Project C9 would also cross through this district. The electrical loop would not change overall land use. Project C10, a Warrior Fitness Center, is compatible with current land use in this district.

Projects C11 (Site A) through C19 would occur within the Mission Operations Complex District. Project C11 (Site A), the installation of solar and battery systems, would be anticipated to occupy over 3,000,000 ft² (approximately 70 acres) of land within the district. The district contains mission functions that are similar to light industrial use, and the solar and battery system is compatible with those. Projects C12–C16 and C18 are all related to facility administrative use, which is compatible with current land use in this district. Project C17, replacing current ground data terminal (GDT) towers, would be industrial, which is compatible with current land use in the district. Project C19, constructing north flightline entry control point (ECP) barriers, is related to industrial or administrative use, both of which are compatible with current land use in the district.

Portions of Projects C6 and C9 and the entirety of Projects I3 and C20 would occur within the Munitions Storage Area District. Project C20, the construction of a munitions storage igloo, directly supports the overall function of the district. Project I3 would repair existing waterlines and supports the land use of this district and the overall mission of Creech AFB. While Projects C9 and C6 would cross through this district; neither project would impact the normal operations of this district.

Projects D1–D3, portions of D4 (B137), I4 and I5, C2, and C21–C25 would occur within the Southside Operations District. The remaining buildings associated with Project D4 (B404 and B406) would be located within the T-Shirt District. Projects C2 and C21–C25 involve the construction of administrative/operations and maintenance facilities, all of which are compatible with current land uses in the district. Projects I4 and I5 would repair existing waterlines and support the overall land use and the Creech AFB mission. Demolition projects D1–D4 would reduce the DAF footprint and consolidate facilities. As demolition projects, they would not introduce new structures within the district.

Projects C26 and C27 would occur on land not within a designated district. Project C26, installing a commercial vehicle inspection facility, would occur on previously undeveloped land and would require an easement to connect US-95 to the inspection facility. The easement would be located directly west of the western boundary of the Installation and would be parallel to the perimeter road. The land is owned by the BLM but has been withdrawn for military use as part of the NTTR. Project C26 is not anticipated to result in changes to land use. Project C27, a northwest perimeter fence, would have no impact on land use.

Projects associated with Alternative 1 would not be anticipated to change or alter the existing land use. Alternative 1 is compatible and consistent with existing and future Installation land use planning guidance as identified in the Creech AFB IDP and ADP; therefore, no adverse impacts to land use would occur (DAF, 2015, 2019b).

3.4.3.3 Alternative 2

Under Alternative 2, all project locations would remain the same as under Alternative 1 apart from Project C11, which would occur in an adjacent location within the Community Support District (Site B). Project C11 is the installation of cybersecure microgrid solar and battery systems and supports the continued mission of the Community Support District and Creech AFB. While the goal was to create an area dedicated to the community support function, the Creech AFB IDP and ADP are guides only and do not restrict land use within Creech AFB. They are living documents. With approval of the Creech AFB Facilities Board and Installation Commander, Project C11 may be sited in the area that was a notional Community Support District. Project C11 does not preclude the viability of existing land use or continued use or occupation of the area. It is also not incompatible with adjacent land use to the extent that public health, the protection of human life and property, or safety is threatened. Upon approval for Project C11, Alternative 2 would comply with, and be consistent with, existing and future Installation land use requirements; therefore, no adverse impacts to land use would occur (DAF, 2015, 2019b).

3.4.3.4 Alternative 3

Under Alternative 3, all project locations would remain the same as under Alternative 1 apart from Project C11, which would occur in an adjacent location within the Community Support District (Site C). Project C11 is the installation of cybersecure microgrid solar and battery systems and supports the continued mission of the Community Support District and Creech AFB. While the goal was to create an area dedicated to the Community Support mission function, the Creech AFB IDP and ADP are guides only and do not restrict land use within Creech AFB. They are living documents. With approval of the Creech AFB Facility Board and Installation Commander, Project C11 may be sited in the area that was a notional Community Support District. Project C11 does not preclude the viability of existing land use or continued use or occupation of the area. It is also not incompatible with adjacent land use to the extent that public health, the protection of human life and property, or safety is threatened. Upon approval for Project C11, Alternative 3 would comply with, and be consistent with, existing and future Installation land use requirements; therefore, no adverse impacts to land use would occur (DAF, 2015, 2019b).

3.4.3.5 Reasonably Foreseeable Actions and Impacts

The Proposed Action Alternatives would not result in changes to land use within the ROI. Other actions defined in **Table 3-1, Appendix E**, would not occur within the boundaries of Creech AFB and would not have the potential to cause impacts to land use on the Installation. The BLM solar project would have the potential to impact approximately 5,000 acres of vacant land that would be used to construct a new solar farm southwest of Creech AFB, near Indian Springs, Nevada. The Interstate 11 (I-11) feasibility study is currently reviewing alternatives, one of which would result in construction of a bypass around Indian Springs, which would have the potential to permanently change the current access to the Installation and adjacent land use. However, this project is still in its feasibility stage and there is no development planned. The High Desert State Prison and Southern Desert Correctional projects would not impact existing or future Installation land uses, as they would occur outside the boundaries of Creech AFB. When considered in conjunction with

the effects of other past, present, and reasonably foreseeable actions at Creech AFB, no significant reasonably foreseeable impacts to land use would be anticipated to occur with implementation of the Proposed Action.

3.4.3.6 No Action Alternative

Under the No Action Alternative, the DAF would not implement the 36 proposed Installation development projects. Development of facilities and infrastructure that would support the training and flight programs would not take place. Creech AFB would continue to operate under current conditions, facilities would continue to degrade, and no change to land use at Creech AFB would be expected to occur beyond baseline conditions.

3.5 EARTH RESOURCES

3.5.1 Definition of the Resource

Earth resources include geology, topography, and soils. Geology refers to the structure and configuration of the earth's surface and subsurface features. Characteristics of geology include geomorphology, subsurface rock types, and structural elements. Topography refers to the shape, height, and position of the land surface. Soil refers to the unconsolidated materials overlying bedrock or other parent material. Soils are defined by their composition, slope, and physical characteristics. Attributes of soil, such as elasticity, load-bearing capacity, shrink-swell potential, and erodibility determine its suitability to support a particular land use.

Prime farmland, as defined by the United States Department of Agriculture in the *Farmland Protection Policy Act* ([7 USC §§ 4201–4209](#)), is land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops, and is available for these uses.

The ROI for this resource is Creech AFB.

3.5.2 Existing Conditions

3.5.2.1 Geology

Creech AFB is located within the Mojave Desert ecosystem of the Basin and Range physiographic province, which is characterized by a series of mountain ranges that trend north to south and broad desert basins that stretch from southeast Oregon into Mexico. The geologic formations found on the Installation consist of Paleozoic sedimentary rock with no significant landforms. Mountainous terrain consisting of Paleozoic carbonate rock surrounds the Installation to the northwest, northeast, and south. The valleys in this area contain thick deposits of alluvium, i.e., clay, silt, sand, and gravel left behind by running water, that originated from the adjacent mountain ranges. Several inactive fault lines are located in and around the Installation, signifying the area as a “moderate risk” for a major earthquake event (DAF, 2023a).

3.5.2.2 Topography

Creech AFB is located within a basin with relatively flat topography, with elevations ranging from approximately 3,100 ft above mean seal level to approximately 3,200 ft above mean sea level (US Geological Survey, 2021). The average elevation on the Installation is approximately 3,110 ft above mean sea level. There are no notable landforms within the boundary of the Installation that would contribute to substantial differences in elevation (DAF, 2023a).

3.5.2.3 Soils

Soil surveys were conducted to the south of the Creech AFB, as well as on a small portion of the southwestern part of the Installation that sits parallel to US-95. The soils surveyed were found to consist primarily of Corncreek-Haymont association. These soils are characterized by slopes of two to eight percent and are classified as well drained with low runoff potential. The susceptibility to compaction rating is “low,” meaning the soil in the region can support standard equipment and development (US Department of Agriculture [USDA], 2024a). While the remainder of Creech AFB has not been surveyed for soil composition, it can be assumed, based on regional topography and soils, that the remaining areas are likely to exhibit characteristics similar to those of the Corncreek-Haymont association found on and directly south of the Installation, and would be able to support further development on the Installation.

3.5.2.4 Prime Farmland

There are no prime farmland soils located within Creech AFB. Additionally, and in accordance with Section 1540I(1) of the *Farmland Protection Policy Act*, “farmland” does not include land already in or committed to urban development; these areas would not be subject to the Act (USDA, 2024b). Therefore, prime farmland is not carried forward for analysis in this EA.

3.5.3 Environmental Consequences

3.5.3.1 Evaluation Criteria

Evaluation criteria for potential impacts on geological resources are based on the following:

- substantial alteration of unique or valued geologic or topographic conditions;
- substantial soil erosion, sedimentation, and/or loss of natural function (e.g., compaction); and
- development on soils with characteristics that do not support the intended land use.

3.5.3.2 Alternative 1

Geology

Implementation of the projects under Alternative 1 would involve basic earthwork including compacting and excavating to establish structural foundations, bury utilities, and repair existing lines. This basic earthwork would not have the potential to disturb the underlying geology at Creech AFB or to result in adverse impacts to geological resources.

Topography

Implementation of Alternative 1 would not result in large-scale alteration to the topography of Creech AFB. The alteration of ground surfaces would be limited to basic earthwork including compacting and excavating to establish structural foundations, bury utilities, and repair existing lines. After placing and compacting fill soils, superficial soils would be graded to match the local topography to maintain efficient drainage. Alternative 1 would have negligible, short-term, adverse impacts to topography.

Soils

Implementation of Alternative 1 would disturb approximately 4,000,000 ft² (approximately 93 acres) of land. Creech AFB would obtain an NDEP Surface Area Disturbance permit, which is required for all projects not related to agriculture that would disturb more than 5 acres of area (i.e., Projects C1 and C11). Creech AFB also would need to obtain a Clark County Dust Control

Operating Permit, which is required for soil-disturbing or construction activities that exceed 0.25 acre in overall area (i.e., Projects C1–C3, C6–C15, C19, C22, C24, C25, C27, I1–I3, and D2–D4). The Installation would follow all requirements and soil management techniques outlined in these permits to minimize impacts to soils to the greatest extent practicable (NDEP, 2023; Clark County, 2023). Additionally, based on the soil characteristics, it is assumed that soils on Creech AFB would be capable of supporting the proposed future development and construction. With adherence to all applicable guidelines and best management practices (BMPs) outlined in the required permits and considering the characteristics of the soils, Alternative 1 would have moderate, short-term, adverse impacts to soils.

3.5.3.3 Alternative 2

There would be no difference in the amount of ground disturbance associated with Alternative 2 of the Proposed Action, when compared to Alternative 1. Therefore, potential impacts to geology, topography, and soils would be anticipated to be the same as under Alternative 1.

3.5.3.4 Alternative 3

There would be no difference in the amount of ground disturbance associated with Alternative 3 of the Proposed Action, when compared to Alternative 1. Therefore, potential impacts to geology, topography, and soils would be anticipated to be the same as under Alternative 1.

3.5.3.5 Reasonably Foreseeable Actions and Impacts

When combined with projects identified in **Table 3-1, Appendix E**, implementation of the Proposed Action Alternatives would result in minor, short-term impacts to earth resources. The I-11 feasibility study is currently reviewing alternatives, one of which would result in construction of a bypass around Indian Springs, Nevada, which would have the potential to permanently change the geology, topography, and soils in this vicinity by adding new road pavements. However, this project is still in its feasibility stage, and there is no development planned. The Indian Springs School projects would replace existing facilities on a previously developed 37.2-acre parcel; this project would not change geology, topography, or soils in the area. The BLM solar, the High Desert State Prison, and the Southern Desert Correctional projects would disturb soil for fencing and underground piping replacements. Nevada general permitting rules for ground disturbance from any such future construction actions would be managed on a project-level basis. When considered in conjunction with the effects of other past, present, and reasonably foreseeable actions at Creech AFB, no significant reasonably foreseeable impacts to geology, topography, and soils would be anticipated to occur with implementation of the Proposed Action.

3.5.3.6 No Action Alternative

Under the No Action Alternative, the DAF would not implement the 36 proposed Installation development projects. Development of facilities and infrastructure that would support the training and flight programs would not take place. Creech AFB would continue to operate under current conditions, facilities would continue to degrade, and no change to earth resources at Creech AFB would be expected to occur beyond baseline conditions.

3.6 AIR QUALITY

3.6.1 Definition of the Resource

Air pollution is a threat to human health and damages trees, crops, other plants, waterbodies, and animals. It creates haze or smog that reduces visibility in national parks and cities and interferes

with aviation. To improve air quality and reduce air pollution, Congress passed the CAA and its amendments in 1970 and 1990, which set regulatory limits on air pollutants and help to ensure basic health and environmental protection from air pollution.

The US Environmental Protection Agency (USEPA) has divided the country into geographical regions known as air quality control regions to evaluate compliance with the National Ambient Air Quality Standards (NAAQS). Creech AFB is located in Clark County, Nevada, which is in the Las Vegas Intrastate Air Quality Control Region (LVIAQCR) ([40 CFR § 81.80](#)) and serves as the ROI for the projects within Creech AFB.

3.6.1.1 Criteria Pollutants

In accordance with CAA requirements, the air quality in each region is measured by the concentration of various pollutants in the atmosphere. Measurements of these “criteria pollutants” in ambient air are expressed in units of parts per million (ppm) or in units of micrograms per cubic meter.

The CAA directed the USEPA to develop, implement, and enforce environmental regulations that would ensure clean and healthy ambient air quality. To protect public health and welfare, the USEPA developed numerical concentration-based standards (i.e., NAAQS) for pollutants that have been determined to impact human health and the environment and established both primary and secondary NAAQS under the provisions of the CAA (**Table 3-2, Appendix E**). The primary NAAQS represent maximum levels of background air pollution that are considered safe, with an adequate margin of safety to protect public health. Secondary NAAQS represent the maximum pollutant concentration allowable for the protection of vegetation, crops, and other public resources in addition to maintaining visibility standards.

Ozone is not usually emitted directly into the air but is formed in the atmosphere by photochemical reactions involving sunlight and previously emitted pollutants, or “ozone precursors.” These ozone precursors consist primarily of nitrogen oxides and volatile organic compounds that are directly emitted from a wide range of emission sources. For this reason, regulatory agencies limit atmospheric ozone concentrations by controlling volatile organic compound pollutants (also identified as reactive organic gases) and nitrogen oxides.

3.6.1.2 General Conformity and Attainment

When a region or area meets NAAQS for a criteria pollutant, that region or area is classified as in “attainment” for that pollutant. When a region or area fails to meet NAAQS for a criteria pollutant, that region or area is classified as “nonattainment” for that pollutant. In cases of nonattainment, the affected state, territory, or local agency must develop a state implementation plan for USEPA review and approval. The state implementation plan is an enforceable plan developed at the state level that lays out a pathway for how the state would comply with air quality standards. If air quality improves in a region that is classified as nonattainment, and the improvement results in the region meeting the criteria for classification as attainment, then that region is reclassified as a “maintenance” area.

Under the CAA, the General Conformity Rule requires proposed federal agency activities in designated nonattainment or maintenance areas (i.e., attainment areas reclassified from a prior nonattainment designation) to demonstrate conformity with the state implementation plan for attainment of NAAQS. Agencies are required to show that the net change in emissions from a

federal proposed action would be below applicable *de minimis* threshold levels (i.e., so minor as to merit disregard).

3.6.1.3 New Source Review

Per the CAA, the USEPA’s Prevention of Significant Deterioration (PSD) New Source Review permit program regulates criteria and certain non-criteria air pollutants for air quality control regions designated as unclassified or in attainment status with respect to the federal standards. In such areas, a PSD review is required for new “major source” or “major modification of existing source” emissions that exceed 100 or 250 tons per year (tpy) of a regulated CAA pollutant, dependent on the type of major stationary source. For “minor source” emissions, a PSD review is required if a project increases a “major source” threshold.

3.6.1.4 Greenhouse Gases

Greenhouse gases (GHGs) are gases that trap heat in the atmosphere. These emissions are generated by both natural processes and human activities. The accumulation of GHGs in the atmosphere helps regulate the earth’s temperature. GHGs include water vapor, carbon dioxide, methane, nitrous oxide, ozone, and several hydrocarbons and chlorofluorocarbons. Each GHG has an estimated global warming potential, which is a function of its atmospheric lifetime and its ability to absorb and radiate infrared energy emitted from the earth’s surface. The global warming potential of a particular gas provides a relative basis for calculating its carbon dioxide-equivalent (CO₂e) or the amount of CO₂e to the emissions of that gas. Carbon dioxide has a global warming potential of 1 and is therefore the standard by which all other GHGs are measured. The GHGs are multiplied by their global warming potential, and the resulting values are added together to estimate the total CO₂e.

The USEPA regulates GHG primarily through a permitting program known as the GHG Tailoring Rule. This rule applies to GHG emissions from larger stationary sources. Additionally, the USEPA promulgated a rule for large GHG emission stationary sources, fuel and industrial gas suppliers, and carbon dioxide injection sites if they emit 25,000 metric tons or more of CO₂e per year ([40 CFR § 98.2\(a\)\(2\)](#)). The Air Force, however, has adopted the PSD threshold for GHG of 75,000 tpy of CO₂e as an indicator or “threshold of insignificance” for NEPA air quality impacts in all areas. This indicator provides a threshold to identify actions that are insignificant or too trivial or minor to merit consideration. Actions with a net change in GHG (CO₂e) emissions below the PSD threshold are considered too insignificant on a global scale to warrant any further analysis. Actions with a net change in GHG (CO₂e) emissions above the PSD threshold are considered potentially significant and require further assessment to determine if the action poses a significant impact (Air Force Civil Engineer Center [AFCEC], 2023).

3.6.1.5 Operating Permits

The state of Nevada has adopted the federal NAAQS. A “source” is defined pursuant to [Nevada Revised Statute \(NRS\) 445B.155](#).

By authority of [NRS 445B.500](#), the Clark County Board of County Commissioners established the Department of Air Quality Management in 2001. The Department of Air Quality Management, which is now known as the Department of Environment and Sustainability, administers the air pollution control program for Clark County under provisions of the Clark County Air Quality Regulations. Permitting requirements for federal owners and operators are largely based on a “potential to emit,” defined as the maximum capacity of a stationary source to emit any air

pollutant under its physical and operational design or configuration. Calculations are used to determine whether a federal facility is defined as a “major source” under the CAA, requiring a Title V Operating Permit; however, some “non-major” or “minor source” federal owners or operators are subject to other stationary permitting requirements. Stationary source air permits, including [Title V](#) permits, are issued through [Department of Environment and Sustainability Permitting](#).

3.6.2 Existing Conditions

The LVIAQCR maintains the following designations for NAAQS (see [40 CFR § 81.329](#)):

- moderate nonattainment for the 2015 ozone NAAQS (as of 5 January 2023) for the portion of Clark County that lies in Hydrographic Area 212 (known as the Las Vegas Valley);
- maintenance/attainment for carbon monoxide and particulate matter less than or equal to 10 microns in diameter (PM₁₀) for the portion of Clark County that lies in Hydrographic Area 212; and
- unclassifiable/attainment for lead, nitrogen dioxide, sulfur dioxide, and particulate matter less than or equal to 2.5 microns in diameter (PM_{2.5}).

Creech AFB is outside of Hydrographic Area 212 and, therefore, is designated as unclassifiable/attainment for all NAAQS.

3.6.2.1 Air Emission Sources at Creech AFB

Mobile source emissions are generated by aircraft, vehicles, equipment, and other sources that move or have the potential to move from place to place. Aircraft emissions at Creech AFB are generated through the propulsion systems of RPAs. Vehicle emissions include both government- and privately owned vehicles. Equipment emissions come from forklifts, backhoes, tractors, and other onsite construction equipment. Aerospace ground equipment used to service aircraft includes generators, light carts, compressors, bomb lifts, hydraulic test stands, and other portable equipment required for aircraft operations.

3.6.2.2 Regional Climate

Nevada lies on the eastern side of the Sierra Nevada Mountain Range, which blocks moisture from the Pacific Ocean. Locally, average annual precipitation varies from 4 inches to more than 50 inches on high mountain peaks of the Sierra Nevada Mountains. The southern Nevada areas where Creech AFB resides vary from 0 to 15 inches of precipitation annually.

The regional climate of the Creech AFB area is semiarid desert with mild winters, hot summers, and low precipitation. The climate at Creech AFB is characterized by warm-to-hot spring, summer, and early fall temperatures (National Oceanic and Atmospheric Administration [NOAA], 2024). July is the hottest month, with an average daily high temperature of 104.9 degrees Fahrenheit (°F) and an average low temperature of 77.9°F. Average temperatures in spring, summer, and fall are 66.3°F (April), 91.4°F (July), and 69.5°F (October), respectively. Winter temperatures tend to be mild; December is the coolest month of the year, with an average daily high temperature of 58.5°F and an average low temperature of 36.8°F (NOAA, 2024).

Precipitation in the Creech AFB area occurs almost entirely in the form of rain. Creech AFB normally receives about 4.72 inches of precipitation annually, and extended periods of drought have been recorded (NOAA, 2024). Precipitation typically has seasonal peaks in winter and summer. Winter rains occur primarily in December, January, and February with an annual average

of 0.58, 0.55 and 0.79 inches, respectively. Winter rains originate from frontal systems that begin in the Pacific Ocean and move eastward across Nevada. Summer rains result from moisture moving into Nevada from Mexico, the Gulf of Mexico, and/or the Gulf of California. Summer rains or monsoons tend to be highly localized and result in brief, torrential downpours often accompanied by high winds and lightning, causing flooding and flows in otherwise dry stream channels.

3.6.3 Environmental Consequences

3.6.3.1 Evaluation Criteria and Methodology

The environmental impact methodology for air quality impacts presented in this EA is derived from [Air Force Manual \(AFMAN\) 32-7002](#), *Environmental Compliance and Pollution Prevention* (February 2020). The Proposed Action is broken down into basic units. For example, a basic development project that consists of replacing a building with a new building could be broken down into demolition (square feet [ft²]), grading (ft²), building construction (ft² and height), architectural coatings (ft²), and paving (ft²). These data are then input into the Air Force's Air Conformity Applicability Model (ACAM), which models emissions based on the inputs and estimates air emissions for each specific criteria and precursor pollutant, as defined in the NAAQS. The calculated emissions are then compared against the applicable threshold based on the attainment status of the ROI. If the annual net increase in emissions from the project are below the applicable thresholds, then the Proposed Action Alternatives are not considered significant and would not be subject to any further conformity determination. Assumptions of the model, methods, and detailed summary results are provided in **Appendix C** of this EA.

The LVIAQCR is in attainment for all NAAQS for the project area, which includes the portion of Clark County that lies outside of Hydrographic Area 212. Due to the attainment status; the 250 tpy PSD value is used for volatile organic compounds, nitrogen oxides, carbon monoxide, ammonia, PM_{2.5}, and PM₁₀. Additionally, due to the toxicity of lead, the use of the lead PSD threshold as an indicator of potential air quality impact insignificance is not protective of human health or the environment. Therefore, the *de minimis* value of 25 tpy is used instead. The Air Force has adopted a PSD value of 75,000 tpy (68,039 metric tons per year) for CO_{2e}. The following thresholds are applicable for the Proposed Action:

- 250 tpy PSD value for volatile organic compounds, nitrogen oxides, carbon monoxide, ammonia, PM_{2.5}, and PM₁₀
- 25 tpy *de minimis* value for lead
- 75,000 tpy PSD value for CO_{2e}

Assumptions

- For the purpose of the ACAM analysis, the demolition, construction, grading, and trenching activities are assumed to start and finish within the year they are scheduled. The area of grading is estimated to be 20-percent greater than the combined area of demolition and construction activities.

3.6.3.2 Alternative 1

Table 3-3, Appendix E summarizes the results of the ACAM analysis annualized over the course of implementation of Alternative 1 within the LVIAQCR. **Table 3-4, Appendix E** summarizes the highest annual ACAM emissions for each pollutant compared to their respective thresholds for Alternative 1 within the LVIAQCR.

The proposed projects under Alternative 1 include a significant amount of grading, construction, paving, trenching, and increased building heating. The years with the greatest air quality impacts include 2025, during which the solar and battery system would be installed (Project C11, Site A), and 2026, during which Taxiway Alpha would be extended (Project C1). The grading activities, in particular, would be expected to contribute significantly to the PM₁₀ emissions. The 2026 annual PM₁₀ emissions are anticipated to be approximately 19.709 tpy and the 2027 annual PM₁₀ emissions are anticipated to be approximately 138.943 tpy. However, these elevated PM₁₀ emissions would be below the applicable thresholds of significance. The highest air quality impacts are expected to be short term and related to construction. The steady-state (operational) impacts are anticipated to be very minor. For example, the steady-state PM₁₀ emissions are anticipated to be an additional 0.112 tpy annually over the current conditions.

Projects C1–C3, C6–C15, C19, C22, C24, C25, C27, I1–I13, and D2–D4 would require a Clark County Dust Control Operating Permit, which is required for soil disturbance or construction activity that exceeds 0.25 acre or trenching activity that exceeds 100 ft.

3.6.3.3 Alternative 2

The ACAM assumptions of grading area, construction area, and timeline for Project C11 (Site B) would be the same as under Alternative 1. As such, the results of the ACAM model for Alternative 2 are the same as Alternative 1. Elevated PM₁₀ emissions would be expected to occur during construction in 2026 and 2027 but are not anticipated to exceed the PSD threshold. The highest air quality impacts are expected to be short term and related to construction. The steady-state impacts are anticipated to be minor.

3.6.3.4 Alternative 3

The ACAM assumptions of grading area, construction area, and timeline for Project C11 (Site C) would be the same as under Alternative 1. As such, the results of the ACAM model for Alternative 3 are the same as Alternative 1. Elevated PM₁₀ emissions would be expected to occur during construction in 2026 and 2027 but are not anticipated to exceed the PSD threshold. The highest air quality impacts are expected to be short term and related to construction. The steady-state impacts would be minor.

3.6.3.5 Reasonably Foreseeable Actions and Impacts

Implementation of the Proposed Action Alternatives, when combined with the actions identified in **Table 3-1, Appendix E**, would be anticipated to have short-term, negligible-to-minor adverse impacts to air quality. The BLM solar project, I-11 feasibility study, Indian Springs Schools project, the High Desert State Prison project, and the Southern Desert Correctional Center project would involve short-term construction and the use of earth-moving equipment. When considered in conjunction with the effects of other past, present, and reasonably foreseeable future actions at Creech AFB, no significant reasonably foreseeable impacts to air quality would be anticipated to occur with implementation of the Proposed Action.

3.6.3.6 No Action Alternative

Under the No Action Alternative, the DAF would not implement the 36 proposed Installation development projects. Development of facilities and infrastructure that would support the training and flight programs would not take place. Creech AFB would continue to operate under current conditions; fugitive dust emissions would not occur from construction, demolition, and renovation

of facilities; facilities would continue to degrade; and no change to air quality would be expected to occur beyond baseline conditions.

3.7 WATER RESOURCES

3.7.1 Definition of the Resource

Water resources include surface water, groundwater, stormwater, and floodplains. The *Federal Water Pollution Control Act of 1948*, as amended by the CWA, was enacted to protect water resources vulnerable to contamination and quality degradation. The CWA provides the authority to establish water quality standards, control discharges into surface and subsurface waters (including groundwater), develop waste treatment management plans and practices, and issue permits for discharges. A National Pollutant Discharge Elimination System (NPDES) permit under Section 402 of the CWA is required for discharges into navigable waters. The NDEP issues NPDES permits, with USEPA oversight. The NDEP also implements the CWA Section 401 state water quality certification program, providing the state of Nevada the opportunity to consider adverse water quality impacts accumulating on proposed federal activities.

The ROI for this resource is Creech AFB.

3.7.1.1 Surface Water

The USEPA defines surface waters as waters of the US, which are primarily lakes, rivers, estuaries, coastal waters, and wetlands. Jurisdictional waters, including surface water resources, as defined in [33 CFR § 328.3](#), are regulated under Sections 401 and 404 of the CWA and Section 10 of the *Rivers and Harbors Act*. Man-made features not directly associated with a natural drainage, such as upland stock ponds and irrigation canals, are generally not considered jurisdictional waters.

3.7.1.2 Stormwater

Stormwater is surface water runoff generated from precipitation and has the potential to introduce sediments and other pollutants into surface waters. Stormwater is regulated under the CWA Section 402 NPDES program. Impervious surfaces such as buildings, roads, parking lots, and even some natural soils increase surface runoff. Stormwater management systems are designed to contain runoff on site during construction and to maintain predevelopment stormwater flow characteristics following development through either the application of infiltration or retention practices. The *Energy Independence and Security Act* establishes stormwater design requirements for development and redevelopment projects. Under these requirements, federal facility projects larger than 5,000 ft² must maintain or restore, to the maximum extent feasible, the predevelopment hydrology of the property with respect to the water temperature, rate, volume, and duration of flow.

3.7.1.3 Groundwater

Groundwater is water that exists in the saturated zone beneath the earth's surface in pore spaces and fractures and includes aquifers. Groundwater is recharged through percolation of water on the ground's surface (e.g., precipitation and surface water bodies) and upward movement of water in lower aquifers through capillary movement. Groundwater is an essential resource that can be used for drinking, irrigation, and industrial processes, and can be described in terms of depth from the surface, aquifer or well capacity, water quality, recharge rate, and surrounding geologic formations. Groundwater quality and quantity are regulated under several different programs. The federal underground injection control regulations, authorized under the *Safe Drinking Water Act*

of 1974 ([Public Law 93-523](#); [42 USC 300f–300j](#)) require a permit for the discharge or disposal of fluids into a well. The federal sole source aquifer regulations, also authorized under the *Safe Drinking Water Act*, protect aquifers that are critical to water supply.

3.7.1.4 Floodplains

Floodplains are areas of low-level ground along rivers, stream channels, or coastal waters that provide a broad area to inundate and temporarily store floodwater. In their natural vegetated state, floodplains slow the rate at which the incoming overland flow reaches the main water body. Floodplains are subject to periodic or infrequent inundation due to rain or melting snow. The risk of flooding is influenced by local topography, the frequency of precipitation events, and the size and characteristics of the watershed upslope of the floodplain.

The Federal Emergency Management Agency (FEMA) evaluates and maps flood potential, which defines the 100-year (regulatory) floodplain. The 100-year floodplain is the area that has a one-percent annual chance of inundation by floodwater. FEMA uses letter designations for flood zone classification. Zone A designates 100-year floodplains where flood depths (base flood elevations) have not been calculated and further studies are needed. Zone AE floodplains include calculated base flood elevations. Base flood elevations are minimum elevation standards for buildings. Zone X indicates areas outside of the FEMA 100-year regulatory floodplain and indicate a low risk of flooding hazards (FEMA, 2023). Federal, state, and local regulations often limit floodplain development to passive uses, such as recreational and preservation activities, to reduce the risks to property and human health and safety.

[EO 11988](#), *Floodplain Management*, provides guidelines that agencies should carry out as part of their decision-making process on projects that have potential impacts to or within the floodplain. This EO requires that federal agencies avoid, to the extent possible, the long- and short-term adverse impacts associated with the occupancy and modification of floodplains and avoid direct and indirect support of floodplain development wherever there is a practicable alternative. [EO 13690](#), *Establishing a Flood Risk Management Standard and Process for Further Soliciting and Considering Stakeholder Input*, established a Federal Flood Risk Management Standard and a process for further soliciting and considering stakeholder input; however, this EO was later revoked by Section 6 of [EO 13807](#), *Establishing Discipline and Accountability in the Environmental Review and Permitting Process for Infrastructure*. EO 13807 did not revoke or otherwise alter EO 11988.

3.7.1.5 Wetlands

The CWA regulates discharges of pollutants in surface waters of the US. Section 404 of the CWA established a program to regulate the discharge of dredged and fill material into waters of the US, including wetlands. The United States Army Corps of Engineers (USACE) defines wetlands as “those areas that are inundated or saturated with ground or surface water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted to life in saturated soil conditions” (Environmental Laboratory, 1987). Wetlands generally include swamps, marshes, bogs, and similar areas ([33 CFR § 328.3](#)). Federal protection of wetlands is also promulgated under [EO 11990](#), *Protection of Wetlands*, the purpose of which is to reduce adverse impacts associated with the destruction or modification of wetlands. This EO directs federal agencies to provide leadership in minimizing the destruction, loss, or degradation of wetlands.

3.7.2 Existing Conditions

3.7.2.1 Surface Water

Creech AFB is located in an area characterized by low precipitation and sporadic, severe thunderstorms due to its semiarid climate. Creech AFB lies within the Indian Springs Valley basin, a contained basin that does not connect to waters of the US, and contributes to the southern portion of the Sand Springs-Tikaboo Watershed. The minor amounts of surface water located within the watershed occur in the form of ephemeral streams, alluvial fans, valley collectors, and dry lake beds or playa lakes. Within Creech AFB, ephemeral streams are located in the northern portions of the Installation. These streams originate north of the Installation and cross the Munitions Storage Area District, portions of the Mission Operations Complex and Community Support districts, and most of the unoccupied areas in the northwest corner of the Installation (**Figure 3-1, Appendix D**). The small quantity of precipitation that does occur is often lost to evaporation. Runoff from surrounding mountain snowpacks is also prone to evaporation, collecting and depositing salts and other materials in the area's playas and dry lake beds. Because of these salt and material deposits, vegetation is stunted. Surrounding Creech AFB, ephemeral streams exist only for hours or weeks, depending on the time of year (DAF, 2023a).

3.7.2.2 Stormwater

Creech AFB and the surrounding areas are prone to intense thunderstorms that can result in flash floods. Annually, these storms generate approximately 4.5 inches of precipitation, where most months receive 0 inches of rainfall (DAF, 2021). These waters are prone to evaporation but supply the area's ephemeral streams for limited amounts of time. Four stormwater inlets are located along the southern portion of the Installation with five outlets and one larger outfall located in the northern and northeastern portions of Creech AFB, respectively. Stormwater runoff within Creech AFB is diverted through the ephemeral streams and a series of unlined channels and either evaporates or discharges through the Installation's northeast outfall. The outfall diverts stormwater off the Installation and into the Indian Springs Valley dry playa to the north, where it evaporates and/or contributes to the expansive groundwater system in the area (DAF, 2021). Much of Creech AFB is flat, and evaporation rates are high due to high temperatures and an arid environment. As such, stormwater runoff does not always reach the outfall before evaporating or soaking into the terrain, though the capacity for stormwater drainage remains when needed. Creech AFB holds a NPDES permit to discharge stormwater in association with Creech AFB's Multi-Sector General Permit Industrial Stormwater – NVR050000, which was renewed 11 June 2024. Creech AFB discharges stormwater through NPDES Permit GNV00022233 (DAF, 2023a).

3.7.2.3 Groundwater

Creech AFB is located within the carbonate rock province of the Great Basin; this province covers eastern and southern Nevada and western Utah. Groundwater within this province is extensive due to the permeability of carbonate rock. Groundwater within the province is located hundreds of feet below ground surface and is contained within two interconnected aquifer systems: one deep and one shallow. The deep aquifer system is expansive and contained in carbonate bedrock while the shallow aquifer system is alluvial, residing in individual basins and watersheds (DAF, 2023a). Both systems rely on winter snowpack and storm precipitation for recharge.

Within Creech AFB, the amount of groundwater recharge that occurs is highly dependent on the permeability of the soils, the amount of precipitation received, and the rate at which surface evaporation or groundwater evapotranspiration occurs. Groundwater recharge rates rely on

permeable surfaces with the occurrence of more precipitation than evapotranspiration. Creech AFB utilizes three groundwater wells to support the Installation's supply of water (DAF, 2023a).

3.7.2.4 Floodplains

FEMA floodplain data are not available for Creech AFB. However, permanent streams are not known to occur within the boundaries of the Installation (**Figure 3-1, Appendix D**). Flooding is anticipated to occur as flash floods follow storm events, and shallow flooding can occur from impermeable surfaces such as pavements or poorly drained soils. During storm events, the ephemeral streams and dry lake beds fill with precipitation, resulting in opportunities for flash flooding events (DAF, 2023a). The nearest FEMA floodplain is over 1 mile west of Creech AFB (FEMA, 2002).

3.7.2.5 Wetlands

No known wetlands occur within the boundaries of Creech AFB; additionally, no jurisdictional wetland delineations have occurred on the Installation. While some hydrologic areas support ephemeral streams, further analysis would need to be conducted to determine if wetlands characteristics are present within the Installation (DAF, 2023a). Therefore, the topic of wetlands is not carried forward for analysis in this EA.

3.7.3 Environmental Consequences

3.7.3.1 Evaluation Criteria

Evaluation criteria for potential impacts on water resources are based on water availability, quality, and use; existence of floodplains; and associated regulations. Potential adverse impacts to water resources would occur if the Proposed Action or Alternatives

- reduce water availability or supply to existing users,
- overdraft groundwater basins,
- exceed safe annual yield of water supply sources,
- adversely affect water quality,
- endanger public health by creating or worsening health hazard conditions, or
- violate established laws or regulations adopted to protect sensitive water resources.

3.7.3.2 Alternative 1

Surface Water

Permanent surface water resources do not exist within the boundaries of Creech AFB and any precipitation is likely to evaporate, as described in **Section 3.7.2.1**. As such, the management of hydrology is accomplished via stormwater channels and ephemeral streams, as described in **Stormwater** below. Under Alternative 1, approximately 4,000,000 ft² (approximately 93 acres) of net building and facility footprint would be constructed. While implementation of Alternative 1 would result in an increase of impervious surfaces within the Installation, the majority of the construction projects would occur in heavily developed areas where impervious surfaces are already prevalent and would not result in a change to the amount of runoff expected for those areas. Projects C4, C5, C10, C12, and C26 would result in approximately 92,000 ft² of new impervious surfaces that would be located in areas that are less developed. While Project C11 would be located in a currently undeveloped area and would have a large footprint, photovoltaic (PV) arrays remain open to ground surface and would not be anticipated to contribute to overall impervious surfaces.

Approximately 62,000 ft² of linear construction also would occur. Increases in the overall impervious surface within the Installation would lead to increased runoff into ephemeral streams and dry lake beds found within and near the Installation.

Projects proposed in the northern portions of the Installation under Alternative 1 have the potential to impact ephemeral streams (**Figure 3-1, Appendix D**). Projects C6, C8, C9, C11, C12, C16, C18, C20, C26, C27, and I3 are intersected by mapped ephemeral streams. However, these streams only contain water during precipitation events and are prone to rapid evaporation. In addition, the potential for runoff from construction and demolition sites during these events would be managed through the application of BMPs. Over the long term, projects would be designed to consider and support proper drainage of ephemeral streams in accordance with Creech AFB's surface and stormwater management requirements. Short- and long-term, moderate and minor, adverse impacts to surface water would be anticipated to occur under Alternative 1.

Stormwater

The increase in the overall impervious surface under Alternative 1 would lead to increased runoff into ephemeral streams, dry lake beds, and stormwater infrastructure found within and near the Installation. Creech AFB is largely developed and has the capacity to manage increased stormwater runoff from additional impervious surfaces through unlined channels and ephemeral streams. These routes carry stormwater runoff from developed areas into dry lake beds that distribute and hold water for short periods of time before evaporating and returning to dry conditions.

Potential adverse impacts to stormwater management would be managed at an individual project level. When applicable, the construction contractor would obtain and comply with a Construction General Permit (CGP) under the NDEP-administered NPDES program. The CGP would require the preparation, approval, and implementation of a site-specific stormwater pollution prevention plan for projects greater than 1 acre (i.e., Projects C1, C10, C11, C13, C14, I1, and I2) prior to construction, including appropriate structural and non-structural erosion, sediment, and waste control BMPs.

During construction, crews would adhere to BMPs for stormwater management, as determined by Creech AFB Environmental, to minimize runoff potential. Potential BMPs include, but are not limited to, the following:

- Maintain grading and topography at project locations.
- Stage equipment and construction materials in areas outside of known flash flooding areas.
- Adhere to and implement BMPs for construction and post-construction stormwater management in accordance with the [USEPA's National Menu of Best Management Practices \(BMPs\) for Stormwater](#) or other technical guidance, and
- Design projects to utilize stormwater drainage through the numerous, existing unlined channels and ephemeral streams at Creech AFB, which have adequate capacity to support additional development.

All demolition projects would be located in the Southside Operations District, which is highly developed. Demolition without reconstruction would provide a small offset from the increase in impervious surfaces, resulting in an increase of approximately 12,400 ft² of permeable ground surfaces. This offset would allow water in the area to permeate the ground surface and recharge groundwater resources as opposed to contributing to additional stormwater runoff.

During storm events, linear construction projects involving airfield fencing (Projects C6–C8 and C24), may impact stormwater runoff by catching debris and impeding flow. The impediment of stormwater flow would have the potential to increase the probability of flash flooding during severe storm events. Debris removal and fence maintenance would help to ensure water moves freely in these areas. Projects C1–C5, C10–C18, C20–C23, C25, and C26 would result in increases to stormwater runoff due to an increase in impervious surfaces on undeveloped parcels within the Installation (i.e., where surfaces were previously permeable). Short-term, minor, adverse impacts to stormwater would have the potential to occur during construction activities and would be managed with implementation of the BMPs described above. Creech AFB would have the capacity to manage the increase in stormwater runoff associated with the increased impervious surface area under Alternative 1 through ephemeral stream and unlined channel drainage. Long-term, minor impacts to stormwater would be anticipated to occur due to the overall increase in impervious surface area and subsequent runoff within the existing system.

Groundwater

The increase in overall impervious surface under Alternative 1 would further limit the ability of groundwater resources to recharge directly below the Installation. However, the underground water system is expansive in this area and the interconnected system below would remain able to absorb water from the adjacent, undeveloped areas surrounding Creech AFB. Therefore, no impacts to groundwater would be anticipated under Alternative 1.

Floodplains

There are no identified FEMA floodplains within Creech AFB; however, storm events are anticipated to result in flash flooding and shallow flooding where impermeable surfaces or poorly drained soils exist. All project development would adhere to applicable construction and development regulations to ensure compliance with federal flood risk-management measures.

Additionally, during storm events, linear construction projects, such as airfield fencing, may impact stormwater runoff by catching debris and impeding flow. The impediment of stormwater flow would have the potential to increase the probability of flash flooding during severe storm events. Debris removal and fence maintenance would help to ensure water moves freely in these areas; therefore, long-term, negligible, adverse impacts to floodplains would be anticipated to occur under Alternative 1.

3.7.3.3 Alternative 2

There would be no difference in the amount of increased overall impervious surface associated with Alternative 2 of the Proposed Action, when compared to Alternative 1. Therefore, potential impacts to surface water, stormwater, groundwater, and floodplains would be anticipated to be the same as Alternative 1.

3.7.3.4 Alternative 3

There would be no difference in the amount of increased overall impervious surface associated with Alternative 3 of the Proposed Action, when compared to Alternative 1. Therefore, potential impacts to surface water, stormwater, groundwater, and floodplains would be anticipated to be the same as Alternative 1.

3.7.3.5 Reasonably Foreseeable Actions and Impacts

When combined with projects identified in **Table 3-1, Appendix E**, implementation of the Proposed Action Alternatives would have the potential to impact water resources due to temporary

construction activities and increased runoff from new impervious surfaces near ephemeral streams within the region. The increase of impervious surfaces would have the potential to result in runoff to these streams, dry lake beds and washes, and existing stormwater infrastructure in the area. BMPs and mitigation would be employed on a project-level basis to minimize impacts to these resources where practicable. The High Desert State Prison and the Southern Desert Correctional projects would involve upgrades to existing facilities and would not be expected to impact the water resources in this area. When considered in conjunction with the effects of past, present, and reasonably foreseeable actions at Creech AFB, minor, adverse reasonably foreseeable impacts to surface water, stormwater, groundwater, and floodplains would be anticipated to occur with implementation of the Proposed Action.

3.7.3.6 No Action Alternative

Under the No Action Alternative, the DAF would not implement the 36 proposed Installation development projects. Development of the facilities and infrastructure that would support the training and flight programs would not take place. Creech AFB would continue to operate under current conditions, facilities would continue to degrade, and no change to water resources at Creech AFB would be expected to occur beyond baseline conditions.

3.8 BIOLOGICAL/NATURAL RESOURCES

3.8.1 Definition of the Resource

Biological resources include native or invasive plants and animals; sensitive and protected floral and faunal species; and the associated habitats, such as wetlands, forests, grasslands, cliffs, and caves in which they exist. Habitat can be defined as the resources and conditions in an area that support a defined suite of organisms. The following is a description of the primary federal statutes that form the regulatory framework for the evaluation of biological resources.

The ROI for this resource is Creech AFB.

3.8.1.1 Endangered Species Act

The ESA established protection for threatened and endangered species and the ecosystems upon which they depend. Sensitive and protected biological resources include plant and animal species listed as threatened, endangered, or special status by USFWS. The ESA also allows the designation of geographic areas as critical habitat for threatened or endangered species. Under the ESA, an “endangered species” is defined as any species in danger of extinction throughout all, or a large portion, of its range. A “threatened species” is defined as any species likely to become an endangered species in the foreseeable future. USFWS maintains a list of candidate species being evaluated for possible listing as threatened or endangered under the ESA. Although candidate species receive no statutory protection under the ESA, USFWS has attempted to advise government agencies, industry, and the public that these species are at risk and may warrant protection in the future under the ESA.

3.8.1.2 Migratory Bird Treaty Act

The MBTA makes it unlawful for anyone to take migratory birds or their parts, nests, or eggs unless permitted to do so by regulations. Per the MBTA, “take” is defined as “pursue, hunt, shoot, wound, kill, trap, capture, or collect” ([50 CFR § 10.12](#)). Birds protected under the MBTA include nearly all species in the US except for non-native/human-introduced species and some game birds.

[EO 13186](#), *Responsibilities of Federal Agencies to Protect Migratory Birds*, requires all federal agencies undertaking activities that may negatively impact migratory birds to follow a prescribed set of actions to further implement MBTA. EO 13186 directs federal agencies to develop a Memorandum of Understanding with USFWS that promotes the conservation of migratory birds.

The *National Defense Authorization Act for Fiscal Year 2003* ([Public Law 107-314, 116 Stat. 2458](#)) provided the Secretary of the Interior the authority to prescribe regulations to exempt the armed forces from the incidental take of migratory birds during authorized military readiness activities. Congress defined military readiness activities as all training and operations of the US Armed Forces that relate to combat and the adequate and realistic testing of military equipment, vehicles, weapons, and sensors for proper operation and suitability for combat use. Further, in October of 2012, the Authorization of Take Incidental to Military Readiness Activities was published in the *Federal Register* ([50 CFR § 21.15](#)), authorizing incidental take during military readiness activities unless such activities may result in significant adverse effects on a population of a migratory bird species.

In December 2017, the US Department of the Interior issued M-Opinion 37050, which concluded that the take of migratory birds from an activity is not prohibited by the MBTA when the purpose of that activity is not the take of a migratory birds, eggs, or nests. On August 11, 2020, the US District Court, Southern District of New York, vacated M-Opinion 37050. Thus, the incidental take of migratory birds is again prohibited. The interpretation of the MBTA remains in flux, and additional court proceedings are expected.

3.8.1.3 Bald and Golden Eagle Protection Act

The *Bald and Golden Eagle Protection Act of 1940* ([16 USC §§ 668–668d](#)) (BGEPA) prohibits actions to “take, possess, sell, purchase, barter, offer to sell, purchase or barter, transport, export or import, at any time or any manner, any bald eagle [or any golden eagle], alive or dead, or any part, nest, or egg thereof.” Further, the BGEPA defines “take” as “pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest or disturb,” and “disturb” is defined as “to agitate or bother a bald or golden eagle to a degree that causes, or is likely to cause, based on the best scientific information available, injury to an eagle, a decrease in productivity by substantially interfering with the eagle’s normal breeding, feeding or sheltering behavior, or nest abandonment by substantially interfering with the eagle’s normal breeding, feeding, or sheltering behavior.” The BGEPA also prohibits activities around an active or inactive nest site that would have the potential to result in disturbance to returning eagles.

3.8.1.4 Invasive and Noxious Weed Species

Invasive species are non-native species in an ecosystem whose introduction causes or is likely to cause economic or environmental harm, or harm to human, animal, or plant health. [EO 13751](#), *Safeguarding the Nation from the Impacts of Invasive Species*, requires federal agencies to identify actions that may affect invasive species; use relevant programs to prevent introductions of invasive species; detect, respond, and control such species; monitor invasive species populations; and provide for restoration of native species. Invasive species damage native habitat and impede management by outcompeting native species.

3.8.2 Existing Conditions

3.8.2.1 Ecoregion Description

Creech AFB is located within the Mojave Basin and Range terrestrial ecoregion, which includes Mojave mid-elevation mixed desert shrub and Mojave warm desert habitats (NDOW, 2022). The vegetation and wildlife found within the Installation are described below.

3.8.2.2 Vegetation

As described in the 2020 *Integrated Natural Resources Management Plan: Nellis Air Force Base, Creech Air Force Base, Nevada Test and Training Range* (DAF, 2020), Creech AFB is in the northeastern portion of the Mojave Desert within the Mojave biogeographic province, a dry environment that receives approximately 4 inches of precipitation per year. Most of the land area on Creech AFB has been developed for Installation and airfield infrastructure or has been graded to remove vegetation as part of bird/wildlife strike hazard (BASH) management efforts. No detailed vegetation inventory or mapping has been conducted due to the sparseness of the plants that remain. In 2023, Creech AFB prepared the *Integrated Natural Resources Management Plan (Regulatory Draft)* (DAF, 2023a). This update describes the three most prevalent key habitats found on Creech AFB as the Desert Playas and Ephemeral Pools Habitat (approximately 965 acres), the Intermountain Cold Desert Scrub Habitat (approximately 235 acres), and the Mojave Warm Desert and Mixed Desert Scrub Habitat (approximately 1,209 acres).

The remaining native vegetation and historical vegetation on Creech AFB are influenced by its location on the north edge of a bajada (an alluvial area at the foot of a mountainous area) that extends north from the Spring Mountains to a broad area of ephemeral desert washes that drain a playa on the NTTR-South Range from the north. Vegetation on bajadas in the Mojave Desert is characterized by an open shrub layer primarily made up of creosote bush (*Larrea tridentata*) and white bursage (*Ambrosia dumosa*). Other common species include shadscale saltbush (*Atriplex confertifolia*), Nevada jointfir (*Ephedra nevadensis*), burrobrush (*Ambrosia salsola*), winterfat (*Krascheninnikovia lanata*), water jacket (*Lycium andersonii*), branched pencil cholla (*Cylindropuntia ramosissima*), Fremont's dalea (*Psoralea fremontii*), cottontop cactus (*Echinocactus polycephalus*), Mexican bladdersage (*Salazaria mexicana*), sporadic Mojave yuccas (*Yucca schidigera*), and western Joshua trees (*Yucca brevifolia*).

If there is an herbaceous layer present within the ROI, it is usually sparse and often includes desert trumpet (*Eriogonum inflatum*), California croton (*Croton californicus*), and big galleta (*Pleuraphis rigida*) (DAF, 2022b). Vegetation on the northern part of Creech AFB can be inferred from recent vegetation classification surveys of the NTTR-South Range. Creosote bush and white bursage remain common species but areas of bare soil occur more frequently. Other species that may occur are saltbushes, including four-wing saltbush (*Atriplex canescens*) and shadscale saltbush, cattle spinach (*A. polycarpa*), Mexican bladdersage, desert globemallow (*Sphaeralcea ambigua*), and Nevada jointfir. The northwest corner of Creech AFB is the only remaining area that has been minimally disturbed by previous development and operations (DAF, 2023a).

The climate of Creech AFB supports various drought-tolerant trees and shrubs, perennial species, and grasses that grow in the improved, irrigated areas of the Installation. Improved ground areas include turf grasses and ornamental landscaping that must be maintained regularly. However, over the last several years, Creech AFB has moved toward xeriscaping, a landscaping style meant to cut down on the need for irrigation, by planting native species that are adapted to the dry desert

climate to minimize water use and reduce the need for ongoing maintenance. Species that are adapted to environments with little water, such as different types of succulents, can now be found in landscaped areas across the Installation (DAF, 2023a; National Geographic, 2023; Southern Nevada Water Authority & Southern Nevada Regional Planning Coalition, 2021).

3.8.2.3 Wildlife

The land within Creech AFB is mostly developed and contains limited wildlife habitat (DAF, 2023a). Because of this limited habitat, the abundance of wildlife within the ROI is low and lacks diversity. However, the portions of the NTTR-South Range that surround Creech AFB to the north and east may contain habitat for species that would have the potential to move between the range and the Installation, especially birds or other winged species (DAF, 2023a).

Small, terrestrial mammal species are common on Creech AFB and perform important ecological functions such as providing food for various predators, enabling seed dispersal and germination, mixing and aerating soils, and enhancing nutrient cycles. Mammals with the potential to occur on Creech AFB include the white tailed antelope ground squirrel (*Ammospermophilus leucurus*), long-tailed pocket mouse (*Chaetodipus formosus*), desert kangaroo rat (*Dipodomys deserti*), Merriam's kangaroo rat (*Dipodomys merriami*), chisel-toothed kangaroo rat (*Dipodomys microps*), house mouse (*Mus musculus*), desert woodrat (*Neotoma lepida*), Northern grasshopper mouse (*Onychomys leucogaster*), little pocket mouse (*Perognathus longimembris*), canyon mouse (*Peromyscus crinitus*), deer mouse (*Peromyscus maniculatus*), and round-tailed ground squirrel (*Xerospermophilus tereticaudus*) (DAF, 2023a).

Reptiles confirmed to be present on Creech AFB include the Great Basin whiptail (*Aspidoscelis tigris tigris*), zebra-tailed lizard (*Callisaurus draconoides*), yellow-backed spiny lizard (*Sceloporus uniformis*), and side-blotched lizard (*Uta stansburiana*). Reptiles with a probable presence on Creech AFB are the regal ring-necked snake (*Diadophis punctatus regalis*) and western ground snake (*Sonora semiannulata*). One amphibian, the red-spotted toad (*Anaxyrus punctatus*), also has a probable presence within the Installation (DAF, 2023a).

Due to its small size, a perimeter fence that keeps wildlife from most of the Installation, and limited suitable wildlife habitat available, Creech AFB does not require extensive fish and wildlife management. Combined with the lack of water resources and the resulting lack of fish species, amphibians, and waterfowl, most of the fish and wildlife management on the Installation is focused on conservation efforts or reducing BASH risks from small mammals and avian species (DAF, 2023a).

3.8.2.4 Threatened, Endangered, and Other Protected Species

Threatened or Endangered Species

The only federally designated species known to occur on Creech AFB is the Mojave Desert tortoise (*Gopherus agassizii*). The Mojave population of the desert tortoise was listed as threatened under the ESA in 1990. No critical habitat for the Mojave Desert tortoise exists within the ROI, but there is some marginal habitat available (USFWS, 2023). The Mojave Desert tortoise is also protected by the state of Nevada because its populations are declining due to fragmentation and loss of habitat as well as disease and human activity (DAF, 2023a).

The Mojave Desert tortoise is found in arid and semiarid desert environments. It utilizes a variety of habitats, including desert flats and slopes dominated by creosote scrub at lower elevations and black brush/juniper woodland transition zones at medium elevations. The species requires soils

that are easy to dig burrows in, but firm enough to prevent the burrows from collapsing. It also requires rocky habitats, as it prefers to burrow beneath rocks, and often finds food in washes and draws that channel rainwater. Mojave Desert tortoises are considered a keystone species because the burrows they create are used as shelter by many other Mojave Desert species; their digging also supports nutrient cycling in desert soils (DAF, 2023a).

The Desert National Wildlife Refuge abuts Creech AFB's northern boundary (see **Figure 1-2, Appendix D**). This is the largest wildlife refuge in the contiguous US of which the Mojave Desert tortoise is a resident species. Located north, west, and east of the Installation, the Mojave Desert tortoise is primarily observed on the NTTR-South Range and has occasionally burrowed under the Creech AFB perimeter fence designed to keep it out. However, there have been no observations of a breeding population located on Creech AFB (USFWS, 2024; DAF, 2023a).

Two federally designated avian species, the endangered southwestern willow flycatcher (*Empidonax traillii extimus*) and the threatened yellow-billed cuckoo (*Coccyzus americanus*) are known to occur in Nevada. In the western US, both species use habitat with dense cover and nearby water sources, including wooded areas with low, scrubby vegetation, overgrown orchards, abandoned farmland, and dense thickets along streams and marshes (USFWS, 2023b). No habitat for either bird, critical or otherwise, exists in the ROI, and there are no records of their occurrence on the Installation (USFWS, 2023).

The Monarch butterfly (*Danaus plexippus*) is a candidate species for protection under the ESA. The Monarch butterfly migrates seasonally in the spring and fall through Nevada, which is part of the butterfly's summer breeding area. Milkweeds (*Asclepias* spp.) are crucial to their breeding process as are the presence of nectar-producing plants ([87 FR 26169](#), 3 May 2022). Due to the lack of water resources and scarce vegetation across Creech AFB, suitable habitat for this species does not exist in the ROI (DAF, 2023a).

Migratory Birds

Migratory and neotropical bird surveys were conducted on Creech AFB in 2018 and 2019. In 2018, 68 individuals of 14 different species were detected, while in 2019, 31 individuals of 8 different species were detected. The previously noted lack of abundance and diversity of wildlife in the ROI extends to avian species as well due to poor-quality habitat and a lack of bird attractants. Neither survey detected avian species with a special-status designation. Bird species that are confirmed to be present on Creech AFB are the rock pigeon (*Columba livia*), western wood-pewee (*Contopus sordidulus*), common raven (*Corvus corax*), Brewer's blackbird (*Euphagus cyanocephalus*), house finch (*Haemorhous mexicanus*), house sparrow (*Passer domesticus*), great-tailed grackle (*Quiscalus mexicanus*), Say's phoebe (*Sayornis saya*), yellow warbler (*Setophaga petechia*), red-naped sapsucker (*Sphyrapicus nuchalis*), Eurasian collared dove (*Streptopelia decaocto*), western kingbird (*Tyrannus verticalis*), white-crowned sparrow (*Zonotrichia leucophrys*), and mourning dove (*Zenaida macroura*). The mourning dove prefers to live in Mojave Desert creosote scrub plant communities such as those found on Creech AFB. Two species designated by NDOW as Species of Greatest Conservation Need (SGCN), the phainopepla (*Phainopepla nitens*) and the loggerhead shrike (*Lanius ludovicianus*), are also confirmed to occur on Creech AFB. The loggerhead shrike is also listed as a Nevada sensitive bird (DAF, 2023a).

Species of High Priority

The DAF is required to protect and manage state-listed species when consistent with the mission, in accordance with [DAFMAN 32-7003](#), *Environmental Conservation*, Section 3.38.1, *Federally*

Listed Species, Nevada has four levels of state protection for wildlife under the Nevada Administrative Code, Chapter 503: state protected, sensitive, threatened, and endangered. In 2022, NDOW published the most recent Nevada State Wildlife Action Plan, a management plan that classifies some species as SGCN. This classification is meant to inform management actions for species that are in need, but it does not provide any state or federal protection (DAF, 2023a). **Table 3-5, Appendix E** presents all Nevada state-listed species that are confirmed to have or have a probable presence on Creech AFB.

3.8.2.5 Invasive and Noxious Weed Species

Euro-American settlements in the vicinity of Creech AFB resulted in the introduction of various exotic annual and perennial plants (plants that complete their life cycle in one year and plants that regrow seasonally for several years, respectively), some of which are invasive and continue to persist in the area, dominating local, native vegetation. The most predominant annual invasive plants found on the NTTR-South Range are Russian thistle (*Salsola tragus*) and red brome (*Bromus rubens*), aggressive species that can displace populations of native annual plants in places where soil has been disturbed. If the soil is not disturbed further, Russian thistle will often stop growing but red brome can continue to be dominant in certain habitats regardless of further soil disturbance. Russian thistle and red brome have been documented on Creech AFB, as well as cheatgrass (*Bromus tectorum*), saltlover (*Halogeton glomeratus*), and tamarisk (*Tamarix* sp.), a Nevada state-listed noxious weed (DAF, 2023a).

The Pest Management Program for Creech AFB and the surrounding areas of the NTTR-South Range includes control and management of invasive plants. However, efforts to eradicate red brome from the NTTR-South Range are no longer practical, which has increased the risk of this plant spreading to Creech AFB. In addition to competing with native species for limited soil moisture, the flammable dormant red brome plants increase the susceptibility of areas to more frequent wildland fires to which native plant communities are adapted, but that create ideal conditions for red brome to continue thriving (DAF, 2023a). This creates a self-perpetuating cycle of increased fire activity and further spreading of flammable grass (Fusco et al., 2021).

3.8.3 Environmental Consequences

3.8.3.1 Evaluation Criteria

Evaluation criteria for potential impacts on biological resources are 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; and
- duration of potential ecological impact.

Adverse impacts on biological resources would occur if the Proposed Action negatively affects species or habitats of high concern over relatively large areas or if estimated 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 the agency's proposed actions would not adversely affect the existence of any threatened or endangered species. The ESA requires that all federal agencies avoid "taking" federally threatened or endangered species (which includes jeopardizing threatened or endangered species habitat).

3.8.3.2 Alternative 1

Vegetation

Creech AFB is sparsely vegetated and the land use districts where proposed project activities under Alternative 1 would occur have been mostly previously disturbed or developed. Because of the absence of intact native vegetation and the minimal vegetation clearing associated with construction and demolition activities that would occur under Alternative 1, long-term, negligible adverse impacts to vegetation would be expected to occur in the Airfield, Community Support, Mission Operations Complex, Munitions Storage Area, Southside Operations, and T-Shirt districts.

Projects C26 and C27 would take place in undisturbed areas outside of identified districts along the northwestern boundary of the Installation but would not impact adjacent Desert National Wildlife Refuge land. All development associated with projects near the boundary of Creech AFB and the Desert National Wildlife Refuge would take precautions to not disturb Refuge land. An environmental baseline survey investigated an 80-acre parcel of land west of Creech AFB, referred to as the northwest parcel, which contains patches of desert pavement interspersed with areas of creosote bush and white bursage. This parcel encompasses a segment of Project C27 that is approximately 3,900 linear feet (lf); the area is located approximately 1,460 feet northeast of Project C26. Project C26 would disturb approximately 4,660 ft² of vegetation in the vicinity of the northwest parcel to create a stable foundation for a new inspection facility, in addition to approximately 6,200 lf of electric, communication, and water lines and approximately 6,100 ft² for construction of a new asphalt road to connect the facility to US-95. Fence construction under Project C27 would disturb approximately 11,000 lf of soil. Due to the sparse vegetation cover in the proposed sites for Project C26 and C27, negligible, long-term, adverse impacts to vegetation would be anticipated to occur.

Wildlife

There is limited suitable habitat for wildlife within the land use districts on Creech AFB where Alternative 1 projects would be located. Areas of Project C26 that are located outside of the Installation boundary would have the potential to permanently change habitat to accommodate the new road connecting US-95 to the proposed access gate. However, the area proposed for C26 is already utilized as an access road and has been disturbed. All development associated with projects near the boundary of Creech AFB and the Desert National Wildlife Refuge would take precautions to not disturb Refuge land and associated wildlife. Apart from Projects C26 and C27, Alternative 1 would be located on developed portions of the Installation, which support relatively common species of small mammals, birds, and reptiles. The bat maternity season is generally from May through August, and it is possible that bats may roost on some of the buildings scheduled for demolition—Projects D1–D4 (NDOW, 2024). These buildings would be checked for roosting bats prior to demolition. Wildlife, especially avian species, that utilize small, undeveloped areas between buildings for foraging and breeding would normally be sensitive to increased noise impacts from military aircraft. However, operations have been ongoing at Creech AFB for decades and are now part of the natural noise environment. The noise and human activity from construction and demolition activities within the Airfield, Community Support, Mission Operations Complex, Munitions Storage Area, Southside Operations, and T-Shirt districts would have negligible, short-term, adverse impacts on wildlife. Projects C26 and C27 would be anticipated to have negligible, short- and long-term, adverse impacts on wildlife because of the sparse vegetation, lack suitable habitat for wildlife, and the relatively small area that would be disturbed.

Threatened, Endangered, and Other Protected Species

Threatened or Endangered Species

Creech AFB does not contain habitat for either the threatened yellow-billed cuckoo or the endangered southwestern willow flycatcher. Creech AFB does contain marginal habitat but no critical habitat for the threatened Mojave Desert tortoise. The desert tortoise has been observed on the adjacent NTTR-South Range but is rarely found on Creech AFB due to lack of vegetation cover and a perimeter fence that is designed to keep it out. The northwest parcel adjacent to Project C26 and where part of Project C27 would be located contains undisturbed vegetation but also large areas of barren desert pavement. A 2017 Biological Assessment for the NTTR evaluated extending the withdrawal of land for military use (DAF, 2017). As part of that Biological Assessment, several alternatives were evaluated including one that would expand the NTTR-South Range to I-95, west and east of Creech AFB. Various surveys were conducted during the alternatives evaluation, and one live Mojave Desert tortoise was recorded approximately 5 miles northwest of Projects C26 or C27; no desert tortoises were reported in direct proximity to Creech AFB during the various surveys of the area. Additionally, the nearest desert tortoise survey to Creech AFB (approximately 1.25 miles northwest of the Installation boundary) identified the area as having a “scarce” or “not present” desert tortoise abundance. While the probability of the Mojave Desert tortoise occurring in this area is low, monitoring for desert tortoise in areas of undisturbed vegetation would occur prior to and during development activities that would occur under Alternative 1. The following BMPs would be implemented at the project sites to prevent the potential for impacts to the Mojave Desert tortoise:

- Perform pre-construction clearance surveys.
- Monitor the project site during construction.
- Eliminate accumulated water source during construction.
- Cover open holes during construction.
- Regulate speed limits.
- Construct fencing to enclose the northwest parcel within the boundary of Creech AFB.
- Conduct personnel awareness training.
- Disseminate biologist notifications if species are observed.

Construction of Project C27 fencing would contain the remaining land owned by Creech AFB in the northwest parcel, preventing Mojave Desert tortoise access onto the Installation. The DAF has determined that all projects under the Proposed Action would have “no effect” on the listed species identified in **Table 3-5, Appendix E**; USFWS does not consult on determinations of “no effect.”

Migratory Birds

Migratory birds are of the most concern during nesting season, which generally occurs between 1 April and 15 July (US Forest Service, 2020). Migratory birds have the potential to nest in buildings proposed for demolition under Alternative 1; however, all project areas would be checked prior to construction and demolition activities for nesting birds or the presence of migratory species. No impacts to golden or bald eagles would be anticipated under Alternative 1 because suitable habitat for these species does not exist on Creech AFB and none of the proposed projects would have the potential to impact the species while in flight. With implementation of BMPs, including checking buildings prior to demolition and avoiding construction work during certain seasons when

practicable, adverse impacts to migratory birds would be anticipated to be short term and negligible.

Species of High Priority

While general species habitat on Creech AFB is limited, it is possible that bats would have the potential to roost on some of the buildings proposed for demolition under Alternative 1; any such buildings would be checked for roosting bats prior to demolition. Other species of high priority as described in **Table 3-5, Appendix E** would have the potential to occur within the project areas. However, with implementation of BMPs, such as checking buildings prior to demolition and avoiding construction work during certain seasons when practicable, adverse impacts to species of high priority would be anticipated to be short-term and negligible.

Invasive and Noxious Weed Species

Unwanted invasive and noxious weed species are controlled through proper methods and management. Both Russian thistle and red brome are particularly adapted to areas where soils have been disturbed. Saltlover also establishes in disturbed areas where vegetation has been removed or along roadsides where native vegetation is sparse (Utah State University Extension, 2024). Soil disturbance associated with either demolition or new construction would have the potential to create conditions conducive to the establishment of Russian thistle, red brome, or saltlover. Tamarisk grows in places with shallow water tables, such as marshes, streambanks, and irrigation ditches. The Proposed Action would not occur in areas with shallow water tables; therefore, it is unlikely that Alternative 1 would result in the spread of tamarisks (Colorado Department of Agriculture, 2015).

Under Alternative 1, construction activities for Projects C26 and C27 would disturb soils on existing, open, undeveloped space where invasive and noxious weed species are more likely to occur. Any invasive or noxious weed species found during development would be controlled; however, eradication of some species, such as red brome, may be impractical (DAF, 2023a). BMPs, such as checking construction sites for the presence of invasive plants or noxious weeds, using mechanical or chemical treatments, avoiding areas of invasive plants, and washing vehicle tires and undersides and worker's boots prior to leaving the area, would minimize potential transport of seeds to other areas.

The remaining projects under Alternative 1 would occur in improved areas of the Installation. Weed control on the Installation occurs as routine maintenance. While efforts to eradicate red brome have become impractical, the above-listed BMPs support the goal of limiting the spread of red brome from the NTTR-South Range to Creech AFB. Projects that involve soil disturbance would be monitored for invasive plants after project completion. The Creech AFB Pest Management Program, in conjunction with the Creech Natural Resources Program and regulators, oversees invasive and noxious weed species management on the Installation. The Installation is developing an Integrated Pest Management Plan, which would align with the goals and efforts of the Pest Management Program, the Creech Natural Resources Program, regulators, and the approaches described in the National Invasive Species Management Plan (DAF, 2023a). With implementation of BMPs and adherence to appropriate procedures, adverse impacts from invasive and noxious weed species under Alternative 1 would be anticipated to be short term and minor.

3.8.3.3 Alternative 2

Under Alternative 2, only the location of Project C11 would change; all other projects and their locations would remain the same. Project C11 (Site B) would be located in a previously disturbed

and improved area on the Installation. Potential impacts to biological resources would be anticipated to be the same as Alternative 1.

3.8.3.4 Alternative 3

Under Alternative 3, only the location of Project C11 would change; all other projects and their locations would remain the same. Project C11 (Site C) would be located in a previously disturbed and improved area on the Installation. Potential impacts to biological resources would be anticipated to be the same as Alternative 1.

3.8.3.5 Reasonably Foreseeable Actions and Impacts

When combined with projects identified in **Table 3-1, Appendix E**, implementation of the Proposed Action Alternatives would be anticipated to have short-term, negligible-to-minor adverse impacts to biological resources as a result of additional soil, vegetation, and/or habitat disturbance. The BLM solar project would clear approximately 5,000 acres of previously undeveloped land. While located approximately 5 miles from Creech AFB, the clearing of 5,000 acres would have the potential to eradicate invasive weeds in the vicinity as well as further reduce the habitat of the Mojave Desert tortoise. However, within Creech AFB, invasive weeds are currently managed and Mojave Desert tortoise habitat is limited with active precautions to keep the tortoise outside of the Installation. The I-11 feasibility study is currently reviewing alternatives, one of which would result in construction of a bypass around Indian Springs, Nevada, which would have the potential to permanently disturb biological resources in currently undeveloped areas. However, this project is still in its feasibility stage, and there is no development planned. There would be no impacts to biological resources from the Indian Springs Schools, the High Desert State Prison, or the Southern Desert Correctional Center projects; these projects would take place on developed areas. When considered in conjunction with the effects of other past, present, and reasonably foreseeable actions at Creech AFB, minor, adverse reasonably foreseeable effects to biological resources would be anticipated to occur with implementation of the Proposed Action.

3.8.3.6 No Action Alternative

Under the No Action Alternative, the DAF would not implement the 36 proposed Installation development projects. Development of the facilities and infrastructure that would support the training and flight programs would not take place. Creech AFB would continue to operate under current conditions, facilities would continue to degrade, and no change to biological resources at Creech AFB would be expected to occur beyond baseline conditions.

3.9 CULTURAL RESOURCES

3.9.1 Definition of the Resource

Cultural resources include any prehistoric or historic district, site, building, structure, or object that is important to a community for scientific, traditional, religious, or other purposes. These resources are protected under several federal laws, including the *Archaeological and Historic Preservation Act* ([54 USC §§ 312501–312508](#)), the *American Indian Religious Freedom Act* ([42 USC § 1996](#)), the *Archaeological Resources Protection Act* ([16 USC §§ 470aa–470mm](#)), the *Native American Graves Protection and Repatriation Act* ([25 USC §§ 3001–3013](#)), and the NHPA. Under NHPA Section 106 and its implementing regulations ([36 CFR § 800](#)), federal agencies must consider the effects of their undertakings on historic properties, provide consulting parties the opportunity to comment, and seek to avoid, minimize, or mitigate adverse effects.

Historic properties are defined as cultural resources listed, or eligible for listing, on the National Register of Historic Places (NRHP) ([36 CFR § 800.1\(a\)](#)). The lead federal agency for an undertaking is responsible for making determinations of eligibility, which then must be reviewed and concurred on by the SHPO. A cultural resource may be determined NRHP-eligible if it possesses integrity of location, design, setting, materials, workmanship, feeling, and association and if it meets any of the following four criteria for evaluation:

- A. associated with events that have made a significant contribution to the broad patterns of history; or
- B. associated with the lives of persons significant in history; or
- C. embodies the distinctive characteristics of a type, period, or method of construction; represents the work of a master; possesses high artistic value; or represents a significant and distinguished entity whose components may lack individual distinction; or
- D. has yielded, or may likely yield, information important in prehistory or history.

Generally, resources less than 50 years old, moved or reconstructed buildings, cemeteries, and religious properties are not NRHP-eligible unless they meet one of the NRHP “criteria considerations” (see [36 CFR § 60.4](#)). For example, a resource less than 50 years old may be eligible under Criteria Consideration G if it possesses integrity and is of exceptional importance, such as Cold War-era DoD properties (1945–1992).

3.9.2 Region of Influence

For this EA, the ROI is equivalent to the Area of Potential Effects (APE), as defined in [36 CFR § 800.16\(d\)](#). Direct effects are those that would occur at the same time as the undertaking and could include physical, visual, auditory, atmospheric, and/or cumulative effects. Indirect effects are those that would occur later in time or farther in distance but remain reasonably foreseeable. The APE’s extent depends on the scale and nature of each undertaking.

For the Proposed Action, the physical APE includes the areas of proposed ground disturbance for each project. The visual APE extends 0.5 mile from each project’s physical APE and encompasses potential atmospheric, auditory, and cumulative effects.

3.9.3 Existing Conditions

Creech AFB follows standard operating procedures for the management and protection of cultural resources on the lands included within the APE. Procedures, as outlined in the Creech AFB Integrated Cultural Resources Management Plan (ICRMP), address mission conflicts, management and coordination for Section 106 of the NHPA, and other necessary consultations (DAF, 2023b). A review of all available information about previous archaeological and historical inventories within Creech AFB was conducted. Searches for previous reports and archaeological site forms were completed for all identified lands associated with this document. Reviews included the Nevada Cultural Resources Information System (NVCRIS) database managed by the SHPO and records and reports on file at Creech AFB.

Within Creech AFB, 2,036 acres have been surveyed for cultural resources. The remaining non-surveyed acres of the Installation are located within the undeveloped areas in the northwest corner of the Installation (approximately 250 acres). Additionally, Project C26, as described in this EA, would be located outside of, but directly adjacent to, the bounds of Creech AFB along the western

perimeter fence in an area that has been disturbed and used as an access road. Project C26 would include the construction of a vehicle inspection facility, associated utilities, and a new asphalt road to connect US-95 to the new inspection facility (approximately 6,100 linear feet). The new paved road would be built upon an existing dirt road that extends around the Installation's perimeter.

3.9.3.1 Architectural Properties

There currently are 32 buildings and five structures at Creech AFB within the visual APE that were constructed before 1992. The DAF has determined that four of the structures are NRHP-eligible and all 32 buildings and one structure are NRHP-ineligible as both individual resources and contributing resources to a district. The four NRHP-eligible properties are listed in **Table 3-6, Appendix E** and depicted on **Figure 3-2, Appendix D**. Nine historic architectural surveys have been conducted within the APE (**Table 3-7, Appendix E**). One survey report (23425) was not available and denoted as in-process in the NVCRIS database at the time of review.

3.9.3.2 Archaeological Properties

There have been 29 archaeological sites identified within the APE as a result of 19 archaeological surveys (**Table 3-8, Appendix E**). Of the 29 sites, one (CK1649) was determined NRHP-eligible and two were determined NRHP-ineligible, all with SHPO concurrence. According to archaeological site forms available through NVCRIS, the SHPO has not concurred on the NRHP recommendation and determinations of the remaining 26 sites. Contractor/DAF evaluations for the 26 unevaluated sites include one site recommended NRHP-eligible (CK5395) and 25 sites recommended NRHP-ineligible. **Table 3-9, Appendix E** lists the 1 NRHP-eligible site and all 26 unevaluated sites. All except for approximately 250 acres in the northwest corner of the Installation and approximately 6,100 linear feet along the outside of the western perimeter fence of the physical APE has been subject to systematic archaeological survey.

3.9.3.3 Traditional Cultural Properties (TCPs)

Sixteen federally recognized Native American Tribes have historical ties to Creech AFB and the surrounding area. In accordance with DoDI 4710.02 and DAFI 90-2002, the DAF initiated consultation with below-listed Tribal Historic Preservation Officers and tribal leaders of the 16 federally recognized Native American tribes to identify TCPs that would have the potential to be affected by the Proposed Action. To date, no TCPs have been identified within the APE.

- 1) Big Pine Paiute Tribe
- 2) Bishop Paiute Tribe
- 3) Chemehuevi Indian Tribe
- 4) Colorado River Indian Tribes
- 5) Duckwater Shoshone Tribe
- 6) Ely Shoshone Tribe
- 7) Fort Independence Indian Community
- 8) Fort Mojave Indian Tribe
- 9) Kaibab Band of Paiute Indians
- 10) Las Vegas Tribe of Paiute Indians

- 11) Lone Pine Paiute-Shoshone Tribe
- 12) Moapa Band of Paiute Indians
- 13) Paiute Indian Tribe of Utah
- 14) Timbisha Shoshone Tribe
- 15) Utu Utu Gwaitu Paiute Tribe
- 16) Yomba Shoshone Tribe

None of the Tribes identified areas of concern for cultural resources during consultation for the Proposed Action. Therefore, TCPs are not carried forward for analysis in this EA. Tribal consultation correspondence can be found in **Appendix A**.

3.9.4 Environmental Consequences

3.9.4.1 Evaluation Criteria

Adverse impacts on cultural resources would occur if the Proposed Action

- physically alters, damages, or destroys all or part of a resource;
- alters characteristics of the surrounding environment that contribute to the resource's significance;
- introduces visual or audible elements that are out of character with the property or alter its setting;
- neglects the resource to the extent that it deteriorates or is destroyed; or
- results in 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 impact is considered significant if it alters the integrity of a NRHP-listed, eligible, or potentially eligible resource.

On 20 October 2025, the SHPO issued a determination that the DAF has no further Section 106 responsibilities for this undertaking. This determination fulfills the requirements for Section 106 consultation associated with the determinations made in **Sections 3.9.4.2–3.9.4.4**.

3.9.4.2 Alternative 1

Cultural resources potentially affected include significant historic sites such as national landmarks or properties listed, eligible for listing, or potentially eligible for listing on the NRHP. These properties qualify because of setting or feeling, historic architectural resources, archaeological resources with standing structures that would have the potential to be affected by noise or ground disturbance, national historic trails, and cultural resources that are associated with places that require isolation or quiet.

Architectural Properties

Runway 08/26 (S1829) is located along the southern portion of the Creech AFB airfield. The resource includes the runway itself and nine accessory resources, including taxiways, overruns, runway lights, a live ordnance loading area, and a turnaround pad. The runway is oriented east to west and is immediately north of the main apron. It is connected to the runway system by a number of taxiways and intersects Runway 13/31 on its east end. Runway 08/26 (S1829) measures 9,002

feet long by 150 feet wide, encompassing a total of 28.5 acres. It is made of poured concrete with asphalt shoulders and is level with the surrounding grade. The runway has black and white paint markings. The asphalt shoulders have lights, which are raised above the pavement surface. The outside edge of the asphalt shoulder appears to be of historic age, although other sections of concrete and asphalt appear to have been recently replaced. In 2008, repairs to or replacement of sinking asphalt were made on the east end of the runway. Creech AFB Real Property records state that the runway was constructed in 1943. The runway was extended on the west end, and overruns were added to both ends in 1959. Runway 08/26 was recommended eligible for NRHP listing in 2017, with SHPO concurrence in 2020. Projects within the scope of this EA with potential to affect the runway include C1 and I1. Project C1 would construct a taxiway extension and arm/disarm pad that extends the existing Taxiway Alpha to the west threshold of Runway 08/26. Project C1 would include an asphalt taxiway; concrete arm/disarm pad; paved shoulders; airfield lighting, markings, and guidance signage; addition of an access roadway leading to the arm/disarm pad; airfield storm drainage; utilities; and all other work as necessary. Minor long-term, direct, adverse effects to the western terminus of Runway 08/26, where the Alpha Taxiway addition would connect to Runway 08/26, would be anticipated. Project I1 would repair sections of degraded airfield pavements along Runway 08/26. Effects from Project I1 would be minor, long term, direct, and beneficial due to the repair of the resource; such repairs would not change the historic character or setting of the resource. In summary, effects to Runway 08/26 would be minor, long term, direct, and both adverse and beneficial under Alternative 1.

Runway 13/31 (S1830) is located in the northeastern portion of the Creech AFB airfield and is the second principal runway at Creech AFB. The resource includes the runway itself and four accessory resources, including taxiways and overruns. Runway 13/31 (S1830) is oriented northwest to southeast and is on the north side of Runway 08/26 and east of Taxiway B. Runway 13/31 intersects with Taxiway B and Taxiway G at its northwest end and with Runway 08/26 on its southeast end. The runway is paved in asphalt with fine-grained aggregate and is level with the surrounding grade. The asphalt is modern and has long, parallel joints, suggesting that it may have been laid in several courses. The runway has white and yellow retroreflective paint markings. The only lights on the runway are the adjoining modern taxiway lights. One section of older concrete is present near the southeast end of the runway. Creech AFB Real Property records state that the runway was constructed in 1943. Project I2 is anticipated to affect the resource by repairing sections of degraded airfield pavements along the runway. Effects from Project I2 would be minor, long term, direct, and beneficial due to the repair of the resource; such repairs would not change the historic character or setting of the resource under Alternative 1.

Taxiway B (S1831) is located in the center of the Creech AFB airfield. The resource includes the taxiway itself and two accessory resources, both of which are RPA live ordnance loading areas. Taxiway B (S1831) is oriented roughly north to south and is north of Runway 08/26 and west of Runway 13/31. Taxiway B connects with Runway 13/31 at the northwest end of the runway and intersects with Taxiway F and Runway 08/26 before finally reaching the main apron at the south end of the taxiway. It measures approximately 4,500 feet long and 100 feet wide. The taxiway is made of poured concrete panels and is level with the surrounding grade. Taxiway B was originally a runway constructed around 1943, and sections of the original World War II and Cold War-era concrete remain. No projects within the scope of this EA would physically alter Taxiway B, nor do any projects include actions that would cause visual, atmospheric, auditory, or reasonably foreseeable effects to the resource. Therefore, there would be no adverse effects to Taxiway B under Alternative 1.

A beacon (S1832) is located atop the Creech AFB water tower along the south-central boundary of Creech AFB, situated between North Frontage Road to the south and 1st Street to the north. The structure is made of metal that has been painted orange. The beacon has four lights equally spaced from each other, and it is designed to rotate 360 degrees. The beacon is mounted on a steel substructure and has a lightning rod next to it. The steel substructure consists of a circular rotating disk, bolted to a motor to operate the beacon. It is accessed via an enclosed ladder on the water tower. Creech AFB Real Property records state that the beacon stands 75 feet off the ground, measures 10 feet by 10 feet, and was constructed in 1952. Project I4 would repair water lines around the water tower, but no alteration to the tower or beacon is planned. No projects within the scope of this EA would physically alter the beacon or the water tower on which it is installed, nor do any projects include actions that would cause visual, atmospheric, auditory, or reasonably foreseeable effects to the resource. Therefore, there would be no adverse effects to the beacon under Alternative 1.

The Proposed Action also includes the demolition of six buildings. Project D1 would demolish B95, the Airfield Lighting Vault (SHPO # B13735). Constructed in 1952, B95/B13735 initially was recorded in 2006 and recommended ineligible for NRHP listing in 2015. The building was again surveyed and recommended NRHP-ineligible in December 2024 by the archaeology contractor and the DAF (Curran et al., 2024). The SHPO has not yet concurred with these recommendations according to NVCRIS records. Project D2 would demolish B86 (an administrative office building) (SHPO # B16179). B86/B16179 was constructed in 1989 and recommended ineligible for NRHP listing in 2017 with SHPO concurrence in 2020. Project D3 would demolish B55, the HQ Administration Building. B55 was constructed in 2006, making it ineligible for NRHP listing. Project D4 would demolish buildings B137, B404, and B406. B137 was constructed in 1994, making it ineligible for NRHP listing. B404 (SHPO # 16195) and B406 (SHPO # 16196) were both determined NRHP-ineligible by SHPO in 2020. Therefore, there would be no adverse effects to architectural resources from demolition activities under Alternative 1.

Adverse visual effects to historic architectural resources would have the potential to occur from introduced visual or audible elements from development of the Proposed Action that are out of character with historic architectural resources that alter their setting or feeling. Adverse visual effects would have the potential to occur if NRHP-eligible architectural resources were within the visual APE and had visual modifications that alter their setting or feeling. The projects included in the Proposed Action are military in nature and would be in character with the surrounding built environment. Therefore, the Proposed Action is unlikely to cause an adverse visual, auditory, or atmospheric effect to architectural historic properties within the APE. A precise layout for some projects under the Proposed Action has not been determined, and potential direct, minor, adverse visual effects would have the potential to occur if any of the four architectural historic properties within the APE were altered to be out of character for their built environment during project development. Creech AFB would continue to consult with the SHPO on potential effects.

Archaeological Properties

There are no NRHP-eligible or -listed archaeological sites within the physical APE for Alternative 1. There are 16 sites that are considered unevaluated for NRHP eligibility within the physical APE that would have the potential to be subject to physical disturbance. While these 16 sites have not yet been evaluated with SHPO concurrence, 14 of the 16 sites have been recommended ineligible for NRHP listing on their respective archaeological site forms by contracted professional archaeologists, and they have likely exhausted their ability to provide

important information about the past, and/or they have lost their historic integrity through physical disturbance, or the sites have been thoroughly investigated, and all artifacts have been collected.

Site CK3872 is a large, chert, lithic quarry site of undetermined dimensions recorded in 1987. NVCRIS records depict six different areas (vernacularly referred to as polygons) with this site number, one of which is located near the northeast corner of the Installation boundary, while the remaining five areas are depicted two miles to the northeast. The single site polygon depicted within the APE is approximately 14.5 acres; however, only 0.25 acre of the site's area (two percent) is located within the physical APE. NVCRIS also notes that there is an issue with duplicate records for this entry. The site form for CK3872 does not depict or describe any site of the site's discontinuous polygons to be near the Installation, and one of the polygons two miles away is the only one that matches the site sketch map included in the original site form from 1987. If the site polygon mapped near the northeast corner of the Installation is accurate, then Project C11 would be the only project with potential to overlap with the site boundary. However, the portion of the site within the physical APE is already substantially disturbed by the Installation's perimeter fence and surrounding roads. Additionally, the archaeology contractor revisited the portion of CK3872 within Creech AFB in December 2024, and no artifacts or cultural features were observed (Curran et al., 2024). The contractor stated that since the site was not relocated, site integrity could not be determined and an updated NRHP evaluation could not be made. Therefore, regardless of the site's spatial accuracy as depicted in NVCRIS, there would be no adverse effects to site CK3872 under Alternative 1.

Site CK4700 is located along the northern edge of the landfill in the northwestern corner of the Installation. The site consists of an isolated dispersed prehistoric-period hearth composed of approximately 70 to 100 fractured fire-altered rocks ranging in size from gravel to small cobble. The current condition of site CK4700 is unknown. Under Alternative 1, Project C11 would have the potential to physically disturb site CK4700, assuming it had not been previously disturbed by the closed landfill or other activities. Project C11 would design and install a cybersecure microgrid control system integrated with large-scale PV arrays, a battery energy storage system, and a thermal energy storage system. The project potentially would include up to 71.2 acres, primarily for PV arrays, of which 19.4 acres would be within the closed landfill. Additionally, the archaeology contractor revisited CK4700 in December 2024 and no artifacts or cultural features were observed (Curran et al., 2024). The contractor stated that, based on field observations, the site likely has been destroyed by military activity, including complete grading and blading of the area. Therefore, there would be no adverse effects to site CK4700 under Alternative 1.

For each of the 11 sites within the visual APE (see **Table 3-9, Appendix E**), there likely would be no adverse effect, either direct or indirect. Archaeological resources typically are only eligible for the NRHP under Criterion D, aside from special cases with unique circumstances. Because the significance and integrity of resources eligible under Criterion D typically are dependent on the recovery of data important, or potentially important, to the past, only physical disturbance likely would threaten these sites. Therefore, there would be no adverse effects to the 11 sites only within the visual APE under Alternative 1.

Approximately 250 acres within the physical APE in the northwest corner of the Installation have yet to be systematically surveyed for archaeological resources. Proposed development within this area includes Projects C20 and C27 (see **Figure 2-1, Appendix D**). Project C20, located along the southwestern edge of the Munitions Storage Area, would construct an aboveground earth-covered munitions storage igloo with a reinforced concrete foundation/floor slab and a pre-engineered

reinforced concrete panel exterior with earth covering. The project would include blast-resistant steel doors, interior and exterior lighting, grounding, surge protection, intrusion detection system, and an exterior concrete access apron. All land east of this point has been subject to systematic survey. It is unclear whether Project C20 would extend westward into the area yet to be surveyed. Project C27, located along the Installation's northwestern boundary, would construct a perimeter fence to contain the remaining land owned by Creech AFB. The fence would extend northward from proposed project C26 and then turn eastward at approximately 90 degrees from the Installation's northwestern corner boundary to eventually meet the existing fence on the western side of the Munitions Storage Area. Existing ground disturbance in the areas planned for Projects C20 and C27 is minimal.

As described in **Section 3.9.3** areas of Project C26 would be located outside of the Installation boundary. Because the C26 project area was previously disturbed and cleared for use as an access road, the probability of encountering intact NRHP-eligible cultural resources is low. In the event of an unanticipated discovery of an archaeological resource during construction, Creech AFB would initiate the inadvertent discovery procedures outlined in the ICRMP (DAF, 2023b). Construction in the immediate area of the discovery would pause and the SHPO, Advisory Council on Historic Preservation, and federally recognized tribes affiliated with Creech AFB would be notified within 48 hours of discovery ([36 CFR § 800.13](#)). The remaining procedures outlined in the ICRMP would continue to be followed until resolved. With such measures taken, it is anticipated that there would be no adverse effects to archaeological properties under Alternative 1.

3.9.4.3 Alternative 2

Potential impacts to historic properties under Alternative 2 would be the same as Alternative 1.

3.9.4.4 Alternative 3

Potential impacts to historic properties under Alternative 3 would be the same as Alternative 1.

3.9.4.5 Reasonably Foreseeable Actions and Impacts

When combined with projects identified in **Table 3-1, Appendix E**, implementation of the Proposed Action Alternatives would result in no additional adverse impacts to cultural resources. The Indian Springs Schools, the High Desert State Prison, and the Southern Desert Correctional Center projects would occur on previously disturbed areas and would not be anticipated to encounter cultural resources. The BLM solar project would result in 5,000 acres of land disturbance and would need SHPO consultation prior to construction. The US-95 conversion project is currently reviewing alternatives. Depending on the chosen alternative, undeveloped land may be developed; SHPO consultation would be needed prior to construction. However, this project is still in its feasibility stage, and there is no development planned. When considered in conjunction with the effects of other past, present, and reasonably foreseeable actions at Creech AFB, no significant reasonably foreseeable impacts to cultural resources would be anticipated to occur with implementation of the Proposed Action.

3.9.4.6 No Action Alternative

Under the No Action Alternative, the DAF would not implement the proposed Installation development projects. Development of the facilities and infrastructure that would support the training and flight programs would not take place. Creech AFB would continue to operate under current conditions, facilities would continue to degrade, and no change to cultural resources at Creech AFB would be expected to occur beyond baseline conditions.

3.10 INFRASTRUCTURE/UTILITIES (INCLUDING TRANSPORTATION)

3.10.1 Definition of the Resource

Infrastructure consists of the systems and structures that enable a population in a specified area to function. Infrastructure is wholly man-made, with a high correlation between the type and extent of infrastructure and the degree to which an area is characterized as developed. Infrastructure components include transportation and utility systems, solid waste management, and stormwater infrastructure. The availability of infrastructure and its capacity to support more users, including future development of an area, are generally regarded as essential to continued economic growth. Transportation is defined as the system of roadways, highways, and transit services that provide ingress/egress from or to a particular location, as well as access to regional goods and services.

Utilities include electricity and natural gas, potable water supply, sanitary sewage/wastewater, and communications systems. Solid waste management primarily relates to landfill capacity for disposal of non-hazardous solid waste (e.g., construction waste) generated in an area or by a population. Stormwater infrastructure includes the man-made conveyance systems that function in tandem with natural drainages to collect and control the rate of surface runoff during and after a precipitation event. In urbanized areas, stormwater that is not discharged to a waterbody is conveyed to sanitary sewers, systems that collect, move, and treat liquid waste prior to its discharge back into the environment. **Sections 3.7.3.2 and 3.10.3.2** of this EA discuss stormwater conditions and potential impacts from the Proposed Action.

The ROI for this resource is Creech AFB and the external infrastructure components and services relied upon to operate the Installation.

3.10.2 Existing Conditions

3.10.2.1 Transportation

Creech AFB is accessible from US-95 along the southern boundary of the Installation. The East Gate, located just north of US-95, is the primary access control point and is manned 24 hours a day for entry of personnel, goods, and equipment (DAF, 2015). Within the Installation, a perimeter road encases the property with a series of smaller connected roads in the Community Support, Mission Operations Complex, and Southside Operations districts. The Airfield and Munitions Storage Area districts contain limited access roads. The transportation system within Creech AFB is reported as adequate, with the road network free of congestion except during peak hours. However, toward the southern areas of the Installation, including the access gate, slowdowns are expected as vehicles enter and exit onto US-95.

3.10.2.2 Utilities

Electricity and Natural Gas

Electricity at Creech AFB is provided by Nevada Energy via a 12.5-kilovolt electrical substation (DAF, 2019b). Valley Electric Association owns and maintains the infrastructure providing medium-voltage electrical power under a contract in place until 2063. Creech AFB uses three electrical feeders and relies on facilities using diesel-powered generators when electricity is not available. Within the ROI, from 2 to 12 power outages occur annually due to weather or when new buildings are connected to the power grid (DAF, 2022c).

Creech AFB does not use natural gas but does use propane gas. Propane is transported onto the Installation via trucks through a service contract with Defense Fuel Supply. Because there is no natural gas system within the ROI, natural gas is not carried forward for analysis in this EA.

Potable Water Supply

Water is supplied to Creech AFB via three on-Base operating wells constructed since 2009. The water supply is heavily dependent on groundwater recharge during periods of precipitation where the amount of precipitation exceeds the rate of evapotranspiration. The water is chlorinated then released to the distribution system made up of storage tanks and water lines. The majority of water use within the ROI is attributed to commercial, industrial, and administrative activities. The water supply system has a capacity of approximately 57 million gallons per year, which is sufficient capacity to meet current and future demands for potable water supply (DAF, 2022c).

Sanitary Sewage/Wastewater

There is no wastewater treatment plant located within the Installation. Instead, wastewater generated by Creech AFB is connected to the Indian Springs Wastewater Treatment Plant for processing. Vehicle and equipment washing areas contain closed-loop systems to collect wastewater, where it discharges through an oil and water separator (OWS) for pretreatment before discharging through Creech AFB's sanitary sewer system (DAF, 2021). Within the Installation, 11 active and 2 inactive OWSs are used to prevent potential sources of pollution from entering the sanitary or stormwater drainage systems (DAF, 2023c).

Overflow protection devices are used to reduce the potential for accidental overflow or spills. These measures include high-level alarms, site gauges, and/or automatic cutoffs that shut down transfer pumps. Additionally, berms are used to collect wastewater and are sloped to direct wastewater through an OWS, eliminating a potential pollutant source for stormwater (DAF, 2021).

Communications Systems

Several communications links are utilized between Creech AFB and the nearby Nellis AFB and Las Vegas metropolitan area (DAF, 2015). Telephone systems are updated and offer complete facility coverage. There is no use of radar technology within the ROI; radar coverage originates from Angel Peak, approximately 10 miles south of Creech AFB. The communications network within Creech AFB is aging and inefficient; expansion is needed to consolidate facilities, expand communications capabilities, and reduce radio interference (Creech AFB, 2023).

3.10.2.3 Solid Waste Management

Creech AFB follows state and federal regulations for solid waste management in accordance with the Installation's Integrated Solid Waste Management Program. Generated waste is sorted for reuse, donation, recycling, and disposal. Recycled waste is collected within Creech AFB and then transported to Nellis AFB for processing through that installation's recycling center. Collection and disposal of solid waste from Creech AFB is transported to Nellis AFB before being transported to APEX Regional Landfill for disposal. The landfill has a service life through 2078 (DAF, 2022c, 2023d).

3.10.3 Environmental Consequences

3.10.3.1 Evaluation Criteria

The DAF defines a significant effect on or from infrastructure, transportation, and utilities within the ROI as one or more of the following:

- measurable change or service reduction within the regional transportation network;
- prolonged or repeated interruption of public transportation services regionally;
- prolonged or repeated service disruptions to utility end users; and
- substantial increase in utility demand relative to existing and planned regional uses.

3.10.3.2 Alternative 1

Transportation

Under Alternative 1, Projects C19 and C26 would directly impact the transportation system at Creech AFB. Project C19 would install fencing and an automatic gate system for flightline ECP access. Currently, there is no entry point with direct access to the airfield operations, and all vehicles must enter through the main access control points for the flightline. This project would facilitate the smooth flow of traffic during emergency situations and prevent backups by providing direct access to the airfield. Project C26 would construct a commercial vehicle gate, alleviating traffic congestion along US-95 stemming from the single Installation access control point. The current access location can result in closures to personnel entry and highway travel by the Installation when commercial vehicle inspections occur. Implementation of Projects C19 and C26 would improve vehicle access, resulting in long-term, beneficial impacts to transportation.

New parking lots and access roadways associated with Projects C2, C3, C10, C12–C16, C18, C20, C21, C23, and C26 would result in indirect and long-term, beneficial impacts to Installation transportation. During construction, temporary, minor, adverse impacts to transportation infrastructure would be anticipated from road closures and associated congestion; however, local and regional roadways would be able to readily absorb construction-related traffic. Minor delays on or in the immediate vicinity of Creech AFB would be anticipated but impacts on roadway capacity or condition would not be discernible. No permanent, adverse impacts to transportation infrastructure would be expected to result under Alternative 1. Any increase in personnel, traffic, or equipment would be temporary and short term during the construction period.

The proposed projects under Alternative 1 would have long-term, moderate, beneficial impacts on the transportation system at Creech AFB.

Utilities

Electricity and Natural Gas

Many of the proposed projects under Alternative 1 would impact the Creech AFB electrical system. Projects C9 and C11 are intended to improve the system. Project C9 would increase energy resilience by providing power backup and restoration in case of outages caused by feeder damage. Project C11 would provide critical facilities with emergency backup power and would ultimately increase the energy independence of the Installation.

Energy efficient construction of new buildings, consistent with [EO 13693](#), *Planning for Federal Sustainability in the Next Decade*, may decrease energy consumption, and demolition of outdated and inefficient buildings would decrease the electrical demand. Therefore, net changes in long-term electrical demand would be anticipated to be minimal from the increase in construction projects. Any potential short-term disruptions to electrical service within the project areas during construction and demolition activities would be mitigated during project planning. Disruptions would be anticipated to occur from temporary service interruptions during disconnections for demolition, rerouting of above- or below-ground service lines, or during installation of connections to new buildings.

There are 13 new buildings associated with Projects C2, C3, C10, C12–C16, C18, C20, C21, C23, and C26 that would draw from the electrical system at Creech AFB and increase the energy demand of the Installation. The proposed demolition of four buildings associated with Projects D1–D4 would slightly offset the new construction. However, the electrical system has the capacity to support the new construction. Projects C9 and C11 would support the Installation’s energy resilience and provide backup power in the event of an outage. The remaining projects under Alternative 1 would have no impact on the Installation electrical system.

The proposed projects under Alternative 1 would be expected to have long-term, moderate, beneficial impacts to the electrical system at Creech AFB.

Potable Water Supply

Under Alternative 1, Projects I1–I3 would repair water lines located in Zones I–III of Creech AFB. These projects would ensure consistent and efficient delivery of water within the Installation. These projects are necessary as potable water systems are crucial infrastructure and require proper maintenance.

There are 13 new buildings associated with Projects C2, C3, C10, C12–C16, C18, C20, C21, C23, and C26 that would require connection to the potable water system at Creech AFB. The proposed demolition of four buildings associated with Projects D1–D4 would slightly offset the new demand from construction of new buildings. Short-term, negligible, adverse impacts on the potable water supply system would be anticipated to occur during construction and demolition when existing lines are disconnected from old buildings and new lines are constructed to serve new buildings. There would be a short-term increase in water use for dust control during demolition and construction activities. The remaining projects under Alternative 1 would have no impact on the potable water supply.

The projects proposed under Alternative 1 would be expected to have moderate, beneficial impacts to the potable water system at Creech AFB. With implementation of the proposed improvements to the potable water system and considering the current capacity, the potable water system on Creech AFB would be expected to have sufficient capacity to meet current and future demands.

Sanitary Sewage/Wastewater

There are 13 new buildings associated with Projects C2, C3, C10, C12–C16, C18, C20, C21, C23, and C26 that would require connection to the sanitary sewer and wastewater systems at Creech AFB. While there is existing capacity to support new facility connection, overflow protection devices are used to reduce the potential for accidental overflow or spills. The proposed demolition of four buildings associated with Projects D1–D4 would slightly offset the new demand from construction of new buildings. Short-term, negligible, adverse impacts on the sanitary sewer and wastewater treatment system would be anticipated to occur during construction and demolition when existing lines would be connected to new buildings or capped, as appropriate. The remaining projects under Alternative 1 would have no impact on wastewater infrastructure. There would be short-term, negligible, adverse impacts to the sanitary sewer and wastewater systems, as the system has capacity to meet current and future mission demands.

Communications Systems

Under Alternative 1, seven projects would directly affect the communications systems on Creech AFB. Project C4 proposes the construction of an antenna tower complex and the installation of eight MQ-9 GDT systems that would reduce radio interference. Project C5 would construct a GDT tower site, which would revitalize and expand communication capabilities and reduce radio

interference at Creech AFB. Projects C17 and C23 would reconstruct north and south GDT towers, resulting in a decrease of radio interference. Projects C21, a Network Control Center, and C22, an Airfield Operations Center, would upgrade communications and security while consolidating flight facilities and increasing overall efficiency. Project C26 would alleviate traffic congestion and would require the installation of approximately 2,700 ft² of communications lines. The remaining projects under Alternative 1 would have no impact on communications systems. The projects proposed under Alternative 1 would be expected to result in long-term, beneficial impacts to communications systems on Creech AFB.

Solid Waste Management

Under Alternative 1, construction and demolition activities would generate solid waste in the form of construction and demolition debris. Construction projects generate approximately 4.39 pounds (lbs)/ft² of construction activity and approximately 158 lbs/ft² from demolition projects (buildings and impervious surfaces) (USEPA, 2003). When considered for the proposed building construction and demolition projects, total debris would result in approximately 17.6 million lbs of construction waste and 2 million lbs of demolition waste over the lifetime of the projects.

In accordance with AFMAN 37-7002, *Environmental Compliance and Pollution Prevention*, generated solid waste would be collected and reused or recycled through Installation programs, with residual waste transported off the Installation for disposal or recycling. As done under current operations, contractors would comply with federal, state, and local regulations for the collection and disposal of solid waste from the proposed projects. The DAF nonhazardous solid waste diversion goal for FY 2020–2025 was 40 percent. Additionally, the DAF must reduce two percent of its total nonhazardous solid waste every fiscal year. Recyclable materials at the Installation are reused to the greatest extent possible. As Creech AFB does not operate a recycling center, recycled waste is collected and transported to Nellis AFB for processing through that Base's recycling center. The Nellis AFB recycling center receives an annual average of 7.2 tons of co-mingled recyclables from Creech AFB, including mixed plastics, aluminum cans, paper, and cardboard (DAF, 2022c).

Moderate, short-term, adverse impacts to solid waste would be expected during construction and demolition due to the increased demand on the solid waste system. No long-term impacts on solid waste management would be expected to occur under Alternative 1 because the projects would not appreciably increase the amount of solid waste generated on Creech AFB, and the APEX Regional Landfill has sufficient capacity to accommodate the waste generated.

3.10.3.3 Alternative 2

Potential impacts to the transportation, utilities, and solid waste management systems under Alternative 2 would be the same as Alternative 1.

3.10.3.4 Alternative 3

Potential impacts to the transportation, utilities, and solid waste management systems under Alternative 3 would be the same as Alternative 1.

3.10.3.5 Reasonably Foreseeable Actions and Impacts

When combined with projects identified in **Table 3-1, Appendix E**, implementation of the Proposed Action Alternatives would result in moderate, beneficial impacts to infrastructure, including transportation and utilities. The I-11 feasibility study would be anticipated to have long-term impacts to transportation both within Creech AFB and in the vicinity of the Installation. The

I-11 feasibility study is currently reviewing alternatives, one of which would result in construction of a bypass around Indian Springs, Nevada, and would have the potential to permanently change the current access to the Installation. However, this project is still in its feasibility stage, and there is no development planned. When considered in conjunction with the effects of other past, present, and reasonably foreseeable actions and planned actions at Creech AFB, no significant reasonably foreseeable impacts to infrastructure, including transportation and utilities, would be anticipated to occur with implementation of the Proposed Action.

3.10.3.6 No Action Alternative

Under the No Action Alternative, the DAF would not implement the proposed Installation development projects. The Development of the facilities and infrastructure that would support the training and flight programs would not take place. Creech AFB would continue to operate under current conditions, facilities would continue to degrade, and the beneficial impacts to the transportation, electricity, and communications systems would not be realized.

3.11 NOISE/ACOUSTIC ENVIRONMENT

3.11.1 Definition of the Resource

Sound is a physical phenomenon consisting of minute vibrations that travel through a medium, such as air or water, and are sensed by the human ear. Noise is generally described as unwanted sound. Unwanted sound can be grounded in objectivity (e.g., hearing loss or damage to structures) or subjectivity (e.g., an individual's level of tolerance or annoyance to different sounds). Noise events elicit varying responses within a population or area based on the activity generating noise and its perceived importance and related factors, such as setting, time of day, exposure period or duration, and receptor sensitivity. In addition to humans, noise may also affect wildlife as indicated by behavioral changes during nesting, foraging, migration, or other life-cycle activities (USEPA, 1978).

Noise and sound levels are expressed in logarithmic units measured by decibels (dB). A sound level of 0 dB is approximately the threshold of human hearing and is barely audible under extremely quiet listening conditions. Normal speech equates to a sound level of approximately 60 dB, sound levels above 120 dB begin to be felt inside the human ear as discomfort, and sound levels between 130 and 140 dB are felt as pain (Berglund and Lindvall, 1995). To mimic the human ear's non-linear sensitivity and perception of different frequencies of sound, the spectral content is weighted to de-emphasize very low and very high frequencies to better replicate human sensitivity and is denoted as an A-weighted decibel (dBA). All sound levels presented in this document are in units dBA unless otherwise noted.

In accordance with DoD guidelines and standard practice for environmental impact analysis documents, the noise analysis herein uses the Day-Night Average Sound Level (DNL) and the Onset-Rate Adjusted DNL. DNL is a cumulative measure of multiple flight and engine maintenance activities throughout an average year.

The *Noise Control Act of 1972* ([Public Law 92-574](#)) directs federal agencies to comply with applicable federal, state, and local noise control regulations. In 1974, the USEPA provided information suggesting that continuous and long-term noise levels greater than 65 dBA are normally unacceptable for noise-sensitive receptors such as residences, schools, churches, and hospitals (USEPA, 1974).

The ROI for noise is Creech AFB.

3.11.2 Existing Conditions

As is normal for military installations with a flying mission, the primary driver of noise at Creech AFB is aircraft operations. Creech AFB functions as the DAF's Thunderbirds' aerial demonstration site and as the home base of daily overseas Contingency Operations for RPA. Noise contours for the aircraft operations are shown on **Figure 3-3, Appendix D**.

In addition to aviation noise, other noise is generated from the day-to-day activities from operations, maintenance, and the industrial functions associated with airfield operations. These noise sources include ground-support equipment and vehicular transportation. Noise from aircraft operations remains the dominant noise source.

Noise-sensitive receptors in the ROI are primarily associated with schools, healthcare facilities, recreation and conservation lands (including the wildlife that inhabits these areas), and places of religion. Noise-sensitive receptors within 800 feet of the planned demolition and construction activities, that is, those who could reasonably be expected to hear construction noise under the Proposed Action, include the following:

- Echoes of Faith Church,
- Indian Springs School baseball field, and
- Creech AFB running track.

3.11.3 Environmental Consequences

3.11.3.1 Evaluation Criteria

When evaluating noise effects, several aspects are examined:

- the degree to which noise levels generated by training and operations, as well as construction, demolition, and renovation activities, would be higher than the ambient noise levels;
- the degree to which there would be hearing loss and/or annoyance; and
- the proximity of noise-sensitive receptors (e.g., residences, schools, hospitals, parks) to the noise source.

3.11.3.2 Alternative 1

Alternative 1 would include construction, renovation, and demolition activities that would occur entirely within the boundaries of Creech AFB with the exception of Project C26, which would occur directly adjacent to the boundary along the perimeter fence line. These actions would be short term, implemented over time, and would not contribute to the long-term baseline noise environment. Short-term noise would be generated from construction equipment and traffic. Sound levels associated with typical construction equipment are listed in **Table 3-10, Appendix E**.

Noise associated with the operation of construction equipment generally would be short term, intermittent, and localized, with the loudest machinery typically producing peak sound pressure levels ranging from 86 to 95 dBA at a 50-foot distance from the source (see **Table 3-10, Appendix E**). The equipment would be operated during daylight hours and would be localized at the project site. Two noise-sensitive receptors (Echoes of Faith Church and Indian Springs School baseball field) would experience short-term, minor, adverse noise impacts during construction and

demolition activities. There would be no long-term change to the existing noise environment with implementation of Alternative 1.

3.11.3.3 Alternative 2

Under Alternative 2, only the location of Project C11 would change; all other projects and their locations would remain the same. The location of Project C11 (Site B) would not change the number of or potential impacts to noise-sensitive receptors. Potential impacts to the noise/acoustical environment under Alternative 2 would be the same as Alternative 1.

3.11.3.4 Alternative 3

Under Alternative 3, only the location of Project C11 would change; all other projects and their locations would remain the same. The location of Project C11 (Site C) would be farther south, closer to the Creech AFB running track. Project C11 is anticipated to cover approximately 71 acres. Depending on its final location, the project would have the potential to result in short-term, minor, adverse noise impacts to the running track facility during construction and demolition activities. Equipment would be operated intermittently during construction, and potential noise impacts would be limited to daylight hours. There would be no long-term change to the existing noise environment with the implementation of Alternative 3.

3.11.3.5 Reasonably Foreseeable Actions and Impacts

When combined with projects identified in **Table 3-1, Appendix E**, implementation of the Proposed Action Alternatives would be short term (i.e., limited to the construction period) and localized to the individual construction projects. When considered in conjunction with the effects of other past, present, and reasonably foreseeable actions at Creech AFB, no significant reasonably foreseeable impacts to the noise/acoustic environment would be anticipated with implementation of the Proposed Action.

3.11.3.6 No Action Alternative

Under the No Action Alternative, the DAF would not implement the proposed Installation development projects. Development of the facilities and infrastructure that would support the training and flight programs would not take place. Creech AFB would continue to operate under current conditions, facilities would continue to degrade, and no change to noise/acoustic environment at Creech AFB would be expected to occur beyond baseline conditions.

3.12 HAZARDOUS MATERIALS AND WASTE

3.12.1 Definition of the Resource

CERCLA, as amended by the Superfund Amendments and Reauthorization Act (SARA) and TSCA ([15 USC § 2601 et seq.](#), as implemented by [40 CFR Part 761](#)), defines hazardous materials (HAZMAT) as any substance with physical properties of ignitability, corrosivity, reactivity, or toxicity that might cause an increase in mortality, serious irreversible illness, and incapacitating reversible illness, or that might pose a substantial threat to human health or the environment. The Occupational Safety and Health Administration (OSHA) is responsible for the enforcement and implementation of federal laws and regulations pertaining to worker health and safety under [29 CFR Part 1910](#). OSHA also includes the regulation of HAZMAT in the workplace and ensures appropriate training in their handling.

The *Solid Waste Disposal Act*, as amended by RCRA, which was further amended by the *Hazardous and Solid Waste Amendments of 1984*, defines hazardous wastes as any solid, liquid, contained gaseous, or semi-solid waste, or any combination of wastes, that pose a substantial present or potential hazard to human health or the environment. In general, both HAZMAT and hazardous wastes include substances that, because of their quantity, concentration, physical, chemical, or infectious characteristics, might present substantial danger to public health and welfare or the environment when released or otherwise improperly managed.

In accordance with [Air Force Policy Directive \(AFPD\) 32-70](#), *Environmental Considerations in Air Force Programs and Activities*, the DAF is committed to performing the following actions:

- cleaning up environmental damage resulting from its past activities,
- meeting all environmental standards applicable to its present operations,
- planning its future activities to minimize environmental impacts,
- responsibly managing the irreplaceable natural and cultural resources it holds in public trust, and
- eliminating pollution from its activities wherever possible.

[DAFMAN 32-1067](#), *Water and Fuel Systems*, identifies compliance requirements for underground storage tanks (USTs) and aboveground storage tanks (ASTs), and associated piping, that store petroleum products and hazardous substances. Evaluation of HAZMAT and hazardous wastes focuses on USTs and ASTs as well as the storage, transport, and use of pesticides, fuels, oils, and lubricants. Evaluation might also extend to generation, storage, transportation, and disposal of hazardous wastes when such activity occurs at or near the project site of a Proposed Action. In addition to being a threat to humans, the improper release of HAZMAT and hazardous wastes can threaten the health and wellbeing of wildlife species, botanical habitats, soil systems, and water resources. In the event of HAZMAT and hazardous wastes release, the extent of contamination would vary based on the type of soil, topography, weather conditions, and water resources that occur in the vicinity of the event.

[AFMAN 32-7002](#), *Environmental Compliance and Pollution Prevention*, establishes procedures and standards that govern management of HAZMAT throughout the DAF. This manual applies to all personnel acting on behalf of the DAF who authorize, procure, issue, use, or dispose of HAZMAT, and to those who manage, monitor, or track any associated activities.

Through the Environmental Restoration Program (ERP) initiated in 1980, a subcomponent of the Defense ERP that became law under SARA (formerly the Installation Restoration Program), each DoD installation is required to identify, investigate, and clean up hazardous waste disposal or release sites. Remedial activities for ERP sites follow the Hazardous and Solid Waste Amendments under the RCRA Corrective Action Program. The ERP provides a uniform, thorough methodology to evaluate past disposal sites, control the migration of contaminants, minimize potential hazards to human health and the environment, and clean up contamination through a series of stages until it is decided that no further remedial action is warranted.

Description of ERP activities provides a useful gauge of the condition of soils, water resources, and other resources that might be affected by contaminants. It also aids in the identification of properties and their usefulness for given purposes (e.g., activities dependent on groundwater usage might be foreclosed where a groundwater contaminant plume remains to complete remediation).

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 (ACMs), lead-based paint (LBP), polychlorinated biphenyls (PCBs), fuel storage, ERP, per- and polyfluoroalkyl substances (PFAS), aqueous film forming foam (AFFF), radon, and pesticides. The presence of special hazards or controls over them might affect, or be affected by, a proposed action. Information on special hazards describing their locations, quantities, and condition assists in determining the significance of a proposed action.

The ROI for this resource is Creech AFB.

3.12.2 Existing Conditions

3.12.2.1 Hazardous Materials and Wastes

Hazardous substances are used at Creech AFB for aircraft operations support and maintenance, including petroleum, oils, and lubricants management and distribution. Types of hazardous substances found on Creech AFB include paints, solvents, thinners, adhesives, aircraft fuel, diesel, gasoline, lubricants and oils, hydraulic fluids, cleaners, batteries, acids, refrigerants, herbicides, insecticides, rodenticides, and compressed gases (DAF, 2023d). Building 255 functions as the hazardous waste storage and recycling site on the Installation (DAF, 2021).

Hazardous and toxic substances disposal procedures are identified in the Creech AFB Hazardous Waste Management Plan, and all waste is disposed of in compliance with all federal, state, and local regulations (DAF, 2023d). The USEPA considers Creech AFB a small-quantity generator of hazardous waste and maintains the Hazardous Waste EPA ID Number NV0570090019 (DAF, 2021). To maintain the small-quantity generator status, the facility cannot dispose of more than 2,200 lbs of hazardous waste per month. Hazardous waste at Creech AFB is collected at the central accumulation point: Building 255, initial accumulation points, and universal waste collection centers (DAF, 2023d). Activities on the Installation, including aircraft maintenance and support, community services, vehicle maintenance, and facility management operations, are contributors to hazardous waste streams. Basic processes and waste-handling procedures for general and aircraft maintenance activities are identified in the Creech AFB Hazardous Waste Management Plan (DAF, 2023d).

Buildings located on Creech AFB may contain ACMs. These materials were commonly used during construction on buildings built from the 1940s through the 1980s. Nonfriable asbestos are not considered HAZMAT until removed or disturbed. Buildings constructed prior to 1977 are likely to contain friable asbestos in building materials. Disruption of these materials may cause asbestos to become airborne, producing a risk of inhalation. The Air Force manages asbestos in accordance with [AFI 32-1001](#), *Civil Engineer Operations*, and applicable USEPA regulations (USEPA, 2024).

The OSHA and the USEPA have determined that human exposure to lead is an adverse health risk. Sources of exposure to lead include dust, soils, and LBPs. In 1973, the Consumer Product Safety Commission established a maximum lead content in paint of 0.5 percent by weight in a dry film of newly applied paint. In 1978, under the *Consumer Product Safety Act* ([15 USC §§ 2051–2089](#)), the Commission lowered the allowable lead level in paint to 0.06 percent (600 parts per million). The Act also restricted the use of LBP in nonindustrial facilities. The DoD implemented a ban on LBP use in 1978; therefore, it is possible that facilities constructed prior to or during 1978 may contain LBP.

PCBs were commonly manufactured in the US until 1929 and found in many industrial and commercial products such as fluorescent light ballasts, thermal insulation, adhesives and tapes, oil-based paint, plastics, and floor finish. The production of PCBs was banned in 1979 but release and exposure from sources prior to the ban are possible. PCBs do not readily break down once they enter the environment and can remain for long periods cycling between water, air, and soil (USEPA, 2024).

3.12.2.2 Fuel Storage

At Creech AFB, fuel is stored in the Bulk Fuel Storage Area, which consists of Buildings 115, 117, and 121 to the south of the airfield in the Southside Operations District. The fuel is stored in ASTs, and the Installation has a total capacity of 171,000 gallons. Fuels managed in this area include aviation fuel (Jet-A) and unleaded gasoline. Jet fuel (JP-8) is also stored in Building 278 (DAF, 2021). These buildings are not associated with any of the projects evaluated under the Proposed Action.

3.12.2.3 Environmental Restoration Program and Other Potentially Contaminated Sites

The Secretary of Defense established the ERP in 1981 to investigate and remediate hazardous waste sites at DoD facilities. The DAF subsequently established its ERP to locate and investigate hazardous waste sites on its installations, termed “ERP sites.” Fully restored and remediated ERP sites present few constraints to future Installation development; however, land use controls² may be required. At Creech AFB, there nine active and three closed ERP sites. Eight of the nine active ERP sites are located on areas where historic AFFF release is known to have occurred, and the ninth active site is located on an area where a leak of JP-8 from an underground pipeline is known to have occurred. The three closed ERP sites are former landfills (**Figure 3-4, Appendix D**).

3.12.2.4 Per- and Polyfluoroalkyl Substances and Aqueous Film Forming Foam

PFAS is a group of synthetic fluorinated chemicals employed in a wide variety of residential, commercial, and industrial uses and can be found in everyday items such as nonstick cookware, stain-resistant fabric and carpet, certain types of food packaging, and fire-fighting foam (AFCEC, 2024). Scientific studies have shown that exposure to some PFAS in the environment may be linked to harmful health effects in humans and animals. In recent years, the USEPA has been taking steps to address PFAS and protect communities across the US. In 2016, the USEPA announced advisory levels for two types of PFAS in drinking water, perfluorooctane sulfonate (PFOS) and perfluorooctanoic acid (PFOA). In August 2022, the USEPA issued a proposal to designate two of the most widely used PFAS as hazardous substances under CERCLA (USEPA, 2023). In March 2023, the USEPA proposed to establish legally enforceable levels for six PFAS known to occur in drinking water.

AFFF, which the DAF began to use in the 1970s to extinguish petroleum-based fires, contains both PFOS and PFOA. In August of 2016, the DAF began phasing out PFOS-based AFFF and other AFFF products and introduced newer, more environmentally friendly formulas. In August 2017, the DAF finished the phase-out and completed the new foam delivery. Creech AFB replaced AFFF with a synthetic fluorine-free foam that is compatible with the DoD’s Qualified Products List for

² Land use controls may consist of non-engineered instruments, such as administrative and legal controls or engineered and physical barriers (e.g., fences and security guards). Land use controls help to minimize the potential for exposure to contamination and/or protect the integrity of a response action and are typically designed to work by limiting land and/or resource use or by providing information that helps modify or guide human behavior at a site (USEPA, 2022b).

use as a fire-fighting foam. This synthetic fluorine-free foam is biodegradable and contains no PFAS (Perimeter Solutions, 2022, 2024).

All DAF investigation and mitigation work relating to PFOS and PFOA is performed in accordance with CERCLA, applicable state laws, and the USEPA’s lifetime drinking water health advisory of 4 parts per trillion (AFCEC, 2024; USEPA, 2025).

The current fire training area has no history of AFFF usage (USACE, 2016). Historically, one former fire training area (AFFF #1) utilized training activities that included the release of unknown quantities of AFFF on bare soil with no liner or collection system. Hangars 707 (AFFF #2) and 718 (AFFF #3) had been equipped with AFFF fire suppression systems; however, there have been no reported releases of AFFF from these systems. Prior to 2016, biennial testing of the system involved the release of approximately 25 gallons of AFFF mixture in the vicinity of the hanger’s concrete approach aprons on the northern sides of both buildings. Therefore, areas in the vicinity have the potential for impacted media due to the possibility of unreported historical release (USACE, 2016).

There are two fire stations located on Creech AFB. Prior to the 2017 AFFF phase-out, both fire stations had fire emergency vehicles that were equipped with AFFF storage; Fire Station 2 (AFFF #5) was the primary location for AFFF storage. AFFF resupply of fire emergency vehicles occurred on the approach apron on the northern side of Fire Station 1 (AFFF #4) and on the apron on the south side of Fire Station 2. Small releases of AFFF during resupply would flow onto the adjacent paved areas with the potential to reach unpaved areas. Several 55-gallon drums of AFFF were stored in a designated storage room. There are no reported releases of AFFF at either fire station, and the supply of AFFF was replaced with foam that reduced FOS and PFOA exposure from 2011 to 2017 (AFCEC, 2017). There are three known historical aircraft crash sites where AFFF was released. The emergency response, including the release of unknown quantities of AFFF, occurred in an unpaved area in 1982 directly northwest of Taxiway D (AFFF #7); in 1994 in an open area 250 feet north of Creech AFB Runway 08/26 (AFFF #6); and in 2013 in open desert land about half a mile northeast of the Installation (not shown on the figure) (USACE, 2016).

3.12.2.5 Radon

Radon is an odorless, colorless, radioactive gas that develops from the natural breakdown of uranium in soil and rock. Radon can migrate through permeable rocks and soils and seep into buildings or structures, thereby posing an atmospheric human health risk. The national standard of concern for indoor radon is 4 picocuries per liter (pCi/L) in the air. USEPA and the United States Surgeon General have evaluated the radon potential around the country to organize and assist building code officials in deciding whether radon-resistant features are applicable in new construction. Radon zones can range from 1 (high) to 3 (low). Each zone designation reflects the average short-term radon measurement that can be expected in a building without the implementation of radon control methods. The USEPA radon zone for Clark County, Nevada, is Zone 3 (low potential, predicted indoor average level less than 2 pCi/L); however, radon potential throughout the county can vary (USEPA, 2024a).

3.12.2.6 Pesticides

The application of all pesticides at Creech AFB includes herbicides, fungicides, insecticides, and rodenticides and is authorized by Creech’s Integrated Pest Management Program, which manages policies, standards, and requirements meant to establish and maintain safe, effective, and environmentally sound integrated pest management procedures (DAF, 2019b). Invasive species

management on Creech AFB is guided by the National Invasive Species Management Plan; *Federal Noxious Weed Act* ([7 USC § 2814](#)); Nevada Revised Statutes Chapter 555, *Control of Insects, Pests, and Noxious Weeds*; and the Nellis AFB Integrated Pest Management Plan (DAF, 2019b).

3.12.3 Environmental Consequences

3.12.3.1 Evaluation Criteria

Impacts from HAZMAT or hazardous wastes would be significant if the Proposed Action

- generates, uses, or stores HAZMAT or hazardous wastes in violation of federal or state regulations; or
- exposes construction workers to increased health risks from working in existing contamination without proper training and equipment.

3.12.3.2 Alternative 1

Hazardous Materials and Wastes

Under Alternative 1, a limited use of certain HAZMAT would be required during construction, renovation, and demolition activities. Such HAZMAT might include paints, welding gases, solvents, preservatives, sealants, and pesticides. Additionally, hydraulic fluids and petroleum products, such as diesel and gasoline, would be anticipated to be used in construction and demolition equipment and vehicles. As such, Alternative 1 would have the potential for the accidental discharge or spill of HAZMAT that would have the potential to contaminate the environment or result in exposure of persons to such contaminants.

Construction activities associated with Alternative 1 would have the potential to unearth contaminants in environmental media not yet known or identified for management action. Even without a major release or discovery event, multiple minor releases of HAZMAT would have the potential to affect the environment or persons in the vicinity. As a precaution to ensure potable water sources are not contaminated, Creech AFB has implemented BMPs that limit mission actions involving potential HAZMAT to beyond 200 feet of any production well, monitoring well, or natural spring, unless such actions are mission critical (DAF, 2023d).

HAZMAT used or generated during construction, renovation, or demolition activities would be handled, stored, and disposed of in accordance with federal, state, and local laws and regulations. All applicable permits, beyond permits already maintained, for the handling and disposal of HAZMAT would be obtained prior to starting construction, renovation, or demolition activities. Construction, renovation, and demolition work under Alternative 1 would be subject to the procedural requirements of the Creech AFB Hazardous Waste Management Plan and other applicable management plans to prevent and minimize risks associated with contaminant release or transport in the environment. During construction or demolition, if HAZMAT is discovered, work in that location would stop until the potential contamination has been properly evaluated and addressed.

Concerns of ACM, LBP, and PCB are associated with the age of a building, specifically buildings constructed during or before 1974. The use of ACM, LBP, and PCBs was banned in 1977, 1978, and 1979, respectively. Under Alternative 1, buildings associated with Projects D2 (Building 86) and D4 (Buildings 137, 404, and 406) would not be expected to contain ACM, LBP, or PCBs, as they were all constructed after 1984. However, it is possible that transformers or electrical

equipment within the ROI may contain unknown PCBs. As such, any PCBs encountered during the development of the project would be handled and disposed of in accordance with federal and DoD regulations.

With the use of appropriate BMPs, short-term, minor, adverse impacts to hazardous wastes and materials would be anticipated to occur under Alternative 1.

Fuel Storage

None of the proposed construction, demolition, or infrastructure projects on the Installation would impact the current fuel storage system; therefore, there would be no adverse impacts to fuel storage under Alternative 1.

Environmental Restoration Program Sites

Project C9 would be located within a former landfill, ERP site LF-001. Portions of Projects I4 and C24 would occur within a former landfill, ERP site LF-010. These former landfills have been assessed for continued environmental contamination and have been listed by the DAF as no further action needed. These projects involve passive uses, such as utility systems and fencing, and would not be subject to development restrictions. Therefore, no adverse impacts to these sites would be anticipated under Alternative 1.

Per- and Polyfluoroalkyl Substances and Aqueous Film Forming Foam

As of 2017 and in compliance with CERCLA regulations, the DAF has phased out use of PFAS and AFFF.

Projects C8 and C23 would occur on AFFF Area # 5 and AFFF Area #2, respectively. Project C8, the construction of airfield fencing, would cross AFFF Area #5. However, as this project only involves installation of fencing, it would have minimal ground and soil disturbance. Project C23, the construction of GDT towers, would involve replacement of the existing towers where soil disturbance in AFFF Area #2 has already occurred; the likelihood of encountering AFFF-contaminated soils would be reduced, although contamination may still exist within the site. Creech AFB would follow the NDEP recommendations and take measures, such as site testing, to ensure that no additional releases of AFFF or PFAS occur as a result of planned activities and that any derived waste, such as contaminated soils from investigation of AFFF release sites, are disposed of in an authorized facility. Short-term, moderate, adverse impacts associated with construction activities within AFFF sites would be anticipated to occur under Alternative 1.

Radon

The USEPA radon zone for Clark County is Zone 3 (low potential, predicted indoor average level less than 2 pCi/L). It is unlikely that new facilities constructed under Alternative 1 would have indoor radon screening levels greater than 4 pCi/L. If higher radon levels were detected, post-construction radon management measures, such as installing ventilation systems to remove radon that has already entered the building, would be taken in buildings that test higher than 4 pCi/L. Therefore, there would be no adverse impacts to construction activities from radon exposure under Alternative 1.

Pesticides

Under Alternative 1, there potentially would be an increase in the number of pesticides, herbicides, fungicides, insecticides, and rodenticides used during construction, renovation, and demolition activities. Herbicide and pesticide applications would have the potential to adversely impact non-target species, result in downstream contamination from application site runoff, and cause

unintentional releases to the environment by spills and application errors of chemicals. The types of chemicals used would be approved in accordance with Installation policies. Best management practices such as not applying pesticides, herbicides, fungicides, insecticides, and rodenticides during precipitation events would reduce the risk of unintentional runoff or release of chemicals. Use of pesticides, herbicides, fungicides, insecticides, and rodenticides during demolition or renovation and after construction activities would be conducted on an as-needed basis consistent with federal, state, and local regulations. Therefore, potential adverse impacts from increased pesticide usage would be anticipated to be short term and temporary with under Alternative 1.

3.12.3.3 Alternative 2

Under Alternative 2, potential impacts to HAZMAT and hazardous wastes, ERP sites, PFAS, AFFF, radon, and pesticide use would be anticipated to be the same as Alternative 1.

3.12.3.4 Alternative 3

Under Alternative 3, potential impacts to HAZMAT and hazardous waste, PFAS, AFFF, radon, and pesticide use would be anticipated to be the same as Alternative 1.

Under Alternative 3, Project C11 (Site C) would be located adjacent to former landfill ERP site LF-001. Depending on the final layout and size of the solar array, a portion of the project may intersect the landfill. This site has been identified as a closed ERP and has been determined by the DAF as no further action needed. The remaining projects would not change from the analysis under Alternative 1 and potential impacts to ERP sites would be anticipated to be the same as Alternative 1.

3.12.3.5 Reasonably Foreseeable Actions and Impacts

When combined with the projects identified in **Table 3-1, Appendix E**, implementation of the Proposed Action Alternatives would result in no significant impacts to HAZMAT and hazardous wastes, toxic substances, or contaminated sites. Any HAZMAT or hazardous waste generated from construction of the Indian Springs Schools or the BLM solar project would be managed at the project site level. Construction under the Proposed Action Alternatives would be anticipated to occur over a five-year period, reducing the potential for temporary impacts generated during construction, renovation, and demolition actions. When considered in conjunction with the effects of other past, present, and reasonably foreseeable actions at Creech AFB, no significant reasonably foreseeable impacts to HAZMAT, hazardous wastes, toxic substances, and contaminated sites would be anticipated to occur with implementation of the Proposed Action.

3.12.3.6 No Action Alternative

Under the No Action Alternative, the DAF would not implement the proposed Installation development projects. Development of the facilities and infrastructure that would support the training and flight programs would not take place. Creech AFB would continue to operate under current conditions, facilities would continue to degrade, and no change to HAZMAT and hazardous wastes, as well as contaminated sites, would be expected to occur beyond baseline conditions.

3.13 SAFETY AND OCCUPATIONAL HEALTH

3.13.1 Definition of the Resource

This section discusses safety and occupational health concerns associated with ground, explosives, and flight activities. Ground safety considers issues associated with ground operations and maintenance activities that support unit operations including arresting gear capability, jet blast/maintenance testing, and safety danger. Aircraft maintenance testing occurs in designated safety zones. Ground safety also considers the safety of personnel and facilities on the ground that may be placed at risk from flight operations in the vicinity of the airfield. Clear zones (CZs) and APZs around the airfield restrict the public's exposure to areas where there is a higher accident potential. Although ground and flight safety are addressed separately, in the immediate vicinity of the runway, risks associated with safety-of-flight issues are interrelated with ground safety concerns.

Explosives safety relates to the management and safe use of ordnance and munitions. Flight safety considers aircraft flight risks such as midair collision, BASH, and in-flight emergency. Creech AFB would adhere to DAF safety procedures and aircraft-specific emergency procedures produced by the original equipment manufacturer. Basic airmanship procedures also exist for handling any deviations to air traffic control procedures due to an in-flight emergency; these procedures are defined in Volume 3 of [AFMAN 11-202](#), *Flight Operations*, and established aircraft flight manuals. The Flight Crew Information File is a safety resource for Aircrew day-to-day operations and contains air and ground operation rules and procedures.

The primary federal statute addressing occupational hazards is the *Occupational Health and Safety Act* ([29 USC §§ 651–678](#)) which created OSHA and the National Institute for Occupational Safety and Health. Creech AFB would be required to ensure the occupational health and safety of all personnel through implementation of [DAFMAN 91-203](#), *Air Force Occupational Safety, Fire, and Health Standards* (2022), and [AFI 91-202](#), *The US Air Force Mishap Prevention Program* (2023), which implements [DAFPD 91-2](#), *Safety Programs*.

The ROI for safety and occupational health is Creech AFB.

3.13.2 Existing Conditions

3.13.2.1 Ground and Construction Safety

DAFPD 91-2 is implemented by AFI 91-202, which manages risks to protect DAF personnel from occupational deaths, injuries, or illnesses and minimize loss of DAF resources. These standards, in addition to adherence to the DAF's Mishap Prevention Program, serve to ensure that all DAF workplaces meet federal safety and health requirements and apply to all DAF activities.

In accordance with AFI 91-202, all construction contractors at Creech AFB must follow safety regulations and worker's compensation programs to avoid posing any risks to workers or personnel on or off the Installation. Construction contractors are responsible for reviewing potentially hazardous workplace operations, monitoring exposure to workplace chemicals (e.g., asbestos, lead, HAZMAT), physical hazards (e.g., noise propagation, slips, trips, falls), and biological agents (e.g., infectious waste, wildlife, poisonous plants). Construction contractors are also required to recommend and evaluate controls (e.g., preventative, administrative, engineering) to ensure that personnel are properly protected and to implement a medical surveillance program to perform occupational health physicals for those workers subject to any accidental chemical exposures.

3.13.2.2 Flight Safety

The primary safety concern for military aircraft activity is the potential for aircraft accidents. Research in accident potential conducted by DAF found that most aircraft accidents occurred during takeoff or landing and were clustered along the runway and its extended centerline. This resulted in the designation of safety zones around airfields and restriction of incompatible land uses to reduce the public's exposure to safety hazards. CZs and APZs are designated rectangular safety zones extending outward from the ends of active military airfields that delineate areas recognized as having the greatest risk of aircraft accidents. APZs are further defined as APZ I, APZ II, and APZ III depending on their level of accident potential with APZ III being the least restrictive.

Within the Installation, CZs flank the western and eastern portions of Runway 08/26, followed by APZ I. APZ II for Runway 08/26 extends beyond the boundaries of Creech AFB. Additional CZs are associated with Runway 13/31, which is oriented southeast to northwest, perpendicular to Runway 08/26. The northern CZ of Runway 13/31 extends beyond the Installation boundary, while its southern CZ ends at US-95 before extending to APZ I (**Figure 3-5, Appendix D**).

3.13.2.3 Explosives Safety

[Defense Explosives Safety Regulation 6055.09 DAFMAN 91-201](#), *Explosives Safety Standards*, establishes the size of the clearance zone around facilities used to store, handle, and maintain munitions based on the quantity-distance criteria. Defined distances are maintained between munitions storage areas and a variety of other types of facilities. These distances, called explosives safety quantity-distance (ESQD) arcs, are associated with munitions storage and hot cargo pads, the CZs associated with the runway, and the noise zones associated with airfield operations. Within these ESQD arcs, development is either restricted or prohibited (DAF, 2015). The ESQD arcs within Creech AFB are located centrally in the Airfield District and in the northwestern portion of the Installation surrounding the Munitions Storage Area District (**Figure 3-5, Appendix D**).

3.13.2.4 Bird/Wildlife Aircraft Strike Hazards

Creech AFB implements a BASH program to support the avoidance of potential aircraft collisions with birds and wildlife while maintaining mission capability. Migratory birds and raptors can present serious strike hazards to aircraft when they get into the flight path. Other wildlife, such as deer and coyotes, also pose a strike risk for landing aircraft by crossing onto the runway (DAF, 2023a). The Creech AFB Natural Resources Program and 432d Wing Flight Safety cooperate to conduct avian point-count surveys around the flightline and apply for state and federal depredation permits. Bird surveys are conducted to quantify seasonal trends in bird density and abundance in areas in and next to the flight path. The Creech AFB Natural Resources Program also traps small mammals around the flight lines to reduce the number of prey for raptors and coyotes that would have the potential to create BASH problems. Creech AFB also has a Bird Hazard Working Group to discuss BASH issues and review the BASH program (DAF, 2023a).

Small mammals are discouraged from using areas around the airfield through habitat management. This includes removal of vegetation and soil stabilization with chemical solutions to ensure that there is no suitable habitat for prey that would attract BASH predators. Creech AFB maintains an internal DAF waiver of AFI 91-202 grass height standards, allowing the total removal of vegetation as a best practice for wildlife mitigation in desert environments. Additionally, drainage channels are in place to avoid water ponding, and vegetation is regularly removed from the channels to prevent birds from taking up residence (DAF, 2023a).

3.13.3 Environmental Consequences

DAFPD 91-2 is implemented by AFI 91-202, which manages risks to protect DAF personnel from occupational deaths, injuries, or illnesses and minimizes loss of DAF resources. These standards apply to all DAF activities; adherence to DAF's Mishap Prevention Program ensures that DAF workplaces meet federal safety and health requirements.

3.13.3.1 Evaluation Criteria

Safety-related impacts from a proposed activity are assessed according to the potential to increase or decrease safety risks to personnel, the public, property, or the environment. Adverse impacts related to safety would occur if the Proposed Action resulted in DAF OSHA criteria being exceeded or the improper implementation of established or proposed safety measures, creating unacceptable safety risk to personnel. Adverse impacts would occur if the Proposed Action

- increases risks associated with the safety of construction personnel, contractors, military personnel, or the local community;
- hinders the ability to respond to an emergency; or
- introduces a new health or safety risk for which the Base is not prepared or does not have adequate management and response plans in place.

Significant adverse impacts to safety resources would occur if the Proposed Action

- substantially increases risks to the health and safety of workers or the public;
- substantially increases rates of injuries, illnesses, accidents, or emergencies;
- substantially affects the ability of law enforcement or other emergency response personnel to respond promptly to accidents and emergencies;
- causes workers or the public to reasonably perceive that health and safety risks had substantially increased; and/or
- contributes to a violation of any local, state, or federal regulation.

3.13.3.2 Alternative 1

Ground and Construction Safety

Construction and demolition activities can potentially expose personnel to health and safety hazards from heavy-equipment operation, HAZMAT and chemical use, and poorly ventilated, noisy environments. Therefore, short-term, negligible-to-minor, adverse impacts on contractor health and safety would be anticipated as a result of proposed construction activities under Alternative 1. To minimize health and safety risks, contractors would be required to use appropriate personal protective equipment and establish and maintain site-specific health and safety programs that follow all applicable OSHA regulations for their employees. Additionally, all construction contractors at Creech AFB would be required to follow industry-accepted safety practices, ground safety regulations, and worker's compensation programs to avoid posing any risks to workers or personnel on or off the Installation.

Under Alternative 1, Projects C4, C5, C17, and C21–C23 would be anticipated to result in moderate, long-term, beneficial impacts to ground safety through the construction of GDT towers and infrastructure to reduce interference among communications systems for the airfield, improving the safety of ongoing operations.

Projects C6–C8, C19, C24, and C27, which would involve the construction of fences along portions of the flightline and installation of an automatic gate system for flightline ECPs, would be anticipated to result in moderate, long-term, beneficial impacts to ground safety by controlling access to the airfield and reducing security risks to airfield operations. These projects would enclose the airfield and create a more secure environment and would include ECPs that would allow for greater regulation of airfield access. Project C19, installation of the automatic gate system, would result in additional moderate, long-term, beneficial impacts by providing points of direct access for emergency and response vehicles that would otherwise need to enter via main access points, increasing their response time in cases of emergency.

Project C9, construction of a finished electrical loop system, and Project C11, installation of solar and battery systems, would be anticipated to have moderate, long-term, beneficial impacts on ground safety by providing backup power sources and supplying emergency power to Installation-critical facilities in the event of electrical outages. Creech AFB does not currently have emergency backup power for Installation-critical facilities. These projects would also allow for increased energy resilience, which would have the potential for moderate, long-term, beneficial impacts to ground safety by enabling Creech AFB to be more prepared in the event of any emergency situations where primary power sources are incapacitated and by putting systems in place that would allow for quicker recovery from any power disruptions.

Project C26 would be anticipated to have minor, long-term, beneficial impacts on ground safety by allowing for more efficient inspection of commercial vehicles entering the Installation, increasing safety and security for Installation personnel. This project would also relieve current traffic congestion and highway closure issues due to backups that are created by current commercial vehicle inspection capabilities at Creech AFB entry points, which would be anticipated to have moderate, long-term, beneficial impacts on ground safety by creating safer traffic conditions on Installation access roads and on the nearby portion of US-95.

Projects D1–D4 would be anticipated to have minor, long-term, beneficial impacts to ground safety by removing outdated, unused facilities that have the potential to pose a safety risk to Installation personnel if the facilities were to remain standing and left to degrade over time.

Projects I1 and I2 would repair degraded sections of airfield pavement and would be anticipated to have moderate, long-term, beneficial impacts on ground safety by reducing safety risks to Aircrew and equipment due to poor pavement conditions.

Projects I3–I5 would repair waterlines in Zones I–III. Waterlines are considered crucial infrastructure on Creech AFB, and the water supply system on the Installation does not currently meet fire protection needs (DAF 2015, 2019b). These projects would result in moderate, long-term, beneficial impacts to ground safety by ensuring that the water system is adequately able to meet fire protection needs in the event of an emergency.

An approximately 4,031-foot-long section of Project I4 would be within the CZ, as well as approximately 503 lf of C7 and 2,505 lf of C9. Project C26 would be located entirely within APZ I, as well as approximately 2,146 lf of C9, 855 lf of C24, and 125 lf of C27. Project I4 would repair existing water lines and would not conflict with the use of the CZ. Project C7 would construct an airfield fence, which would result in long-term, beneficial impacts to ground and construction safety by regulating access to the CZ. Project C9 would construct an underground electrical loop that would not conflict with the CZ.

Portions of Projects C9 and C24 would be located in APZ I of Runway 08/26. These projects involve utilities and fencing improvements and are in compliance with the land use for APZ I. The access road portion of Project C26 would cross APZ I of Runway 08/26. The exact location of the commercial vehicle gate facility has not been determined but would be constructed in compliance with airfield CZ and APZs.

Implementation of the above projects under Alternative 1 would be anticipated to result in moderate, long-term, beneficial impacts to ground safety.

Flight Safety

Projects C4, C5, C17, C21, C22, and C23 under Alternative 1 would involve the construction of GDT towers and infrastructure and streamline airfield operations facilities. These projects would have the potential to result in moderate, long-term, beneficial impacts to flight safety by lowering the chances of disruptions to airfield operations and by reducing interference among communications systems, including those used by a ground control station to communicate with the RPA for launch and recovery operations. All other projects under Alternative 1 would have no impact to flight safety.

Explosives Safety

Project C20, which would construct an aboveground munitions storage igloo to support operations growth and increase storage capabilities, would not be anticipated to result in impacts to explosives safety.

Projects C4–C6, C20, I2, and I3 would be completely within the ESQD arc. Approximately 4,118 lf of C9 and 3,470 lf of C27 also would be within the ESQD arc, and I1 would overlap with part of the arc's boundary to the southeast. Projects C4 and C5 would support the construction of new GDT towers, resulting in improved communications capabilities. While these towers would be located within the ESQD arcs, they would provide a necessary benefit to airfield safety. Project C6 would construct an airfield fence, which would result in restricted access to the area, reducing the opportunity for accidental access to the ESQD arc area. Projects C9 and I1–I3 would improve critical infrastructure and would not be in conflict with the ESQD arcs. Project C20, the construction of a munitions storage igloo, would be in compliance with ESQD arc regulations and allow for proper storage of munitions as the operations and missions of Creech AFB continue to expand. Therefore, there would be long-term, moderate, beneficial impacts and no adverse impacts to explosives safety under Alternative 1.

Bird/Wildlife Aircraft Strike Hazard

The fences constructed under Projects C6–C8, C24, and C27 would have the potential to result in long-term, moderate, beneficial impacts to BASH safety by deterring or preventing some small mammals from accessing the airfield and creating hazards for flight operations.

3.13.3.3 Alternative 2

Under Alternative 2, potential impacts to ground and construction safety, flight safety, explosives safety, and bird/wildlife aircraft strike hazards would be anticipated to be the same as Alternative 1.

3.13.3.4 Alternative 3

Under Alternative 3, potential impacts to ground and construction safety, flight safety, explosives safety, and bird/wildlife aircraft strike hazards would be anticipated to be the same as Alternative 1.

3.13.3.5 Reasonably Foreseeable Actions and Impacts

When combined with the projects identified in **Table 3-1, Appendix E**, implementation of the Proposed Action Alternatives would have moderate, long-term, beneficial impacts to ground and construction safety; minor, long-term, beneficial impacts to explosives safety; and minor-to-moderate, long-term, beneficial impacts to flight and BASH safety. When considered in conjunction with the effects of other past, present, and reasonably foreseeable actions at Creech AFB, no significant adverse reasonably foreseeable impacts to safety and occupational health would be anticipated to occur with implementation of the Proposed Action.

3.13.3.6 No Action Alternative

Under the No Action Alternative, the DAF would not implement the proposed Installation development projects. Development of the facilities and infrastructure that would support the training and flight programs would not take place. Creech AFB would continue to operate under current conditions, safety risks associated with substandard components of Creech AFB's built environment would persist, and no change to safety and occupational health would be expected to occur beyond baseline conditions.

3.14 SOCIOECONOMICS

3.14.1 Definition of the Resource

Socioeconomics is the relationship between economics and social elements, such as population levels and economic activity. Several factors can be used as indicators of economic conditions for a geographic area, such as demographics, median household income, unemployment rates, percentage of dependents living below the poverty level, employment, and housing data. Employment data identify gross numbers of employees, employment by industry or trade, and unemployment trends. Data on industrial, commercial, and other sectors of the economy provide baseline information about the economic health of a region. Socioeconomic data are typically presented at county, state, and national levels to characterize baseline socioeconomic conditions in the context of regional, state, and national trends.

The ROI is defined as Creech AFB and the surrounding communities in Clark County, Nevada.

3.14.2 Existing Conditions

3.14.2.1 Population

Creech AFB lies entirely within Clark County, 1 mile north of Indian Springs Nevada, and 35 miles northwest of Las Vegas, Nevada. The Installation occupies 2,085 acres of land with a majority of its operations located on the northern side of US-95. In 2022, the population of Clark County was estimated to be 2,322,985 people (**Table 3-11, Appendix E**). Between 2012 and 2022, the populations of Nevada and Clark County increased by 14.8 and 15.9 percent, respectively. Over the same period, the population of Indian Springs decreased by 10.8 percent (United States Census Bureau [USCB], 2012, 2022a).

3.14.2.2 Employment

In 2022, the unemployment rate in Clark County was 6 percent. In comparison, the 2022 unemployment rate in the state of Nevada and the US was 5.4 percent and 3.6 percent, respectively. The state of Nevada had a marginally lower unemployment rate than Clark County but a higher rate than the US overall (BLS, 2022, 2024).

In 2023, the top three sectors by employment in Clark County were Accommodation and Food Services, Retail Trade, and Health Care and Social Assistance (BEA, 2024). The single largest employer in Clark County is the DAF, with more than 10,000 federal civilian employees, non-appropriated fund civilian employees, and private-business employees based out of Nellis AFB; an additional approximately 3,500 employees support Creech AFB (Nevada Workforce, 2024).

3.14.2.3 Housing

There is no housing on Creech AFB. Installation personnel wanting to live on a military Installation are referred to Nellis AFB, located approximately 50 miles southeast of Creech AFB. Housing on Nellis AFB is handled by Hunt Military Communities, a private company (Military OneSource, 2024).

Many employed by Creech AFB opt to live in the more populated areas of Clark County, such as the city of Las Vegas; however, the closest off-Installation housing is available in Indian Springs, Nevada, a small, unincorporated town with limited amenities. Indian Springs' housing availability is limited due to its size and population. The current median listing price for homes in Indian Springs is approximately \$95,100 less than the median listing price for homes in Clark County (USCB, 2022b).

Nevada housing rates show vacancy rates above the federal level (**Table 3-12, Appendix E**). Approximately 73 percent of the vacant homes in Nevada are located within Clark County, where the average cost for housing is higher than the national average (**Table 3-12, Appendix E**) (USCB, 2022b).

3.14.2.4 Schools

The Clark County School District provides education within the ROI. Indian Springs Schools, located south of Creech AFB, supports education from Pre-Kindergarten through 12th grade (K–12). Current enrollment includes 124 elementary-aged students, 73 middle school students, and 74 high school students (Indian Springs Schools, 2024). Additionally, the Clark County School District has 44 magnet schools available for students to attend pending an application process that caters to K–12 students. There are several private and religious schools not associated with the Clark County School District. There are no schools located at the Installation.

3.14.2.5 Public Services

Police

On Creech AFB, the 432d Security Forces Squadron provides law enforcement services, responds to incidents, and provides security. Incidents occurring outside the Installation boundaries receive response from the Clark County Police Department (DAF, 2019b).

Fire

The Creech AFB Fire Department, located in the Airfield District, and the Clark County Fire Department provide fire and emergency services on and for Creech AFB. The Clark County Fire Department is supported by 30 locations throughout Clark County, with 10 stations operated by volunteers. Because of the large size (region and population) of the county and many volunteer first responders, Creech AFB occasionally responds to calls off the Installation, such as in the nearby town of Indian Springs (DAF, 2015). Clark County Fire District Station 83 is located in Indian Springs, Nevada.

Hospitals

There are no hospitals on Creech AFB; hospital medical services for Creech AFB personnel are routed through Nellis AFB or other local community doctors (DAF, 2015). There are no urgent care or medical facilities in Indian Springs; however, as common in any metropolitan area, medical facilities are plentiful throughout the Las Vegas Valley, including several hospitals and smaller, non-emergency clinics.

3.14.3 Environmental Consequences

3.14.3.1 Evaluation Criteria

Consequences to socioeconomic resources are assessed in terms of the potential impacts on the local economy from implementation of a proposed action. The level of impacts from expenditures associated with the Proposed Action was assessed in terms of direct impacts on the local economy and indirect impacts on other socioeconomic resources (e.g., housing, employment). 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 might have significant impacts in a rural region. In addition, if potential socioeconomic changes from a Proposed Action result in substantial shifts in population trends or in adverse effects on regional spending and earning patterns, such changes may be considered adverse.

3.14.3.2 Alternative 1

Population

Alternative 1 is anticipated to have minimal to no adverse impacts to population levels in the ROI. The Proposed Action would not change the current population on Creech AFB.

Employment

Alternative 1 is anticipated to have short-term, minor, beneficial impacts to the socioeconomic condition of the ROI. Construction and demolition operations under Alternative 1 would be anticipated to result in a temporary increase in construction employees working on the Installation. The exact number of temporary personnel is unknown and would be anticipated to vary depending on the number of concurrent projects and their size.

Housing

Alternative 1 is anticipated to have no impact to housing levels and availability in the ROI. Although the availability of vacant homes in the ROI is adequate, the need for additional housing requirements under Alternative 1 would not be expected.

Schools

Alternative 1 is anticipated to have no impact to school population levels in the ROI. There would be no increase in demand for educational resources in the ROI. Military families would continue to use regional educational facilities as is currently being done.

Public Services

Alternative 1 would have no impact to public services in the ROI. Alternative 1 would not be anticipated to contribute to an increase in demand for police, fire, or hospital services.

3.14.3.3 Alternative 2

Under Alternative 2, potential impacts to socioeconomic conditions would be anticipated to the same as Alternative 1.

3.14.3.4 Alternative 3

Under Alternative 3, potential impacts to socioeconomic conditions would be anticipated to the same as Alternative 1.

3.14.3.5 Reasonably Foreseeable Actions and Impacts

When combined with projects identified in **Table 3-1, Appendix E**, implementation of the Proposed Action Alternatives would have short-term, minor impacts to socioeconomics. The Indian Springs Schools, operated by the Clark County School District, has proposed construction and demolition activities to take place in 2027 resulting in new schools to replace the existing facilities. A temporary increase in construction and demolition jobs would be anticipated to occur, resulting in short-term, beneficial, indirect impacts to the economy in the vicinity of Creech AFB. When considered in conjunction with the effects of other past, present, and reasonably foreseeable actions at Creech AFB, no reasonably foreseeable effects to socioeconomics would be anticipated to occur with implementation of the Proposed Action.

3.14.3.6 No Action Alternative

Under the No Action Alternative, the DAF would not implement the proposed Installation development projects. Development of the facilities and infrastructure that would support the training and flight programs would not take place. Creech AFB would continue to operate under current conditions, facilities would continue to degrade, and no change to socioeconomic conditions would be expected to occur beyond baseline conditions.

This page intentionally left blank

CHAPTER 4 LIST OF PREPARERS

The following individuals assisted in the preparation of this EA.

Tom Daues, PMP

Environmental Assessment Services, LLC
NEPA and Compliance Program Manager
M.S., Natural Resources
B.S., Biology
Years of Experience: 32
Contribution: Program Management and
Quality Control

Elyse Maurer, CFM

Environmental Assessment Services, LLC
Project Manager
B.A., Geography
Minors: GIS (certificate), Anthropology
Years of Experience: 10
Contribution: Project Management, Earth
Resources, Water Resources,
Socioeconomics

Michael Nied PE (WI)

Environmental Assessment Services, LLC
Project Manager
B.S., Biological Systems Engineering–
Natural Resources
Years of Experience: 13
Contribution: Air Quality and Noise

Violet Perry, AICP

Environmental Assessment Services, LLC
Environmental Planner
M.S., Urban Planning
B.S., Outdoor Adventure Leadership
Years of Experience: 3
Contribution: Biological Resources, Earth
Resources, Safety and Occupational Health

Joanne Stover

Koman Environmental Assessment Services,
LLC
Technical Editor
B.S., Business Administration–Management
Years of Experience: 30
Contribution: Technical Editor/Document
Production, Administrative Record

Nick Sutton

Environmental Assessment Services, LLC
Project Manager
B.S., Biology
Years of Experience: 8
Contribution: Draft EA Project Management

Chris Swisher, RPA

Environmental Assessment Services, LLC
Project Manager
M.A., Applied Archaeology
B.A., Sociology and Anthropology
Years of Experience: 10
Contribution: Cultural Resources

Karin Volpe

Environmental Assessment Services, LLC
Environmental Planner
B.A., Urban Planning
Minor: Disaster Risk Reduction
Years of Experience: 3
Contribution: Hazardous Materials and
Waste, Land Use, Infrastructure, GIS

4.1 GOVERNMENT CONTRIBUTORS

The following individuals contributed to this EA.

Contributor	Organization/Affiliation
Roland Fornoff	USAF ACC 432 SPTS/CEI
Sean Dorrough	USAF ACC 432 SPTS/CEIE
TSgt Aric McDonald	USAF ACC 432 SPTS/CEOFP
Grace Keesling	USAF AFMC AFIMSC/CIEE

CHAPTER 5 REFERENCES

- Advisory Council on Historic Preservation, 2019. Memorandum to ACHP Staff. *Re: Recent court decision regarding the meaning of “direct” in Sections 106 and 110(f) of the National Historic Preservation Act*. ACHP Office of General Counsel. 7 June.
- Air Force Civil Engineer Center (AFCEC), 2017. “Frequently Asked Questions Aqueous Film Forming Foam Replacement and Containment.” <https://www.afcec.af.mil/> (accessed February 1, 2024).
- AFCEC, 2023. *Level II, Air Quality Quantitative Assessment, Insignificance Indicators*. Technical Support Division. April.
- AFCEC, 2024 “Air Force Response to PFAS.” <https://www.afcec.af.mil/WhatWeDo/Environment/Perfluorinated-Compounds> (accessed 19 January 2024).
- Bureau of Economic Analysis, 2024. *Regional Data. GDP and Personal Income*. <https://apps.bea.gov/> (accessed 26 January 2024).
- Bureau of Labor Statistics (BLS), 2022. *Labor Force Data by County, 2022 Annual Averages*. <https://www.bls.gov/lau/laucnty22.xlsx> (accessed 26 January 2024).
- BLS, 2023. *Local Area Unemployment Statistics*. <https://www.bls.gov/lau/lastrk22.htm> (accessed 26 January 2024).
- California Native Plant Society, 2023. “What is an alliance?” <https://vegetation.cnps.org/whatsalliance> (accessed 22 December 2023).
- Colorado Department of Agriculture, 2015. *Saltcedar identification and Management*. https://drive.google.com/file/d/1qMxP9ogp7Z_Q_bnCSIF6wyKdkIELKOCO/view (accessed 23 January 2024).
- Creech Air Force Base, 2023. Personal communication with TSgt Aric McDonald.
- Curran, J.; P. Mires; A.K. Wiley; and K. Edmiston, 2024. *Cultural Resource Inventory for Creech Air Force Base, Clark County, Nevada*. Prepared for Creech Air Force Base by Chronicle Heritage. Henderson, Nevada.
- Department of the Air Force (DAF), 2015. *Installation Development Plan*. Creech Air Force Base, Nevada. May 2015.
- DAF, 2017. *Biological Assessment for the Nevada Test and Training Range and Proposed Expansion Alternatives*. The Nevada Test and Training Range and Nellis Air Force Base. November.

- DAF, 2019a. “History of Creech AFB.” Creech Air Force Base, Nevada.
<https://www.creech.af.mil/About-Us/Fact-Sheets/Display/Article/449127/history-of-creech-air-force-base/> (accessed November 23, 2022).
- DAF, 2019b. *Area Development Plan Mission Operations Complex District*. Creech AFB, Nevada. US Department of the Air Force. March.
- DAF, 2020. *Integrated Natural Resources Management Plan: Nellis Air Force Base, Creech Air Force Base, Nevada Test and Training Range*. Nellis Air Force Base, Nevada. US Air Force.
- DAF, 2021. *Stormwater Pollution Prevention Plan*. Creech AFB, Nevada. US Department of the Air Force.
- DAF, 2022a. *Phase 1 Environmental Baseline Survey: Three Parcels at Creech Air Force Base, Nevada*. Prepared by Environmental Assessment Services, LLC. May 2022.
- DAF, 2022b. *Final Report: 2021 South Range Vegetation Classification*. Prepared by Colorado State University Center for Environmental Management Military Lands. May.
- DAF, 2022c. *Integrated Solid Waste Management Plan*. Creech AFB, Nevada. US Department of the Air Force. January 2022.
- DAF, 2023a. *Integrated Natural Resources Management Plan (Regulatory Draft)*. Creech Air Force Base, Nevada. US Department of the Air Force.
- DAF, 2023b. *Integrated Cultural Resources Management Plan*. Creech AFB, Nevada. US Department of the Air Force. July 2023.
- DAF, 2023c. *Spill Prevention, Control, and Countermeasure Plan*. Creech AFB, Nevada. US Department of the Air Force. April 2023.
- DAF, 2023d. *Hazardous Waste Management Plan*. Creech AFB, Nevada. US Department of the Air Force. July 2023.
- Federal Emergency Management Agency (FEMA), 2002. *FEMA Flood Insurance Rate Map 32003C0875E*. 27 September 2002.
<https://msc.fema.gov/portal/advanceSearch#searchresultsanchor> (accessed, 22 January 2024).
- FEMA, 2023. “FEMA Flood Maps and Zones Explained.” <https://www.fema.gov/blog/fema-flood-maps-and-zones-explained> (accessed 22 January 2024).
- Federal Highway Administration, 2006. *Construction Noise Handbook*. Chapter 9, “Construction Equipment Noise Levels and Ranges.”
https://www.fhwa.dot.gov/environment/noise/construction_noise/handbook/handbook09.cfm (accessed 21 February 2024)

- Fusco, E.; J.K. Balch; A. Mahood; and C. Nagy, 2021. *The human-grass-fire cycle: how people and invasives co-occur to drive fire regimes*.
https://www.researchgate.net/publication/356216949_The_human-grass-fire_cycle_how_people_and_invasives_co-occur_to_drive_fire_regimes (accessed 22 December 2023).
- Indian Springs Schools, 2024. *About Us – Indian Springs Schools*.
https://tbirdterritory.com/apps/pages/index.jsp?uREC_ID=400363&type=d (accessed 26 January 2024)
- National Geographic, 2023. “Xeriscaping.”
<https://education.nationalgeographic.org/resource/xeriscaping/> (accessed 22 December 2023).
- National Oceanic and Atmospheric Administration, 2024. Summary of Monthly Normals – North Las Vegas, NV.
- Nevada Department of Wildlife (NDOW), 2022. *Nevada State Wildlife Action Plan*.
<https://www.ndow.org/wp-content/uploads/2023/11/2022-SWAP-Full-Doc-FINAL-print.pdf> (accessed 29 January 2024).
- NDOW, 2024. “Living with bats.” <https://www.ndow.org/blog/living-with-bats/#:~:text=Do%20not%20exclude%20bats%20between,require%20care%20from%20their%20mothers>. (accessed 23 January 2024).
- Nevada Workforce, 2024. *Top Employers by County*. <https://nevadaworkforce.com/docs/Top-Employers/20211/Top-20-Employers---Clark-County> (accessed 26 January 2024).
- Nordberg, E.J and L. Schwarzkopf, 2018. “Reduced competition may allow generalist species to benefit from habitat homogenization.” *Journal of Applied Ecology*.
<https://besjournals.onlinelibrary.wiley.com/doi/full/10.1111/1365-2664.13299> (accessed 3 January 2024).
- Perimeter Solutions, 2022. *Solberg 3% MIL-SPEC SFFF*. Perimeter Solutions Safety Data Sheet. 7 September. https://www.perimeter-solutions.com/wp-content/uploads/2023/09/SOLBERG-3_MIL-SPEC-ALT-datasheet_letter_v18.pdf (accessed 12 August 2024).
- Perimeter Solutions, 2024. *Solberg 3% MIL-SPEC SFFF*. <https://www.perimeter-solutions.com/en/class-b-foam/3-mil-spec-sfff/> (accessed 26 June 2024).
- Southern Nevada Water Authority & Southern Nevada Regional Planning Coalition, 2021. *Regional plant list*. <https://www.snwa.com/assets/pdf/water-smart-plant-list.pdf> (accessed 22 December 2023).
- United States Army Corps of Engineers, 2016. *Preliminary Assessment and Summary of Findings Site Inspections of Aqueous Film forming foam usage at Creech AFB, Nevada*. USACE. May.

- United States Census Bureau (USCB), 2012. “ACS 5-Year Estimates Data Profiles Table DP05 (2012).” *American Community Survey: Demographic and Housing Estimates*. <https://data.census.gov/table/ACSDP5Y2012.DP05> (accessed 7 August 2025).
- USCB, 2022a. “ACS 5-Year Estimates Data Profiles Table DP05 (2022).” *American Community Survey: Demographic and Housing Estimates*. <https://data.census.gov/table/ACSDP5Y2022.DP05> (accessed 7 August 2025).
- USCB, 2022b. “ACS 5-Year Estimates Data Profiles Table DP04 (2022).” *American Community Survey: Selected Housing Characteristics*. <https://data.census.gov/table/ACSDP5Y2022.DP04> (accessed 7 August 2025).
- United States Department of Agriculture (USDA), 2024a. *Soil Health Compaction Surface Sealing - Clark County Area Nevada and Energy and Defense Area Nevada*. Natural Resources Conservation Service.
- USDA, 2024b. *Farmland Classification*. Natural Resources Conservation Service.
- United States Environmental Protection Agency (USEPA), 1974. *Information on Levels of Environmental Noise Requisite to Protect Public Health and Welfare with an Adequate Margin of Safety*. EPA550/9-74-004. March.
- USEPA, 1978. *Protective Noise Levels: Condensed Version of EPA Levels Document*. EPA550/9-79-100. November.
- USEPA, 2003. *Estimating 2003 Building-Related Construction and Demolition Building Material Amounts*.
- USEPA, 2023. “Key Actions to Address PFAS.” <https://www.epa.gov/pfas/key-epa-actions-address-pfas#:~:text=In%20August%202023%2C%20EPA%20finalized,in%20the%20manufacturing%20process%2C%20federal> (accessed 21 February 2024).
- USEPA, 2024a. Nevada – EPA Map of Radon Zones. <https://www.epa.gov/sites/default/files/2014-08/documents/nevada.pdf> (accessed 19 January 2024).
- USEPA, 2024b. “Asbestos Laws and Regulations.” <https://www.epa.gov/asbestos/asbestos-laws-and-regulations> (accessed 19 January 2024).
- USEPA, 2024c. *Learn about Polychlorinated Biphenyls*. <https://www.epa.gov/pcbs/learn-about-polychlorinated-biphenyls#what> (accessed 5 February 2024).
- USEPA, 2025. *Per- and Polyfluoroalkyl Substances (PFAS). Final PFAS National Primary Drinking Water Regulation*. <https://www.epa.gov/sdwa/and-polyfluoroalkyl-substances-pfas> (accessed 22 July 2025).

- United States Fish and Wildlife Service (USFWS), 2020. *Project Recommendations for Migratory Bird Conservation*.
https://www.fws.gov/sites/default/files/documents/USFWS_Utah_FieldOffice_Migratory_Bird_Reccomendations_May2020.pdf (accessed 23 January 2024).
- USFWS, 2023a. *IPaC Information for Planning and Conservation*. Southern Nevada Fish and Wildlife Office. December.
- USFWS, 2024. *Desert National Wildlife Refuge*. <https://www.fws.gov/refuge/desert>. (accessed 19 February 2024).
- Utah State University Extension, 2024. “Halogeton.” <https://extension.usu.edu/rangeplants/forbs-herbaceous/halogeton> (accessed 23 January 2024).

This page intentionally left blank

**APPENDIX A. INTERGOVERNMENTAL COORDINATION, PUBLIC AND AGENCY
PARTICIPATION**

This page intentionally left blank

Mailing List

Las Vegas Station Manager
US Geological Survey – Nevada Water
Science Center
2730 N. Deer Run Road
Carson City, NV 89701

Area Support Team
USACE – Arizona-Nevada Area Office
3636 N. Central Avenue, Ste. 900
Phoenix, AZ 85012

Jamie Gottlieb
Natural Resource Conservation Service
Las Vegas Service Center
7080 La Cienega St, Suite 100
Las Vegas, NV 89119

Bill Dunkelberger
Forest Supervisor
Humboldt-Toiyabe National Forest
4701 North Torrey Pines Drive
Las Vegas, NV 89130

Field Manager
BLM – Southern Nevada Field Office
4701 North Torrey Pines Drive
Las Vegas, NV 89130

Alan Jenne, Director
Nevada Department of Wildlife –
Headquarters
6980 Sierra Center Pkwy #120
Reno, NV 89511

Brad Hardenbrook
Supervisory Habitat Biologist
Nevada Department of Wildlife –
Southern Region
3373 Pepper Lane
Las Vegas, NV 89120

Kacey KC
State Forester
Nevada Division of Forestry – State Office
2478 Fairview Drive
Carson City, NV 89701

James Gibson
Chairperson
Clark County Commission
500 Grand Central Parkway
Las Vegas, NV 89109

Jacob Snow
General Manager
Regional Transportation Commission of
Southern Nevada
600 S. Grand Central Parkway
Suite 350
Las Vegas, NV 89106

Gregory Blackburn, Director
City of North Las Vegas – Community
Development
2200 Civic Center Drive
Las Vegas, NV 89030

Jennifer Olsen
Southern Nevada Regional Planning
240 Water Street, Mail Stop 115
Henderson, NV 89009

Marci Henson, Director
Clark County Department of Environment
and Sustainability
500 S. Grand Central Parkway
Las Vegas, NV 89155

John Mendoza, Senior Planner
Clark County Air Quality Planning Division
500 S. Grand Central Parkway
Las Vegas, NV 89155

Charles Donohue
State Lands Administrator
Nevada Division of State Lands
901 S Stewart St., Ste. 5003
Carson City, NV 89701

Bradley Crowell, Director
Nevada Department of Conservation and
Natural Resources
901 S. Stewart St.
Ste. 1003
Carson City, NV 89701

Martha Guzman
Regional Administrator
USEPA Pacific Southwest - Region 9
75 Hawthorne St.
San Francisco, CA 94105

Art Krupicz
State Historic Preservation Officer
Nevada State Historic Preservation Office
901 S. Stewart St., Suite 5004
Carson City, NV 89701

Robin Reed
Deputy State Historic Preservation Officer
Nevada State Historic Preservation Office
901 S. Stewart St., Suite 5004
Carson City, NV 89701



DEPARTMENT OF THE AIR FORCE
HEADQUARTERS 432D WING
CREECH AIR FORCE BASE NEVADA

18 July 2024

Colonel Nicholas R. Pederson, USAF
Commander
Perimeter Road, Building 1065
Creech AFB NV 89018

Ms Martha Guzman
Regional Administrator
USEPA Pacific Southwest – Region 9
75 Hawthorne St
San Francisco CA 94105

Dear Ms Guzman

The United States Department of the Air Force (USAF) is preparing an Environmental Assessment (EA) for proposed installation development plan projects at Creech Air Force Base (AFB), Nevada. The EA will evaluate the potential environmental impacts associated with construction, renovation, and demolition projects that make up the Proposed Action. To account for possible environmental concerns, the USAF is engaging early with all potentially affected resource agencies as it formulates this undertaking. Accordingly, the USAF seeks consultation with your office.

Project Location

The Proposed Action would implement 36 short-term development actions and real-property improvements on Creech AFB from approximately 2024 to 2029. The Proposed Action would occur across five planning districts on the Installation: Airfield, Community Support, Mission Operations Complex, Munitions Storage Area, and Southside Operations (**Attachment 1**).

Proposed Action

The Proposed Action involves a total of 36 short-term development actions and real-property improvements that range in scope from new construction and demolition actions to repairs, renovations, and upgrades (**Attachment 2**). The USAF proposes to implement these projects from approximately 2024 to 2029. The intent of these projects is to provide improvements and infrastructure necessary to support the mission of Creech AFB. The installation development projects included as part of the Proposed Action were selected based on current and future needs at Creech AFB identified through the installation planning process, as required by Air Force Instruction 32-1015, *Integrated Installation Planning*.

Purpose and Need

The purpose of the Proposed Action is to support Creech AFB's current and future mission of remotely piloted aircraft employment and aircrew training. The Proposed Action would ensure the continued operational abilities of Creech AFB through the development of facilities and infrastructure supporting the training and flight programs. The Proposed Action is needed to address deficiencies and degradation of the support facilities at Creech AFB. Left unchecked, deficiencies in facilities and infrastructure would degrade the Base's ability to meet the USAF's current and future needs. The individual purpose and need for each of the 36 development projects has been identified in support of the overall goal of the Proposed Action (see again **Attachment 2**).

Environmental Assessment

The EA will assess the potential environmental consequences of the Proposed Action and No Action Alternative. Potential impacts identified for evaluation in the EA include effects to airspace, air quality (including an assessment of greenhouse gases), climate change, noise/acoustic environment, cultural resources, biological/natural resources, water resources, hazardous materials and waste, land use, infrastructure and utilities, earth resources, socioeconomics, environmental justice, and safety and occupational health. The EA will also examine the cumulative effects when combined with past, present, and reasonably foreseeable environmental trends and planned actions at Creech AFB. In support of this process, we request your input in identifying general or specific issues or areas of concern you believe should be addressed in the EA.

We intend to notify your agency when the Draft EA is completed and welcome comments and input at that time as well. Please inform us if someone else within your agency other than you should receive the Draft EA. So that we remain on schedule to complete the environmental impact analysis process in a timely manner, please provide your response no later than 30 days from receipt of this correspondence. Please send your response via postal mail or email (preferred) to:

ATTN: Sean Dorrough
 US Department of the Air Force
 432 SPTS/CE
 1065 Perimeter Road
 Creech AFB NV 89018
 Phone: 702-404-1836
 Email: sean.dorrough.1@us.af.mil

The USAF appreciates your interest in and support of its military mission at Creech AFB. We thank you in advance for your assistance and look forward to your response.

Sincerely

PEDERSON.NI
CHOLAS.R.125
2163855

Digitally signed by
 PEDERSON.NICHOLAS.R.
 1252163855
 Date: 2024.06.25 10:34:08
 -07'00'

NICHOLAS R. PEDERSON, Colonel, USAF
 Commander

Attachments:

1. Project Area and Locations
2. Details of the Proposed Action



DEPARTMENT OF THE AIR FORCE
HEADQUARTERS 432D WING
CREECH AIR FORCE BASE NEVADA

18 July 2024

Colonel Nicholas R. Pederson, USAF
Commander
Perimeter Road, Building 1065
Creech AFB NV 89018

Amelia Flores
Tribal Chairperson
Colorado River Indian Tribes
26600 Mohave Road
Parker AZ 85344

Dear Chairperson Flores

The United States Department of the Air Force (USAF) is preparing an Environmental Assessment (EA) associated with installation development plan projects at Creech Air Force Base (AFB), Nevada. The EA will evaluate the potential environmental impacts associated with construction, renovation, and demolition projects that make up the Proposed Action.

Project Location

The Proposed Action would implement 36 short-term development actions and real-property improvements on Creech AFB from approximately 2024 to 2029. The Proposed Action would occur across five planning districts on the Installation: Airfield, Community Support, Mission Operations Complex, Munitions Storage Area, and Southside Operations (**Attachment 1**).

Proposed Action

The 36 development actions and real-property improvements range in scope from new construction and demolition actions to repairs, renovations, and upgrades (**Attachment 2**). The intent of these projects is to provide improvements and infrastructure necessary to support the mission of Creech AFB. The installation development projects included as part of the Proposed Action were selected based on current and future needs at Creech AFB identified through the installation planning process, as required by Air Force Instruction 32-1015, *Integrated Installation Planning*.

Purpose and Need

The overall purpose of the Proposed Action is to support Creech AFB's current and future mission of remotely piloted aircraft employment and aircrew training. The Proposed Action would ensure the continued operational abilities of Creech AFB through the development of facilities and infrastructure supporting the training and flight programs. The Proposed Action is needed to address deficiencies and degradation of the support facilities at Creech AFB. Left unchecked, deficiencies in facilities and infrastructure would degrade the Base's ability to meet the USAF's current and future

needs. The individual purpose and need for each of the 36 development projects has been identified in support of the overall goal of the Proposed Action (see again **Attachment 2**).

Pursuant to Section 106 of the *National Historic Preservation Act* (NHPA), implementing regulations at 36 CFR Part 800, and Department of Defense (DoD) Instruction 4710.02, *DoD Interactions with Federally Recognized Tribes*, we would like to initiate government-to-government consultation on the Proposed Action. Pursuant to 36 CFR §§ 800.4(a) and (b), we request your assistance in defining the Area of Potential Effect and seek information on any historic properties located therein that may be affected by the proposed undertaking. The USAF desires to discuss the proposal in detail with you early in the EA process so that we may understand and consider any comments, concerns, and suggestions you may have. We invite you, pursuant to 36 CFR § 800.4(a)(4), to provide information on any properties of historic, religious, or cultural significance that may be affected by our proposed undertaking. The USAF is committed to complying with the *Native American Graves Protection and Repatriation Act* by informing the Colorado River Indian Tribes of any inadvertent discovery of archaeological or human remains and consulting on their disposition.

If you have any questions or concerns, please contact the Creech AFB Environmental Program Manager, Sean Dorrough, via postal mail, US Department of the Air Force, 432 SPTS/CE 1065 Perimeter Road, Creech AFB NV 89018, or by email, sean.dorrough.1@us.af.mil. Thank you in advance for your assistance in this effort. We look forward to your input on this important federal undertaking.

Sincerely

PEDERSON.NIC
HOLAS.R.12521
63855
NICHOLAS R. PEDERSON, Colonel, USAF
Commander

Digitally signed by
PEDERSON.NICHOLAS.R.1
252163855
Date: 2024.06.25 10:11:44
-07'00'

Attachments:

1. Project Area and Locations
2. Details of the Proposed Action



DEPARTMENT OF THE AIR FORCE
HEADQUARTERS 432D WING
CREECH AIR FORCE BASE NEVADA

18 July 2024

Colonel Nicholas R. Pederson, USAF
Commander
Perimeter Road, Building 1065
Creech AFB NV 89018

Ms Rebecca Palmer
State Historic Preservation Officer
Nevada State Historic Preservation Office
901 S. Stewart Street, Suite 5004
Carson City NV 89701

Dear Ms Palmer

The United States (US) Department of the Air Force (USAF) is preparing an Environmental Assessment (EA) for proposed installation development plan projects at Creech Air Force Base (AFB), Nevada. The EA will evaluate the potential environmental impacts associated with construction, renovation, and demolition projects that make up the Proposed Action. To account for possible environmental concerns, the USAF is engaging early with all potentially affected resource agencies as it formulates this undertaking. Accordingly, the USAF seeks consultation with the State Historic Preservation Office.

Project Location

The Proposed Action would implement 36 short-term development actions and real-property improvements on Creech AFB from approximately 2024 to 2029. The Proposed Action would occur across five planning districts on the Installation: Airfield, Community Support, Mission Operations Complex, Munitions Storage Area, and Southside Operations (**Attachment 1**).

Proposed Action

The 36 short-term development actions and real-property improvements range in scope from new construction and demolition actions to repairs, renovations, and upgrades (**Attachment 2**). The intent of these projects is to provide improvements and infrastructure necessary to support the mission of Creech AFB. The installation development projects included as part of the Proposed Action were selected based on current and future needs at Creech AFB identified through the installation planning process, as required by Air Force Instruction 32-1015, *Integrated Installation Planning*.

Pursuant to 36 CFR §§ 800.4(a) and (b), we request your assistance defining the Area of Potential Effect (APE) and information on any historic properties located therein that may be affected by the proposed undertaking.

Purpose and Need

The overall purpose of the Proposed Action is to support Creech AFB's current and future mission of remotely piloted aircraft employment and aircrew training. The Proposed Action would ensure the continued operational abilities of Creech AFB through the development of facilities and infrastructure supporting the training and flight programs. The Proposed Action is needed to address deficiencies and degradation of the support facilities at Creech AFB. Left unchecked, deficiencies in facilities and infrastructure would degrade the Base's ability to meet the USAF's current and future needs. The individual purpose and need for each of the 36 development projects has been identified in support of the overall goal of the Proposed Action (see also **Attachment 2**).

Environmental Assessment

The EA will assess the potential environmental consequences of the Proposed Action and No Action Alternative. Potential impacts identified for evaluation in the EA include effects to airspace, air quality (including an assessment of greenhouse gases), climate change, noise/acoustic environment, cultural resources, biological/natural resources, water resources, hazardous materials and waste, land use, infrastructure and utilities, earth resources, socioeconomics, environmental justice, and safety and occupational health. The EA will also examine the cumulative effects when combined with past, present, and reasonably foreseeable environmental trends and planned actions at Creech AFB. In support of this process, we request your input in identifying general or specific issues or areas of concern you believe should be addressed in the EA.

The USAF would appreciate any input regarding concerns of potential effects of the Proposed Action on historic properties as well as assistance in defining the APE for the Proposed Action. We intend to notify your agency when the Draft EA is completed and welcome comments and input at that time as well. Please inform us if someone else within your agency other than you should receive the Draft EA. So that we remain on schedule to complete the environmental impact analysis process in a timely manner, please provide your response no later than 30 days from receipt of this correspondence. Please send your response via postal mail or email (preferred) to:

ATTN: Sean Dorrough
 US Department of the Air Force
 432 SPTS/CE
 1065 Perimeter Road
 Creech AFB NV 89018
 Phone: 702-404-1836
 Email: sean.dorrough.1@us.af.mil

The USAF appreciates your interest in and support of its military mission at Creech AFB. We thank you in advance for your assistance and look forward to your response.

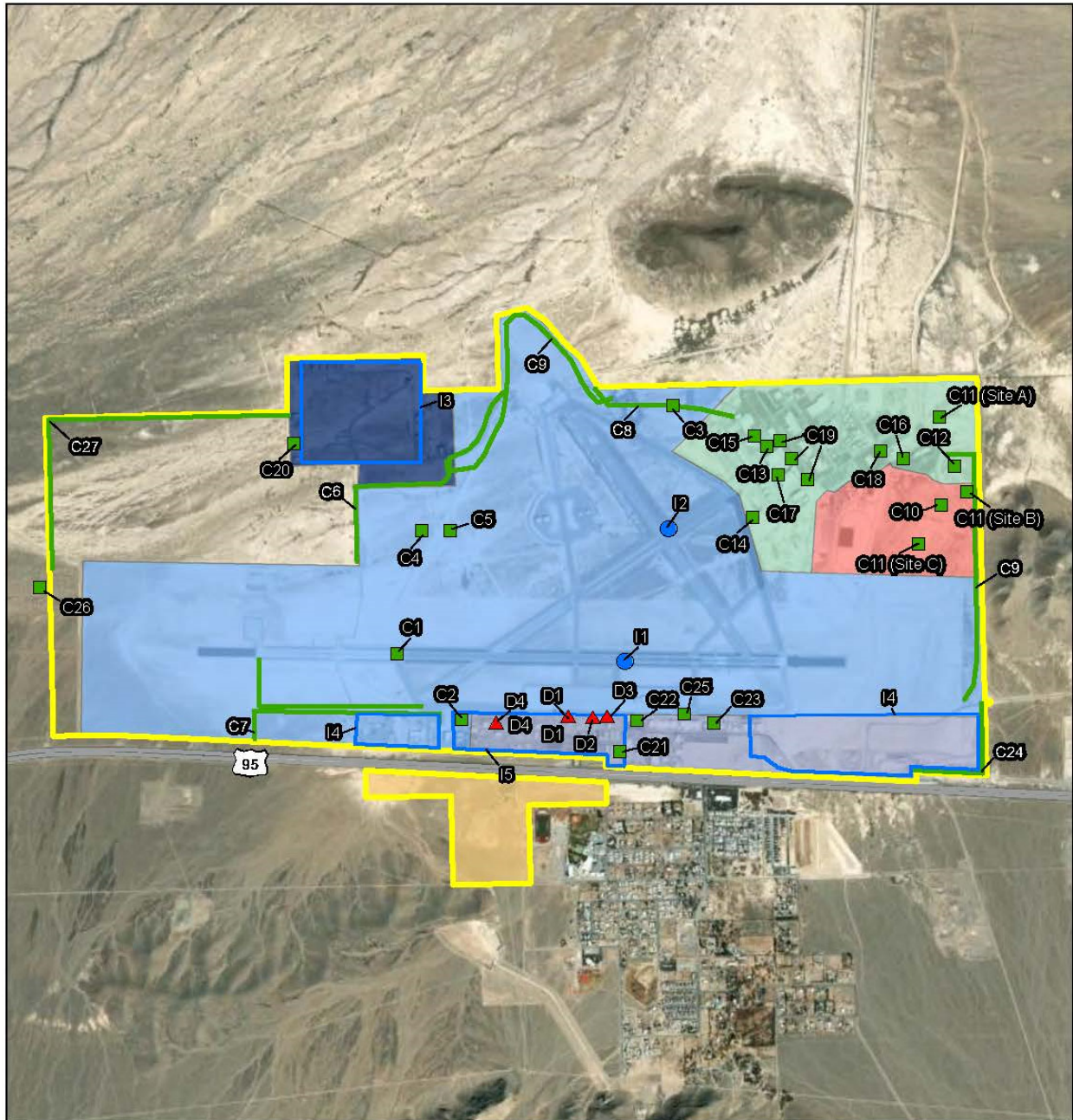
Sincerely

PEDERSON.NI
CHOLAS.R.125
2163855
 Digitally signed by
 PEDERSON.NICHOLAS.R.
 1252163855
 Date: 2024.06.25 11:26:27
 -07'00'
 NICHOLAS R. PEDERSON, Colonel, USAF
 Commander

Attachments:

1. Project Area and Locations
2. Details of the Proposed Action

Attachment 1: Project Area and Locations



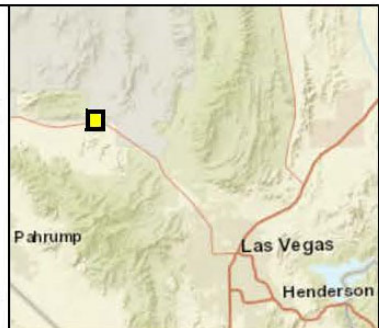
Proposed IDP Projects Location on Creech AFB

- | | | |
|-------------------------|-------------------------------|--------------------------|
| ■ Construction | ■ Installation Boundary | ■ Munitions Storage Area |
| ▲ Demolition | ■ Planning Districts | ■ Southside Operations |
| ● Infrastructure | ■ Airfield | ■ T-Shirt |
| — Linear Construction | ■ Community Support | |
| — Linear Infrastructure | ■ Missions Operations Complex | |



0 0.25 0.5
Mile

Imagery: ESRI, 2021
Coordinate System: WGS 1984 UTM Zone 11N



Attachment 2: Details of the Proposed Action

Map ID Number	Project Title	Project Description	Purpose and Need	Estimated Construction Year	Estimated New Facility or Infrastructure Size	Estimated Change in Facility Footprint
AIRFIELD DISTRICT						
Construction Projects						
C1	Taxiway Alpha Addition	This project would construct a taxiway extension and arm/disarm pad that extends the existing Taxiway Alpha to the west threshold of Runway 08/26. This project would include asphalt taxiway; concrete arm/disarm pad; paved shoulders; airfield lighting, markings, and guidance signage; addition of an access roadway leading to the arm/disarm pad; airfield storm drainage; utilities; and all other work as necessary.	<p>Purpose: The purpose of the proposed project is to add additional capacity to the airfield taxiway and to allow aircraft to taxi to the arm/disarm pad.</p> <p>Need: The project is needed because currently, Aircraft must back-taxi on the runway, which has caused delays and runway inefficiencies.</p>	2026	539,175 ft ²	+539,175 ft ²
C2	Weapons Load Trainer Facility	This project would construct a MQ-9 Weapons Load Crew Training Facility utilizing conventional design and construction methods. The facility would be constructed with a reinforced concrete foundation/floor slab, structural-steel frame, metal panel with brick veneer exterior, and standing seam metal roof. Construction associated with this project would include information systems, fire protection and alarm systems, cybersecurity measures, intrusion detection system installation, and energy monitoring and control systems connection. Supporting facilities would include a training bay access apron, parking areas, construction of an access roadway, security lighting, storm drainage, site improvements, signage, and all other necessary features to make a complete and useable facility.	<p>Purpose: The purpose of the proposed project is to prevent disruptions to the Weapons Load Crew Training and to provide secure, dedicated space for the training to occur.</p> <p>Need: The proposed project is needed because the current training area is inadequate for current operational needs and training capabilities are disrupted. Creech AFB needs a dedicated training facility to keep up with manning increases.</p>	2026	42,033 ft ²	+42,033 ft ²

Attachment 2: Details of the Proposed Action

Map ID Number	Project Title	Project Description	Purpose and Need	Estimated Construction Year	Estimated New Facility or Infrastructure Size	Estimated Change in Facility Footprint
C3	LRS Deployment Center	This project would construct a two-story Deployment Processing Center and include an aircraft parking apron capable of supporting two C-17's or one C-5 airframe.	<p>Purpose: The purpose of the proposed project is to support Creech AFB's mission and training requirements with increased efficiency through functional centralization and the optimization of existing resources.</p> <p>Need: The proposed project is needed due to the outdated and inefficient infrastructure that currently supports the Missions Operations Complex District. Considerations of the adjacent Community Support District with regard for future infrastructure development and facility siting also drive the need.</p>	2026	43,075 ft ²	+43,075 ft ²
C4	MQ-9 CPIP GDT Antenna Complex	The project would construct a properly sited and configured antenna tower complex for the installation of eight MQ-9 ground data terminal (GDT) systems. The GDT antenna system provides a mission-critical line-of-site communications link from the ground control station to the RPA for launch and recovery operations. This project provides 50-ft-high fixed towers that would be used to support the GDT system. The Defense Spectrum Organization – Joint Spectrum Center identified a preferred site location for the antennas that would mitigate existing C-band video link mishaps due to existing GDT locations and resulting electro-magnetic interference saturation. The proposed antenna complex is located north of Runway 08/26 and west of the live ordnance loading area. This site ensures that saturation-induced interference is precluded during airfield operations and avoids existing building and fence line obstructions.	<p>Purpose: The purpose of the proposed project is to increase safety and communication for airfield operations by reducing saturation-induced interference between communications systems.</p> <p>Need: The proposed project is needed because currently, C-band video link mishaps occur due to existing GDT locations and electro-magnetic interference saturation. Communication expansion is needed to reduce radio interference.</p>	2025	4,000 ft ²	4,000 ft ²

Attachment 2: Details of the Proposed Action

Map ID Number	Project Title	Project Description	Purpose and Need	Estimated Construction Year	Estimated New Facility or Infrastructure Size	Estimated Change in Facility Footprint
C5	Construct GDT Tower Site	This project would construct a GDT tower site.	<p>Purpose: The purpose of the proposed project is to revitalize and expand communication capabilities at Creech AFB.</p> <p>Need: The proposed project is needed because the current towers require reconstruction due to their condition and age. Communication expansion is also needed to reduce radio interference.</p>	2024	2,000 ft ²	2,000 ft ²
C6	Construct Northwest Frangible Airfield Fence	This project would construct a fence between Northwest Perimeter Road and the flightline.	<p>Purpose: The purpose of the proposed project is to provide security for airfield operations by enclosing the airfield.</p> <p>Need: The proposed project is needed because the airfield is not currently enclosed, leaving a security risk for airfield operations.</p>	2025	9,400 lf	+9,400 lf
C7	Construct Frangible Airfield Fence First Street	This project would construct a fence between West Perimeter Road and the flightline.	<p>Purpose: The purpose of the proposed project is to provide security for airfield operations by enclosing the airfield.</p> <p>Need: The proposed project is needed because the airfield is not currently enclosed, leaving a security risk for airfield operations.</p>	2025	9,100 lf	+9,100 lf
C8	Construct Central Frangible Airfield Fence	This project would construct a fence between North Perimeter Road and the flightline.	<p>Purpose: The purpose of the proposed project is to provide security for airfield operations by enclosing the airfield.</p> <p>Need: The proposed project is needed because the airfield is not currently enclosed, leaving a security risk for airfield operations.</p>	2025	4,600 lf	+4,600 lf

Attachment 2: Details of the Proposed Action

Map ID Number	Project Title	Project Description	Purpose and Need	Estimated Construction Year	Estimated New Facility or Infrastructure Size	Estimated Change in Facility Footprint
C9	North Side Electrical Loop	This project would construct a finished electrical loop system of approximately 30,000 linear feet (lf) from the southwest side of the Base to the north side of the Base. This would be accomplished by running a new electrical line from the intersection of Box Canyon and Hunters Road to Building 1065 (B1065).	Purpose: The purpose of the proposed project is to increase energy resilience with back feed capabilities. Need: The proposed project is needed to provide power backup and restoration in case of outage caused by feeder damage.	2025	30,000 lf	+30,000 lf
Infrastructure Projects						
I1	Repair Southern Airfield Pavements	This project would repair airfield pavements identified in the 2015 Airfield Pavement Evaluation. Recommendations for repair include the mill and overlay of sections R03C1, R03C2, R04A1, and R04A2.	Purpose: The purpose of the proposed project is to improve the condition of degraded airfield pavement sections. Need: The proposed project is needed to address poor pavement conditions reported by inspection.	2024	884,475 ft ²	N/A
I2	Repair Northern Airfield Pavements	This project would repair airfield pavements identified in the 2015 Airfield Pavement Evaluation. Recommendations include the mill and overlay of sections T21A, T25A, and T32A. Full replacement is recommended for sections R09A, R10A, and T20A.	Purpose: The purpose of the proposed project is to improve the condition of degraded airfield pavement sections. Need: The proposed project is needed due to address poor pavement conditions reported by inspection.	2024	502,500 ft ²	N/A

Attachment 2: Details of the Proposed Action

Map ID Number	Project Title	Project Description	Purpose and Need	Estimated Construction Year	Estimated New Facility or Infrastructure Size	Estimated Change in Facility Footprint
COMMUNITY SUPPORT DISTRICT						
Construction Projects						
C10	Warrior Fitness Center	This project would construct basketball and racquetball courts, a 1/10th mile elevated indoor running track, unit physical training/group exercise areas, weight rooms, administration, lockers, showers, and restrooms. Supporting facilities include all required utilities, staff and customer parking areas, sidewalks, lighting, signage, and other site improvements. The project would incorporate sustainability and energy measures, stormwater mitigation, and meet antiterrorism force protection standoff requirements.	<p>Purpose: The purpose of the proposed project is to support Creech AFB's mission and training requirements with increased efficiency through functional centralization and the optimization of existing resources.</p> <p>Need: The proposed project is needed due to the outdated and inefficient infrastructure that currently supports the Missions Operations Complex District. Considerations of the adjacent Community Support District with regard for future infrastructure development and facility siting also drive the need.</p>	2026	44,000 ft ²	+44,000 ft ²

Attachment 2: Details of the Proposed Action

Map ID Number	Project Title	Project Description	Purpose and Need	Estimated Construction Year	Estimated New Facility or Infrastructure Size	Estimated Change in Facility Footprint
C11	Install Solar and Battery Systems	<p>This project would design and install a cybersecure microgrid control system integrated with large-scale photovoltaic (PV) arrays, battery energy storage system (BESS), and thermal energy storage system to address physical, cybersecurity, and climate threats as described in Creech AFB's Energy Resilience Assessment. Installation activities would include new electrical infrastructure, new automated main switchgear, new automated sectionalizing switches, step-up transformers, new fiber/ supervisory control and data acquisition, and a megawatt charging system (MCS) integrated with existing Utility MCS. The system would dispatch distributed energy resources to respond to grid disruptions and control automated switching sequences for microgrid operation, separation of critical and non-critical loads, and dispatch of electricity to recover from system faults, anomalies, or outages. This project would be located within the existing fence line on the northeast corner of Creech AFB and would potentially include up to 71.2 acres primarily for PV arrays, including 19.4 acres on a closed landfill location. Additional locations considered in this area have been previously reserved for unrelated future projects. A PV with 4.0 megawatts (MW) of capacity would be installed. For the BESS, a lithium iron phosphate battery chemistry is the current basis of design; 5.8 MW/11.6 kilowatt-hours will meet microgrid peak demand.</p>	<p>Purpose: The purpose of the proposed project is to support continued mission operations in the event of power loss, provide Base-critical facilities with emergency backup power, and increase Creech AFB's energy resilience.</p> <p>Need: The proposed project is needed because Base-critical facilities currently lack emergency backup power capabilities in the event of power loss.</p>	2025 (estimated)	3,101,472 ft ²	+3,101,472 ft ²

Attachment 2: Details of the Proposed Action

Map ID Number	Project Title	Project Description	Purpose and Need	Estimated Construction Year	Estimated New Facility or Infrastructure Size	Estimated Change in Facility Footprint
MISSIONS OPERATIONS COMPLEX DISTRICT						
Construction Projects						
C12	Mission Support Facility	This project would construct a Mission Support Center, providing a permanent, consolidated facility for the 432d Mission Support Group and Force Support Squadron in support of mission and support services for all personnel on Creech AFB.	<p>Purpose: The purpose of the proposed project is to support Creech AFB's mission and training requirements with increased efficiency through functional centralization and the optimization of existing resources.</p> <p>Need: The proposed project is needed because the infrastructure that currently supports the Missions Operations Complex District is outdated and inefficient. Considerations of the adjacent Community Support District with regard for future infrastructure development and facility siting also drive the need.</p>	2026	36,966 ft ²	+36,966 ft ²
C13	RPA Structural Repair Facility	This project would construct an RPA Structural Repair Facility and a separate Corrosion Control Utility Storage Building. The proposed facility would provide a modern, functional space capable of supporting required MQ-9 structural and composite repair as well as non-destructive inspection.	<p>Purpose: The purpose of the proposed project is to support Creech AFB's mission and training requirements with increased efficiency through functional centralization and the optimization of existing resources.</p> <p>Need: The proposed project is needed because the infrastructure that currently supports the Missions Operations Complex District is outdated and inefficient. Considerations of the adjacent Community Support District with regard for future infrastructure development and facility siting also drive the need.</p>	2025	52,124 ft ²	+52,124 ft ²

Attachment 2: Details of the Proposed Action

Map ID Number	Project Title	Project Description	Purpose and Need	Estimated Construction Year	Estimated New Facility or Infrastructure Size	Estimated Change in Facility Footprint
C14	RPA Maintenance Hangar	This project would construct an RPA Maintenance Hangar adequately configured to support eight MQ-9s and provide administrative and maintenance space for the activation of a new Aircraft Maintenance Unit.	<p>Purpose: The purpose of the proposed project is to provide additional administrative and maintenance space for the activation of a new Aircraft Maintenance Unit.</p> <p>Need: The proposed project is needed because an increase in RPAs requires more space than is currently available. RPAs that are due for maintenance are currently being parked outside while awaiting space.</p>	2027	77,887 ft ²	+77,887 ft ²
C15	Casket & WRM AGE Storage Facility	This project would construct a War Reserve Materiel (WRM) Aerospace Ground Equipment (AGE) Storage Facility with a consolidated and secure, climate-controlled storage space that would enhance the capability of the 432d Maintenance Group to sustain and deploy critical RPA mission equipment. The facility would also provide an AGE storage bay, bench stock/tool room, parts cleaning, and a semi-enclosed wash rack area.	<p>Purpose: The purpose of the proposed project is to support Creech AFB's mission and training requirements with increased efficiency through functional centralization and the optimization of existing resources.</p> <p>Need: The proposed project is needed because the infrastructure that currently supports the Missions Operations Complex District is outdated and inefficient. Considerations of the adjacent Community Support District with regard for future infrastructure development and facility siting also drive the need.</p>	2026	21,000 ft ²	+21,000 ft ²

Attachment 2: Details of the Proposed Action

Map ID Number	Project Title	Project Description	Purpose and Need	Estimated Construction Year	Estimated New Facility or Infrastructure Size	Estimated Change in Facility Footprint
C16	Wing Advance Programs Facility	This project would construct a facility to house the 432 Wing Advance Programs. This facility would require additional space to accommodate current staffing.	<p>Purpose: The purpose of the proposed project is to provide dedicated space to accommodate current staffing of the 432d Wing Advance Programs.</p> <p>Need: The proposed project is needed because the Wing Advance Programs team does not have adequate staffing space. The team is currently operating out of a small office and is unable to accommodate all assigned personnel.</p>	2026	2,000 ft ²	+2,000 ft ²
C17	Construct North GDT Towers	The project would repair by replacing current GDT towers on the north airfield apron. This project is currently being reevaluated for removal of the current three towers.	<p>Purpose: The purpose of the proposed project is to revitalize and expand communication capabilities at Creech AFB.</p> <p>Need: The proposed project is needed because the current towers require reconstruction due to their condition and age. Communication expansion is also needed to reduce radio interference.</p>	2024	1,000 ft ²	1,000 ft ²
C18	Construct CAT/EOC Facility	This project would construct a structure that would be co-located with B1209. This structure would be a single-floor facility and utilize the existing parking lot.	<p>Purpose: The purpose of the proposed project is to provide dedicated space for CAT/EOC teams and alleviate mission disruptions and Creech AFB.</p> <p>Need: The proposed project is needed because CAT/EOC teams do not have a designated location at Creech AFB. The current location is dual-purposed and interrupts other missions when activated.</p>	2025	5,000 ft ²	+5,000 ft ²

Attachment 2: Details of the Proposed Action

Map ID Number	Project Title	Project Description	Purpose and Need	Estimated Construction Year	Estimated New Facility or Infrastructure Size	Estimated Change in Facility Footprint
C19	Construct North Flightline ECP Barriers	This project would install fencing and an automatic gate system for flightline entry control point access.	Purpose: The purpose of the proposed project is to establish a secure entry control point for the airfield. Need: The proposed project is needed because no entry point currently exists with direct access to airfield operations. All vehicles destined for this location must enter through the main access control points.	2023	400 lf	+400 lf
MUNITIONS STORAGE AREA DISTRICT						
Construction Projects						
C20	Munitions Storage Igloo	This project would construct an aboveground earth-covered munitions storage igloo with a reinforced concrete foundation/floor slab and a pre-engineered reinforced concrete panel exterior with earth covering. The project would include blast-resistant steel doors, interior and exterior lighting, grounding, surge protection, intrusion detection system, and an exterior concrete access apron.	Purpose: The purpose of the proposed project is to provide additional space for munitions storage Need: The proposed project is needed to support operations growth. The current capabilities are unable to support anticipated expansions at Creech AFB.	2026	2,046 ft ²	+2,046 ft ²
Infrastructure Projects						
I3	Repair Water Lines Zone III	This project would repair water lines in Zone 3 as identified in the Creech AFB Installation Development Plan (IDP).	Purpose: The purpose of the proposed project is to ensure consistent delivery of water on Creech AFB. Need: The proposed project is needed because Base water lines are considered crucial infrastructure at Creech AFB. Routine inspection and repair of the water lines are required to ensure proper maintenance.	2027	7,820 lf	N/A

Attachment 2: Details of the Proposed Action

Map ID Number	Project Title	Project Description	Purpose and Need	Estimated Construction Year	Estimated New Facility or Infrastructure Size	Estimated Change in Facility Footprint
C21	Network Control Center	This project would consolidate four communication flight facilities by constructing a new facility. The structure would be sized to encompass the whole of the communications flight and a communication node for Creech AFB.	Purpose: The purpose of the proposed project is to upgrade the communication capabilities and consolidate flight facilities at Creech AFB to improve efficiency. Need: The proposed project is needed because equipment upgrades and replacements are necessary to maintain operation and security missions at Creech AFB.	2028	2,500 ft ²	+2,500 ft ²
C22	Airfield Operations Center	This project would construct an approximately 15,000-ft ² facility, which would consolidate deployed Operations, Transit Alert, and Air Traffic Control. This construction is currently planned for fiscal year 2025 to relocate B93 to the current location of B726. A parking lot to the west of B726 is being discussed.	Purpose: The purpose of the proposed project is to support efficient airfield operations and improve security and communications. Need: The proposed project is needed because current airfield operations units are separated into individual facilities, disrupting operations. By removing an aging control tower, Creech AFB would consolidate airfield operations into one streamlined facility.	2026	15,000 ft ²	+15,000 ft ²
C23	Construct south GDT Towers	This project would construct a replacement for the current GDT towers on the south airfield.	Purpose: The purpose of the proposed project is to revitalize and expand communication capabilities at Creech AFB. Need: The proposed project is needed because the current towers require reconstruction due to their condition and age. Communication expansion is also needed to reduce radio interference.	2024	1,000 ft ²	1,000 ft ²

Attachment 2: Details of the Proposed Action

Map ID Number	Project Title	Project Description	Purpose and Need	Estimated Construction Year	Estimated New Facility or Infrastructure Size	Estimated Change in Facility Footprint
C24	Construct Perimeter Road Fence	This project would provide re-enforcement of the southeast fence.	Purpose: The purpose of the proposed project is to provide security for airfield operations by enclosing the perimeter road. Need: The proposed project is needed because the southeast fence needs re-enforcement to provide increased airfield security for airfield operations.	2025	9,100 lf	+9,100 lf
C25	Construct AGE Storage Facility	This project would construct a warehouse and administrative space on the north apron beside B1131.	Purpose: The purpose of the proposed project is to provide adequate storage for aircraft ground equipment. Need: The proposed project is needed to protect equipment stored on the north side of Creech AFB from outside elements.	2025	13,993 ft ²	+13,993 ft ²
Demolition Projects						
D1	Demo Airfield Lighting Vault B95	This project would demolish the Airfield Lighting Vault, B95.	Purpose: The purpose of the proposed project is to reduce the USAF footprint. Need: The proposed project is needed because unused facilities require costs associated with infrastructure upkeep. Removing these facilities reduces costs and provides space for new infrastructure.	2023	N/A	-500 ft ²
D2	Demo B86	This project would demolish B86.	Purpose: The purpose of the proposed project is to reduce the USAF footprint. Need: The proposed project is needed because unused facilities require costs associated with infrastructure upkeep. Removing these facilities reduces costs and provides space for new infrastructure.	2023	N/A	-1,700 ft ²

Attachment 2: Details of the Proposed Action

Map ID Number	Project Title	Project Description	Purpose and Need	Estimated Construction Year	Estimated New Facility or Infrastructure Size	Estimated Change in Facility Footprint
D3	Demo HQ Admin B55	This project would demolish the Headquarters Administration Building, B55.	Purpose: The purpose of the proposed project is to reduce the USAF footprint. Need: The proposed project is needed because unused facilities require costs associated with infrastructure upkeep. Removing these facilities reduces costs and provides space for new infrastructure.	2024	N/A	-5,200 ft ²
D4	Demo Buildings (B137, B404, B406)	This project would demolish B137, B404, and B406.	Purpose: The purpose of the proposed project is to reduce the USAF footprint. Need: The proposed project is needed because unused facilities require costs associated with infrastructure upkeep. Removing these facilities reduces costs and provides space for new infrastructure.	2023	N/A	-5,000 ft ²
Infrastructure Projects						
I4	Repair Water Lines Zone II	This project would repair water lines in Zone 2 as identified in the Creech AFB IDP.	Purpose: The purpose of the proposed project is to ensure consistent delivery of water on Creech AFB. Need: The proposed project is needed because Base water lines are considered crucial infrastructure at Creech AFB. Routine inspection and repair of the water lines are required to ensure proper maintenance.	2027	12,275 lf	N/A

Attachment 2: Details of the Proposed Action

Map ID Number	Project Title	Project Description	Purpose and Need	Estimated Construction Year	Estimated New Facility or Infrastructure Size	Estimated Change in Facility Footprint
I5	Repair Water Lines Zone I	This project would repair water lines in Zone 1 as identified in the Creech AFB IDP.	<p>Purpose: The purpose of the proposed project is to repair crucial infrastructure on Creech AFB.</p> <p>Need: The proposed project is needed because Base water lines are considered crucial infrastructure at Creech AFB. Routine inspection and repair of the water lines are required to ensure proper maintenance.</p>	2027	6,115 lf	N/A
PROJECTS LOCATED OUTSIDE OF PLANNING DISTRICTS						
Construction Projects						
C26	Commercial Vehicle Gate	This project would construct a new 6,000-ft ² commercial vehicle inspection facility with gatehouse inspection bays. The area for construction would need to be graded and formed to provide a stable foundation. All utilities would be hydro excavated to a depth of 3 to 6 ft. The primary electrical circuit would run approximately 500 ft, communications lines would run approximately 2,700 ft, and water lines would run approximately 3,000 ft to trench to the main feed. Sewage would be trenched for a septic tank and septic field. New asphalt road construction would be needed approximately 6,100 ft from US Highway 95 to a newly constructed guard facility.	<p>Purpose: The purpose of the proposed project is to provide security and safety protection to base personnel while alleviating traffic congestion concerns along Highway 95.</p> <p>Need: The proposed project is needed because the current access location results in closures to both personnel entry and highway travel by the Base. Disruptions are a result of current entry-point conditions caused by commercial vehicle inspections. The project is needed to resolve both concerns.</p>	2026	4,660 ft ²	+4,660 ft ²
C27	Northwest Perimeter Fence	This project would construct a fence to contain the remaining land owned by Creech AFB in the northwest parcel.	<p>Purpose: The purpose of the proposed project is to provide security of Creech AFB-owned land by enclosing the parcel.</p> <p>Need: The proposed project is needed because the Creech AFB-owned parcel is not currently enclosed, posing a security risk.</p>	2025	11,000 lf	+11,000 lf

This page intentionally left blank



United States Department of the Interior

FISH AND WILDLIFE SERVICE
Southern Nevada Fish And Wildlife Office
4701 N. Torrey Pines Drive
Las Vegas, NV 89130-2301
Phone: (702) 515-5230 Fax: (702) 515-5231



In Reply Refer To:
Project Code: 2024-0026923
Project Name: Creech AFB IDP EA Version 2 (without Nellis)

December 14, 2023

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

To Whom It May Concern:

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

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through IPaC by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2) (c)). For projects other than major construction activities, the Service suggests that a biological

evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at: <https://www.fws.gov/sites/default/files/documents/endangered-species-consultation-handbook.pdf>

Migratory Birds: In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity, intentional or unintentional, resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts, see [Migratory Bird Permit | What We Do | U.S. Fish & Wildlife Service \(fws.gov\)](#).

The MBTA has no provision for allowing take of migratory birds that may be unintentionally killed or injured by otherwise lawful activities. It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a federal nexus) or a Bird/Eagle Conservation Plan (when there is no federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and recommended conservation measures, see <https://www.fws.gov/library/collections/threats-birds>.

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of Executive Order 13186, please visit <https://www.fws.gov/partner/council-conservation-migratory-birds>.

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

Attachment(s):

- Official Species List
-

OFFICIAL SPECIES LIST

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

This species list is provided by:

Southern Nevada Fish And Wildlife Office

4701 N. Torrey Pines Drive

Las Vegas, NV 89130-2301

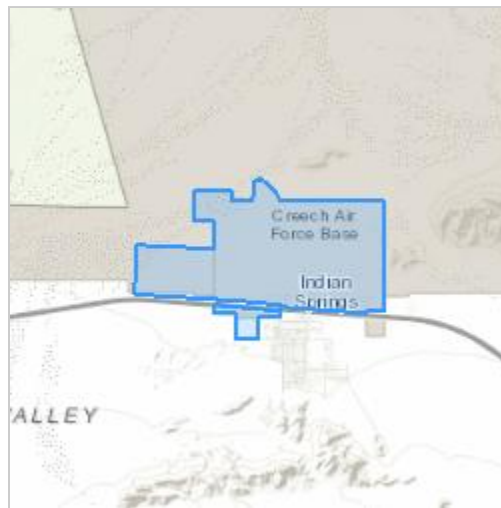
(702) 515-5230

PROJECT SUMMARY

Project Code: 2024-0026923
Project Name: Creech AFB IDP EA Version 2 (without Nellis)
Project Type: Military Development
Project Description: Creech AFB IDP EA Version 2 (without Nellis)
For EAS 2023

Project Location:

The approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@36.590409550000004,-115.67142109007196,14z>



Counties: Clark County, Nevada

ENDANGERED SPECIES ACT SPECIES

There is a total of 5 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries¹, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

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

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

BIRDS

NAME	STATUS
Southwestern Willow Flycatcher <i>Empidonax traillii extimus</i> There is final critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/6749	Endangered
Yellow-billed Cuckoo <i>Coccyzus americanus</i> Population: Western U.S. DPS There is final critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/3911	Threatened

REPTILES

NAME	STATUS
Desert Tortoise <i>Gopherus agassizii</i> Population: Wherever found, except AZ south and east of Colorado R., and Mexico There is final critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/4481	Threatened

FISHES

NAME	STATUS
Devils Hole Pupfish <i>Cyprinodon diabolis</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/7409	Endangered

INSECTS

NAME	STATUS
Monarch Butterfly <i>Danaus plexippus</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9743	Candidate

CRITICAL HABITATS

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

YOU ARE STILL REQUIRED TO DETERMINE IF YOUR PROJECT(S) MAY HAVE EFFECTS ON ALL ABOVE LISTED SPECIES.

IPAC USER CONTACT INFORMATION

Agency: Private Entity

Name: Elyse Maurer

Address:

City: Richland

State: WA

Zip:

Email: elyse.maurer@easbio.com

Phone: 5099441383

LEAD AGENCY CONTACT INFORMATION

Lead Agency: Army Corps of Engineers

Comment # 1

From: Brendon Grant

Agency: Nevada Division of Environmental Protection NDEP

Title:

Phone: 775-687-9524

Email: bgrant@ndep.nv.gov

Date Received: 07/30/2024

Projects to construct or extend the public water system at Creech Air Force Base (NV0001081) shall be reviewed and approved by the Bureau of Safe Drinking Water prior to construction. Please contact Brendon Grant at (775) 687-9524 or bgrant@ndep.nv.gov for any questions regarding the engineering submittal and review process.

Nevada State Clearinghouse Comments Received for E2025-029 DOD USAF - Draft EA Creech Air Force Base - Clark County - Clark

Comment # 2

From: Greta Gaddis

Agency: Nevada Division of Water Resources

Title: Supervisor III

Phone: 775-684-2800

Email: ggaddis@water.nv.gov

Date Received: 08/14/2024

See attached

Nevada State Clearinghouse

Department of Conservation and Natural Resources

901 South Stewart Street, Suite 5003

Carson City, NV 89701

775-684-2723

<http://clearinghouse.nv.gov>

www.lands.nv.gov

DATE: 8/14/2024

Division of Water Resources

Nevada SAI # E2025-029

Project: **Creech Air Force Base, Nevada**

☐ No comment on this project

☒ Comments on project below

AGENCY COMMENTS:

NRS – Nevada Revised Statutes

NAC – Nevada Administrative Code

General:

Compliance with Nevada water law is required.

All waters of the State belong to the public and may be appropriated for beneficial use pursuant to the provisions of NRS Chapters 533 and 534 and not otherwise.

Water shall not be used from any source unless the use of that water is authorized through a permit issued by the State Engineer. For underground sources, certain uses of water may be authorized through the issuance of a waiver pursuant to NRS Chapter 534 and NAC Chapter 534.

Any surface or underground water developments constructed and utilized for a beneficial use must be done so in compliance with the referenced chapters of the NRS.

Any water from a water purveyor may require a change application if the place of use is outside of their service area.

The basin in which the project is located is a designated basin pursuant to NRS 534.030. The State Engineer is authorized to make rules, regulations, and orders when groundwater is being depleted in the designated area. Order 728 was issued establishing rules for the Indian Springs Valley Hydrographic Basin 161.

Water for Construction Projects:

Any water used on the described lands for the project for any manner of use shall be provided by an established utility or under permit or temporary change application or waiver issued by the State Engineer's Office with a manner of use acceptable for suggested project's water needs.

The scoping document does not indicate the source of water to support the construction operation.

Water Rights Ownership:

Any ownership transfer of water rights shall be sufficiently documented through a chain of title and a report of conveyance submitted to the State Engineer's Office as provided by NRS 533.384. The State Engineer is authorized and is responsible for maintaining water right files and accompanying documents as per NRS Chapters 111, 240, 375, 532, 533 and 534.

Wells:

All wells must be noticed, drilled, constructed, and plugged in accordance with NRS Chapter 534 and NAC Chapter 534, and the work must be completed by a licensed well driller as provided by NRS Chapter 534.

Pursuant to NRS Chapter 534 and NAC Chapter 534A, a water right or waiver is required prior to drilling a well in a designated basin.

A waiver to drill a well must comply with the provisions of NRS Chapter 534 and NAC Chapter 534 and the terms of the waiver approval.

The use of water issued under a waiver must comply with the provisions of NRS Chapter 534 and NAC Chapter 534 and the terms of the waiver approval. (oil, gas, geothermal, or mineral exploration other than dissolved mineral exploration).

Monitoring wells require a waiver from the State Engineer's Office pursuant to NRS Chapter 534 and NAC Chapter 534 and must comply with the provisions of NAC Chapter 534.

All replacement wells shall comply with NRS Chapter 534 and NAC Chapter 534. The replaced well must be plugged and abandoned as required in NAC Chapter 534.

Any unauthorized or unpermitted drill holes/wells (water wells, monitor wells or geotechnical soil borings) that may be located on existing, acquired or transferred lands, are ultimately the responsibility of the owner of the property and must be plugged and abandoned as required in NAC Chapter 534.

Abandoned wells need to be reported to the State Engineer's Office and must be plugged in accordance with NAC Chapter 534.

If artesian conditions are encountered in any well or borehole it shall be controlled as required by NRS Chapter 534 and NAC Chapter 534 and plugged in accordance with NAC Chapter 534.



REGION 9

SAN FRANCISCO, CA 94105

September 18, 2024

Sean Dorrough
Department of the Air Force
1065 Perimeter Road
Creech AFB, Nevada 89018

Subject: Scoping comments for proposed installation development plan projects, Creech Air Force Base, Nevada

Dear Sean Dorrough:

The U.S. Environmental Protection Agency has reviewed your early coordination letter, dated July 17, 2024, inviting comments on the proposed action. The letter indicated that comments were due 30 days from receipt of the letter. Since the notification was sent via hard copy to our Regional Administrator, there was substantial delay and our office received it on August 19, 2024. I informed you of this via email message on August 20, 2024 and indicated that 30 days from the receipt of the letter would be September 18, 2024. Our comments are provided pursuant to the National Environmental Policy Act, Council on Environmental Quality regulations (40 CFR Parts 1500-1508) and our NEPA review authority under Section 309 of the Clean Air Act.

The Proposed Action would implement 36 short-term development action and real-property improvement on Creech AFB from approximately 2024 through 2029 across five planning districts on the installation: Airfield, Community Support, Mission Operations Complex, Munitions Storage Area, and Southside Operations. We have the following suggestions for your consideration when preparing the Draft Environmental Assessment (DEA):

Soil and Water Contamination

The Draft EA should identify areas of contamination to assist in project planning, waste management, and safe construction practices.

Identify any hazardous contaminants and remediation sites on the Base that are in proximity to the development areas and provide a general overview of the status of any cleanup that is occurring. Explain how the proposed development could interface with any cleanup remedies. The DEA should indicate whether the physical development of the proposed action could expose construction and maintenance workers, visitors, occupants, or ecological systems to potential hazards associated with contaminants.

Perfluorinated Compounds (PFAS)

Provide an update of the investigations and actions regarding characterizing the nature and extent of PFOS and PFOA contamination on Creech AFB. According to the 2018 Site Investigation (SI), PFOS contamination exceeded the SI's Project Action Levels (PALs) in several areas. We note that the PALs in the Site Investigation for groundwater were derived from EPA's 2016 Lifetime Health Advisory of 70 parts per trillion (ppt). Since that time, EPA finalized its PFAS National Primary Drinking Water Regulation (<https://www.epa.gov/sdwa/and-polyfluoroalkyl-substances-pfas>). The MCL is much lower than the 70 ppt health advisory and supersedes it. The Draft EA should discuss contamination in the project areas with reference to the existing standard, not the interim health advisory level nor levels derived from it. The 70 parts per trillion (ppt) interim health advisory level should not be referenced or used in the impact assessment methodology.

The SI report identified potential PFAS exposure pathways for groundwater, soil, and air and these should be discussed in relation to the IDP project sites. According to the scoping notice, a number of PFOA/PFAS contaminated sites appear proximate to IDP projects, such as water line repair, fencing projects, and perhaps the Munitions Storage Igloo. The SI indicates that potential air migration pathways exist for the human receptors within four miles of the Time-Distance Spray Testing Area, including the worker population at Creech AFB (approximately 3,500 individuals) and the resident population of Indian Springs (approximately 1,000 individuals). Potential ecological targets for the air exposure pathway include the sensitive species that exist within the Desert National Wildlife Refuge to the north of Creech AFB. Ensure these potential impacts and risks are disclosed in the DEA.

Because of the new PFAS MCL which was not considered in the SI, we recommend conducting testing in all PFAS source areas where construction is planned prior to any earth movement. Knowledge of PFAS presence is needed if materials will be moved, as the receiving location could become a new source. Indicate whether any material will be reused on site. Discuss in the DEA where and how PFAS-contaminated materials will be identified, managed and disposed. If off-site disposal is possible, we recommend exploring availability of disposal sites. While some facilities do take PFAS-contaminated material, they may have restrictions. Discuss how contaminated groundwater encountered during construction would be managed, treated and disposed. Since inhalation is an exposure pathway for PFAS in soils, we recommend the Air Force consider dust monitoring and requiring contractors to establish worker health protections for dust inhalation.

Impacts to Wildlife

There are multiple new fence projects proposed in the list of IDP projects. New fencing has the potential to disrupt wildlife corridors, which are of increasing importance under climate change as they allow wildlife to move and adapt to new climate regimes. We recommend the DEA discuss existing wildlife corridors near Creech and assess how new fencing might disrupt wildlife movements. According to the [Nevada Department of Wildlife mapping program](#), there are Bighorn Sheep movement corridors between populations in the Pintwater Range to the north and Indian Ridge to the south. Consider security options that do not impede these movement corridors, such as fencing certain assets instead of Base perimeter fencing.

Impacts to ephemeral streams and from increased precipitation patterns

We strongly recommend avoiding any development in the ephemeral stream located north of the airfield that runs southwest to northeast to an inland water feature. Designate a protective buffer

around this drainage to mark the area of no construction. Due to increased extreme precipitation volumes and intensities, it is important to maintain drainages for stormwater conveyance and to avoid flooding damages. Additionally, drainages are often wildlife movement corridors.

Renewable Energy Project

Maximize photovoltaics

We appreciate that Project C11 in the northeast portion of the base would consist of a large-scale photovoltaic (PV) system. While this is a valuable addition, it need not be the only photovoltaics incorporated into the project. We recommend photovoltaics be installed on new buildings and on carports over parking lots, such as those at [Marine Corps Air Station Miramar](#), which are especially advantageous since they significantly reduce heat impacts to drivers.

Utilize smart construction techniques

For the large-scale PV system, we recommend utilizing the lessons learned from many PV projects in the desert; specifically, the industry has evolved towards design features that minimize grading, soil disturbance, and vegetation removal during construction. Keeping vegetation in place provides a more hospitable habitat for native species and pollinators, stabilizes soil, preserves soil structure, reduces erosion and dust and valley fever risk to workers, and reduces the need for restoration. We recommend:

- Avoiding site grading and disk-and-roll preparation techniques and utilizing less intrusive measures such as overland travel
- Limiting grading to specific areas only – roads, substations, O&M facilities, laydown areas, and some equipment pads
- Utilize smaller rubber-wheeled vehicles, lightweight skid steers, small cranes, tractors, and rubber-tired forklifts to minimize soil disturbance
- Mount batteries, transformers, and inverters on elevated platforms to allow soils underneath to remain pervious

Protect workers and residents from Valley Fever

The project is in an area the Centers for Disease Control and Prevention indicates is endemic for *Coccidioides immitis*, a fungus causing Valley fever (*Coccidioidomycosis*) in humans.¹ As a result, fugitive dust generated during ground disturbing activities could disperse *Coccidioides* spores, if present. This occurred on one PV solar project construction site in California² and at several other gatherings where soil was disrupted. Valley fever can result in mild to severe symptoms, and if severe, it can take months to recover. Valley fever can also be fatal. To reduce the human health risk of contracting Valley fever, we recommend the Air Force create and implement a strict fugitive dust control plan. Include this plan in the DEA and Finding of No Significant Impact (FONSI).

The plan should include measures to prevent or reduce the risk of exposure to workers, including training for workers and supervisors on the potential presence of Valley Fever spores, methods to minimize exposure, and how to recognize symptoms. Mitigation measures could include limiting workers' exposure to outdoor dust in disease-endemic areas by (1) providing air-conditioned cabs for

¹ <https://www.cdc.gov/valley-fever/areas/index.html>

² <https://www.cdc.gov/mmwr/volumes/67/wr/mm6733a4.htm>

vehicles that generate dust and making sure workers keep windows and vents closed, (2) suspending work during heavy winds, and (3) directing them to remove dusty clothing after fieldwork and store in closed plastic bags until washed. When exposure to dust is unavoidable, provide approved respiratory protection to filter particles.

Planning for Extreme Heat

Heat is a serious climate change effect that can be fatal. According to the FEMA National Risk Index, Clark County has a very high risk for extreme heat, with annual days with maximum temperature over 90 degrees predicted between 134 and 141 by midcentury, and annual days with temperature over 100 degrees between 74 and 81 days per year.

We strongly recommend the Installation Development be designed to minimize excessive heat by integrating heat mitigation strategies into site plans. Use cool surfaces and pavements that store less heat than traditional pavements. Heat islands, areas dominated by hard surfaces and lacking trees and green space, can be more than 20 degrees hotter than nearby areas with trees and grass. Use of vegetation cools surrounding areas through evapotranspiration.

Provide a certain amount of shading through either trees or built shade structures. Orient buildings with local climate and geographic conditions in mind which can improve natural ventilation, avoid solar heat gain, decrease energy usage, and improve human thermal comfort. On building sides with high solar exposure, improvements such as shade screens, window glazing, and smaller windows on the east and west sides can help shade and keep the inside of buildings cooler.³ We recommend integrating in as many design elements as possible into the projects to help Creech AFB reduce excessive heat health risks.

Utilities

We recommend the DEA have a section on utilities and discuss quantity and quality of drinking water sources, especially considering PFA contamination, and describe the current and new components to the wastewater treatment system. Ensure stormwater management systems are upsized to accommodate the more intense precipitation patterns now being experienced.

The EPA appreciates the opportunity to comment on preparation of the DEA. When the Draft EA is released for public review, please send an electronic copy to me at vitulano.karen@epa.gov. If you have questions, please contact me at (415) 947-4178 or by email.

Sincerely,

Karen Vitulano
Environmental Scientist
Environmental Review Section 2

cc: Jasmine C. Kleiber, Nevada Department of Wildlife

³ See: https://planning-org-uploaded-media.s3.amazonaws.com/publication/download_pdf/PAS-Report-600-r1.pdf



DEPARTMENT OF THE AIR FORCE
HEADQUARTERS 432D WING
CREECH AIR FORCE BASE, NEVADA

JAN 22 2025

Colonel Nicholas R. Pederson, USAF
432d Wing, 432 AEW Commander
1065 Perimeter Road
Creech AFB NV 89018

Mr Tony Wasley
Director
Nevada Department of Wildlife - Headquarters
1100 Valley Road
Reno NV 89512

Dear Mr Wasley

The United States Department of the Air Force (DAF) announces the availability of a Draft Environmental Assessment (EA) and proposed Finding of No Significant Impact (FONSI) evaluating potential environmental impacts from the DAF's Proposed Action of implementing 36 short-term installation development plan projects at Creech Air Force Base (AFB). The Draft EA was prepared in accordance with the *National Environmental Policy Act* (NEPA), the Council on Environmental Quality NEPA implementing regulations, and the DAF's Environmental Impact Analysis Process.

The 36 short-term installation development projects would involve demolition of aging facilities, new facility construction, facility upgrades, facility repair and renovation, utilities upgrades, community living upgrades, infrastructure improvement, recreational upgrades, natural infrastructure management projects, and strategic sustainability performance projects to be completed or implemented over approximately the next five years. Accordingly, the DAF has prepared a proposed FONSI to document the findings of the Draft EA.

The documents are available on the Creech AFB website at <https://www.creech.af.mil/> (or by scanning the QR code below) under the *Public Notification* heading. The DAF invites input and comment on the Draft EA and FONSI for a period of 30 days from the date of this letter. Comments or inquiries may be sent via postal mail or email (preferred) to:

ATTN: Sean Dorrough
US Department of the Air Force
432 SPTS/CE
1065 Perimeter Road
Creech AFB NV 89018
Phone: 702-404-1836
Email: sean.dorrough.1@us.af.mil



Sincerely

NICHOLAS R. PEDERSON, Colonel, USAF
Commander



DEPARTMENT OF THE AIR FORCE
HEADQUARTERS 432D WING
CREECH AIR FORCE BASE, NEVADA

JAN 22 2025

Colonel Nicholas R. Pederson, USAF
432d Wing, 432 AEW Commander
1065 Perimeter Road
Creech AFB NV 89018

Amelia Flores
Tribal Chairperson
Colorado River Indian Tribes
26600 Mohave Road
Parker AZ 85344

Dear Chairperson Flores

The United States Department of the Air Force (DAF) announces the availability of a Draft Environmental Assessment (EA) and proposed Finding of No Significant Impact (FONSI) evaluating potential environmental impacts from the DAF's Proposed Action of implementing 36 short-term Installation development plan projects at Creech Air Force Base (AFB). The Draft EA was prepared in accordance with the *National Environmental Policy Act* (NEPA), the Council on Environmental Quality NEPA implementing regulations, and the DAF's Environmental Impact Analysis Process.

The 36 short-term Installation development projects would involve demolition of aging facilities, new facility construction, facility upgrades, facility repair and renovation, utilities upgrades, community living upgrades, infrastructure improvement, recreational upgrades, natural infrastructure management projects, and strategic sustainability performance projects to be completed or implemented over approximately the next 5 years. Accordingly, the DAF has prepared a proposed FONSI to document the findings of the Draft EA.

The documents are available on the Creech AFB website at <https://www.creech.af.mil/> (or by scanning the QR code below) under the *Public Notification* heading. The DAF invites input and comment on the Draft EA and FONSI for a period of 30 days from the date of this letter. Comments or inquiries may be sent via postal mail or email (preferred) to:

ATTN: Sean Dorrough
US Department of the Air Force
432 SPTS/CE
1065 Perimeter Road
Creech AFB NV 89018
Phone: 702-404-1836
Email: sean.dorrough.1@us.af.mil



Sincerely

NICHOLAS R. PEDERSON, Colonel, USAF
Commander



DEPARTMENT OF THE AIR FORCE
HEADQUARTERS 432D WING
CREECH AIR FORCE BASE, NEVADA

JAN 22 2025

Colonel Nicholas R. Pederson, USAF
432d Wing, 432 AEW Commander
1065 Perimeter Road
Creech AFB NV 89018

Glen Knowles
Field Supervisor
US Fish and Wildlife Service
4701 North Torrey Pines Drive
Las Vegas NV 89130

Dear Mr. Knowles

The United States Department of the Air Force (DAF) announces the availability of a Draft Environmental Assessment (EA) and proposed Finding of No Significant Impact (FONSI) evaluating potential environmental impacts from the DAF's Proposed Action of implementing 36 short-term installation development plan projects at Creech Air Force Base (AFB). The Draft EA was prepared in accordance with the *National Environmental Policy Act* (NEPA), the Council on Environmental Quality NEPA implementing regulations, and the DAF's Environmental Impact Analysis Process.

The 36 short-term installation development projects would involve demolition of aging facilities, new facility construction, facility upgrades, facility repair and renovation, utilities upgrades, community living upgrades, infrastructure improvement, recreational upgrades, natural infrastructure management projects, and strategic sustainability performance projects to be completed or implemented over approximately the next five years. Accordingly, the DAF has prepared a proposed FONSI to document the findings of the Draft EA.

Parts of two projects, Projects C26 and C27, would be located in areas directly adjacent to but outside of the Installation where the vegetation and topography is known to be suitable for Mojave desert tortoise habitat. While these unsurveyed areas likely contain habitat features to support desert tortoise, no desert tortoises have been observed in these locations. Identified critical habitat for the Mojave desert tortoise is more than 30 miles from the project locations associated with the Proposed Action (Attachment 1). Creech AFB would implement best management practices at the project sites to prevent potential impacts to all species. Section 3.8.3.2 of the Draft EA provides a detailed discussion of the project development approach as well as the Installation's best management practices. The DAF is seeking concurrence on its determination of "No Effect" to the Mojave desert tortoise from these Installation development projects.

The documents are available on the Creech AFB website at <https://www.creech.af.mil/> (or by scanning the QR code below) under the *Public Notification* heading. The DAF invites

input and comment on the Draft EA and FONSI for a period of 30 days from the date of this letter. Comments or inquiries may be sent via postal mail or email (preferred) to:

ATTN: Sean Dorrough
US Department of the Air Force
432 SPTS/CE
1065 Perimeter Road
Creech AFB NV 89018
Phone: 702-404-1836
Email: sean.dorrough.1@us.af.mil



Sincerely

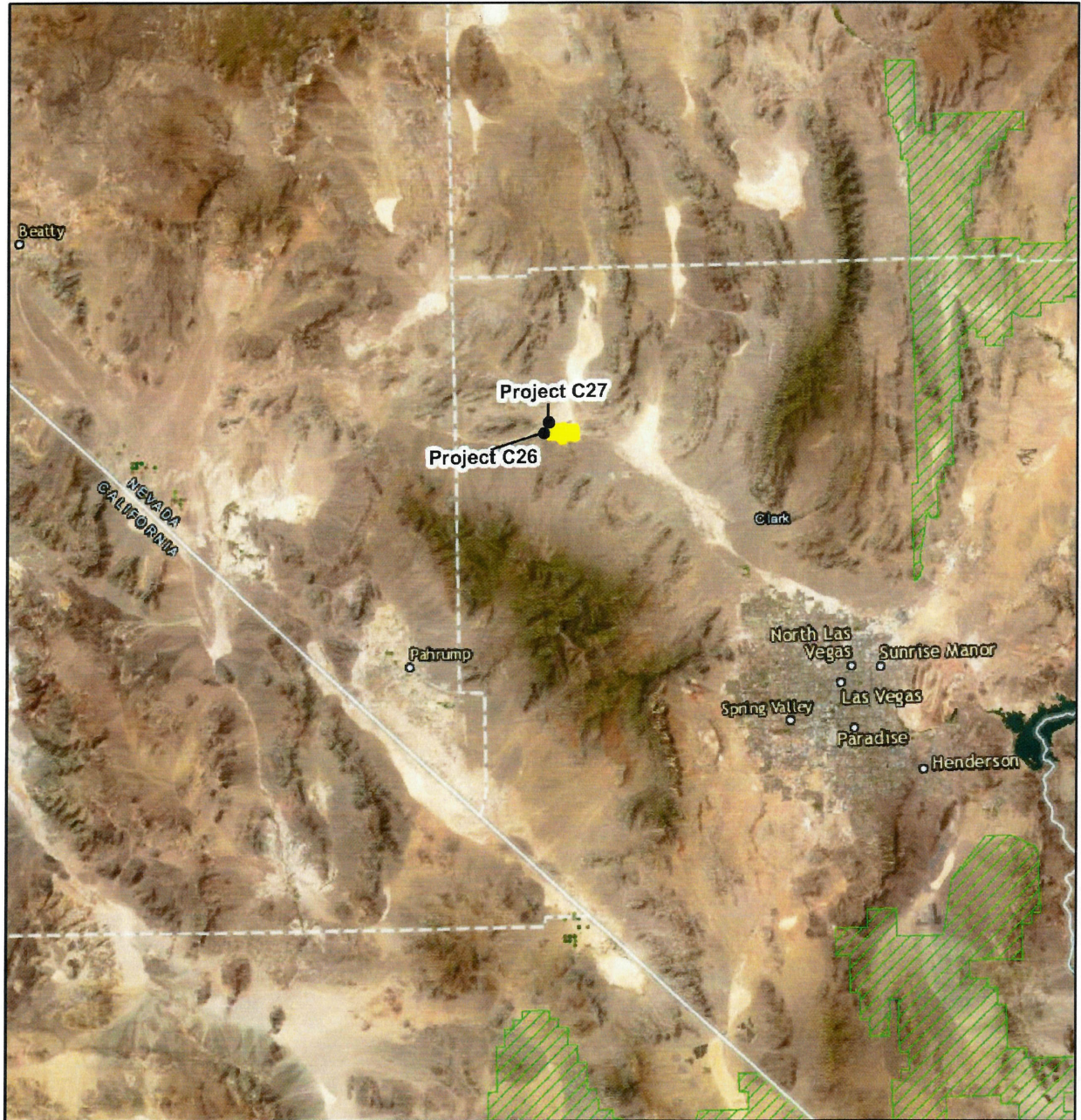
A handwritten signature in black ink, appearing to read 'Nick Pederson', written over a horizontal line.

NICHOLAS R. PEDERSON, Colonel, USAF
Commander


Attachment:

1. Map of Mojave desert tortoise critical habitat

ATTACHMENT 1 – MOJAVE DESERT TORTOISE CRITICAL HABITAT



ATTACHMENT 1 Desert Tortoise Critical Habitat

-  Identified Critical Habitat
-  Creech Air Force Base



0 5 10 20 30 Miles

Imagery: ESRI, 2021
Coordinate System: WGS 1984 UTM Zone 11N





DEPARTMENT OF THE AIR FORCE
HEADQUARTERS 432D WING
CREECH AIR FORCE BASE, NEVADA

JAN 22 2025

Colonel Nicholas R. Pederson, USAF
432d Wing, 432 AEW Commander
1065 Perimeter Road
Creech AFB NV 89018

Director
Centennial Hills Library
6711 N Buffalo Drive
Las Vegas NV 89131

Dear Sir/Madam

The United States Department of the Air Force (DAF) announces the availability of a Draft Environmental Assessment (EA) and proposed Finding of No Significant Impact (FONSI) evaluating potential environmental impacts from the DAF's Proposed Action of implementing 36 short-term installation development plan projects at Creech Air Force Base (AFB). The Draft EA was prepared in accordance with the *National Environmental Policy Act* (NEPA), the Council on Environmental Quality NEPA implementing regulations, and the DAF's Environmental Impact Analysis Process.

The DAF requests that the enclosed combined Draft EA and FONSI be made available for the public to review. The availability of these documents to the public will be announced in the *Las Vegas Review Journal*. The bounded document is intended to be accessible to the public at the library, but it is not intended to be circulated. Please ensure that the document remains available to the public for 30 calendar days from the date of this letter.

Comments or inquiries may be sent via postal mail or email (preferred) to:

ATTN: Sean Dorrough
US Department of the Air Force
432 SPTS/CE
1065 Perimeter Road
Creech AFB NV 89018
Phone: 702-404-1836
Email: sean.dorrough.1@us.af.mil

Sincerely

A handwritten signature in black ink, appearing to read "Nick Pederson", is written over a horizontal line.

NICHOLAS R. PEDERSON, Colonel, USAF
Commander

Attachment:

1. Draft EA and FONSI



REGION 9

SAN FRANCISCO, CA 94105

March 12, 2025

Sean Dorrough
432 SPTS/CE, Department of the Air Force
1065 Perimeter Road
Creech Air Force Base, Nevada 89018

Subject: US EPA Comments on the Creech Air Force Base Installation Development Plan Draft
Environmental Assessment

Dear Sean Dorrough:

The EPA has reviewed the Draft Environmental Assessment (DEA) prepared by the Department of the Air Force (DAF) for a Proposed Action to implement an installation development plan (IDP) on Creech Air Force Base (AFB). Our comments are provided pursuant to the National Environmental Policy Act and our NEPA review authority under Section 309 of the Clean Air Act.

The installation development plan describes various construction, infrastructure, and demolition projects, including but not limited to the installation of a solar array and battery system, the construction of barracks and mission support buildings, and the installation of perimeter and on-base fencing. The DEA indicates that the DAF is proposing to choose Alternative 1 as the Preferred Alternative. The EPA encourages the DAF to consider our feedback provided below when preparing the Final Environmental Assessment (FEA) and Finding of No Significant Impact as the National Environmental Policy Act process proceeds.

The EPA provided scoping comments to the DAF on September 18, 2024. The following comments describe our concerns with stormwater and floodplain management, soil and water contamination, pesticide use, and heat management.

Thank you for the opportunity to review the DEA. Please contact me at 415-972-3629, or the lead reviewer, Martin Nguyen (nguyen.martin@epa.gov; 415-972-3590) to discuss any questions about these recommendations. We would appreciate if a copy of the final environmental assessment be sent to the EPA when it is available for review.

Sincerely,

Francisco Dóñez
Manager
Environmental Review Section 2

Enclosure: Detailed Scoping Comments for the Creech AFB IDP Draft Environmental Assessment

Cc: Corey Kallstrom, United States Fish and Wildlife Service

Stormwater

In section 3.7.3.2, the DEA states that “approximately 4,000,000 square feet of net building footprint would be constructed” and that “the majority of the construction projects would occur in developed areas” (pg. 3-18). Although the DEA notes that the majority of these construction projects would occur in developed areas, the DEA does not fully describe how much development would occur in undeveloped areas. The EPA appreciates the DAF’s disclosure of Table 2-1, which describes the footprint of various construction, infrastructure, and demolition projects. However, the area of undeveloped land that would be developed for the Proposed Action is unclear. Understanding this area is important for understanding the impact on local hydrology. The EPA has provided guidance for maintaining predevelopment hydrology to the maximum extent practicable in the recommendations below. If bioretention is utilized to comply with EISA Section 438, the DAF may want to consult EPA’s *Bioretention Design Handbook*¹ which includes information about the latest approaches and lessons learned for bioretention design, construction, inspection, and operation and maintenance.

The EPA appreciates that the DAF briefly discussed possible best management practices considered for stormwater and floodplain management in section 3.7.3.2. However, due to the wide variance in types of planned projects, understanding the full list of BMPs is important to understand how stormwater quality is being protected for each type of proposed project.

Recommendations for the Final EA:

- Identify measures to manage hydrology.
- Include a list of best management practices that will be included in the construction general plan.
- Estimate and disclose the area of undeveloped land that would be developed for the Proposed Action.
- Disclose all applicable best management practices for the entirety of the Creech AFB IDP.

Ephemeral Streams and Floodplains

The EPA’s 2024 scoping letter recommended that the DAF avoid development in ephemeral streams, as well as designate a protective buffer around them. In section 3.7.3.2, the DEA states that “projects proposed in the northern portions of the installation under Alternative 1 have the potential to impact ephemeral streams” (pg. 3-18). Figure 3.1 delineates these projects in relation to ephemeral streams. Project C11, the planned installation of solar and battery systems, is in one of the ephemeral streams crossing into Creech AFB. Considering that “Creech AFB and the surrounding areas are prone to intense thunderstorms that can result in flash floods” (pg. 3-16) and that “storm events are anticipated to result in flash flooding and shallow flooding where impermeable surfaces or poorly drained soils exist” (pg. 3-19), the solar array and battery systems may be vulnerable to flooding due to their proposed location. The DEA briefly states how Creech AFB would mitigate flood impacts with the current stormwater drainage system. However, the DEA does not describe how it would floodproof the planned construction, which may have financial implications for Creech AFB. Projects like the solar

¹ Available at https://www.epa.gov/system/files/documents/2023-11/bioretentiondesignhandbook_plainnov2023.pdf

array and battery system installation may be costly to repair and maintain should flooding occur. The DAF may find it financially advantageous to floodproof the planned construction and relocate Project C11, which would have the additional benefit of mitigating impacts to ephemeral streams. The DAF may find the Federal Flood Risk Management Standards helpful.

Recommendations for the Final EA:

- Clearly identify any flood mitigation measures that will be included to protect buildings and structures in the study area.
- Discuss and commit to the requirements of the Federal Flood Risk Management Standards as practicable.²
- Delineate areas of potential flooding on Creech AFB.
- Select Alternative 2 or Alternative 3 such that construction of Project C11 would be located away from an ephemeral stream.

Soil and Water Contamination

The EPA made recommendations to the DAF to identify areas of potential hazardous material contamination, provide a general overview of the status of any cleanup that is occurring, and discuss the cleanup remedies occurring at Creech AFB, as well as the potential interactions between construction and the remedy. The EPA appreciates the DAF's delineation of the Environmental Restoration Program (ERP) sites in Figure 3-3, which identify potentially contaminated sites on Creech AFB. Figure 2-1 indicates that the proposed construction, demolition, and infrastructure projects are co-located on the ERP sites identified in Figure 3-3. However, the DEA does not describe generally the cleanups at these ERP sites, nor does the DEA indicate how these projects will impact the cleanup at the ERP sites. Disclosing this information will be valuable for the public to understand how Creech AFB will clean up these sites as well as what the impacts to the surrounding soil and water may be.

Recommendations for the Final EA:

- Disclose generally the cleanup occurring at the active ERP sites.
- Discuss how the planned projects might impact these cleanups and identify measures to minimize these impacts, if necessary and as practicable.
- Identify measures to detect potential soil and water contamination from the ERPs.

Per- and Polyfluoroalkyl substances (PFAS)

In section 3.12.2.4, the DEA states that "All DAF investigation and mitigation work relating to PFOS and PFOA is performed in accordance with...the USEPA's lifetime drinking water health advisory of 70 parts per trillion (ppt)" (pg. 3-45). However, 70 ppt is no longer consistent with latest maximum contaminant levels (MCL) updates in the PFAS National Primary Drinking Water Regulation.³ In the Final EA, please consider discussing contamination in the project areas with reference to the existing standard, not the interim health advisory level nor levels derived from it.

Recommendations for the Final EA:

- Discuss contamination in the project areas with reference to the existing standard.

² <https://www.fema.gov/floodplain-management/intergovernmental/federal-flood-risk-management-standard>

³ <https://www.epa.gov/sdwa/and-polyfluoroalkyl-substances-pfas>

- Conduct testing in all PFAS source areas where construction is planned prior to any earth movement.

Mojave Desert Tortoise

In section 3.8.3.2, the DEA states that “Construction of Project C27 fencing would contain the remaining land owned by Creech AFB in the northwest parcel, preventing Mojave Desert tortoise access onto the Installation. The DAF has determined that Projects C26 and C27 of the Proposed Action ‘may affect but are not likely to adversely affect’ the Mojave Desert tortoise” (pg. 3-27). The EPA notes that the DAF is seeking concurrence with the United States Fish and Wildlife Service (USFWS) for this determination. However, the DEA further states that “while this parcel is not labeled as sensitive habitat, the results of the environmental baseline survey indicated that it was surrounded by desert tortoise habitat, and it was determined that the parcel likely would be designated as tortoise habitat following future desert tortoise surveys (DAF, 2022b)” (pg. 3-27). Furthermore, according to a dataset from the USFWS, projects C26 and C27 may encroach on desert tortoise habitat.⁴ While Table 2-1 quantifies the estimated change in facility footprint from these two projects, the total area enclosed by the proposed Northwest Perimeter Fence, C27, remains unclear. As such, coordination with the USFWS may help the DAF reduce potential impacts to the Mojave Desert tortoise.

Recommendations for the Final EA:

- Coordinate with the USFWS to mitigate impacts to the Mojave Desert tortoise. The EPA defers to the USFWS’s recommendations.
- Commit to and disclose the USFWS’s mitigation recommendations in the FEA.

Renewable Energy Project

The EPA’s 2024 scoping comments recommend the DAF install additional photovoltaics in the form of carports over parking lots, such as the ones installed at Marine Corps Air Station Miramar.⁵ The DEA states that, in section 3.10.2.2, “Creech AFB uses three electrical feeders and relies on facilities using diesel-powered generators when electricity is not available” (pg. 3-33). The EPA notes that, considering the planned battery capacity exceeds the planned solar array capacity, at 5.8 megawatts and 4.0 megawatts (Table 2-1), respectively, there is battery capacity available for the installation of potential solar carports. In addition to increasing Creech AFB’s total renewable energy capacity, the solar carports’ additional capacity would decrease the facility’s reliance on diesel-powered generators, resulting in fewer air pollutant emissions. Solar carports have the additional benefit of reducing heat impacts to drivers. For the installation of the large-scale solar array, the DAF may find helpful design features that minimize grading, soil disturbance, and vegetation removal during construction. These features may reduce erosion and dust impacts in the long term, as well as reducing the frequency of restoration and repairs to the solar array, which may financially benefit the DAF in the long run.

Recommendations for the Final EA:

- Consider and implement the best management practices below as practicable for the solar array installation and potential solar carport.
 - Avoid site grading, disk-and-roll preparation techniques.

⁴ <https://databasin.org/datasets/391a56f07a394579badb1d578899d04d/>

⁵ <https://www.strongholdengineering.com/projects/p-196-m-solar-carport-miramar/>

- Limit grading to specific areas – roads, substations, operation and maintenance facilities, laydown areas, and some equipment pads.
- Utilize smaller rubber-wheeled vehicles, lightweight skid steers, small cranes, tractors, and rubber-tired forklifts to minimize soil disturbance.
- Mount batteries, transformers, and inverters on elevated platforms to allow soils underneath to remain pervious.
- Consider and discuss installing solar carports at Creech AFB parking lots.

Valley Fever Human Health Impacts

In the EPA's 2024 scoping letter, recommendations were made to the DAF to consider and discuss a plan to protect workers from Valley Fever, which could have human health impacts in areas where soil is disturbed. Considering the acreage needed for the proposed projects, construction workers may risk exposure to Valley Fever, especially where ground is disturbed. The EPA reiterates its comments to minimize impacts to human health by reducing the risk of exposure to Valley Fever through dust mitigation practices.

Recommendations for the final EA:

- Consider and discuss a plan to train workers and supervisors to recognize the potential presence of Valley Fever spores, how to minimize exposure to those spores, and how to recognize symptoms of Valley Fever. Consider, discuss, and implement the best management practices below as practicable:
 - Suspension of work during heavy winds.
 - Decontamination procedures for workers after completing fieldwork.
 - Provision of approved respiratory protection to workers.

Heat Management

In the EPA's 2024 scoping letter, recommendations were made to the DAF to integrate heat mitigation strategies into site plans, considering Clark County's risk for extreme heat according to FEMA's National Risk Index. The DEA does not discuss heat mitigation strategies to protect workers and base personnel. The EPA reiterates its previous recommendations to the DAF to integrate heat mitigation strategies into the site plans as well as other best management practices to mitigate extreme heat impacts.

Recommendations for the Final EA:

- Consider and implement the following where practicable:
 - Use surfaces and pavements that store less heat than traditional pavements.
 - Integrate green infrastructure, utilizing native vegetation in functional and/or aesthetic ways to reduce the heat island effect.
 - Implement built and/or natural shade structures.
 - Consider orienting buildings with consideration of local climate and geography to improve natural ventilation, avoid solar heat gain, and decrease energy usage.

Pesticides

The DEA states that "under Alternative 1, there could be an increase in the number of pesticides, herbicides, fungicides, insecticides, and rodenticides used during construction, renovation, and demolition activities" (pg. 3-47). The DEA further states that "herbicide and pesticide applications

would have the potential to adversely impact non-target species, result in downstream contamination from application site runoff, and cause unintentional releases to the environment by spills and application errors of chemicals” (pg. 3-47). There may be unintended impacts to human health and wildlife due to runoff and spills. Furthermore, there may be regulations concerning the types of chemicals used. Pursuant to the DAF’s commitment to environmental stewardship, disclosure of pesticides and herbicides used, and measures to mitigate and prevent downstream contamination and unintentional releases related to chemical applications and management, may be warranted.

Recommendations for the Final EA:

- Consider and discuss a plan to mitigate and prevent runoff and unintentional releases of any type of pesticides, herbicides, fungicides, insecticides, and rodenticides applied during project activities.
- Include maps that identify areas where chemicals will be applied, as well as runoff paths from these sites.
- Disclose what pesticides, herbicides, fungicides, insecticides, and rodenticides are being used.

Reuse of Demolition Material

The EPA appreciates that the DAF discusses solid waste management in section 3.10.2.3, where the DEA states that “generated waste is sorted for reuse, donation, recycling, and disposal” (pg. 3-34). Below are some recommendations the DAF may find helpful regarding the reuse and recycling of solid waste generated from construction and demolition activities. Further, the EPA encourages deconstruction and reuse of materials, if possible, rather than incineration or landfill disposal. Deconstruction reduces disposal site health impacts, reduces the spread of toxics from demolition dust (lead, hidden asbestos), provides local jobs and job training, and provides low-cost rebuilding materials. In addition, these strategies reduce greenhouse gas emissions. For questions about materials management through deconstruction and reuse, please contact Timonie Hood, EPA Region 9’s Zero Waste and Green Building Coordinator, at (415) 972-3282 or hood.timonie@epa.gov.

Recommendations for the Final EA:

- Quantify the amount of solid waste reused, donated, recycled, and disposed. Consider and implement the following practices as practicable:
 - Conduct a Deconstruction/Reuse Assessment to determine which materials could be reused/salvaged onsite to support the proposed expansion (preferred) or off-site through deconstruction and building materials facilities.
 - Revise proposed plans to deconstruct (reuse first, then recycle), instead of demolish, buildings based on the Deconstruction/Reuse Assessment.
- Track building materials reuse as a priority over demolition and recycling actions proposed.
- Confirm that any construction and demolition plans follow the waste management hierarchy.



**United States Department of the Interior
FISH AND WILDLIFE SERVICE**

DESERT NATIONAL WILDLIFE REFUGE COMPLEX
4701 NORTH TORREY PINES DRIVE
LAS VEGAS, NEVADA 89130
<http://desertcomplex.fws.gov>
702-515-5450



March 7, 2025

Colonel Nicholas R. Pederson, USAF
432d Wing, 432 AEW Commander
1065 Perimeter Road
Creech AFB, NV 89018

RE: The United States Department of the Air Force (DAF) announces the availability of a Draft Environmental Assessment (EA) and proposed Finding of No Significant Impact (FONSI) evaluating potential environmental impacts from the DAF's Proposed Action of implementing 36 short-term installation development plan projects at Creech Air Force Base (AFB).

Dear Col. Pederson,

Thank you for the opportunity to provide comments on the draft EA and proposed FONSI for the DAF's Proposed Action of implementing 36 short-term installation development plan projects at Creech AFB.

It's my understanding that Glen Knowles, Field Supervisor for the Southern Nevada Fish and Wildlife Office will be providing comments regarding Endangered Species Act compliance for Mojave Desert tortoise within Creech AFB. My comments will focus on the Desert National Wildlife Refuge.

Creech AFB is located adjacent to Desert National Wildlife Refuge (DNWR), U.S. Fish and Wildlife Service primary jurisdiction lands within the Nevada Test and Training Range. The boundary of the DNWR borders Creech AFB along the north and east sides (attachment 1.). The DAF's proposed action is located within Creech AFB. However, the following comments are provided to help ensure that the DNWR and natural resources the refuge protects are not impacted by the DAF's proposed action:

1. DAF activities are not permitted on DNWR lands adjacent to Creech AFB without approval by the Project Leader/Wildlife Refuge Manager for the DNWR.
2. Vehicles are only permitted on designated named roads and ground disturbing activities are strictly prohibited on DNWR lands.
3. Some of the proposed construction sites (C27, 13, C11 (Site B), C9) are close to the boundary of the DNWR. DAF must ensure that construction activities on Creech AFB do not impact adjacent DNWR lands and natural resources.
4. If temporary or permanent lighting will be installed adjacent to the DNWR boundary, please ensure lights are directed inward and downward within the Creech AFB boundary. This will reduce impacts to wildlife on adjacent DNWR lands and hopefully, reduce the number of wildlife attracted to lighting on Creech AFB.
5. DAF must ensure invasive weed species are controlled on Creech AFB to prevent their spread onto DNWR lands.

If you have any questions regarding my comments or need additional information, please don't hesitate to contact me.

Respectively,

Kevin DesRoberts
Project Leader

Attachment:

1. Desert National Wildlife Refuge Land Status Map

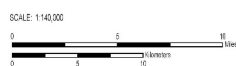
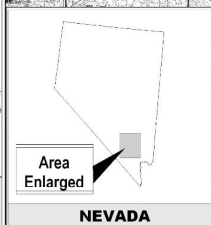
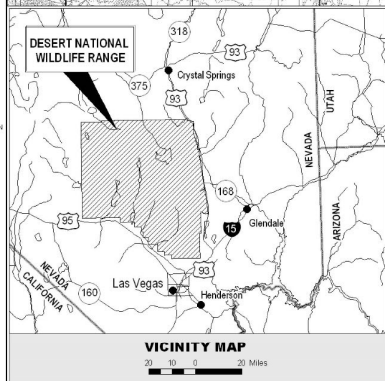
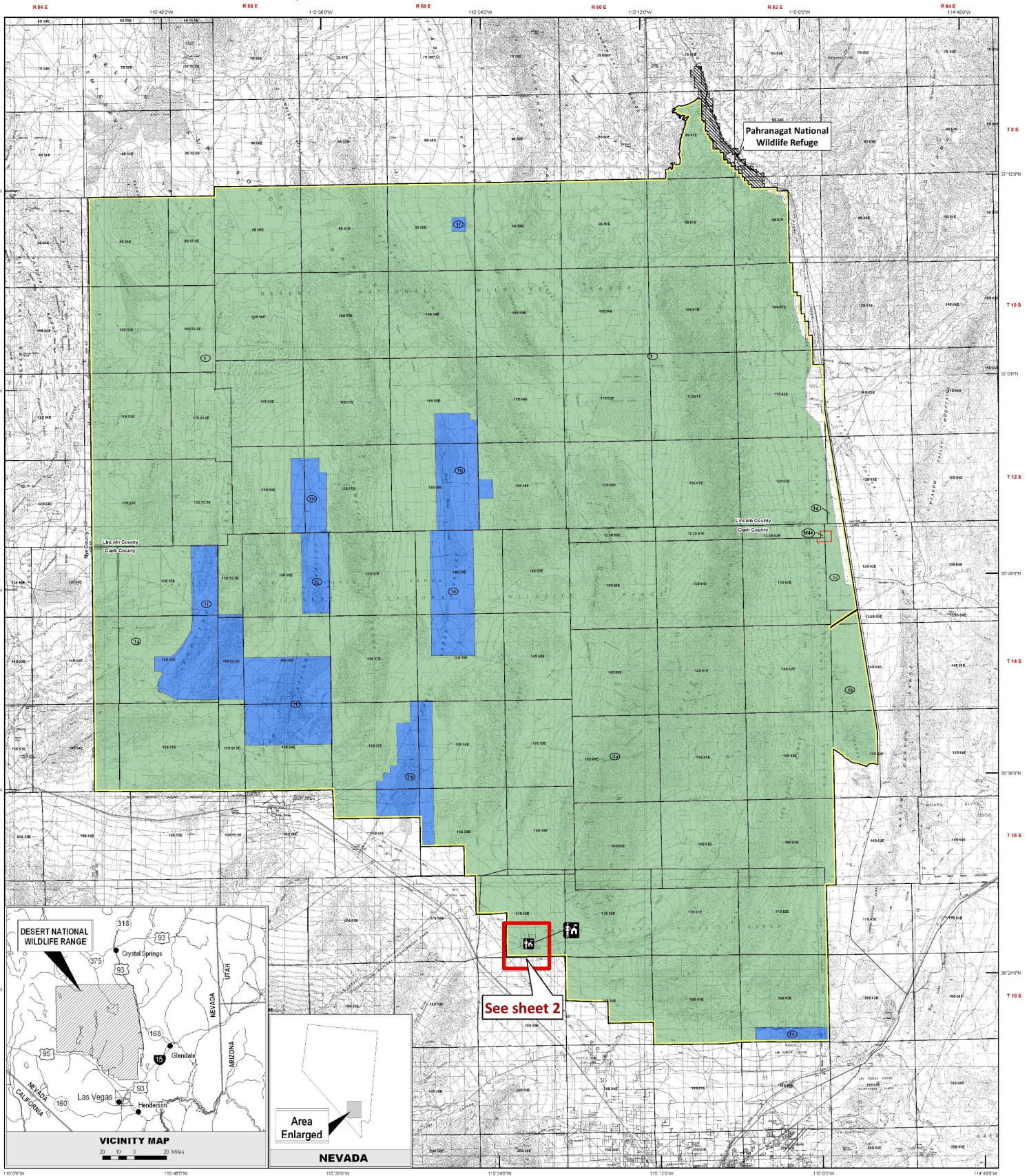


U.S. Fish & Wildlife Service

Desert National Wildlife Range

Clark and Lincoln Counties, Nevada

Land Status
Sheet 1 of 2



LEGEND:	
Acquired Interest	Boundaries
Fee Title	Approved Refuge Boundary
Secondary	Outgrants/FWS Issued Permits
	Tract Boundary
	Fee Title
	Less than Fee



From: Kallstrom, Corey <corey_kallstrom@fws.gov>

Sent: Tuesday, March 4, 2025 7:17 AM

To: DORROUGH, SEAN D CIV USAF ACC 432 SPTS/CEIE <sean.dorrough.1@us.af.mil>

Cc: Knowles, Glen W <glen_knowles@fws.gov>; Berry, Kellie <Kellie_Berry@fws.gov>

Subject: [Non-DoD Source] USAF Request for Concurrence for 36 short-term installation projects at Creech AFB

You don't often get email from corey_kallstrom@fws.gov. [Learn why this is important](#)

Dear Sean,

On behalf of Glen Knowles I am responding to your request we received February 13, 2025. Thank you for your submission of information regarding the United States Department of Air Force proposed action of implementing 36 short-term installation development plan projects at Creech Air Force Base in Nevada.

The Endangered Species Act (ESA) does not require consultation with the U.S. Fish and Wildlife Service (Service) if the proposed action, and other activities that are caused by the proposed action, will result in a "no effect determination" to listed species or critical habitat. Additionally, the ESA does not require a Federal Action Agency to obtain written concurrence from the Service if they determine that the proposed action will not affect listed species or critical habitat; nor do the regulations provide a legal mechanism for the Service to concur with such a determination. It is the action agencies responsibility to make the effect determination for compliance of 7(a)(2). It is recommended that action agencies document the "no effect" determination in their files for validation as to why section 7 consultation is not necessary.

This webpage be of assistance working through the ESA process <https://www.fws.gov/service/esa-section-7-consultation>. I've found our Midwest Region's webpage to have a little more detail which may be informative for you. Our Information for Planning and Consultation tool can assist with an environmental review process.

As you continue forward with your project planning and implementation, if any information gathered suggests an effect to the desert tortoise, please feel free to contact the Service for further guidance. I am available to provide technical assistance or consultation guidance if you have any further questions or concerns.

Respectfully,

Corey
Corey Kallstrom
Fish and Wildlife Biologist
Southern Nevada Fish and Wildlife Office
U.S. Fish and Wildlife Service
4701 N. Torrey Pines Dr.
Las Vegas, NV 89130
(702) 515-5461
Corey_Kallstrom@fws.gov



DEPARTMENT OF THE AIR FORCE
HEADQUARTERS 432D WING
CREECH AIR FORCE BASE, NEVADA

JAN 22 2025

Colonel Nicholas R. Pederson, USAF
432d Wing, 432 AEW Commander
1065 Perimeter Road
Creech AFB NV 89018

Robin Reed
Deputy State Historic Preservation Officer
Nevada State Historic Preservation Office
901 S. Stewart Street, Suite 5004
Carson City NV 89701

Dear Ms. Reed

The United States Department of the Air Force (DAF) announces the availability of a Draft Environmental Assessment (EA) and proposed Finding of No Significant Impact (FONSI) evaluating potential environmental impacts from the DAF's Proposed Action of implementing 36 short-term installation development plan projects at Creech Air Force Base (AFB). The Draft EA was prepared in accordance with the *National Environmental Policy Act* (NEPA), the Council on Environmental Quality NEPA implementing regulations, and the DAF's Environmental Impact Analysis Process.

The 36 short-term installation development projects would involve demolition of aging facilities, new facility construction, facility upgrades, facility repair and renovation, utilities upgrades, community living upgrades, infrastructure improvement, recreational upgrades, natural infrastructure management projects, and strategic sustainability performance projects to be completed or implemented over approximately the next five years. Accordingly, the DAF has prepared a proposed FONSI to document the findings of the Draft EA.

Analysis in the EA has determined that none of the facilities associated with the Proposed Action are listed or eligible for listing in the National Register of Historic Places; no Traditional Cultural Properties have been identified; and construction, demolition, and repair activities would avoid disturbance of all listed, eligible, and unevaluated sites not associated with the Proposed Action within the Installation. Areas of Project C26 would be located outside of the Installation boundary. Due to the possible presence of eligible archaeological sites within Project C26's development area and the potential for subsurface deposits, it is recommended that a qualified archaeologist be present to monitor all construction activities to ensure that no archaeological resources are disturbed or destroyed. With such measures in place, no adverse effects to archaeological properties would be anticipated with implementation of the Proposed Action (refer to Section 3.9.3 of the Draft EA). The DAF is seeking concurrence on its determination of "No Adverse Effect" from these Installation development projects.

The documents are available on the Creech AFB website at <https://www.creech.af.mil/> (or by scanning the QR code below) under the *Public Notification* heading. The DAF invites input

and comment on the Draft EA and FONSI for a period of 30 days from the date of this letter.
Comments or inquiries may be sent via postal mail or email (preferred) to:

ATTN: Sean Dorrough
US Department of the Air Force
432 SPTS/CE
1065 Perimeter Road
Creech AFB NV 89018
Phone: 702-404-1836
Email: sean.dorrough.1@us.af.mil



Sincerely

A handwritten signature in black ink, appearing to read 'Nick Pederson', written over the printed name.

NICHOLAS R. PEDERSON, Colonel, USAF
Commander



NEVADA
**STATE HISTORIC
PRESERVATION OFFICE**

STATE OF NEVADA
Department of Conservation and Natural Resources

Joe Lombardo, *Governor*
James A. Settelmeyer, *Director*
Rebecca L. Palmer, *Administrator*

August 21, 2024

Colonel Nicholas R. Pederson, USAF
Commander
US Department of the Air Force
432 SPTS/CE
1065 Perimeter Road
Creech AFB NV 89018

RE: Environmental Assessment (EA) for proposed installation of development plan projects at
Creech Air Force Base (AFB), Clark County, NV; SHPO UT #2024-8334; 35630

Dear Colonel Pederson:

The Nevada State Historic Preservation Office (SHPO) has reviewed the subject documents in accordance with 54 U.S.C. § 306108 commonly known as Section 106 of the National Historic Preservation Act of 1966, as amended.

Project Description

The United States (US) Department of Air Force (USAF) proposed action involves 36 short-term development actions and real-property improvements including new construction, demolition, repairs, renovations, and upgrades at Creech AFB from 2024-2029.

Area of Potential Effect (APE)

The USAF has not identified the APE for this undertaking, either in a written description or on a map. The submitted project area map (Attachment 1) is inadequate for the SHPO's review and comment. This map needs to be both legible and based on a USGS 7.5' topographic map base with the proposed APE boundary clearly depicted on it to meet the minimum documentation standards found at 36 CFR § 800.11. Please submit an adequate APE map for our office's review and comment that considers all proposed potential effects for this undertaking.

Identification and Evaluation of Historic Properties

The USAF is requesting "information on any historic properties located therein that may be affected by the proposed undertaking."

Archaeological Resources

Although this submission does not request review of any proposed identification efforts, the entire base has been inventoried for archaeological resources with the final piece reviewed by the SHPO in 2022.

Architectural Resources

Regarding our enclosed June 19, 2020 letter (UT# 2018-5168; 24132 and 24674), the SHPO has not received a written response from the USAF specifically for the buildings / structures at Creech. If our

Commander Pederson
August 21, 2024
Page 2 of 3

records are in error, please let us know. The 2018 basewide architectural survey, *Building Inventory of Nellis Air Force Base, Creech Air Force Base, and Nevada Test and Training Range, Las Vegas, Nevada*, did not include enough information for our office to evaluate that historic districts are not present at Creech. Page two of our 2020 letter outlined our request for limited additional information that our office needs to receive in order to evaluate whether or not a historic district is present at Creech. We look forward to receiving this information for review and comment.

Regarding individual eligibility for listing in the National Register of Historic Places (NRHP), the USAF's Attachment 2 list of demolition projects (pages 2-12 and 2-13) includes buildings B86, B404, and B406. Architectural Resource Assessment (ARA) forms were included for these 3 buildings in the 2018 basewide architectural survey, and our office previously concurred in our 2020 letter with the USAF's determination that these 3 resources are not individually NRHP eligible. However, the one-page table for Creech resources in our 2020 letter stated that our office considers these 3 resources **unevaluated** for NRHP eligibility as contributing resources to a historic district. This conclusion is still valid.

To our knowledge, three other buildings proposed for demolition (B95, B55, and B137) were not included in the basewide survey. If our records are in error, please let us know. Unless a previous inventory exists and the USAF has documentation that our office previously concurred on individual eligibility, the USAF should submit an NRHP evaluation for each resource (on individual ARA forms for consistency) to our office for review and comment. Therefore, at this time, our office considers these 3 resources as **unevaluated** for both individual NRHP eligibility and as contributing resources to a historic district.

The SHPO's review of this undertaking has stopped pending receipt of the information mentioned above.

Sincerely,



Rebecca Lynn Palmer
State Historic Preservation Officer

enc. SHPO June 19, 2020 letter (UT# 2018-5168; 24132 and 24674)

From: Lori Rayner <lrayner@shpo.nv.gov>

Sent: Tuesday, March 11, 2025 10:01 AM

To: DORROUGH, SEAN D CIV USAF ACC 432 SPTS/CEIE <sean.dorrough.1@us.af.mil>

Cc: Robin Reed <rreed@shpo.nv.gov>; Georgie De Antoni <gdeantoni@shpo.nv.gov>

Subject: [Non-DoD Source] Review of Environmental Assessment for Creech AFB (SHPO UT 2024-8334; 36089)

You don't often get email from lrayner@shpo.nv.gov. [Learn why this is important](#)

Good morning, Mr. Dorrough,

The SHPO is in the process of reviewing the Draft Environmental Assessment (EA) for 36 short-term installation development projects at Creech AFB.

Regarding the Area of Potential Effect (APE):

1. Per the SHPO's letter dated August 21, 2024, our office had requested additional information regarding the project's APE and a new APE map on a 7.5' USGA topographic map base with the proposed APE boundary clearly depicted to meet the minimum documentation standards found at 36 CFR § 800.11. The Figure 2-1 map on page 37 of the EA titled "Location of Proposed IDP Projects" still does not adequately identify the APE boundary and where all project activities will occur, including staging and transportation routes of vehicles or heavy equipment.
2. Page 72 of the EA states that "The direct and indirect APE for this EA is 50 meters and 800 meters around each project location, respectively." Please submit a new map that considers all proposed potential effects for this undertaking to assist our office in completing our current review

Regarding the identification and evaluation of cultural and historic resources within the APE

3. The EA states on pages 72 and 73 that records searches were conducted including NVCRIS, and that no archaeological properties are located within the APE.
4. However, at the bottom of page 73 the EA states that "The proposed action would avoid disturbance of all eligible and unevaluated sites within the Installation".
5. Also, the agency's letter dated February 10, 2025 states that "Areas of Project C26 would be located outside of the Installation boundary. Due to the possible presence of eligible archaeological sites within Project C26's development area and the potential for subsurface deposits, it is recommended that a qualified archaeologist be present to monitor all construction activities to ensure that no archaeological resources are disturbed or destroyed".

6. These statements appear to be contradictory. Please provide our office with the report from NVCRIS confirming there are no archaeological properties located within the APE. If archaeological resources do exist within the APE, please provide our office with a listing of these resources as well as IMACS site forms and any updates that the agency has made to the forms regarding determinations of eligibility.
7. The SHPO's August 21, 2024 letter requested additional information about several buildings, structures and potential historic districts that may be present within the Installation or are proposed for demolition so the SHPO could evaluate the existence of historic districts. To date, our office still has not received a response. Please provide an update regarding these previous requests.
8. Page 72 of the EA states "Of the 146 facilities located within Creech AFB, 81 have been determined non-eligible for listing on the NRHP, including all facilities associated with the Proposed Action. No NRHP-eligible architectural resources were identified".
9. Please provide our office with a complete listing of these 146 facilities with any updated eligibility determination that may have been made to them, as well as the corresponding ARA / NARA forms for each facility.

Upon receipt of the additional requested information stated above, the SHPO will continue it's review of this undertaking in accordance with 54 U.S.C. § 306108 commonly known as Section 106 of the National Historic Preservation Act (NHPA) of 1966, as amended.

The SHPO's August 21, 2024 letter is attached for your reference.

Thank you kindly,

Lori M. Rayner

Review and Compliance Archaeologist
Nevada State Historic Preservation Office
Department of Conservation and Natural Resources
901 South Stewart Street, Suite 5004
Carson City, NV 89701
(O): 775-684-3450 | (F) 775-684-3442
lrayer@shpo.nv.gov



DEPARTMENT OF THE AIR FORCE
HEADQUARTERS 432D WING
CREECH AIR FORCE BASE, NEVADA

Creech Air Force Base
1065 Perimeter Road
Creech AFB NV 89018

Mr. Art Krupicz
State Historic Preservation Officer
901 S. Stewart Street, Suite 5004
Carson City NV 89701

Dear Mr. Krupicz

On 11 March 2025, Creech Air Force Base (AFB) received correspondence (email) from your office in response to the Draft Environmental Assessment (EA) for Installation Development Projects at Creech AFB. Detailed responses to each question raised by the SHPO (numbered 1-8 below) are included herein and reference the attached revised Cultural Resources EA Section (**Attachment 1**).

- 1. Per the SHPO's letter dated August 21, 2024, our office had requested additional information regarding the project's Area of Potential Effects (APE) and a new APE map on a 7.5' USGS topographic map base with the proposed APE boundary clearly depicted to meet the minimum documentation standards found at 36 CFR § 800.11. The Figure 2-1 map on page 37 of the EA titled "Location of Proposed IDP Projects" still does not adequately identify the APE boundary and where all project activities will occur, including staging and transportation routes of vehicles or heavy equipment.*

Please find attached for your review two maps showing the APE that encompasses all project locations. As requested, the map shows the APE on a 7.5' USGS topographic map base (Indian Springs, Nevada [1974; photorevised 1984]) with the proposed APE boundary clearly depicted (**Attachment 2**). An additional APE map was provided with an aerial imagery map base for comparison (**Attachment 3**).

The maps assume that the physical effects would occur at the mapped project locations (refer to project details in **Attachment 4**) and that other resources within the red APE boundary would be assessed for visual, auditory, atmospheric, and cumulative effects. The physical APE for new construction projects represented by point features on Attachments 3 and 4 would include each respective proposed construction footprint; physical APE point features representing demolitions are limited to the subject building; and the physical APE for infrastructure projects I1 and I2 are confined to specific areas proposed for airfield pavement repairs.

All transportation and staging for each project would occur on existing roads and within previously disturbed areas near the project locations.

The DAF requests the SHPO's concurrence on its definition of the APE.

2. *Page 72 of the EA states that "The direct and indirect APE for this EA is 50 meters and 800 meters around each project location, respectively." Please submit a new map that considers all proposed potential effects for this undertaking to assist our office in completing our current review.*

A new map has been provided as noted under Comment #1 (see **Attachments 2 and 3**) and the text within the EA has been revised to describe the newly defined APE (see **Attachment 1**).

3. *The EA states on pages 72 and 73 that records searches were conducted including NVCRIS, and that no archaeological properties are located within the APE.*

A new NVCRIS review was conducted, and the EA has been revised with the results of the NVCRIS review. The NVCRIS report reformatted from excel to pdf is attached for your reference (**Attachment 5**).

4. *However, at the bottom of page 73 the EA states that "The proposed action would avoid disturbance of all eligible and unevaluated sites within the Installation".*

The text has been redeveloped upon the redefining of the APE. Previous language referenced in this comment has been removed. NVCRIS records for the new APE have been reviewed and included in the revised analysis in the EA. The text now indicates that there are no National Register of Historic Places (NRHP)-eligible or -listed archaeological sites within the physical APE for the Proposed Action and Alternatives. There are 16 sites that are considered unevaluated for NRHP eligibility within the physical APE that could be subject to physical disturbance. Each of these sites is addressed in the attached revised Cultural Resources Section of the EA (see **Attachment 1**).

5. *Also, the agency's letter dated February 10, 2025 states that "Areas of Project C26 would be located outside of the Installation boundary. Due to the possible presence of eligible archaeological sites within Project C26's development area and the potential for subsurface deposits, it is recommended that a qualified archaeologist be present to monitor all construction activities to ensure that no archaeological resources are disturbed or destroyed".*

The text has been revised based on the most recent data gathering and analysis efforts reflected in the revised EA. The revised text clarifies that Project C26 would involve paving and would be located on an existing dirt road that is currently being used by the installation. Language reflecting inadvertent discovery has also been added to the text, and the recommendation for an archaeological monitor to be present has been removed.

6. *These statements appear to be contradictory. Please provide our office with the report from NVCRIS confirming there are no archaeological properties located within the APE. If archaeological resources do exist within the APE, please provide our office with a listing of these resources as well as IMACS site forms and any updates that the agency has made to the forms regarding determinations of eligibility.*

The referenced contradictory language has been removed. A list of NRHP-eligible and unevaluated resources has been added to the revised attached Cultural

Resources Section. **Attachment 5** contains lists of exported Inventory and Resource data from NVCRIS converted from excel format.

7. *The SHPO's August 21, 2024 letter requested additional information about several buildings, structures and potential historic districts that may be present within the Installation or are proposed for demolition so the SHPO could evaluate the existence of historic districts. To date, our office still has not received a response. Please provide an update regarding these previous requests.*

An assessment of potential unidentified historic districts within Creech AFB has been conducted based on the SHPO's letter dated June 19, 2020, associated with project UT 2018-5169 #s 24132 and subsequent correspondence. This assessment was prepared in report format by Environmental Assessment Services, LLC (EAS), which also addresses the previously unevaluated buildings (B55, B95, and B137). The report is included as **Attachment 6**, titled *Additional Documentation And Evaluation of Potential Historic Districts At Creech Air Force Base, Clark County, Nevada*. In the report, EAS recommends that there are no historic districts present at Creech AFB. The DAF has reviewed the report, agrees with its findings, and requests the SHPO's concurrence on the DAF's determination that no historic districts are present.

8. *Page 72 of the EA states "Of the 146 facilities located within Creech AFB, 81 have been determined non-eligible for listing on the NRHP, including all facilities associated with the Proposed Action. No NRHP-eligible architectural resources were identified". Please provide our office with a complete listing of these 146 facilities with any updated eligibility determination that may have been made to them, as well as the corresponding ARA / NARA forms for each facility.*

This section has been entirely revised upon redefining the APE. NRHP-eligible and unevaluated facilities are now listed in the revised EA section (**Attachment 1**), and an export of such data from NVCRIS has been provided to your office to accompany this correspondence (**Attachment 5**).

Sincerely

KUZMIN.DENNIS
S.I.1283020750

Digitally signed by
KUZMIN.DENNIS.I.128302
0750
Date: 2025.09.11 16:51:36
-07'00'

DENNIS I. KUZMIN, Captain, USAF
Base Civil Engineer

Attachments:

Revised cultural resources section from Draft Environmental Assessment
Map of Proposed Installation Development Plan Projects – Area of Potential Effects – 7.5" USGS
Topographic Quadrangle Basemap
Map of Proposed Installation Development Plan Projects – Area of Potential Effects – Aerial
Imagery Basemap
List of Creech AFB Installation Development Plan Projects
NVCRIS Report
Report: Additional Documentation And Evaluation of Potential Historic Districts at Creech Air Force
Base, Clark County, Nevada

From: Lori Rayner <lrayer@shpo.nv.gov>
Sent: Monday, October 20, 2025 10:00 AM
To: DORROUGH, SEAN D CIV USAF ACC 432 SPTS/CEIE <sean.dorrough.1@us.af.mil>
Cc: Robin Reed <rreed@shpo.nv.gov>; Georgie De Antoni <gdeantoni@shpo.nv.gov>; Art Krupicz <art.krupicz@shpo.nv.gov>; FORNOFF, ROLAND J CIV USAF ACC 432 SPTS/CEI <roland.fornoff.1@us.af.mil>
Subject: [Non-DoD Source] Review of Environmental Assessment for Creech AFB (SHPO UT 2024-8334; 36690)

Good morning, Sean,

Thank you for your inquiry.

Due to staffing issues our office was unable to provide a timely response on this submission (SHPO UT 2024-8334; 36690).

In accordance with the regulations, the USAF has no further responsibilities for Section 106 consultation for this undertaking.

Sincerely,

Lori M. Rayner
Review and Compliance Archaeologist
Nevada State Historic Preservation Office
Department of Conservation and Natural Resources
901 S. Stewart Street, Suite 3002, Carson City, Nevada 89701
lrayer@shpo.nv.gov
Office: 775-684-3450

From: DORROUGH, SEAN D CIV USAF ACC 432 SPTS/CEIE <sean.dorrough.1@us.af.mil>
Sent: Thursday, October 16, 2025 8:47 AM
To: Lori Rayner <lrayner@shpo.nv.gov>
Cc: Robin Reed <rreed@shpo.nv.gov>; Georgie De Antoni <gdeantoni@shpo.nv.gov>; Art Krupicz <art.krupicz@shpo.nv.gov>; FORNOFF, ROLAND J CIV USAF ACC 432 SPTS/CEI <roland.fornoff.1@us.af.mil>
Subject: RE: Review of Environmental Assessment for Creech AFB (SHPO UT 2024-8334; 36089)

WARNING - This email originated from outside the State of Nevada. Exercise caution when opening attachments or clicking links, especially from unknown senders.

Good morning,

I wanted to reach out and see if the SHPO was ready to issue a response to the letter received on Sept 22, 2025.

If the response is ready, I would greatly appreciate an electronic copy of the letter emailed to me.

Respectfully,

Sean D. Dorrough, GS-12, USAF
432 SPTS/CEIE Creech AFB, NV
Comm: 702-404-1836 Cell: 775-764-0356

From: Lori Rayner <lrayner@shpo.nv.gov>
Sent: Tuesday, September 23, 2025 10:46 AM
To: DORROUGH, SEAN D CIV USAF ACC 432 SPTS/CEIE <sean.dorrough.1@us.af.mil>
Cc: Robin Reed <rreed@shpo.nv.gov>; Georgie De Antoni <gdeantoni@shpo.nv.gov>; Art Krupicz <art.krupicz@shpo.nv.gov>; FORNOFF, ROLAND J CIV USAF ACC 432 SPTS/CEI <roland.fornoff.1@us.af.mil>
Subject: [Non-DoD Source] RE: Review of Environmental Assessment for Creech AFB (SHPO UT 2024-8334; 36089)

Good morning, Sean,

Thank you for reaching out. Yes, the SHPO received hard copies of the letter and report yesterday. We will complete our review and issue a response by October 16th.

Best,

Lori M. Rayner
Review and Compliance Archaeologist
Nevada State Historic Preservation Office
Department of Conservation and Natural Resources
901 S. Stewart Street, Suite 3002, Carson City, Nevada 89701
lrayner@shpo.nv.gov
Office: 775-684-3450

From: DORROUGH, SEAN D CIV USAF ACC 432 SPTS/CEIE <sean.dorrough.1@us.af.mil>
Sent: Tuesday, September 23, 2025 10:26 AM
To: Lori Rayner <lrayner@shpo.nv.gov>
Cc: Robin Reed <rreed@shpo.nv.gov>; Georgie De Antoni <gdeantoni@shpo.nv.gov>; Art Krupicz

<art.krupicz@shpo.nv.gov>; FORNOFF, ROLAND J CIV USAF ACC 432 SPTS/CEI <roland.fornoff.1@us.af.mil>

Subject: RE: Review of Environmental Assessment for Creech AFB (SHPO UT 2024-8334; 36089)

WARNING - This email originated from outside the State of Nevada. Exercise caution when opening attachments or clicking links, especially from unknown senders.

Good morning,

I wanted to reach out and check the delivery status of the letter and report. Did your office receive anything yet?

Respectfully,

Sean D. Dorrough, GS-12, USAF
432 SPTS/CEIE Creech AFB, NV
Comm: 702-404-1836 Cell: 775-764-0356

From: Lori Rayner <lrayer@shpo.nv.gov>

Sent: Wednesday, September 17, 2025 2:44 PM

To: DORROUGH, SEAN D CIV USAF ACC 432 SPTS/CEIE <sean.dorrough.1@us.af.mil>

Cc: Robin Reed <rreed@shpo.nv.gov>; Georgie De Antoni <gdeantoni@shpo.nv.gov>; Art Krupicz <art.krupicz@shpo.nv.gov>; FORNOFF, ROLAND J CIV USAF ACC 432 SPTS/CEI <roland.fornoff.1@us.af.mil>

Subject: [Non-DoD Source] RE: Review of Environmental Assessment for Creech AFB (SHPO UT 2024-8334; 36089)

Hi Sean,

Thank you for your email, additional information, and digital copies regarding the Environmental Assessment for the Creech AFB Installation Development Plan. The SHPO will log this review back in for a new 30 – day review period upon receipt of the hard copy letter and report that were mailed to our office

Kind regards,

Lori M. Rayner

Review and Compliance Archaeologist
Nevada State Historic Preservation Office
Department of Conservation and Natural Resources
901 S. Stewart Street, Suite 3002, Carson City, Nevada 89701
lrayer@shpo.nv.gov
Office: 775-684-3450

From: DORROUGH, SEAN D CIV USAF ACC 432 SPTS/CEIE <sean.dorrough.1@us.af.mil>

Sent: Wednesday, September 17, 2025 1:45 PM

To: Lori Rayner <lrayer@shpo.nv.gov>

Cc: Robin Reed <rreed@shpo.nv.gov>; Georgie De Antoni <gdeantoni@shpo.nv.gov>; Art Krupicz <art.krupicz@shpo.nv.gov>; FORNOFF, ROLAND J CIV USAF ACC 432 SPTS/CEI <roland.fornoff.1@us.af.mil>

Subject: RE: Review of Environmental Assessment for Creech AFB (SHPO UT 2024-8334; 36089)

WARNING - This email originated from outside the State of Nevada. Exercise caution when opening attachments or clicking links, especially from unknown senders.

Good afternoon,

First, I want to apologize for the delayed response to your 2020, and 2024 letters. Creech AFB has been going through some growing pangs as Creech AFB stands up programs after the separation from Nellis AFB.

Please see the attached response letter. My team and I worked with the contractor developing the Draft Environmental Assessment(EA) for the Creech AFB Installation Development Plan(IDP) to make the requested changes below. Also enclosed is a report to address the information requests of the June 2020 letter.

A hard copy of the letter and report were mailed today with an estimated delivery date of Friday, 19 September 2025. I wanted to send a digital copy for convenience.

Please do not hesitate to let me know if there are any questions or concerns.

Very Respectfully,

Sean D. Dorrough, GS-12, USAF
432 SPTS/CEIE Creech AFB, NV
Comm: 702-404-1836 Cell: 775-764-0356

From: Lori Rayner <lrayner@shpo.nv.gov>
Sent: Tuesday, March 11, 2025 10:01 AM
To: DORROUGH, SEAN D CIV USAF ACC 432 SPTS/CEIE <sean.dorrough.1@us.af.mil>
Cc: Robin Reed <rreed@shpo.nv.gov>; Georgie De Antoni <gdeantoni@shpo.nv.gov>
Subject: [Non-DoD Source] Review of Environmental Assessment for Creech AFB (SHPO UT 2024-8334; 36089)

You don't often get email from lrayner@shpo.nv.gov. [Learn why this is important](#)

Good morning, Mr. Dorrough,

The SHPO is in the process of reviewing the Draft Environmental Assessment (EA) for 36 short – term installation development projects at Creech AFB.

Regarding the Area of Potential Effect (APE):

1. Per the SHPO's letter dated August 21, 2024, our office had requested additional information regarding the project's APE and a new APE map on a 7.5' USGA topographic map base with the proposed APE boundary clearly depicted to meet the minimum documentation standards found at 36 CFR § 800.11. The Figure 2-1 map on page 37 of the EA titled "Location of Proposed IDP Projects" still does not adequately identify the APE boundary and where all project activities will occur, including staging and transportation routes of vehicles or heavy equipment.
2. Page 72 of the EA states that "The direct and indirect APE for this EA is 50 meters and 800 meters around each project location, respectively." Please submit a new map that considers all proposed potential effects for this undertaking to assist our office in completing our current review

Regarding the identification and evaluation of cultural and historic resources within the APE:

3. The EA states on pages 72 and 73 that records searches were conducted including NVCRIS, and that no archaeological properties are located within the APE.

4. However, at the bottom of page 73 the EA states that “The proposed action would avoid disturbance of all eligible and unevaluated sites within the Installation”.
5. Also, the agency’s letter dated February 10, 2025 states that “Areas of Project C26 would be located outside of the Installation boundary. Due to the possible presence of eligible archaeological sites within Project C26’s development area and the potential for subsurface deposits, it is recommended that a qualified archaeologist be present to monitor all construction activities to ensure that no archaeological resources are disturbed or destroyed”.
6. These statements appear to be contradictory. Please provide our office with the report from NVCRIS confirming there are no archaeological properties located within the APE. If archaeological resources do exist within the APE, please provide our office with a listing of these resources as well as IMACS site forms and any updates that the agency has made to the forms regarding determinations of eligibility.
7. The SHPO’s August 21, 2024 letter requested additional information about several buildings, structures and potential historic districts that may be present within the Installation or are proposed for demolition so the SHPO could evaluate the existence of historic districts. To date, our office still has not received a response. Please provide an update regarding these previous requests.
8. Page 72 of the EA states “Of the 146 facilities located within Creech AFB, 81 have been determined non-eligible for listing on the NRHP, including all facilities associated with the Proposed Action. No NRHP-eligible architectural resources were identified”. Please provide our office with a complete listing of these 146 facilities with any updated eligibility determination that may have been made to them, as well as the corresponding ARA / NARA forms for each facility.

Upon receipt of the additional requested information stated above, the SHPO will continue it’s review of this undertaking in accordance with 54 U.S.C. § 306108 commonly known as Section 106 of the National Historic Preservation Act (NHPA) of 1966, as amended.

The SHPO’s August 21, 2024 letter is attached for your reference.

Thank you kindly,

Lori M. Rayner

Review and Compliance Archaeologist
Nevada State Historic Preservation Office
Department of Conservation and Natural Resources
901 South Stewart Street, Suite 5004
Carson City, NV 89701
(O): 775-684-3450 | (F) 775-684-3442
lrayer@shpo.nv.gov

Connect with us:   

Attachment 1. Revised Cultural Resources Section from
Draft Environmental Assessment (EA)

Cultural Resources

Definition of the Resource

Cultural resources include any prehistoric or historic district, site, building, structure, or object that is important to a community for scientific, traditional, religious, or other purposes. These resources are protected under several federal laws, including the *Archaeological and Historic Preservation Act* ([54 U.S.C. §§ 312501–312508](#)), the *American Indian Religious Freedom Act* ([42 USC § 1996](#)), the *Archaeological Resources Protection Act* ([16 USC §§ 470aa–470mm](#)), the *Native American Graves Protection and Repatriation Act* ([25 USC §§ 3001–3013](#)), and the *National Historic Preservation Act* (NHPA) ([54 USC § 300101–320101](#)). Under NHPA Section 106 and its implementing regulations ([36 CFR § 800](#)), federal agencies must consider the effects of their undertakings on historic properties, provide consulting parties the opportunity to comment, and seek to avoid, minimize, or mitigate adverse effects.

Historic properties are defined as cultural resources listed on, or eligible for listing on the National Register of Historic Places (NRHP) ([36 CFR § 800.1\(a\)](#)). The lead federal agency for an undertaking is responsible for making determinations of eligibility, which then must be reviewed and concurred on by the State Historic Preservation Office(r) (SHPO). A cultural resource may be determined NRHP-eligible if it possesses integrity of location, design, setting, materials, workmanship, feeling, and association and if it meets any of the following four criteria for evaluation:

- A. associated with events that have made a significant contribution to the broad patterns of history; or
- B. associated with the lives of persons significant in history; or
- C. embodies the distinctive characteristics of a type, period, or method of construction; represents the work of a master; possesses high artistic value; or represents a significant and distinguished entity whose components may lack individual distinction; or
- D. has yielded, or may likely yield, information important in prehistory or history.

Generally, resources less than 50 years old, moved or reconstructed buildings, cemeteries, and religious properties are not NRHP-eligible, unless they meet one of the NRHP “criteria considerations” ([36 CFR § 60.4](#)). For example, a resource less than 50 years old may be eligible under Criteria Consideration G if it possesses integrity and is of exceptional importance, such as Cold War-era DoD properties (1945–1992).

Region of Influence

For this analysis, the Region of Influence (ROI) is equivalent to the Area of Potential Effects (APE) as defined in [36 CFR § 800.16\(d\)](#). Direct effects occur at the same time as the undertaking and could include those that are physical, visual, auditory, atmospheric, and/or cumulative. Indirect effects occur later in time or farther in distance but remain reasonably foreseeable. The APE’s extent depends on the scale and nature of each undertaking.

For the Proposed Action, the physical APE includes the areas of proposed ground disturbance for each project. The visual APE extends 0.5 miles from each project’s physical APE and encompasses potential atmospheric, auditory, and cumulative effects.



Existing Conditions

Creech AFB follows standard operating procedures for the management and protection of cultural resources on the lands included within the APE. Procedures, as outlined in the Creech AFB Integrated Cultural Resources Management Plan (ICRMP), address mission conflicts, management and coordination for Section 106 of the NHPA, and other necessary consultations (DAF, 2023b). A review of all available information about previous archaeological and historical inventories within Creech AFB was conducted.

Searches for previous reports and archaeological site forms were completed for all identified lands associated with this document. Reviews included the Nevada Cultural Resources Information System (NVCRIS) database managed by the SHPO and records and reports on file at Creech AFB.

Within Creech AFB, 2,036 acres have been surveyed for cultural resources. The remaining non-surveyed acres of the Installation are located within the undeveloped areas in the northwest corner of the Installation (approximately 250 acres). Additionally, Project C26, as described in this EA, is located outside of, but directly adjacent to, the bounds of Creech AFB along the western perimeter fence in an area that has been previously disturbed and is used as an access road. Project C26 would include the construction of a vehicle inspection facility, associated utilities, and a new asphalt road to connect US Highway 95 to the new inspection facility (approximately 6,100 linear feet). The new paved road would be built upon an existing dirt road that extends around the Installation's perimeter.

Architectural Resources

There are currently 32 buildings and five structures at Creech AFB within the visual APE that were constructed before 1992; of which four of the structures have been determined NRHP-eligible, and 32 buildings and one structure have been determined by the DAF to be NRHP-ineligible as both individual resources and as contributing resources to a district. The four NRHP-eligible properties are listed in **Table 3-6** and depicted on **Figure 3-2**. Nine historic architectural surveys have been conducted within the APE (**Table 3-7**). One survey report (23425) was not available and denoted as in-process in the NVCRIS database at the time of review.

Table 3-6
NRHP-Eligible Architectural Resources within the APE

SHPO ID	Historic Name	Date Built	NRHP Status and Eligibility Criteria	APE
S1829	Runway 08/26	1943	Eligible (A)	Physical
S1830	Runway 13/31	1943	Eligible (A)	Physical
S1831	Taxiway B	1943	Eligible (A)	Visual
S1832	Beacon	1952	Eligible (A, C)	Visual

Source: Nellis AFB Real Property and Cultural Resources; NVCRIS

(A) = eligible under Criterion A; APE = Area of Potential Effect; (C) = eligible under Criterion C; NRHP = National Register of Historic Places; SHPO = State Historic Preservation Office

Table 3-7
Architectural Surveys Conducted within the APE

SHPO Report Number	Report Author(s)	Report Name	Year
TBD	EAS	Additional Documentation and Evaluation of Potential Historic Districts at Creech Air Force Base, Clark County, Nevada	2025
TBD	Curran, Joe; Peter Mires, Ashley Konoske Wiley, and Kelly Edmiston	Cultural Resource Inventory for Creech Air Force Base, Clark County, Nevada	2024
23425	SWCA	Historic Overview of the Creech Air Force Base Runway System, Indian Springs, Clark County	2018
24132	Edwards, Erin	Historic Building Inventory of Nellis Air Force Base, Creech Air Force Base, and Nevada Test and Training Range, Las Vegas, Nevada	2018
20179	Edwards, Susan	Architectural Survey and Historic Evaluation of Ten Resources at Nellis and Creech Air Force Bases, Clark County	2015

SHPO Report Number	Report Author(s)	Report Name	Year
TBD	EAS	Additional Documentation and Evaluation of Potential Historic Districts at Creech Air Force Base, Clark County, Nevada	2025
20297	Edwards, Susan	Documentation Regarding Nine Demolished Buildings at Nellis and Creech Air Force Bases, Clark County, Nevada	2015
20182	Higgins, Courtney, Daron Duke, and Steven J. Melvin	Cultural Resources Inventory of 17 Acres for the Creech Air Force Base Land Acquisition Project, Clark County	2014
TBD	Travisano, Mikel, Michelle Wurtz, Marsha Prior, and Tarin E. Erickson	Nellis Air Force Base Historic Evaluation of 64 Buildings	2009
TBD	Travisano, Mikel, Michelle Wurtz, Natalie K. Thomas, and Marsha Prior	Nellis Air Force Base Historic Evaluation Of 251 Buildings	2007
175	Geo-Marine, Inc.	Nellis Air Force Base, Historic Evaluation of 9 Buildings	2006

Source: NVCRIS

TBD = To Be Determined

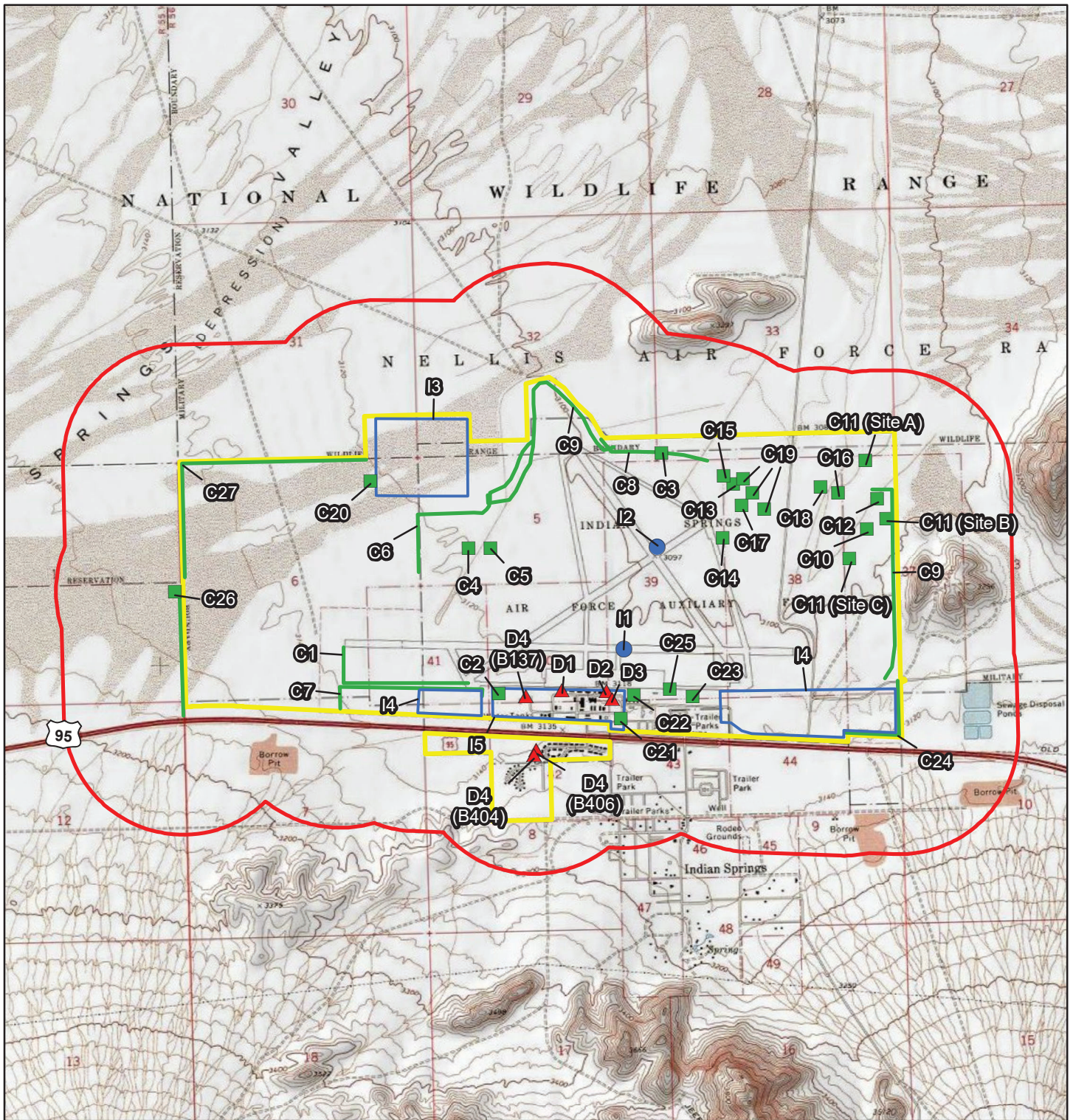


Figure 3-2
APE for Proposed IDP Projects at Creech AFB

- Construction Physical APE
- ▲ Demolition Physical APE
- Infrastructure Physical APE
- Linear Construction Physical APE
- Linear Infrastructure Physical APE
- Installation Boundary
- Visual, Auditory, and Atmospheric APE



Imagery: ESRI 2021
Coordinate System: WGS 1984 UTM Zone 11N



AFB = Air Force Base; APE = Area of Potential Effects; IDP = Installation Development Plan

Archaeological Resources

There have been 29 archaeological sites identified within the APE as a result of 19 archaeological surveys (**Table 3-8**). Of the 29 sites, one has been determined NRHP-eligible (CK1649) and two have been determined NRHP-ineligible, all with SHPO concurrence. According to archaeological site forms available through NVCRIS, the NRHP recommendations and determinations of the remaining 26 sites have not yet been concurred by the SHPO. Contractor/DAF evaluations for the 26 unevaluated sites include one site recommended as eligible (CK5395) and 25 sites recommended as ineligible. The combined 27 NRHP-eligible and unevaluated sites are listed in **Table 3-9**. All except for approximately 250 acres in the northwest corner of the Installation and approximately 6,100 linear feet along the outside of the western perimeter fence of the physical APE has been subject to systematic archaeological survey.

Table 3-8
Archaeological Surveys Conducted within the APE

SHPO Report Number	Report Author(s)	Report Name	Year
TBD	Curran, Joe; Peter Mires, Ashley Konoske Wiley, and Kelly Edmiston	Cultural Resource Inventory for Creech Air Force Base, Clark County, Nevada	2024
29858	Younie, A.; Perri, A.; Cook, M.	Class III Archaeological Inventory for Fence-To-Fence Environmental Services at Creech Air Force Base, Clark County, Nevada	2022
18756	Riddle, Jennifer E.	A Class III Cultural Resource Investigation of Material Pit NY 07-04 and the NDOT Right-of-Way on US-95 from Milepost NY 8.14 to Milepost CL 120.44 in Nye and Clark Counties, Nevada	2013
4686	Eskenazi, Suzanne and Christopher Harper	Archaeological Survey for the Proposed Mercury to Indian Springs Fiber Optic Line, Clark and Nye Counties, Nevada	2010
3997	Leavitt, Robert M. and Jeffrey L. Baker	Class III Cultural Resource Inventory of Proposed Sewage Disposal Pond and Associated Facilities on Clark County Water Reclamation District Property and Public Rights of Way Indian Springs, Clark County, NV	2009
11293	Myhrer, Keith	An Inventory of 111 Acres for a Bypass Road and Staging Area at Creech Air Force Base, Clark County, Nevada NAFB Report 07-03	2007
657	Kolvet, Renee Corona et al	A Stratified Archaeological Sample of Low Elevation Areas on Nellis Air Force Range, Nevada	2000
11402	Pippin, Lonnie C. and Susan Edwards	A Class III Cultural Resources Reconnaissance for a 167 Km Fiber Optic Line Between the Air Force Auxiliary Field at Indian Springs and the Cedar Pass Gate on the Tonopah Test Range, Nellis Air Force Range, Nevada	1997
11392	York, Andrew L., Robin E. McMullen, Paula del Espinasse, and W. Geoffrey Spaulding	Archaeological Survey of the Indian Springs Air Force Auxiliary Field, Nellis Air Force Base, Clark County, Nevada	1996
11324	Bergin, Kathleen Ann	A Cultural Resource Inventory of the Indian Springs Landfill Expansion Project Area, Indian Springs Air Force Auxiliary Field, Clark County, Nevada	1991
13045	Sheets, Robert S.	Indian Springs Fiber Optic Project	1991
5-1763	Myhrer, Keith	Material Pits Near Indian Springs	1989
SR071888-1	Livingston, Stephanie D. and Lonnie C. Phippen	Evaluation of Site 26CK3906 on the Air Force Auxiliary Field, Indian Springs, Nevada	1989

SHPO Report Number	Report Author(s)	Report Name	Year
16231	Durand, Stephen R., Reno, Ronald and Alvin McLane	Archaeological Survey and Evaluation of Six Parcels on Nellis Air Force Base, Lincoln, Clark, and Nye Counties, Nevada	1988
16243	Reno, Ronald L., Katherine Cheryl Dojaquez	A Class III Cultural Resources Reconnaissance of Radiological Monitoring Stations for the Yucca Mountain Project, Clark and Nye Counties, Nevada	1988
12377	Blair, Lynda M. Blair and Peter J. Calos	A Cultural Resource Inventory of the National Guard Licensed Area on Range 65 Near Indian Springs, Clark County, Nevada	1987
12981	N/A	An Archaeological Survey between Beatty, Nye County, and Indian Springs, Clark County, Nevada	1982
13027	Windham, Michael D.	Seismic Exploration Lines Near the Spring Mountains Clark County, Nevada.	1981
5-772	Liebhauser, William J.	12-5 KV Aerial Powerline R/W N-30598	1981

Source: Nevada SHPO, 2025

N/A = not available; SHPO = State Historic Preservation Office

Table 3-9
NRHP-Eligible and Unevaluated Archaeological Resources within the APE

Site No.	Temporal Affiliation	Description	NRHP Status	APE
CK1649	Historic	Las Vegas and Tonopah Railroad berm	Eligible	Visual
CK3871	Prehistoric	Isolate chert interior flake, broken	Unevaluated	Visual
CK3872	Prehistoric	Lithic quarry	Unevaluated	Physical
CK3906	Prehistoric	Lithic scatter	Unevaluated	Physical
CK3907	Prehistoric	Isolated obsidian tertiary flake	Unevaluated	Visual
CK3908	Prehistoric	Lithic scatter; 4 chert flakes	Unevaluated	Physical
CK3909	Prehistoric	Isolated chert tertiary flake	Unevaluated	Physical
CK3910	Prehistoric	Isolated chert secondary flake	Unevaluated	Physical
CK3911	Prehistoric	Isolated chert secondary flake	Unevaluated	Physical
CK4029	Prehistoric	Isolated chert secondary flake	Unevaluated	Visual
CK4030	Prehistoric: Middle Archaic	Isolated Elko series projectile point	Unevaluated	Visual
CK4031	Prehistoric	Isolated chert flake	Unevaluated	Visual
CK4100	Historic	Las Vegas and Tonopah Railroad gradient	Unevaluated	Visual
CK4700	Prehistoric	Dispersed prehistoric hearth	Unevaluated	Physical
CK5265	Prehistoric	Lithic scatter; 9 chert flakes	Unevaluated	Physical
CK5266	Prehistoric: Archaic	Lithic scatter with tools	Unevaluated	Physical
CK5267	Prehistoric	Lithic scatter	Unevaluated	Physical
CK5268	Prehistoric	Lithic scatter	Unevaluated	Physical
CK5269	Prehistoric	Lithic scatter	Unevaluated	Physical
CK5270	Prehistoric: Archaic	Lithic scatter with tools	Unevaluated	Physical
CK5271	Prehistoric	Lithic scatter	Unevaluated	Physical

Site No.	Temporal Affiliation	Description	NRHP Status	APE
CK5272	Prehistoric	Lithic scatter; 3 flakes, 1 core	Unevaluated	Visual
CK5273	Prehistoric	Lithic scatter; 4 flakes, 2 cores	Unevaluated	Visual
CK5274	Historic	Trash scatter; early-mid-20 th century	Unevaluated	Physical
CK5275	Historic	Trash scatter; early-mid-20 th century	Unevaluated	Physical
CK5276	Historic	Trash scatter/automotive parts	Unevaluated	Visual
CK5395	Prehistoric	Temporary camp	Unevaluated	Visual

Source: Nellis AFB Real Property and Cultural Resources; Nevada SHPO, 2025

APE = Area of Potential Effect; NRHP = National Register of Historic Places; SHPO = State Historic Preservation Office

Traditional Cultural Properties

Sixteen federally recognized Native American Tribes have historical ties to Creech AFB and the surrounding area. In accordance with DoD Instruction 4710.02 and DAF Instruction 90-2002, the DAF initiated consultation with Tribal Historic Preservation Officers and tribal leaders of the 16 federally recognized Native American tribes to identify TCPs that would have the potential to be affected by the Proposed Action. To date, no TCPs have been identified within the APE. The following tribes were initially contacted in July 2024 regarding the Proposed Action:

- Big Pine Paiute Tribe
- Bishop Paiute Tribe
- Chemehuevi Indian Tribe
- Colorado River Indian Tribes
- Duckwater Shoshone Tribe
- Ely Shoshone Tribe
- Fort Independence Indian Community
- Fort Mojave Indian Tribe
- Kaibab Band of Paiute Indians
- Las Vegas Tribe of Paiute Indians
- Lone Pine Paiute-Shoshone Tribe
- Moapa Band of Paiute Indians
- Paiute Indian Tribe of Utah
- Timbisha Shoshone Tribe
- Utu Utu Gwaitu Paiute Tribe
- Yomba Shoshone Tribe

There were no areas of concern for cultural resources identified by the tribes during consultation for the Proposed Action. Therefore, TCPs are not discussed further in this EA. Tribal consultation correspondence can be found in **Appendix A**.

Environmental Consequences

Evaluation Criteria

Adverse impacts on cultural resources would occur if the Proposed Action or Alternatives results in the following:

- physically altering, damaging, or destroying all or part of a resource;
- altering characteristics of the surrounding environment that contribute to the resource's significance;

introducing visual or audible elements that are out of character with the property or alter 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 impact is considered significant if it alters the integrity of a NRHP-listed, eligible, or potentially eligible resource or potentially impacts TCPs.

Alternative 1

Cultural resources potentially affected include significant historic sites such as national landmarks or properties listed, eligible for listing, or potentially eligible for listing on the NRHP. These properties qualify because of setting or feeling; historic architectural resources; archaeological resources with standing structures that could be affected by noise or ground disturbance; national historic trails; and cultural resources that are associated with places that require isolation or quiet.

Architectural Properties

Runway 08/26 (S1829) is located along the southern portion of the Creech AFB airfield. The resource includes the runway itself and nine accessory resources, including taxiways, overruns, runway lights, a live ordnance loading area, and a turnaround pad. The runway is oriented east-west, and it is immediately north of the main apron. It is connected to the runway system by a number of taxiways, and it intersects with Runway 13/31 on its east end. The runway measures 9,002 feet long by 150 feet wide, and it encompasses a total of 28.5 acres. It is made of poured concrete with asphalt shoulders and is level with the surrounding grade. The runway has black and white paint markings. The asphalt shoulders have lights, which are raised above the pavement surface. The outside edge of the asphalt shoulder appears to be of historic age, although other sections of concrete and asphalt appear to have been recently replaced. In 2008, repairs to or replacement of sinking asphalt was made on the east end of the runway. Creech AFB Real Property records state that the runway was constructed in 1943. The runway was extended on the west end, and overruns were added to both ends in 1959. Runway 08/26 was recommended eligible for NRHP listing in 2017 with SHPO concurrence in 2020. Projects within the scope of this EA with potential to affect the runway include C1 and I1. Project C1 would construct a taxiway extension and arm/disarm pad that extends the existing Taxiway Alpha to the west threshold of Runway 08/26. Project C1 would include an asphalt taxiway; concrete arm/disarm pad; paved shoulders; airfield lighting, markings, and guidance signage; addition of an access roadway leading to the arm/disarm pad; airfield storm drainage; utilities; and all other work as necessary. Minor long-term-direct adverse effects to the western terminus of Runway 08/26 would be anticipated where the Alpha Taxiway addition would connect to Runway 08/26. Project I1 would repair sections of degraded airfield pavements along Runway 08/26. Effects from Project I1 would be minor, long-term, direct, and beneficial due to the repair of the resource and that such repairs would not change the historic character or setting of the resource. In summary, effects to Runway 08/26 would be minor, long-term, direct, and both adverse and beneficial under Alternative 1.

Runway 13/31 (S1830) is located in the northeastern portion of the Creech AFB airfield, and it is the second principal runway at Creech AFB. The resource includes the runway itself and four accessory resources, including taxiways and overruns. The runway is oriented northwest-southeast and is on the north side of Runway 08/26 and east of Taxiway B. Runway 13/31 intersects with Taxiway B and Taxiway G at its northwest end, and with Runway 08/26 on its southeast end. The runway is paved in asphalt with fine-grained aggregate and is level with the surrounding grade. The asphalt is modern and has long, parallel joints, suggesting that it may have been laid in several courses. The runway has white and yellow retroreflective paint markings. No lights were observed on the shoulders or the runway itself, except for modern taxiway lights that adjoin it. One section of older concrete is present near the southeast end of the runway. Creech AFB Real Property records state that the runway was constructed in 1943. Project I2 is anticipated to affect the resource by repairing sections of degraded airfield pavements along the runway. Effects from Project I2 would be minor, long-term, direct, and beneficial due to the repair of the resource and such repairs would not change the historic character or setting of the resource under Alternative 1.

Taxiway B (S1831) is located in the center of the Creech AFB airfield. The resource includes the taxiway itself and two accessory resources, both of which are RPA live ordnance loading areas. The taxiway is oriented roughly north-south and is north of Runway 08/26 and west of Runway 13/31. Taxiway B connects with Runway 13/31 at the northwest end of the runway, and intersects with Taxiway F and Runway 08/26, before finally reaching the main apron at the south end of the taxiway. It measures approximately 4,500 feet long and 100 feet wide. The taxiway is made of poured concrete panels and is level with the surrounding grade. Taxiway B was originally a runway constructed around 1943, and sections of the original World War II and Cold War-era concrete remain. No projects within the scope of this EA would physically alter Taxiway B, nor do any projects include actions that would cause visual, atmospheric, auditory, or cumulative effects to the resource. Therefore, there would be no adverse effects to Taxiway B under Alternative 1.

Beacon (S1832) is located atop the Creech AFB water tower along the south-central boundary of Creech AFB, situated between North Frontage Road to the south and 1st Street to the north. The structure is made of metal which has been painted orange. The beacon has four lights equally spaced from each other, and it is designed to rotate 360 degrees. The beacon is mounted on a steel substructure and has a lightning rod next to it. The steel substructure consists of a circular rotating disk, bolted to a motor to operate the beacon. It is accessed via an enclosed ladder on the water tower. Creech AFB Real property records state that the light stands 75 feet off the ground, measures 10 feet by 10 feet, and that it was constructed in 1952. Project I4 would repair water lines around the water tower, but no alteration to the tower or beacon is planned. No projects within the scope of this EA would physically alter the beacon or the water tower on which it is installed, nor do any projects include actions that would cause visual, atmospheric, auditory, or cumulative effects to the resource. Therefore, there would be no adverse effects to the beacon under Alternative 1.

The Proposed Action also includes the demolition of six buildings. Project D1 would demolish B95, the Airfield Lighting Vault (SHPO # B13735). B95/B13735, constructed in 1952, was initially recorded in 2006 and recommended ineligible for NRHP listing in 2015. The building was again surveyed and recommended NRHP-ineligible in December 2024 by the contractor and the DAF (Curran et al., 2024). The SHPO has not yet concurred with these recommendations according to NVCRIS records. Project D2 would demolish administrative office building B86 (SHPO # B16179). B86/B16179 was constructed in 1989 and recommended ineligible for NRHP listing in 2017 with SHPO concurrence in 2020. Project D3 would demolish B55, the HQ Administration Building. B55 was constructed in 2006, making it ineligible for NRHP listing. Project D4 would demolish buildings B137, B404, and B406. B137 was constructed in 1994, making it ineligible for NRHP listing. B404 (SHPO # 16195) and B406 (SHPO # 16196) were both determined NRHP-ineligible by SHPO in 2020. Therefore, there would be no adverse effects to architectural resources from demolition activities under Alternative 1.

Adverse visual effects to historic architectural resources would have the potential to occur from introduced visual or audible elements from development of the Proposed Action that are out of character with historic architectural resources that alter their setting or feeling. Adverse visual effects would have the potential to occur if NRHP-eligible architectural resources were within the visual APE and had visual modifications that alter their setting or feeling. The projects included in the Proposed Action are military in nature and would be in character with the surrounding built environment. Therefore, the Proposed Action is unlikely to cause an adverse visual, auditory, or atmospheric effect to architectural historic properties within the APE. A precise layout for some projects under the Proposed Action has not been determined, and potential direct, minor, adverse visual effects would have the potential to occur if any of the four architectural historic properties within the APE were altered to be out of character for their built environment during project development. Creech AFB will continue to consult with the SHPO on potential effects and determine whether mitigation measures would be necessary.

Archaeological Properties

There are no NRHP-eligible or -listed archaeological sites within the physical APE for Alternative 1. There are 16 sites that are considered unevaluated for NRHP eligibility within the physical APE that would have the potential to be subject to physical disturbance. While these 16 sites have not yet been evaluated with SHPO concurrence, 14 of the 16 sites have been recommended ineligible for NRHP listing on their respective archaeological site forms by contracted professional archaeologists, and they have likely

exhausted their ability to provide important information about the past, and/or they have lost their historic integrity through physical disturbance, or the sites have been thoroughly investigated, and all artifacts have been collected.

Site CK3872 is a large chert lithic quarry site of undetermined dimensions recorded in 1987. NVCRIS records depict six different polygons with this site number, one of which is located near the northeast corner of the Installation boundary, while the remaining five areas are depicted two miles away to the northeast. The single site locus depicted within the APE is approximately 14.5 acres; however, only 0.25 acres of the site's area (2 percent) is located within the physical APE. NVCRIS also notes that there is an issue with duplicate records for this entry. The site form for CK3872 does not depict or describe any site locus to be near the Installation, and one of the polygons two miles away is the only one that matches the site sketch map included in the original site form from 1987. If the site locus mapped near the northeast corner of the Installation is accurate, then Project C11 would be the only project with potential to overlap with the site boundary. However, the portion of the site within the physical APE is already substantially disturbed by the Installation's perimeter fence and surrounding roads. Additionally, the locus of CK3872 within Creech AFB was revisited by Curran et al. (2024) in December 2024 and no artifacts or cultural features were observed. The contractor stated that since the site was not relocated, site integrity could not be determined and an updated NRHP evaluation could not be made. Therefore, regardless of the site's spatial accuracy as depicted in NVCRIS, there would be no adverse effects to site CK3872 under Alternative 1.

Site CK4700 is located along the northern edge of the landfill in the northwestern corner of the Installation. The site consists of an isolated dispersed prehistoric period hearth composed of approximately 70 to 100 fractured fire-altered rocks ranging from gravel to small cobble in size. The current condition of site CK4700 is unknown. Under Alternative 1, Project C11 would have the potential to physically disturb site CK4700, if it has not already been disturbed by the closed landfill or other activities. Project C11 would design and install a cybersecure microgrid control system integrated with large-scale PV arrays, a battery energy storage system, and a thermal energy storage system. The project would potentially include up to 71.2 acres primarily for PV arrays, of which 19.4 acres would be within the closed landfill. Additionally, CK4700 was revisited by Curran et al. (2024) in December 2024 and no artifacts or cultural features were observed. The contractor stated that, based on field observations, the site has likely been destroyed by military activity, including complete grading and blading of the area. Therefore, there would be no adverse effects to site CK4700 under Alternative 1.

For each of the 11 sites within the visual APE (see **Table 3-9**), there likely would be no adverse effect, either direct or indirect. Archaeological resources are typically only eligible for the NRHP under Criterion D, aside from special cases with unique circumstances. Because the significance and integrity of resources eligible under Criterion D typically are dependent on the recovery of data important, or potentially important, to the past, only physical disturbance likely would threaten these sites. Therefore, there would be no adverse effects to the 11 sites only within the visual APE under Alternative 1.

Approximately 250 acres within the physical APE in the northwest corner of the Installation have yet to be systematically surveyed for archaeological resources. Proposed development within this area includes Projects C20 and C27 (see **Figure 2-1**). Project C20, located along the southwestern edge of the Munitions Storage Area, would construct an aboveground earth-covered munitions storage igloo with a reinforced concrete foundation/floor slab and a pre-engineered reinforced concrete panel exterior with earth covering. The project would include blast-resistant steel doors, interior and exterior lighting, grounding, surge protection, intrusion detection system, and an exterior concrete access apron. All land east of this point has been subject to systematic survey. It is unclear whether Project C20 would extend westward into the area yet to be surveyed. Project C27, located along the Installation's northwestern boundary, would construct a perimeter fence to contain the remaining land owned by Creech AFB. The fence would extend northward from proposed project C26 and then turn eastward at approximately 90 degrees from the Installation's northwestern corner boundary to eventually meet the existing fence on the western side of the Munitions Storage Area. Existing ground disturbance in the areas planned for Projects C20 and C27 appears to be minimal.

As described in **Section 3.9.2.2**, areas of Project C26 would be located outside of the Installation boundary. Because the C26 project area was previously disturbed and cleared for use as an access road, the probability of encountering intact NRHP-eligible cultural resources is low. In the event of an unanticipated discovery of an archaeological resource during construction, Creech AFB would initiate the inadvertent discovery procedures outlined in the ICRMP (DAF, 2023b). Construction in the immediate area of the discovery would pause and the SHPO, Advisory Council on Historic Preservation, and federally recognized tribes affiliated with Creech AFB would be notified within 48 hours of discovery ([36 CFR § 800.13](#)). The remaining procedures outlined in the ICRMP would continue to be followed until resolved. With such measures taken, it is anticipated that there would be no adverse effects to archaeological properties under Alternative 1.

Alternative 2

Potential impacts to historic properties under Alternative 2 would be the same as Alternative 1.

Alternative 3

Potential impacts to historic properties under Alternative 3 would be the same as Alternative 1.

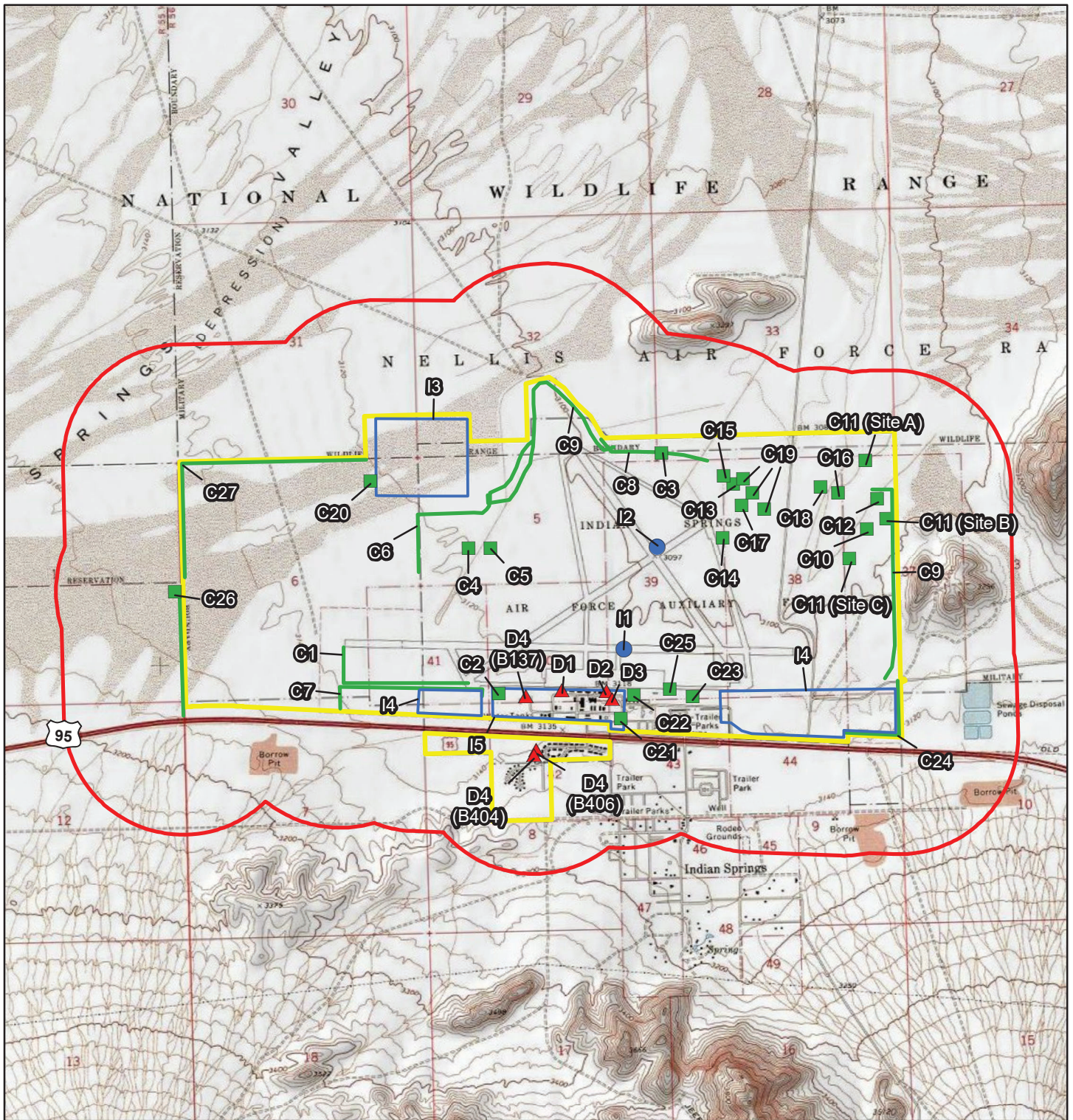
Cumulative Impacts

When combined with projects identified in **Table 3-1**, implementation of the Proposed Action Alternatives would result in no additional adverse impacts to cultural resources. The Indian Springs Schools, the High Desert State Prison, and the Southern Desert Correctional Center projects would occur on previously disturbed areas and would not be anticipated to encounter cultural resources. The BLM solar project would result in 5,000 acres of land disturbance and would need SHPO consultation prior to construction. The US-95 conversion project is currently reviewing alternatives. Depending on the chosen alternative, undeveloped land may be developed; SHPO consultation would be needed prior to construction. However, this project is still in its feasibility stage, and there is no development planned. When considered in conjunction with the effects of other past, present, and reasonably foreseeable actions at Creech AFB, no significant cumulative impacts to cultural resources would be anticipated to occur with implementation of the Proposed Action.

No Action Alternative

Under the No Action Alternative, the DAF would not implement the proposed Installation development projects listed in **Table 2-1**. Development of the facilities and infrastructure that would support the training and flight programs would not take place. Creech AFB would continue to operate under current conditions, facilities would continue to degrade, and no change to cultural resources at Creech AFB would be expected to occur beyond baseline conditions.

Attachment 2. Map of Proposed Installation Development Plan
Projects - Area of Potential Effects - 7.5" USGS Topographic
Quadrangle Basemap



Attachment 2

APE for Proposed IDP Projects at Creech AFB

- Construction Physical APE
- ▲ Demolition Physical APE
- Infrastructure Physical APE
- Linear Construction Physical APE
- Linear Infrastructure Physical APE
- Installation Boundary
- Visual, Auditory, and Atmospheric APE

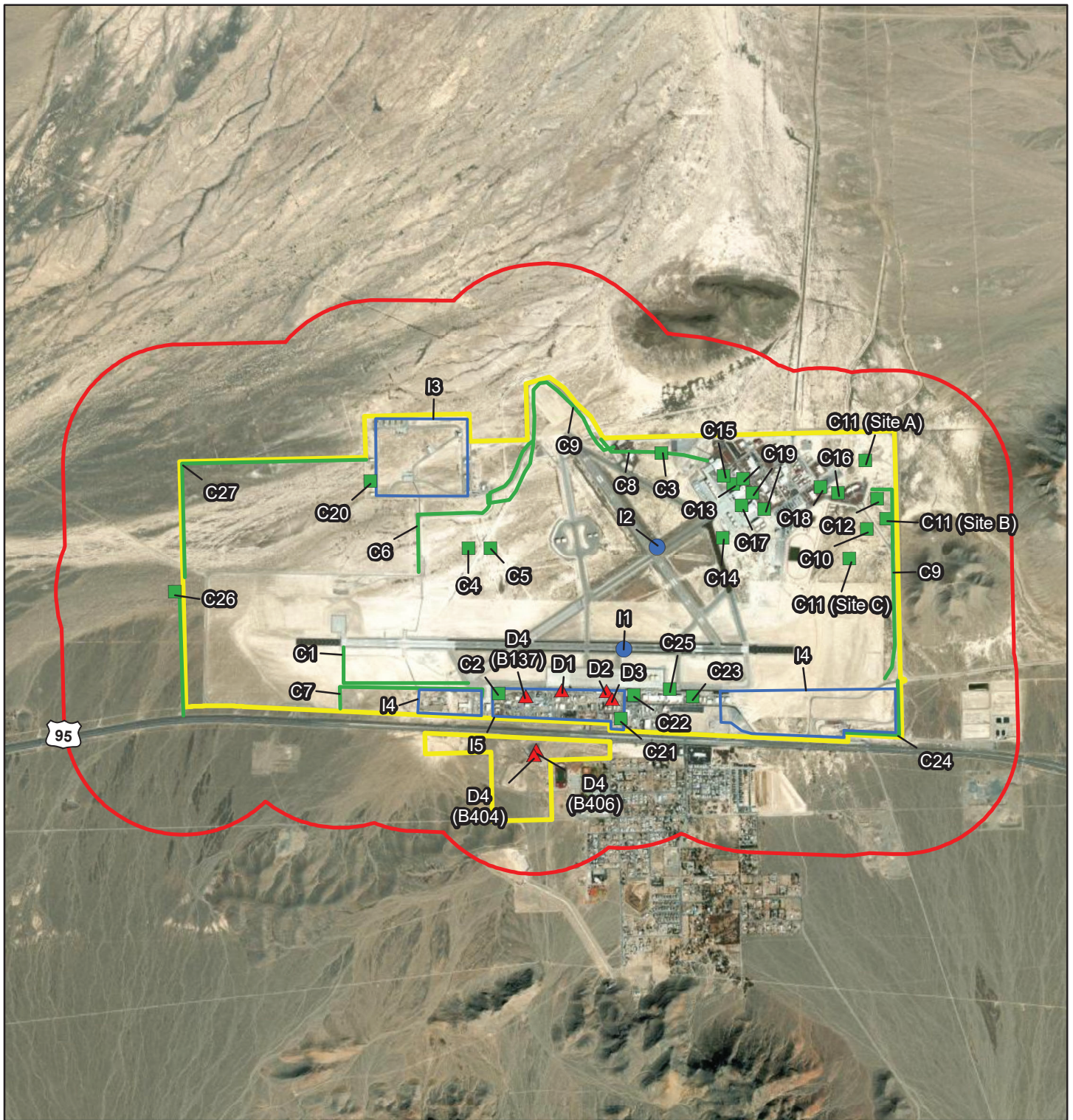


0 0.5 1
Mile

Imagery: ESRI 2021
Coordinate System: WGS 1984 UTM Zone 11N



Attachment 3. Map of Proposed Installation Development Plan
Projects - Area of Potential Effects - Aerial Imagery Basemap



Attachment 3

APE for Proposed IDP Projects at Creech AFB

- Construction Physical APE
- ▲ Demolition Physical APE
- Infrastructure Physical APE
- Linear Construction Physical APE
- Linear Infrastructure Physical APE
- Installation Boundary
- Visual, Auditory, and Atmospheric APE



0 0.5 1
Mile

Imagery: ESRI 2021
Coordinate System: WGS 1984 UTM Zone 11N



Attachment 4. List of Creech AFB Installation Development Plan Projects

Attachment 4 – List of Creech AFB Installation Development Plan Projects

Map ID Number	Project Title	Project Description	Purpose and Need	Estimated Construction Year	Estimated New Facility or Infrastructure Size	Estimated Change in Facility Footprint
AIRFIELD DISTRICT						
Construction Projects						
C1	Taxiway Alpha Addition	This project would construct a taxiway extension and arm/disarm pad that extends the existing Taxiway Alpha to the west threshold of Runway 08/26. This project would include asphalt taxiway; concrete arm/disarm pad; paved shoulders; airfield lighting, markings, and guidance signage; addition of an access roadway leading to the arm/disarm pad; airfield storm drainage; utilities; and all other work as necessary.	Purpose: The purpose of the proposed project is to add additional capacity to the airfield taxiway and to allow aircraft to taxi to the arm/disarm pad. Need: The project is needed because currently, Aircraft must back-taxi on the runway, which has caused delays and runway inefficiencies.	2026	539,175 ft ²	+539,175 ft ²
C2	Weapons Load Trainer Facility	This project would construct a MQ-9 Weapons Load Crew Training Facility utilizing conventional design and construction methods. The facility would be constructed with a reinforced concrete foundation/floor slab, structural-steel frame, metal panel with brick veneer exterior, and standing seam metal roof. Construction associated with this project would include information systems, fire protection and alarm systems, cybersecurity measures, intrusion detection system installation, and energy monitoring and control systems connection. Supporting facilities would include a training bay access apron, parking areas, construction of an access roadway, security lighting, storm drainage, site improvements, signage, and all other necessary features to make a complete and useable facility.	Purpose: The purpose of the proposed project is to prevent disruptions to the Weapons Load Crew Training and to provide secure, dedicated space for the training to occur. Need: The proposed project is needed because the current training area is inadequate for current operational needs and training capabilities are disrupted. Creech AFB needs a dedicated training facility to keep up with manning increases.	2026	42,033 ft ²	+42,033 ft ²

Attachment 4 – List of Creech AFB Installation Development Plan Projects

Map ID Number	Project Title	Project Description	Purpose and Need	Estimated Construction Year	Estimated New Facility or Infrastructure Size	Estimated Change in Facility Footprint
C3	LRS Deployment Center	This project would construct a two-story Deployment Processing Center and include an aircraft parking apron capable of supporting two C-17's or one C-5 airframe.	<p>Purpose: The purpose of the proposed project is to support Creech AFB's mission and training requirements with increased efficiency through functional centralization and the optimization of existing resources.</p> <p>Need: The proposed project is needed due to the outdated and inefficient infrastructure that currently supports the Mission Operations Complex District. The proposed project is also needed to provide centralized infrastructure (near the Community Support District) that would provide needed facilities identified as part of the area development planning process.</p>	2026	43,075 ft ²	+43,075 ft ²
C4	MQ-9 CPIP GDT Antenna Complex	The project would construct a properly sited and configured antenna tower complex for the installation of eight MQ-9 ground data terminal (GDT) systems. The GDT antenna system provides a mission-critical, line-of-site communications link from the ground control station to the remotely piloted aircraft (RPA) for launch and recovery operations. This project provides 50-ft-high fixed towers that would be used to support the GDT system. The Defense Spectrum Organization – Joint Spectrum Center identified a preferred site location for the antennas that would mitigate existing C-band video link mishaps due to existing GDT locations and resulting electro-magnetic interference saturation. The proposed antenna complex is located north of Runway 08/26 and west of the live ordnance loading area. This site ensures that saturation-induced interference is precluded during airfield operations and avoids existing building and fence line obstructions.	<p>Purpose: The purpose of the proposed project is to increase safety and communication for airfield operations by reducing saturation-induced interference between communications systems.</p> <p>Need: The proposed project is needed because currently, C-band video link mishaps occur due to existing GDT locations and electro-magnetic interference saturation. Communication expansion is needed to reduce radio interference.</p>	2025	4,000 ft ²	+4,000 ft ²

Attachment 4 – List of Creech AFB Installation Development Plan Projects

Map ID Number	Project Title	Project Description	Purpose and Need	Estimated Construction Year	Estimated New Facility or Infrastructure Size	Estimated Change in Facility Footprint
C5	Construct GDT Tower Site	This project would construct a GDT tower site.	<p>Purpose: The purpose of the proposed project is to revitalize and expand communication capabilities at Creech AFB.</p> <p>Need: The proposed project is needed because the current towers require reconstruction due to their condition and age. Communication expansion is also needed to reduce radio interference.</p>	2024	2,000 ft ²	+2,000 ft ²
C6	Construct Northwest Frangible Airfield Fence	This project would construct a fence between Northwest Perimeter Road and the flightline.	<p>Purpose: The purpose of the proposed project is to provide security for airfield operations by enclosing the airfield.</p> <p>Need: The proposed project is needed to reduce the security risk to airfield operations by regulating access to the airfield through fencing and controlled entry points per Air Force Policy Directive (AFPD) 13-2, <i>Air Traffic Control, Airfield, Airspace, and Range Management</i>, and defined in Air Force Manual (AFMAN) 13-204, <i>Air Traffic Control</i>.</p>	2025	9,400 lf	+9,400 lf
C7	Construct Frangible Airfield Fence First Street	This project would construct a fence between West Perimeter Road and the flightline.	<p>Purpose: The purpose of the proposed project is to provide security for airfield operations by enclosing the airfield.</p> <p>Need: The proposed project is needed to reduce the security risk to airfield operations by regulating access to the airfield through fencing and controlled entry points per AFPD 13-2 and defined in AFMAN 13-204.</p>	2025	9,100 lf	+9,100 lf
C8	Construct Central Frangible Airfield Fence	This project would construct a fence between North Perimeter Road and the flightline.	<p>Purpose: The purpose of the proposed project is to provide security for airfield operations by enclosing the airfield.</p> <p>Need: The proposed project is needed to reduce the security risk to airfield operations by regulating access to the airfield through fencing and controlled entry points per AFPD 13-2 and defined in AFMAN 13-204.</p>	2025	4,600 lf	+4,600 lf

Attachment 4 – List of Creech AFB Installation Development Plan Projects

Map ID Number	Project Title	Project Description	Purpose and Need	Estimated Construction Year	Estimated New Facility or Infrastructure Size	Estimated Change in Facility Footprint
C9	North Side Electrical Loop	This project would construct a finished electrical loop system of approximately 30,000 linear feet (lf) from the southwest side of the Installation to the north side of the Installation. This would be accomplished by running a new electrical line from the intersection of Box Canyon and Hunters Road to Building 1065 (B1065).	Purpose: The purpose of the proposed project is to increase energy resilience with back feed capabilities. Need: The proposed project is needed to provide power backup and restoration in case of outage caused by feeder damage.	2025	30,000 lf	+30,000 lf

Attachment 4 – List of Creech AFB Installation Development Plan Projects

Map ID Number	Project Title	Project Description	Purpose and Need	Estimated Construction Year	Estimated New Facility or Infrastructure Size	Estimated Change in Facility Footprint
Infrastructure Projects						
I1	Repair Southern Airfield Pavements	This project would repair airfield pavements identified in the 2015 Airfield Pavement Evaluation. Recommendations for repair include the mill and overlay of sections R03C1, R03C2, R04A1, and R04A2.	<p>Purpose: The purpose of the proposed project is to improve the condition of degraded airfield pavement sections.</p> <p>Need: The proposed project is needed to address poor pavement conditions reported by inspection. Poor airfield pavements are a safety risk for Aircrew and equipment. Left unchecked, further damage to the airfield pavements would have the potential to occur. The proposed project is further needed to comply with DAFMAN 32-1084, <i>Facility Requirements Standards – Airfield Pavements</i>.</p>	2024	884,475 ft ²	N/A
I2	Repair Northern Airfield Pavements	This project would repair airfield pavements identified in the 2015 Airfield Pavement Evaluation. Recommendations include the mill and overlay of sections T21A, T25A, and T32A. Full replacement is recommended for sections R09A, R10A, and T20A.	<p>Purpose: The purpose of the proposed project is to improve the condition of degraded airfield pavement sections.</p> <p>Need: The proposed project is needed to address poor pavement conditions reported by inspection. Poor airfield pavements are a safety risk for Aircrew and equipment. Left unchecked, further damage to the airfield pavements would have the potential to occur. The proposed project is further needed to comply with DAFMAN 32-1084, <i>Facility Requirements Standards – Airfield Pavements</i>.</p>	2024	502,500 ft ²	N/A

Attachment 4 – List of Creech AFB Installation Development Plan Projects

Map ID Number	Project Title	Project Description	Purpose and Need	Estimated Construction Year	Estimated New Facility or Infrastructure Size	Estimated Change in Facility Footprint
COMMUNITY SUPPORT DISTRICT						
Construction Projects						
C10	Warrior Fitness Center	This project would construct basketball and racquetball courts, a 1/10th mile elevated indoor running track, unit physical training/group exercise areas, weight rooms, administration, lockers, showers, and restrooms. Supporting facilities include all required utilities, staff and customer parking areas, sidewalks, lighting, signage, and other site improvements. The project would incorporate sustainability and energy measures, stormwater mitigation, and meet antiterrorism force protection standoff requirements.	<p>Purpose: The purpose of the proposed project is to support Creech AFB's mission and training requirements with increased efficiency through functional centralization and the optimization of existing resources.</p> <p>Need: The proposed project is needed due to the outdated and inefficient infrastructure that currently supports the Mission Operations Complex District. The proposed project is also needed to provide centralized infrastructure (near the Community Support District) that would provide needed facilities identified as part of the area development planning process.</p>	2026	44,000 ft ²	+44,000 ft ²

Attachment 4 – List of Creech AFB Installation Development Plan Projects

[illegible]

Attachment 4 – List of Creech AFB Installation Development Plan Projects

Map ID Number	Project Title	Project Description	Purpose and Need	Estimated Construction Year	Estimated New Facility or Infrastructure Size	Estimated Change in Facility Footprint
C12	Mission Support Facility	This project would construct a Mission Support Center, providing a permanent, consolidated facility for the 432d Mission Support Group and Force Support Squadron in support of mission and support services for all personnel on Creech AFB.	<p>Purpose: The purpose of the proposed project is to support Creech AFB's mission and training requirements with increased efficiency through functional centralization and the optimization of existing resources.</p> <p>Need: The proposed project is needed because the infrastructure that currently supports the Mission Operations Complex District is outdated and inefficient. The proposed project is also needed to provide centralized infrastructure (near the Community Support District) that would provide needed facilities identified as part of the area development planning process.</p>	2026	36,966 ft ²	+36,966 ft ²
C13	RPA Structural Repair Facility	This project would construct an RPA Structural Repair Facility and a separate Corrosion Control Utility Storage Building. The proposed facility would provide a modern, functional space capable of supporting required MQ-9 structural and composite repair as well as non-destructive inspection.	<p>Purpose: The purpose of the proposed project is to support Creech AFB's mission and training requirements with increased efficiency through functional centralization and the optimization of existing resources.</p> <p>Need: The proposed project is needed because the infrastructure that currently supports the Mission Operations Complex District is outdated and inefficient. The proposed project is also needed to provide centralized infrastructure (near the Community Support District) that would provide needed facilities identified as part of the area development planning process.</p>	2025	52,124 ft ²	+52,124 ft ²

Attachment 4 – List of Creech AFB Installation Development Plan Projects

Map ID Number	Project Title	Project Description	Purpose and Need	Estimated Construction Year	Estimated New Facility or Infrastructure Size	Estimated Change in Facility Footprint
C14	RPA Maintenance Hangar	This project would construct an RPA Maintenance Hangar adequately configured to support eight MQ-9s and provide administrative and maintenance space for the activation of a new Aircraft Maintenance Unit.	Purpose: The purpose of the proposed project is to provide additional administrative and maintenance space for the activation of a new Aircraft Maintenance Unit. Need: The proposed project is needed because an increase in RPAs requires more space than is currently available. RPAs that are due for maintenance are currently being parked outside while awaiting space.	2027	77,887 ft ²	+77,887 ft ²
C15	Casket & WRM AGE Storage Facility	This project would construct a War Reserve Materiel (WRM) Aerospace Ground Equipment (AGE) Storage Facility with a consolidated and secure, climate-controlled storage space that would enhance the capability of the 432d Maintenance Group to sustain and deploy critical RPA mission equipment. The facility would also provide an AGE storage bay, bench stock/tool room, parts cleaning, and a semi-enclosed wash rack area.	Purpose: The purpose of the proposed project is to support Creech AFB's mission and training requirements with increased efficiency through functional centralization and the optimization of existing resources. Need: The proposed project is needed because the infrastructure that currently supports the Mission Operations Complex District is outdated and inefficient. The proposed project is also needed to provide centralized infrastructure (near the Community Support District) that would provide needed facilities identified as part of the area development planning process.	2026	21,000 ft ²	+21,000 ft ²
C16	Wing Advance Programs Facility	This project would construct a facility to house the 432 Wing Advance Programs. This facility would require additional space to accommodate current staffing.	Purpose: The purpose of the proposed project is to provide dedicated space to accommodate current staffing of the 432d Wing Advance Programs. Need: The proposed project is needed because the Wing Advance Programs team does not have adequate staffing space. The team is currently operating out of a small office and is unable to accommodate all assigned personnel.	2026	2,000 ft ²	+2,000 ft ²

Attachment 4 – List of Creech AFB Installation Development Plan Projects

Map ID Number	Project Title	Project Description	Purpose and Need	Estimated Construction Year	Estimated New Facility or Infrastructure Size	Estimated Change in Facility Footprint
C17	Construct North GDT Towers	The project would repair by replacing current GDT towers on the north airfield apron. This project is currently being reevaluated for removal of the current three towers.	Purpose: The purpose of the proposed project is to revitalize and expand communication capabilities at Creech AFB. Need: The proposed project is needed because the current towers require reconstruction due to their condition and age. Communication expansion is also needed to reduce radio interference.	2024	1,000 ft ²	+1,000 ft ²
C18	Construct CAT/EOC Facility	This project would construct a structure that would be co-located with B1209. This structure would be a single-floor facility and utilize the existing parking lot.	Purpose: The purpose of the proposed project is to provide dedicated space for Crisis Action Team/Emergency Operations Center (CAT/EOC) teams and alleviate mission disruptions and Creech AFB. Need: The proposed project is needed because CAT/EOC teams do not have a designated location at Creech AFB. The current location is dual-purposed and interrupts other missions when activated.	2025	5,000 ft ²	+5,000 ft ²
C19	Construct North Flightline ECP Barriers	This project would install fencing and an automatic gate system for flightline entry control point (ECP) access.	Purpose: The purpose of the proposed project is to establish a secure ECP for the airfield. Need: The proposed project is needed because no entry point currently exists with direct access to airfield operations. All vehicles destined for this location currently must enter through the main access control points. A designated access point is needed to improve safety and airfield operations by providing direct access for emergency and response vehicles.	2023	400 lf	+400 lf

Attachment 4 – List of Creech AFB Installation Development Plan Projects

Map ID Number	Project Title	Project Description	Purpose and Need	Estimated Construction Year	Estimated New Facility or Infrastructure Size	Estimated Change in Facility Footprint
MUNITIONS STORAGE AREA DISTRICT						
Construction Projects						
C20	Munitions Storage Igloo	This project would construct an aboveground earth-covered munitions storage igloo with a reinforced concrete foundation/floor slab and a pre-engineered reinforced concrete panel exterior with earth covering. The project would include blast-resistant steel doors, interior and exterior lighting, grounding, surge protection, intrusion detection system, and an exterior concrete access apron.	Purpose: The purpose of the proposed project is to provide additional space for munitions storage Need: The proposed project is needed to support operations growth. The current capabilities are unable to support anticipated expansions at Creech AFB.	2026	2,046 ft ²	+2,046 ft ²
Infrastructure Projects						
I3	Repair Water Lines Zone III	This project would repair water lines in Zone 3 as identified in the Creech AFB Installation Development Plan (IDP).	Purpose: The purpose of the proposed project is to ensure consistent delivery of water on Creech AFB. Need: The proposed project is needed because Installation water lines are considered crucial infrastructure at Creech AFB. Routine inspection and repair of the water lines are required to ensure proper maintenance.	2027	7,820 lf	N/A

Attachment 4 – List of Creech AFB Installation Development Plan Projects

Map ID Number	Project Title	Project Description	Purpose and Need	Estimated Construction Year	Estimated New Facility or Infrastructure Size	Estimated Change in Facility Footprint
SOUTHSIDE OPERATIONS DISTRICT						
Construction Projects						
C21	Network Control Center	This project would consolidate four communication flight facilities by constructing a new facility. The structure would be sized to encompass the whole of the communications flight and a communication node for Creech AFB.	Purpose: The purpose of the proposed project is to upgrade the communication capabilities and consolidate flight facilities at Creech AFB to improve efficiency. Need: The proposed project is needed because equipment upgrades and replacements are necessary to maintain operation and security missions at Creech AFB.	2028	2,500 ft ²	+2,500 ft ²
C22	Airfield Operations Center	This project would construct an approximately 15,000-ft ² facility, which would consolidate deployed operations, transit alert, and air traffic control. This construction is currently planned for fiscal year 2025 to relocate B93 to the current location of B726. A parking lot to the west of B726 is being discussed.	Purpose: The purpose of the proposed project is to support efficient airfield operations and improve security and communications. Need: The proposed project is needed because current airfield operations units are separated into individual facilities, disrupting operations. By removing an aging control tower, Creech AFB would consolidate airfield operations into one streamlined facility.	2026	15,000 ft ²	+15,000 ft ²
C23	Construct south GDT Towers	This project would construct a replacement for the current GDT towers on the south airfield.	Purpose: The purpose of the proposed project is to revitalize and expand communication capabilities at Creech AFB. Need: The proposed project is needed because the current towers require reconstruction due to their condition and age. Communication expansion is also needed to reduce radio interference.	2024	1,000 ft ²	+1,000 ft ²
C24	Construct Perimeter Road Fence	This project would provide re-enforcement of the southeast fence.	Purpose: The purpose of the proposed project is to provide security for airfield operations by enclosing the perimeter road. Need: The proposed project is needed because the southeast fence needs re-enforcement to provide increased airfield security for airfield operations.	2025	9,100 lf	+9,100 lf

Attachment 4 – List of Creech AFB Installation Development Plan Projects

Map ID Number	Project Title	Project Description	Purpose and Need	Estimated Construction Year	Estimated New Facility or Infrastructure Size	Estimated Change in Facility Footprint
C25	Construct AGE Storage Facility	This project would construct a warehouse and administrative space on the north apron beside B1131.	Purpose: The purpose of the proposed project is to provide adequate storage for aircraft ground equipment. Need: The proposed project is needed to protect equipment stored on the north side of Creech AFB from outside elements.	2025	13,993 ft ²	+13,993 ft ²

Attachment 4 – List of Creech AFB Installation Development Plan Projects

Map ID Number	Project Title	Project Description	Purpose and Need	Estimated Construction Year	Estimated New Facility or Infrastructure Size	Estimated Change in Facility Footprint
I4	Repair Water Lines Zone II	This project would repair water lines in Zone 2 as identified in the Creech AFB IDP.	Purpose: The purpose of the proposed project is to ensure consistent delivery of water on Creech AFB. Need: The proposed project is needed because Installation water lines are considered crucial infrastructure at Creech AFB. Routine inspection and repair of the water lines are required to ensure proper maintenance.	2027	12,275 lf	N/A
I5	Repair Water Lines Zone I	This project would repair water lines in Zone 1 as identified in the Creech AFB IDP.	Purpose: The purpose of the proposed project is to repair crucial infrastructure on Creech AFB. Need: The proposed project is needed because Installation water lines are considered crucial infrastructure at Creech AFB. Routine inspection and repair of the water lines are required to ensure proper maintenance.	2027	6,115 lf	N/A
PROJECTS LOCATED OUTSIDE OF THE LAND USE DISTRICTS						
Construction Projects						
C26	Commercial Vehicle Gate	This project would construct a new 6,000-ft ² commercial vehicle inspection facility with gatehouse inspection bays. The area for construction would need to be graded and formed to provide a stable foundation. All utilities would be hydro excavated to a depth of 3–6 feet (ft). The primary electrical circuit would run approximately 500 ft, communications lines would run approximately 2,700 ft, and water lines would run approximately 3,000 ft to trench to the main feed. Sewage would be trenched for a septic tank and septic field. New asphalt road construction would be needed approximately 6,100 ft from US Highway 95 to a newly constructed guard facility.	Purpose: The purpose of the proposed project is to provide security and safety protection to Installation personnel while alleviating traffic congestion concerns along US Highway 95. Need: The proposed project is needed because the current access location results in closures to both personnel entry and highway travel by the Installation. Disruptions are a result of current entry-point conditions caused by commercial vehicle inspections. The project is needed to resolve both concerns.	2026	4,660 ft ²	+4,660 ft ²
C27	Northwest Perimeter Fence	This project would construct a fence to contain the remaining land owned by Creech AFB in the northwest parcel.	Purpose: The purpose of the proposed project is to provide security of Creech AFB-owned land by enclosing the parcel. Need: The proposed project is needed because the Creech AFB-owned parcel is not currently enclosed, posing a security risk.	2025	11,000 lf	+11,000 lf

Attachment 5, NVCRIS Report

Attachment 5

NVCRIS Export Results from within Area of Potential Effects for Proposed Creech Air Force Base Installation Development Plan Projects

Archaeological Inventory

SHPO Report Number	Lead Agency	Lead Agency Report Number	Project Proponent	Other Report Number	Report Date	Title	Author	Total Acreage	Class III Acreage	Form Source
11293	USAF Nellis Air Force Base	3-Jul	USAF Nellis Air Force Base		2007-09-26	An Inventory of 111 Acres for a Bypass Road and Staging Area at Creech Air Force Base, Clark County, Nevada NAFB Report 07-03	Myhrer, Keith	111	111	
16243	DOE	SR062388-1		Desert Research Institute Cultural Resources Reco*	1988-11-01	A Class III Cultural Resources Reconnaissance of Radiological Monitoring Stations for the Yucca Mountain Project, Clark and Nye Counties, Nevada	Reno, Ronald L., Katherine Cheryl Dojaquez	0	0	Report
CT68					1900-01-01			0	0	
12981		5-1010			1982-11-01	An Archaeological Survey between Beatty, Nye County, and Indian Springs, Clark County, Nevada		0	0	
16231	NPS	5-1690	Nellis Air Force Base		1988-08-01	Archaeological Survey and Evaluation of Six Parcels on Nellis Air Force Base, Lincoln, Clark, and Nye Counties, Nevada	Durand, Stephen R., Reno, Ronald and Alvin McLane	0	0	
13027	BLM	5-760			1981-02-03	Seismic Exploration Lines Near The Spring Mountains Clark County, Nevada.	Windham, Michael D.	471.6 Acres	0	Report
12377	BLM	5-1768 (P)		1/13/2001	1987-12-01	A Cultural Resource Inventory of the National Guard Licensed Area on Range 65 Near Indian Springs, Clark County, Nevada	Blair, Lynda M. Blair and Peter J. Calos	0	0	

Attachment 5

NVCRIS Export Results from within Area of Potential Effects for Proposed Creech Air Force Base Installation Development Plan Projects

SHPO Report Number	Lead Agency	Lead Agency Report Number	Project Proponent	Other Report Number	Report Date	Title	Author	Total Acreage	Class III Acreage	Form Source
11402	NAFB			SR050496-1	1997-12-01	A Class III Cultural Resources Reconnaissance for a 167 Km Fiber Optic Line Between the Air Force Auxiliary Field at Indian Springs and the Cedar Pass Gate on the Tonopah Test Range, Nellis Air Force Range, Nevada	Pippin, Lonnie C. and Susan Edwards	0	0	
May-62					1900-01-01			0	0	
5-1717					1900-01-01			0	0	
5-1734					1900-01-01			0	0	
13045	BLM	May-53	Nellis AFB	NADB 1672529	1991-10-10	Indian Springs Fiber Optic Project	Sheets, Robert S.	121	121	Report
3997	EPA		PBS&J Environmental Services		2009-08-01	Class III Cultural Resource Inventory of Proposed Sewage Disposal Pond and Associated Facilities on Ck Cnty Water Reclamation District Property and Public Rights of Way Indian Springs, Ck Cnty NV	Leavitt, Robert M. and Jeffrey L. Baker	87	87.4	
May-66					1900-01-01			0	0	
5-1763	Nellis AFB				1989-01-01	Material Pits Near Indian Springs	Myhrer, Keith	0	0	
SR071888-1			Nellis AFB		1989-01-01	Evaluation of Site 26CK3906 on the Air Force Auxiliary Field, Indian Springs, Nevada	Livingston, Stephanie D. and Lonnie C. Pippen	0	0	
SR071888-1					1900-01-01			0	0	
11324				MISC9	1991-12-01	A Cultural Resource Inventory of the Indian Springs Landfill Expansion Project Area, Indian Springs Air Force Auxiliary Field, Clark County, Nevada	Bergin, Kathleen Ann	0	0	

Attachment 5

NVCRIS Export Results from within Area of Potential Effects for Proposed Creech Air Force Base Installation Development Plan Projects

SHPO Report Number	Lead Agency	Lead Agency Report Number	Project Proponent	Other Report Number	Report Date	Title	Author	Total Acreage	Class III Acreage	Form Source
5-221					1900-01-01			0	0	
11392				MISC77	1996-03-27	Archaeological Survey of the Indian Springs Air Force Auxiliary Field, Nellis Air Force Base, Clark County, Nevada	York, Andrew L., Robin E. McMullen, Paula deLespinasse, and W. Geoffrey Spaulding	0	0	
5-772	BLM				1981-01-01	12-5 KV Aerial Powerline R/W N-30598	Liebhauser, William J.	0	0	
4686	BLM LV Field Office	May-35	Environmental Compliance		2010-03-24	Archaeological Survey for the Proposed Mercury to Indian Springs Fiber Optic Line, Clark and Nye Counties, Nevada	Eskenazi, Suzanne and Christopher Harper	279	279	Report
18756	FHWA	SPF-095-2(052)	FHWA	BLM 5-2696, NDOT CL-11-019R	2013-07-01	A Class III Cultural Resource Investigation of Material Pit NY 07-04 and the NDOT Right-of-Way on US-95 from Milepost NY 8.14 to Milepost CL 120.44 in Nye and Clark Counties, Nevada	Riddle, Jennifer E.	1097	1097	Contractor GIS
657	USAF NAFB		USAF		2000-09-01	A Stratified Archaeological Sample of Low Elevation Areas on Nellis Air Force Range, Nevada	Kolvet, Renee Corona et al	61009	61009	Report
29858	USAF	NAFB_2021_003		20-1133	2022-02-02	Class III Archaeological Inventory for Fence-To-Fence Environmental Services at Creech Air Force Base, Clark County, Nevada	Younie, A.; Perri, A.; Cook, M.	175	175	Contractor GIS

Attachment 5

NVCRIS Export Results from within Area of Potential Effects for Proposed Creech Air Force Base Installation Development Plan Projects

Archaeological Sites

Trinomial	Age	Resource Type	Description	Field NRHP	Lead Agency NRHP	SHPO NRHP	Status	Revisit?
CK4031	Unknown	Isolate						
CK2109	Historic	Linear	Historic trail	Ineligible	Ineligible	Ineligible	Destroyed	Y
CK5272	Unknown							
CK5273	Unknown							
CK5270	Unknown							
CK5269	Unknown							
CK5275	Unknown							
CK5265	Unknown							
CK5271	Unknown							
CK5266	Unknown							
CK5276	Unknown							
CK3907	Unknown							
CK3908	Prehistoric	Site	Lithic scatter				All 4 artifacted collected.	No
CK3909	Unknown							
CK3911	Unknown							
CK5268	Unknown							
CK5274	Unknown							
CK5395	Unknown							
CK3906	Unknown							
CK3872	Unknown						Duplicate-needs help	
CK4030	Unknown	Isolate						
CK4029	Unknown	Isolate						
CK4700	Prehistoric	Site	dispersed prehistoric hearth composed of ~70-100 fractured rocks	Unevaluated		Unevaluated		
CK1649	Historic	Linear	Las Vegas and Tonopah Railroad berm	Eligible (D)	Eligible (D)	Eligible (D)		Yes
CK5267	Unknown							
CK4100	Unknown							
CK3871	Unknown							
CK3910	Unknown							
CK11244	Historic	Site	Can Scatter	Ineligible	Ineligible	Ineligible		No

Attachment 5

NVCRIS Export Results from within Area of Potential Effects for Proposed Creech Air Force Base Installation Development Plan Projects

In Process Inventory

SHPO Report Number	Undertaking Number	Lead Agency	Project Proponent	Other Report Number	Report Date	Title	Author	Author Organization	Site Count	Total Acreage	Class III Acreage	Fieldwork End	Form Source
23425	2018-5168	Nellis AFB	Nellis AFB, Air Force Civil Engineering Center	SWCA 17-664	2018-01-01	Historic Overview of the Creech Air Force Base Runway System, Indian Springs, Clark County	Oliver, Anne, et al.	SWCA	4	605.98	605.98	2017-11-06	Report

In Process Sites

SHPO Site ID	Site ID 1	Other ID	Age	Resource Type	Description	Lead Agency	Lead Report Number	Request Company	Request Date	Form Source	Revisit?	Date Last Recorded
S2794			Historic	Structure	U.S. 95		CL20-009P-1	NDOT		Agency GIS	No	2/25/2021
CK11228	53-10079	21-219-01	Prehistoric	Site	Lithic scatter	BLM SNDO	May-94	Broadbent	12/15/2021	Contractor GIS	No	2021
CK11230	53-10081	21-219-03	Historic	Site	Road corridor	BLM SNDO	May-94	Broadbent	12/15/2021	Contractor GIS	No	2021
CK11662	53-10686	TM-S-103	Historic	Linear	Two-track road	BLM	5-2924f	SWCA	7/16/2024	Contractor GIS		
CK11663	53-10687	TM-S-104	Historic	Linear	Two-track road	BLM	5-2924f	SWCA	7/16/2024	Contractor GIS		

Attachment 5

NVCRIS Export Results from within Area of Potential Effects for Proposed Creech Air Force Base Installation Development Plan Projects

Rural Architectural Inventory

SHPO Report Number	Undertaking Number	Project Proponent	Report Date	Title	Author	Resource Count	SHPO Summary	SHPO Date	Survey Acreage	Survey Year	Comments	Form Source
20297	2015-3740	Nellis AFB	2/1/2015	Documentation Regarding Nine Demolished Buildings at Nellis and Creech Air Force Bases, Clark County, Nevada	Edwards, Susan	9	Not Reviewed for Section 106	2015-05-28	9	2013	SHPO precluded from commenting	Report
20179	2010-0424	USAF	2/1/2015	Architectural Survey and Historic Evaluation of Ten Resources at Nellis and Creech Air Force Bases, Clark County	Edwards, Susan	10	Default Concurrence	2015-05-03	7.5	2015		Contractor GIS
24132	2018-5168	AFCEC	11/1/2018	Historic Building Inventory of Nellis Air Force Base, Creech Air Force Base, and Nevada Test and Training Range, Las Vegas, Nevada	Edwards, Erin	315	DOE Only	2020-06-19	12000	2017		Report

Rural Architectural Resources

SHPO Resource Number	Other ID	Historic Name	Current Name	Property Use	Ownership	Survey Year	Resource Type	Date Built	Integrity	Condition	SHPO NRHP
B12995	C65	T-65	Building 65 Recreation Center	Defense	Private	6/26/2013	Building	1941-1942	Altered	Demolished	Unevaluated
B13732	C80	Storage Shed, Building 80	Storage Shed, Building 80	Defense		1/14/2015	Building	1984	Original	Excellent	Default
B13733	C81	Aircraft Maintenance Office, Building 81	Red Horse Civil Engineering Squadron Project Office, Building 81	Defense		1/14/2015	Building	1983	Altered/Moved	Excellent	Default
B13734	82	Squadron Operations	Transient Alert	Defense	Federal	9/20/2017	Building	1982	Intact	Fair	Ineligible
B13735	C95	Utility Vault, Building 95	Utility Vault, Building 95	Defense		1/14/2015	Building	1952	Original	Excellent	Default
B15064	C260	Dispensary	Medical Aid Station	Defense	Private	5/17/2013	Building	1943	Altered	Demolished	Unevaluated

Attachment 5

NVCRIS Export Results from within Area of Potential Effects for Proposed Creech Air Force Base Installation Development Plan Projects

SHPO Resource Number	Other ID	Historic Name	Current Name	Property Use	Ownership	Survey Year	Resource Type	Date Built	Integrity	Condition	SHPO NRHP
B15065	C261	Auto Maintenance Shop	Building 261--Combat Arms Training Maintenance Building	Defense	Private	5/17/2013	Building	1943	Altered	Demolished	Unevaluated
B16170	3	Traffic Check House	Traffic Check House	Defense	Federal	9/20/2017	Building	1987	Intact	Good	Ineligible
B16171	4	Visiting Officer's Quarters	Visiting Officer's Quarters	Domestic	Federal	9/20/2017	Building	1986	Intact	Good	Ineligible
B16172	5	Visiting Almen's Quarters	Visiting Almen's Quarters	Domestic	Federal	9/20/2017	Building	1986	Intact	Good	Ineligible
B16173	24	Visiting Almen's Quarters	Visiting Almen's Quarters	Domestic	Federal	9/20/2017	Building	1969	Intact	Fair	Ineligible
B16174	39	Base Theater	Diamondback Briefing Facility	Recreation	Federal	9/20/2017	Building	1953	Altered	Good	Ineligible
B16175	50	Warehouse	DFAC Supply Warehouse	Defense	Federal	9/20/2017	Building	1990	Intact	Good	Ineligible
B16176	64	Communications Facility	Communications Facility	Defense	Federal	9/20/2017	Building	1986	Altered	Good	Ineligible
B16177	66	Organizational Classrom	Civil Engineers Utilities Shop	Defense	Federal	9/20/2017	Building	1984	Intact	Fair	Ineligible
B16178	71	Dining Hall, Almen	Exchange Caf Snack Bar	Commerce	Federal	9/20/2017	Building	1977	Altered	Good	Ineligible
B16179	86	Administration Office, Fire Station	Administration Office, Non Air Force	Government	Federal	9/20/2017	Building	1989	Intact	Fair	Ineligible
B16180	91	Base Operations Facility	Deployed Operations	Defense	Federal	9/20/2017	Building	1952	Altered	Fair	Ineligible
B16181	92	Office	Security Police Operations	Defense	Federal	9/20/2017	Building	1952	Altered	Good	Ineligible
B16182	93	Control Tower	Control Tower	Defense	Federal	9/20/2017	Building	1987	Intact	Good	Ineligible
B16183	96	Cold Storage Building	Electrical Shop	Defense	Federal	9/20/2017	Building	1952	Altered	Good	Ineligible
B16184	115	Vehicle Maintenance Shop	Vehicle Maintenance Shop	Defense	Federal	9/20/2017	Building	1991	Intact	Good	Ineligible
B16185	127	Temporary Lodging Facility	Laundry	Domestic	Federal	9/20/2017	Building	1984	Intact	Good	Ineligible
B16186	140	Warehouse	Range Supply & Equipment Storage/Combat Arms Storage	Defense	Federal	9/20/2017	Building	1953	Intact	Fair	Ineligible
B16187	225	Vehicle Maintenance Shop	Vehicle Maintenance and Transportation	Defense	Federal	9/21/2017	Building	1976	Altered	Good	Ineligible
B16188	227	Vehicle Maintenance Shop	Vehicle Maintenance Shop	Defense	Federal	9/21/2017	Building	1983	Intact	Good	Ineligible
B16189	239	Base Storage Shed	Base Storage Shed	Defense	Federal	9/21/2017	Building	1956	Intact	Good	Ineligible

Attachment 5

NVCRIS Export Results from within Area of Potential Effects for Proposed Creech Air Force Base Installation Development Plan Projects

SHPO Resource Number	Other ID	Historic Name	Current Name	Property Use	Ownership	Survey Year	Resource Type	Date Built	Integrity	Condition	SHPO NRHP
B16190	241	Base Storage Shed	Base Storage CV Facility	Defense	Federal	9/21/2017	Building	1957	Intact	Poor	Ineligible
B16191	242	Base Storage Shed	Base Storage Shed	Defense	Federal	9/21/2017	Building	1984	Intact	Good	Ineligible
B16192	243	Base Storage Shed	Civil Engineers Lock Shop/Paint Storage	Defense	Federal	9/21/2017	Building	1982	Intact	Good	Ineligible
B16193	400	Community Support Building-Laundromat	Base Engineer Maintenance Shop	Defense	Federal	9/20/2017	Building	1986	Intact	Good	Ineligible
B16194	402	Base Chapel	Base Chapel, Echoes of Faith Community Church	Religion	Federal	9/20/2017	Building	1986	Intact	Good	Ineligible
B16195	404	Community Center	Squad Engagement Training System/99th Ground Combat Training Squadron	Defense	Federal	9/20/2017	Building	1986	Intact	Poor	Ineligible
B16196	406	Child Care Center	Group Headquarters	Defense	Federal	9/20/2017	Building	1986	Intact	Fair	Ineligible
B16197	3910	Storage	Magasin Storage	Defense	Federal	9/21/2017	Building	1990	Intact	Good	Ineligible
B16198	3926	Munitions Maintenance Administration	Munitions Maintenance Administration	Defense	Federal	9/21/2017	Building	1990	Intact	Good	Ineligible
B16199	3928	Security Entry Control Building	Security Entry Control Building	Defense	Federal	9/21/2017	Building	1990	Intact	Good	Ineligible
S1829	58118	Runway 08/26	Runway 08/26	Defense	Federal	11/6/2017	Structure	1943	Altered	Excellent	Eligible (A)
S1830	53112	Runway 13/31	Runway 13/31	Defense	Federal	11/6/2017	Structure	1943	Altered	Excellent	Eligible (A)
S1831	112	Taxiway	Taxiway B	Defense	Federal	11/6/2017	Structure	1943	Altered	Good	Eligible (A)
S1832	627	Beacon	Beacon	Defense	Federal	11/6/2017	Structure	1952	Intact	Excellent	Eligible (A, C)
S2794		SR 5; US 95	US 95	Transportation	Federal	9/16/2021	Structure	1939-1940	Altered	Good	Ineligible

Attachment 5

NVCRIS Export Results from within Area of Potential Effects for Proposed Creech Air Force Base Installation Development Plan Projects

Urban Architectural Inventory

SHPO Report Number	Undertaking Number	Lead Agency	Project Proponent	City	Report Date	Title	Author	Survey Type	Resource Count	SHPO Summary	SHPO Date	Survey Acreage	Survey Year
175		USAF	Nellis AFB	Las Vegas	Oct-06	Nellis Air Force Base, Historic Evaluation of 9 Buildings	Geo-Marine, Inc.	Intensive	9	No Adverse Effect	2006-12-01	3.16	2006
20182	2015-3515	USACE	USACE	Creech AFB	12/1/2014	Cultural Resources Inventory of 17 Acres for the Creech Air Force Base Land Acquisition Project, Clark County	Higgings, Courtney, Daron Duke, and Steven J. Melvin	Intensive	2	No properties affected	2015-05-22	17	2014

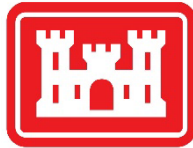
Urban Architectural Resources

SHPO Resource Number	Historic Name	Current Name	Property Use	City	County	Survey Date	Resource Type	Architectural Style	Date Built	Integrity	Condition	SHPO NRHP	SHPO Date
B8623	Squadron Headquarters	Administration Building	Gov	Creech Air Force Base	Clark	2006	Building	Vernacular	1952	Altered		Ineligible	
B13527	Stop-N-Go Market	Unoccupied	Commerce	Indian Springs	Clark		Building	Commercial	1963	Altered	Fair	Ineligible	2015-03-18
B13528	Auntie Moe's Trading Post	Auntie Moe's Trading Post	Commerce	Indian Springs	Clark		Building	Commercial	1964	Intact	Fair	Ineligible	2015-03-18

Attachment 6. Report: Additional Documentation and Evaluation of
Potential Historic Districts at Creech Air Force Base, Clark County,
Nevada

ADDITIONAL DOCUMENTATION AND EVALUATION OF POTENTIAL HISTORIC DISTRICTS AT CREECH AIR FORCE BASE, CLARK COUNTY, NEVADA

Prepared for:



United States Army Corps of Engineers – Los Angeles District
915 Wilshire Boulevard, Suite 930
Los Angeles, CA 90017-3401

Prepared by:



Environmental Assessment Services, LLC
350 Hills Street, Suite 112
Richland, WA 99354-5511

Solicitation Number
W912PL21D0023

Nevada SHPO Project Numbers
UT #2018-5168; 24132
UT #2024-8334; 35630

September 2025

This page intentionally left blank

ABSTRACT

Report Title: Additional Documentation and Evaluation of Potential Historic Districts at Creech Air Force Base, Clark County, Nevada

Project Name: Environmental Assessment for Proposed Installation Development Plan Projects at Creech Air Force Base, Clark County, Nevada

Project Location: Creech Air Force Base, Clark County, Nevada

Project Sponsors: United States Department of the Air Force and United States Army Corps of Engineers, Los Angeles District

SHPO Project Number: UT #2024-8334; 35630

Solicitation Number: W912PL21D0023

Lead Agency: United States Department of the Air Force

Other Involved Agencies: United States Army Corps of Engineers

Other Associated Projects: Historical Building Inventory of Nellis Air Force Base, Creech Air Force Base, and Nevada Test and Training Range, Las Vegas, Nevada - UT# 2018-5168; 24132

Applicable Regulations: National Historic Preservation Act (NHPA) Section 106 (54 USC § 306108; 36 CFR Part 800); NHPA Section 110 (54 USC § 306102); National Environmental Policy Act (42 USC § 4321 et seq.)

Report Summary: This report provides additional documentation and evaluation of potential historic districts at Creech Air Force Base (AFB), Clark County, Nevada. It was prepared at the request of the Nevada State Historic Preservation Office (SHPO) as part of ongoing Section 106 and Section 110 consultation with the United States Department of the Air Force for projects at Creech AFB (SHPO UT #2018-5168; 24132 and UT #2024-8334; 35630). No new field survey was conducted. The analysis is based on archival research, including the review of Creech AFB Real property spatial data and Nevada Cultural Resource Inventory System records. Environmental Assessment Services, LLC recommends that there are no historic districts present at Creech AFB. The assessment and evaluation did not find any combination of resources that meet the significance and integrity required for National Register of Historic Places eligibility. Consequently, there are no buildings at Creech AFB that are considered contributing resources to a historic district. These findings are provided to support the ongoing Environmental Assessment and related Section 106/110 review.

This page intentionally left blank

TABLE OF CONTENTS

ABSTRACT	i
1 INTRODUCTION.....	1
1.1 PURPOSE OF THE REPORT	1
1.2 AGENCY CONSULTATION SUMMARY.....	1
1.3 PROJECT DESCRIPTION	2
1.4 PROJECT LOCATION AND ENVIRONMENT	2
1.4.1 <i>Built Environment</i>	2
1.4.2 <i>Natural Environment</i>	2
1.5 AREA OF POTENTIAL EFFECTS	3
1.6 REPORT ORGANIZATION	3
2 HISTORIC CONTEXT	5
3 RESEARCH DESIGN	9
3.1 RECENT CONSULTATION	9
3.2 HISTORIC DISTRICTS AND THE NATIONAL REGISTER OF HISTORIC PLACES	9
3.3 ARCHIVAL RESEARCH	10
3.4 GEOGRAPHIC INFORMATION SYSTEM ANALYSIS	10
4 HISTORIC DISTRICT ASSESSMENT.....	11
4.1 ARCHIVAL REVIEW.....	11
4.2 HISTORIC DISTRICT ASSESSMENT	13
4.2.1 <i>Overview</i>	13
4.2.2 <i>Southside Operations Planning District</i>	13
4.2.3 <i>T-Shirt Planning District</i>	14
4.2.4 <i>Munitions Storage Area Planning District</i>	20
4.3 SUMMARY OF FINDINGS	20
5 CONCLUSIONS.....	25
6 REFERENCES.....	27

Appendices

APPENDIX A: Agency Correspondence

APPENDIX B: List Of Proposed Creech Air Force Base Installation Development Plan Projects

APPENDIX C: Buildings With Unresolved Consultation At Creech Air Force Base

List of Figures

Figure 1	Area of Potential Effects depicted on USGS 7.5-minute topographic quadrangle.....	4
Figure 2	Overview of Buildings on Creech Air Force Base	15
Figure 3	Cold War-Era, Post-Cold War-Era, and Demolished Buildings within the Southside Operations and T-Shirt Planning Districts	16
Figure 4	Building Construction by Decade within the Southside Operations and T-Shirt Planning Districts	17
Figure 5	Integrity of Cold War-Era Buildings within the Southside Operations and T-Shirt Planning Districts	18
Figure 6	Cold War-Era Building Use Types within the Southside Operations and T-Shirt Planning Districts	19
Figure 7	Cold War-Era, Post-Cold War-Era, and Demolished Buildings within the Munitions Storage Area Planning District	21
Figure 8	Building Construction by Decade within the Munitions Storage Area Planning District.....	22
Figure 9	Integrity of Cold War-Era Buildings within the Munitions Storage Area Planning District.....	23
Figure 10	Cold War-Era Building Use Types within the Munitions Storage Area Planning District	24

List of Tables

Table 1	Creech Air Force Base Buildings with Unresolved National Register of Historic Places Evaluations	11
---------	--	----

ACRONYMS AND ABBREVIATIONS

AFB	Air Force Base
ARA	Architectural Resource Assessment
B	Building
CFR	Code of Federal Regulations
DAF	Department of the Air Force
EA	Environmental Assessment
EAS	Environmental Assessment Services, LLC
GIS	Geographic Information System
GSRC	Gulf South Research Corporation
IDP	Installation Development Plan
LV&T	Las Vegas to Tonopah Railroad
MSA	Munitions Storage Area
NEPA	National Environmental Policy Act
NETR	Nationwide Environmental Title Research, LLC
NHPA	National Historic Preservation Act
NPS	National Park Service
NRHP	National Register of Historic Places
NTTR	Nevada Test and Training Range
NVCRIS	Nevada Cultural Resource Inventory System
PD	Planning District
RCG&A	R. Christopher Goodwin & Associates, Inc.
SHPO	State Historic Preservation Office
US	United States
USC	United States Code
USGLO	United States Government Land Office

This page intentionally left blank

1 INTRODUCTION

1.1 PURPOSE OF THE REPORT

The United States (US) Department of the Air Force (DAF) is developing an Environmental Assessment (EA) for 36 short-term projects at Creech Air Force Base (AFB), Clark County, Nevada, as proposed in Creech AFB's Installation Development Plan (IDP) (DAF 2015). This report was prepared by Environmental Assessment Services, LLC (EAS) on behalf of the DAF to address outstanding consultation concerns specified by the Nevada State Historic Preservation Office (SHPO) through its recent correspondence with Creech AFB in March 2025 and August 2024 (UT #2024-8334; 35630), and previously with Nellis AFB in June 2020 (UT #2018-5168; 24132), regarding the identification and evaluation of historic properties at Creech AFB.

Thirty-four buildings at Creech AFB have been the subject of prior SHPO correspondence due to incomplete evaluations of eligibility for listing on the National Register of Historic Places (NRHP). Of these buildings, 31 were previously determined NRHP-ineligible as individual resources but were not evaluated as potential contributing resources to a historic district. One building (B64) was previously determined ineligible individually and as a contributing resource, with SHPO concurrence. The remaining 2 of the 34 buildings (B55 and B137) are proposed for demolition as part of the IDP, and the SHPO has requested additional information on these resources.

In accordance with the National Historic Preservation Act (NHPA) Section 106 (54 USC § 306108; 36 CFR Part 800); NHPA Section 110 (54 USC § 306102); and the National Environmental Policy Act (NEPA; 42 USC § 4321 et seq.), this assessment evaluates whether unidentified historic districts are present at Creech AFB and whether any buildings are contributing resources to a NRHP-eligible historic district.

1.2 AGENCY CONSULTATION SUMMARY

Operations at Creech AFB were managed by Nellis AFB in 2018 when Gulf South Research Corporation (GSRC) and R. Christopher Goodwin & Associates, Inc. (RCG&A) prepared a NHPA Section 110 survey report on behalf of the DAF including a combined historic building inventory of Nellis AFB, Creech AFB, and the Nevada Test and Training Range (NTTR) (GSRC and RCG&A 2018), which were all managed by Nellis AFB at the time of the survey. GSRC and RCG&A (2018) recommended that all 31 of the buildings surveyed at Creech AFB were individually ineligible for the NRHP and that no historic districts were present at Creech AFB.

In July 2019, Creech AFB officially separated from Nellis AFB and became an independent installation. Less than one year later in late spring 2020, Nellis AFB submitted the 2018 inventory report to the SHPO with its determinations, which were aligned with the contractor's recommendations. In a letter to Nellis AFB dated June 19, 2020 (Nevada SHPO 2020) (UT #2018-5168; 24132), the SHPO concurred with the DAF's determinations on the NRHP eligibility of individual resources; however, the SHPO also requested that Nellis AFB provide limited additional information in a "short report" format to justify the DAF's determinations on the absence of historic districts at Nellis AFB, Creech AFB and the NTTR, and if any of the 31 subject buildings at Creech AFB are contributing resources to potential historic districts. It is unclear how the management of cultural resources at Creech AFB was handled during its transition to an independent DAF installation. However, it appears that Creech AFB may have either not received a copy of the SHPO's June 2020 response letter or it was not able to act on the SHPO's request for additional information at the time.

In July 2024, Creech AFB initiated consultation with the SHPO during the early development of a Draft EA for 36 proposed IDP projects at Creech AFB (UT # 2024-8334; 35630). In a letter response dated August 21, 2024 (Nevada SHPO 2024), the SHPO informed Creech AFB of its June 2020 letter, as attached, and its request for limited additional information to assess if unidentified historic districts are present at Creech AFB. The August 2024 letter also requested additional information regarding the NRHP eligibility, both individually and as contributing resources to a district, of three buildings proposed for demolition (B55, B95,

and B137) under the proposed action detailed in the Creech AFB IDP EA. Therefore, this report focuses on evaluating each of the 34 total buildings specifically requested by the SHPO for eligibility as contributing resources.

Additional correspondence with the SHPO occurred following the SHPO's review of the Creech AFB IDP Draft EA, which was made available for public review on February 7, 2025. In response to the Draft EA, the SHPO submitted comments to Creech AFB on March 11, 2025. These comments included requests for additional information regarding the undertaking's area of potential effects (APE) and the identification and evaluation of cultural and historic properties within the APE. Comment 7 from the email reiterates the previous requests made in the 2020 and 2024 letters discussed above. All other comments are addressed in a separate document accompanying the submission of this report. The 2020 and 2024 letters and the 2025 email from the SHPO discussed in this section are provided in **Appendix A**.

1.3 PROJECT DESCRIPTION

The proposed action described in the Creech AFB IDP EA (DAF 2025) would implement 36 short-term projects to address current and future needs at the Installation. These projects would include demolition of aging facilities, new facility construction, facility upgrades, facility repair and renovation, utilities upgrades, community facility upgrades, infrastructure improvement, recreational upgrades, natural infrastructure management projects, and strategic sustainability performance projects. All projects are expected to be completed or implemented over approximately five years.

1.4 PROJECT LOCATION AND ENVIRONMENT

1.4.1 Built Environment

Creech AFB is the main operating base of the 432d Wing and 432d Air Expeditionary Wing and is located 1 mile northwest of Indian Springs, Nevada, and 35 miles northwest of Las Vegas, Nevada (DAF 2019a). These Wings are collectively known as the "Hunters" and support the training and employment of remotely piloted aircraft for the DAF. Creech AFB also supports various operations such as the 556th Test and Evaluation Squadron, the DAF Reserve's 91st Attack Squadron, and the DAF Reserve's 78th Attack Squadron (DAF 2019a). The Installation occupies 2,085 acres of land in Clark County, Nevada, on the north side of US Highway 95 (US-95); an additional 80 acres of land is owned by Creech AFB south of US-95.

Creech AFB real property records identify 169 buildings in total, of which 25 have been demolished and 144 remain extant. Most of these facilities serve operational, administrative, and support functions. The extant buildings date from 1952 to the present; however, 137 (94 percent) of which were built within the past 50 years, placing them outside the general 50-year threshold for consideration under the NRHP criteria. Development at the Installation is largely modern, with 114 buildings (78 percent) constructed after 1991 during the post-Cold War Era, reflecting its recent growth as a center for remotely piloted aircraft operations.

1.4.2 Natural Environment

The Installation is situated in the northeastern portion of the Mojave Desert, a dry environment that receives approximately 4 inches of annual precipitation. Most of the land area on Creech AFB has been developed for Installation and airfield infrastructure or has been graded to remove vegetation as part of bird/wildlife strike hazard management efforts. The three most prevalent key habitats found on Creech AFB are the Desert Playas and Ephemeral Pools Habitat (approximately 965 acres), the Intermountain Cold Desert Scrub Habitat (approximately 235 acres), and the Mojave Warm Desert and Mixed Desert Scrub Habitat (approximately 1,209 acres) (DAF 2020).

Creech AFB is located within the Tonopah Basin ecoregion of the Northern Basin and Range physiographic region. This area is characterized by arid conditions and greatly varied topography consisting of mountain

ranges separated by desert plains and basins (DAF 2019a). Lands within Creech AFB are relatively flat, with elevations ranging from approximately 3,100 feet above mean sea level (MSL) to approximately 3,200 feet above MSL. This environmental and built context informs the delineation of the APE for the proposed action.

1.5 AREA OF POTENTIAL EFFECTS

The DAF has defined the APE for the proposed IDP projects associated with UT # 2024-8334; 35630 as the mapped location of each project to assess potential physical effects, as well as an additional 0.5-mile radius to assess potential visual, auditory, and atmospheric effects (**Figure 1**). The physical APE for new construction projects represented by point features on Figure 1 would include each respective proposed construction footprint; physical APE point features representing demolitions are limited to the subject building; and the physical APE for infrastructure projects I1 and I2 are confined to specific areas proposed for airfield pavement repairs. All transportation and staging for each project would occur on existing roads and within previously disturbed areas near the project sites. Figure 1 depicts the APEs on the US Geological Survey (USGS) *Indian Springs, Nevada* 7.5-minute quadrangle (1973, photorevised 1984). Additional information regarding each proposed IDP project is provided in **Appendix B**.

1.6 REPORT ORGANIZATION

This report is organized into four chapters. Chapter 1 provides the project purpose, description, location and environmental context, and APE. Chapter 2 presents the historic context relevant to Creech AFB. Chapter 3 describes the research design, including archival review and GIS analysis. Chapter 4 presents the historic district assessment, evaluation results, and conclusions. Appendices include agency correspondence and an inventory of specific buildings at Creech AFB for which the SHPO has requested additional information.

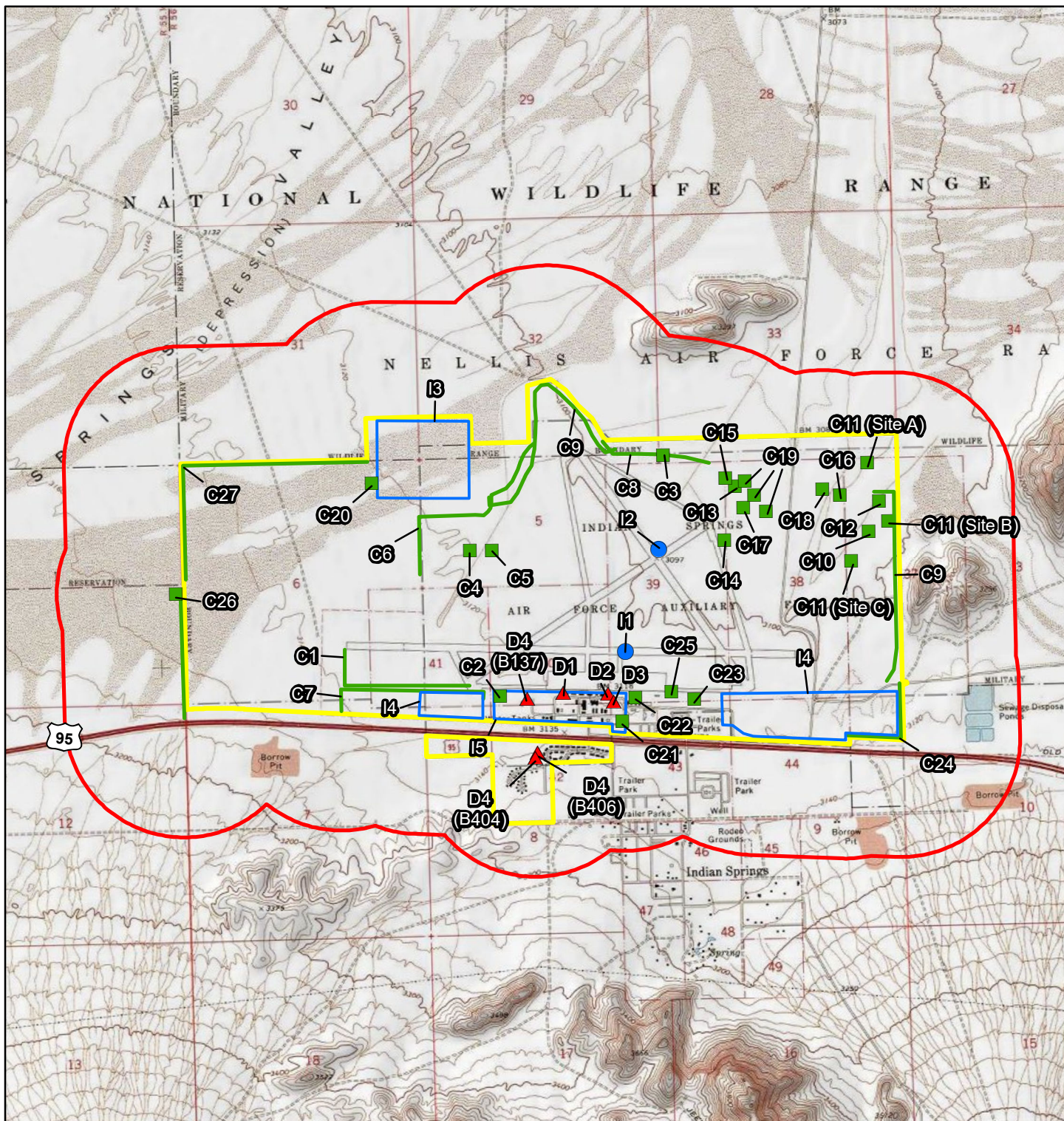
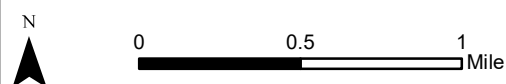


Figure 1
APE for Proposed IDP Projects at Creech AFB

- Construction Physical APE
- ▲ Demolition Physical APE
- Infrastructure Physical APE
- Linear Construction Physical APE
- Linear Infrastructure Physical APE
- Installation Boundary
- Visual, Auditory, and Atmospheric APE



Imagery: ESRI 2021
Coordinate System: WGS 1984 UTM Zone 11N



AFB = Air Force Base; APE = Area of Potential Effects; IDP = Installation Development Plan

2 HISTORIC CONTEXT

Euro-American settlement of the land currently occupied by Creech AFB occurred when a wagon party consisting of Charles Towner, Joseph Yount, and their families arrived at the local natural springs for which Indian Springs was named, in 1876. The group was traveling from Oregon to Arizona, but the location appealed to Towner, and he and his family decided to stay. The Younts continued on and settled near Pahrump. Towner reportedly bought the land from a local Paiute named Whispering Ben and established a ranch. The land was surveyed into sections by the US Government Land Office (USGLO) in 1881. The USGLO plat depicted Indian Springs in Section 16, T16S, R56E, as well as an east/west road passing by the spring labeled the Wagon Road from Las Vegas to Pahrump Valley, and the Wagon Road to Belmont going north from the spring. "Towner's House" is also depicted next to the spring. This is the only building shown in the Indian Springs area. Towner's house was about a mile south of the study area for this project. Towner and his family remained at Indian Springs until 1903. While early pioneers such as Towner and Yount settled in this region in the late 1800s, the dry, hot desert of the greater Las Vegas Valley area, including Indian Springs, was still very sparsely settled in 1900. Interest in the area rose in 1904 when gold was discovered at Beatty, about 70 miles west of Indian Springs. Following this strike, Las Vegas grew in prominence, developing into the freight hub to this mining district, and Indian Springs was a stop on the wagon route between Las Vegas and the Beatty mines (DAF 2019b:112; USGLO 1881).

The increasing volume of wagon freight traffic along the route between Beatty and Las Vegas prompted Senator William A. Clark of Montana to organize and build the San Pedro, Los Angeles, and Salt Lake Railroad through Las Vegas. Clark completed the line in 1905 and proceeded to build another railroad from Las Vegas to Tonopah called the LV&T to serve the mines around Beatty, Tonopah, and Goldfield, which all had mining booms between 1904 and 1907. LV&T was incorporated by Clark and his brother J. Ross Clark on September 22, 1905, in the state of Utah (Myrick 1963:455, 460-461). Construction of the LV&T route began at Las Vegas on January 4, 1906. Railroad operation started March 1, 1906, between Las Vegas and Indian Springs, which is approximately 44 miles. As part of this project, Clark bought land in Indian Springs from Towner and erected a station, freight house, section house, and water tank. A few of these buildings were in the study area but are no longer extant. By June 1906, 100 miles of track were laid, and the line almost reached the town of Beatty. The LV&T arrived at its terminus in Goldfield on October 26, 1907 (DAF 2019b:112; Myrick 1963:457, 461, 463, 466, 467, 489, 494; USGLO 1920).

The railroad's success peaked the year the track was completed when it ran daily trains. Subsequent years of operation brought a decline in passenger and freight traffic as the mines played out. Additional difficulties came in the form of washouts and fires that destroyed facilities in Rhyolite. In 1913, the Clark brothers approached Bullfrog-Goldfield Railroad to combine their lines and eliminate wasteful track (DAF 2019b:112).

Eventually, they transferred LV&T's desirable track to Bullfrog-Goldfield and in 1914, LV&T applied to the Railroad Commission of Nevada to abandon its entire line. Rail service over LV&T's main line steadily diminished over the next four years going from stub trains to tri-weekly service. Operations ceased entirely on October 31, 1918, and the railroad company removed the tracks and ties in 1919. That same year, the State of Nevada took over the old LV&T right of way between Las Vegas and Beatty for use as a motor vehicle road and designated the roadway as part of the state highway system (State Route 5). In subsequent years, as automobile traffic increased, the State widened, paved and otherwise improved the highway. It became a part of the US highway system, designated as US Highway 95 in 1940, and is one of the major north-south routes through the state connecting it with California and Oregon (DAF 2019b:112; Myrick 1963:466, 494, 499, 502-503).

Beginning in 1910, Ira McFarland and his wife Alice began acquiring land in the Indian Springs area. The McFarlands bought land from Clark and filed two Desert Land Act entries and a Homestead Act entry for a total of 600 acres. This land included Tract 39 north of the study area; Tract 43, which includes the study area; and Tract 47, which is south of the study area, near the outlet of the springs and the Towner ranch house. The couple's house was south of the study area. The McFarlands envisioned Indian Springs as a vacation oasis and proceeded to plant shade trees, pecan trees, and fruit trees, and developed the many ponds near the springs into swimming pools in an effort to entice travelers (DAF 2019b:112; USGLO 1920).

The McFarlands' ranch attracted both visitors from Las Vegas and travelers passing through, but the couple had grander plans for Indian Springs. In 1929, they subdivided Tract 43 of their property into 143 lots, most 165 feet by 134 feet (about one acre) and called it the Indian Springs Pecan Groves subdivision. The subdivision was on both sides of the highway with most of the lots south of the highway. As the name suggests, the McFarlands planned to plant pecan trees on the land and sell the lots to settlers to create a pecan agricultural community. Despite the promotion of this land development project in Las Vegas, only a few people bought lots, and the scheme was largely a bust. The study area consists of lots 25 through 38 of this subdivision. One parcel, APN 059-09-101-001, located between lots 36 and 37, was not included in the subdivision for reasons unknown. This parcel is currently vacant (DAF 2019b:113).

While Indian Springs had some appeal to visitors, it was still a harsh environment far from services and shopping in Las Vegas, and in the 1920s and 1930s had few permanent residents. The 1920 US Census counted only 15 residents in Indian Springs. Despite the failure of the McFarlands' subdivision, their ranch remained popular as a guest ranch and had several cottages for visitors. The McFarlands' guest cabins were located south of the study area, near the outlet of the springs (DAF 2019b:113).

Roadside commercial enterprises sprung up in the study area in the 1920s, about the time the road was designated as part of the state highway system. Tim Harnedy, an Irish immigrant, and his wife Lou acquired land along the state highway and built a house, gas station/store and small inn out of abandoned railroad ties from the LV&T. Behind the inn, the Harnedys also built small cabins for travelers. The facility was called the Indian Inn and Gas Station. None of these buildings are present today but were once located within the study area, in the approximate location of the current casino, gas station and commercial buildings. West of the Harnedys' home and business was a state highway maintenance station staffed by resident workers. The workers' names in 1930 were Frank Tucker, a single road laborer, and Marvin H. Waite, the maintenance foreman, who lived on site with his wife, two sons, and a niece. In 1937, the state paved the highway, boosting traffic on the road as well as the Harnedys' business interests (DAF 2019b:113; Myhrer 2012:4).

In the 1940s and 1950s the federal government's presence in the Indian Springs area gave a boost to the local economy and population. In the aftermath of the Japanese attack on Pearl Harbor, the US Army established the Indian Springs Air Force Auxiliary Airfield north of Highway 95 in Indian Springs as an air-to-air gunnery training camp for B-17 and T-6 aircraft. After World War II, the base closed but was reactivated in January 1949 following the onset of the Cold War and the establishment of the DAF as an independent branch of the military. Renamed the Indian Springs AFB, it became a weapons system research and testing facility and supported nuclear arms testing at the Nevada Proving Grounds. It also provided range maintenance for the Nellis Test and Training Range (now the Nevada Test and Training Range [NTTR]). The base grew to 1,500 personnel during this period with many employees of the base and the nuclear test site residing in Indian Springs. (DAF 2019b:113-114; Myhrer 2012:4, 5).

In 1964, the Air Force redesignated Indian Springs AFB as Indian Springs Air Force Auxiliary Field and assigned it to Nellis AFB. Throughout the 1960s and 1970s, the Installation continued to provide range maintenance for sections of the NTTR and hosted recurring field training exercises, though it maintained no singular operational mission. The Installation supported a succession of host and tenant organizations and played a role in critical but often unpublicized missions, including nuclear test support and staging for weapons delivery verification tests. Concurrently, the Installation regularly hosted deployments of Airmen and aviators across all services to conduct realistic, less constrained field training. Despite these important and ongoing contributions to critical missions and the development of air superiority, the Installation did not maintain a dedicated operational mission, with only a detachment of UH-1N helicopters during the 1970s and 1980s (DAF 2019a).

Following the 1992 inactivation of Tactical Air Command, the Installation fell under Air Combat Command. The emergence of remotely piloted aircraft operations in the 1990s transformed the mission of the Installation. The first RQ-1 Predator flight occurred in 1996, followed by the first armed Predator mission in 2001. In 2005, the DAF redesignated the Installation as Creech AFB in honor of General Wilbur L. Creech, reflecting its growing prominence as the home of the 432d Wing and 432d Air Expeditionary Wing. Subsequent additions, including the MQ-9 Reaper, the 432d Mission Support Group, and the 726th

Operations Group, solidified Creech AFB as a central hub for the global Remotely Piloted Aircraft Enterprise. Creech AFB became a fully independent installation in July 2019 when it separated from Nellis AFB's command authority. Today, Creech AFB supports approximately 3,000 personnel and continues to sustain around-the-clock overseas contingency operations (DAF 2019a).

This page intentionally left blank

3 RESEARCH DESIGN

This chapter provides an overview of recent consultation and correspondence with the Nevada SHPO, which informed the subsequent methods described to research and assess the presence or absence of historic districts at Creech AFB.

3.1 RECENT CONSULTATION

In 2018, GSRC and RCG&A conducted a Section 110 historic building inventory survey of Creech AFB on behalf of the DAF (GSRC and RCG&A 2018). All buildings constructed prior to the end of the Cold War were reported on and evaluated in the 2018 inventory report. As a result, the contractor recommended that there were no historic districts at Creech AFB. However, according to the SHPO, the 2018 report did not include enough information for the DAF to make a determination on the presence or absence of historic districts. In the SHPO's 2020 and 2024 correspondence with the DAF, the SHPO stated,

"If the agency believes that no historic districts exist at Nellis AFB, Creech AFB, or the Nevada Test and Training Range beyond those that have already been identified, that [the lack of historic districts] can be justified with minimal additional work...Our office recommends that a lack of historic districts be justified in a short report format containing the following types of information:

- Color-coded maps illustrating a lack of cohesiveness. Maps could include data such as:
- Distribution of dates of construction;
- Distribution of intact resources versus altered resources;
- Distribution of use types;
- Location of buildings that are no longer present; and
- Location of non-historic infill buildings.
- Written justification summarizing the data and explaining why no districts are present."

Therefore, the objective of the current investigation and this report was to gather and analyze the information requested above to re-assess if unidentified historic districts are present at Creech AFB by applying the NRHP Criteria for Evaluation (54 USC § 306108) (NPS 1997).

3.2 HISTORIC DISTRICTS AND THE NATIONAL REGISTER OF HISTORIC PLACES

As defined by the National Park Service (NPS 1997), a historic district "possesses a significant concentration, linkage, or continuity of sites, buildings, structures, or objects united historically or aesthetically by plan or physical development." The importance of a historic district is derived from being a unified entity, even when composed of a variety of resources or discontinuous elements, whether the interrelationship of a historic district's resources conveys a visual sense of the overall historic environment or be an arrangement of historically or functionally-related properties. In addition to being an identifiable entity, a historic district must possess integrity of location, design, setting, materials, workmanship, feeling, and association, and it must meet at least one of the following criteria for evaluation:

- A) associated with events that have made a significant contribution to the broad patterns of our history; or
- B) associated with the lives of persons significant in our past; or
- C) embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
- D) have yielded, or may be likely to yield, information important in prehistory or history.

Generally, resources less than 50 years old, moved or reconstructed buildings, cemeteries, and religious properties are not NRHP-eligible, unless they meet one of the NRHP "criteria considerations" (36 CFR § 60.4). For example, a resource less than 50 years old may be eligible under Criteria Consideration G if it

possesses integrity and is of exceptional importance, such as Cold War-era DoD properties (1945–1992). Explicit guidance for evaluating and nominating properties that are less than 50 years old and/or have achieved significance within the past 50 years is provided within National Register Bulletin 22 (NPS 1998).

A historic district may include a combination of elements, some of which are individually significant and serve as focal points, and others that are not distinguished on their own. In some cases, a historic district may still be considered eligible for the NRHP even if none of its components are individually notable, as long as the collective grouping holds significance within its historical context. Regardless of individual distinction, the majority of contributing elements must retain historic integrity, and the historic district as a whole must also maintain its integrity. Noncontributing resources such as buildings, structures, sites, objects, or open spaces, can be present within the historic district; however, the number and nature of these resources must not compromise the historic district's overall ability to reflect its historical period and patterns of development (NPS 1997:5–6, 16–17, 44–47).

3.3 ARCHIVAL RESEARCH

Archival research focused on identifying, obtaining, and reviewing the most recent Architectural Resource Assessment (ARA) forms for each of the 34 subject buildings available within the Nevada Cultural Resource Information System (NVCRIS) online database to confirm current individual eligibility determinations and SHPO concurrence. Other data obtained for each building included *dates of construction*, *integrity* (intact versus altered resources), and *use types*. Construction dates listed on ARA forms were cross-referenced with Creech AFB real property data, which was also used to confirm if any other buildings on Creech AFB were constructed prior to the end of the Cold War in December 1991.

3.4 GEOGRAPHIC INFORMATION SYSTEM ANALYSIS

Following archival research, data for the attributes obtained from NVCRIS archival research and Creech AFB records were added to Creech AFB geographic information system (GIS) files for each of the 34 buildings referenced by the SHPO (2024). The data for each of these attributes were then visualized on modern aerial imagery utilizing ArcMap 10.8.1 software to identify if there was a lack of cohesiveness that would prohibit a group of buildings from being defined as a historic district.

4 HISTORIC DISTRICT ASSESSMENT

4.1 ARCHIVAL REVIEW

Archival research of the 34 subject buildings resulted in identifying 32 buildings with ARA forms on record within NVCRIS. All 32 buildings with ARA forms were determined to be individually ineligible for the NRHP with SHPO concurrence. Creech AFB real property data confirmed that there are only 32 remaining buildings that were constructed before 1992, the oldest of which was constructed in 1952. Therefore, all extant buildings on Creech AFB were either constructed during the Cold War era or in the post-Cold War era, and they will be referred to as such throughout the remainder of this report. Additionally, there are only nine extant buildings on Creech AFB that have aged 50 years or greater.

The only buildings directly referenced by the SHPO (2024) with no ARA forms on record were B55 and B137. According to Creech AFB records, B55 was constructed in 2006, and B137 was constructed in 1994. Therefore, B55 and B137 were constructed too recently to qualify for evaluation, even under NRHP Criteria Consideration G due to their post-Cold War construction and lack of exceptional importance.

Table 1 lists each of the buildings directly referenced by the SHPO (2024) that have unresolved NRHP evaluations. The table includes construction dates, property use types, integrity, and current NRHP status according to NVCRIS. All buildings listed in Table 1 have been determined by the DAF to be ineligible for the NRHP as individual resources, with SHPO concurrence. B64 (B16176) was also previously determined by the DAF to be ineligible as a contributing resource to a historic district, also with SHPO concurrence (2020). Except for B55 and B137, which were constructed in the post-Cold War era and hold no exceptional importance, the remaining 31 buildings have yet to be evaluated for NRHP eligibility as a contributing resource to a historic district. Table 1 also lists the Creech AFB planning district (PD) within which each resource is located. Creech AFB PDs with extant buildings constructed prior to the end of the Cold War are limited to the Southside Operations PD, the T-Shirt PD, and the Munitions Storage Area (MSA) PD. A more detailed table that includes the historic name and current name of each of these buildings is included in **Appendix C**.

Table 1 Creech Air Force Base Buildings with Unresolved National Register of Historic Places Evaluations

Creech AFB Building Number	SHPO Resource Number	Creech AFB Planning District	Construction Date	Property Use Type	Integrity	Current NRHP Status
B3	B16170	Southside Operations	1987	Defense	Intact	Individually ineligible
B4	B16171	Southside Operations	1986	Domestic	Intact	Individually ineligible
B5	B16172	Southside Operations	1986	Domestic	Intact	Individually ineligible
B24	B16173	Southside Operations	1969	Domestic	Intact	Individually ineligible
B39	B16174	Southside Operations	1953	Recreation	Altered	Individually ineligible
B50	B16175	Southside Operations	1990	Defense	Intact	Individually ineligible
B55	N/A	Southside Operations	2006	Demolished	Demolished	Does not qualify for evaluation

Creech AFB Building Number	SHPO Resource Number	Creech AFB Planning District	Construction Date	Property Use Type	Integrity	Current NRHP Status
B64	B16176	Southside Operations	1986	Defense	Altered	Individually ineligible/ Ineligible as a contributing resource to a historic district
B66	B16177	Southside Operations	1984	Defense	Intact	Individually ineligible
B71	B16178	Southside Operations	1977	Commerce	Altered	Individually ineligible
B82	B13734	Southside Operations	1982	Defense	Intact	Individually ineligible
B86	B16179	Southside Operations	1989	Government	Intact	Individually ineligible
B91	B16180	Southside Operations	1952	Defense	Altered	Individually ineligible
B92	B16181	Southside Operations	1952	Defense	Altered	Individually ineligible
B93	B16182	Southside Operations	1987	Defense	Intact	Individually ineligible
B95	B13735	Southside Operations	1952	Defense	Original	Individually ineligible
B96	B16183	Southside Operations	1952	Defense	Altered	Individually ineligible
B115	B16184	Southside Operations	1991	Defense	Intact	Individually ineligible
B127	B16185	Southside Operations	1984	Domestic	Intact	Individually ineligible
B137	N/A	Southside Operations	1994	Demolished	Demolished	Does not qualify for evaluation
B140	B16186	Southside Operations	1953	Defense	Intact	Individually ineligible
B225	B16187	Southside Operations	1976	Defense	Altered	Individually ineligible
B227	B16188	Southside Operations	1983	Defense	Intact	Individually ineligible
B239	B16189	Southside Operations	1956	Defense	Intact	Individually ineligible
B241	B16190	Southside Operations	1957	Defense	Intact	Individually ineligible
B242	B16191	Southside Operations	1984	Defense	Intact	Individually ineligible
B243	B16192	Southside Operations	1982	Defense	Intact	Individually ineligible

Creech AFB Building Number	SHPO Resource Number	Creech AFB Planning District	Construction Date	Property Use Type	Integrity	Current NRHP Status
B400	B16193	T-Shirt	1986	Defense	Intact	Individually ineligible
B402	B16194	T-Shirt	1986	Religion	Intact	Individually ineligible
B404	B16195	T-Shirt	1986	Defense	Intact	Individually ineligible
B406	B16196	T-Shirt	1986	Defense	Intact	Individually ineligible
B3910	B16197	MSA	1990	Defense	Intact	Individually ineligible
B3926	B16198	MSA	1990	Defense	Intact	Individually ineligible
B3928	B16199	MSA	1990	Defense	Intact	Individually ineligible

B = Building (as in B3); MSA = Munitions Storage Area; N/A = Not Applicable; NRHP = National Register of Historic Places

4.2 HISTORIC DISTRICT ASSESSMENT

4.2.1 Overview

The values of the resource attributes recorded and confirmed during the archival research phase of this analysis were added to a copy of the Creech AFB real property GIS database to visualize the level of cohesiveness within the areas of Creech AFB with extant Cold War-era buildings compared to post-Cold War-era buildings and those that have been demolished. The Creech AFB GIS database included 169 buildings in total, of which 135 are labeled as permanent, 25 are labeled as demolished, and 9 are labeled as demolition.

At the time of this analysis, the 9 buildings labeled as “demolition” were presumed to be proposed for future demolition. However, it should also be noted that these spatial features have not been edited since 2019 and 2020 according to the geodatabase’s attribute table, and some buildings may have been demolished since these files were last edited. Additionally, there may also be past building demolitions that are absent from the geodatabase altogether. Therefore, the status of demolished buildings as presented in this report may not be current or present the entire built history of the Installation.

With the presumption that the 9 buildings labeled for demolition are still extant, this report identifies 144 extant buildings in total. These 144 buildings date from 1952 to the present; however, 137 (95 percent) of which were built less than 50 years ago, placing them outside the general 50-year threshold for eligibility consideration under the NRHP criteria. Development at the Installation is largely modern, with 112 buildings (78 percent) constructed during the post-Cold War era. The 32 previously evaluated buildings are located only within three of Creech AFB’s PDs: the Southside Operations PD (n=25), the T-Shirt PD (n=4), and the MSA PD (n=3) (**Figure 2**).

4.2.2 Southside Operations Planning District

The Southside Operations PD at Creech AFB contains small administrative facilities that support the flying operations and training at Creech AFB. This PD also contains maintenance and associated maintenance yard areas for aircraft (DAF 2015). Of the 103 total buildings mapped within the Southside Operations PD, 25 were constructed during the Cold War, 58 were constructed post-Cold War, and 20 have been demolished (**Figure 3**). The Cold War-era buildings are located sporadically throughout the PD with no sense of planned cohesion or aesthetics. Extant post-Cold War-era buildings and empty lots from demolitions are interspersed between the previously evaluated buildings.

The distribution of Cold War-era building construction dates ranges from 1952 to 1991, with no identifiable patterns of periods of construction as it pertains to spatial planning or aesthetic and thematic cohesion. Of the extant Cold War-era buildings within the Southside Operations PD, 8 were constructed in the 1950s, 1

was constructed in the 1960s, 2 were constructed in the 1970s, 12 were constructed in the 1980s, and 2 were constructed in the Cold War-era 1990s through December 1991 (**Figure 4**). While instances of building construction in the 1950s and 1980s were substantially higher than those of other decades, Figure 3 illustrates that there appears to be no spatial relationship amongst buildings constructed during a particular period.

Analysis of each resource's integrity within the Southside Operations PD resulted in the identification of altered (n=7), intact (n=17), and original (n=1) states of integrity. While 72 percent of the Southside Operations Cold War-era buildings remain intact or original, the spatial distribution of these buildings is sporadic at best, and the large gaps of empty space and presence of non-historic infill buildings amongst the Cold War-era buildings suggests a lack of historic or aesthetic cohesion by plan and physical development (**Figure 5**).

Cold War-era building use types within the Southside Operations PD include commerce (n=1), defense (n=18), domestic (n=4), government (n=1), and recreation (n=1). While the proportion of buildings utilized for defense is substantial at 72 percent, the spatial distribution of these buildings is sporadic at best, and the large gaps of empty space and extant modern buildings suggests a lack of historic or aesthetic cohesion by plan and physical development (**Figure 6**).

As a result of this assessment, EAS recommends that there are no historic districts within the Southside Operations PD due to a lack of cohesion in construction dates and use types, an abundance of non-historic infill buildings and empty space amongst the Cold War-era buildings that prohibit consideration that a unified entity is present. Therefore, all 25 Cold War-era buildings within the Southside Operations PD are ineligible for the NRHP, both individually and as contributing resources to a historic district.

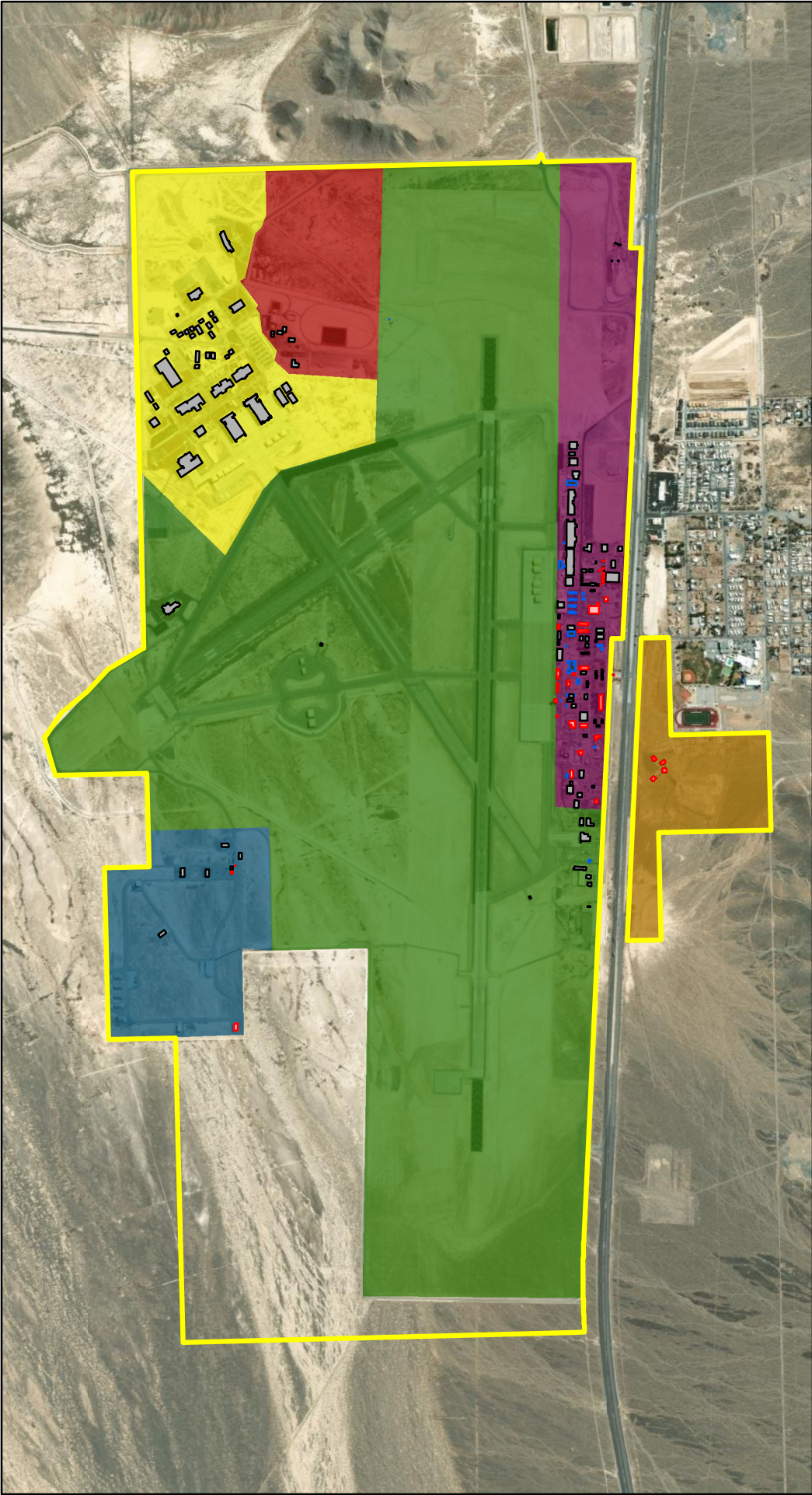
4.2.3 T-Shirt Planning District

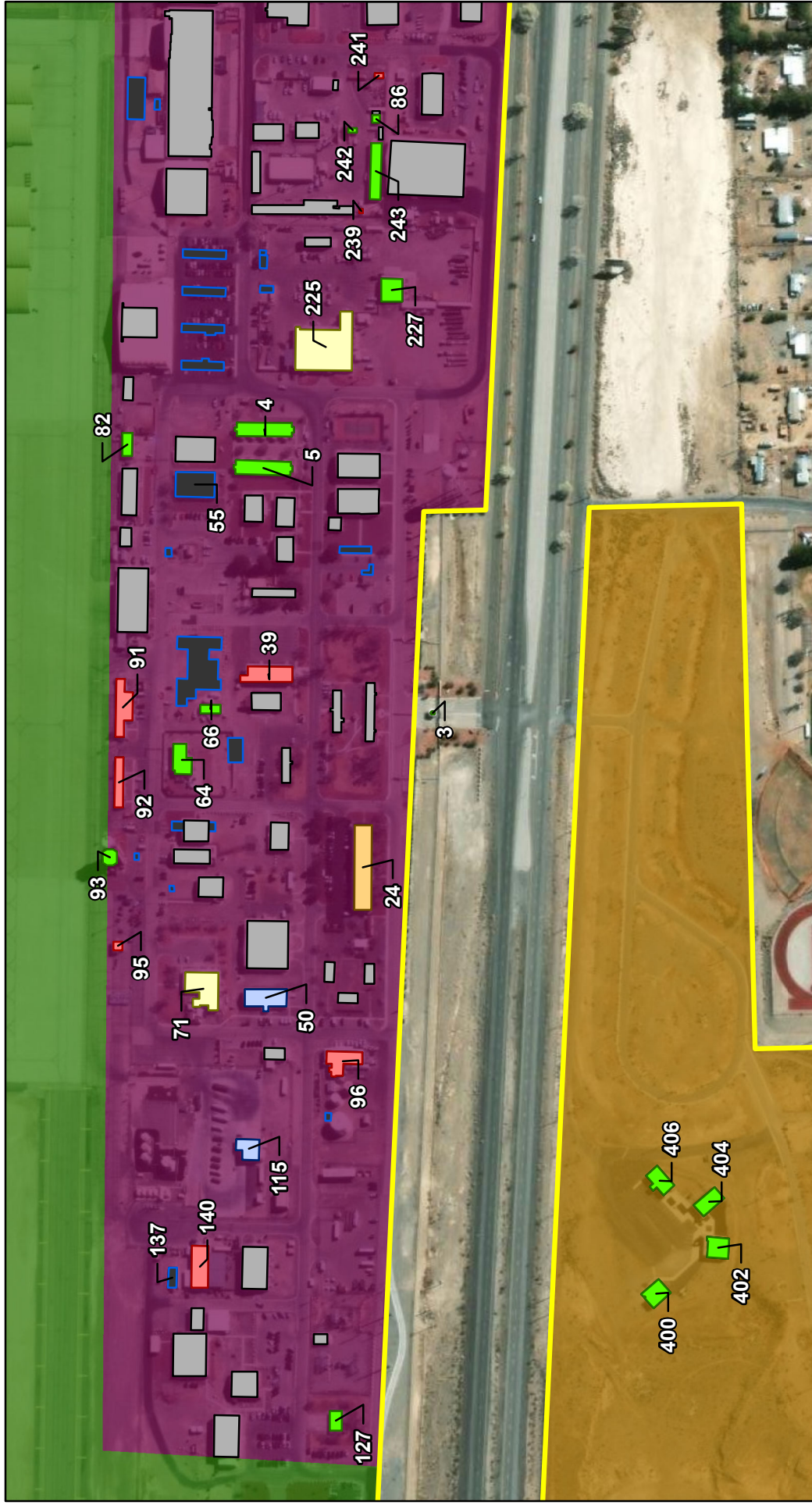
The 80-acre T-Shirt PD of Creech AFB, located south of US-95, was once used as Creech AFB housing. Housing facilities within the T-Shirt PD have since been demolished¹ and the PD lies mostly vacant; no Creech AFB housing currently exists, and most personnel live in northwest Las Vegas or on Nellis AFB in unaccompanied housing (DAF, 2015). The four extant Cold War-era buildings within the T-Shirt PD (B400, B402, B404, and B406) are located relatively adjacent to one another, and they are the only buildings remaining in the PD following the previous demolition of its former housing facilities (see **Figure 3**).

The four Cold War-era buildings in the T-Shirt PD share several common attribute values, including their construction in 1986 (see **Figure 4**) and their reported intact integrity (see **Figure 5**). Use type amongst these buildings varies slightly with three designated for defense and one designated for religion (see **Figure 6**). While these four buildings are located near each other, share the same construction date, and are all intact, the combination of use types for defense and religion suggest a lack of thematic cohesion, especially considering these are the only buildings remaining in the T-Shirt PD and there are so few of them.

As a result of this assessment, EAS recommends that there are no historic districts within the T-Shirt PD due to a lack of cohesion in use types, an abundance of empty space from the demolition of the T-Shirt PD's former buildings, and the scarce number of buildings remaining that limit consideration that a unified entity is present. Therefore, all four Cold War-era buildings within the T-Shirt PD are ineligible for the NRHP, both individually and as contributing resources to a historic district.

¹ The total number of demolished buildings in the T-Shirt PD is unknown; however, historic aerial imagery shows at least 38 buildings in 1983 (NETR 1983), all of which were absent in the next available photograph from 1994 (NETR 1994). The four extant buildings were constructed in 1986.





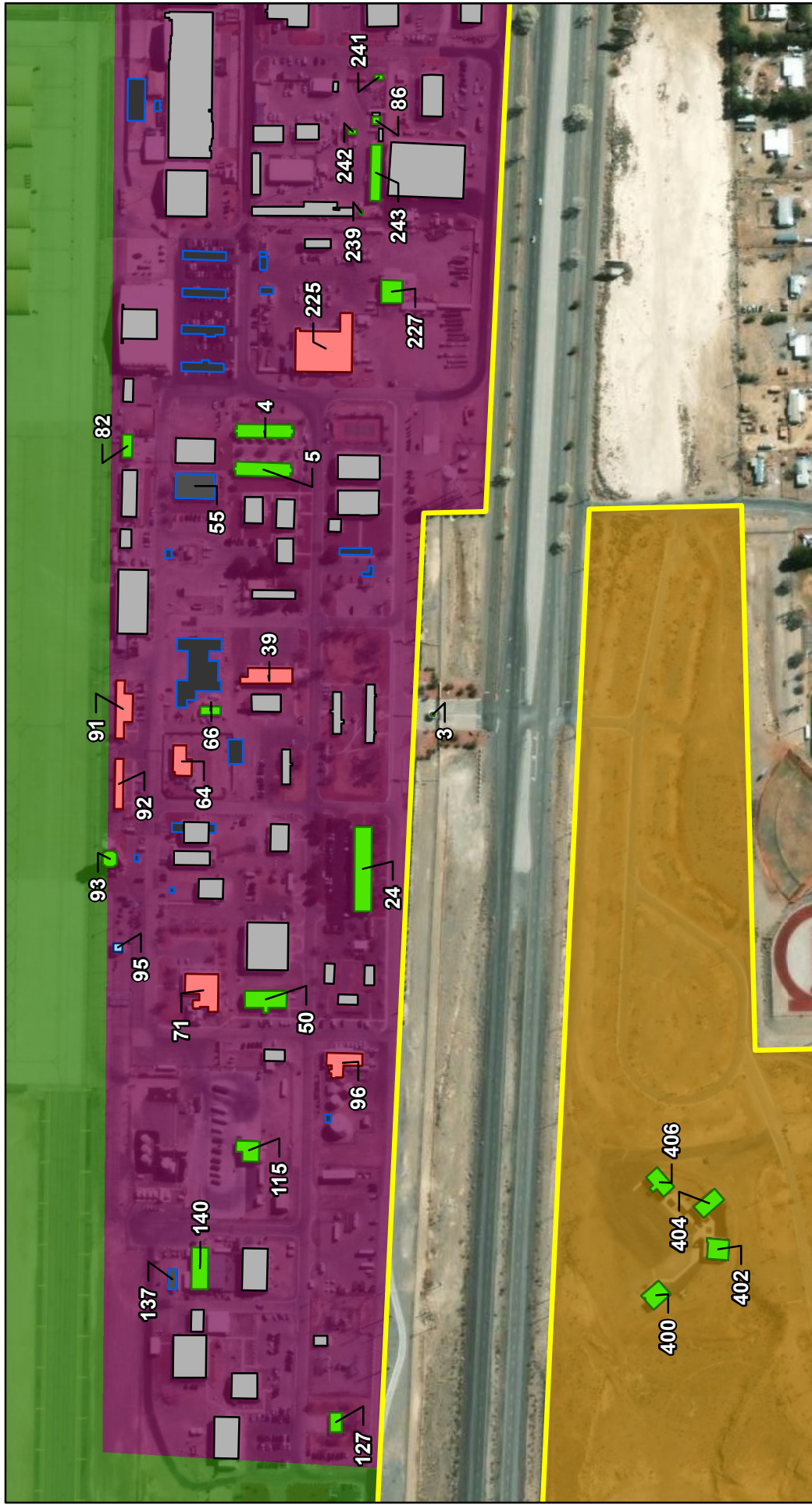
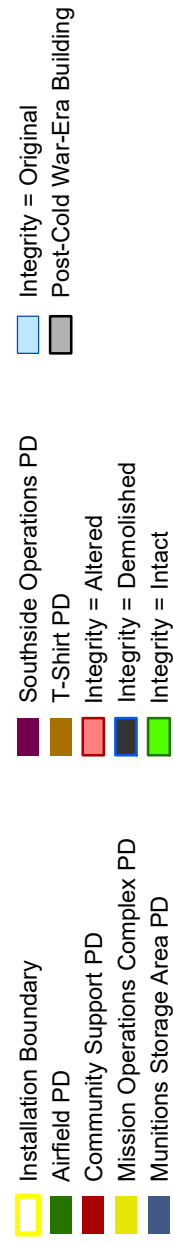
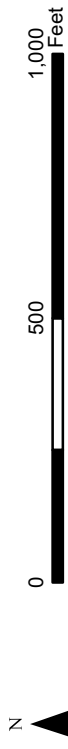


Figure 5
Integrity of Cold War-Era Buildings within the Southside Operations and T-Shirt PDs



Imagery: ESRI, 2021
Coordinate System: WGS 1984 UTM Zone 11N



4.2.4 Munitions Storage Area Planning District

The MSA PD houses the Installation's storage igloos and munitions magazines. Located in the northwest corner of Creech AFB, Perimeter Road defines the southern boundary of the PD, which is heavily industrial (DAF 2015). Of the 9 total extant buildings within the MSA, three buildings (B3910, B3926, and B3928) were constructed during the Cold War (**Figure 7**). Five post-Cold War-era buildings and two Cold War-era buildings (B3926 and B3928) are located in the eastern third of the MSA, one post-Cold War-era building is located in its north-central portion, and one Cold War-era building (B3910) is located in the southwest corner of the MSA.

The three Cold War-era buildings in the MSA PD share several common attribute values, including their construction in 1990 (**Figure 8**), their reported intact integrity (**Figure 9**), and their use for defense (**Figure 10**). While these common traits are present, there is a lack of a spatial relationship that could tie these resources together as a unified entity beyond their location within the same PD. This is also supported by the low proportion of Cold War-era buildings to non-historic infill buildings in the MSA.

As a result of this assessment, EAS recommends that there are no historic districts within the MSA PD due to the abundance of empty space between the buildings and the low proportion of Cold War-era buildings to non-historic infill buildings within the PD. Therefore, all three Cold War-era buildings within the MSA PD are ineligible for the NRHP, both individually and as contributing resources to a historic district.

4.3 SUMMARY OF FINDINGS

As a result of the archival review and historic district assessment, EAS recommends that there are no historic districts present at Creech AFB, evident through a lack of cohesion and the inability to identify any combination of resources as a unified entity that could meet the significance and integrity criteria for inclusion in the NRHP. Consequently, all 32 Cold War-era buildings at Creech AFB are ineligible for the NRHP, both individually and as contributing resources to a historic district.

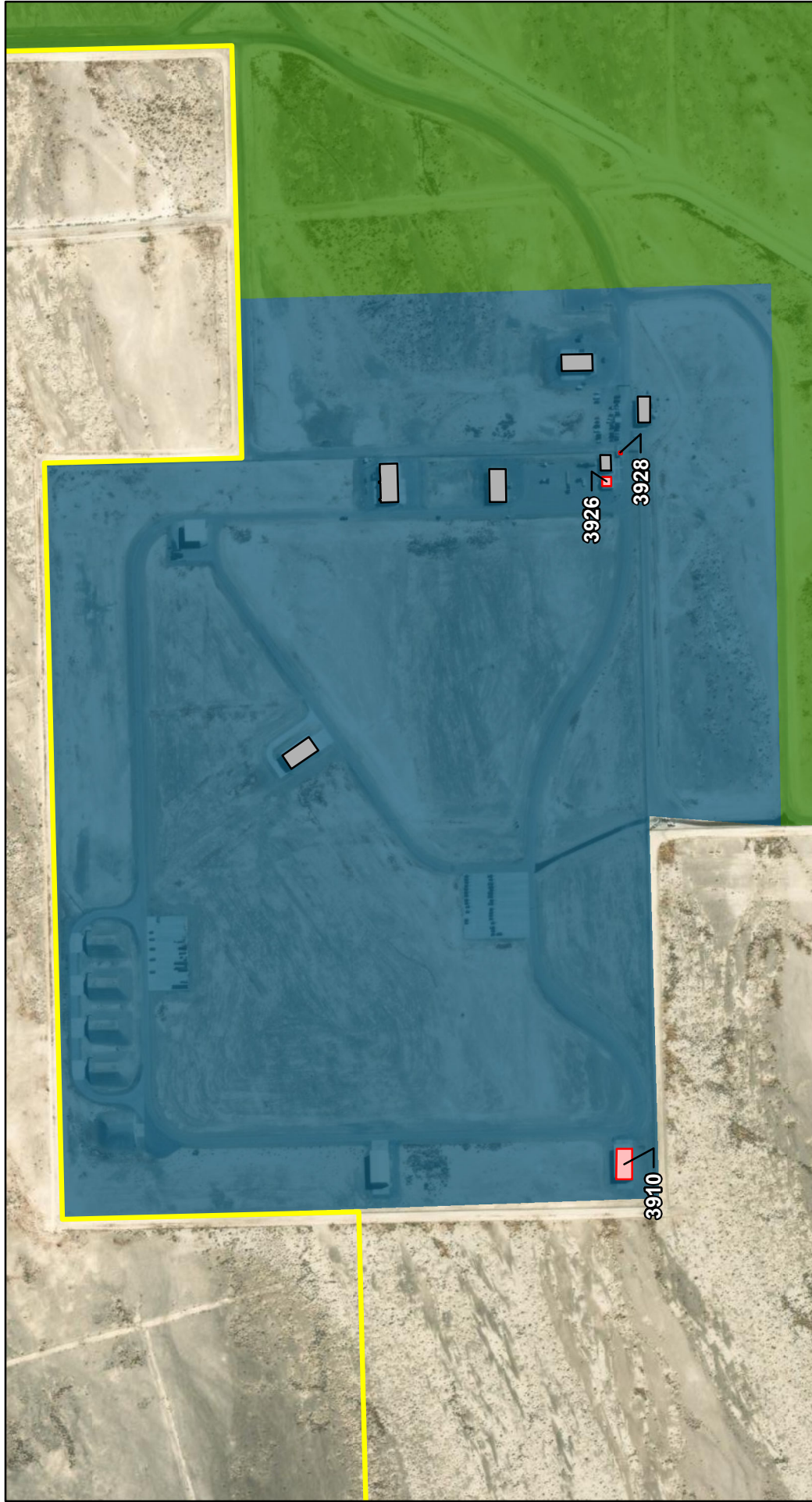


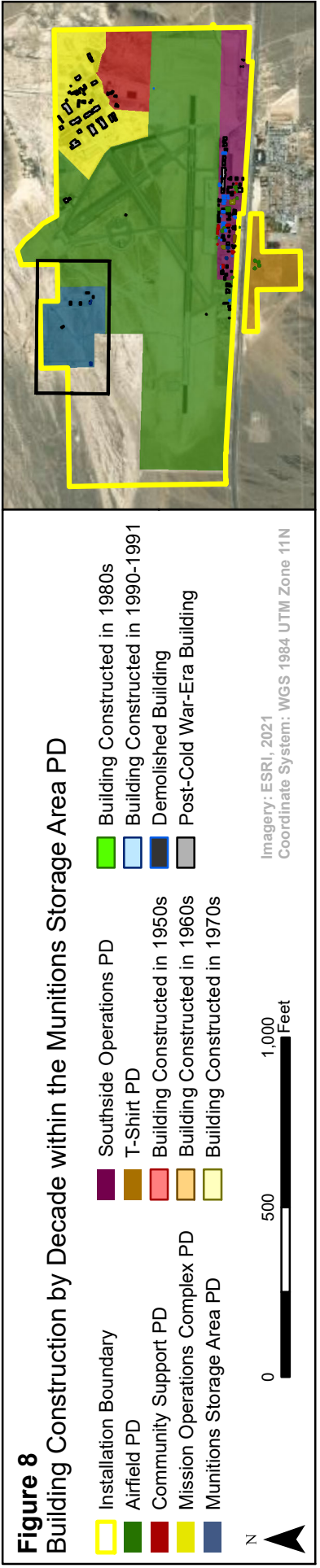
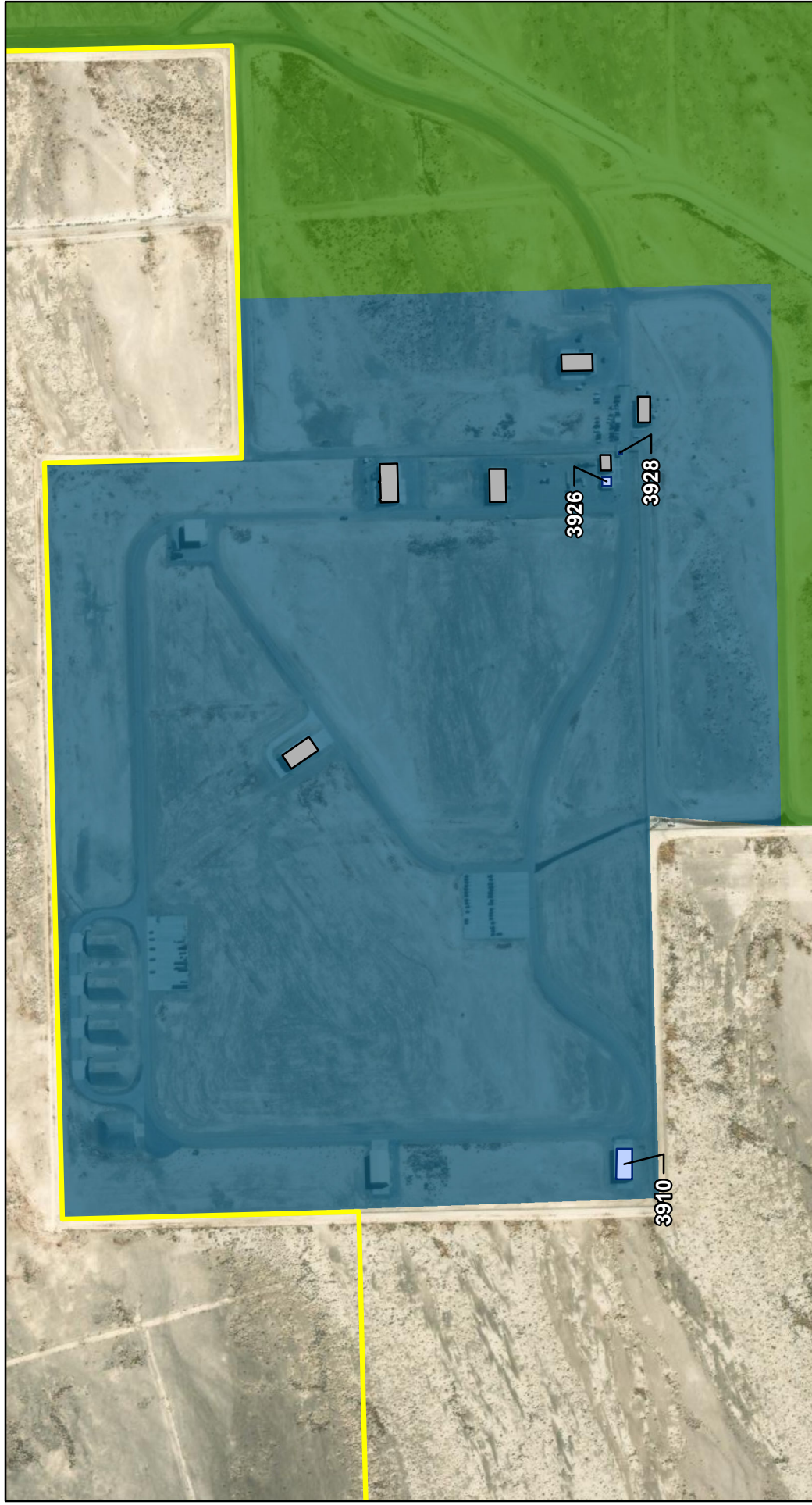
Figure 7
Cold War-Era and Post-Cold War-Era Buildings within the MSA PD

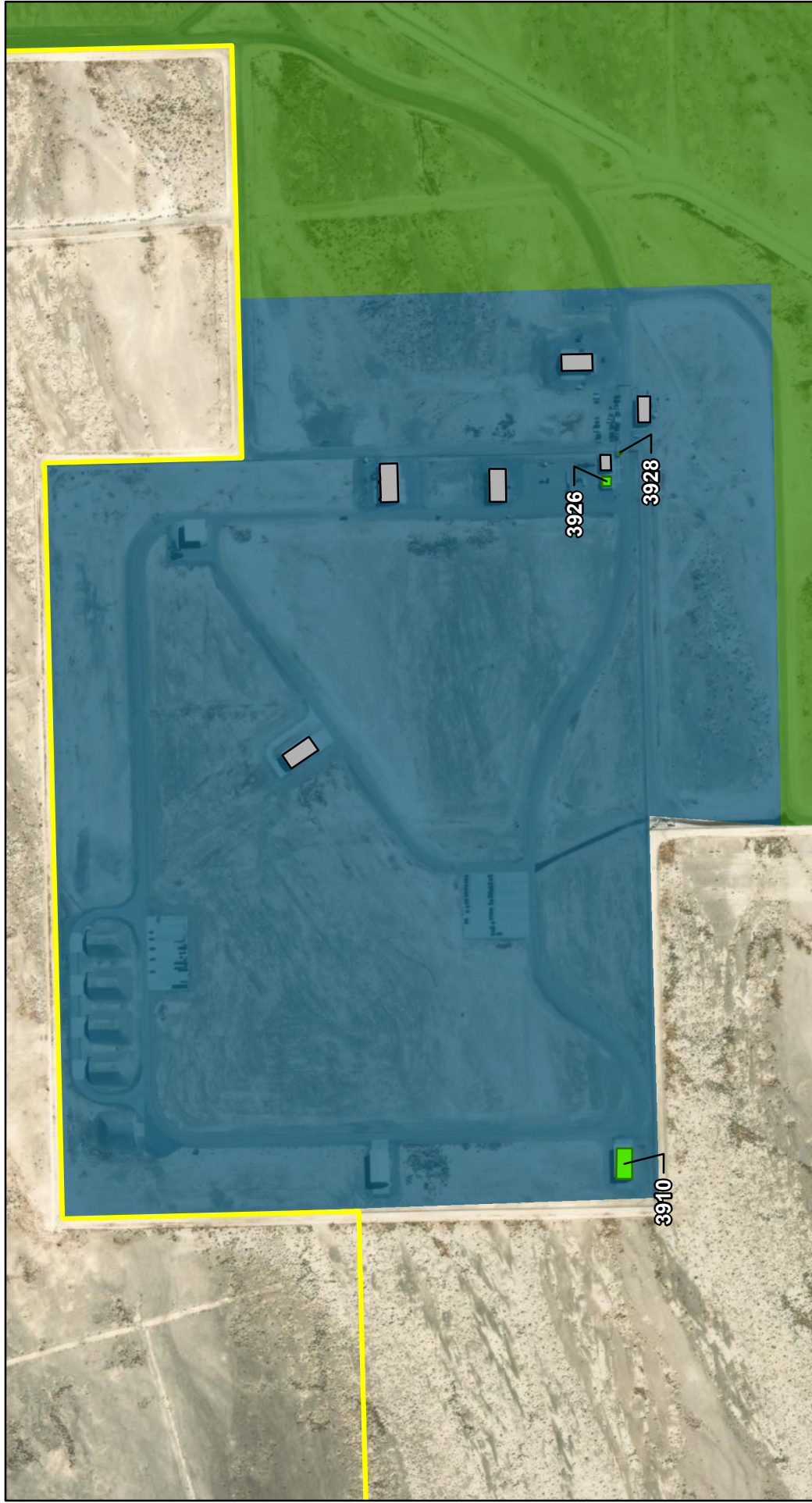
- | | | | |
|--|-------------------------------|--|----------------------------|
| | Installation Boundary | | Southside Operations PD |
| | Airfield PD | | T-Shirt PD |
| | Community Support PD | | Demolished Building |
| | Mission Operations Complex PD | | Cold War-Era Building |
| | MSA PD | | Post-Cold War-Era Building |

N
 0 500 1,000 Feet
 Imagery: ESRI, 2021
 Coordinate System: WGS 1984 UTM Zone 11N

MSA = Munitions Storage Area; PD = Planning District







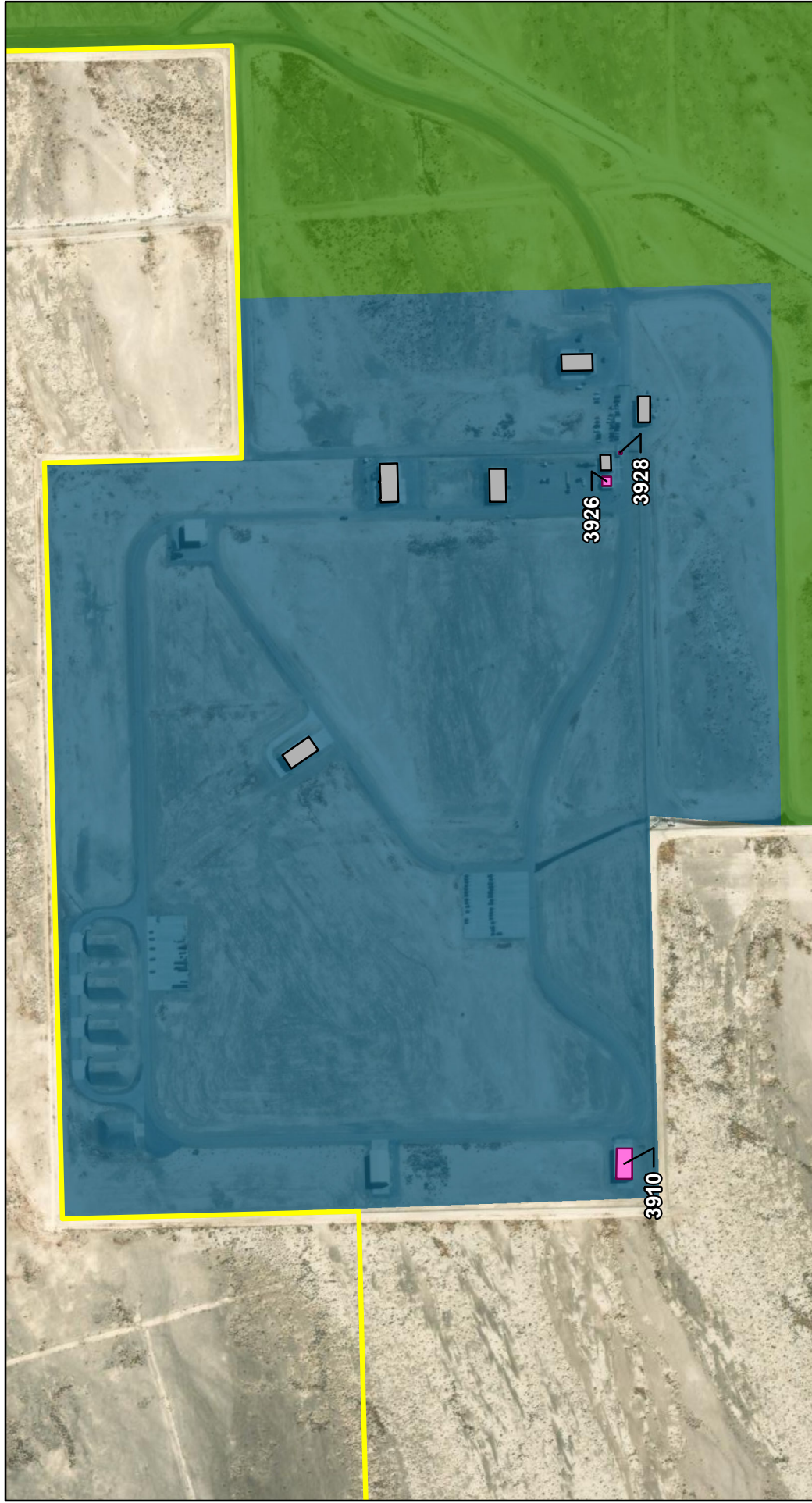
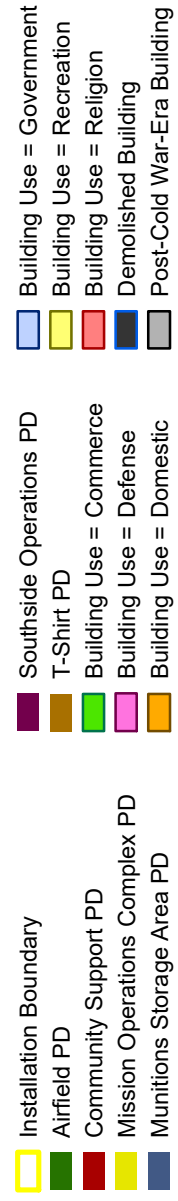


Figure 10
Cold War-Era Building Use Types within the Munitions Storage Area PD



Imagery: ESRI, 2021
Coordinate System: WGS 1984 UTM Zone 11N



PD = Planning District

5 CONCLUSIONS

Based on archival research and a historic district assessment conducted to address recent SHPO consultation concerns regarding 34 buildings at Creech AFB, EAS recommends that no historic districts are present at the Installation. The evaluation did not identify any combination of buildings or structures that possess the collective significance and integrity required for consideration as a historic district under the NRHP criteria. Accordingly, no buildings at Creech AFB are considered contributing resources to a historic district.

This page intentionally left blank

6 REFERENCES

Department of the Air Force (DAF)

2015 *Installation Development Plan*. Creech Air Force Base, Nevada. May 2015.

2019a *History of Creech AFB*. Creech Air Force Base, Nevada. <https://www.creech.af.mil/About-Us/Fact-Sheets/Display/Article/449127/history-of-creech-air-force-base/> (Accessed, November 23, 2022).

2019b *Integrated Cultural Resources Management Plan: Nellis Air Force Base, Creech Air Force Base, Nevada Test and Training Range*. Nellis Air Force Base, Nevada. US Air Force.

2020 *Integrated Natural Resources Management Plan: Nellis Air Force Base, Creech Air Force Base, Nevada Test and Training Range*. Nellis Air Force Base, Nevada. US Air Force.

2024 *Draft Environmental Assessment, Proposed Installation Development Plan Projects at Creech Air Force Base, Clark County, Nevada*. October 2024.

Gulf South Research Corporation (GSRC) and R. Christopher Goodwin & Associates (RCG&A).

2018 *Historical Building Inventory of Nellis Air Force Base, Creech Air Force Base, and Nevada Test and Training Range, Las Vegas, Nevada*. SHPO UT# 2018-5168; 24132 and 24674. Prepared for the Department of the Air Force. November 2018.

Myhrer, Keith M.

2012 *A History of the Nellis Air Force Base Military Training Lands, Nellis Air Force Base, Nevada*. Nellis Air Force Base, NV.

Myrick, David F.

1963 *Railroads of Nevada and Eastern California, Volume II: The Southern Roads*. University of Nevada Press, Reno, Nevada.

National Park Service (NPS)

1997 *How to Apply the National Register Criteria for Evaluation*. National Register Bulletin No. 15. National Park Service, U.S. Department of the Interior, Washington, D.C.

1998 *Guidelines for Evaluating and Nominating Properties that Have Achieved Significance Within the Past Fifty Years*. National Register Bulletin No. 22. National Park Service, U.S. Department of the Interior, Washington, D.C.

Nationwide Environmental Title Research, LLC (NETR)

1983 *Historic Aerials: Creech Air Force Base and Vicinity, 1983*. Available at <https://www.historicaerials.com/viewer>. Accessed September 4, 2025.

1994 *Historic Aerials: Creech Air Force Base and Vicinity, 1994*. Available at <https://www.historicaerials.com/viewer>. Accessed September 4, 2025.

Nevada State Historic Preservation Office (SHPO)

2020 Letter to the Department of the Air Force. Re: Historical Building Inventory of Nellis Air Force Base, Creech Air Force Base, and Nevada Test and Training Range, Las Vegas, Nevada (UT 2018-5168; 24132 and 24674). 19 June 2020.

2024 Letter to the Department of the Air Force. Re: Environmental Assessment (EA) for proposed installation of development plan projects at Creech Air Force Base (AFB), Clark County, NV; SHPO UT #2024-8334; 35630. 21 August 2024.

2025 Nevada Cultural Resource Information System (NVCRIS). Nevada SHPO, Carson City, NV. Electronic database, <https://nvcris.shpo.nv.gov/> (accessed August 2025).

United States Government Land Office (USGLO)

- 1881 Supplemental Plat for Township 16 South, Range 56 East, Mount Diablo Meridian, State of Nevada. Approved by Edmund S. Davis, Surveyor General.
- 1920 Supplemental Plat for Township 16 South, Range 56 East, Mount Diablo Meridian, State of Nevada. Approved by John B. Sullivan, Surveyor General.

APPENDIX A

AGENCY CORRESPONDENCE

This page intentionally left blank



NEVADA
**STATE HISTORIC
PRESERVATION OFFICE**

Department of Conservation and Natural Resources

Steve Sisolak, Governor
Bradley Crowell, Director
Rebecca L. Palmer, Administrator, SHPO

June 19, 2020

Lt Col Christopher J. Wedewer
USAF Commander
USAF 99th CES
6020 Beale Ave.
Nellis AFB, NV 89191

COPY

Re: Historical Building Inventory of Nellis Air Force Base, Creech Air Force Base, and Nevada Test and Training Range, Clark County, Nevada (UT 2018-5168 #s 24132)

Dear Lt Col Wedewer:

The Nevada State Historic Preservation Office (SHPO) received the subject documents on August 6, 2018 and has reviewed them in accordance with Section 110 of the National Historic Preservation Act (NHPA) of 1966, as amended.

The Department of the Air Force (USAF) submitted a Section 110 survey entitled *Historical Building Inventory of Nellis Air Force Base, Creech Air Force Base, and Nevada Test and Training Range, Las Vegas, Nevada* and is seeking SHPO concurrence on the agency's National Register of Historic Places (NRHP) eligibility determinations (draft dated June 2018).

Ineligible Resources

The SHPO **concurs** that 62 of the surveyed resources are **not eligible** for NRHP listing either as individual resources or as contributing resources to potential historic districts due to a lack of integrity, construction outside the period of significance, lack of association, or clear evidence that no historic district is present in that location (i.e., a related grouping of buildings where the majority have non-historic alterations).

For a list of the 62 resources, please see the attached inventory tables. The SHPO has indicated concurrence in the right-hand column of each (with "concur NE").

Eligible Resources

The SHPO **concurs** that the following resources are **eligible** for listing in the NRHP: B15930, B15936, and B15999.

Resources that are Not Individually Eligible

The SHPO **concurs** that *all* the other surveyed resources that are not among the 65 discussed above are **not individually eligible** for listing in the NRHP. Please refer to the attached

Lt Col Christopher J. Wedewer
Page 2 of 2
June 19, 2020

inventory tables. If a row contains a check mark in the right-hand column, that resource is not individually eligible.

Note that at this time, the resources in this category remain unevaluated for NRHP eligibility as contributing members of potential historic districts.

As discussed with USAF staff on several occasions and noted in recent letters, the 2018 survey report currently does not contain enough information for our office to concur that historic district(s) are not present at Nellis. Regardless of whether a resource is not individually eligible, its full NRHP eligibility is unknown until it has been evaluated as a possible contributing resource to a potential historic district.

If the agency believes that no historic districts exist at Nellis AFB, Creech, or NTTR beyond those that have already been identified, that can be demonstrated and justified with minimal additional work. Past conversations with Nellis staff outlined our office's recommendations for supplementing this survey to determine whether unidentified historic districts are present. As previously mentioned, our office recommends that a lack of historic districts be justified in a short report format containing the following types of information.

- Color-coded maps illustrating a lack of cohesiveness. Maps could include data such as:
 - Distribution of dates of construction;
 - Distribution of intact resources versus altered resources;
 - Distribution of use types;
 - Location of buildings that are no longer present; and
 - Location of non-historic infill buildings.
- Written justification summarizing the data and explaining why no districts are present.

If adequate information of that type were submitted to the SHPO, and if our office concurred with the findings, the NRHP eligibility of all surveyed resources at Nellis, Creech, and NTTR would be known.

Should you have questions concerning this correspondence, please contact me at (775) 684-3439 or by email at knbrown@shpo.nv.gov.

Sincerely,



Robin K. Reed
Deputy State Historic Preservation Officer

cc via email: Kish LaPierre, NAFB Cultural Resource Manager

24132 & 24674

Key

Concur = Not individually eligible & not eligible as contributing resource to potential historic district
✓ = Not individually eligible. SHPO considers resource unevaluated for NRHP eligibility as a contributing resource to a historic district.

CREECH

SHPO
COMMENTS

Table 13. Evaluated Resources at Creech AFB

SHPO #	Building Number	Historic Name	Current Name	Property Type	Resource Type	Construction Date	NRHP Recommendation
B16170	3	Traffic Check House	Traffic Check House	Support Facilities: Security	Building	1987	Not Eligible ✓
B16171	4	Visiting Officers Quarters (VOQ)	Visiting Officers Quarters (VOQ)	Housing	Building	1986	Not Eligible ✓
B16172	5	Visiting Airmen's Quarters (VAQ)	Visiting Airmen's Quarters (VAQ)	Housing	Building	1986	Not Eligible ✓
B16173	24	Visiting Airmen's Quarters (VAQ)	Visiting Airmen's Quarters (VAQ)	Housing	Building	1969	Not Eligible ✓
B16174	39	Base Theater	Diamondback Briefing Facility	Support Facilities: Recreational	Building	1953	Not Eligible ✓
B16175	50	Warehouse	DFAC Supply Warehouse	Support Facilities: Maintenance and Storage	Building	1990	Not Eligible ✓
B16176	64	Communications Facility	Communications Facility	Operational Facilities	Building	1986	Not Eligible ✓
B16177	66	Organizational Classroom	Civil Engineers Utilities Shop	Support Facilities: Maintenance and Storage	Building	1984	Not Eligible ✓
B16178	71	Dining Hall, Airmen	Exchange canteen Snack Bar	Support Facilities: Personnel	Building	1977	Not Eligible ✓
B13734	82	Squadron Operations	Transient Alert	Operational Facilities	Building	1982	Not Eligible ✓
B16179	86	Administration Office, Fire Station	Administration Office, Non Air Force	Operational Facilities	Building	1989	Not Eligible ✓
B16180	91	Base Operations Facility	Deployed Operations	Operational Facilities	Building	1952	Not Eligible ✓
B16181	92	Office	Security Police Operations	Operational Facilities	Building	1952	Not Eligible ✓
B16182	93	Control Tower	Control Tower	Operational Facilities	Building	1987	Not Eligible ✓
B16183	96	Cold Storage Building	Electrical Shop	Support Facilities: Maintenance and Storage	Building	1952	Not Eligible ✓
B16184	115	Vehicle Maintenance Shop	Vehicle Maintenance Shop	Support Facilities: Maintenance and Storage	Building	1991	Not Eligible ✓
B16185	127	Temporary Lodging Facility (TLF)	Laundry	Housing	Building	1984	Not Eligible ✓
B16186	140	Warehouse	Range Supply & Equipment Storage/Combat Arms Storage	Support Facilities: Maintenance and Storage	Building	1953	Not Eligible ✓
B16187	225	Vehicle Maintenance Shop	Vehicle Maintenance and Transportation	Support Facilities: Maintenance and Storage	Building	1976	Not Eligible ✓
B16188	227	Vehicle Maintenance Shop	Vehicle Maintenance Shop	Support Facilities: Maintenance and Storage	Building	1983	Not Eligible ✓
B16189	239	Base Storage Shed	Base Storage CV Facility	Support Facilities: Maintenance and Storage	Building	1956	Not Eligible ✓
B16190	241	Base Storage Shed	Base Storage CV Facility	Support Facilities: Maintenance and Storage	Building	1957	Not Eligible ✓
B16191	242	Base Storage Shed	Base Storage Shed	Support Facilities: Maintenance and Storage	Building	1984	Not Eligible ✓
B16192	243	Base Storage Shed	Civil Engineers Lock Shop/Paint Storage	Support Facilities: Maintenance and Storage	Building	1982	Not Eligible ✓
B16193	400	Community Support Building - Laundromat	Base Engineer Maintenance Shop	Support Facilities: Personnel	Building	1986	Not Eligible ✓
B16194	402	Base Chapel	Base Chapel, Echoes of Faith Community Church	Support Facilities: Personnel	Building	1986	Not Eligible ✓
B16195	404	Community Center	Squad Engagement Training System/99th Ground Combat Training Squadron	Support Facilities: Personnel	Building	1986	Not Eligible ✓
B16196	406	Child Care Center	Group Headquarters	Support Facilities: Personnel	Building	1986	Not Eligible ✓
B16197	3910	Storage	Magazine Storage	Support Facilities: Maintenance and Storage	Building	1990	Not Eligible ✓
B16198	3926	Munitions Maintenance Administration	Munitions Maintenance Administration	Administration Facilities	Building	1990	Not Eligible ✓
B16199	3928	Security Entry Control Building	Security Entry Control Building	Support Facilities: Security	Building	1990	Not Eligible ✓

NE



NEVADA
**STATE HISTORIC
PRESERVATION OFFICE**

STATE OF NEVADA
Department of Conservation and Natural Resources

Joe Lombardo, *Governor*
James A. Settelmeyer, *Director*
Rebecca L. Palmer, *Administrator*

August 21, 2024

Colonel Nicholas R. Pederson, USAF
Commander
US Department of the Air Force
432 SPTS/CE
1065 Perimeter Road
Creech AFB NV 89018

RE: Environmental Assessment (EA) for proposed installation of development plan projects at
Creech Air Force Base (AFB), Clark County, NV; SHPO UT #2024-8334; 35630

Dear Colonel Pederson:

The Nevada State Historic Preservation Office (SHPO) has reviewed the subject documents in accordance with 54 U.S.C. § 306108 commonly known as Section 106 of the National Historic Preservation Act of 1966, as amended.

Project Description

The United States (US) Department of Air Force (USAF) proposed action involves 36 short-term development actions and real-property improvements including new construction, demolition, repairs, renovations, and upgrades at Creech AFB from 2024-2029.

Area of Potential Effect (APE)

The USAF has not identified the APE for this undertaking, either in a written description or on a map. The submitted project area map (Attachment 1) is inadequate for the SHPO's review and comment. This map needs to be both legible and based on a USGS 7.5' topographic map base with the proposed APE boundary clearly depicted on it to meet the minimum documentation standards found at 36 CFR § 800.11. Please submit an adequate APE map for our office's review and comment that considers all proposed potential effects for this undertaking.

Identification and Evaluation of Historic Properties

The USAF is requesting "information on any historic properties located therein that may be affected by the proposed undertaking."

Archaeological Resources

Although this submission does not request review of any proposed identification efforts, the entire base has been inventoried for archaeological resources with the final piece reviewed by the SHPO in 2022.

Architectural Resources

Regarding our enclosed June 19, 2020 letter (UT# 2018-5168; 24132 and 24674), the SHPO has not received a written response from the USAF specifically for the buildings / structures at Creech. If our

Commander Pederson
August 21, 2024
Page 2 of 3

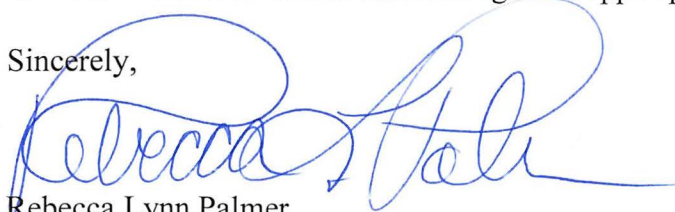
records are in error, please let us know. The 2018 basewide architectural survey, *Building Inventory of Nellis Air Force Base, Creech Air Force Base, and Nevada Test and Training Range, Las Vegas, Nevada*, did not include enough information for our office to evaluate that historic districts are not present at Creech. Page two of our 2020 letter outlined our request for limited additional information that our office needs to receive in order to evaluate whether or not a historic district is present at Creech. We look forward to receiving this information for review and comment.

Regarding individual eligibility for listing in the National Register of Historic Places (NRHP), the USAF's Attachment 2 list of demolition projects (pages 2-12 and 2-13) includes buildings B86, B404, and B406. Architectural Resource Assessment (ARA) forms were included for these 3 buildings in the 2018 basewide architectural survey, and our office previously concurred in our 2020 letter with the USAF's determination that these 3 resources are not individually NRHP eligible. However, the one-page table for Creech resources in our 2020 letter stated that our office considers these 3 resources **unevaluated** for NRHP eligibility as contributing resources to a historic district. This conclusion is still valid.

To our knowledge, three other buildings proposed for demolition (B95, B55, and B137) were not included in the basewide survey. If our records are in error, please let us know. Unless a previous inventory exists and the USAF has documentation that our office previously concurred on individual eligibility, the USAF should submit an NRHP evaluation for each resource (on individual ARA forms for consistency) to our office for review and comment. Therefore, at this time, our office considers these 3 resources as **unevaluated** for both individual NRHP eligibility and as contributing resources to a historic district.

The SHPO's review of this undertaking has stopped pending receipt of the information mentioned above.

Sincerely,



Rebecca Lynn Palmer
State Historic Preservation Officer

enc. SHPO June 19, 2020 letter (UT# 2018-5168; 24132 and 24674)

From: Lori Rayner <lrayner@shpo.nv.gov>

Sent: Tuesday, March 11, 2025 10:01 AM

To: DORROUGH, SEAN D CIV USAF ACC 432 SPTS/CEIE <sean.dorrough.1@us.af.mil>

Cc: Robin Reed <rreed@shpo.nv.gov>; Georgie De Antoni <gdeantoni@shpo.nv.gov>

Subject: [Non-DoD Source] Review of Environmental Assessment for Creech AFB (SHPO UT 2024-8334; 36089)

You don't often get email from lrayner@shpo.nv.gov. [Learn why this is important](#)

Good morning, Mr. Dorrough,

The SHPO is in the process of reviewing the Draft Environmental Assessment (EA) for 36 short – term installation development projects at Creech AFB.

Regarding the Area of Potential Effect (APE):

1. Per the SHPO's letter dated August 21, 2024, our office had requested additional information regarding the project's APE and a new APE map on a 7.5' USGA topographic map base with the proposed APE boundary clearly depicted to meet the minimum documentation standards found at 36 CFR § 800.11. The Figure 2-1 map on page 37 of the EA titled "Location of Proposed IDP Projects" still does not adequately identify the APE boundary and where all project activities will occur, including staging and transportation routes of vehicles or heavy equipment.
2. Page 72 of the EA states that "The direct and indirect APE for this EA is 50 meters and 800 meters around each project location, respectively." Please submit a new map that considers all proposed potential effects for this undertaking to assist our office in completing our current review

Regarding the identification and evaluation of cultural and historic resources within the APE:

3. The EA states on pages 72 and 73 that records searches were conducted including NVCRIS, and that no archaeological properties are located within the APE.
4. However, at the bottom of page 73 the EA states that "The proposed action would avoid disturbance of all eligible and unevaluated sites within the Installation".
5. Also, the agency's letter dated February 10, 2025 states that "Areas of Project C26 would be located outside of the Installation boundary. Due to the possible presence of eligible archaeological sites within Project C26's development area and the potential for subsurface deposits, it is recommended that a qualified archaeologist be present to monitor all construction activities to ensure that no archaeological resources are disturbed or destroyed".
6. These statements appear to be contradictory. Please provide our office with the report from NVCRIS confirming there are no archaeological properties located within the APE. If archaeological resources do exist within the APE, please provide our office with a listing of these resources as well as IMACS site forms and any updates that the agency has made to the forms regarding determinations of eligibility.
7. The SHPO's August 21, 2024 letter requested additional information about several buildings, structures and potential historic districts that may be present within the Installation or are proposed for demolition so the SHPO could evaluate the existence of

APPENDIX B
LIST OF PROPOSED CREECH AIR FORCE BASE INSTALLATION
DEVELOPMENT PLAN PROJECTS

This page intentionally left blank

Appendix B – List of Creech AFB Installation Development Plan Projects

Map ID Number	Project Title	Project Description	Purpose and Need	Estimated Construction Year	Estimated New Facility or Infrastructure Size	Estimated Change in Facility Footprint
AIRFIELD DISTRICT						
Construction Projects						
C1	Taxiway Alpha Addition	This project would construct a taxiway extension and arm/disarm pad that extends the existing Taxiway Alpha to the west threshold of Runway 08/26. This project would include asphalt taxiway; concrete arm/disarm pad; paved shoulders; airfield lighting, markings, and guidance signage; addition of an access roadway leading to the arm/disarm pad; airfield storm drainage; utilities; and all other work as necessary.	Purpose: The purpose of the proposed project is to add additional capacity to the airfield taxiway and to allow aircraft to taxi to the arm/disarm pad. Need: The project is needed because currently, Aircraft must back-taxi on the runway, which has caused delays and runway inefficiencies.	2026	539,175 ft ²	+539,175 ft ²
C2	Weapons Load Trainer Facility	This project would construct a MQ-9 Weapons Load Crew Training Facility utilizing conventional design and construction methods. The facility would be constructed with a reinforced concrete foundation/floor slab, structural-steel frame, metal panel with brick veneer exterior, and standing seam metal roof. Construction associated with this project would include information systems, fire protection and alarm systems, cybersecurity measures, intrusion detection system installation, and energy monitoring and control systems connection. Supporting facilities would include a training bay access apron, parking areas, construction of an access roadway, security lighting, storm drainage, site improvements, signage, and all other necessary features to make a complete and useable facility.	Purpose: The purpose of the proposed project is to prevent disruptions to the Weapons Load Crew Training and to provide secure, dedicated space for the training to occur. Need: The proposed project is needed because the current training area is inadequate for current operational needs and training capabilities are disrupted. Creech AFB needs a dedicated training facility to keep up with manning increases.	2026	42,033 ft ²	+42,033 ft ²

Appendix B – List of Creech AFB Installation Development Plan Projects

Map ID Number	Project Title	Project Description	Purpose and Need	Estimated Construction Year	Estimated New Facility or Infrastructure Size	Estimated Change in Facility Footprint
C3	LRS Deployment Center	This project would construct a two-story Deployment Processing Center and include an aircraft parking apron capable of supporting two C-17's or one C-5 airframe.	<p>Purpose: The purpose of the proposed project is to support Creech AFB's mission and training requirements with increased efficiency through functional centralization and the optimization of existing resources.</p> <p>Need: The proposed project is needed due to the outdated and inefficient infrastructure that currently supports the Mission Operations Complex District. The proposed project is also needed to provide centralized infrastructure (near the Community Support District) that would provide needed facilities identified as part of the area development planning process.</p>	2026	43,075 ft ²	+43,075 ft ²
C4	MQ-9 CPIP GDT Antenna Complex	The project would construct a properly sited and configured antenna tower complex for the installation of eight MQ-9 ground data terminal (GDT) systems. The GDT antenna system provides a mission-critical, line-of-site communications link from the ground control station to the remotely piloted aircraft (RPA) for launch and recovery operations. This project provides 50-ft-high fixed towers that would be used to support the GDT system. The Defense Spectrum Organization – Joint Spectrum Center identified a preferred site location for the antennas that would mitigate existing C-band video link mishaps due to existing GDT locations and resulting electro-magnetic interference saturation. The proposed antenna complex is located north of Runway 08/26 and west of the live ordnance loading area. This site ensures that saturation-induced interference is precluded during airfield operations and avoids existing building and fence line obstructions.	<p>Purpose: The purpose of the proposed project is to increase safety and communication for airfield operations by reducing saturation-induced interference between communications systems.</p> <p>Need: The proposed project is needed because currently, C-band video link mishaps occur due to existing GDT locations and electro-magnetic interference saturation. Communication expansion is needed to reduce radio interference.</p>	2025	4,000 ft ²	+4,000 ft ²

Appendix B – List of Creech AFB Installation Development Plan Projects

Map ID Number	Project Title	Project Description	Purpose and Need	Estimated Construction Year	Estimated New Facility or Infrastructure Size	Estimated Change in Facility Footprint
C5	Construct GDT Tower Site	This project would construct a GDT tower site.	<p>Purpose: The purpose of the proposed project is to revitalize and expand communication capabilities at Creech AFB.</p> <p>Need: The proposed project is needed because the current towers require reconstruction due to their condition and age. Communication expansion is also needed to reduce radio interference.</p>	2024	2,000 ft ²	+2,000 ft ²
C6	Construct Northwest Frangible Airfield Fence	This project would construct a fence between Northwest Perimeter Road and the flightline.	<p>Purpose: The purpose of the proposed project is to provide security for airfield operations by enclosing the airfield.</p> <p>Need: The proposed project is needed to reduce the security risk to airfield operations by regulating access to the airfield through fencing and controlled entry points per Air Force Policy Directive (AFPD) 13-2, <i>Air Traffic Control, Airfield, Airspace, and Range Management</i>, and defined in Air Force Manual (AFMAN) 13-204, <i>Air Traffic Control</i>.</p>	2025	9,400 lf	+9,400 lf
C7	Construct Frangible Airfield Fence First Street	This project would construct a fence between West Perimeter Road and the flightline.	<p>Purpose: The purpose of the proposed project is to provide security for airfield operations by enclosing the airfield.</p> <p>Need: The proposed project is needed to reduce the security risk to airfield operations by regulating access to the airfield through fencing and controlled entry points per AFPD 13-2 and defined in AFMAN 13-204.</p>	2025	9,100 lf	+9,100 lf
C8	Construct Central Frangible Airfield Fence	This project would construct a fence between North Perimeter Road and the flightline.	<p>Purpose: The purpose of the proposed project is to provide security for airfield operations by enclosing the airfield.</p> <p>Need: The proposed project is needed to reduce the security risk to airfield operations by regulating access to the airfield through fencing and controlled entry points per AFPD 13-2 and defined in AFMAN 13-204.</p>	2025	4,600 lf	+4,600 lf

Appendix B – List of Creech AFB Installation Development Plan Projects

[illegible]

Appendix B – List of Creech AFB Installation Development Plan Projects

Map ID Number	Project Title	Project Description	Purpose and Need	Estimated Construction Year	Estimated New Facility or Infrastructure Size	Estimated Change in Facility Footprint
C10	Warrior Fitness Center	This project would construct basketball and racquetball courts, a 1/10th mile elevated indoor running track, unit physical training/group exercise areas, weight rooms, administration, lockers, showers, and restrooms. Supporting facilities include all required utilities, staff and customer parking areas, sidewalks, lighting, signage, and other site improvements. The project would incorporate sustainability and energy measures, stormwater mitigation, and meet antiterrorism force protection standoff requirements.	<p>Purpose: The purpose of the proposed project is to support Creech AFB's mission and training requirements with increased efficiency through functional centralization and the optimization of existing resources.</p> <p>Need: The proposed project is needed due to the outdated and inefficient infrastructure that currently supports the Mission Operations Complex District. The proposed project is also needed to provide centralized infrastructure (near the Community Support District) that would provide needed facilities identified as part of the area development planning process.</p>	2026	44,000 ft ²	+44,000 ft ²

Appendix B – List of Creech AFB Installation Development Plan Projects

Map ID Number	Project Title	Project Description	Purpose and Need	Estimated Construction Year	Estimated New Facility or Infrastructure Size	Estimated Change in Facility Footprint
C11	Install Solar and Battery Systems	<p>This project would design and install a cybersecure microgrid control system integrated with large-scale photovoltaic (PV) arrays, battery energy storage system, and thermal energy storage system to address physical, cybersecurity, and climate threats as described in Creech AFB's Energy Resilience Assessment. Installation activities would include new electrical infrastructure, new automated main switchgear, new automated sectionalizing switches, step-up transformers, new fiber/ supervisory control and data acquisition, and a megawatt charging system integrated with the existing utility megawatt charging system. The system would dispatch distributed energy resources to respond to grid disruptions and control automated switching sequences for microgrid operation, separation of critical and non-critical loads, and dispatch of electricity to recover from system faults, anomalies, or outages. This project would be located within the existing fence line on the northeast corner of Creech AFB and would potentially include up to 71.2 acres primarily for PV arrays, including 19.4 acres on a closed landfill location. Additional locations considered in this area have been previously reserved for unrelated future projects. A PV with 4.0 megawatts (MW) capacity would be installed. For the battery energy storage system, a lithium iron phosphate battery chemistry is the current basis of design; 5.8 MW/11.6 kilowatt-hours would meet microgrid peak demand.</p>	<p>Purpose: The purpose of the proposed project is to support continued mission operations in the event of power loss, provide Installation-critical facilities with emergency backup power, and increase Creech AFB's energy resilience.</p> <p>Need: The proposed project is needed because Installation-critical facilities currently lack emergency backup power capabilities in the event of power loss.</p>	2025 (estimated)	3,101,472 ft ²	+3,101,472 ft ²

Appendix B – List of Creech AFB Installation Development Plan Projects

Map ID Number	Project Title	Project Description	Purpose and Need	Estimated Construction Year	Estimated New Facility or Infrastructure Size	Estimated Change in Facility Footprint
MISSION OPERATIONS COMPLEX DISTRICT						
Construction Projects						
C12	Mission Support Facility	This project would construct a Mission Support Center, providing a permanent, consolidated facility for the 432d Mission Support Group and Force Support Squadron in support of mission and support services for all personnel on Creech AFB.	<p>Purpose: The purpose of the proposed project is to support Creech AFB's mission and training requirements with increased efficiency through functional centralization and the optimization of existing resources.</p> <p>Need: The proposed project is needed because the infrastructure that currently supports the Mission Operations Complex District is outdated and inefficient. The proposed project is also needed to provide centralized infrastructure (near the Community Support District) that would provide needed facilities identified as part of the area development planning process.</p>	2026	36,966 ft ²	+36,966 ft ²

Appendix B – List of Creech AFB Installation Development Plan Projects

Map ID Number	Project Title	Project Description	Purpose and Need	Estimated Construction Year	Estimated New Facility or Infrastructure Size	Estimated Change in Facility Footprint
C13	RPA Structural Repair Facility	This project would construct an RPA Structural Repair Facility and a separate Corrosion Control Utility Storage Building. The proposed facility would provide a modern, functional space capable of supporting required MQ-9 structural and composite repair as well as non-destructive inspection.	<p>Purpose: The purpose of the proposed project is to support Creech AFB's mission and training requirements with increased efficiency through functional centralization and the optimization of existing resources.</p> <p>Need: The proposed project is needed because the infrastructure that currently supports the Mission Operations Complex District is outdated and inefficient. The proposed project is also needed to provide centralized infrastructure (near the Community Support District) that would provide needed facilities identified as part of the area development planning process.</p>	2025	52,124 ft ²	+52,124 ft ²
C14	RPA Maintenance Hangar	This project would construct an RPA Maintenance Hangar adequately configured to support eight MQ-9s and provide administrative and maintenance space for the activation of a new Aircraft Maintenance Unit.	<p>Purpose: The purpose of the proposed project is to provide additional administrative and maintenance space for the activation of a new Aircraft Maintenance Unit.</p> <p>Need: The proposed project is needed because an increase in RPAs requires more space than is currently available. RPAs that are due for maintenance are currently being parked outside while awaiting space.</p>	2027	77,887 ft ²	+77,887 ft ²

Appendix B – List of Creech AFB Installation Development Plan Projects

Map ID Number	Project Title	Project Description	Purpose and Need	Estimated Construction Year	Estimated New Facility or Infrastructure Size	Estimated Change in Facility Footprint
C15	Casket & WRM AGE Storage Facility	This project would construct a War Reserve Materiel (WRM) Aerospace Ground Equipment (AGE) Storage Facility with a consolidated and secure, climate-controlled storage space that would enhance the capability of the 432d Maintenance Group to sustain and deploy critical RPA mission equipment. The facility would also provide an AGE storage bay, bench stock/tool room, parts cleaning, and a semi-enclosed wash rack area.	<p>Purpose: The purpose of the proposed project is to support Creech AFB's mission and training requirements with increased efficiency through functional centralization and the optimization of existing resources.</p> <p>Need: The proposed project is needed because the infrastructure that currently supports the Mission Operations Complex District is outdated and inefficient. The proposed project is also needed to provide centralized infrastructure (near the Community Support District) that would provide needed facilities identified as part of the area development planning process.</p>	2026	21,000 ft ²	+21,000 ft ²
C16	Wing Advance Programs Facility	This project would construct a facility to house the 432 Wing Advance Programs. This facility would require additional space to accommodate current staffing.	<p>Purpose: The purpose of the proposed project is to provide dedicated space to accommodate current staffing of the 432d Wing Advance Programs.</p> <p>Need: The proposed project is needed because the Wing Advance Programs team does not have adequate staffing space. The team is currently operating out of a small office and is unable to accommodate all assigned personnel.</p>	2026	2,000 ft ²	+2,000 ft ²

Appendix B – List of Creech AFB Installation Development Plan Projects

Map ID Number	Project Title	Project Description	Purpose and Need	Estimated Construction Year	Estimated New Facility or Infrastructure Size	Estimated Change in Facility Footprint
C17	Construct North GDT Towers	The project would repair by replacing current GDT towers on the north airfield apron. This project is currently being reevaluated for removal of the current three towers.	Purpose: The purpose of the proposed project is to revitalize and expand communication capabilities at Creech AFB. Need: The proposed project is needed because the current towers require reconstruction due to their condition and age. Communication expansion is also needed to reduce radio interference.	2024	1,000 ft ²	+1,000 ft ²
C18	Construct CAT/EOC Facility	This project would construct a structure that would be co-located with B1209. This structure would be a single-floor facility and utilize the existing parking lot.	Purpose: The purpose of the proposed project is to provide dedicated space for Crisis Action Team/Emergency Operations Center (CAT/EOC) teams and alleviate mission disruptions and Creech AFB. Need: The proposed project is needed because CAT/EOC teams do not have a designated location at Creech AFB. The current location is dual-purposed and interrupts other missions when activated.	2025	5,000 ft ²	+5,000 ft ²

Appendix B – List of Creech AFB Installation Development Plan Projects

Map ID Number	Project Title	Project Description	Purpose and Need	Estimated Construction Year	Estimated New Facility or Infrastructure Size	Estimated Change in Facility Footprint
C19	Construct North Flightline ECP Barriers	This project would install fencing and an automatic gate system for flightline entry control point (ECP) access.	<p>Purpose: The purpose of the proposed project is to establish a secure ECP for the airfield.</p> <p>Need: The proposed project is needed because no entry point currently exists with direct access to airfield operations. All vehicles destined for this location currently must enter through the main access control points. A designated access point is needed to improve safety and airfield operations by providing direct access for emergency and response vehicles.</p>	2023	400 lf	+400 lf
MUNITIONS STORAGE AREA DISTRICT						
Construction Projects						
C20	Munitions Storage Igloo	This project would construct an aboveground earth-covered munitions storage igloo with a reinforced concrete foundation/floor slab and a pre-engineered reinforced concrete panel exterior with earth covering. The project would include blast-resistant steel doors, interior and exterior lighting, grounding, surge protection, intrusion detection system, and an exterior concrete access apron.	<p>Purpose: The purpose of the proposed project is to provide additional space for munitions storage</p> <p>Need: The proposed project is needed to support operations growth. The current capabilities are unable to support anticipated expansions at Creech AFB.</p>	2026	2,046 ft ²	+2,046 ft ²
Infrastructure Projects						
I3	Repair Water Lines Zone III	This project would repair water lines in Zone 3 as identified in the Creech AFB Installation Development Plan (IDP).	<p>Purpose: The purpose of the proposed project is to ensure consistent delivery of water on Creech AFB.</p> <p>Need: The proposed project is needed because Installation water lines are considered crucial infrastructure at Creech AFB. Routine inspection and repair of the water lines are required to ensure proper maintenance.</p>	2027	7,820 lf	N/A

Appendix B – List of Creech AFB Installation Development Plan Projects

Map ID Number	Project Title	Project Description	Purpose and Need	Estimated Construction Year	Estimated New Facility or Infrastructure Size	Estimated Change in Facility Footprint
C21	Network Control Center	This project would consolidate four communication flight facilities by constructing a new facility. The structure would be sized to encompass the whole of the communications flight and a communication node for Creech AFB.	Purpose: The purpose of the proposed project is to upgrade the communication capabilities and consolidate flight facilities at Creech AFB to improve efficiency. Need: The proposed project is needed because equipment upgrades and replacements are necessary to maintain operation and security missions at Creech AFB.	2028	2,500 ft ²	+2,500 ft ²
C22	Airfield Operations Center	This project would construct an approximately 15,000-ft ² facility, which would consolidate deployed operations, transit alert, and air traffic control. This construction is currently planned for fiscal year 2025 to relocate B93 to the current location of B726. A parking lot to the west of B726 is being discussed.	Purpose: The purpose of the proposed project is to support efficient airfield operations and improve security and communications. Need: The proposed project is needed because current airfield operations units are separated into individual facilities, disrupting operations. By removing an aging control tower, Creech AFB would consolidate airfield operations into one streamlined facility.	2026	15,000 ft ²	+15,000 ft ²
C23	Construct south GDT Towers	This project would construct a replacement for the current GDT towers on the south airfield.	Purpose: The purpose of the proposed project is to revitalize and expand communication capabilities at Creech AFB. Need: The proposed project is needed because the current towers require reconstruction due to their condition and age. Communication expansion is also needed to reduce radio interference.	2024	1,000 ft ²	+1,000 ft ²

Appendix B – List of Creech AFB Installation Development Plan Projects

Map ID Number	Project Title	Project Description	Purpose and Need	Estimated Construction Year	Estimated New Facility or Infrastructure Size	Estimated Change in Facility Footprint
C24	Construct Perimeter Road Fence	This project would provide re-enforcement of the southeast fence.	Purpose: The purpose of the proposed project is to provide security for airfield operations by enclosing the perimeter road. Need: The proposed project is needed because the southeast fence needs re-enforcement to provide increased airfield security for airfield operations.	2025	9,100 lf	+9,100 lf
C25	Construct AGE Storage Facility	This project would construct a warehouse and administrative space on the north apron beside B1131.	Purpose: The purpose of the proposed project is to provide adequate storage for aircraft ground equipment. Need: The proposed project is needed to protect equipment stored on the north side of Creech AFB from outside elements.	2025	13,993 ft ²	+13,993 ft ²
Demolition Projects						
D1	Demo Airfield Lighting Vault B95	This project would demolish the Airfield Lighting Vault, B95.	Purpose: The purpose of the proposed project is to reduce the DAF footprint. Need: The proposed project is needed because unused facilities require costs associated with infrastructure upkeep. Removing these facilities reduces costs and provides space for new infrastructure.	2023	N/A	-500 ft ²
D2	Demo B86	This project would demolish B86.	Purpose: The purpose of the proposed project is to reduce the DAF footprint. Need: The proposed project is needed because unused facilities require costs associated with infrastructure upkeep. Removing these facilities reduces costs and provides space for new infrastructure.	2023	N/A	-1,700 ft ²

Appendix B – List of Creech AFB Installation Development Plan Projects

Map ID Number	Project Title	Project Description	Purpose and Need	Estimated Construction Year	Estimated New Facility or Infrastructure Size	Estimated Change in Facility Footprint
D3	Demo HQ Admin B55	This project would demolish the Headquarters Administration (HQ) Building, B55.	Purpose: The purpose of the proposed project is to reduce the DAF footprint. Need: The proposed project is needed because unused facilities require costs associated with infrastructure upkeep. Removing these facilities reduces costs and provides space for new infrastructure.	2024	N/A	-5,200 ft ²
D4	Demo Buildings (B137, B404, B406)	This project would demolish B137, B404, and B406.	Purpose: The purpose of the proposed project is to reduce the DAF footprint. Need: The proposed project is needed because unused facilities require costs associated with infrastructure upkeep. Removing these facilities reduces costs and provides space for new infrastructure.	2023	N/A	-5,000 ft ²

Appendix B – List of Creech AFB Installation Development Plan Projects

Map ID Number	Project Title	Project Description	Purpose and Need	Estimated Construction Year	Estimated New Facility or Infrastructure Size	Estimated Change in Facility Footprint
Infrastructure Projects						
I4	Repair Water Lines Zone II	This project would repair water lines in Zone 2 as identified in the Creech AFB IDP.	<p>Purpose: The purpose of the proposed project is to ensure consistent delivery of water on Creech AFB.</p> <p>Need: The proposed project is needed because Installation water lines are considered crucial infrastructure at Creech AFB. Routine inspection and repair of the water lines are required to ensure proper maintenance.</p>	2027	12,275 lf	N/A
I5	Repair Water Lines Zone I	This project would repair water lines in Zone 1 as identified in the Creech AFB IDP.	<p>Purpose: The purpose of the proposed project is to repair crucial infrastructure on Creech AFB.</p> <p>Need: The proposed project is needed because Installation water lines are considered crucial infrastructure at Creech AFB. Routine inspection and repair of the water lines are required to ensure proper maintenance.</p>	2027	6,115 lf	N/A

Appendix B – List of Creech AFB Installation Development Plan Projects

Map ID Number	Project Title	Project Description	Purpose and Need	Estimated Construction Year	Estimated New Facility or Infrastructure Size	Estimated Change in Facility Footprint
PROJECTS LOCATED OUTSIDE OF THE LAND USE DISTRICTS						
Construction Projects						
C26	Commercial Vehicle Gate	This project would construct a new 6,000-ft ² commercial vehicle inspection facility with gatehouse inspection bays. The area for construction would need to be graded and formed to provide a stable foundation. All utilities would be hydro excavated to a depth of 3–6 feet (ft). The primary electrical circuit would run approximately 500 ft, communications lines would run approximately 2,700 ft, and water lines would run approximately 3,000 ft to trench to the main feed. Sewage would be trenched for a septic tank and septic field. New asphalt road construction would be needed approximately 6,100 ft from US Highway 95 to a newly constructed guard facility.	Purpose: The purpose of the proposed project is to provide security and safety protection to Installation personnel while alleviating traffic congestion concerns along US Highway 95. Need: The proposed project is needed because the current access location results in closures to both personnel entry and highway travel by the Installation. Disruptions are a result of current entry-point conditions caused by commercial vehicle inspections. The project is needed to resolve both concerns.	2026	4,660 ft ²	+4,660 ft ²
C27	Northwest Perimeter Fence	This project would construct a fence to contain the remaining land owned by Creech AFB in the northwest parcel.	Purpose: The purpose of the proposed project is to provide security of Creech AFB-owned land by enclosing the parcel. Need: The proposed project is needed because the Creech AFB-owned parcel is not currently enclosed, posing a security risk.	2025	11,000 lf	+11,000 lf

APPENDIX C
BUILDINGS WITH UNRESOLVED CONSULTATION AT CREECH AIR
FORCE BASE

This page intentionally left blank

Additional Documentation and Evaluation of Potential Historic Districts
Creech Air Force Base, Clark County, Nevada

SHPO Resource #	Creech AFB Building #	Historic Name	Current Name	Property Type	Resource Type	Location	Construction Date	Integrity	NRHP Status
B16170	B3	Traffic Check House	Traffic Check House	Defense	Building	Southside Operations District	1987	Intact	Individually ineligible
B16171	B4	Visiting Officer's Quarters	Visiting Officer's Quarters	Domestic	Building	Southside Operations District	1986	Intact	Individually ineligible
B16172	B5	Visiting Almen's Quarters	Visiting Almen's Quarters	Domestic	Building	Southside Operations District	1986	Intact	Individually ineligible
B16173	B24	Visiting Almen's Quarters	Visiting Almen's Quarters	Domestic	Building	Southside Operations District	1969	Intact	Individually ineligible
B16174	B39	Base Theater	Diamondback Briefing Facility	Recreation	Building	Southside Operations District	1953	Altered	Individually ineligible
B16175	B50	Warehouse	DFAC Supply Warehouse	Defense	Building	Southside Operations District	1990	Intact	Individually ineligible
N/A	B55	Joint UAS Center	Joint UAS Center	Demolished	Building	Southside Operations District	2006	Demolished	Demolished
B16176	B64	Communications Facility	Communications Facility	Defense	Building	Southside Operations District	1986	Altered	Individually ineligible/ Ineligible as a contributing resource to a district
B16177	B66	Organizational Classron	Civil Engineers Utilities Shop	Defense	Building	Southside Operations District	1984	Intact	Individually ineligible
B16178	B71	Dining Hall, Almen	Exchange Caf Snack Bar	Commerce	Building	Southside Operations District	1977	Altered	Individually ineligible
B13734	B82	Squadron Operations	Transient Alert	Defense	Building	Southside Operations District	1982	Intact	Individually ineligible
B16179	B86	Administration Office, Fire Station	Administration Office, Non Air Force	Government	Building	Southside Operations District	1989	Intact	Individually ineligible

Additional Documentation and Evaluation of Potential Historic Districts
Creech Air Force Base, Clark County, Nevada

SHPO Resource #	Creech AFB Building #	Historic Name	Current Name	Property Type	Resource Type	Location	Construction Date	Integrity	NRHP Status
B16180	B91	Base Operations Facility	Deployed Operations	Defense	Building	Southside Operations District	1952	Altered	Individually ineligible
B16181	B92	Office	Security Police Operations	Defense	Building	Southside Operations District	1952	Altered	Individually ineligible
B16182	B93	Control Tower	Control Tower	Defense	Building	Southside Operations District	1987	Intact	Individually ineligible
B13735	B95	Utility Vault, Building 95	Utility Vault, Building 95	Defense	Building	Southside Operations District	1952	Original	Individually ineligible
B16183	B96	Cold Storage Building	Electrical Shop	Defense	Building	Southside Operations District	1952	Altered	Individually ineligible
B16184	B115	Vehicle Maintenance Shop	Vehicle Maintenance Shop	Defense	Building	Southside Operations District	1991	Intact	Individually ineligible
B16185	B127	Temporary Lodging Facility	Laundry	Domestic	Building	Southside Operations District	1984	Intact	Individually ineligible
N/A	B137	Base Supply Administration	Base Supply Administration	Demolished	Building	Southside Operations	1994	Demolished	Demolished
B16186	B140	Warehouse	Range Supply & Equipment Storage/Combat Arms Storage	Defense	Building	Southside Operations District	1953	Intact	Individually ineligible
B16187	B225	Vehicle Maintenance Shop	Vehicle Maintenance and Transportation	Defense	Building	Southside Operations District	1976	Altered	Individually ineligible
B16188	B227	Vehicle Maintenance Shop	Vehicle Maintenance Shop	Defense	Building	Southside Operations District	1983	Intact	Individually ineligible
B16189	B239	Base Storage Shed	Base Storage Shed	Defense	Building	Southside Operations District	1956	Intact	Individually ineligible
B16190	B241	Base Storage Shed	Base Storage CV Facility	Defense	Building	Southside Operations District	1957	Intact	Individually ineligible

Additional Documentation and Evaluation of Potential Historic Districts
Creech Air Force Base, Clark County, Nevada

SHPO Resource #	Creech AFB Building #	Historic Name	Current Name	Property Type	Resource Type	Location	Construction Date	Integrity	NRHP Status
B16191	B242	Base Storage Shed	Base Storage Shed	Defense	Building	Southside Operations District	1984	Intact	Individually ineligible
B16192	B243	Base Storage Shed	Civil Engineers Lock Shop/Paint Storage	Defense	Building	Southside Operations District	1982	Intact	Individually ineligible
B16193	B400	Community Support Building-Laundromat	Base Engineer Maintenance Shop	Defense	Building	T-Shirt District	1986	Intact	Individually ineligible
B16194	B402	Base Chapel	Base Chapel, Echoes of Faith Community Church	Religion	Building	T-Shirt District	1986	Intact	Individually ineligible
B16195	B404	Community Center	Squad Engagement Training System/99th Ground Combat Training Squadron	Defense	Building	T-Shirt District	1986	Intact	Individually ineligible
B16196	B406	Child Care Center	Group Headquarters	Defense	Building	T-Shirt District	1986	Intact	Individually ineligible
B16197	B3910	Storage	Magasin Storage	Defense	Building	Munitions Storage Area District	1990	Intact	Individually ineligible
B16198	B3926	Munitions Maintenance Administration	Munitions Maintenance Administration	Defense	Building	Munitions Storage Area District	1990	Intact	Individually ineligible
B16199	B3928	Security Entry Control Building	Security Entry Control Building	Defense	Building	Munitions Storage Area District	1990	Intact	Individually ineligible

This page intentionally left blank

APPENDIX B. PUBLIC NOTICES

This page intentionally left blank

HOMES

Continued from Page 1A

bornly” high mortgage interest rates and economic uncertainty to start 2025 he remains optimistic about the housing market moving forward.

“The increase in our median price is another sign of the continued demand for housing here in Southern Nevada. It’s also good to see our housing supply increasing in recent months so people have more choices when looking for a home,” he said. “Overall, I remain confident that the local housing market will remain as strong as any in the U.S.”

The valley is in a housing crisis as a lack of land to develop has coupled with high mortgage rates, a slowdown in building and increased construction and labor costs.

Homes listed for sale without any type of offer also remain elevated at the end of January, at 5,215 homes listings, a 46.9 percent increase from one year ago. Condos and townhomes listed without any offer are up even more — 66.9 percent — from this time last year.

A total of 1,991 existing homes, condos and townhomes sold in January, and compared to January 2024,



An aerial view of homes at Sarasota, a master-planned community in The Paseos of Summerlin, as seen on Thursday. Bizuayehu Tesfaye Las Vegas Review-Journal @bizutesfaye

sales were up 6.7 percent for homes, but down 13.2 percent for condos and townhomes.

Economic uncertainty abounds during the first few weeks of Presi-

dent Donald Trump’s administra- tion as analysts think mortgage rates could go up because of a trade war with China and a pending trade war with China and Mexico. Tariffs also

could potentially increase prices on building materials, and more.

Contact Patrick Blennerhassett at pblennerhassett@reviewjournal.com.

SHIMER

Continued from Page 1A

The report indicates that Shimer, a criminal defense and personal injury attorney who has practiced law in Nevada since 2009, is the only other lawyer police questioned during the investigation. Only Guymon is facing criminal charges.

According to the report, Guymon instructed one of his clients, whom he allegedly encouraged to engage in prostitution with his associates, to contact Shimer in October.

'Locker room talk'

The report also details the August conversation between Guymon and Shimer, when Guymon told the other attorney to bring condoms for a boat outing.

Shimer told the Review-Journal he was upset that he was named in the Metro report and called his conversation with Guymon “locker room talk, basically.”

Shimer also has previously worked with the Las Vegas Police Protective Association as one of the attorneys who would respond to police shootings to speak with officers.

Steve Grammas, the president of the police union, declined to say why Shimer is no longer with the organization.

According to Guymon’s arrest report, he texted one of his clients in October: “My friend John would like to see you.” That conversation happened two months after Guymon and Shimer discussed going onto Guymon’s boat.

“The text message from the girl, who I never met before, was totally unsolicited,” Shimer said during a brief interview Thursday at the Regional Justice Center.

Shimer said he was frustrated that the report makes it look like he “was reaching out for that.”

“I voluntarily met with the de- tectives and cooperated fully with their investigation,” Shimer said in a statement on Thursday in response to follow-up questions. “However, I want to be clear, I received an unso- licited text from an unknown num- ber, I ultimately blocked the person as I was not interested. To this day, I have no idea who texted me.”

Reached earlier this week, Guy-

mon declined to comment.

The Metro report indicates that de- tectives interviewed Shimer on Jan. 17, and that police only asked him about the boat trip with Guymon. Shimer also told police that his text messages with Guymon were “guy talk” and said he did not have sex with anyone on the boat.

In August, Shimer texted Guymon about the boat trip: “I’m in for the

suspend Guymon’s law license.

According to Guymon’s arrest report, he represented at least two of the alleged victims on prostitu- tion-related charges, including the woman he gave Shimer’s contact information. That woman told police that when she asked Guymon about paying him for his legal services, he told her: “I want you to come to my office and dance for me.” Guymon

engaged in.”

She said she went onto Guymon’s boat with another one of his clients in October, two days after Guymon officially began representing her in court. During that trip, Guymon told the two women to engage in sexual acts, and said his client would “go to jail if you don’t,” the report said.

The report details three other women whom police say Guymon encouraged or coerced into prostitu- tion. He is also accused of conspir- ing with two felons to kill one of the women as he was under investiga- tion, according to the report.

Guymon is facing charges of solici- tation to commit murder, conspiracy to commit murder, sex trafficking of an adult, three counts of pandering, perjury, coercion with threat of force and three counts of bribing or intim- idating a witness. He is scheduled to appear in court for a status hearing on March 6.

Contact Katelyn Newberg at kneuberg@reviewjournal.com or 702-383-0240.

The report also details the August conversation between Guymon and Shimer, when Guymon told the other attorney to bring condoms for a boat outing.

shenanigans tomorrow!!! I’m bring- ing cash for the donation. Can I bring anything else?”

Guymon responded with: “Con- doms,” according to the report.

A detective wrote in the report that Shimer told Guymon he would “have to pick up some condoms,” and Guymon replied that “he al- ready had some for Shimer.”

Shimer then asked: “Is \$500 enough for tomorrow?”

Guymon told him: “Listen. We’re not sending these women’s children to college. That’s too much. Diapers and formula are very inexpensive.”

Shimer later told police that he brought cash to the boat outing to purchase fuel, the report said.

On Thursday, Shimer told the Review-Journal that he had been on Guymon’s boat with his longtime girlfriend and several other “mem- bers of the community,” including other lawyers he did not name.

Guymon has been a member of the state bar since 1989 and has worked at both the Clark County district attorney’s office and public defender’s office. As a prosecutor, he was in charge of high-profile cases such as the murder trial for Mar- garet Rudin, whose conviction was vacated in 2022. He left the office after his name surfaced in a public corruption case involving county commissioners and Cheetah’s strip club owner Michael Galardi.

Law license in question

Daniel Hooze, the state bar’s gen- eral counsel, said the bar submitted a petition with the Nevada Supreme Court on Thursday to temporarily

also told the woman he wanted her to pay by having sex with him, the report said.

The woman told police that Guy- mon took photos of her in his office, which she believed were going to be sent to his friends, the report said. She said Guymon introduced her to at least four of his friends for “pros- titution-related activities, which she

Attention to detail like no other.



“Our experience at Palm Mortuaries was smooth and supportive. The staff’s empathy and patience helped beyond what words can describe.

I am forever grateful.”

Customer, January 2025



The detail we’re most proud of
Palm Mortuaries is a symbol of trust and a mark of excellence. We celebrate life with compassion and attention to detail that is second to none.

10 locations in Las Vegas and Henderson.

PUBLIC NOTICE NOTICE OF AVAILABILITY DRAFT ENVIRONMENTAL ASSESSMENT AND PROPOSED FINDING OF NO SIGNIFICANT IMPACT FOR PROPOSED INSTALLATION DEVELOPMENT PLAN PROJECTS CREECH AIR FORCE BASE, NEVADA

The Department of the Air Force (DAF) announces the availability of a Draft Environmental Assessment (EA) and proposed Finding of No Significant Impact (FONSI) evaluating potential impacts from the DAF’s Proposed Action of implementing 36 short-term Installation development plan projects at Creech Air Force Base (AFB). The proposed projects would involve demolition of aging facilities, new facility construction, facility upgrades, facility repair and renovation, utilities upgrades, community living upgrades, infrastructure improvement, recreational upgrades, natural infrastructure management projects, and strategic sustainability performance projects to be completed or implemented over approximately the next 5 years.

The Draft EA, prepared in accordance with the National Environmental Policy Act (NEPA), Council on Environmental Quality (CEQ) regulations, and DAF NEPA implementing guidelines, evaluates potential environmental impacts of reasonable alternatives to the Proposed Action, including the No Action Alternative. Based on this analysis, no significant, adverse impacts would be anticipated from implementation of the proposed Installation development projects. Accordingly, the DAF has prepared a proposed FONSI.

Printed copies of the Draft EA and proposed FONSI are available for review at the following locations:

- Centennial Hills Library, 6711 N. Buffalo Dr, Las Vegas, NV 89131
- Indian Springs Library, 715 Gretta Ln, Indian Springs, NV 89018

Electronic copies of the documents are available on the Creech AFB website at <https://www.creech.af.mil/>. Members of the public are encouraged to submit comments within 30 days of the publication of this notice. Address comments to Sean Dorrough, 432 SPTS/CE, 1065 Perimeter Road, Creech AFB, NV, 89018, or by email to sean.dorrough.1@us.af.mil.

APPENDIX C. AIR CONFORMITY APPLICABILITY MODEL ANALYSIS

This page intentionally left blank

AIR CONFORMITY APPLICABILITY MODEL REPORT

RECORD OF AIR ANALYSIS (ROAA)

1. General Information: The Air Force's Air Conformity Applicability Model (ACAM) was used to perform a net change in emissions analysis to assess the potential air quality impact/s associated with the action. The analysis was performed in accordance with the Air Force Manual 32-7002, *Environmental Compliance and Pollution Prevention*; the *Environmental Impact Analysis Process* (EIAP, 32 CFR 989); the *General Conformity Rule* (GCR, 40 CFR 93 Subpart B); and the *USAF Air Quality Environmental Impact Analysis Process (EIAP) Guide*. This report provides a summary of the ACAM analysis.

a. Action Location:

Base: CREECH AFB
State: Nevada
County(s): Clark
Regulatory Area(s): NOT IN A REGULATORY AREA

b. Action Title: Creech AFB Installation Development Plan (IDP)

c. Project Number/s (if applicable):

d. Projected Action Start Date: 1 / 2024

e. Action Description:

- Creech AFB proposes to implement 36 short-term development projects, including demolition of aging facilities, new facility construction, facility upgrades, facility repair and renovation, utilities upgrades, community living upgrades, infrastructure improvement, recreational upgrades, natural infrastructure management projects, and strategic sustainability performance projects to be completed or implemented over the next 5 years (FY 2024–2029). Projects include:
- Taxiway Alpha Addition: This project would construct a taxiway extension and arm/disarm pad that extends the existing Taxiway Alpha to the west threshold of Runway 08/26. This project would include asphalt taxiway; concrete arm/disarm pad; paved shoulders; airfield lighting, markings, and guidance signage; addition of an access roadway leading to the arm/disarm pad; airfield storm drainage; utilities; and all other work as necessary.
- Weapons Load Trainer Facility: This project would construct a MQ-9 Weapons Load Crew Training Facility utilizing conventional design and construction methods. The facility would be constructed with a reinforced concrete foundation/floor slab, structural-steel frame, metal panel with brick veneer exterior, and standing seam metal roof. Construction associated with this project would include information systems, fire protection and alarm systems, cybersecurity measures, intrusion detection system installation, and energy monitoring and control systems connection. Supporting facilities would include a training bay access apron, parking areas, construction of an access roadway, security lighting, storm drainage, site improvements, signage, and all other necessary features to make a complete and useable facility.
- LRS Deployment Center: This project would construct a two-story Deployment Processing Center and include an aircraft parking apron capable of supporting two C-17's or one C-5 airframe.
- MQ-9 CPIP GDT Antenna Complex: The project would construct a properly sited and configured antenna tower complex for the installation of eight MQ-9 ground data terminal (GDT) systems.
- Construct Airfield Fencing: These projects would construct a fencing needed to reduce the security risk to airfield operations by regulating access to the airfield.
- North Side Electrical Loop: This project would construct a finished electrical loop system of approximately 30,000 linear feet (lf) from the southwest side of the Base to the north side of the Base. This would be accomplished by running a new electrical line from the intersection of Box Canyon and Hunters Road to Building 1065 (B1065).
- Repair Airfield Pavements: This project would repair airfield pavements identified in the 2015 Airfield Pavement Evaluation.
- Warrior Fitness Center: This project would construct basketball and racquetball courts, a 1/10th mile elevated indoor running track, unit physical training/group exercise areas, weight rooms, administration, lockers, showers, and restrooms. Supporting facilities include all required utilities, staff and customer

AIR CONFORMITY APPLICABILITY MODEL REPORT

RECORD OF AIR ANALYSIS (ROAA)

parking areas, sidewalks, lighting, signage, and other site improvements. The project would incorporate sustainability and energy measures, stormwater mitigation, and meet antiterrorism force protection standoff requirements.

- **Install Solar and Battery Systems:** This project would design and install a cybersecure microgrid control system integrated with large-scale photovoltaic (PV) arrays, battery energy storage system (BESS), and thermal energy storage system to address physical, cybersecurity, and climate threats as described in Creech AFB's Energy Resilience Assessment.
- **Mission Support Facility:** This project would construct a Mission Support Center, providing a permanent, consolidated facility for the 432d Mission Support Group and Force Support Squadron in support of mission and support services for all personnel on Creech AFB.
- **RPA Structural Repair Facility:** This project would construct an RPA Structural Repair Facility and a separate Corrosion Control Utility Storage Building. The proposed facility would provide a modern, functional space capable of supporting required MQ-9 structural and composite repair as well as non-destructive inspection.
- **RPA Maintenance Hangar:** This project would construct an RPA Maintenance Hangar adequately configured to support eight MQ-9s and provide administrative and maintenance space for the activation of a new Aircraft Maintenance Unit.
- **Casket & WRM AGE Storage Facility:** This project would construct a War Reserve Materiel (WRM) Aerospace Ground Equipment (AGE) Storage Facility with a consolidated and secure, climate-controlled storage space that would enhance the capability of the 432d Maintenance Group to sustain and deploy critical RPA mission equipment. The facility would also provide an AGE storage bay, bench stock/tool room, parts cleaning, and a semi-enclosed wash rack area.
- **Wing Advance Programs Facility:** This project would construct a facility to house the 432 Wing Advance Programs. This facility would require additional space to accommodate current staffing.
- **Construct North GDT Towers:** The project would repair by replacing current GDT towers on the north airfield apron. This project is currently being reevaluated for removal of the current three towers.
- **Construct CAT/EOC Facility:** This project would construct a structure that would be co-located with B1209. This structure would be a single-floor facility and utilize the existing parking lot.
- **Munitions Storage Igloo:** This project would construct an aboveground earth-covered munitions storage igloo with a reinforced concrete foundation/floor slab and a pre-engineered reinforced concrete panel exterior with earth covering. The project would include blast-resistant steel doors, interior and exterior lighting, grounding, surge protection, intrusion detection system, and an exterior concrete access apron.
- **Repair Water Lines:** This project would repair water lines as identified in the Creech AFB Installation Development Plan (IDP).
- **Network Control Center:** This project would consolidate four communication flight facilities by constructing a new facility. The structure would be sized to encompass the whole of the communications flight and a communication node for Creech AFB.
- **Airfield Operations Center:** This project would construct an approximately 15,000-ft² facility, which would consolidate deployed Operations, Transit Alert, and Air Traffic Control. This construction is currently planned for fiscal year 2025 to relocate B93 to the current location of B726. A parking lot to the west of B726 is being discussed.
- **Construct AGE Storage Facility:** This project would construct a warehouse and administrative space on the north apron beside B1131.
- **Commercial Vehicle Gate:** This project would construct a new 6,000-ft² commercial vehicle inspection facility with gatehouse inspection bays

f. Point of Contact:

Name:	J. Michael Nied, PE (WI)
Title:	Project Manager / Environmental Engineer
Organization:	Environmental Assessment Services, LLC
Email:	mnied@easbio.com
Phone Number:	(608) 797-1326

AIR CONFORMITY APPLICABILITY MODEL REPORT

RECORD OF AIR ANALYSIS (ROAA)

2. Air Impact Analysis: Based on the attainment status at the action location, the requirements of the GCR are:

☐ applicable
☒ not applicable

Total reasonably foreseeable net direct and indirect emissions associated with the action were estimated through ACAM on a calendar-year basis for the start of the action through achieving “steady state” (hsba.e., no net gain/loss in emission stabilized and the action is fully implemented) emissions. The ACAM analysis uses the latest and most accurate emission estimation techniques available; all algorithms, emission factors, and methodologies used are described in detail in the *USAF Air Emissions Guide for Air Force Stationary Sources*, the *USAF Air Emissions Guide for Air Force Mobile Sources*, and the *USAF Air Emissions Guide for Air Force Transitory Sources*.

"Insignificance Indicators" were used in the analysis to provide an indication of the significance of the proposed Action's potential impacts to local air quality. The insignificance indicators are trivial (de minimis) rate thresholds that have been demonstrated to have little to no impact to air quality. These insignificance indicators are the 250 ton/yr Prevention of Significant Deterioration (PSD) major source threshold and 25 ton/yr for lead for actions occurring in areas that are "Attainment" (hsba.e., not exceeding any National Ambient Air Quality Standard (NAAQS)). These indicators do not define a significant impact; however, they do provide a threshold to identify actions that are insignificant. Any action with net emissions below the insignificance indicators for all criteria pollutants is considered so insignificant that the action will not cause or contribute to an exceedance on one or more NAAQS. For further detail on insignificance indicators, refer to *Level II, Air Quality Quantitative Assessment, Insignificance Indicators*.

The action's net emissions for every year through achieving steady state were compared against the Insignificance Indicators and are summarized below.

Analysis Summary:

2024

Pollutant	Action Emissions (ton/yr)	INSIGNIFICANCE INDICATOR	
		Indicator (ton/yr)	Exceedance (Yes or No)
NOT IN A REGULATORY AREA			
VOC	0.136	250	No
NOx	1.127	250	No
CO	1.472	250	No
SOx	-0.099	250	No
PM 10	0.174	250	No
PM 2.5	0.046	250	No
Pb	0.000	25	No
NH3	0.001	250	No

2025

Pollutant	Action Emissions (ton/yr)	INSIGNIFICANCE INDICATOR	
		Indicator (ton/yr)	Exceedance (Yes or No)
NOT IN A REGULATORY AREA			
VOC	0.220	250	No
NOx	1.099	250	No
CO	1.674	250	No
SOx	-0.122	250	No
PM 10	0.059	250	No
PM 2.5	0.044	250	No
Pb	0.000	25	No
NH3	0.002	250	No

AIR CONFORMITY APPLICABILITY MODEL REPORT

RECORD OF AIR ANALYSIS (ROAA)

2026

Pollutant	Action Emissions (ton/yr)	INSIGNIFICANCE INDICATOR	
		Indicator (ton/yr)	Exceedance (Yes or No)
NOT IN A REGULATORY AREA			
VOC	0.550	250	No
NOx	2.514	250	No
CO	3.036	250	No
SOx	0.519	250	No
PM 10	19.709	250	No
PM 2.5	0.080	250	No
Pb	0.000	25	No
NH3	0.002	250	No

2027

2027

Pollutant	Action Emissions (ton/yr)	INSIGNIFICANCE INDICATOR	
		Indicator (ton/yr)	Exceedance (Yes or No)
NOT IN A REGULATORY AREA			
VOC	2.914	250	No
NOx	4.957	250	No
CO	4.521	250	No
SOx	3.078	250	No
PM 10	138.943	250	No
PM 2.5	0.158	250	No
Pb	0.000	25	No
NH3	0.004	250	No

2028

Pollutant	Action Emissions (ton/yr)	INSIGNIFICANCE INDICATOR	
		Indicator (ton/yr)	Exceedance (Yes or No)
NOT IN A REGULATORY AREA			
VOC	1.070	250	No
NOx	2.933	250	No
CO	2.044	250	No
SOx	3.884	250	No
PM 10	9.196	250	No
PM 2.5	0.076	250	No
Pb	0.000	25	No
NH3	0.002	250	No

2029

Pollutant	Action Emissions (ton/yr)	INSIGNIFICANCE INDICATOR	
		Indicator (ton/yr)	Exceedance (Yes or No)
NOT IN A REGULATORY AREA			
VOC	0.132	250	No
NOx	2.577	250	No
CO	1.381	250	No
SOx	3.915	250	No
PM 10	0.226	250	No
PM 2.5	0.064	250	No
Pb	0.000	25	No
NH3	0.004	250	No

AIR CONFORMITY APPLICABILITY MODEL REPORT RECORD OF AIR ANALYSIS (ROAA)

2030 - (Steady State)

Pollutant	Action Emissions (ton/yr)	INSIGNIFICANCE INDICATOR	
		Indicator (ton/yr)	Exceedance (Yes or No)
NOT IN A REGULATORY AREA			
VOC	0.031	250	No
NOx	1.812	250	No
CO	0.453	250	No
SOx	3.913	250	No
PM 10	0.112	250	No
PM 2.5	0.042	250	No
Pb	0.000	25	No
NH3	0.000	250	No

None of the estimated annual net emissions associated with this action are above the insignificance indicators; therefore, the action will not cause or contribute to an exceedance of one or more NAAQSs and will have an insignificant impact on air quality. No further air assessment is needed.

J. Michael Nied, PE (WI), Project Manager / Environmental Engineer

Jun 07 2024

Name, Title

Date

AIR CONFORMITY APPLICABILITY MODEL REPORT

GREENHOUSE GAS (GHG) EMISSIONS

1. General Information: The Air Force's Air Conformity Applicability Model (ACAM) was used to perform an analysis to estimate GHG emissions and assess the theoretical Social Cost of Greenhouse Gases (SC GHG) associated with the action. The analysis was performed in accordance with the Air Force Manual 32-7002, Environmental Compliance and Pollution Prevention; the Environmental Impact Analysis Process (EIAP, 32 CFR 989); and the USAF Air Quality Environmental Impact Analysis Process (EIAP) Guide. This report provides a summary of GHG emissions and SC GHG analysis.

a. Action Location:

Base: CREECH AFB
State: Nevada
County(s): Clark
Regulatory Area(s): NOT IN A REGULATORY AREA

b. Action Title: Creech AFB Installation Development Plan (IDP)

c. Project Number/s (if applicable):

d. Projected Action Start Date: 1 / 2024

e. Action Description:

- Creech AFB proposes to implement 36 short-term development projects, including demolition of aging facilities, new facility construction, facility upgrades, facility repair and renovation, utilities upgrades, community living upgrades, infrastructure improvement, recreational upgrades, natural infrastructure management projects, and strategic sustainability performance projects to be completed or implemented over the next 5 years (FY 2024–2029). Projects include:
- Taxiway Alpha Addition: This project would construct a taxiway extension and arm/disarm pad that extends the existing Taxiway Alpha to the west threshold of Runway 08/26. This project would include asphalt taxiway; concrete arm/disarm pad; paved shoulders; airfield lighting, markings, and guidance signage; addition of an access roadway leading to the arm/disarm pad; airfield storm drainage; utilities; and all other work as necessary.
- Weapons Load Trainer Facility: This project would construct a MQ-9 Weapons Load Crew Training Facility utilizing conventional design and construction methods. The facility would be constructed with a reinforced concrete foundation/floor slab, structural-steel frame, metal panel with brick veneer exterior, and standing seam metal roof. Construction associated with this project would include information systems, fire protection and alarm systems, cybersecurity measures, intrusion detection system installation, and energy monitoring and control systems connection. Supporting facilities would include a training bay access apron, parking areas, construction of an access roadway, security lighting, storm drainage, site improvements, signage, and all other necessary features to make a complete and useable facility.
- LRS Deployment Center: This project would construct a two-story Deployment Processing Center and include an aircraft parking apron capable of supporting two C-17's or one C-5 airframe.
- MQ-9 CPIP GDT Antenna Complex: The project would construct a properly sited and configured antenna tower complex for the installation of eight MQ-9 ground data terminal (GDT) systems.
- Construct Airfield Fencing: These projects would construct a fencing needed to reduce the security risk to airfield operations by regulating access to the airfield.
- North Side Electrical Loop: This project would construct a finished electrical loop system of approximately 30,000 linear feet (lf) from the southwest side of the Base to the north side of the Base. This would be accomplished by running a new electrical line from the intersection of Box Canyon and Hunters Road to Building 1065 (B1065).
- Repair Airfield Pavements: This project would repair airfield pavements identified in the 2015 Airfield Pavement Evaluation.
- Warrior Fitness Center: This project would construct basketball and racquetball courts, a 1/10th mile elevated indoor running track, unit physical training/group exercise areas, weight rooms, administration, lockers, showers, and restrooms. Supporting facilities include all required utilities, staff and customer

AIR CONFORMITY APPLICABILITY MODEL REPORT

GREENHOUSE GAS (GHG) EMISSIONS

parking areas, sidewalks, lighting, signage, and other site improvements. The project would incorporate sustainability and energy measures, stormwater mitigation, and meet antiterrorism force protection standoff requirements.

- **Install Solar and Battery Systems:** This project would design and install a cybersecure microgrid control system integrated with large-scale photovoltaic (PV) arrays, battery energy storage system (BESS), and thermal energy storage system to address physical, cybersecurity, and climate threats as described in Creech AFB's Energy Resilience Assessment.
- **Mission Support Facility:** This project would construct a Mission Support Center, providing a permanent, consolidated facility for the 432d Mission Support Group and Force Support Squadron in support of mission and support services for all personnel on Creech AFB.
- **RPA Structural Repair Facility:** This project would construct an RPA Structural Repair Facility and a separate Corrosion Control Utility Storage Building. The proposed facility would provide a modern, functional space capable of supporting required MQ-9 structural and composite repair as well as non-destructive inspection.
- **RPA Maintenance Hangar:** This project would construct an RPA Maintenance Hangar adequately configured to support eight MQ-9s and provide administrative and maintenance space for the activation of a new Aircraft Maintenance Unit.
- **Casket & WRM AGE Storage Facility:** This project would construct a War Reserve Materiel (WRM) Aerospace Ground Equipment (AGE) Storage Facility with a consolidated and secure, climate-controlled storage space that would enhance the capability of the 432d Maintenance Group to sustain and deploy critical RPA mission equipment. The facility would also provide an AGE storage bay, bench stock/tool room, parts cleaning, and a semi-enclosed wash rack area.
- **Wing Advance Programs Facility:** This project would construct a facility to house the 432 Wing Advance Programs. This facility would require additional space to accommodate current staffing.
- **Construct North GDT Towers:** The project would repair by replacing current GDT towers on the north airfield apron. This project is currently being reevaluated for removal of the current three towers.
- **Construct CAT/EOC Facility:** This project would construct a structure that would be co-located with B1209. This structure would be a single-floor facility and utilize the existing parking lot.
- **Munitions Storage Igloo:** This project would construct an aboveground earth-covered munitions storage igloo with a reinforced concrete foundation/floor slab and a pre-engineered reinforced concrete panel exterior with earth covering. The project would include blast-resistant steel doors, interior and exterior lighting, grounding, surge protection, intrusion detection system, and an exterior concrete access apron.
- **Repair Water Lines:** This project would repair water lines as identified in the Creech AFB Installation Development Plan (IDP).
- **Network Control Center:** This project would consolidate four communication flight facilities by constructing a new facility. The structure would be sized to encompass the whole of the communications flight and a communication node for Creech AFB.
- **Airfield Operations Center:** This project would construct an approximately 15,000-ft² facility, which would consolidate deployed Operations, Transit Alert, and Air Traffic Control. This construction is currently planned for fiscal year 2025 to relocate B93 to the current location of B726. A parking lot to the west of B726 is being discussed.
- **Construct AGE Storage Facility:** This project would construct a warehouse and administrative space on the north apron beside B1131.
- **Commercial Vehicle Gate:** This project would construct a new 6,000-ft² commercial vehicle inspection facility with gatehouse inspection bays

f. Point of Contact:

Name:	J. Michael Nied, PE (WI)
Title:	Project Manager / Environmental Engineer
Organization:	Environmental Assessment Services, LLC
Email:	mnied@easbio.com
Phone Number:	(608) 797-1326

AIR CONFORMITY APPLICABILITY MODEL REPORT

GREENHOUSE GAS (GHG) EMISSIONS

2. Analysis: Total combined direct and indirect GHG emissions associated with the action were estimated through ACAM on a calendar-year basis from the action start through the expected life cycle of the action. The life cycle for Air Force actions with "steady state" emissions (SS, net gain/loss in emission stabilized and the action is fully implemented) is assumed to be 10 years beyond the SS emissions year or 20 years beyond SS emissions year for aircraft operations related actions.

GHG Emissions Analysis Summary:

GHGs produced by fossil-fuel combustion are primarily carbon dioxide (CO₂), methane (CH₄), and nitrous oxide (NO₂). These three GHGs represent more than 97 percent of all U.S. GHG emissions. Emissions of GHGs are typically quantified and regulated in units of CO₂ equivalents (CO₂e). The CO₂e takes into account the global warming potential (GWP) of each GHG. The GWP is the measure of a particular GHG's ability to absorb solar radiation as well as its residence time within the atmosphere. The GWP allows comparison of global warming impacts between different gases; the higher the GWP, the more that gas contributes to climate change in comparison to CO₂. All GHG emissions estimates were derived from various emission sources using the methods, algorithms, emission factors, and GWPs from the most current Air Emissions Guide for Air Force Stationary Sources, Air Emissions Guide for Air Force Mobile Sources, and/or Air Emissions Guide for Air Force Transitory Sources.

The Air Force has adopted the Prevention of Significant Deterioration (PSD) threshold for GHG of 75,000 ton per year (ton/yr) of CO₂e (or 68,039 metric ton per year, mton/yr) as an indicator or "threshold of insignificance" for NEPA air quality impacts in all areas. This indicator does not define a significant impact; however, it provides a threshold to identify actions that are insignificant (de minimis, too trivial or minor to merit consideration). Actions with a net change in GHG (CO₂e) emissions below the insignificance indicator (threshold) are considered too insignificant on a global scale to warrant any further analysis. Note that actions with a net change in GHG (CO₂e) emissions above the insignificance indicator (threshold) are only considered potentially significant and require further assessment to determine if the action poses a significant impact. For further detail on insignificance indicators see Level II, Air Quality Quantitative Assessment, Insignificance Indicators (April 2023).

The following table summarizes the action-related GHG emissions on a calendar-year basis through the projected life cycle of the action.

Action-Related Annual GHG Emissions (mton/yr)						
YEAR	CO ₂	CH ₄	N ₂ O	CO ₂ e	Threshold	Exceedance
2024	148	0.00609627	-0.00022426	149	68,039	No
2025	195	0.00762995	-0.00026559	195	68,039	No
2026	739	0.02989518	0.01408615	742	68,039	No
2027	2,293	0.09188197	0.06561081	2,300	68,039	No
2028	2,086	0.08425446	0.07649268	2,093	68,039	No
2029	2,095	0.08259601	0.0764278	2,102	68,039	No
2030 [SS Year]	1,849	0.0750217	0.0750217	1,855	68,039	No
2031	1,849	0.0750217	0.0750217	1,855	68,039	No
2032	1,849	0.0750217	0.0750217	1,855	68,039	No
2033	1,849	0.0750217	0.0750217	1,855	68,039	No
2034	1,849	0.0750217	0.0750217	1,855	68,039	No
2035	1,849	0.0750217	0.0750217	1,855	68,039	No
2036	1,849	0.0750217	0.0750217	1,855	68,039	No
2037	1,849	0.0750217	0.0750217	1,855	68,039	No
2038	1,849	0.0750217	0.0750217	1,855	68,039	No
2039	1,849	0.0750217	0.0750217	1,855	68,039	No
2040	1,849	0.0750217	0.0750217	1,855	68,039	No

AIR CONFORMITY APPLICABILITY MODEL REPORT

GREENHOUSE GAS (GHG) EMISSIONS

The following U.S. and State's GHG emissions estimates (next two tables) are based on a five-year average (2016 through 2020) of individual state-reported GHG emissions (Reference: State Climate Summaries 2022, NOAA National Centers for Environmental Information, National Oceanic and Atmospheric Administration. <https://statesummaries.ncics.org/downloads/>).

State's Annual GHG Emissions (mton/yr)				
YEAR	CO2	CH4	N2O	CO2e
2024	39,602,863	85,229	6,288	39,694,380
2025	39,602,863	85,229	6,288	39,694,380
2026	39,602,863	85,229	6,288	39,694,380
2027	39,602,863	85,229	6,288	39,694,380
2028	39,602,863	85,229	6,288	39,694,380
2029	39,602,863	85,229	6,288	39,694,380
2030 [SS Year]	39,602,863	85,229	6,288	39,694,380
2031	39,602,863	85,229	6,288	39,694,380
2032	39,602,863	85,229	6,288	39,694,380
2033	39,602,863	85,229	6,288	39,694,380
2034	39,602,863	85,229	6,288	39,694,380
2035	39,602,863	85,229	6,288	39,694,380
2036	39,602,863	85,229	6,288	39,694,380
2037	39,602,863	85,229	6,288	39,694,380
2038	39,602,863	85,229	6,288	39,694,380
2039	39,602,863	85,229	6,288	39,694,380
2040	39,602,863	85,229	6,288	39,694,380

U.S. Annual GHG Emissions (mton/yr)				
YEAR	CO2	CH4	N2O	CO2e
2024	5,136,454,179	25,626,912	1,500,708	5,163,581,798
2025	5,136,454,179	25,626,912	1,500,708	5,163,581,798
2026	5,136,454,179	25,626,912	1,500,708	5,163,581,798
2027	5,136,454,179	25,626,912	1,500,708	5,163,581,798
2028	5,136,454,179	25,626,912	1,500,708	5,163,581,798
2029	5,136,454,179	25,626,912	1,500,708	5,163,581,798
2030 [SS Year]	5,136,454,179	25,626,912	1,500,708	5,163,581,798
2031	5,136,454,179	25,626,912	1,500,708	5,163,581,798
2032	5,136,454,179	25,626,912	1,500,708	5,163,581,798
2033	5,136,454,179	25,626,912	1,500,708	5,163,581,798
2034	5,136,454,179	25,626,912	1,500,708	5,163,581,798
2035	5,136,454,179	25,626,912	1,500,708	5,163,581,798
2036	5,136,454,179	25,626,912	1,500,708	5,163,581,798
2037	5,136,454,179	25,626,912	1,500,708	5,163,581,798
2038	5,136,454,179	25,626,912	1,500,708	5,163,581,798
2039	5,136,454,179	25,626,912	1,500,708	5,163,581,798
2040	5,136,454,179	25,626,912	1,500,708	5,163,581,798

GHG Relative Significance Assessment:

A Relative Significance Assessment uses the rule of reason and the concept of proportionality along with the consideration of the affected area (yGba.e., global, national, and regional) and the degree (intensity) of the proposed action's effects. The Relative Significance Assessment provides real-world context and allows for a reasoned choice against alternatives through a relative comparison analysis. The analysis weighs each alternative's annual net change in GHG emissions proportionally against (or relative to) global, national, and regional emissions.

AIR CONFORMITY APPLICABILITY MODEL REPORT

GREENHOUSE GAS (GHG) EMISSIONS

The action's surroundings, circumstances, environment, and background (context associated with an action) provide the setting for evaluating the GHG intensity (impact significance). From an air quality perspective, context of an action is the local area's ambient air quality relative to meeting the NAAQSs, expressed as attainment, nonattainment, or maintenance areas (this designation is considered the attainment status). GHGs are non-hazardous to health at normal ambient concentrations and, at a cumulative global scale, action-related GHG emissions can only potentially cause warming of the climatic system. Therefore, the action-related GHGs generally have an insignificant impact to local air quality.

However, the affected area (context) of GHG/climate change is global. Therefore, the intensity or degree of the proposed action's GHG/climate change effects are gauged through the quantity of GHG associated with the action as compared to a baseline of the state, U.S., and global GHG inventories. Each action (or alternative) has significance, based on their annual net change in GHG emissions, in relation to or proportionally to the global, national, and regional annual GHG emissions.

To provide real-world context to the GHG and climate change effects on a global scale, an action's net change in GHG emissions is compared relative to the state (where action will occur) and U.S. annual emissions. The following table provides a relative comparison of an action's net change in GHG emissions vs. state and U.S. projected GHG emissions for the same time period.

Total GHG Relative Significance (mton)					
		CO2	CH4	N2O	CO2e
2024-2040	State Total	673,248,663	1,448,895	106,897	674,804,455
2024-2040	U.S. Total	87,319,721,043	435,657,499	25,512,030	87,780,890,571
2024-2040	Action	27,893	1.127593	1.057366	27,989
Percent of State Totals		0.00414311%	0.00007782%	0.00098915%	0.00414768%
Percent of U.S. Totals		0.00003194%	0.00000026%	0.00000414%	0.00003188%

Climate Change Assessment (as SC GHG):

On a global scale, the potential climate change effects of an action are indirectly addressed and put into context through providing the theoretical SC GHG associated with an action. The SC GHG is an administrative and theoretical tool intended to provide additional context to a GHG's potential impacts through approximating the long-term monetary damage that may result from GHG emissions affect on climate change. It is important to note that the SC GHG is a monetary quantification, in 2020 U.S. dollars, of the theoretical economic damages that could result from emitting GHGs into the atmosphere.

The SC GHG estimates are derived using the methodology and discount factors in the "Technical Support Document: Social Cost of Carbon, Methane, and Nitrous Oxide Interim Estimates under Executive Order 13990," released by the Interagency Working Group on Social Cost of Greenhouse Gases (IWG SC GHGs) in February 2021.

The speciated IWG Annual SC GHG Emission associated with an action (or alternative) are first estimated as annual unit cost (cost per metric ton, \$/mton). Results of the annual IWG Annual SC GHG Emission Assessments are tabulated in the IWG Annual SC GHG Cost per Metric Ton Table below:

AIR CONFORMITY APPLICABILITY MODEL REPORT

GREENHOUSE GAS (GHG) EMISSIONS

IWG SC GHG Discount Factor: 2.5%

IWG Annual SC GHG Cost per Metric Ton (\$/mton [In 2020 \$])			
YEAR	CO2	CH4	N2O
2024	\$82.00	\$2,200.00	\$29,000.00
2025	\$83.00	\$2,200.00	\$30,000.00
2026	\$84.00	\$2,300.00	\$30,000.00
2027	\$86.00	\$2,300.00	\$31,000.00
2028	\$87.00	\$2,400.00	\$32,000.00
2029	\$88.00	\$2,500.00	\$32,000.00
2030 [SS Year]	\$89.00	\$2,500.00	\$33,000.00
2031	\$91.00	\$2,600.00	\$33,000.00
2032	\$92.00	\$2,600.00	\$34,000.00
2033	\$94.00	\$2,700.00	\$35,000.00
2034	\$95.00	\$2,800.00	\$35,000.00
2035	\$96.00	\$2,800.00	\$36,000.00
2036	\$98.00	\$2,900.00	\$36,000.00
2037	\$99.00	\$3,000.00	\$37,000.00
2038	\$100.00	\$3,000.00	\$38,000.00
2039	\$102.00	\$3,100.00	\$38,000.00
2040	\$103.00	\$3,100.00	\$39,000.00

Action-related SC GHG were estimated by calendar-year for the projected action's lifecycle. Annual estimates were found by multiplying the annual emission for a given year by the corresponding IWG Annual SC GHG Emission value (see table above).

Action-Related Annual SC GHG (\$K/yr [In 2020 \$])				
YEAR	CO2	CH4	N2O	GHG
2024	\$12.18	\$0.01	(\$0.01)	\$12.18
2025	\$16.16	\$0.02	(\$0.01)	\$16.17
2026	\$62.07	\$0.07	\$0.42	\$62.56
2027	\$197.16	\$0.21	\$2.03	\$199.41
2028	\$181.47	\$0.20	\$2.45	\$184.12
2029	\$184.34	\$0.21	\$2.45	\$186.99
2030 [SS Year]	\$164.55	\$0.19	\$2.48	\$167.22
2031	\$168.25	\$0.20	\$2.48	\$170.92
2032	\$170.10	\$0.20	\$2.55	\$172.85
2033	\$173.80	\$0.20	\$2.63	\$176.63
2034	\$175.65	\$0.21	\$2.63	\$178.48
2035	\$177.50	\$0.21	\$2.70	\$180.41
2036	\$181.19	\$0.22	\$2.70	\$184.11
2037	\$183.04	\$0.23	\$2.78	\$186.04
2038	\$184.89	\$0.23	\$2.85	\$187.97
2039	\$188.59	\$0.23	\$2.85	\$191.67
2040	\$190.44	\$0.23	\$2.93	\$193.60

AIR CONFORMITY APPLICABILITY MODEL REPORT

GREENHOUSE GAS (GHG) EMISSIONS

The following two tables summarize the U.S. and State's Annual SC GHG by calendar-year. The U.S. and State's Annual SC GHG are in 2020 dollars and were estimated by each year for the projected action lifecycle. Annual SC GHG estimates were found by multiplying the U.S. and State's annual five-year average GHG emissions for a given year by the corresponding IWG Annual SC GHG Cost per Metric Ton value.

State's Annual SC GHG (\$K/yr [In 2020 \$])				
YEAR	CO2	CH4	N2O	GHG
2024	\$3,247,434.73	\$187,504.10	\$182,353.34	\$3,617,292.17
2025	\$3,287,037.59	\$187,504.10	\$188,641.38	\$3,663,183.08
2026	\$3,326,640.45	\$196,027.02	\$188,641.38	\$3,711,308.85
2027	\$3,405,846.18	\$196,027.02	\$194,929.43	\$3,796,802.62
2028	\$3,445,449.04	\$204,549.93	\$201,217.48	\$3,851,216.45
2029	\$3,485,051.90	\$213,072.85	\$201,217.48	\$3,899,342.22
2030 [SS Year]	\$3,524,654.76	\$213,072.85	\$207,505.52	\$3,945,233.13
2031	\$3,603,860.49	\$221,595.76	\$207,505.52	\$4,032,961.77
2032	\$3,643,463.35	\$221,595.76	\$213,793.57	\$4,078,852.68
2033	\$3,722,669.08	\$230,118.67	\$220,081.61	\$4,172,869.36
2034	\$3,762,271.94	\$238,641.59	\$220,081.61	\$4,220,995.14
2035	\$3,801,874.80	\$238,641.59	\$226,369.66	\$4,266,886.05
2036	\$3,881,080.53	\$247,164.50	\$226,369.66	\$4,354,614.69
2037	\$3,920,683.39	\$255,687.42	\$232,657.71	\$4,409,028.51
2038	\$3,960,286.25	\$255,687.42	\$238,945.75	\$4,454,919.42
2039	\$4,039,491.98	\$264,210.33	\$238,945.75	\$4,542,648.06
2040	\$4,079,094.84	\$264,210.33	\$245,233.80	\$4,588,538.97

U.S. Annual SC GHG (\$K/yr [In 2020 \$])				
YEAR	CO2	CH4	N2O	GHG
2024	\$421,189,242.68	\$56,379,205.70	\$43,520,521.44	\$521,088,969.82
2025	\$426,325,696.86	\$56,379,205.70	\$45,021,229.08	\$527,726,131.63
2026	\$431,462,151.04	\$58,941,896.86	\$45,021,229.08	\$535,425,276.98
2027	\$441,735,059.39	\$58,941,896.86	\$46,521,936.72	\$547,198,892.97
2028	\$446,871,513.57	\$61,504,588.03	\$48,022,644.35	\$556,398,745.96
2029	\$452,007,967.75	\$64,067,279.20	\$48,022,644.35	\$564,097,891.30
2030 [SS Year]	\$457,144,421.93	\$64,067,279.20	\$49,523,351.99	\$570,735,053.12
2031	\$467,417,330.29	\$66,629,970.37	\$49,523,351.99	\$583,570,652.65
2032	\$472,553,784.47	\$66,629,970.37	\$51,024,059.62	\$590,207,814.46
2033	\$482,826,692.83	\$69,192,661.54	\$52,524,767.26	\$604,544,121.62
2034	\$487,963,147.01	\$71,755,352.70	\$52,524,767.26	\$612,243,266.97
2035	\$493,099,601.18	\$71,755,352.70	\$54,025,474.90	\$618,880,428.78
2036	\$503,372,509.54	\$74,318,043.87	\$54,025,474.90	\$631,716,028.31
2037	\$508,508,963.72	\$76,880,735.04	\$55,526,182.53	\$640,915,881.29
2038	\$513,645,417.90	\$76,880,735.04	\$57,026,890.17	\$647,553,043.11
2039	\$523,918,326.26	\$79,443,426.21	\$57,026,890.17	\$660,388,642.63
2040	\$529,054,780.44	\$79,443,426.21	\$58,527,597.80	\$667,025,804.45

Relative Comparison of SC GHG:

To provide additional real-world context to the potential climate change impact associate with an action, a Relative Comparison of SC GHG Assessment is also performed. While the SC GHG estimates capture an indirect approximation of global climate damages, the Relative Comparison of SC GHG Assessment provides a better perspective from a regional and global scale.

AIR CONFORMITY APPLICABILITY MODEL REPORT

GREENHOUSE GAS (GHG) EMISSIONS

The Relative Comparison of SC GHG Assessment uses the rule of reason and the concept of proportionality along with the consideration of the affected area (yGba.e., global, national, and regional) and the SC GHG as the degree (intensity) of the proposed action's effects. The Relative Comparison Assessment provides real-world context and allows for a reasoned choice among alternatives through a relative contrast analysis which weighs each alternative's SC GHG proportionally against (or relative to) existing global, national, and regional SC GHG. The below table provides a relative comparison between an action's SC GHG vs. state and U.S. projected SC GHG for the same time period:

Total SC-GHG (\$K [In 2020 \$])					
		CO2	CH4	N2O	GHG
2024-2040	State Total	\$62,136,891.27	\$3,835,311.24	\$3,634,490.67	\$69,606,693.17
2024-2040	U.S. Total	\$8,059,096,606.85	\$1,153,211,025.60	\$867,409,013.61	\$10,079,716,646.06
2024-2040	Action	\$2,611.38	\$3.05	\$36.89	\$2,651.33
Percent of State Totals		0.00420263%	0.00007958%	0.00101511%	0.00380901%
Percent of U.S. Totals		0.00003240%	0.00000026%	0.00000425%	0.00002630%

From a global context, the action alternative's total SC GHG percentage of total global SC GHG for the same time period is: 0.00000352%.*

* Global value based on the U.S. emits 13.4% of all global GHG annual emissions (2018 Emissions Data, Center for Climate and Energy Solutions, accessed 7-6-2023, <https://www.c2es.org/content/international-emissions>).

J. Michael Nied, PE (WI), Project Manager / Environmental Engineer

Jun 07 2024

Name, Title

Date

APPENDIX D. FIGURES

This page intentionally left blank

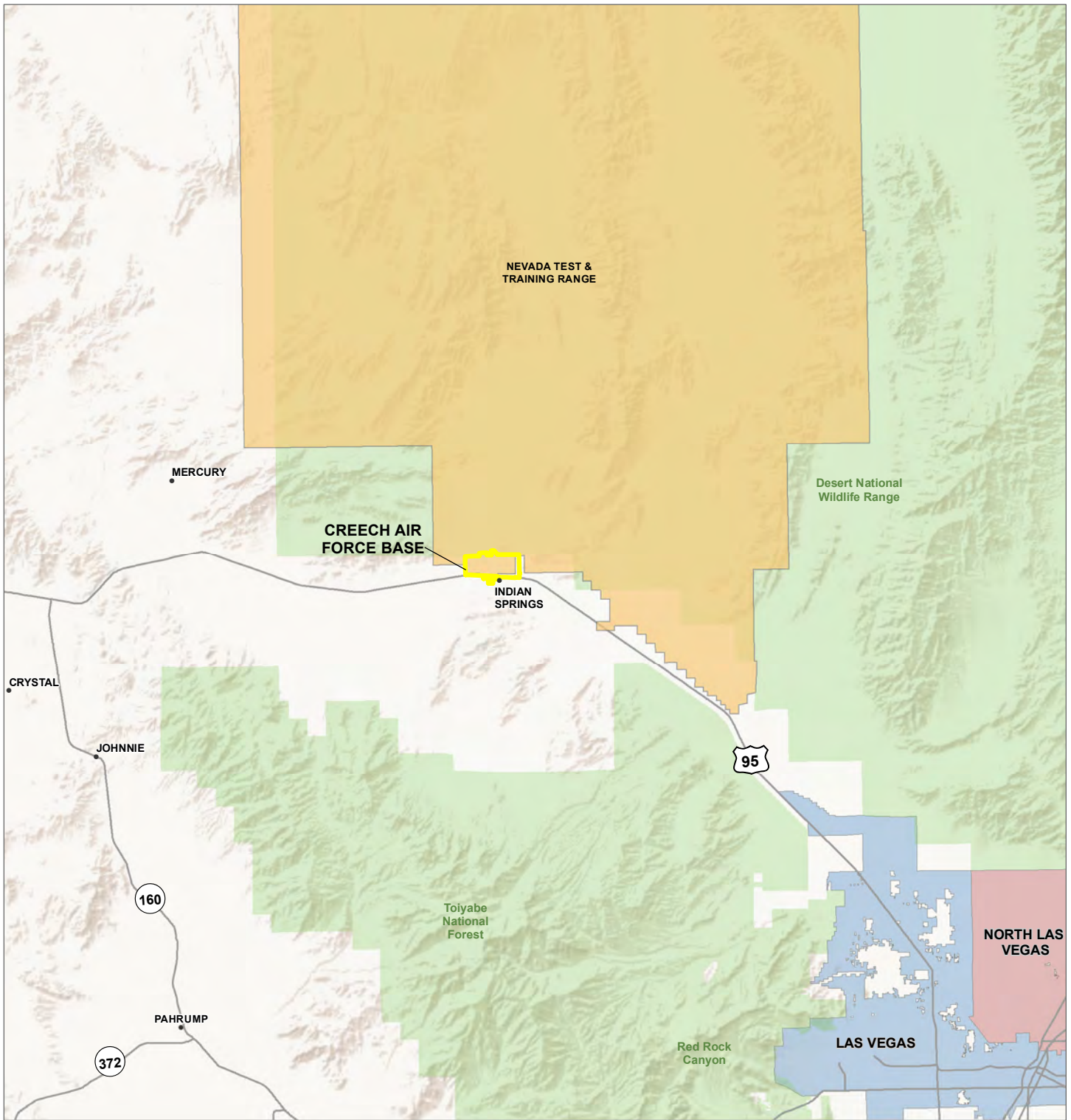
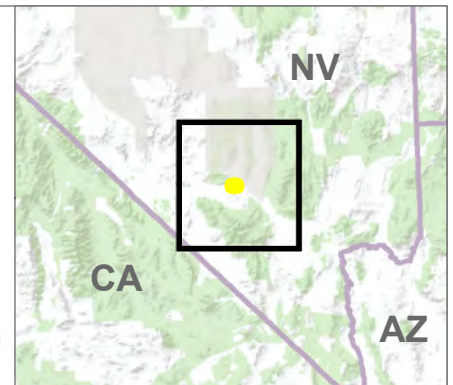


FIGURE 1-1
Regional Location Map

- Installation Boundary
- Nevada Test and Training Range
- City of Las Vegas
- City of North Las Vegas



Coordinate System: WGS 1984 UTM Zone 11N



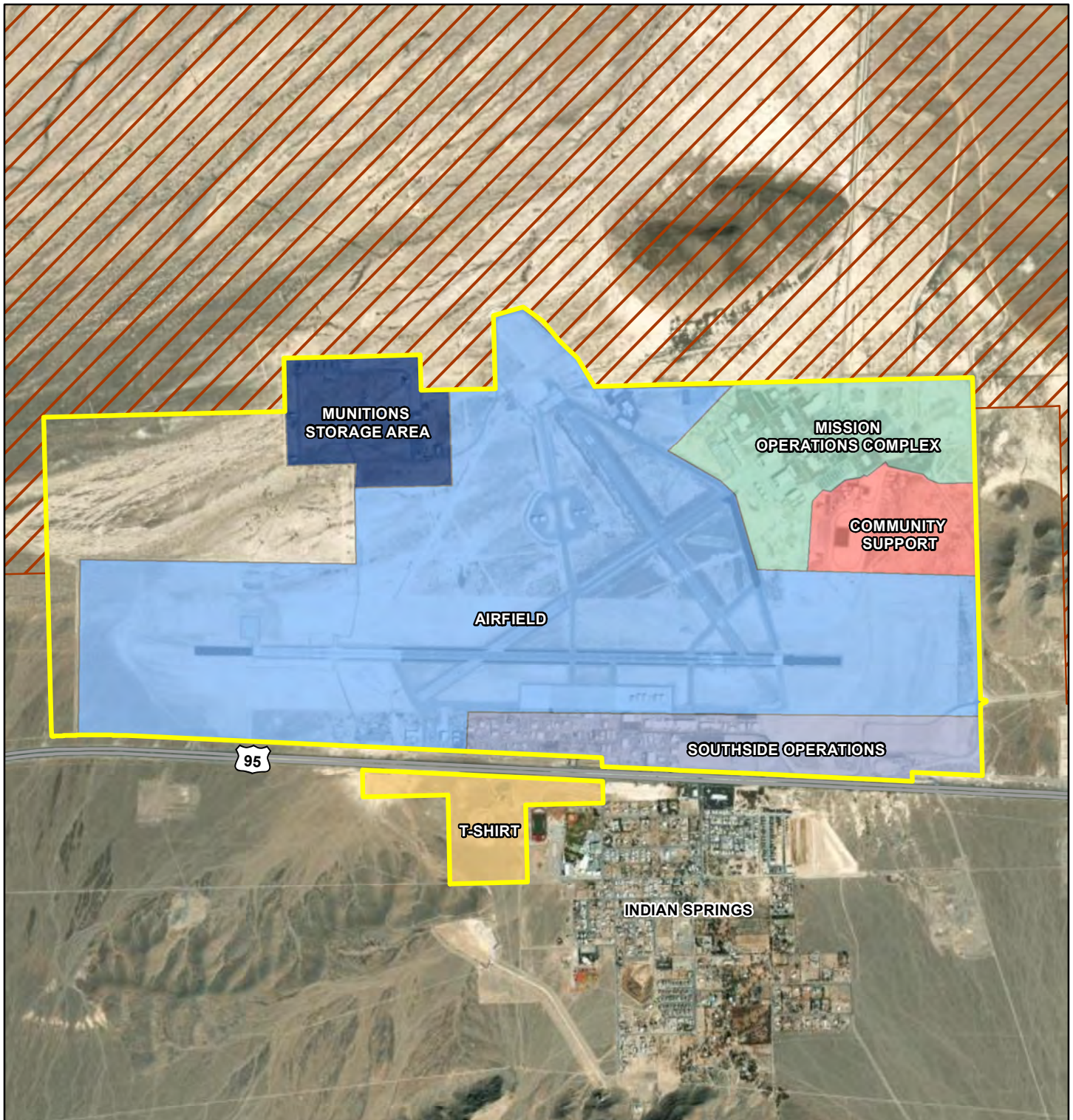
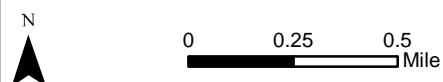
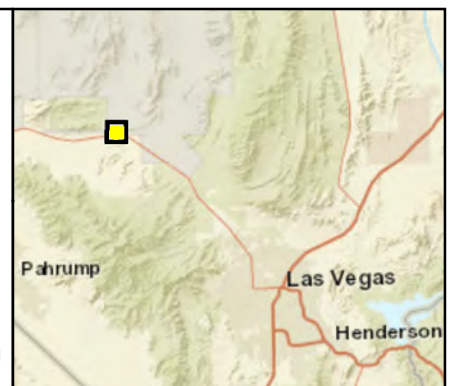


FIGURE 1-2
Creech AFB Land Use Districts

- | | |
|--|----------------------------|
| Installation Boundary | Mission Operations Complex |
| Nevada Test and Training Range - South Range | Munitions Storage Area |
| Airfield | Southside Operations |
| Community Support | T-Shirt |



Imagery: ESRI, 2021
Coordinate System: WGS 1984 UTM Zone 11N



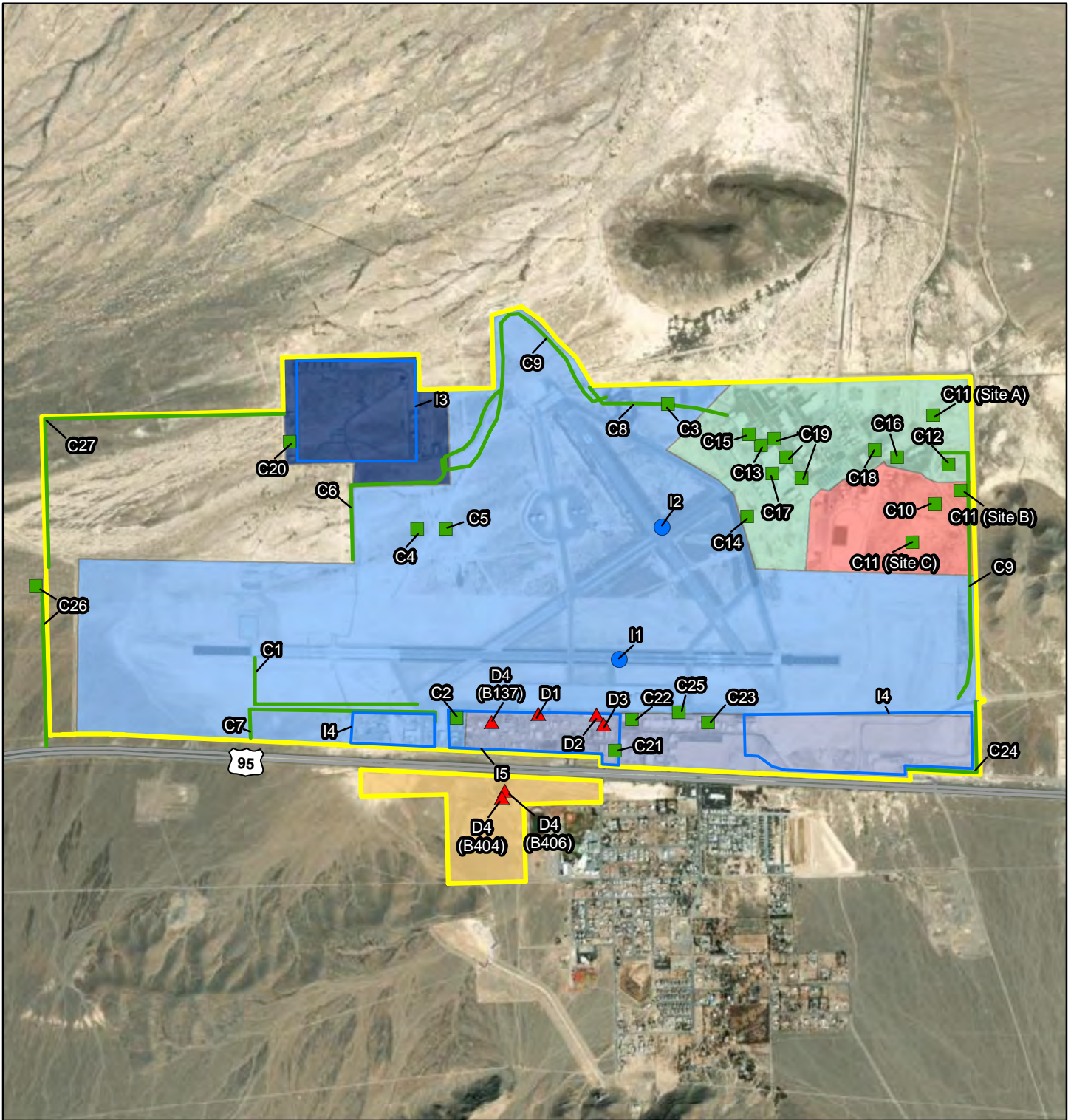


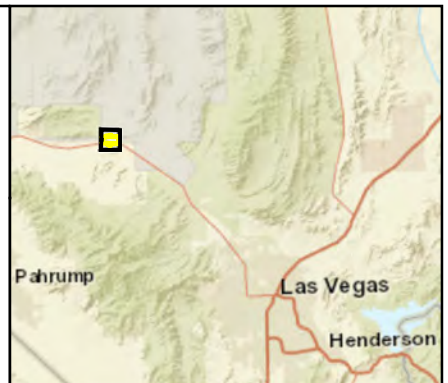
FIGURE 2-1
Project Location

- | | | |
|---|---|---|
| ■ Construction | Installation Boundary | ■ Munitions Storage Area |
| ▲ Demolition | Planning Districts | ■ Southside Operations |
| ● Infrastructure | ■ Airfield | ■ T-Shirt |
| — Linear Construction | ■ Community Support | |
| — Linear Infrastructure | ■ Mission Operations Complex | |



0 0.25 0.5
Mile

Imagery: ESRI, 2021
Coordinate System: WGS 1984 UTM Zone 11N



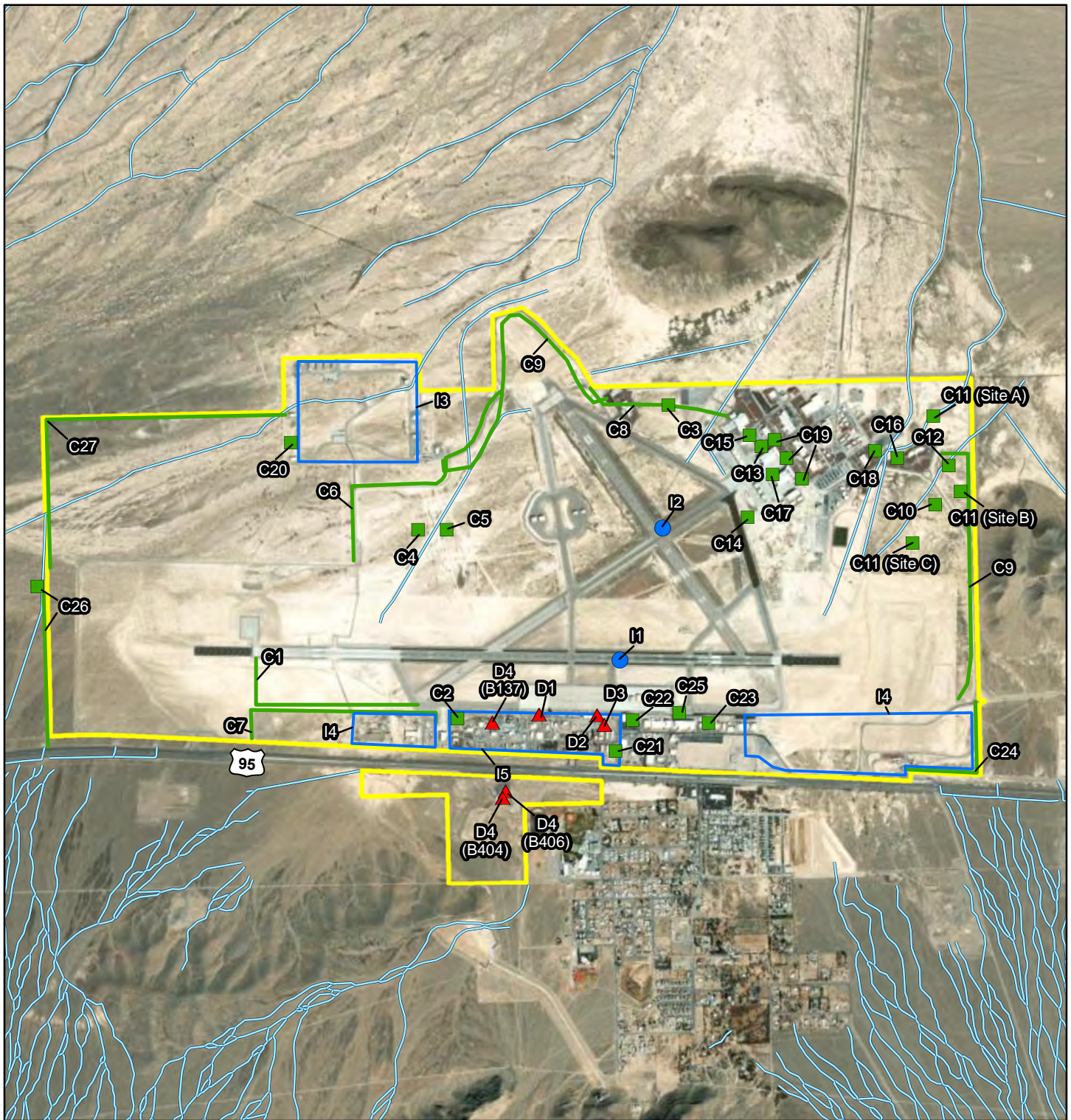


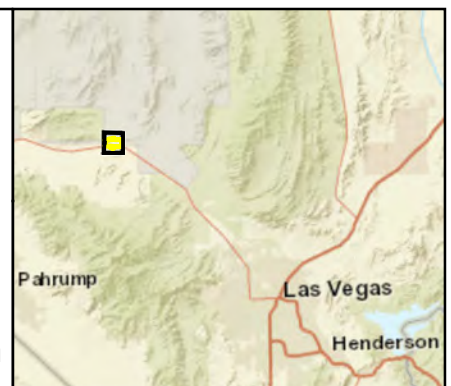
FIGURE 3-1
Streams and Surface Waters

- | | | |
|------------------|-------------------------|-------------------------|
| ■ Construction | — Ephemeral Streams | □ Installation Boundary |
| ▲ Demolition | — Linear Construction | |
| ● Infrastructure | — Linear Infrastructure | |



0 0.25 0.5
Mile

Imagery: ESRI, 2021
Coordinate System: WGS 1984 UTM Zone 11N



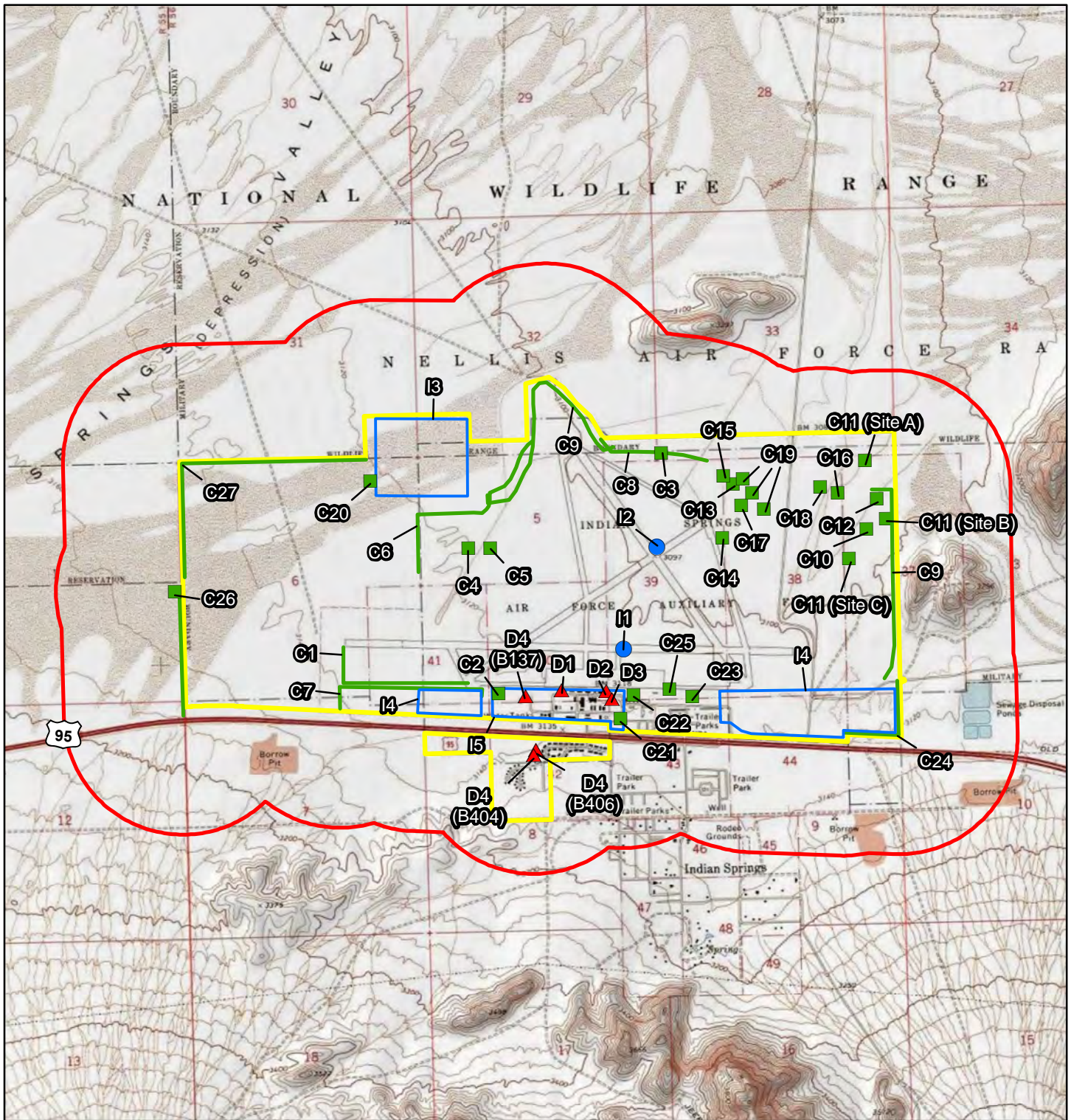
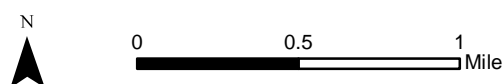


Figure 3-2
APE for Proposed IDP Projects at Creech AFB

- Construction Physical APE
- ▲ Demolition Physical APE
- Infrastructure Physical APE
- Linear Construction Physical APE
- Linear Infrastructure Physical APE
- Installation Boundary
- Visual, Auditory, and Atmospheric APE



Imagery: ESRI 2021
Coordinate System: WGS 1984 UTM Zone 11N



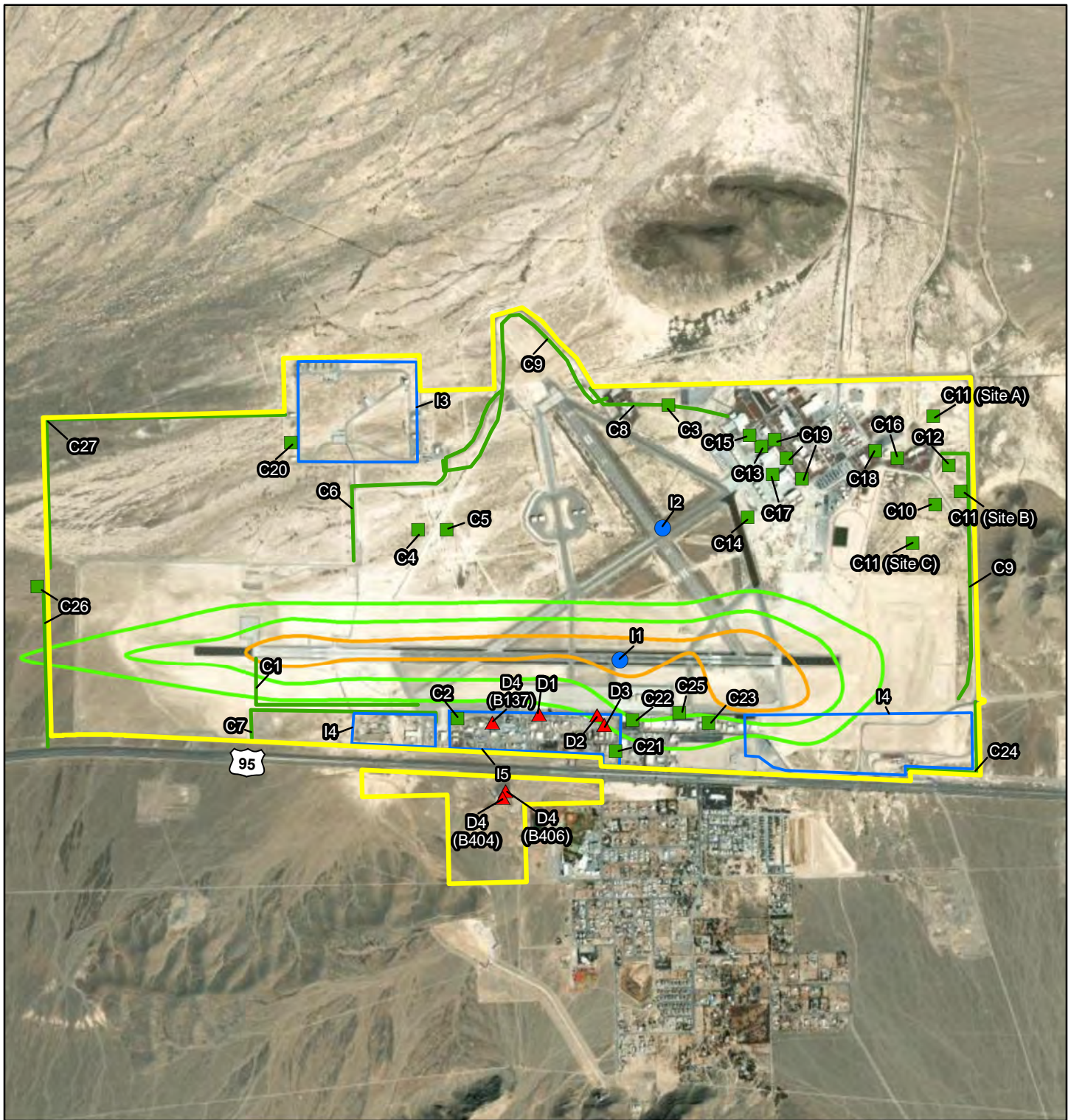
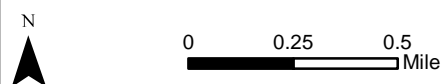
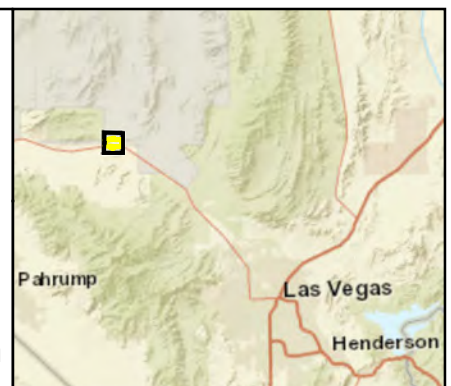


FIGURE 3-3
Noise

- Construction
- ▲ Demolition
- Infrastructure
- Linear Construction
- Linear Infrastructure
- Installation Boundary
- 60 Decibel Noise Contour
- 70 Decibel Noise Contour



Imagery: ESRI, 2021
Coordinate System: WGS 1984 UTM Zone 11N



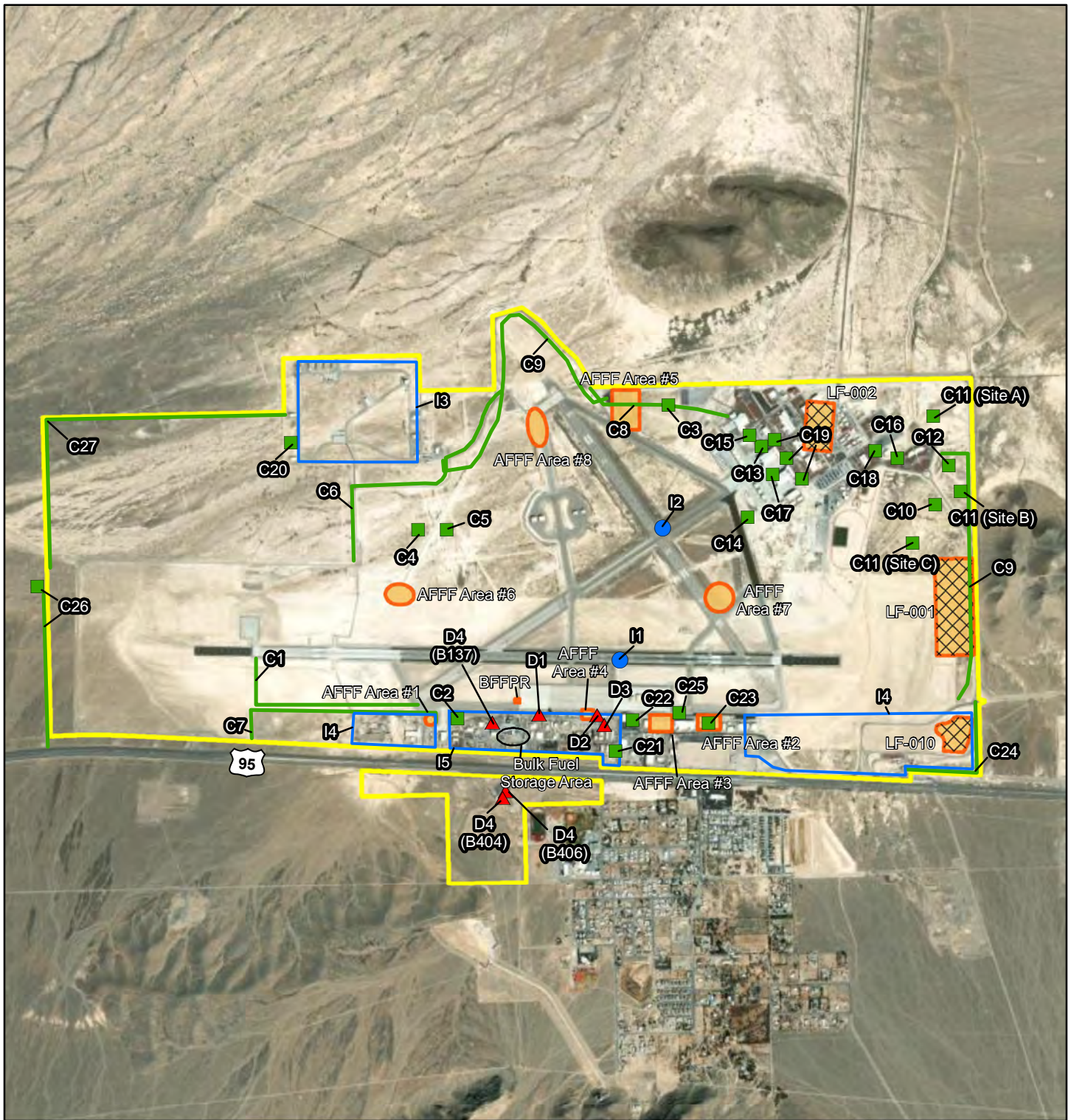


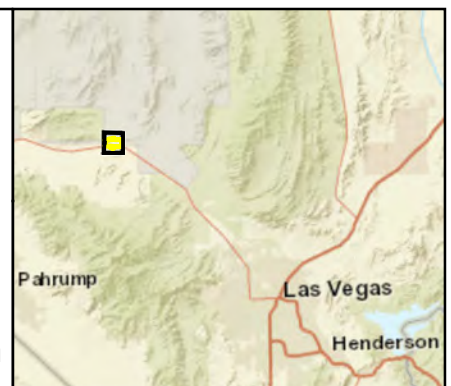
FIGURE 3-4
Environmental Restoration Program Sites

- | | |
|-------------------------|--|
| ■ Construction | ■ Installation Boundary |
| ▲ Demolition | ▨ Former Landfill |
| ● Infrastructure | ■ Environmental Restoration Program Site |
| — Linear Construction | |
| — Linear Infrastructure | |



0 0.25 0.5
Mile

Imagery: ESRI, 2021
Coordinate System: WGS 1984 UTM Zone 11N



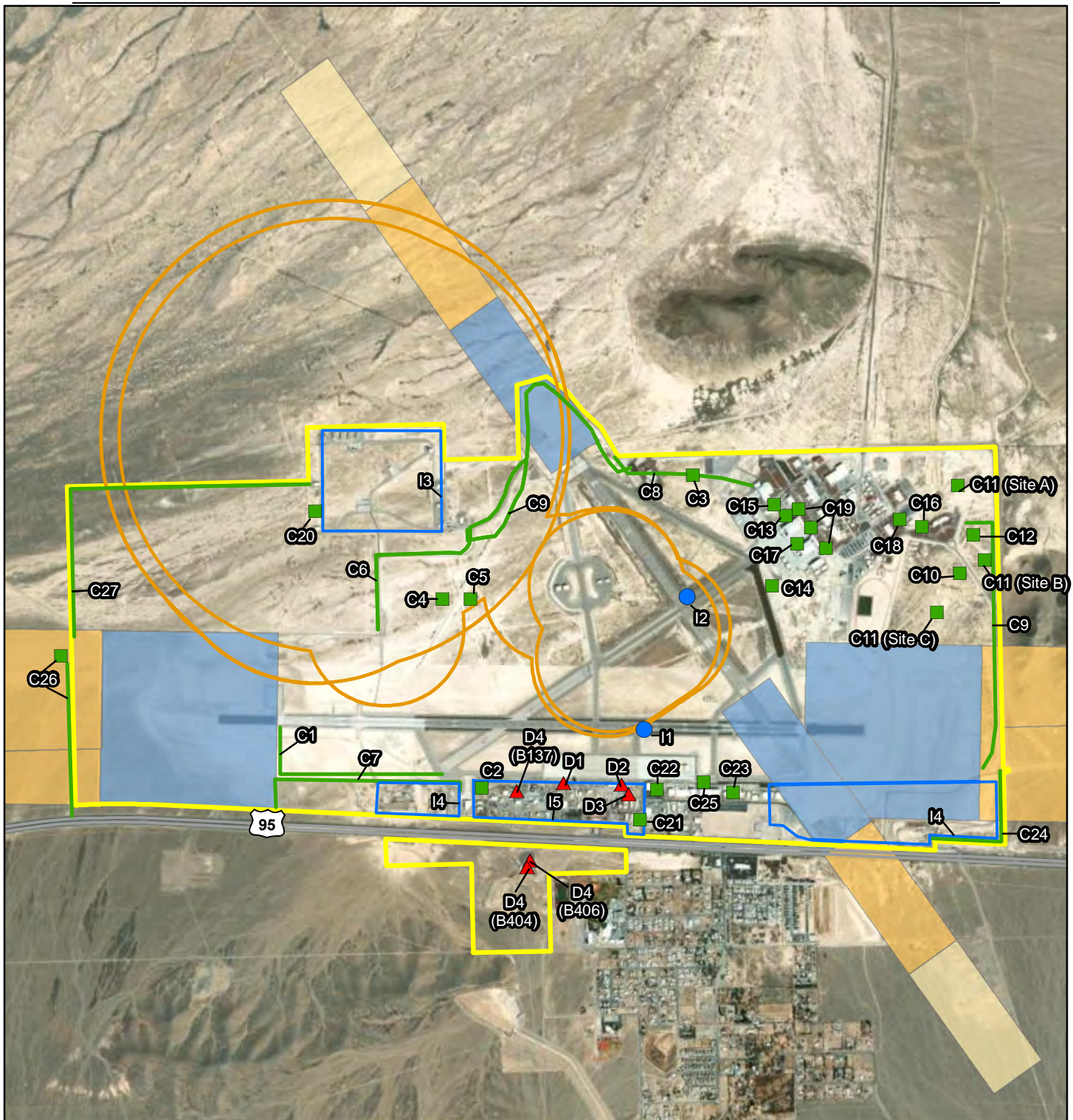


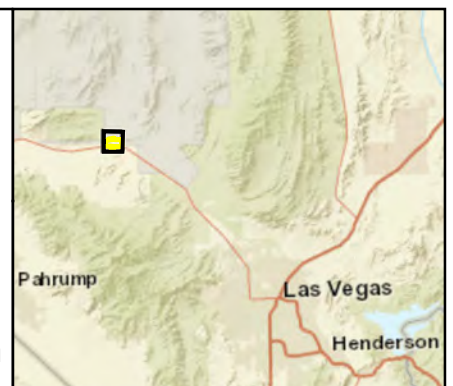
FIGURE 3-5
Safety

- | | |
|---|---|
| ■ Construction | Installation Boundary |
| ▲ Demolition | Explosive Safety Quantity Distance Arc |
| ● Infrastructure | Accident Potential Zone I |
| — Linear Construction | Accident Potential Zone II |
| — Linear Infrastructure | Clear Zones |



0 0.25 0.5
Mile

Imagery: ESRI, 2021
Coordinate System: WGS 1984 UTM Zone 11N



APPENDIX E. TABLES

This page intentionally left blank

TABLE OF CONTENTS

Table 1-1	Descriptions of 36 Projects Analyzed in this Environmental Assessment	E-1
Table 2-1	Summary of Environmental Consequences	E-20
Table 3-1	Past, Present, and Reasonably Foreseeable Environmental Actions	E-24
Table 3-2	National Ambient Air Quality Standards.....	E-25
Table 3-3	Annual Air Emissions, LVIAQCR (tpy)	E-26
Table 3-4	Highest Annual Air Emissions and Indicators/Thresholds, LVIAQCR (tpy).....	E-26
Table 3-5	Species of High Priority on Creech AFB.....	E-27
Table 3-6	NRHP-Eligible Architectural Resources within the APE.....	E-27
Table 3-7	Architectural Surveys and Studies Conducted within the APE	E-28
Table 3-8	Archaeological Surveys Conducted within the APE	E-29
Table 3-9	NRHP-Eligible and Unevaluated Archaeological Resources within the APE	E-31
Table 3-10	Peak Sound Pressure Level of Construction Equipment from 50 Feet.....	E-32
Table 3-11	Population Characteristics	E-32
Table 3-12	Housing.....	E-32

This page intentionally left blank

Table 1-1 Descriptions of 36 Projects Analyzed in this Environmental Assessment

Map ID Number	Project Title	Project Description	Purpose and Need	Estimated Construction Year	Estimated New Facility or Infrastructure Size	Estimated Change in Facility Footprint
AIRFIELD DISTRICT						
Construction Projects						
C1	Taxiway Alpha Addition	This project would construct a taxiway extension and arm/disarm pad that extends the existing Taxiway Alpha to the west threshold of Runway 08/26. This project would include asphalt taxiway; concrete arm/disarm pad; paved shoulders; airfield lighting, markings, and guidance signage; addition of an access roadway leading to the arm/disarm pad; airfield storm drainage; utilities; and all other work as necessary.	Purpose: The purpose of the proposed project is to add additional capacity to the airfield taxiway and to allow aircraft to taxi to the arm/disarm pad. Need: The project is needed because currently, Aircraft must back-taxi on the runway, which has caused delays and runway inefficiencies.	2026	539,175 ft ²	+539,175 ft ²
C2	Weapons Load Trainer Facility	This project would construct a MQ-9 Weapons Load Crew Training Facility utilizing conventional design and construction methods. The facility would be constructed with a reinforced concrete foundation/floor slab, structural-steel frame, metal panel with brick veneer exterior, and standing seam metal roof. Construction associated with this project would include information systems, fire protection and alarm systems, cybersecurity measures, intrusion detection system installation, and energy monitoring and control systems connection. Supporting facilities would include a training bay access apron, parking areas, construction of an access roadway, security lighting, storm drainage, site improvements, signage, and all other necessary features to make a complete and useable facility.	Purpose: The purpose of the proposed project is to prevent disruptions to the Weapons Load Crew Training and to provide secure, dedicated space for the training to occur. Need: The proposed project is needed because the current training area is inadequate for current operational needs and training capabilities are disrupted. Creech AFB needs a dedicated training facility to keep up with manning increases.	2026	42,033 ft ²	+42,033 ft ²

Map ID Number	Project Title	Project Description	Purpose and Need	Estimated Construction Year	Estimated New Facility or Infrastructure Size	Estimated Change in Facility Footprint
C3	LRS Deployment Center	This project would construct a two-story Deployment Processing Center and include an aircraft parking apron capable of supporting two C-17's or one C-5 airframe.	<p>Purpose: The purpose of the proposed project is to support Creech AFB's mission and training requirements with increased efficiency through functional centralization and the optimization of existing resources.</p> <p>Need: The proposed project is needed due to the outdated and inefficient infrastructure that currently supports the Mission Operations Complex District. The proposed project is also needed to provide centralized infrastructure (near the Community Support District) that would provide needed facilities identified as part of the area development planning process.</p>	2026	43,075 ft ²	+43,075 ft ²

Map ID Number	Project Title	Project Description	Purpose and Need	Estimated Construction Year	Estimated New Facility or Infrastructure Size	Estimated Change in Facility Footprint
C4	MQ-9 CPIP GDT Antenna Complex	The project would construct a properly sited and configured antenna tower complex for the installation of eight MQ-9 ground data terminal (GDT) systems. The GDT antenna system provides a mission-critical, line-of-site communications link from the ground control station to the remotely piloted aircraft (RPA) for launch and recovery operations. This project provides 50-ft-high fixed towers that would be used to support the GDT system. The Defense Spectrum Organization – Joint Spectrum Center identified a preferred site location for the antennas that would mitigate existing C-band video link mishaps due to existing GDT locations and resulting electro-magnetic interference saturation. The proposed antenna complex is located north of Runway 08/26 and west of the live ordnance loading area. This site ensures that saturation-induced interference is precluded during airfield operations and avoids existing building and fence line obstructions.	Purpose: The purpose of the proposed project is to increase safety and communication for airfield operations by reducing saturation-induced interference between communications systems. Need: The proposed project is needed because currently, C-band video link mishaps occur due to existing GDT locations and electro-magnetic interference saturation. Communication expansion is needed to reduce radio interference.	2025	4,000 ft ²	+4,000 ft ²
C5	Construct GDT Tower Site	This project would construct a GDT tower site.	Purpose: The purpose of the proposed project is to revitalize and expand communication capabilities at Creech AFB. Need: The proposed project is needed because the current towers require reconstruction due to their condition and age. Communication expansion is also needed to reduce radio interference.	2024	2,000 ft ²	+2,000 ft ²

Map ID Number	Project Title	Project Description	Purpose and Need	Estimated Construction Year	Estimated New Facility or Infrastructure Size	Estimated Change in Facility Footprint
C6	Construct Northwest Frangible Airfield Fence	This project would construct a fence between Northwest Perimeter Road and the flightline.	Purpose: The purpose of the proposed project is to provide security for airfield operations by enclosing the airfield. Need: The proposed project is needed to reduce the security risk to airfield operations by regulating access to the airfield through fencing and controlled entry points per Air Force Policy Directive (AFPD) 13-2, <i>Air Traffic Control, Airfield, Airspace, and Range Management</i> , and defined in Air Force Manual (AFMAN) 13-204, <i>Air Traffic Control</i> .	2025	9,400 lf	+9,400 lf
C7	Construct Frangible Airfield Fence First Street	This project would construct a fence between West Perimeter Road and the flightline.	Purpose: The purpose of the proposed project is to provide security for airfield operations by enclosing the airfield. Need: The proposed project is needed to reduce the security risk to airfield operations by regulating access to the airfield through fencing and controlled entry points per AFPD 13-2 and defined in AFMAN 13-204.	2025	9,100 lf	+9,100 lf
C8	Construct Central Frangible Airfield Fence	This project would construct a fence between North Perimeter Road and the flightline.	Purpose: The purpose of the proposed project is to provide security for airfield operations by enclosing the airfield. Need: The proposed project is needed to reduce the security risk to airfield operations by regulating access to the airfield through fencing and controlled entry points per AFPD 13-2 and defined in AFMAN 13-204.	2025	4,600 lf	+4,600 lf

Map ID Number	Project Title	Project Description	Purpose and Need	Estimated Construction Year	Estimated New Facility or Infrastructure Size	Estimated Change in Facility Footprint
C9	North Side Electrical Loop	This project would construct a finished electrical loop system of approximately 30,000 linear feet (lf) from the southwest side of the Installation to the north side of the Installation. This would be accomplished by running a new electrical line from the intersection of Box Canyon and Hunters Road to Building 1065 (B1065).	Purpose: The purpose of the proposed project is to increase energy resilience with back feed capabilities. Need: The proposed project is needed to provide power backup and restoration in case of outage caused by feeder damage.	2025	30,000 lf	+30,000 lf
Infrastructure Projects						
I1	Repair Southern Airfield Pavements	This project would repair airfield pavements identified in the 2015 Airfield Pavement Evaluation. Recommendations for repair include the mill and overlay of sections R03C1, R03C2, R04A1, and R04A2.	Purpose: The purpose of the proposed project is to improve the condition of degraded airfield pavement sections. Need: The proposed project is needed to address poor pavement conditions reported by inspection. Poor airfield pavements are a safety risk for Aircrew and equipment. Left unchecked, further damage to the airfield pavements would have the potential to occur. The proposed project is further needed to comply with DAFMAN 32-1084, <i>Facility Requirements Standards – Airfield Pavements</i> .	2024	884,475 ft ²	N/A

Map ID Number	Project Title	Project Description	Purpose and Need	Estimated Construction Year	Estimated New Facility or Infrastructure Size	Estimated Change in Facility Footprint
12	Repair Northern Airfield Pavements	This project would repair airfield pavements identified in the 2015 Airfield Pavement Evaluation. Recommendations include the mill and overlay of sections T21A, T25A, and T32A. Full replacement is recommended for sections R09A, R10A, and T20A.	<p>Purpose: The purpose of the proposed project is to improve the condition of degraded airfield pavement sections.</p> <p>Need: The proposed project is needed to address poor pavement conditions reported by inspection. Poor airfield pavements are a safety risk for Aircrew and equipment. Left unchecked, further damage to the airfield pavements would have the potential to occur. The proposed project is further needed to comply with DAFMAN 32-1084, <i>Facility Requirements Standards – Airfield Pavements</i>.</p>	2024	502,500 ft ²	N/A

Map ID Number	Project Title	Project Description	Purpose and Need	Estimated Construction Year	Estimated New Facility or Infrastructure Size	Estimated Change in Facility Footprint
COMMUNITY SUPPORT DISTRICT						
Construction Projects						
C10	Warrior Fitness Center	This project would construct basketball and racquetball courts, a 1/10th mile elevated indoor running track, unit physical training/group exercise areas, weight rooms, administration, lockers, showers, and restrooms. Supporting facilities include all required utilities, staff and customer parking areas, sidewalks, lighting, signage, and other site improvements. The project would incorporate sustainability and energy measures, stormwater mitigation, and meet antiterrorism force protection standoff requirements.	<p>Purpose: The purpose of the proposed project is to support Creech AFB’s mission and training requirements with increased efficiency through functional centralization and the optimization of existing resources.</p> <p>Need: The proposed project is needed due to the outdated and inefficient infrastructure that currently supports the Mission Operations Complex District. The proposed project is also needed to provide centralized infrastructure (near the Community Support District) that would provide needed facilities identified as part of the area development planning process.</p>	2026	44,000 ft ²	+44,000 ft ²

Map ID Number	Project Title	Project Description	Purpose and Need	Estimated Construction Year	Estimated New Facility or Infrastructure Size	Estimated Change in Facility Footprint
C11	Install Solar and Battery Systems	<p>This project would design and install a cybersecure microgrid control system integrated with large-scale photovoltaic (PV) arrays, battery energy storage system, and thermal energy storage system to address physical, cybersecurity, and climate threats as described in Creech AFB’s Energy Resilience Assessment. Installation activities would include new electrical infrastructure, new automated main switchgear, new automated sectionalizing switches, step-up transformers, new fiber/ supervisory control and data acquisition, and a megawatt charging system integrated with the existing utility megawatt charging system. The system would dispatch distributed energy resources to respond to grid disruptions and control automated switching sequences for microgrid operation, separation of critical and non-critical loads, and dispatch of electricity to recover from system faults, anomalies, or outages. This project would be located within the existing fence line on the northeast corner of Creech AFB and would potentially include up to 71.2 acres primarily for PV arrays, including 19.4 acres on a closed landfill location.</p>	<p>Purpose: The purpose of the proposed project is to support continued mission operations in the event of power loss, provide Installation-critical facilities with emergency backup power, and increase Creech AFB’s energy resilience.</p> <p>Need: The proposed project is needed because Installation-critical facilities currently lack emergency backup power capabilities in the event of power loss.</p>	2025 (estimated)	3,101,472 ft ²	+3,101,472 ft ²
		<p>Additional locations considered in this area have been previously reserved for unrelated future projects. A PV with 4.0 megawatts (MW) capacity would be installed. For the battery energy storage system, a lithium iron phosphate battery chemistry is the current basis of design; 5.8 MW/11.6 kilowatt-hours would meet microgrid peak demand.</p>				

Map ID Number	Project Title	Project Description	Purpose and Need	Estimated Construction Year	Estimated New Facility or Infrastructure Size	Estimated Change in Facility Footprint
MISSION OPERATIONS COMPLEX DISTRICT						
Construction Projects						
C12	Mission Support Facility	This project would construct a Mission Support Center, providing a permanent, consolidated facility for the 432d Mission Support Group and Force Support Squadron in support of mission and support services for all personnel on Creech AFB.	<p>Purpose: The purpose of the proposed project is to support Creech AFB's mission and training requirements with increased efficiency through functional centralization and the optimization of existing resources.</p> <p>Need: The proposed project is needed because the infrastructure that currently supports the Mission Operations Complex District is outdated and inefficient. The proposed project is also needed to provide centralized infrastructure (near the Community Support District) that would provide needed facilities identified as part of the area development planning process.</p>	2026	36,966 ft ²	+36,966 ft ²

Map ID Number	Project Title	Project Description	Purpose and Need	Estimated Construction Year	Estimated New Facility or Infrastructure Size	Estimated Change in Facility Footprint
C13	RPA Structural Repair Facility	This project would construct an RPA Structural Repair Facility and a separate Corrosion Control Utility Storage Building. The proposed facility would provide a modern, functional space capable of supporting required MQ-9 structural and composite repair as well as non-destructive inspection.	<p>Purpose: The purpose of the proposed project is to support Creech AFB’s mission and training requirements with increased efficiency through functional centralization and the optimization of existing resources.</p> <p>Need: The proposed project is needed because the infrastructure that currently supports the Mission Operations Complex District is outdated and inefficient. The proposed project is also needed to provide centralized infrastructure (near the Community Support District) that would provide needed facilities identified as part of the area development planning process.</p>	2025	52,124 ft ²	+52,124 ft ²
C14	RPA Maintenance Hangar	This project would construct an RPA Maintenance Hangar adequately configured to support eight MQ-9s and provide administrative and maintenance space for the activation of a new Aircraft Maintenance Unit.	<p>Purpose: The purpose of the proposed project is to provide additional administrative and maintenance space for the activation of a new Aircraft Maintenance Unit.</p> <p>Need: The proposed project is needed because an increase in RPAs requires more space than is currently available. RPAs that are due for maintenance are currently being parked outside while awaiting space.</p>	2027	77,887 ft ²	+77,887 ft ²

Map ID Number	Project Title	Project Description	Purpose and Need	Estimated Construction Year	Estimated New Facility or Infrastructure Size	Estimated Change in Facility Footprint
C15	Casket & WRM AGE Storage Facility	This project would construct a War Reserve Materiel (WRM) Aerospace Ground Equipment (AGE) Storage Facility with a consolidated and secure, climate-controlled storage space that would enhance the capability of the 432d Maintenance Group to sustain and deploy critical RPA mission equipment. The facility would also provide an AGE storage bay, bench stock/tool room, parts cleaning, and a semi-enclosed wash rack area.	Purpose: The purpose of the proposed project is to support Creech AFB's mission and training requirements with increased efficiency through functional centralization and the optimization of existing resources. Need: The proposed project is needed because the infrastructure that currently supports the Mission Operations Complex District is outdated and inefficient. The proposed project is also needed to provide centralized infrastructure (near the Community Support District) that would provide needed facilities identified as part of the area development planning process.	2026	21,000 ft ²	+21,000 ft ²
C16	Wing Advance Programs Facility	This project would construct a facility to house the 432 Wing Advance Programs. This facility would require additional space to accommodate current staffing.	Purpose: The purpose of the proposed project is to provide dedicated space to accommodate current staffing of the 432d Wing Advance Programs. Need: The proposed project is needed because the Wing Advance Programs team does not have adequate staffing space. The team is currently operating out of a small office and is unable to accommodate all assigned personnel.	2026	2,000 ft ²	+2,000 ft ²

Map ID Number	Project Title	Project Description	Purpose and Need	Estimated Construction Year	Estimated New Facility or Infrastructure Size	Estimated Change in Facility Footprint
C17	Construct North GDT Towers	The project would repair by replacing current GDT towers on the north airfield apron. This project is currently being reevaluated for removal of the current three towers.	Purpose: The purpose of the proposed project is to revitalize and expand communication capabilities at Creech AFB. Need: The proposed project is needed because the current towers require reconstruction due to their condition and age. Communication expansion is also needed to reduce radio interference.	2024	1,000 ft ²	+1,000 ft ²
C18	Construct CAT/EOC Facility	This project would construct a structure that would be co-located with B1209. This structure would be a single-floor facility and utilize the existing parking lot.	Purpose: The purpose of the proposed project is to provide dedicated space for Crisis Action Team/Emergency Operations Center (CAT/EOC) teams and alleviate mission disruptions and Creech AFB. Need: The proposed project is needed because CAT/EOC teams do not have a designated location at Creech AFB. The current location is dual-purposed and interrupts other missions when activated.	2025	5,000 ft ²	+5,000 ft ²

Map ID Number	Project Title	Project Description	Purpose and Need	Estimated Construction Year	Estimated New Facility or Infrastructure Size	Estimated Change in Facility Footprint
C19	Construct North Flightline ECP Barriers	This project would install fencing and an automatic gate system for flightline entry control point (ECP) access.	Purpose: The purpose of the proposed project is to establish a secure ECP for the airfield. Need: The proposed project is needed because no entry point currently exists with direct access to airfield operations. All vehicles destined for this location currently must enter through the main access control points. A designated access point is needed to improve safety and airfield operations by providing direct access for emergency and response vehicles.	2023	400 lf	+400 lf
MUNITIONS STORAGE AREA DISTRICT						
Construction Projects						
C20	Munitions Storage Igloo	This project would construct an aboveground earth-covered munitions storage igloo with a reinforced concrete foundation/floor slab and a pre-engineered reinforced concrete panel exterior with earth covering. The project would include blast-resistant steel doors, interior and exterior lighting, grounding, surge protection, intrusion detection system, and an exterior concrete access apron.	Purpose: The purpose of the proposed project is to provide additional space for munitions storage Need: The proposed project is needed to support operations growth. The current capabilities are unable to support anticipated expansions at Creech AFB.	2026	2,046 ft ²	+2,046 ft ²

Map ID Number	Project Title	Project Description	Purpose and Need	Estimated Construction Year	Estimated New Facility or Infrastructure Size	Estimated Change in Facility Footprint
Infrastructure Projects						
I3	Repair Water Lines Zone III	This project would repair water lines in Zone 3 as identified in the Creech AFB Installation Development Plan (IDP).	<p>Purpose: The purpose of the proposed project is to ensure consistent delivery of water on Creech AFB.</p> <p>Need: The proposed project is needed because Installation water lines are considered crucial infrastructure at Creech AFB. Routine inspection and repair of the water lines are required to ensure proper maintenance.</p>	2027	7,820 lf	N/A
SOUTHSIDE OPERATIONS DISTRICT						
Construction Projects						
C21	Network Control Center	This project would consolidate four communication flight facilities by constructing a new facility. The structure would be sized to encompass the whole of the communications flight and a communication node for Creech AFB.	<p>Purpose: The purpose of the proposed project is to upgrade the communication capabilities and consolidate flight facilities at Creech AFB to improve efficiency.</p> <p>Need: The proposed project is needed because equipment upgrades and replacements are necessary to maintain operation and security missions at Creech AFB.</p>	2028	2,500 ft ²	+2,500 ft ²

Map ID Number	Project Title	Project Description	Purpose and Need	Estimated Construction Year	Estimated New Facility or Infrastructure Size	Estimated Change in Facility Footprint
C22	Airfield Operations Center	This project would construct an approximately 15,000-ft ² facility, which would consolidate deployed operations, transit alert, and air traffic control. This construction is currently planned for fiscal year 2025 to relocate B93 to the current location of B726. A parking lot to the west of B726 is being discussed.	Purpose: The purpose of the proposed project is to support efficient airfield operations and improve security and communications. Need: The proposed project is needed because current airfield operations units are separated into individual facilities, disrupting operations. By removing an aging control tower, Creech AFB would consolidate airfield operations into one streamlined facility.	2026	15,000 ft ²	+15,000 ft ²
C23	Construct south GDT Towers	This project would construct a replacement for the current GDT towers on the south airfield.	Purpose: The purpose of the proposed project is to revitalize and expand communication capabilities at Creech AFB. Need: The proposed project is needed because the current towers require reconstruction due to their condition and age. Communication expansion is also needed to reduce radio interference.	2024	1,000 ft ²	+1,000 ft ²
C24	Construct Perimeter Road Fence	This project would provide re-enforcement of the southeast fence.	Purpose: The purpose of the proposed project is to provide security for airfield operations by enclosing the perimeter road. Need: The proposed project is needed because the southeast fence needs re-enforcement to provide increased airfield security for airfield operations.	2025	9,100 lf	+9,100 lf

Map ID Number	Project Title	Project Description	Purpose and Need	Estimated Construction Year	Estimated New Facility or Infrastructure Size	Estimated Change in Facility Footprint
C25	Construct AGE Storage Facility	This project would construct a warehouse and administrative space on the north apron beside B1131.	Purpose: The purpose of the proposed project is to provide adequate storage for aircraft ground equipment. Need: The proposed project is needed to protect equipment stored on the north side of Creech AFB from outside elements.	2025	13,993 ft ²	+13,993 ft ²
Demolition Projects						
D1	Demolish Airfield Lighting Vault B95	This project would demolish the Airfield Lighting Vault, B95.	Purpose: The purpose of the proposed project is to reduce the DAF footprint. Need: The proposed project is needed because unused facilities require costs associated with infrastructure upkeep. Removing these facilities reduces costs and provides space for new infrastructure.	2023	N/A	-500 ft ²
D2	Demolish B86	This project would demolish B86.	Purpose: The purpose of the proposed project is to reduce the DAF footprint. Need: The proposed project is needed because unused facilities require costs associated with infrastructure upkeep. Removing these facilities reduces costs and provides space for new infrastructure.	2023	N/A	-1,700 ft ²

Map ID Number	Project Title	Project Description	Purpose and Need	Estimated Construction Year	Estimated New Facility or Infrastructure Size	Estimated Change in Facility Footprint
D3	Demolish HQ Admin B55	This project would demolish the Headquarters Administration (HQ) Building, B55.	Purpose: The purpose of the proposed project is to reduce the DAF footprint. Need: The proposed project is needed because unused facilities require costs associated with infrastructure upkeep. Removing these facilities reduces costs and provides space for new infrastructure.	2024	N/A	-5,200 ft ²
D4	Demolish Buildings (B137, B404, B406)	This project would demolish B137, B404, and B406. B404 and B406 are located within the T-Shirt District.	Purpose: The purpose of the proposed project is to reduce the DAF footprint. Need: The proposed project is needed because unused facilities require costs associated with infrastructure upkeep. Removing these facilities reduces costs and provides space for new infrastructure.	2023	N/A	-5,000 ft ²
Infrastructure Projects						
I4	Repair Water Lines Zone II	This project would repair water lines in Zone 2 as identified in the Creech AFB IDP.	Purpose: The purpose of the proposed project is to ensure consistent delivery of water on Creech AFB. Need: The proposed project is needed because Installation water lines are considered crucial infrastructure at Creech AFB. Routine inspection and repair of the water lines are required to ensure proper maintenance.	2027	12,275 lf	N/A

Map ID Number	Project Title	Project Description	Purpose and Need	Estimated Construction Year	Estimated New Facility or Infrastructure Size	Estimated Change in Facility Footprint
15	Repair Water Lines Zone I	This project would repair water lines in Zone 1 as identified in the Creech AFB IDP.	<p>Purpose: The purpose of the proposed project is to repair crucial infrastructure on Creech AFB.</p> <p>Need: The proposed project is needed because Installation water lines are considered crucial infrastructure at Creech AFB. Routine inspection and repair of the water lines are required to ensure proper maintenance.</p>	2027	6,115 lf	N/A
PROJECTS LOCATED OUTSIDE OF THE LAND USE DISTRICTS						
Construction Projects						
C26	Commercial Vehicle Gate	This project would construct a new 6,000-ft ² commercial vehicle inspection facility with gatehouse inspection bays. The area for construction would need to be graded and formed to provide a stable foundation. All utilities would be hydro excavated to a depth of 3–6 feet (ft). The primary electrical circuit would run approximately 500 ft, communications lines would run approximately 2,700 ft, and water lines would run approximately 3,000 ft to trench to the main feed. Sewage would be trenched for a septic tank and septic field. New asphalt road construction would be needed approximately 6,100 ft from US Highway 95 to a newly constructed guard facility.	<p>Purpose: The purpose of the proposed project is to provide security and safety protection to Installation personnel while alleviating traffic congestion concerns along US Highway 95.</p> <p>Need: The proposed project is needed because the current access location results in closures to both personnel entry and highway travel by the Installation. Disruptions are a result of current entry-point conditions caused by commercial vehicle inspections. The project is needed to resolve both concerns.</p>	2026	4,660 ft ²	+4,660 ft ²

Map ID Number	Project Title	Project Description	Purpose and Need	Estimated Construction Year	Estimated New Facility or Infrastructure Size	Estimated Change in Facility Footprint
C27	Northwest Perimeter Fence	This project would construct a fence to contain the remaining land owned by Creech AFB in the northwest parcel.	<p>Purpose: The purpose of the proposed project is to provide security of Creech AFB-owned land by enclosing the parcel.</p> <p>Need: The proposed project is needed because the Creech AFB-owned parcel is not currently enclosed, posing a security risk.</p>	2025	11,000 lf	+11,000 lf

Table 2-1 Summary of Environmental Consequences

Resource Area	Alternative 1	Alternative 2	Alternative 3	No Action Alternative
Land Use	Under Alternative 1, changes to existing land use would not occur. Alternative 1 would comply with, and be consistent with, existing and future installation land use plans and policies, as identified in the Creech AFB IDP and ADP.	Alternative 2 would comply with, and be consistent with, existing and future installation land use plans and policies, as identified in the Creech AFB IDP and ADP.	Alternative 3 would comply with, and be consistent with, existing and future installation land use plans and policies, as identified in the Creech AFB IDP and ADP.	No change to land use conditions on the Installation would occur.
Earth Resources	Under Alternative 1, no impacts to geology; short-term, negligible, adverse impacts to topography; and short-term, moderate, adverse impacts to soils would occur.	Under Alternative 2, impacts would be the same as those under Alternative 1.	Under Alternative 3, impacts would be the same as those under Alternative 1.	No impacts to earth resources would occur.
Air Quality	Under Alternative 1, construction activities that would occur would result in short-term, minor, adverse impacts to air quality. Short-term emissions resulting from construction would remain below the applicable thresholds for air quality standards.	Under Alternative 2, impacts would be the same as those under Alternative 1.	Under Alternative 3, impacts would be the same as those under Alternative 1.	No impacts to air quality would occur.

Resource Area	Alternative 1	Alternative 2	Alternative 3	No Action Alternative
Water Resources	Under Alternative 1, both long-term and short-term, minor, adverse impacts to surface water; long-term, minor impacts to stormwater; long-term, negligible, adverse impacts to floodplains, and no impacts to groundwater or wetlands would occur.	Under Alternative 2, impacts would be the same as those under Alternative 1.	Under Alternative 3, impacts would be the same as those under Alternative 1.	No impacts to water resources would occur.
Biological/Natural Resources	Under Alternative 1, long-term, negligible, adverse impacts to vegetation; short-term, negligible impacts to wildlife; “no effect” to threatened, endangered, and other protected species; and short-term, minor impacts to invasive species would occur.	Under Alternative 2, impacts would be the same as those under Alternative 1.	Under Alternative 3, impacts would be the same as those under Alternative 1.	No impacts to biological or natural resources would occur.
Cultural Resources	Under Alternative 1, long-term, minor impacts, both adverse and beneficial, to architectural properties would occur. There would be no impact to archaeological properties or traditional cultural properties.	Under Alternative 2, impacts would be the same as those under Alternative 1	Under Alternative 3, impacts would be the same as those under Alternative 1.	No impacts to cultural resources would occur.

Resource Area	Alternative 1	Alternative 2	Alternative 3	No Action Alternative
Infrastructure/ Utilities (including Transportation)	Under Alternative 1, long-term, beneficial impacts to transportation and electricity; potable water; and communications systems; short-term, negligible impacts to sanitary sewage/wastewater infrastructure; and short-term, moderate adverse impacts to solid waste would occur. There are no natural gas systems within the region of influence; therefore, there would be no related impacts.	Under Alternative 2, impacts would be the same as those under Alternative 1.	Under Alternative 3, impacts would be the same as those under Alternative 1.	Under the No Action Alternative, long-term, adverse impacts to transportation, utilities and utilities would occur.
Noise/Acoustic Environment	Under Alternative 1, there would be no impacts to the existing noise environment.	Under Alternative 2, there would be no impacts to the existing noise environment.	Under Alternative 3, there would be no impacts to the existing noise environment.	Under the No Action Alternative, there would be no change the noise environment at Creech AFB.

Resource Area	Alternative 1	Alternative 2	Alternative 3	No Action Alternative
Hazardous Materials and Waste	Under Alternative 1, short-term, minor, adverse impacts to hazardous materials and wastes; no impacts to fuel storage, radon, or Environmental Restoration Program sites; short-term, minor, adverse impacts from pesticide usage; and short-term, moderate, adverse impacts to aqueous film forming foam sites would occur.	Under Alternative 2, impacts would be the same as those under Alternative 1.	Under Alternative 3, impacts would be the same as those under Alternative 1.	Under the No Action Alternative, no changes to Hazardous Materials and Waste or contaminated sites at Creech AFB would be expected to occur.
Safety and Occupational Health	Under Alternative 1, long-term, minor beneficial impacts to ground and construction safety; long-term, moderate beneficial impacts related to flight safety, explosives safety, and bird and wildlife safety hazards would occur.	Under Alternative 2, impacts would be the same as those under Alternative 1.	Under Alternative 3, impacts would be the same as those under Alternative 1.	Under the No Action Alternative, long-term, minor, adverse impacts to safety and occupational health would occur as a result of the continued deterioration of support facilities and deficiencies in crucial infrastructure.
Socioeconomics	Under Alternative 1, short-term, minor, beneficial impacts to socioeconomics would occur.	Under Alternative 2, impacts would be the same as those under Alternative 1.	Under Alternative 3, impacts would be the same as those under Alternative 1.	No effects to socioeconomics would occur.

ADP = Area Development Plan; AFB = Air Force Base; IDP = Installation Development Plan

Table 3-1 Past, Present, and Reasonably Foreseeable Environmental Actions

Name	Description	Timeframe	Approximate Distance from Creech AFB
Federal Projects			
BLM Solar Project	The US Bureau of Land Management has proposed a 5,000-acre solar panel project that would be located approximately 5 miles west of Indian Springs, Nevada. This project would support the generation of 300 megawatts of solar energy and battery storage.	Project initiated 05 June 2023	5 miles
Interstate 11 Feasibility Study	The Nevada Department of Transportation plans to convert US Highway 95 to an access-controlled Interstate Highway facility. Improvements would result in a freeway bypass around Indian Springs.	TBD	1 mile
Non-Federal Projects			
Indian Springs Elementary, Middle, and High School	Located within Indian Springs, this project would replace the existing schools on a developed 37.2-acre parcel.	March 2027	1 mile
High Desert State Prison – Underground Piping Replacement	This is a state-funded project to replace underground heating and chilled water piping, as well as water controls, at the prison.	2023–2025	6 miles
Southern Desert Correctional Center – Improvements	State-funded improvements to the Southern Desert Correctional Center include additional and upgraded perimeter security fencing, electrical service meter upgrades and replacements, generator removal, fiber optic line updates throughout the facility, new cell doors and locks, and new security gates.	2023–2025	7 miles

BLM = Bureau of Land Management; TBD = to be determined

Table 3-2 National Ambient Air Quality Standards

Pollutant		Primary/ Secondary ^{a,b}	Averaging Time	Level ^c	Form
Carbon monoxide		Primary	8 hours	9 ppm	Not to be exceeded more than once per year
			1 hour	35 ppm	
Lead		Primary and Secondary	Rolling 3-month average	0.15 µg/m ³	Not to be exceeded
Nitrogen dioxide		Primary	1 hour	100 ppb	98th percentile of 1-hour daily maximum concentrations, averaged over 3 years
		Primary and Secondary	1 year	53 ppb	Annual mean
Ozone		Primary and Secondary	8 hours	0.070 ppm	Annual fourth-highest daily maximum 8-hour concentration, averaged over 3 years
Particle Pollution	PM _{2.5}	Primary	1 year	12.0 µg/m ³	Annual mean, averaged over 3 years
		Secondary	1 year	15.0 µg/m ³	Annual mean, averaged over 3 years
		Primary and Secondary	24 hours	35 µg/m ³	98th percentile, averaged over 3 years
	PM ₁₀	Primary and Secondary	24 hours	150 µg/m ³	Not to be exceeded more than once per year on average over 3 years
Sulfur dioxide		Primary	1 hour	75 ppb	99th percentile of 1-hour daily maximum concentrations, averaged over 3 years
		Secondary	3 hours	0.5 ppm	Not to be exceeded more than once per year

Source: [NAAQS table](#)

µg/m³ = micrograms per cubic meter; NAAQS = National Ambient Air Quality Standards; PM_{2.5} = particulate matter less than or equal to 2.5 microns in diameter; PM₁₀ = particulate matter less than or equal to 10 microns in diameter; ppb = parts per billion; ppm = parts per million; USEPA = US Environmental Protection Agency

Notes:

- Primary Standards: the levels of air quality necessary, with an adequate margin of safety to protect public health. Each state must attain the primary standards no later than three years after that state's implementation plan is approved by the USEPA.
- Secondary Standards: the levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.
- Concentrations are expressed first in the units in which they were promulgated.
 - In areas designated nonattainment for the lead standards prior to the promulgation of the current (2008) standards, and for which implementation plans to attain or maintain the current (2008) standards have not been submitted and approved, the previous standards (1.5 µg/m³ as a calendar quarter average) also remain in effect.
 - The level of the annual nitrogen dioxide standard is 0.053 ppm. It is shown here in terms of ppb for the purposes of clearer comparison to the 1-hour standard level.
 - The final rule signed October 1, 2015, and effective December 28, 2015. The previous (2008) ozone standards are not revoked and remain in effect for designated areas. Additionally, some areas may have certain continuing implementation obligations under the prior revoked 1-hour (1979) and 8-hour (1997) ozone standards.
 - The previous sulfur dioxide standards (0.14 ppm 24-hour and 0.03 ppm annual) will additionally remain in effect in certain areas: (1) any area for which it is not yet 1 year since the effective date of designation under the current (2010) standards, and (2) any area for which an implementation plan providing for attainment of the current (2010) standard has not been submitted and approved and which is designated nonattainment under the previous sulfur dioxide standards or is not meeting the requirements of a state implementation plan call under the previous sulfur dioxide standards (40 CFR § 50.4(3)). A state implementation plan call is a USEPA action requiring a state to resubmit all or part of its state implementation plan To demonstrate attainment of the required NAAQS.

Table 3-3 Annual Air Emissions, LVIAQCR (tpy)

Pollutant	2024	2025	2026	2027	2028	2029	2030 (steady-state)
Volatile organic compound	0.136	0.220	0.550	2.914	1.070	0.132	0.031
Nitrogen oxides	1.127	1.099	2.514	4.957	2.933	2.577	1.812
Carbon monoxide	1.472	1.674	3.036	4.521	2.044	1.381	0.453
Sulfur oxides	-0.099	-0.122	0.519	3.078	3.884	3.915	3.913
PM10	0.174	0.059	19.709	138.94 3	9.196	0.226	0.112
PM2.5	0.046	0.044	0.080	0.158	0.076	0.064	0.042
Lead	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Ammonia	0.001	0.002	0.002	0.004	0.002	0.004	0.000
Carbon dioxide-equivalent	135.1	176.9	673.1	2,085.5	1,898.7	1,906.9	1,682.8

LVIAQCR = Las Vegas Intrastate Air Quality Control Region; PM_{2.5} = particulate matter less than or equal to 2.5 microns in diameter; PM₁₀ = particulate matter less than or equal to 10 microns in diameter; tpy = tons per year

Table 3-4 Highest Annual Air Emissions and Indicators/Thresholds, LVIAQCR (tpy)

Pollutant	Highest Annual Emissions (ton/yr)	GENERAL CONFORMITY	
		Threshold (ton/yr)	Exceedance (yes or no)
Volatile organic compound	2.914	250	No
Nitrogen oxides	4.957	250	No
Carbon monoxide	4.521	250	No
Sulfur oxides	3.915	250	No
PM10	138.943	250	No
PM2.5	0.158	250	No
Lead	0.000	25	No
Ammonia	0.004	250	No
Carbon dioxide-equivalent	2,085.5	75,000	No

LVIAQCR = Las Vegas Intrastate Air Quality Control Region; PM_{2.5} = particulate matter less than or equal to 2.5 microns in diameter; PM₁₀ = particulate matter less than or equal to 10 microns in diameter; PSD = Prevention of Significant Deterioration; tpy = tons per year

Table 3-5 Species of High Priority on Creech AFB

Common Name	Scientific Name	State Status	Presence on Creech AFB
Birds			
Loggerhead shrike	<i>Lanius ludovicianus</i>	SGCN, SB	Confirmed
Phainopepla	<i>Phainopepla nitens</i>	SGCN	Confirmed
Reptiles			
Western banded gecko	<i>Coleonyx variegatus</i>	SGCN	Confirmed
Great Basin collared lizard	<i>Crotaphytus bicinctores</i>	SGCN	Confirmed
Long-nosed leopard lizard	<i>Gambelia wislizenii</i>	SGCN	Confirmed
Mojave Desert tortoise	<i>Gopherus agassizii</i>	SGCN, TR	Confirmed
Desert horned lizard	<i>Phrynosoma platyrhinos</i>	SGCN	Confirmed
Western threadsnake	<i>Rena humilis</i>	SGCN	Probable
Chuckwalla	<i>Sauromalus ater</i>	SGCN	Confirmed
Smith's black-headed snake	<i>Tantilla hobartsmithi</i>	SGCN	Probable
Sonoran lyre snake	<i>Trimorphodon lambda</i>	SGCN	Probable
Mammals			
Pallid bat	<i>Antrozous pallidus</i>	PM	Confirmed
Townsend's big-eared bat	<i>Corynorhinus townsendii</i>	SGCN, SM	Confirmed
Big brown bat	<i>Eptesicus fuscus</i>	PM	Confirmed
Silver-haired bat	<i>Lasionycteris noctivagans</i>	SGCN	Confirmed
Western red bat	<i>Lasiurus blossevillii</i>	SGCN, SM	Confirmed
Hoary bat	<i>Lasiurus cinereus</i>	SGCN	Confirmed
Long-eared myotis	<i>Myotis evotis</i>	SGCN	Confirmed
Fringed myotis	<i>Myotis thysanodes</i>	SGCN, PM	Confirmed
Canyon bat	<i>Parastrellus hesperus</i>	N/A	Confirmed
Mexican free-tailed bat	<i>Tadarida brasiliensis</i>	SGCN, PM	Confirmed

Source: Creech AFB, 2023

N/A = not applicable; P (M, R, B) = protected mammal, reptile, or bird); SGCN = Species of Greatest Conservation Need; S (M, R, B) = sensitive mammal, reptile, or bird; T (M, R, B) = threatened mammal, reptile, or bird

Table 3-6 NRHP-Eligible Architectural Resources within the APE

SHPO ID	Historic Name	Date Built	NRHP Status and Eligibility Criteria	APE
S1829	Runway 08/26	1943	Eligible (A)	Physical
S1830	Runway 13/31	1943	Eligible (A)	Physical
S1831	Taxiway B	1943	Eligible (A)	Visual
S1832	Beacon	1952	Eligible (A, C)	Visual

(A) = eligible under Criterion A; APE = Area of Potential Effect; (C) = eligible under Criterion C; NRHP = National Register of Historic Places; SHPO = State Historic Preservation Office

Table 3-7 Architectural Surveys and Studies Conducted within the APE

SHPO Report Number	Report Author(s)	Report Name	Year
TBD	EAS	Additional Documentation and Evaluation of Potential Historic Districts at Creech Air Force Base, Clark County, Nevada	2025
TBD	Curran, Joe; Peter Mires, Ashley Konoske Wiley, and Kelly Edmiston	Cultural Resource Inventory for Creech Air Force Base, Clark County, Nevada	2024
23425	SWCA	Historic Overview of the Creech Air Force Base Runway System, Indian Springs, Clark County	2018
24132	Edwards, Erin	Historic Building Inventory of Nellis Air Force Base, Creech Air Force Base, and Nevada Test and Training Range, Las Vegas, Nevada	2018
20179	Edwards, Susan	Architectural Survey and Historic Evaluation of Ten Resources at Nellis and Creech Air Force Bases, Clark County	2015
20297	Edwards, Susan	Documentation Regarding Nine Demolished Buildings at Nellis and Creech Air Force Bases, Clark County, Nevada	2015
20182	Higgins, Courtney, Daron Duke, and Steven J. Melvin	Cultural Resources Inventory of 17 Acres for the Creech Air Force Base Land Acquisition Project, Clark County	2014
TBD	Travisano, Mikel, Michelle Wurtz, Marsha Prior, and Tarin E. Erickson	Nellis Air Force Base Historic Evaluation of 64 Buildings	2009
TBD	Travisano, Mikel, Michelle Wurtz, Natalie K. Thomas, and Marsha Prior	Nellis Air Force Base Historic Evaluation Of 251 Buildings	2007
175	Geo-Marine, Inc.	Nellis Air Force Base, Historic Evaluation of 9 Buildings	2006

Source: [NVCRIS](#)

Table 3-8 Archaeological Surveys Conducted within the APE

SHPO Report Number	Report Author(s)	Report Name	Year
TBD	Curran, Joe; Peter Mires, Ashley Konoske Wiley, and Kelly Edmiston	Cultural Resource Inventory for Creech Air Force Base, Clark County, Nevada	2024
29858	Younie, A.; Perri, A.; Cook, M.	Class III Archaeological Inventory for Fence-To-Fence Environmental Services at Creech Air Force Base, Clark County, Nevada	2022
18756	Riddle, Jennifer E.	A Class III Cultural Resource Investigation of Material Pit NY 07-04 and the NDOT Right-of-Way on US-95 from Milepost NY 8.14 to Milepost CL 120.44 in Nye and Clark Counties, Nevada	2013
4686	Eskenazi, Suzanne and Christopher Harper	Archaeological Survey for the Proposed Mercury to Indian Springs Fiber Optic Line, Clark and Nye Counties, Nevada	2010
3997	Leavitt, Robert M. and Jeffrey L. Baker	Class III Cultural Resource Inventory of Proposed Sewage Disposal Pond and Associated Facilities on Clark County Water Reclamation District Property and Public Rights of Way Indian Springs, Clark County, NV	2009
11293	Myhrer, Keith	An Inventory of 111 Acres for a Bypass Road and Staging Area at Creech Air Force Base, Clark County, Nevada NAFB Report 07-03	2007
657	Kolvet, Renee Corona et al	A Stratified Archaeological Sample of Low Elevation Areas on Nellis Air Force Range, Nevada	2000
11402	Pippin, Lonnie C. and Susan Edwards	A Class III Cultural Resources Reconnaissance for a 167 Km Fiber Optic Line Between the Air Force Auxiliary Field at Indian Springs and the Cedar Pass Gate on the Tonopah Test Range, Nellis Air Force Range, Nevada	1997
11392	York, Andrew L., Robin E. McMullen, Paula del Espinasse, and W. Geoffrey Spaulding	Archaeological Survey of the Indian Springs Air Force Auxiliary Field, Nellis Air Force Base, Clark County, Nevada	1996
11324	Bergin, Kathleen Ann	A Cultural Resource Inventory of the Indian Springs Landfill Expansion Project Area, Indian Springs Air Force Auxiliary Field, Clark County, Nevada	1991
13045	Sheets, Robert S.	Indian Springs Fiber Optic Project	1991
5-1763	Myhrer, Keith	Material Pits Near Indian Springs	1989

SHPO Report Number	Report Author(s)	Report Name	Year
SR071888-1	Livingston, Stephanie D. and Lonnie C. Pippen	Evaluation of Site 26CK3906 on the Air Force Auxiliary Field, Indian Springs, Nevada	1989
16231	Durand, Stephen R., Reno, Ronald and Alvin McLane	Archaeological Survey and Evaluation of Six Parcels on Nellis Air Force Base, Lincoln, Clark, and Nye Counties, Nevada	1988
16243	Reno, Ronald L., Katherine Cheryl Dojaquez	A Class III Cultural Resources Reconnaissance of Radiological Monitoring Stations for the Yucca Mountain Project, Clark and Nye Counties, Nevada	1988
12377	Blair, Lynda M. Blair and Peter J. Calos	A Cultural Resource Inventory of the National Guard Licensed Area on Range 65 Near Indian Springs, Clark County, Nevada	1987
12981	N/A	An Archaeological Survey between Beatty, Nye County, and Indian Springs, Clark County, Nevada	1982
13027	Windham, Michael D.	Seismic Exploration Lines Near the Spring Mountains Clark County, Nevada.	1981
5-772	Liebhauser, William J.	12-5 KV Aerial Powerline R/W N-30598	1981

Source: [NVCRIS](#)

N/A = not available; SHPO = State Historic Preservation Office

Table 3-9 NRHP-Eligible and Unevaluated Archaeological Resources within the APE

Site No.	Temporal Affiliation	Description	NRHP Status	APE
CK1649	Historic	Las Vegas and Tonopah Railroad berm	Eligible	Visual
CK3871	Prehistoric	Isolate chert interior flake, broken	Unevaluated	Visual
CK3872	Prehistoric	Lithic quarry	Unevaluated	Physical
CK3906	Prehistoric	Lithic scatter	Unevaluated	Physical
CK3907	Prehistoric	Isolated obsidian tertiary flake	Unevaluated	Visual
CK3908	Prehistoric	Lithic scatter; 4 chert flakes	Unevaluated	Physical
CK3909	Prehistoric	Isolated chert tertiary flake	Unevaluated	Physical
CK3910	Prehistoric	Isolated chert secondary flake	Unevaluated	Physical
CK3911	Prehistoric	Isolated chert secondary flake	Unevaluated	Physical
CK4029	Prehistoric	Isolated chert secondary flake	Unevaluated	Visual
CK4030	Prehistoric: Middle Archaic	Isolated Elko series projectile point	Unevaluated	Visual
CK4031	Prehistoric	Isolated chert flake	Unevaluated	Visual
CK4100	Historic	Las Vegas and Tonopah Railroad gradient	Unevaluated	Visual
CK4700	Prehistoric	Dispersed prehistoric hearth	Unevaluated	Physical
CK5265	Prehistoric	Lithic scatter; 9 chert flakes	Unevaluated	Physical
CK5266	Prehistoric: Archaic	Lithic scatter with tools	Unevaluated	Physical
CK5267	Prehistoric	Lithic scatter	Unevaluated	Physical
CK5268	Prehistoric	Lithic scatter	Unevaluated	Physical
CK5269	Prehistoric	Lithic scatter	Unevaluated	Physical
CK5270	Prehistoric: Archaic	Lithic scatter with tools	Unevaluated	Physical
CK5271	Prehistoric	Lithic scatter	Unevaluated	Physical
CK5272	Prehistoric	Lithic scatter; 3 flakes, 1 core	Unevaluated	Visual
CK5273	Prehistoric	Lithic scatter; 4 flakes, 2 cores	Unevaluated	Visual
CK5274	Historic	Trash scatter; early-mid-20 th century	Unevaluated	Physical
CK5275	Historic	Trash scatter; early-mid-20 th century	Unevaluated	Physical
CK5276	Historic	Trash scatter/automotive parts	Unevaluated	Visual
CK5395	Prehistoric	Temporary camp	Unevaluated	Visual

Source: [NVCRIS](#)

APE = Area of Potential Effect; NRHP = National Register of Historic Places; SHPO = State Historic Preservation Office

Table 3-10 Peak Sound Pressure Level of Construction Equipment from 50 Feet

Equipment	Sound Pressure Level (dBA)
Bulldozer	95
Scraper	94
Front Loader	94
Backhoe	92
Grader	91
Crane	86

Source: Federal Highway Administration, 2006
dBA = A-weighted decibel

Table 3-11 Population Characteristics

Location	Census Year		Average Annual Growth Rate	Total Growth (percent)
	2012	2022		
United States	309,138,711	331,097,593	0.7	7.1
Nevada	2,704,204	3,104,817	1.5	14.8
Clark County	1,954,773	2,265,926	1.6	15.9
Indian Springs	938	837	-1.1	-10.8

Source: USCB, 2012, 2022a

Table 3-12 Housing

Property Description	Indian Springs	Clark County	Nevada	US
Total units	375	923,275	1,288,357	140,943,613
Owner-occupied (percent)	65.7	56.2	58.4	64.8
Renter-occupied (percent)	34.3	43.8	41.6	35.2
Vacant units	92	90,908	124,686	15,207,260
Homeowner vacancy rate ^a (percent)	7.5	1.3	1.2	1.1
Rental vacancy rate ^b (percent)	21.8	7.5	6.9	5.5
Median value ^c	273,700	368,800	373,800	281,900

Source: USCB 2022b

a Homeowner vacancy rate is the proportion of the homeowner inventory that is vacant “for sale.”

b Rental vacancy rate is the proportion of the rental inventory that is vacant “for rent.”

c Median value of owner-occupied units.