DRAFT

Environmental Assessment

For

Adaptive Reuse Potential of Building 291 at Mountain Home Air Force Base, Idaho

Prepared for:

Department of the Air Force
366th Fighter Wing
Mountain Home Air Force Base, Idaho

(no document text this page)

Cover Sheet

Responsible Agency: 366th Fighter Wing, Mountain Home Air Force Base (AFB), Idaho.

Proposed Action: Building 291 and the accompanying 103 acres (referred to as the Alert Complex) would be utilized for various training scenarios.

Point of Contact: Air Force Civil Engineer Center: Ms. Cynthia Pettit, AFCEC/CZN, 210-925-3367; Mountain Home AFB: Sheri Robertson, 366 CES/CEIEA, COM 208-828-4247, DSN 728-4247

Report Designation: Preliminary Draft Environmental Assessment (EA)

Abstract: Mountain Home AFB is preparing an EA addressing potential impacts of reuse options for the Alert Complex. The purpose of this evaluation is to determine the most appropriate end state of the Building 291 and the accompanying 103-acre that comprises the former Alert Complex while considering both the *Sustainable Installations and Air Force 20/20 by 2020* memorandum calling for reduction and consolidation of U. S. Air Force's (USAF) real property, and *Executive Order (EO) 13287: Preserve America,* which serves to protect cultural resources. This evaluation is needed in order to most efficiently utilize available resources at Mountain Home AFB, while also protecting valuable historic properties.

Building 291 and its 103-acre site at Mountain Home AFB is a National Register of Historic Places-eligible facility while also being considered excess property by Mountain Home AFB. The Alert Complex was constructed between 1957 and 1960 under the Strategic Air Command during the Cold War. In 2015, a Programmatic Agreement between Mountain Home AFB, the Advisory Council on Historic Preservation, and the Idaho State Historic Preservation Office was signed for the "Cold War Alert Facility at Mountain Home AFB" (i.e. Alert Complex), which prescribes the long-term management plan for the historic facility.

Under the Proposed Action, the Alert Complex would be utilized for various training scenarios. Currently, the 366th Civil Engineer Squadron (CES) Readiness and Emergency Management Flight and the 366th Fighter Wing (FW) are interested in utilizing the facility for training and Building 291 would be renovated such that it could be used to support training operations.

The following resources were identified for study in this EA: noise, land use, hazardous materials and wastes, biological resources, cultural resources, safety and occupational health, and utilities and infrastructure.

(no document text this page)

DRAFT

FINDING OF NO SIGNIFICANT IMPACT

ENVIRONMENTAL ASSESSMENT
ADAPTIVE REUSE POTENTIAL OF BUILDING 291

MOUNTAIN HOME AIR FORCE BASE, IDAHO

AGENCY: 366th Fighter Wing, Mountain Home Air Force Base (AFB), Idaho

BACKGROUND: The purpose of this evaluation is to determine the most appropriate end state of Building 291 and the accompanying 103-acres that comprises the former Alert Complex, while considering both the *Sustainable Installations and Air Force 20/20 by 2020* memorandum calling for reduction and consolidation of United States Air Force's (USAF) real property, and *Executive Order (EO) 13287: Preserve America,* which serves to protect cultural resources. This evaluation is needed in order to most efficiently utilize available resources at Mountain Home AFB, while also protecting valuable historic properties.

Building 291 and its 103-acre site at Mountain Home AFB is a National Register of Historic Places-eligible facility while also being considered excess property by Mountain Home AFB. The Alert Complex was constructed between 1957 and 1960 under the Strategic Air Command during the Cold War. The Alert Complex includes Building 291, three taxiways, two herringbone alert aprons, access road system, secure fencing, and blast reflectors covering a total area of 103 acres. The project site is located at the southeast corner of Mountain Home AFB at the end of the main runway.

Building 291 is a two-level building that encompasses approximately 33,000 square feet. It was vacated in 2007 and has not had routine maintenance since that time. In 2015, a Programmatic Agreement between Mountain Home AFB, the Advisory Council on Historic Preservation, and the Idaho State Historic Preservation Office (SHPO) was signed for the "Cold War Alert Facility at Mountain Home AFB" (i.e. Alert Complex), which prescribes the long-term management plan for the historic facility.

Pursuant to National Environmental Policy Act (NEPA), 32 Code of Federal Regulations 989, *Air Force Environmental Impact Analysis Process*, and other applicable regulations, Mountain Home AFB completed an Environmental Assessment (EA) of the potential environmental consequences of various reuse options for the Alert Complex. Six action alternatives were screened against the set of selection standards identified for potential reuse scenarios; however, only the Proposed Action and the No-action Alternative satisfied the standards for comparison. The attached EA evaluated the effects of the Proposed Action and the No-action Alternative, and supports this Finding of No Significant Impact.

Proposed Action: Under the Proposed Action, the Alert Complex will be utilized for various training scenarios. Currently, the 366th Civil Engineering Squadron (CES) Readiness and Emergency Management Flight and the 366th Fighter Wing (FW) are interested in utilizing the facility for training and Building 291 will be renovated such that it could be used to support training operations.

No-Action Alternative: Under the No-action Alternative, the Alert Complex would be managed according to the terms and conditions identified within the 2015 Programmatic Agreement including, but not limited to:

- Preservation maintenance (housekeeping, routine and cyclic maintenance, and stabilization) meeting the Secretary of the Interior's Standards for the Treatment of Historic Properties
- Routine grounds maintenance (e.g. grass cutting and tree trimming)
- Rehabilitation of existing parking pads, access roads, and sidewalks with in-kind materials and features within previously disturbed areas
- Repaving of existing roads or existing parking areas within previously disturbed areas
- Placement, maintenance, or replacement of below ground utility lines, transmission lines, within previously disturbed areas
- Pest control, securing exterior envelope from moisture, and structurally stabilizing building, where needed
- Maintenance of exterior berm
- Securing of building from vandals and break-ins
- Maintenance of interior ventilation per Secretary of Interior Standards
- Development of a routine maintenance and law enforcement monitoring plan and a routine maintenance plan

SUMMARY OF ENVIRONMENTAL EFFECTS FOR THE PROPOSED ACTION:

Noise - Training activities anticipated under the Proposed Action are expected to be limited to primarily office work and will not be expected to generate noise outside of Building 291. Therefore, impacts for both Proposed Action are limited to construction noise. None of the construction activities will produce noise levels at noise sensitive receptors above the requisite level to protect health and welfare with an adequate margin of safety (i.e. 75 dBA). Therefore, impacts from noise are expected to be short-term and minor.

Land Use - The Proposed Action will not result in a change to the land use classifications of the Alert Complex. Additionally, there would be no changes made to the existing Live Ordnance Loading Areas (LOLAs) or their availability for aircraft parking. Although the Alert Complex is located within Quantity Distance (QD) arcs, implementation of the Proposed Action will include an emergency action plan to be implemented in the event that an aircraft carrying explosive cargo must make an emergency landing at Mountain Home AFB and must be parked on a LOLA.

Hazardous Materials and Wastes – Under the Proposed Action, hazardous waste would be generated during building renovation activities including abatement of asbestos-containing material (ACM) and lead based paint (LBP) and the removal of mercury and polychlorinated biphenyl (PCB) containing materials. All ACM, LBP, mercury, and LBP activities will be managed of in accordance with all federal, state, local, and USAF policies and regulations. In addition, under the Proposed Action, pesticides will be used to control rodents currently infesting the facility. Pesticides applications will follow all label cautions and instructions to

reduce hazards and be applied in accordance with all federal, state, and local regulations and Department of Defense and USAF policies and requirements. No adverse impacts related to or from hazardous materials and waste are anticipated as a result of implementation of the Proposed Action.

Biological Resources – Implementation of the Proposed Action or the No-action Alternative would not result in adverse impacts to biological resources.

Cultural Resources – Implementation of the Proposed Action or the No-action Alternative would not result in adverse impacts to cultural resources.

Safety and Occupational Health – The potential presence of Hantavirus Pulmonary Syndrome (HPS) within Building 291 due to the infestation of rodents is a safety concern for any building occupants. Pest management at Mountain Home AFB applies pesticide quarterly to the exterior of the facility in order to limit rodent activity within and around the building. Implementation of pest management practices would minimize the risk of personnel contracting HPS.

Since the Alert Complex is located within QD arcs associated with the LOLAs, exposure to man-made hazards would be limited to potential damage or injury from nearby potential explosion sites at the LOLAs. In the event of an emergency landing that must occupy the LOLA, no non-mission essential personnel would occupy the area within the QD arcs. This safety plan would be implemented to reduce the potential explosive hazard to personnel within the Alert Complex.

Building 291 reportedly contains ACM, LBP, mercury, and PCBs, which would be removed by a trained contractor. All ACM, LBP, mercury, and PCBs removed would be managed in accordance with all federal, state, and local regulations and Department of Defense and USAF policies and requirements. Removal of these hazardous materials from Building 291 would result in a beneficial impact in that the materials would no longer present a hazard to building occupants.

No adverse safety or occupational health impacts are expected as a result of the Proposed Action.

Utilities and Infrastructure – Trenching for underground utility renovation and/or replacement would result in short-term disturbance to previously disturbed soils. Fugitive dust may be generated but would be minor and short-term, would fall off rapidly with distance from the construction site, and would last only as long as the duration of soil disturbance. Upgrades to utilities and infrastructure will result in beneficial impacts.

SUMMARY OF MITIGATION MEASURES AND BEST MANAGEMENT PRACTICES: Mitigation is not needed, as the implementation of this proposal is not anticipated to significantly impact the environment in any area. Additionally, unless otherwise stated below, Best Management Practices (BMPs) are not recommended.

Noise - BMPs would include equipping noise-generating heavy equipment at the project site with the manufacturer's standard noise control devices. All equipment should be properly maintained to ensure that no additional noise from worn or improperly maintained equipment

parts is generated. Construction activities would occur between 0700 and 1900 hours (when possible) and would be conducted according to Occupational Safety and Health Administration regulations. These minimization measures shall be updated to reflect current practices at the time of project execution.

Land Use – No measures to minimize impacts or BMPs would be necessary. Preparation and implementation of an emergency action plan within the QD arcs would alleviate any land use conflicts.

Hazardous Materials and Wastes – Hazardous materials and wastes would be managed in accordance with all federal, state, and local regulations and Department of Defense and USAF policies and requirements.

Biological Resources - Wildlife and conservation management practices would be followed in order to ensure that the habitat necessary for protected species is not lost. To avoid any adverse impacts to the burrowing owl, ground nesting surveys should be conducted prior to any (currently unforeseen) ground disturbance that would occur during the nesting season from approximately 1 April through 15 July. If nesting burrowing owls are reported during the survey, then no ground disturbance should occur. To avoid adverse impacts to the long-eared myotis, buildings should be inspected for roosting bats prior to the start of proposed building renovation activities.

Cultural Resources – No measures to minimize impacts or BMPs would be necessary. Consultations with the SHPO regarding the selected action and compliance with the Programmatic Agreement was initiated in October 2015 and is in process.

Safety and Occupational Health – BMPs to limit safety hazards would include briefings with personnel on HPS; signage posted to indicate parking areas and required traffic flow patterns; signage and fencing to indicate construction areas; and personnel conducting LBP, and ACM, mercury, and PCB removal doing so in accordance with regulations, policies, and requirements. Implementation of pest management practices and a standard cleaning regime at Building 291 would minimize worker's and personnel's risk of contracting HPS. Additionally, preparation and implementation of an emergency action plan within the QD arcs would minimize the risk of injury to workers due to unforeseen explosions.

Utilities and Infrastructure – BMPs to reduce fugitive dust would include spraying water over the soil during trenching activities. Erosion control measures, such as silt fences or other barricades may be necessary to prevent soil runoff and would be included as BMPs within a Storm Water Pollution Prevention Plan. BMPs to minimize hazards to workers and base personnel would include posting signage and erecting fencing around construction areas.

SUMMARY OF FINDINGS FOR NO ACTION ALTERNATIVE: Under the No-action Alternative, training activities would not occur on the Alert Complex. Impacts resulting from Programmatic Agreement compliance would be the same as those described for the Proposed Action.

SUMMARY OF CUMULATIVE EFFECTS: Currently, there are no known projects planned for the foreseeable future that would affect Building 291 and its accompanying 103 acres.

FINDING OF NO SIGNIFICANT IMPACT:

Based upon my review of the attached EA, I conclude that the Proposed Action will not have a significant direct, indirect, or cumulative impact upon the environment. Accordingly, the requirements of the NEPA, regulations promulgated by the President's Council on Environmental Quality, and 32 CFR Part 989 are fulfilled and an Environmental Impact Statement is not required at this time.

_____ _____

Date

(no document text this page)

Privacy Advisory Notice

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

(no document text this page)

TABLE OF CONTENTS

TABLE OF CONTENTS (CONTINUED)

LIST OF TABLES

LIST OF FIGURES

APPENDICES

ACRONYMS AND ABBREVIATIONS

AFB	Air Force Base
AFI	Air Force Instruction
AFM	Air Force Manual
AFOSH	Air Force Office of Safety and Health
AFSAS	Air Force Safety Automated System
AICUZ	Air Installation Compatible Use Zone
AP	Accumulation Points
APZ	Accident Potential Zone
BASH	Bird Air Strike Hazard
BMP	Best Management Practice
CAA	Clean Air Act
CDC	Center for Disease Control
CDP	Census Designated Place
CEQ	(The President's) Council on Environmental Quality
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act of 1980
CES	Civil Engineer Squadron
CFR	*Code of Federal Regulations*
COC	Community of Comparison
CWA	Clean Water Act
dBA	"A-weighted" decibels
DERP	Defense Environmental Restoration Program
DNL	Day-Night Average Sound Level
DoD	(U.S.) Department of Defense
EA	Environmental Assessment
EIAP	Environmental Impact Analysis Process
EO	Executive Order
EPCRA	Emergency Planning and Community Right-to-Know Act
ERP	Environmental Restoration Program
FEMA	Federal Emergency Management Agency
FIFRA	Federal Insecticide, Fungicide, and Rodenticide Act
FONSI	Finding of No Significant Impact
FW	Fighter Wing
FY	Fiscal Year

ACRONYMS AND ABBREVIATIONS (CONTINUED)

HAP	High Accident Potential
HAZMART	Hazardous Materials Pharmacy
HPS	Hantavirus Pulmonary Syndrome
ICRMP	Integrated Cultural Resources Management Plan
INRMP	Integrated Natural Resources Management Plan
IPMP	Integrated Pest Management Plan
kg	Kilograms
LBP	Lead-Based Paint
Lmax	Maximum Sound Level
LOLA	Live Ordnance Loading Area
LQG	Large-Quantity Generator
MBTA	Migratory Bird Treaty Act
MC	Munitions Constituents
mg/cm^2	Milligrams per Centimeter Squared
MSW	Municipal Solid Waste
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NPDES	National Pollutant Discharge Elimination System
NRHP	National Register of Historic Places
OSHA	Occupational Safety and Health Administration
PCBs	Polychlorinated Biphenyls
QD	Quantity-Distance
RCRA	Resource Conservation and Recovery Act
RFR	Laser or Radio Frequency
ROI	Region of Influence
RSAF	Republic of Singapore Air Force
SAC	Strategic Air Command
SHPO	State Historic Preservation Office
SPL	Sound Pressure Level
SWMP	Solid Waste Management Plan

ACRONYMS AND ABBREVIATIONS (CONTINUED)

1	TSCA	Toxic Substance Control Act
2	U.S.	United States
3	USAF	U.S. Air Force
4	USDOT	U.S. Department of Transportation
5	USEPA	U.S. Environmental Protection Agency
6	USFWS	U.S. Fish and Wildlife Service
7	UU/UE	Unlimited Use/Unrestricted Exposure
8		

CHAPTER 1
PURPOSE OF AND NEED FOR ACTION

1.1 INTRODUCTION

Mountain Home Air Force Base (AFB) is home to the 366th Fighter Wing (FW), which consists of four groups and three squadrons. The FW has the firepower of approximately 50 F-15E Strike Eagle aircraft and 12 Republic of Singapore Air Force (RSAF) F-15SG aircraft. An active Air National Guard unit, the 266th Range Squadron, controls and maintains emitter sites within the 9,600-square mile operational training range located in southern Idaho. The mission of Mountain Home AFB is to prepare mission ready Gunfighters to fight and win today's war and the next (MHAFB 2015a).

Encompassing 6,844 acres, Mountain Home AFB is located within southwestern Idaho, approximately 40 miles southeast of Boise, in Elmore County (Figure 1-1). The installation is located at an elevation of 2,996 feet above sea level and is in the western portion of the geologic feature known as the Snake River Plain.

1.2 PURPOSE AND NEED

The purpose of this evaluation is to determine the most appropriate end state of the Building 291 and the accompanying 103-acre that comprises the former Alert Complex while considering both the *Sustainable Installations and Air Force 20/20 by 2020* memorandum calling for reduction and consolidation of U. S. Air Force's (USAF) real property, and *Executive Order (EO) 13287: Preserve America,* which serves to protect cultural resources. This evaluation is needed in order to most efficiently utilize available resources at Mountain Home AFB, while also protecting valuable historic properties.

Building 291 and its 103-acre site (hereon called the Alert Complex) at Mountain Home AFB is a National Register of Historic Places (NRHP)-eligible facility while, with the exception of the Live Ordnance Loading Area (LOLA) ramps within the Alert Complex, it is also considered non-functional property by Mountain Home AFB. The Alert Complex was constructed between 1957 and 1960 under the Strategic Air Command (SAC) during the Cold War. The Alert Complex includes Building 291, three taxiways, two herringbone alert aprons, access road system, secure fencing, and blast reflectors covering a total area of 103 acres (MHAFB 2015b). The project site is located at the southeast corner of Mountain Home AFB at the end of the main runway (Figure 1-2).

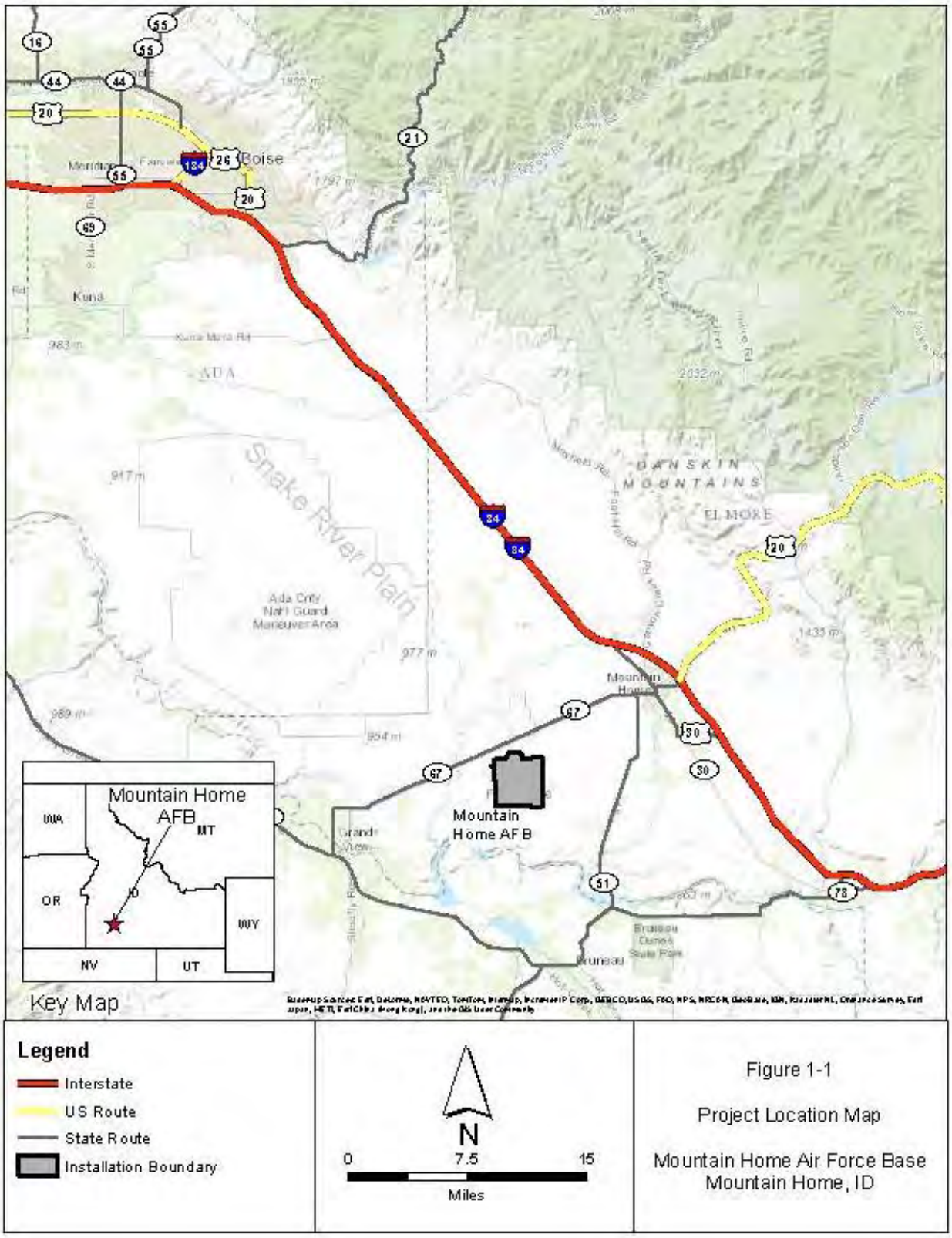

Figure 1-1 Project Location Map

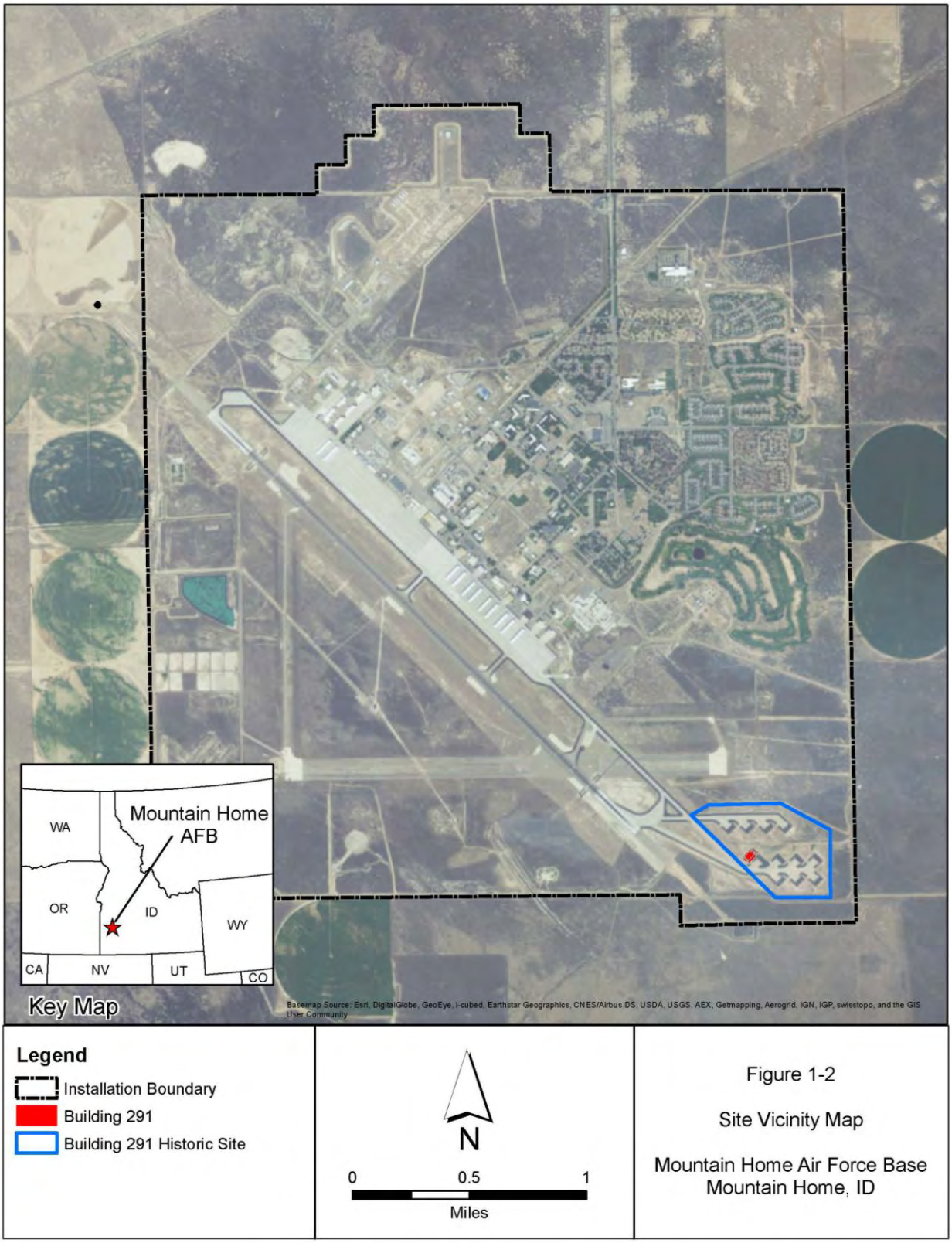

Figure 1-2 Site Vicinity Map

Building 291 is a two-level building that encompasses approximately 33,000 square feet that was vacated in 2007 and has not had routine maintenance since that time. The building has been vandalized and was previously infested with rodents. In 2013, a feasibility study was conducted to determine the potential future usefulness of the facility with consideration to cost impacts necessary for maintenance and upgrades for building occupancy. That study determined that the building, although structurally sound, contains environmental hazards and poor conditions of most infrastructure systems (e.g. mechanical, plumbing, fire protection) (ACC 2013; included as Appendix B). In 2015, a Programmatic Agreement between Mountain Home AFB, the Advisory Council on Historic Preservation, and the Idaho State Historic Preservation Office (SHPO) was signed for the "Cold War Alert Facility at Mountain Home AFB" (i.e. Alert Complex), that prescribes the long-term management plan for the historic facility (included as Appendix A) (MHAFB 2015b).

In June 2010, a Presidential Memorandum was released titled *Disposing of Unneeded Federal Real Estate* which charged all federal agencies with disposing of unneeded real estate, with a focus on utilizing installations more efficiently by optimizing facility-space use, reducing energy and water operating costs, and sustaining only those facilities needed to conduct the mission (POTUS 2010). The *Sustainable Installations and Air Force 20/20 by 2020* memorandum signed by the Vice Chief of Staff on 14 February 2011 is the USAF initiative to comply with this Presidential Memorandum by achieving efficiencies through reducing the owned, leased and USAF-led joint base real property and associated operating costs by 20 percent by the year 2020. One component of this initiative includes consolidating USAF operations into right-sized facilities and demolishing those that do not meet space utilization criteria (USAF 2011).

In 2003, *EO 13287: Preserve America* was signed that served to actively advance the protection, enhancement, and contemporary use of the historic properties owned by the Federal Government, and promote intergovernmental cooperation and partnerships for the preservation and use of historic properties (POTUS 2003). In 2004, the U.S. Department of Defense (DoD) released a Response to EO 13287 wherein it summarizes the DoD's policies regarding management and conservation of cultural resources in conjunction with preserving the mission of the DoD and its components (DoD 2004).

1.3 DECISION TO BE MADE

This Environmental Assessment (EA) evaluates the potential environmental consequences of six options for the Alert Complex at Mountain Home AFB (i.e. demolition and adaptive re-use). Based on the analysis in this EA, the USAF will make one of three decisions regarding the project analyzed: 1) Choose the alternative action that best meets the purpose and need for this project and sign a Finding of No Significant Impact (FONSI), allowing implementation of the selected alternative; 2) initiate preparation of an Environmental Impact Statement if it is determined that significant impacts would occur with implementation of the actions; or 3) select the No-action Alternative, whereby none of the action alternatives would be implemented. As required by the National Environmental Policy Act (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.

1.4 INTERGOVERNMENTAL COORDINATION/ CONSULTATIONS

Through Interagency Coordination, requests have been made for information on planned actions in the surrounding community. Federal, state, and local agencies with jurisdiction that could be affected by the alternatives will be notified and consulted. A complete listing of the agencies consulted may be found in Chapter 6 and interagency correspondence and responses are included in Appendix C. This coordination fulfills the Interagency Coordination Act and EO 12372 *Intergovernmental Review of Federal Programs* (14 July 1982), which requires Federal agencies to cooperate with and consider state and local views in implementing a Federal proposal.

If any concurrent actions are identified during the EA process, they will be examined only in the context of potential cumulative impacts. A cumulative impact, as defined by The President's Council on Environmental Quality (CEQ) (40 Code of Federal Regulations [CFR] 1508.7), is the "impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of which agency (Federal or non-Federal) or person undertakes such actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time."

Based on review of the potential for adverse impacts, the Idaho SHPO and other interested parties have been contacted to initiate the Section 106 consultation. This consultation fulfills 36 CFR Part 800, "Protection of Historic Properties." While Interagency Coordination letters serve as notification of a proposed action and seek to determine an agency's interest, they do not substitute for the Section 106 process. The Section 106 process is initiated through a Government-to-Government letter that declares the intended purpose of initiating the Section 106 process, and through the on-going consultation, seeks ways to avoid, minimize, or mitigate adverse impacts.

1 (no document text this page)

CHAPTER 2
DESCRIPTION OF THE PROPOSED ACTION AND ALTERNATIVE

2.1 PROPOSED ACTION

Under the Proposed Action, the Alert Complex would be utilized for various training scenarios. Currently, the 366th CES Readiness and Emergency Management Flight and the 366th FW are interested in utilizing the facility for training and Building 291 would be renovated such that it could be used to support training operations. 366 CES Readiness and Emergency Management would use the facility as a base of operations for Operations and Maintenance Groups when the rest of their units are operating out of the MOAB exercise site located approximately 1.5 miles west of Building 291.

2.2 SELECTION STANDARDS

Building 291 is located at the end of a runway and it falls within the runway clear zone. Runway clear zones are areas on the ground, located at the ends of runways. They possess a high potential for accidents and their use is restricted to be compatible with aircraft operations. Structures within runway clear zones are not normally compatible and are typically prohibited; however, Building 291 has received an exemption because the facility was constructed under a previous standard. Additionally, a portion of a LOLA associated with the 103-acre Alert Complex is located within the Accident Potential Zone (APZ) I. An APZ is an area that lies beyond the clear zone with lower, but still considerable accident potential. The current LOLA land use is compatible with the APZ I at Mountain Home AFB. The entire Alert Complex is also located within Quantity-Distance (QD) arcs. QD arcs represent an established distance around potential explosion sites to indicate the potential damage or injury radius of explosions from that site. In this case, the potential explosion sites are the LOLAs. When an aircraft carrying explosive cargo must make an emergency landing at Mountain Home AFB, the aircraft are parked on a LOLA until the emergency has been resolved. During this time, no non-mission essential personnel can occupy the area within the QD arcs. Figure 2-1 depicts the Alert Complex in relation to the Clear Zone, APZ I, and the QD Arcs.

Selection standards serve to assist Mountain Home AFB in defining the minimum standards that any alternative must meet. They help to identify a reasonable range of alternatives to be analyzed within the EA. Selection standards in this EA were developed based on USAF initiatives, EOs, and SHPO requirements.

Figure 2-1 Possible Site Constraints

All viable alternatives must:

- Comply with 20/20 by 2020 initiative by optimizing facility-space use, reducing energy and water operating costs, and sustaining only those facilities needed to conduct the mission,
- Comply with EO 13287 by advancing the protection, enhancement, and contemporary use of the historic properties owned by the Federal Government,
- Address remediation of the existing environmental hazards,
- Maintain compliance with the Building 291 Programmatic Agreement, and
- For re-use options,
  - replace or restore to good condition the infrastructure systems within the building,
  - have interested party, and
  - maintain the building's façade such that it does not alter the architectural integrity of the site.

2.3 SCREENING OF ALTERNATIVES

The following six action alternatives were reviewed against the selection standards:

Enhanced Use Lease of the Property – This alternative would require an USAF solicitation of the Building 291 property to attract an outside entity who would be interested in leasing the property.

Relocation of the Entire Facility and Future Re-use – This alternative would include intact removal of Building 291 and the other associated historic structures on the property and relocation to an alternate location. After relocation of the facility, Mountain Home AFB would continue to maintain the facility in accordance with the Programmatic Agreement for Building 291 until such a time that a new facility use is identified. Infrastructure systems would not be updated until a new facility use was identified.

Renovation and Mothballing of Facility – This alternative would include hazardous materials remediation; roof replacement or renovation; and replacement/renovation of existing utilities at Building 291; rehabilitation of existing parking pads, access roads, and sidewalks; and repaving of existing roads or existing parking areas. After renovation activities are complete, the building would remain vacant until a future use for the building was identified. Annual maintenance would occur according to the terms and conditions set forth in the Programmatic Agreement for Building 291.

Demolition of Building 291 – This alternative would include hazardous materials remediation and subsequent demolition of Building 291 and all associated structures within the 103-acre property.

Re-use of Building 291 for a Document Repository – This alternative would include hazardous materials remediation, roof replacement or renovation, and replacement/renovation of existing utilities at Building 291. A document repository (electronic or digital) would then be located within Building 291. This repository could be exclusively for Mountain Home AFB, or could

serve as a USAF-wide repository. The repository would comply with Air Force Manual (AFM) 33-363: Management of Records.

Re-use of Building 291 Site for Training – This alternative would include remediation of all hazardous, replacement or renovation of the roof, and replacement or renovation of existing utilities such that the facility could be used for training scenarios. None of the building's exterior features would be modified for re-use of the facility. Additionally, all management components of the 2015 Programmatic Agreement would be followed by the training units. Training instructors would coordinate training times with the Airfield Manager so as not to conflict with scheduled LOLA occupation by an aircraft.

Table 2-1 below compares each alternative considered against the stated selection standards. Alternatives which meet a given selection standard are indicated in green; whereas, alternatives which do not meet a given selection standard are indicated in red.

Table 2-1 Selection Standard Comparison Against Alternatives

		Alternatives					
		Enhanced Use Lease	**Relocation and Future Re-use**	**Renovate and Mothballing**	**Demolition**	**Re-use for Document Repository**	**Re-use for Training**
Selection Criteria	**Compliance with 20/20 by 2020**						
	Compliance with EO 13287						
	Address Remediation of Environmental Hazards						
	Compliance with B291 PA						
	Replace or Restore Infrastructure Systems*						
	Interested Party for Re-use *						
	Maintain Building Façade to Keep Architectural Integrity of Site*						

* Does not apply to demolition alternative.

Indicates that the alternative meets the selection standard

Indicates that the alternative does not meet the selection standard

Indicates that the alternative is not applicable to be compared against the selection standard

Five of the alternatives in Table 2-1 fail to meet the selection standards and have been eliminated from detailed analysis as discussed in Section 2.6. The alternative that meets all of the selection standards is the re-use of the Alert Complex for training; therefore, this alternative is being carried forward for detailed analysis in the EA and is described further in Section 2.4 below as the Proposed Action. Additionally, as required by the NEPA, the No-action Alternative will also be examined in this EA and is described more fully in Section 2.5.

2.4 DETAILED DESCRIPTION OF THE PROPOSED ACTION

Under the Proposed Action, Building 291 and the accompanying 103 acres comprising the Alert Complex would be utilized for various training scenarios. Building 291 is a two-level building that encompasses approximately 33,000 square feet that has been previously used for training

scenarios prior to 2007. The Alert Complex is in close proximity to the southern apron along the principal runway for Mountain Home AFB with road access to the facility. The lower level of the facility is subterranean and previously accommodated areas that served as temporary living quarters during the occupancy of the facility from 1960 to 2007. The second level of the building has no windows and accommodated partitioned offices, meeting areas, and restroom facilities (ACC 2013).

The 366 CES Readiness and Emergency Management Flight and the 366 FW are interested in utilizing the facility for training and Building 291 would be renovated such that it could be used for either or both scenarios. 366 CES Readiness and Emergency Management Flight would use the facility as a base of operations for Operations and Maintenance Groups when the rest of their units are operating out of the MOAB exercise site located approximately 1.5 miles west of Building 291. The 366 FW would use the facility as a deployed operations center for those visiting units who come to Mountain Home AFB to use the Mountain Home Range Complexes. Both the 366 CES Readiness and Emergency Management Flight and the 366 FW would coordinate with each other and with the Airfield Manager to schedule and coordinate training.

Each training class sizes would vary between a few dozen to a few hundred and could potentially involve 24-hour operations, which would require using some of the building as living quarters. Re-use of the facility would allow the units to train in a currently underutilized facility, thereby optimizing facility-space use and complying with the 20/20 by 2020 initiative. Additionally, the Proposed Action would comply with EO 13287 by assisting Mountain Home AFB in protecting and using a historic property.

Prior to conducting any training, Mountain Home AFB would install communication ports for computer and phone work stations, renovate or create dormitory space (including installation of smoke detectors), install emergency lighting, replace exit signage, repair or replace egress/fire doors, replace fire alarm system (including wiring), remediate all hazardous materials located within Building 291, replace or renovate the existing Building 291 roof, and replace/renovate existing utilities at Building 291. None of the building's exterior features would be modified for re-use of the facility. Additionally, all components of the 2015 Programmatic Agreement would be followed by the training units. Training instructors would coordinate training times with the Airfield Manager so as not to conflict with scheduled LOLA occupation by an aircraft. In the event that an aircraft carrying explosive cargo must make an emergency landing at Mountain Home AFB, the Airfield Manager would immediately notify the training instructor, wherein the instructor would begin an immediate evacuation of the property such that all personnel would relocate outside the QD Arcs for that aircraft's location on the LOLA. No new personnel would be employed or utilized under the Proposed Action.

2.5 NO-ACTION ALTERNATIVE

Under the No-action Alternative, the Alert Complex would be managed according to the terms and conditions identified within the 2015 Programmatic Agreement (MHAFB 2015b) including, but not limited to:

- Preservation maintenance meeting standards and guidelines

- Routine grounds maintenance (e.g. grass cutting and tree trimming)
- Rehabilitation of existing parking pads, access roads, and sidewalks with in-kind materials and features within previously disturbed areas
- Repaving of existing roads or existing parking areas within previously disturbed areas
- Placement, maintenance, or replacement of below ground utility lines, transmission lines, within previously disturbed areas
- Pest control, securing exterior envelope from moisture, and structurally stabilizing building, where needed
- Maintenance of exterior berm
- Securing of building from vandals and break-ins
- Maintenance of interior ventilation per Secretary of Interior Standards
- Development of a routine maintenance and law enforcement monitoring plan and a routine maintenance plan.

2.6 ALTERNATIVES ELIMINATED FROM DETAILED ANALYSIS

The alternatives identified in Table 2-1 that do not meet the selection standards were not carried forward for detailed analysis. Additional details on why each alternative was eliminated is provided below.

Enhanced Use Lease (EUL) of the Property – A lease of the facility would require the leasing entity's use of the property to be compatible with airfield operations as well as maintaining compliance with the Programmatic Agreement. Issues regarding the existing LOLA would need to be addressed either through relocation of the LOLA, or real-time emergency management procedures. Additionally, any leasing entity would have to address existing environmental hazards and degraded infrastructure systems as conditions of a lease. Based on current environmental hazards, degraded infrastructure conditions, and facility use restrictions the building has not been solicited for EUL.

Relocation of the Entire Facility and Future Re-use –This alternative could potentially damage the existing historic resources. The setting of the 103 acres and all associated structures are important to the NRHP eligibility. Additionally, areas of the Alert Complex are needed for parking of aircraft and therefore could not be re-located. Would be a significant impact, unable to mitigate for the total loss of the historic property. In addition, there are currently no entities who have expressed interest in this property for re-use at an alternate location.

Renovation and Mothballing of Facility – Other than that described in the Proposed Action, no other entities have expressed interest in this property for other future reuses.

Demolition of Building 291 – Demolition of Building 291 would not comply with EO 13287 or the Programmatic Agreement for the building. Demolition would result in a significant impact, unable to mitigate for the total loss of the 103-acre historic property.

Re-use of Building 291 for a Document Repository – Currently no need exists for an installation- or USAF-wide repository and no parties have expressed interest in this specific re-use.

CHAPTER 3
AFFECTED ENVIRONMENT

3.1 INTRODUCTION

This chapter describes existing baseline conditions at Mountain Home AFB, which will be used as a basis of comparison in Chapter 4 to identify changes to the natural and human environment after implementation of the Proposed Action and No-action Alternative.

The region of influence (ROI) is the geographical area for each resource area that could potentially be affected by the alternative actions. Generally, the ROI for the resource areas described in this section is limited to the boundary of the Alert Complex. For instances where the ROI is expanded to include the entire boundary of Mountain Home AFB, the ROI is specified in the specific resource area.

3.2 SCOPE OF THE ENVIRONMENTAL REVIEW

NEPA requires Federal agencies to consider environmental consequences in their decision-making process. The CEQ has issued regulations to implement NEPA that include provisions for both the content and procedural aspects of the required environmental impact analysis. The Air Force NEPA process is accomplished through adherence to the procedures set forth in CEQ regulations (40 CFR Sections 1500-1508), DoD Instruction 4715.9 *Environmental Planning and Analysis,* and 32 CFR Part 989 (Environmental Impact Analysis Process [EIAP]), 15 July 1999, as amended. These Federal regulations establish both the administrative process and substantive scope of the environmental impact evaluation designed to ensure that deciding authorities have a proper understanding of the potential environmental consequences of a contemplated course of action.

This EA identifies, describes and evaluates the potential environmental impacts that are associated with re-use of the Alert Complex at Mountain Home AFB. The potential environmental effects of taking no action are also described. As appropriate, the affected environment and environmental consequences of the action may be described in terms of a regional overview or a site-specific description. Fiscal year (FY) 2015 or the most current information is used as the baseline condition.

3.2.1 Resource Areas Addressed in Detail

Resource areas that could be affected by the Proposed Action or the No-action Alternative have been selected to allow for a comprehensive analysis of potential impacts. The intent of this EA is to meet the NEPA requirements established in the Air Force's 32 CFR 989. The following resource areas are discussed in detail in the EA:

- Noise
- Land Use
- Hazardous Materials and Waste
- Biological and Natural Resources
- Visual Resources
- Cultural Resources
- Safety and Occupational Health
- Utilities and Infrastructure
- Transportation

3.2.2 Resource Topics Eliminated from Detailed Analysis

As part of the analysis process, all resource areas that have the potential to impact or be impacted by the Proposed Action are considered during the preliminary assessment phase of the analysis.

Water Resources. Water resources include groundwater, surface water, floodplains, and wetlands. Because both the Proposed Action and the No-action alternative would have no impact on groundwater resources, groundwater has been eliminated from detailed analysis in this EA. Since there are no jurisdiction wetlands or waters of the United States located at Mountain Home AFB, a detailed analysis of wetlands and surface waters have been eliminated from the EA (MHAFB 2007). Additionally, there are no 100- or 500-year floodplains within the Mountain Home AFB boundaries; therefore floodplains have also been eliminated from detailed analysis in this EA (FEMA 1989).

Earth Resources. The Proposed Action activities would be limited to actions within the 103-acre Alert Complex and would not impact soils or geology. Any temporary infrastructure (e.g. tents) erected under the Proposed Action would not result in intrusive ground disturbance; therefore, soils and geology would not be affected. Utility upgrades and replacement within the 103-acre site could potentially impact soils and/or geology but will be further discussed below in Chapter 4 within the Utilities and Infrastructure section. Aside from impacts related to utilities, earth resources has been eliminated from detailed analysis.

Air Quality. The Proposed Action activities would not require limited use of heavy construction equipment, which would be the primary source of pollutant emissions. Generally speaking, the Proposed Action activities would be completed with the use of hand tools that do not create emissions. Heavy equipment (such as a boom lift for roof renovations or trenchers used during underground utility upgrades and replacements) would be used minimally. There would be negligible emissions from the vehicles involved in the few material deliveries that would be required and the minimal privately owned contractor vehicles during their commute to the job site. The renovation of Building 291 would not result in significant ambient air impacts. There would be no long term emissions increase from the use of the Alert Complex by base personnel. The conversion to electric heating and air conditioning would not create any new stationary long term operational emission sources.

Repaving, asphalt rehabilitation and other maintenance activities under the Programmatic Agreement would require temporary use of mobile emission sources such as pavers and rollers. The emissions from these sources would be temporary and eliminated after completion of the activity. There would be minimal ambient air impacts from these localized short-term emissions

that would quickly dissipate with distance from the activity source. The emission of minor amounts of air pollution would be unavoidable; however, the individual and cumulative impacts during the Programmatic Agreement activities would have little impact on the local emissions. Therefore, Air Quality has been eliminated from detailed analysis.

Visual Resources. Under the Proposed Action, there would be no change in the natural and man-made features on or within the vicinity of the Alert Complex. Therefore, Visual Resources has been eliminated from detailed analysis.

Socioeconomics. Under the Proposed Action, there would be no increase in permanent base population and therefore, no increase in housing or education requirements. However, it is likely that the local economy would benefit from expenditures incurred from the environmental remediation and renovation of Building 291. Construction materials and goods (e.g., gasoline for equipment and trucks) would be expected to be purchased from the local area. It should be noted that employment in the area would not increase since it is expected that the remediation and construction companies would utilize their current employees. Since socioeconomic impacts are not expected beyond what are described here, socioeconomics as a resource topic has been eliminated from further analysis in this document.

Environmental Justice. EO 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*, was issued by the President on 11 February 1994. In the EO, the President instructed each Federal agency to make "achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations." 'Adverse' is defined by the Federal Interagency Working Group on Environmental Justice as "having a deleterious effect on human health or the environment that is significant, unacceptable, or above generally accepted norms."

In order to determine if minority and low-income populations would be disproportionately impacted by the Proposed Action, two areas of comparison must first be determined:

- The area potentially affected by the action (i.e., Region of Influence [ROI]); and
- The larger regional community that includes the affected area and serves as a Community of Comparison (COC).

For this analysis, the Mountain Home AFB Census Designated Place (CDP) is considered the ROI, and Elmore County is considered the COC. Table 3-1 shows the percent minority and low-income populations for the ROI and COC.

At least one criteria listed below must be met to determine if an environmental justice population is present:

- If the affected area's percentage of minority or low-income population is greater than that of the general population, the affected area is considered to be a minority or low-income population.

- If the minority population (including Hispanics or Latinos) or low-income population is greater than 50 percent, it is considered a majority-minority or majority low-income population.

Table 3-1 Percent Minority Population and Low-Income Population

Demographic Area	Total Population	Total Hispanic/ Latino Population	Percent Hispanic/ Latino	Total Minority Race Population	Percent Minority Race[a]	Total Low-Income Population	Percent Low Income
Region of Influence							
Mountain Home AFB CDP	3,238	234	7.2	779	**24**	198	6.1
Community of Comparison							
Elmore County, ID	27,038	4,186	15.5	4,767	17.6	4,597	17

Source: USCB 2015
Notes:
[a] Minority Race includes Black or African American; American Indian and Alaska Native; Asian; Native Hawaiian and Other Pacific Islander; and some other race.
Bold text notates the presence of an Environmental Justice population
AFB – Air Force Base
CDP – Census Designated Place
ID – Idaho

Based on the criteria above, there is a minority population present within the Mountain Home AFB CDP. However, all of the impacts associated with the Proposed Action would be localized, both spatially and temporally, to the vicinity of the proposed project site and would not be expected to create disproportionate and adverse impacts to the minority population. Therefore, no impacts to environmental justice would be anticipated under the Proposed Action and no further environmental justice analysis is warranted or included in this EA.

3.3 NOISE

3.3.1 Definition of the Resource

Noise is sound that, if loud enough, can induce hearing loss and can be undesirable if it annoys people due to interference with ordinary daily activities, such as communication or sleep. A person's reaction to noise varies according to the duration, type, and characteristics of the source, distance between the source and receiver, receiver's sensitivity, background noise level and time of day.

Sound is a series of vibrations (energy) transmitted through a medium that are perceived by a receiver. Sound varies in intensity and frequency. It is measured by accounting for the energy level represented by the amplitude (volume) and frequency (pitch) of those vibrations and comparing that to a baseline standard. Sound pressure level (SPL) described in decibels (dB) is used to quantify sound intensity. It is a measure of the maximum sound pressure at a given instant and known distance. The dB is a logarithmic unit that expresses the ratio of the SPL to a standard reference level. When using decibels to depict airborne SPLs, zero dB is the threshold of human

hearing and exponential increases occur every ten dB. An event that generates 60 dB of sound is twice as loud as one that generates 50 dB.. It is important to note that due to the logarithmic nature of the decibel, individual events cannot simply be added directly.

The Day-Night Average Sound Level (DNL) is one of the most common ways to describe ambient noise exposure over an extended period of time. DNL is the metric recognized by the US government for measuring noise and its impacts on humans. It describes a receiver's cumulative noise exposure from all events occurring during a 24-hour period; events occurring between 10:00 p.m. and 7:00 a.m. ("environmental night") are increased by 10 dB to account for greater nighttime sensitivity to noise events. The SPL represented by a given decibel value is usually adjusted to make it more relevant to sound that the human ear hears especially well; for example, an "A-weighted" decibel (dBA) is derived from emphasizing mid-range frequencies to which the human ear responds especially well and de-emphasizing the lower and higher range frequencies.

The Maximum Sound Level (Lmax) is the peak value of all the A-Weighted Sound Levels that occur during a noise event. The limitation of this metric for noise (annoyance) analysis is that peak sound level without a context of duration or time of day does not adequately address annoyance. For example, most would agree that a single 140 dB Lmax event lasting 3 seconds (i.e., an aircraft flyover) that occurs once per day around 1:00 p.m. is less annoying than a 95 dB Lmax event (a jackhammer in a construction site) that lasts for 6 hours, every day and occurs at 11:00 p.m.

Federal and local governments have established noise guidelines and regulations for the purpose of protecting citizens from potential hearing damage and from various other adverse physiological, psychological, and social effects associated with noise.

Hearing Loss. The potential for permanent hearing loss arises from direct exposure to noise on a regular, continuing long-term basis to levels about 75 dBA DNL. Hearing loss is not expected in people exposed to 75 dBA DNL or less for eight hours per day, as long as noise exposure over the remaining 16 hours per day is low enough to not substantially contribute to the 24-hour average (USEPA 1974).

Construction Noise. Building construction and demolition work can cause an increase in sound that is well above the ambient level. Table 3-2 lists noise levels associated with the types of construction equipment expected to be utilized during demolition, site preparation, construction, and finishing work associated with the Proposed Action. As shown in Table 3-2 the construction equipment produces peak SPLs ranging from 75 to 89 dBA at 50 feet (ft) from the source; which decreases by six dBA with every doubling of the distance from the source. It should also be noted that this table includes the level generated, but does not account for the ability of sound to be reflected/absorbed by nearby objects, which could increase or further reduce noise levels.

Air Installation Compatible Use Zones (AICUZ). The AICUZ program was established to protect the public health, safety, and welfare, while ensuring sustainability of the USAF's operational capability. An AICUZ study assists local, regional, state, and federal officials by providing compatible land use recommendations for areas exposed to noise resulting from aircraft operational and maintenance activities, and for areas where the risk of an aircraft accident occurring is greatest.

Land use comprises the natural conditions and/or human-modified activities occurring at a particular location. Management plans and zoning regulations determine the type and extent of land use allowable in specific areas and are often intended to protect specially designated or environmentally sensitive areas and sensitive noise receptors.

Table 3-2 Construction Equipment Peak Sound Pressure Levels

Equipment	Generated Noise[1] dBA				
	50 ft	100 ft	200 ft	400 ft	800 ft
Backhoe	78	72	66	60	54
Compactor	83	77	71	65	59
Crane	81	75	69	63	57
Dump Truck	76	70	64	58	52
Excavator	81	75	69	63	57
Front-end Loader	79	73	67	61	55
Grader	85	79	73	67	61
Jackhammer	89	83	77	71	65
Paver	77	71	65	59	53
Pickup Truck	75	69	63	57	51
Roller	80	74	68	62	56
Scraper	84	78	72	66	60

Source: USDOT 2006
Notes:
[1] Noise from a single source.
dBA - "A-weighted" decibel
ft - feet

3.3.2 Existing Conditions

The primary source of noise in the area surrounding the Alert Complex is associated with aircraft operations. Aircraft stationed at Mountain Home AFB include the USAF's F-15E Strike Eagle and the RSAF F-15SG. Additionally, the base is the location for flight line and equipment maintenance for the F-15E/SE aircraft stationed at the base (MHAFB 1998). Other transient aircraft do also occasionally utilize the airfield at Mountain Home AFB. Aircraft flight operations include departures, arrivals, and pattern work in the local area. Aircraft maintenance operations are associated with pre-flight and post-flight engine runs and when aircraft require maintenance.

The noise contours (Figure 3-1) are primarily driven by flight operations from aircraft stationed at Mountain Home AFB. Noise levels at Building 291 are between 70 and 75 dB DNL and could approach 80 dB(A) near the LOLAs and surrounding land parcels..

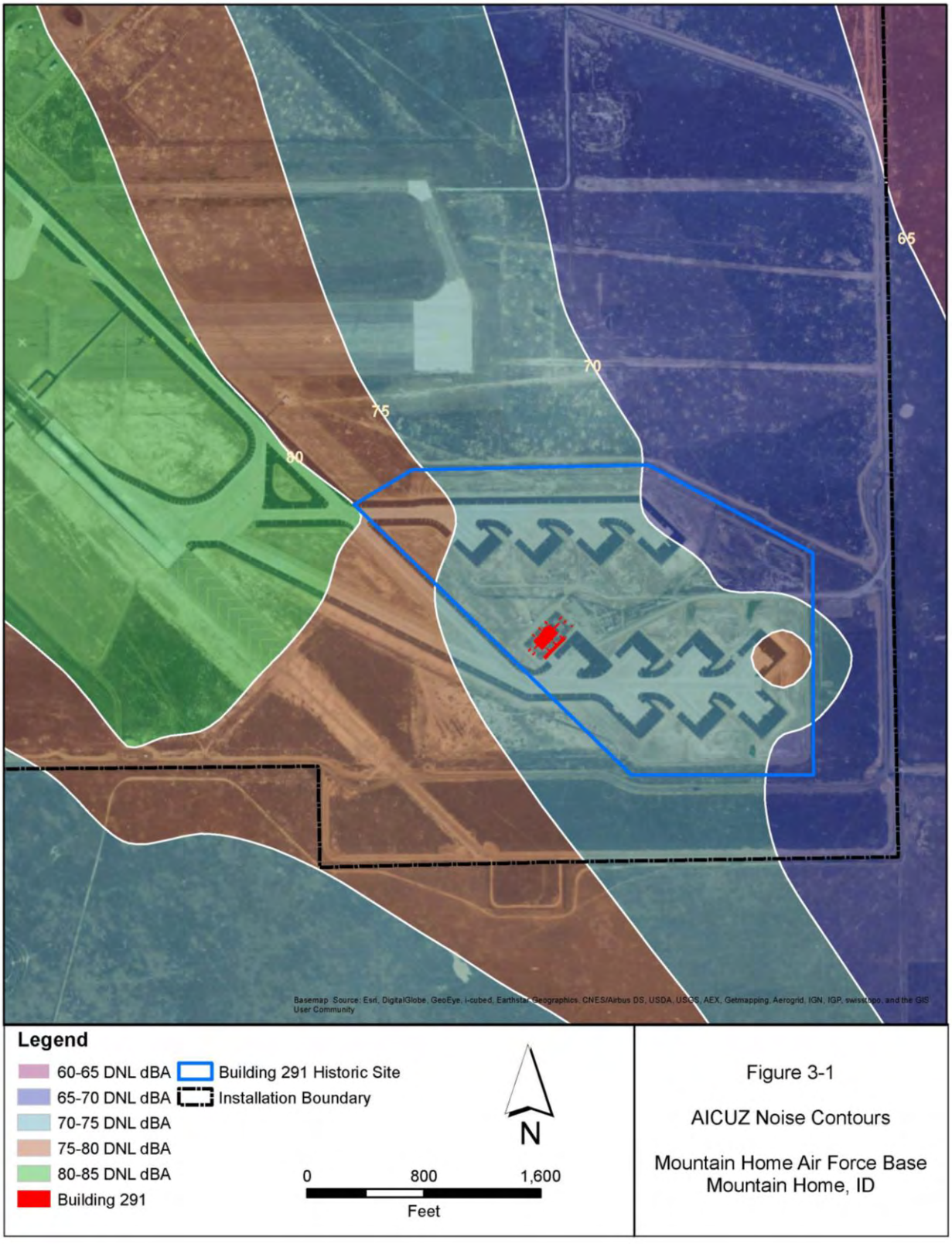

Figure 3-1 AICUZ Noise Contours

3.4 LAND USE

3.4.1 Definition of the Resource

Land use generally refers to any human modification of land, and land dedicated for preservation or protection of natural resources. A major part of land use planning at Mountain Home AFB is analyzing compatible land uses and ensuring that future land use does not result in an incompatible land use. The evaluation of existing and future land use is important to establish and to identify any potential conflicts with future land-use plans. This section describes the land-use resources that could potentially be affected by the Proposed Action or No-action Alternative. For this analysis, the ROI includes the Alert Complex, as well as APZ I and the Clear Zone.

Mountain Home AFB is located in the state of Idaho approximately 40 miles southeast of Boise and approximately 10 miles southwest of the town of Mountain Home. The installation is located within Elmore County and is surrounded by rural land primarily used for agriculture. Highway 67 runs northeast-southwest just a few miles north of the base and Highway 51 runs north-south approximately 6 miles east of the base. The CJ Strike Reservoir is located approximately 4 miles south of the installation. In total, the AFB encompasses approximately 6,844 acres of land that is all base-owned property.

3.4.2 Existing Conditions

3.4.2.1 Existing Land Use

Historically, Building 291, or the Strategic Air Command's Alert Complex was used at the height of the Cold War to provide quarters for air crews on 24-hour alert. The crew's bombers and tankers were strategically parked adjacent to Building 291 on 45-degree parking aprons with a 45-degre entry to the runway for take-off. This configuration of aircraft and crew vastly improved the Air Force's response time (MHAFB 2015c).

The 103-acre Alert Complex is comprised of two land use classifications – approximately 10 acres of Open Buffer Zone at the north of the complex and approximately 90 acres of Air Operations and Maintenance south of the Open Buffer Zone area.

3.4.2.2 Restricted Land Use

Building 291 is located at the end of a runway and it falls within the runway clear zone. Runway clear zones are areas on the ground, located at the ends of runways. They possess a high potential for accidents and their use is restricted to be compatible with aircraft operations. Structures within runway clear zones are not normally compatible and are typically prohibited; however, Building 291 has received an exemption because the facility was constructed under a previous standard.

A portion of a LOLA located near the Alert Complex is located within the APZ I, as shown on Figure 2-1; however, the current LOLA land use, Air Operations and Maintenance, is compatible with this APZ. Due to the presence of LOLAs at the Alert Complex, the entire 103-acre site is also located within QD arcs indicating the potential damage or injury radius of explosions from

the LOLA sites. When an aircraft carrying explosive cargo must make an emergency landing at Mountain Home AFB, the aircraft are parked on one of the Alert Complex's LOLAs until the emergency has been resolved. During this time, no non-mission essential personnel can occupy the area within the QD arcs. In other words, Building 291 and the entire 103-acre site must be vacant any time potentially explosive materials are located at the LOLAs.

3.5 HAZARDOUS MATERIALS AND WASTES

The Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), defines a hazardous substance as: "(A) any substance designated pursuant to section 1321 (b)(2)(A) of Title 33; (B) any element, compound, mixture, solution, or substance designated pursuant to section 9602 of this title; (C) any hazardous waste having the characteristics identified under or listed pursuant to section 3001 of the Resource Conservation and Recovery Act (RCRA) of the 1976, as amended, (42 U.S.C. §6921); (D) any toxic pollutant listed under section 1317(a) of Title 33; (E) any hazardous air pollutants listed under section 112 of the Clean Air Act (CAA) (42 U.S.C. §7412); and (F) any imminently hazardous chemical substance or mixture with respect to which the Administrator of the U.S. Environmental Protection Agency (USEPA) has taken action pursuant to section 2606 of Title 15."

Hazardous waste is defined by RCRA in 42 U.S.C. §6903 as "a solid waste, or combination of solid wastes, which because of its quantity, concentration or physical, chemical, or infectious characteristics may (A) cause, or significantly contribute to an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness; or (B) pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, or disposed of, or otherwise managed."

3.5.1 Existing Conditions

Hazardous material use and management at Mountain Home AFB are regulated under the Air Force Occupational Safety and Health Standards 127-43, the Emergency Planning and Community Right-to-Know Act (EPCRA), the 40 CFR Part 158, Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), 7 U.S.C. 136, et seq, the RCRA, and the Toxic Substances Control Act (TSCA). The U.S. Department of Transportation (USDOT) regulates the transport of hazardous materials in 49 CFR Parts 105-180.

Management of hazardous materials at Mountain Home AFB is established by Air Force Instruction (AFI) 32-7086 Hazardous Materials Management, which incorporates the federal regulations, DoD directives, and other AFIs for the reduction of hazardous material uses and purchases. Guidance for the management of hazardous materials is found in the 3209-CY, Hazardous Materials Emergency Planning and Response Plan and the 3209-CY, and the Pollution Prevention Management Plan (MHAFB 2010a).

Current operations at Mountain Home AFB require the use of hazardous materials in varying quantities. Hazardous materials such as flammable and combustible liquids, acids, corrosives, caustics, anti-icing chemicals, compressed gases, solvents, paints, paint thinners, and pesticides are used throughout the Base. The Base operates a hazardous materials pharmacy (HAZMART)

program. The HAZMART is responsible for purchasing hazardous materials, maintaining an inventory database, and maintaining Safety Data Sheets (SDS) for hazardous material (MHAFB 2015). Hazardous materials are also used by military and contractors. The location of hazardous materials, the procedures and equipment at Mountain Home AFB to prevent and clean up a release, and the actions to take in the event of a release are located in the Mountain Home AFB Hazardous Waste Management Plan (MHAFB 2015d). The regulations require personnel using hazardous materials to be aware of the possible dangers, to know the locations of SDS for all hazardous materials that they are using on base, to understand safe storage procedures, and to wear the correct personal protective equipment (PPE) required for the materials that are being used.

3.5.1.1 Asbestos

Asbestos management at Air Force installations is established in AFI 32-1052, Facility Asbestos Management, which requires the development of an asbestos management plan for the purpose of maintaining a permanent record of the current status and condition of all asbestos-containing materials (ACM) in the installation's inventory of facilities and documenting all asbestos management efforts. In addition, installations are required to develop an asbestos operation plan that details how the installation conducts asbestos-related projects. The USEPA regulates Asbestos under Occupational Safety and Health Administration (OSHA), 29 USC §669, *et seq*. Emissions of asbestos fibers to ambient air are regulated under Section 112 of the CAA.

Mountain Home AFB maintains an Asbestos Operations Management Plan that is designed to establish operations and management organizational responsibilities and procedures for ensuring that personnel in USAF facilities are not exposed to excessive levels of airborne asbestos fibers. The plan provides the foundation for maintaining a record on the current status and conditions of ACM, and guidelines for dealing with ACM removal and control operations (MHAFB 2015e).

Building 291 was constructed when ACMs were commonly used. An ACM survey was conducted in the facility in 2012. The survey revealed nine different ACM existing in varying concentrations from 2% to 23% ACM. Approximately 18,750 square feet (ft^2) of the tile with black mastic is present on the first floor and approximately 6,400 ft^2 of tile and black mastic is present on the second floor. Approximately half of the floor tiles on the second floor were reportedly abated during a facility renovation (CH2M Hill 2012). Table 3-3 summarizes the results of the 2012 ACM survey at Building 291.

Table 3-3 2012 ACM Survey Findings – Building 291

Sample Location	Sample Result	Friable (Yes or No)	Estimated Quantity
Roof Tar Paper	5%	Yes	19,200 ft^2
White Floor tile Black Mastic 1st floor*	2% 4-5%	No	9,300 ft^2
Brown Floor Tile Black Mastic 1st floor*	3-5% 3%	No	9,300 ft^2
Red Floor Tile Black Mastic 1st floor	5% 3%	No	100 ft^2
Green Floor Tile Black Mastic 1st floor	2% 4%	No	50 ft^2
Boiler Insulation* Boiler Room	20-23%	Yes	500 ft^2
Boiler Water Tank Insulation	22%	Yes	200 ft^2
Grey Floor Tile Black Mastic 2nd floor*	5% 2-4%	No	3,200 ft^2
Brown Floor Tile Black Mastic	2% 5%	No	3,200 ft^2

* More than one sample was collected for this sample location.
ft^2-square feet

3.5.1.2 Lead-Based Paint

The U.S. Department of Housing and Urban Development has defined lead-based paint (LBP) as any paint, varnish, shellac or other coating that contains lead equal to or greater than 10 milligrams per centimeter squared (mg/cm^2) as measured by x-ray fluorescence or laboratory analysis, or 0.5 percent by weight (5,000 milligrams per kilogram [mg/kg]) as measured by laboratory analysis. The Residential Lead-Based Paint Hazard Reduction Act of 1992 regulates the use and disposal of LBP at federal facilities. Federal agencies are required to obey all applicable federal, state, interstate, and local laws relating to LBP hazards (MHAFB 2010b).

The Air Force policy and guidance on LBP in facilities establishes the management of LBP at Air Force installations by requiring each installation to develop and implement a facility management plan for identifying, evaluating, managing, and abating LBP hazards (MHAFB 2015f).

Building 291 was constructed when LBP was commonly used. Building 291 was surveyed for LBP in 2012. Fifty-two physical samples of each homogeneous sampling area were collected. Seven different colors of LBP were identified during the survey covering over 900 ft^2. The exact quantity of LBP was not calculated during the survey (CH2M Hill 2012). Table 3-4 summarizes the results of the 2012 LBP survey at Building 291.

Table 3-4 LBP Survey Results

Sample Location	Sample Result (mg/kg)	Estimated Quantity
1st floor hallway Red electrical box	102,000	None Provided
Blue metal stairs Stairwell to the 2nd floor	14,600	None Provided
Grey metal handrail in boiler room	9,730	30 ft.
Grey metal door inside boiler room	11,400	1 door
Grey cement wall in boiler room	6,280	Entire wall
Green pipe wrap in boiler room	13,400	300 ft.
Gray electrical boxes in boiler room	5,230	100 ft^2
Grey metal boiler	8,250	500 ft^2
2nd floor blue metal door	34,400	Up to 8 doors (not provided)
Orange metal ladder leading to roof hatch in stairwell	207,000	15 ft
Metal exterior brown handrail leading from 2nd floor to ground level	23,100	6 sets of handrails

Source: (CH2M Hill 2012)

3.5.1.3 Pesticides/Herbicides

Mountain Home AFB maintains an Integrated Pest Management Plan (IPMP) which describes how the installation will comply with the requirements of DoD Instruction 4150.07, "DoD Pest Management Program." Under AFI 32-1053, installation Pest Management coordinator works in civil engineering and is responsible for installation's pest management program. All Base installation pest management personnel are required to be DoD certified to ensure that pesticides are applied according to the directions for the product. The FIFRA provides framework for the sale, distribution, and use of pesticides. FIFRA applies to all types of pesticides, including insecticides, herbicides, fungicides, rodenticides, and antimicrobials. Pest management at Mountain Home AFB includes inspection and control of public health related pests, stored product pests, structural pests, noxious or invasive plants and animals and undesirable vegetation (MHAFB 2012a).

Pest control services for Building 291 include rodent control inclusive of the quarterly application of rodenticide to the exterior of the facility; placement of rodent traps within the facility, and refilling the rodent bait boxes with the rodenticide Contrac bait blox. Approximately 160 ounces of Contrac bait blox are used annually in Building 291. Insecticide treatment includes applying insecticide to venomous arthropods when discovered. The typical application would occur three times a year in the spring, summer, and fall. Approximately 7.5 ounces of insecticide are applied around the exterior of Building 291 annually (Ash 2015).

Herbicide application varies depending on weather conditions. Wet conditions support weed growth and require increased herbicide application. Under typical weather conditions one application of herbicide in the spring will control vegetation for up to eight weeks. Approximately two gallons of RoundUp and two gallons of Weedar 64 herbicide are applied to the vegetation around Building 291 annually (Ash 2015). Alternate methods to control undesirable vegetation include burning or mechanical ground application of herbicide. Aerial application of herbicide is

often implemented for large control areas when ground control techniques are not successful or are too time consuming (MHAFB 2012a).

Pesticide use is of particular concern for Building 291 due to the infestation of rodents and their ability to be a vector for the diseases such as Hantavirus pulmonary syndrome (HPS), leptospirosis, rat-bite fever, and salmonella (ACC 2013; Center for Disease Control [CDC] No Date [ND]; MHAFB 2012a). HPS is a potentially fatal disease to humans carried by the following rodents in North America: the deer mouse, the white-footed mouse, the rice rat, and the cotton rat. Humans can become exposed to the HPS when they breathe in aerosolized rodent urine or droppings (e.g. sweeping) or when they touch rodent droppings, urine, or nesting material that could contain the virus and subsequently touch their eyes, nose or mouth (CDC ND).

3.5.1.4 Mercury and Polychlorinated Biphenyl Containing Electronics

A room by room inspection of Building 291 was conducted for Mercury and Polychlorinated biphenyls (PCBs) containing materials. PCBs from fluorescent light ballasts and mercury from thermostats or fluorescent light tubes were identified. The survey identified mercury in a thermostat and fluorescent light ballasts with labels that did not indicate if they contained PCBs (CH2M Hill 2012).

3.5.1.5 Hazardous Waste

Hazardous wastes are defined by the Solid Waste Disposal Act as amended by RCRA, which was further amended by the Hazardous and Solid Waste Amendments, RCRA subtitle C (40 CFR, Parts 260 through 270). Hazardous waste management at Mountain Home AFB is also regulated under AFI 32-7042, *Hazardous Waste Compliance*. Mountain Home AFB maintains a Hazardous Waste Management program, as directed by AFI 32-7042.

Mountain Home AFB is considered a Large-Quantity Generator (LQG) of hazardous waste. A LQG generates more than 1,000 kilograms (kg) of hazardous waste per month or more than 1 kg of acutely hazardous waste per month (USEPA 2015). Hazardous wastes are collected at approximately 155 accumulation points (AP). A contractor transports hazardous waste from the APs to a 90-day central collection facility (Building 1296). The AP is an area near the point of waste generation where the user accumulates small quantities of "regulated hazardous waste" up to 55 gallons or up to 1 quart of "acutely hazardous waste." An AP can also accumulate universal wastes. Universal waste generators are allowed to accumulate universal waste at their location for no more than 6 months form the accumulation start date. Once the 6-month time limit has been reached, the universal waste must be turned in to the central collection facility for disposal (MHAFB 2015d). Idaho includes the following as universal waste:

- Batteries, including nickel-cadmium and small sealed lead-acid batteries;
- Agricultural pesticides, including those that have been recalled or banned from use;
- Mercury-containing devices, including thermostats, barometers, manometers, temperature and pressure gauges, and mercury switches; and

- Spent lamps, including fluorescent tubes, and high-intensity discharge, neon mercury vapor, high-pressure sodium, mercury vapor, and metal halide lamps (Idaho Department of Environmental Quality [IDEQ] 2013).

3.5.1.6 Environmental Restoration Program

The Environmental Restoration Program (ERP) is a DoD program which requires each installation to identify, investigate, and clean up hazardous waste disposal or release sites. The objective of the ERP is to identify and evaluate any areas suspected to be contaminated with hazardous materials caused by past USAF operations and to eliminate or control any hazards to the public health, welfare, or the environment. The ERP is a subcomponent of the Defense Environmental Restoration Program (DERP) that became law under the Superfund Amendments and Reauthorization Act.

There are 32 ERP sites at Mountain Home AFB, four have land use controls; four are in the Remedial Action-Operations stage and are included in the Long Term Monitoring Program; and the remaining 24 have unlimited use/unrestricted exposure (UU/UE) status and do not have restrictions on the use of the land or other natural resources (MHAFB 2010c; MHAFB 2011a). Site DP-9 was a waste oil disposal area and is the only ERP site is within 0.5 miles of Building 291. Site DP-09 underwent evaluation and the potential land use is UU/UE. Additionally, the site is not considered a threat to regional groundwater (MHAFB 2010c).

3.6 BIOLOGICAL AND NATURAL RESOURCES

3.6.1 Definition of the Resource

Biological resources are all the living components of an ecosystem and at Mountain Home AFB include various wildlife and plant species. Natural resources as defined in the Code of Regulations encompass land, fish, wildlife, biota, air, water, ground water, drinking water supplies, and other such resources belonging to, managed by, held in trust by, appertaining to, or otherwise controlled by the United States, any State or local government, or any foreign government. The 2012 Integrated Natural Resource Management Plan (INRMP) identifies specific natural resources within the Mountain Home AFB ROI including controlling invasive species, maintaining and restoring vegetative communities, reducing the risk of wildfire, managing threatened and endangered and special status species, and applying livestock grazing practices (MHAFB 2012b).

Site-specific descriptions of the affected environment for biological and natural resources are more appropriately limited to the Alert Complex. Resources that are not likely to be present in the Alert Complex (wetland and deep water habitats and livestock grazing practices) are not included in the descriptions below.

3.6.2 Existing Conditions

3.6.2.1 Vegetation

Local Flora. Historically, Mountain Home AFB was predominantly covered with Wyoming big sagebrush communities with an understory of native forbs and grasses. The greater ROI of Mountain Home AFB lies within the regional landform and vegetation classification known as the Intermountain Sagebrush Province/Sagebrush Steppe Ecosystem (Bailey and Kuckler 1996), which is widespread over much of southern Idaho, eastern Oregon, eastern Washington, and portions of northern Nevada, California, and Utah. This ecosystem contains a large diversity of landforms and vegetation types, ranging from vast expanses of flat sagebrush covered plateaus to rugged mountains blanketed with juniper woodlands and grasslands.

Currently most of Mountain Home AFB is occupied by buildings, residences, training-related facilities, runways, streets, sewage ponds, landfills, and rubble piles. Besides planted urban forests, the condition of vegetation communities within the ROI of Mountain Home AFB is fair to poor. Undeveloped open areas, are dominated by exotic annual weed species when they used to be covered with sagebrush. Most open space on the Base is covered by a mix of weedy annual grasses and invasive species, such as annual kochia (*Bassia scoparia*), Russian thistle (S*alsola kali*), and bur buttercup *(Ceratocephala testiculata)*. This mix forms a blanket of fine fuels over large areas of open spaces on the Base. A few remnant patches of sagebrush still exist and most have a weedy understory. A list of flora at Mountain Home AFB is found in the INRMP (MHAFB 2012b).

Photo 3.6-1. Vegetation adjacent to Building 291 at Mountain Home AFB showing semi-improved grounds with short dry grasses and invasive species.

The vegetated areas of the Alert Complex are maintained as "semi-improved" or undeveloped (unimproved) "natural areas" grounds maintenance categories. Semi-improved grounds (Photo 3.6-1) are where personnel perform periodic maintenance primarily for operational and aesthetic reasons (such as erosion and dust control, weed control, bird control, and visual clear zones). Undeveloped (unimproved) usually do not requiring maintenance more than once a year, if maintenance occurs at all (MHAFB 2012b).

3.6.2.2 Wildlife

General Wildlife Species. Undeveloped natural areas are primarily found around the perimeter of Mountain Home AFB, including the Alert Complex. Natural areas are dominated by cheat grass (*Bromus tectorum)* with some areas containing sagebrush and cheat grass. The Alert Complex

provides habitat for birds and rodents, which may be potential prey for birds of prey. The area would likely not be preferred by birds of prey due to the lack of high nesting sites and perches (trees, fences, canyons) and bird airstrike management that uses frequent scare tactics (e.g., making loud noise) to reduce the numbers of birds around the flight line. In addition, Mountain Home AFB avoids attracting birds and producing habitat in areas such as the Alert Complex by controlling high vegetation, such as high grass and shrubs.

Long-billed curlews can be found in the annual grasslands. Western burrowing owls nest in burrows abandoned by other species, typically in areas dominated by short vegetation. Northern harriers and rough-legged hawks are frequently observed foraging in the natural areas. Reptiles that have been reported in these areas include gopher snakes, western rattle snakes, and sagebrush lizards. Other reptile species likely exist in these areas. European starlings, common ravens, western meadowlarks, mourning doves, and Piute ground squirrels are the most common species in these areas. Black-tailed jack rabbits, American badgers, and coyotes are also common.

In general, the natural areas dominated by cheat grass provide habitat for fewer wildlife species and are considered less desirable. Areas with sagebrush provide a richer species abundance, habitat for sagebrush obligate species, and are very desirable for wildlife species conservation. Unfortunately, sagebrush is regularly being lost on the base which makes it a priority for conservation (MHAFB 2006a).

More details on general wildlife species and a list of fauna found at Mountain Home AFB can be found in the 2012 INRMP and 2006 Mountain Home AFB Wildlife Data Summary Report (MHAFB 2012b, MHAFB 2006a).

Pest Management Concerns. Rodent infestation is readily apparent in every aspect of the building (i.e. droppings on the floor, under the floor boards, inside cabinets and in the restroom), which presents a health concern for HPS when personnel enter the building or are exposed to contaminants from the building. HPS is endemic to Idaho and is spread from wild rodents to people, and in January 2001, a case of HPS was diagnosed in active duty male living on Mountain Home AFB. The virus is found in saliva, urine, and feces. Breathing the virus is the most common way for becoming infected; the virus can enter the air as mist from urine or saliva or as a dust from feces (MHAFB 2012c).

Pest rodents are controlled with both mechanical and chemical methods at Mountain Home AFB. Mechanical methods include glue boards and snap traps are usually the most effective devices for controlling small numbers of rodents. Chemical control of pests, including rodents, is initiated when non-chemical treatments fail to eliminated rodent infestations.

3.6.2.3 Threatened, Endangered and other Protected Species

There is one threatened species on Air Force land in Idaho. Slickspot peppergrass (hereinafter abbreviated LEPA) was listed as threatened on December 7, 2009 (USFWS 2009). According to the 2012 INRMP, LEPA is not known to occur on the Alert Complex. LEPA grows primarily within bare areas that temporarily pool water known as slickspots, and the Alert Complex is mainly comprised of pavement or dry grasslands and lacks this habitat.

Species of concern generally include those federally listed as threatened or endangered, those listed as species of greatest conservation need in Idaho by the Idaho Fish and Game (IDFG), DoD Partners in Flight (DoD PIF 2010) birds of conservation concern, and/or the Bureau of Land Management (BLM) Sensitive species (DoD PIF 2010, ICDC 2009). Laws protecting wildlife include, but are not limited to, the Bald and Golden Eagle Protection Act of 1940, which protects eagles, the Migratory Bird Treaty Act (MBTA) of 1918, which protects all migrant birds including neo-tropical migrant birds, and the Endangered Species Act. Many birds that are protected by the MBTA reside or migrate through the Base.

Species with special status found on Mountain Home AFB are listed in Table 3-5 below.

Table 3-5 Species of Concern that Occur at Mountain Home AFB

Common Name	Scientific Name	Species With Potential for Occurrence at Alert Complex
Sage sparrow	*Amphispiza belli*	
Golden Eagle	*Aquila chrysaetos*	
Western burrowing owl	*Athene cunicularia*	X
Bald Eagle	*Haliaeetus leucocephalus*	
Loggerhead shrike	*Lanius ludovicianus*	
California gull	*Larus californicus*	
Long-eared myotis	*Myotis evotis*	X
Yuma myotis	*Myotis yumanensis*	
Long-billed curlew	*Numenius americanus*	
Sage thrasher	*Oreoscoptes montanus*	X
American white pelican	*Pelecanus erythrorhynchos*	
White-faced ibis	*Plegadis chihi*	

Sage sparrow is a bird that prefers semi-open habitats with evenly spaced shrubs that are approximately one to two meters tall (Chase and Carlson 2002). This species is commonly found in hot, dry areas with mature sagebrush stands. While the bird may be found at the greater ROI of Mountain Home AFB, the bird is not likely present at the Alert Complex, since the site is mainly comprised of pavement or dry grasslands and lacks this shrub habitat.

Golden eagles are large raptors that are typically found in open country, in prairies, arctic and alpine tundra, open wooded country, and barren areas, especially in hilly or mountainous regions. While the bird may be found at the greater ROI of Mountain Home AFB year-round, the bird is not likely present at the Alert Complex, since the site is mainly comprised of pavement or dry grasslands and lacks the open sagebrush plain habitat with which this species is most often associated.

Western burrowing owl inhabits dry, open grasslands, sometimes in areas of high human density, such as in cities, golf courses, airports, and similar areas. This owl nests in burrows excavated by mammals, usually badger (*Taxidea taxus*), ground squirrel, or coyote (*Canis latrans*).

Burrowing owls are a U.S. Fish and Wildlife Service (USFWS) Trust Species, a BLM Type 5 Sensitive Species, DoD PIF Priority Species, and an Idaho Protected Nongame Species (DoD PIF 2010, ICDC 2009; NatureServe 2015). Type 5 Sensitive Species under the BLM are species that are currently on the watch list. Watch list species include species that may be added to the sensitive species list depending on new information concerning threats, species' biology, or statewide trends. The watch list includes species with insufficient data on population or habitat trends or the threats are poorly understood.

Burrowing owls pose a small potential for bird airstrike hazard (BASH) because they fly at low levels during foraging. This owl can hunt at all times of the day and night; however, most prey is captured at dawn and dusk. They frequently hover a short distance above ground, foraging for insects, amphibians, small mammals, and birds. Burrowing owls acquire abandoned badger or rodent burrows within their habitat for nesting and roosting, and prefer to nest in open grassland areas without shrubs.

The natural grassland along the edge of the Alert Compled is dry, open grassland commonly inhabited by burrowing mammals, such as ground squirrels, rodents, black-tailed jackrabbits, and badgers, whose abandoned burrows can be taken over by burrowing owls (MHAFB 2012b). Since burrowing owls are not deterred by human disturbance, the vegetated portions of the Alert Complex can likely be considered burrowing owl habitat. Although maps in the Mountain Home AFB Wildlife Data Summary Report did locate a few burrows in the greater ROI of Mountain Home AFB, results of a more recent 2015 survey of Mountain Home AFB found numerous owl burrows with several within 1,000 feet of the Alert Complex (MHAFB 2006a, MHAFB 2015g). However, none have been observed on the site. Locations of burrowing owl burrows from the 2015 survey of Mountain Home AFB are shown in Figure 3-2.

Bald eagles winter in deciduous and coniferous trees or other sheltered sites. Wintering areas are commonly associated with open water, though in some areas these eagles use habitats with little or no open water if other food resources are readily available. The species was observed for the first time on Mountain Home AFB in March 2010 on the golf course at Mountain Home AFB, presumably hunting ground squirrels. While the bird may be found at the greater ROI of Mountain Home AFB, the bird is not likely present at the Alert Complex, although suitable food sources (burrowing rodents) may be present, since the site is at the end of a runway with frequent human disturbance and contains no trees or open water. Maps in the Mountain Home AFB Wildlife Data Summary Report did not show any bald eagle habitat on base (MHAFB 2006a).

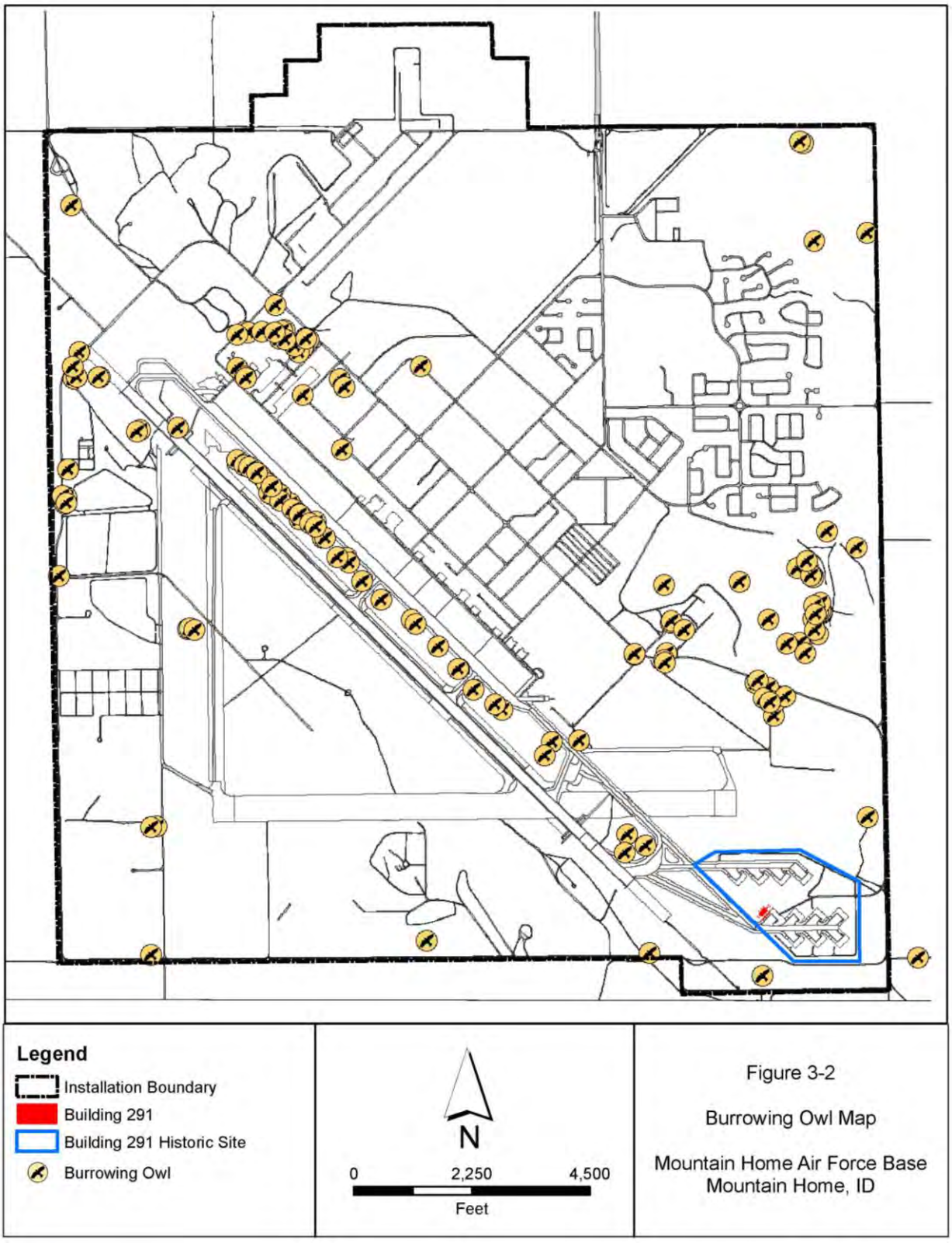

Figure 3-2 Burrowing Owl Map

Loggerhead shrike is a robin-sized bird that prefers habitats consisting of grasslands and open, agricultural areas characterized by short vegetation and scattered trees, shrubs, or hedgerows (Bent 1950; Evers 1994). Habitats of this type provide for nesting cover as well as for hunting and lookout perches. Loggerhead shrikes are a USFWS Trust Species, DoD PIF Priority Species, and a Special Status Species in Owyhee and Elmore Counties, Idaho (DoD PIF 2010, ICDC 2009, NatureServe 2015). They are found in the greater Mountain Home AFB ROI, but have not been recorded at the Alert Complex (MHAFB 2006a). They are seldom seen in habitats without sagebrush or lookout perches; therefore, the bird is not likely present at the Alert Complex, since the site is mainly comprised lacks this shrub habitat.

California gull is an inland breeding bird that inhabits lakes, farms, and marshes during its breeding season. This bird forages along lakes, bogs, farm fields, lawns, pastures, sagebrush, garbage dumps, feedlots, parking lots, ocean beaches, and in the open ocean. The California gull is a USFWS Trust Species and an Idaho Protected Nongame Species (ICDC 2009, NatureServe 2015). While the bird may be found at the greater ROI of Mountain Home AFB associated with the landfill, the bird is not likely present at the Alert Complex, since the site is mainly comprised of pavement or dry grasslands and lacks suitable habitat (MHAFB 2006a).

Long-eared myotis is a bat that is found in a wide range of habitats, often associated with forests. The long-eared myotis is a Special Status Species in Owyhee County, Idaho (ICDC 2009). This species inhabits coniferous forests and woodlands, including areas containing ponderosa pine, juniper, and spruce-fir (Manning and Jones 1989). This species may roost in buildings and trees within the base and is likely to forage around lights. A long-eared myotis was found in Building 1100 at Mountain Home AFB behind some equipment during the winter of 2008 (MHAFB 2012b). Given that the building at the Alert Complex has received infrequent use by humans since 2007 and is infested by rodents, the long-eared myotis could potentially use the building as a roost, although no previous sightings at the Alert Complex have been reported.

Yuma myotis is a bat that is a Special Status Species in both Elmore and Owyhee Counties, Idaho (ICDC 2009). A desiccated Yuma myotis carcass was found in Building1296 on Mountain Home AFB within the vicinity of non-jurisdictional wetlands (MHAFB 2006a, MHAFB 2012b). This species occurs in a variety of western lowland habitats in areas of abundant water. In these areas, the bat forages for insects just above the surface of slack water. Yuma myotis is an important riparian species that roosts within crevices in cliffs, old buildings, mines, caves, bridges, and abandoned cliff swallow nests. While the bird may be found at the greater ROI of Mountain Home AFB, the bat is not likely present at the Alert Complex, since the site is mainly comprised of pavement or dry grasslands and lacks riparian habitat.

Long-billed curlew inhabits prairies, open shrub-steppe, and grassy wet meadows. The long-billed curlew is a large "shorebird" with a very long, curved bill. It is cinnamon brown on top and buff colored on its underside. In Idaho, this species prefers open, recently grazed grasslands containing short vegetation for nesting. Long-billed curlew is a USFWS Trust Species, a BLM Type 5 Sensitive Species, DoD PIF Priority Species, and an Idaho Protected Non-Game species (DoD PIF 2010, ICDC 2009, NatureServe, 2015). These birds breed on the dry, native grasslands of the arid West, where they use their long, curved bills to feed on grasshoppers, beetles, and

caterpillars. Although normally associated with wet areas, during breeding these birds do breed feed on the insects in short grassland vegetation, which is typical of the undeveloped natural areas around the edge of Mountain Home AFB and the Alert Complex. The bird has been found in the greater ROI of Mountain Home AFB, and the entire base is predicted habitat for the bird; therefore, it is possible that the long-billed curlew might use the non-paved portions dry grasslands of the Alert Complex (MHAFB 2006a).

Sage thrasher is a medium-sized passerine bird that highly depends on healthy shrub-steppe communities comprised of tall, dense sagebrush (Rich 1980). In Idaho, sage thrashers use sites that are characterized with high sagebrush cover within large blocks of shrub-steppe (Knick and Rotenberry 1995). Sage thrashers are a USFWS Trust Species, DoD PIF Priority Species, and a Special Status Species in Owyhee County, Idaho (DoD PIF 2010, ICDC 2009, NatureServe 2015). These birds are found on MHAFB and have been recorded in the southeast corner of the base near the Alert Complex (MHAFB 2006a). Although the Alert Complex does not possess the preferred sagebrush habitat for these birds it is possible that they could stop at the area on their way to more suitable habitat in adjacent natural areas.

American white pelicans are large, white bird that have black wing tips and a long, wide, orange bill. In Idaho, this species is found on large inland reservoirs and island nests. The American white pelican is a USFWS Trust Species, a Type 2 BLM Sensitive Species, and an Idaho Protected Nongame Species (ICDC 2009, NatureServe 2015). While the bird may be found at the greater ROI of Mountain Home AFB associated with water features on the golf course, the bird is not likely present at the Alert Complex, since the site is mainly comprised of pavement or dry grasslands and lacks suitable habitat (MHAFB 2006a).

White-faced ibis is a wading bird that breeds colonially in marshes, usually nesting in bushes or low trees (Sibley 2000). The white-faced ibis is an USFWS Trust Species, a Type 4 BLM Sensitive Species, and an Idaho Protected Nongame Species (ICDC 2009, NatureServe 2015). The species was recorded in the greater Mountain Home AFB ROI in 2010 when four white-faced ibis landed near the golf course pond, but immediately left due to the presence of golfers (MHAFB 2006a). White-faced ibis are not typical for the habitat present on Mountain Home AFB, and it is unlikely that the birds would use the Alert Complex, since the site is mainly comprised of pavement or dry grasslands and lacks suitable habitat.

3.7 CULTURAL RESOURCES

3.7.1 Definition of the Resource

Cultural resources are prehistoric and historic sites, buildings, districts, or objects that are important to a culture or community. Cultural resources are generally divided into three categories: archaeological resources, architectural resources, and traditional cultural resources.

Archaeological resources occur in places where people altered the ground surface or left artifacts or other physical remains (e.g., arrowheads, glass bottles, pottery). Archaeological resources can be classified as either sites or isolates. Isolates generally cover a small area and often contain only

one or two artifacts, while sites are usually larger in size, contain more artifacts, and sometimes contain features or structures. Archaeological resources can be either prehistoric or historic.

Architectural resources are standing buildings, dams, canals, bridges, windmills, oil wells, and other such structures. They are generally historic in affiliation.

Traditional cultural resources are resources associated with the cultural practices or beliefs of a living community that link the community to its past and help maintain its cultural identity. Most traditional cultural resources in Idaho are associated with American Indians. Traditional cultural resources can include archaeological resources, locations of prehistoric or historic events, sacred areas, sources of raw materials used in the manufacture of tools and/or sacred objects, certain plants, or traditional hunting and gathering areas.

Under the National Historic Preservation Act (NHPA) and various federal regulations, only significant cultural resources are considered when assessing the possible impacts of a federal undertaking or action. Significant archaeological, architectural, and traditional cultural resources include those that are eligible or recommended eligible for inclusion on the NRHP. The significance of archaeological and architectural resources is usually determined by using specific criteria (listed in 36 CFR 60.4), including: association with important events, association with a famous individual, embodiment of the characteristics of a period, and ability to contribute to scientific research. Cultural resources are generally at least 50 years old to be considered eligible for listing in the NRHP. However, more recent resources, such as Cold War-era buildings, may warrant protection if they manifest "exceptional significance." Traditional cultural resources can be evaluated for National Register-eligibility, as well. However, even if a traditional cultural resource is determined not eligible to the National Register, it may still be significant to a particular American Indian tribe. In this case, such resources may be protected under the Native American Graves Protection and Repatriation Act, the American Indian Religious Freedom Act, and EO 13007, which address Indian sacred sites. The significance of American Indian traditional cultural resources is determined by consulting with the appropriate American Indian tribe(s).

3.7.2 Existing Conditions

For this EA the affected environment includes the Alert Complex, which consists of Building 291 and its associated 103 acres.

3.7.2.1 Mountain Home AFB Archaeological Resources

The Alert Complex was surveyed in 1990. No prehistoric or historic archaeological NRHP-eligible sites were recorded within this area (MHAFB 2011b).

3.7.2.2 Historic Resources

The Alert Complex was previously surveyed in 1995 for Cold War era facilities located at MHAFB (MHAFB 2011b). The Facility was then recorded in 2006 as part of the historic building inventory and evaluations project (MHAFB 2006b). During this survey, 97 buildings were surveyed and evaluated meeting the requirements of Section 110 of the NHPA (MHAFB 2006b). In 2009, the Alert Complex was included in the Cold War-era historic property survey (MHAFB 2009). A

Historic American Building Survey (HABS) of the Alert Complex was completed in 2013 (MHAFB 2013) per the goals outlined in the MHAFB Integrated Cultural Resources Management Plan (ICRMP) (2011) regarding NRHP evaluations of historic buildings. The HABS documentation included black and white photographs, historical information, descriptive data of the facility, and drawings (MHAFB 2013).

History of Alert Complex

Under the SAC during the Cold War, the mission was to deter the Soviet Union through sustainability, durability, and survivability. Beginning in 1951, SAC began to organize their installations in concentric circles based on their distance from Moscow. In 1956, SAC activated numerous 24-hour bomber alert facilities that included both permanent and temporary buildings along primary runways (MHAFB 2012d).

Photo 3.7-1. General Overview of Building 291, Facing North *(Taken from MHAFB 2013)*.

A total of 66 alert crew facilities were constructed including, 150-man, 100-man, and 70-man facilities. Eleven of these 66 were the 150-man facilities planned for installations in Georgia, Idaho, Indiana, Kansas, Missouri, Montana, Nebraska, New Hampshire, New York, Ohio, and Wisconsin. However, the alert facility planned for Wisconsin was never constructed (MHAFB 2012d).

The Alert Complex includes approximately 103 acres and is comprised of one contributing building and four contributing structures. The contributing building is the alert crew building (Building 291) (Photo 3.7-1) also known as the "molehole", two Christmas-tree alert aprons (Buildings 31020 and 31021), and the road system and security fence (Figure 3-3). There are also four non-contributing buildings within the Alert Facility including a 1969 traffic check house, 1985 carport, 1980s era tennis pavilion, and a post-1987 metal building. One non-contributing structure, 1970s era tennis court, is also present within the Alert Facility. These original resources have survived and represent the Cold War-era mission of the U.S. Department of the Air Force under the SAC between 1957 and 1966 (MHAFB 2012d).

Building 291 at Mountain Home AFB was constructed between 1958 and 1959 as a permanent alert crew quarters that could accommodate 150 airmen. The building was used to support three man flight crews for the B-47. Building 291 had two levels and was self-sustaining with its own

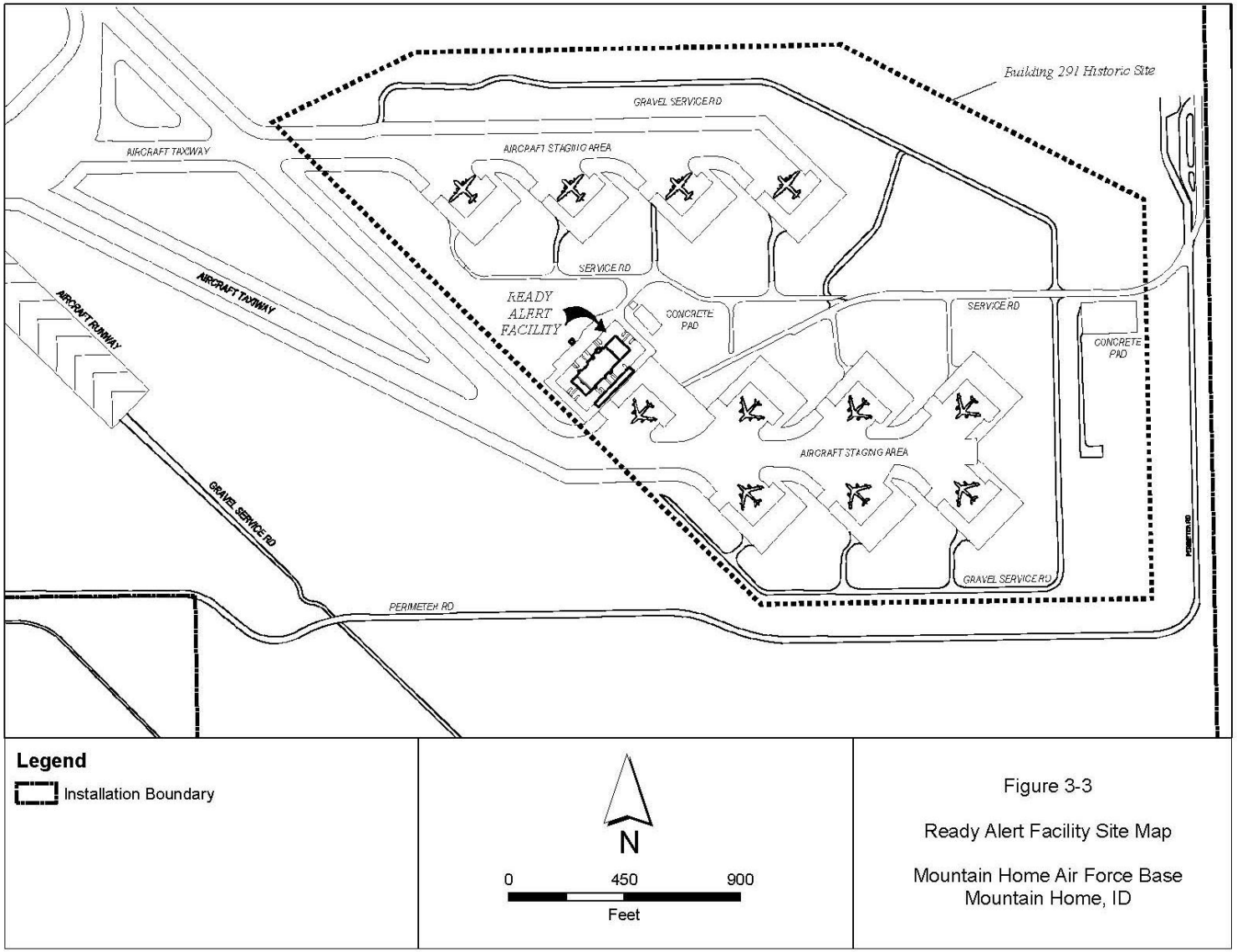

Figure 3-3 Ready Alert Facility Site Map

Photo 3.7-2. View of the Exterior of the Ramped Entrances.

utilities (MHAFB 2013). The first story was subterranean with access through eight ramped entrances located on all four sides of the structure which lead down to the first story (Photos 3.7-2 and 3.7-3). This type of alert crew quarter was designed by architect, Leo A. Daly in 1958, as part of the permanent readiness alert facilities. A sloped exterior earthen berm was also constructed to hide the subterranean level. Because these quarters were semi-subterranean, they were known as "moleholes" (MHAFB 2011b). The subterranean level consisted of living quarters and two sets of bathrooms. The upper level included operation support offices, a briefing room, training and operations rooms, a cafeteria, lounge, library, and recreational space. More than one flight crew was present during each shift and typically two men shared one room. Members of the same flight crew were assigned to a group of rooms adjacent to one another. The airmen were on duty for 24 hours each day and always wearing their flight suits in case the alert was signaled (MHAFB 2013).

Buildings 31020 and 31021, the two Christmas tree aprons, were also constructed during the same time as Building 291. These alert facilities needed to achieve rapid response, therefore, the taxiways were positioned at 45 degree angles towards the primary runway. SAC also positioned the aprons at 45 degree angles to the taxiways. The aircraft parking stubs were placed at 45 degree angles to the apron which created a herringbone pattern, also known as Christmas trees. This configuration increased the number of bomber aircraft on the alert apron and they could be in flight within one minute of each other. This arrangement also reduced the total takeoff time from one hour to fifteen minutes (MHAFB 2012d).

Photo 3.7-3. View of the Interior of the Ramped Entrances.

Building 291 has remained intact through the years with minor alterations and additions. In 1958, exhaust grilles and drains were added to the interior; rotating beacons, door frames, doors, and a circulating pump were installed in 1961 as well as the flood lights were removed and the security

fence and lights were relocated that same year. In 1966, a counter was installed in flight planning, new partitions were added to subdivide the dining rooms, and eleven emergency lights were mounted. The heat plant was upgraded to a 5,040 gallon tank in 1969. That same year, numerous updates to the electrical system were made and the traffic check house (Building 289) was constructed to support SAC satellite activity. In 1970, a platform was installed adjacent to the building for a high-gain log-periodic antennae. The dormitory capacity was reduced to 40 from 150 in 1971. The living quarters and latrines were modified in 1973 and a few of the subterranean interior doors were sealed in 1974. In 1977, the exhaust grilles were moved, an interior wall was removed, and a hall along with three rooms were modified. The kitchen was removed in 1978, the air conditioning unit was replaced with a 55-ton York unit in 1980, and a platform was installed in a room within the subterranean level in 1984. In 1987, the fire detection system was automated and a separate underground irrigation sprinkler system was installed. During this year, an interior wall was constructed to separate the latrine from the laundry room. The HVAC systems were replaced in 1989. The last renovations occurred in 2004 when a pivoting surveillance camera was placed at the northeast corner of the chimney stack (MHAFB 2013).

The Alert Complex was used for Professional Military Education between 1976 and 1994; the following three years (1994-1997) the Alert Complex was vacant. Between 1997 and 2007, the Alert Complex was used quarterly for FW training exercises. The Alert Complex has been vacant since 2007 (Jackson 2016).

National Register Eligibility

Of the actual ten 150-man alert crew facilities that were constructed, Mountain Home AFB's bomber facility appears to be the most intact. Three of these facilities have been demolished and the other six have been greatly altered both on the interior and exterior (MHAFB 2012d).

The Alert Complex represents the best extant example of its type on a national level. The five contributing resources retain their integrity of location, setting, design, materials, workmanship, feeling, and association to a very high level. The resources associated with the Alert Complex have remained in their original locations. The view shed has not been altered with new construction and the facility was constructed near the end of the primary runway. The original taxiways, aprons, and parking stubs are present along with the original roadway system and security fence. The parking stubs are situated at 45-degree angles creating a herringbone or Christmas-tree pattern. Building 291 is located in its original location and retains its original footprint. The at-grade level has remained windowless and the vestibules, tunnels, and ramps remain *in situ*. The roof configuration has remained intact and in-kind materials have been used to repair the building (MHAFB 2012d). Because of these, the Alert Complex is eligible for the National Register under Criterion A for its contributions to the Cold War air combat training and defense mission under SAC. It is also eligible under Criteria C for the innovative design of the alert crew building and the Christmas-tree aprons. The Alert Complex is more than 50 years old, however, its period of significance extends to 1966 with SAC's association to the resources, which meet Criterion Consideration G, as exceptionally significant (MHAFB 2012d). The Idaho SHPO concurred with Mountain Home AFB's determination of eligibility in 2004 (Neitzel 2004).

In the fall of 2013, MHAFB and the Idaho SHPO in coordination with the ACHP, began developing a Programmatic Agreement regarding Building 291 (included as Appendix A). The

primary goal of the Programmatic Agreement was to outline steps that Mountain Home AFB would take to avoid the adverse effects of the on-going deterioration of the Alert Complex due to rodents and vandalism (ISHS 2014). The Programmatic Agreement was signed in June 2015 between the Mountain Home AFB, Idaho SHPO, and ACHP regarding the long term management of the Alert Complex (MHAFB 2015b).

The Programmatic Agreement stipulated the plans to carry out the treatment plan for cleanup and stabilization of Building 291.

Mountain Home AFB completed treatments in the Programmatic Agreement, including:

- Stabilizing to correct deficiencies including pest control, securing the exterior envelope from moisture, and stabilizing the structure where needed.
- Maintaining the exterior berm.
- Securing the building from vandals and break-ins including securing the roof access panels with locks and boarding up egress tunnel windows to protect the corrugated material.
- Maintaining the interior ventilation per the Secretary of Interior Standards.
- Developing a routine maintenance and law enforcement monitoring plans. These were documented in the annual report to the Idaho SHPO.

Mountain Home AFB and the Idaho SHPO also have a Programmatic Agreement regarding the management of all historic properties on the base that was signed in June 2015 (MHAFB 2015g). This Programmatic Agreement covers typical and routine activities that may occur on historic properties located at Mountain Home AFB. According to this Programmatic Agreement the following routine activities do not pose a threat to historic properties:

- Utility and telecommunication infrastructure construction, maintenance, upgrade, and demolition
- Minor repairs such as interior and exterior painting, replacement of mirrors, and replacement of materials using the same composition and application
- Minor modifications to interior spaces that do not include portions of the building that contribute to the historical integrity or uniqueness to buildings considered eligible to the NRHP
- Modifications to heating, ventilating, air conditioning, plumbing or electrical systems limited to mechanical spaces, concealed ducts, plenums, or shaft space.
- Installation of security devices including dead bolts, door locks, window latches, door peepholes, and electronic security systems
- Installation of fire, smoke, or carbon monoxide detectors as long as their installation does not permanently damage a historic feature or surface treatment

Proposals for these types of activities may be screened by the base Cultural Resources Manager. If the Cultural Resources Manager determines that the activities would not have a potential effect on a historic property, then no consultation under Section 106 with the SHPO is required.

3.8 SAFETY AND OCCUPATIONAL HEALTH

3.8.1 Definition of the Resource

A safe environment is one in which there is no, or an optimally reduced, potential for death, serious bodily injury or illness, or property damage. The elements of an accident-prone environment include the presence of hazards and an exposed population at risk of encountering a hazard. Numerous approaches are available to manage the operational environment to improve safety, including reducing the magnitude of a hazard through engineering and administrative controls as well as proper use of personal protective equipment (PPE).

The USAF categorizes incidents that occur while on the job as one of five classes. These classifications begin with the most severe and conclude with general mishaps that are used to help identify prevention methods. Within the fifth classification of incidents the Air Force also has identified three other sub classifications, none of which were recorded at the 341 TRS. The USAF classification according to the Department of the Air Forces Standard No. A2, Mishap Investigation and Reporting are as follows:

- Class A – Total cost of $2,000,000 or more for property damage, or a permanent total disability or fatality. Property damage includes all government equipment, vehicles, or munitions.
- Class B – Total cost of $500,000 or more but less than $2,000,000 for property damage. Permanent partial disability or hospitalization of three or more people.
- Class C – Total cost of $50,000 or more but less than $500,000 for property damage. Minor injury, minor occupational illness. An injury resulting in a lost workday case, or an occupational illness that causes loss of time from work at any time. An occupational injury or illness resulting in permanent change of job.
- Class D – Any non-fatal injury or occupational illness that does not meet the definition of lost workdays (lost time). These are cases where, because of injury or occupational illness, the employee only works partial days, has restricted duties, or is transferred to another job, lost consciousness, required medical treatment greater than first aid, or incurred a significant injury or illness diagnosed by a physician or other health care professional.
- Class E Events – These occurrences do not meet reportable mishap classification criteria, but are deemed important to investigate/report for mishap prevention. Class E reports provide an expeditious way to disseminate valuable mishap prevention information. These events also include the following:
    - Property Damage Events – Mishaps that do not have an injury or illness and the direct cost totals $2,000 or more but less than $50,000.
    - High Accident Potential (HAP) Events – Any hazardous occurrence that has a high potential for becoming a mishap.
    - Laser or Radio Frequency (RFR) incidents or accidents. All incidents or accidents involving alleged or suspected exposures of laser radiation need to be investigated according to Air Force Office of Safety and Health (AFOSH) Std 48-139 Laser Radiation Protection Program Paragraph 2.6, immediately reported via the Laser Injury

Hotline (1-800-473-3549 or DSN 240-4784) and reported in Air Force Safety Automated System (AFSAS). Similarly, alleged or suspected RFR exposures in excess of exposure limits will be investigated and reported as prescribed in AFOSH 48-9, and reported in AFSAS (USAF 2010e).

The primary safety categories discussed in this analysis include Ground, Aircraft and Traffic, and Construction Safety.

Ground Safety. Both natural and man-made environmental hazards may be present at Mountain Home AFB at any time due to the varied activities that take place on the installation. Naturally-occurring potential health and safety hazards include insects, snakes, fire, and climactic conditions. Potential man made health and safety hazards include aircraft noise exposure, fire/explosions, ground traffic (i.e. driving to get to the work site) and general injuries due to motor vehicle accidents. Traffic safety is discussed further below. Potential explosion sites at Air Force Bases are designated with QD arcs which indicate the potential damage or injury radius of explosions from that site.

Aircraft and Ground Traffic Safety. Clear Zones and APZs are areas off the end of DoD runways that were developed based on past Air Force aircraft accidents and reflect land areas at greater risk of an aircraft accident. The Clear Zone and APZs represent areas where an accident is most likely to occur, if one were to occur. The Clear Zone begins at the end of the runway and is the area of highest accident potential. The two APZs lie beyond the Clear Zone and have increasingly less accident potential, but still enough to warrant land use restrictions.

Mishaps related to ground traffic result from the use of roads and public thoroughfares and may increase during periods of heavy traffic or traffic delays due to congestion. Additionally, higher speeds tend to increase the severity of accidents that do occur.

Construction Safety. Construction site safety is largely a matter of adherence to regulatory requirements imposed for the benefit of employees, and implementation of operational practices that reduce risk of illness, injury, death, and property damage. The health and safety of construction contractors are safeguarded by OSHA regulations. These standards specify the amount and type of training required for industrial workers, the use of protective equipment and clothing, engineering controls, and maximum exposure limits for workplace stressors. Construction related hazards that are typical for construction activities include biological hazards, slips trips and falls, use of hand and power tools, repetitive motion injuries, proper lifting and material handling, heavy equipment, heat or/and cold stress, noise exposure, proper PPE, and using the proper tool for the job. Additionally, contractors must maintain cleanliness at the construction site. Construction debris which can be blown around a construction site can also pose a hazard to those working and driving in the area of the construction.

3.8.2 Existing Conditions

Ground Safety. The Wing Safety office collects safety-related mishap data for mishap prevention purposes. This information is not released to the public; therefore, it will not be included in this EA. The entire 103-acre Alert Complex site is located within QD arcs due to the presence of

LOLAs. Additionally, rodent droppings, potentially containing HPS, have been identified at Building 291.

Aircraft and Ground Traffic Safety. An 8.9-acre portion of the Alert Complex's 103 acres is located within the Clear Zone, while a 2.12-acre portion falls within APZ I. The current land use classification of the area within the Clear Zone is Open Buffer Zone and Air Operations and Maintenance which are considered compatible land uses with the airfield. The majority of Building 291 falls within the Clear Zone and is not considered compatible; however, Building 291 has received an exemption because the facility was constructed under a previous standard. The land use within APZ I is classified as Air Operations and Maintenance which is considered compatible with the APZ.

Traffic at Mountain Home AFB is highest during mornings and evenings as Base employees and military personnel travel to and from work. However, traffic at the Alert Complex is minimal due to the restricted nature of the site. Access to the site is generally prevented through the use of gates.

Construction Safety. All contractors at Mountain Home AFB who are conducting construction or demolition activities must follow all ground safety regulations and must perform their duties in a way that protects the health and safety of their co-workers, military personnel, and civilians. Contractors must be aware of site conditions prior to and during construction activities and must manage hazards as they are identified, to include identifying appropriate personal protective equipment for construction workers encountering the hazard. Within Building 291, the Feasibility Study identified the presence of ACM, LBP, mercury, and PCBs as described in Section 3.5, Hazardous Materials and Wastes. Additionally, rodent droppings are visible within the building which could increase the potential for construction worker's exposure to HPS.

3.9 UTILITIES AND INFRASTRUCTURE

3.9.1 Definition of the Resource

In 2013 a Feasibility Study was conducted at Building 291 which identified the existing conditions of various utility systems present at the facility (included as Appendix B). These systems included electrical/fire alarm, plumbing, and mechanical systems. The findings of the Feasibility Study are summarized below. Also, in 2014, the installation's stormwater system was evaluated and the conditions of the system at the Alert Complex are discussed below. Information related to solid waste management practices was collected from the 2014 Solid Waste Management Plan and current disposal and recycling rates were obtained from the Base. Information presented related to transportation includes major and minor roadways, the security gates, and parking areas on Alert Complex.

3.9.2 Existing Conditions

3.9.2.1 Electrical/Fire Alarm Systems

Building 291 is served by a simple radial power distribution system. An outdoor, oil-filled, pad-mounted transformer provides power to the building. This transformer appeared to be recently installed and in working condition. The Feasibility Study rated its condition as average and stated that it may continue serving the building.

There are two installed service disconnects – one for the outside chiller unit and one, seven-breaker, main distribution panelboard in the basement which serves the remaining loads. Another distribution panelboard serves approximately 12 branch circuit panelboards which are located throughout the building corridors in recessed areas along the walls. The main switchgear, controls, disconnect switches, and distribution and branch circuit panelboards appear to have been installed in the 1950s and are generally at the end of their life. Some of the breakers show signs of water intrusion damage and are recommended for removal. Associated electrical wiring and conduits could be recycled once removed. Branch panel recessed steel boxes could be reused in future renovations of the electrical system. The distribution, power, and branch circuit panelboards were rated as being in poor to average condition in the 2013 Feasibility Study (ACC 2013).

Lighting and emergency lighting systems in the building appear to be of 1970s and 1960s-70s vintage, respectively. Generally they are all considered to be in end of life condition. The lighting fixtures are damaged or worn to the point where demolition is the recommended course of action. The fixture's steel housings could be recycled. The lighting systems were given a condition rating of poor to average (ACC 2013).

The Building's fire alarm system appears to have been installed in the 1990s and is controlled by a four-zone panel. At the time of the inspection, the panel appeared to be in working condition; however, that could not be confirmed. It could be re-used for limited fire protection if the building were to undergo selective demolition. However, a new addressable fire alarm/mass notification system (with smoke detectors and visual devices and speakers) should be installed if future building occupation is planned. The fire system appears to have been monitored by the Base Fire Department. Heat detectors are located in most of the corridors and many of the rooms; however, they are in end of life condition and should be replaced. The installed radio transmitter could be re-used onsite or relocated and re-used at another location. The fire alarm system was rated as being in poor to average condition (ACC 2013).

3.9.2.2 Plumbing Systems

Plumbing at Building 291 was installed primarily to provide domestic hot and cold water to restroom and kitchen areas, but also provided water for various wall hydrants located on the exterior of the building. The plumbing system used a 4-inch water main to supply water to the building and an 8-inch sewer line to remove sewage from the building. A 650-gallon hot water heater (heated using a fuel oil system) provided domestic hot water to the facility via a hot water pump. The current hot water heater shows signs of bacterial contamination due to the lack of maintenance, usage, and surrounding conditions. Attempts to disinfect the tank have the potential

of compromising the structural integrity of the tank and the potable water system. Therefore, the water heater has no future usefulness (ACC 2013).

Copper and galvanized piping were installed for the water system and lead-based solder was used during installation. According to the Feasibility Study, the domestic water pipes have no future life usefulness and are considered to be in failed condition.

Plumbing fixtures in Building 291 appear to remain mounted in their original locations. Restrooms are heavily infested with rodent droppings and evidence indicates that rodents may be accessing the building through sewer lines. Plumbing fixtures do not comply with present-day Americans with Disabilities Act standards. Plumbing fixtures were rated as being in poor to average condition (ACC 2013).

Vent and waste piping used in the plumbing system includes cast iron piping with lead oakum joints. When this piping system is disturbed, it is highly susceptible to leaks. Lead piping is not prohibited for use under current plumbing codes as long as it is used for waste purposes and is located within concrete which is not subject to vibration. The Feasibility Study indicates that the waste piping in the slab can be utilized in the future after the lines have been purged and plugged; however, vent piping should be removed and replaced. The overall condition rating for piping is failed to poor (ACC 2013).

3.9.2.3 Mechanical Systems

Mechanical systems within Building 291 were designed to be self-sustaining. The Building has historically used a steam circulation system for heating. A fuel oil system produced heat in three zones of the building, while air was circulated through the building by means of two air handling units, fan coil units, and insulated ductwork. In the 1960s a boiler was installed in the basement, but has since been decommissioned. In the 1990s, the heating system was renovated and two oil-fired boilers were added. When the building was no longer in use, water was left in the system which led to system corrosion and rust. The heating system is considered in poor condition (ACC 2013).

The air handling units, fan coil units, and insulated ductwork show excessive particulate debris and microbiological growth contamination due to mold and rodent droppings. Insulation within the supply system has also deteriorated and corrosion was found on the air handling and fan coil units. These systems were rated to be in a failed condition (ACC 2013).

The building uses a chilled water system for cooling and it is unknown when the system was installed; however, it shows signs of deterioration. Physical damage includes missing and bare wiring, deteriorating insulation, corrosion, microbiological growth from rodent droppings, and rust. Pipe corrosion can result in air and moisture leaking into the system. Currently, the system is not operating at peak efficiency due to the system damage and is considered to be in poor condition.

Exhaust fan systems are found throughout the facility and were used for restroom, kitchen, and mechanical room exhaust. Fan equipment showed deterioration from rust and lack of regular maintenance. The fan system is in poor condition (ACC 2013).

3.9.2.4 Stormwater Drainage Systems

The stormwater system at Mountain Home AFB consists of curb-line grates, runoff collectors, drainage ditches, road culverts, and underground distribution lines. The installation operates under an National Pollutant Discharge Elimination System (NPDES) Multi-Sector General Permit for Storm Water Discharges Associated with Industrial Activity. Stormwater is discharged via one permitted outfall (Outfall 001) to a tributary of Canyon Creek. As long as the stormwater meets the conditions and quality of the NPDES stormwater permit, there are no limitations on the volume of stormwater that may be discharged (MHAFB 2011c).

At Building 291 there is a stormwater main line which runs adjacent to the building on the northwest side. That line also branches twice – once running southeast to northwest, perpendicular to the main line, and once running east to west between the two LOLAs. Another storm service line runs east to west on the south side of the southernmost LOLA. All of the stormwater lines within the 103-acre facility have been determined to be in average to good condition (MHAFB 2014). Nine stormwater catch basins and one stormwater curb inlet are located within the 103-acre footprint. With the exception of one basin located furthest southeast, all of the basins and inlets have good surface condition and average to good interior condition (MHAFB 2014). The stormwater infrastructure is generally in average to good condition and is adequate to support stormwater runoff at the Alert Complex.

Section 402(p) of the Clean Water Act (CWA) states that stormwater discharges associated with industrial activity to waters of the United States must be authorized by an NPDES permit. Mountain Home AFB currently operates under an NPDES Multi-Sector General Permit for Stormwater Discharges Associated with Industrial Activity (Permit No. IDR050000). The permit authorizes the discharge of stormwater associated with industrial activity to surface waters, in accordance with effluent limitations, monitoring requirements, and other conditions (USEPA 2008).

3.9.2.5 Solid Waste

Mountain Home AFB has a Solid Waste Management Plan (SWMP) in accordance with AFI 32-7042, Solid and Hazardous Waste Compliance. The SWMP provides the guidelines for organizing, managing, planning, and implementing the installation's Solid Waste Management Program. The SWMP also describes previous, current, and future solid waste management actions at Mountain Home AFB. The 366 CES is responsible for managing the collection and disposal of all municipal solid waste (MSW) and for the tracking and reporting of recycled materials (MHAFB 2014).

The Mountain Home AFB MSW landfill was closed in March 2009, and a post-closure plan for continued monitoring and reporting is in place. The installation currently uses a contractor to collect MSW generated on-installation and dispose of it at Simco Regional Landfill Operated by

Idaho Waste Systems (Jackson 2015). In 2015, Mountain Home AFB disposed of 1,000.52 tons of solid waste (Jackson 2015). According to the 2014 Solid Waste Management Plan, approximately 42,000 tons of construction and demolition waste are generated at Mountain Home AFB annually and disposed at a permitted off-base landfill (MHAFB 2014).

Mountain Home AFB has a goal of reducing solid waste generated and increasing percentage of solid waste that is recycled and reused. As part of its Pollution Prevention program, Mountain Home AFB recycles materials such as aluminum, paper, tin, cardboard, wood, and plastic. All industrial recycling containers are collected and transported to the Recycling Center (MHAFB 2014). In 2015, Mountain Home AFB recycled 514.18 tons of material (Jackson 2015).

3.9.2.6 Transportation

Mountain Home AFB is approximately 10 miles southwest of Interstate 84. Primary access to Mountain Home AFB is via Airbase Road (Idaho State Route 67) through the Main Gate. The Alert Complex is accessible via Bomber Road. Access is restricted by a locked gate. Currently, the site is only accessible by contacting the 366th Security Forces Squadron to request personnel to unlock the gate. A minor asphalt roadway leads the remaining approximate one-half mile to the facility. The roadway and parking areas are composed of asphalt and concrete which are in poor condition and are in need of resurfacing and crack repair (ACC 2013). Bomber Road is also the access route for personnel participating in the 366 CES Readiness and Emergency Management Flight training exercises at the MOAB site.

CHAPTER 4
ENVIRONMENTAL CONSEQUENCES

4.1 INTRODUCTION

This chapter describes the potential environmental consequences that are likely to occur as a result of implementation of the Proposed Action. The No-action Alternative provides a baseline against which the impacts of the proposed and alternative actions can be compared. Discussion of measures that could be implemented to minimized potential impacts are included as necessary. If the actions result in irreversible or irretrievable results, it is noted within the sections below. Criteria and assumptions used to evaluate potential impacts are discussed at the beginning of each section.

4.2 NOISE

Training activities anticipated under the Proposed Action are expected to be limited to primarily office work and would not be expected to generate noise outside of Building 291. Therefore, impacts analysis in this EA will be limited to construction noise. Impacts from noise would be considered significant if the Alternatives resulted in noise levels at noise sensitive receptors above 75 dBA, the requisite level to protect health and welfare with an adequate margin of safety (USEPA 1974).

4.2.1 Proposed Action

Under the Proposed Action, the majority of construction or renovation activities would occur within Building 291 and would produce temporary increases in noise inside the building. Since exterior walls are 12-inch thick reinforced concrete, it is expected that interior construction noise would be barely audible outside the building. Additionally, all building renovations would occur prior to occupation and use of the building for training. Construction activities outside of Building 291 would include roof renovations and utilities replacement/renovation. However, it is assumed that no heavy construction equipment would be utilized for these activities but would rather be completed with hand tools that do not create significant levels of noise. Other outdoor construction activities would include routine grounds maintenance; rehabilitation of existing parking pads, access roads, and sidewalks; and repaving of existing roads and parking areas. Routine grounds maintenance would utilize lawn mowing equipment which produces average noise levels of 85-90 dB at the source. Even at the upper end of the noise range, noise generated from the source would contribute approximately 17dBA to the baseline noise levels at the closest noise sensitive receptor; however, since decibels are a logarithmic unit, the additional noise would not add to the existing levels. Grounds maintenance personnel should wear protective devices such as ear plugs or ear muffs during mowing activities to reduce noise exposure.

Pavement and asphalt rehabilitation and repaving would utilize jackhammers, pavers, and rollers, the loudest of which would be jackhammers with average noise levels of 89 dBA at 50 feet from the source. It is not expected that any of the paving equipment would be used concurrently. Maintenance and construction workers should wear protective devices such as ear plugs or ear

muffs during mowing and construction/renovation activities to reduce noise exposure. Construction equipment noise levels would contribute approximately 50 dBA to the baseline noise levels at the closest noise sensitive receptor; however, since decibels are a logarithmic unit, the additional noise would result in a negligible increase in existing levels.

All of the noise-producing maintenance activities described in the Programmatic Agreement would occur periodically and would be temporary. None of the activities proposed would produce noise levels at noise sensitive receptors above the requisite level to protect health and welfare with an adequate margin of safety (i.e. 75 dBA). Therefore, impacts from noise would be expected to be short-term and minor.

4.2.2 No-action Alternative

Under the No-action Alternative, impacts from noise-producing activities identified within the 2015 Programmatic Agreement would be similar to those described for the Proposed Action. None of the other activities under the No-action Alternative would be expected to produce increases in ambient noise levels. Therefore, impacts from noise would be expected to be short-term and minor.

4.2.3 Measures to Reduce Impacts

No mitigation measures would be necessary under the alternatives. Under the both the Proposed Action and the No-action Alternative, best management practices (BMPs) would include equipping noise-generating heavy equipment at the project site with the manufacturer's standard noise control devices (i.e., mufflers, baffling, and/or engine enclosures). All equipment should be properly maintained to ensure that no additional noise from worn or improperly maintained equipment parts is generated. Construction activities would occur between 0700 and 1900 hours (when possible) and would be conducted according to OSHA regulations 29 CFR 1910.95 and 29 CFR 1926.52. DoD personnel present within hazardous noise areas as stated in Air Force Occupational Safety and Health Administration Standard 48-20 should follow the applicable hearing protection measures. Non-DoD civilian personnel should comply with applicable federal and state regulations. Occupational exposure to the noise from heavy equipment could be reduced by requiring workers to wear appropriate hearing protection. Hearing protective devices such as ear plugs or ear muffs should be worn at all locations where workers may be exposed to high noise levels. These minimization measures shall be updated to reflect current practices at the time of project execution.

4.3 LAND USE

The following factors were considered in evaluating potential land use: (1) the degree to which the action would interfere with the activities or functions of adjacent existing or proposed land uses and (2) the degree to which any physical changes in land use would affect surrounding uses and compatibility with land use plans. The alternatives could have a significant effect if they conflict in substantial fashion with existing land uses and master planning efforts undertaken by the installation.

4.3.1 Proposed Action

Under the Proposed Action, the land use classifications of the Alert Complex would not be expected to change. Additionally, there would be no changes made to the existing LOLAs or their availability for aircraft parking.

Although the Alert Complex is located within QD arcs, the Proposed Action includes an emergency action plan that would be implemented when an aircraft carrying explosive cargo must make an emergency landing at Mountain Home AFB and must be parked on a LOLA. During this time, no non-mission essential personnel can occupy the area within the QD arcs. In cases of emergency landings the Airfield Manager would immediately notify the training instructor, wherein the instructor would begin an immediate evacuation of the property such that all personnel would relocate outside the QD Arcs for that aircraft's location on the LOLA. Implementation of this emergency plan would alleviate any land use conflicts between the QD arcs and occupation of the Alert Complex. Training instructors would also coordinate training times with the Airfield Manager so as not to conflict with scheduled LOLA occupation by an aircraft.

The runway clear zone is not typically compatible with structures; however, Building 291, located within the clear zone, has received an exemption because the facility was constructed under a previous standard.

The 2015 Programmatic Agreement between Mountain Home AFB, the Advisory Council on Historic Preservation, and the Idaho SHPO for the Alert Complex prescribes the long-term management plan for the historic facility (MHAFB 2015a). The Proposed Action would include implementation by the training units of all the management components of the 2015 Programmatic Agreement.

The Proposed Action would not be expected to conflict in substantial fashion with existing land uses and master planning efforts undertaken by the installation.

4.3.2 No-action Alternative

Under the No-action Alternative, there would be no change to the existing land use classifications and Building 291 would continue to operate under the clear zone exemption. There would be no conflicts with the QD arcs, as the building would not be occupied. All management components of the 2015 Programmatic Agreement would be implemented. No impacts to land use or installation master planning efforts would be expected as a result of the No-action alternative.

4.3.3 Measures to Reduce Impacts

No mitigation measures would be required and no BMPs would be recommended. Preparation and implementation of an emergency action plan within the QD arcs would alleviate any land use conflicts.

4.4 HAZARDOUS MATERIALS AND WASTES

The degree to which the Proposed Action and the No-action Alternatives could affect the existing environmental management practices was considered in evaluating potential from hazardous materials and wastes. Significant impacts could result if hazardous or regulated materials/wastes were collected, stored or disposed of improperly.

4.4.1 Hazardous Materials

4.4.1.1 Proposed Action

During the proposed renovation of Building 291 products containing hazardous materials would be procured and used. The contractors conducting the work will use the products containing hazardous materials for equipment operation (e.g. fuels, oils, hydraulic fluid) during demolition as well as during construction (e.g. adhesives, sealants, roofing materials). These materials must be properly contained and managed in accordance with federal and state regulations. The Civil Engineering Office will coordinate and approve any hazardous materials to be used or maintained on base (MHAFB 2010b). Therefore, no impacts related to or from hazardous materials would be expected under the Proposed Action.

Pesticides. Under the Proposed Action there is the potential for increases in preventative exposure methods to minimize the possibility for human contact with HPS, including an increase of pesticide application within Building 291. Pesticides applications would follow all label cautions and instructions to reduce hazards. All applications of pesticide would meet all federal, state, and local requirements and would comply with FIFRA, AFI32-1053 Integrated Pest Management Program (implemented at Mountain Home AFB through the IPMP), DoDI 4150.7 Integrated Pest Management, and DoDI 4715.4 DoD Pest Management Program, and as such would impact the target species only. Therefore, adverse impacts from pesticides are not expected under the Proposed Action.

Should pesticides be spilled, the MHAFB Fire Department will be notified and the Spill Response team will be activated to control any further contamination. Once the spill is contained the cleanup materials will be disposed of properly (MHAFB 2012a).

Environmental Restoration Program. None of the Mountain Home AFB ERP sites are located within the proposed project footprint. As such, they would not affect or be affected by construction activities associated with the Proposed Action.

4.4.2 Asbestos, LBP, Mercury, and PCBs

Asbestos. The demolition contractor would be responsible for all ACM removal prior to demolition. All friable ACM would be removed by a licensed asbestos abatement contractor and all non-friable ACM would be disposed as solid waste along with other construction debris as long as the landfill is permitted to accept non-friable ACM. All debris mixed with ACM would need to be kept wet to minimize airborne fibers and would need to be sent to an asbestos approved landfill (MHAFB 2015e). Beneficial impacts of the Proposed Action would be the removal of ACM within

Building 291 during the renovation. ACM would be managed in accordance with all federal, state, and local regulations and DoD and USAF policies and requirements; therefore, adverse impacts from ACM are not expected under the Proposed Action.

LBP. For surfaces where LBP was identified during the LBP survey (CH2M Hill 2012), the waste generated from demolition must be handled, accumulated, and disposed of in accordance with all federal, state, and local regulations and would be the responsibility of the contractor. Construction activities would not include use of LBP. Beneficial impacts of the Proposed Action include removal of LBP from Building 291. LBP would be managed in accordance with all federal, state, and local regulations and DoD and USAF policies and requirements; therefore, adverse impacts from LBP are not expected under the Proposed Action.

Mercury and PCBs. The mercury and potential PCB containing fluorescent light ballasts identified in Building 291 would be removed and disposed of in accordance with all federal, state, and local regulations including RCRA requirements for waste management and USDOT requirements for waste transport; therefore, adverse impacts from mercury and PCBs are not expected under the Proposed Action. In addition, removal of the mercury and potential PCB-containing materials would result in a beneficial impact as a result of the Proposed Action.

4.4.2.1 No-action Alternative

During the No Action Alternative at Building 291 products containing hazardous materials would be procured and used. The contractors conducting the work could use the products containing hazardous materials for equipment operation (e.g. fuels, oils, hydraulic fluid) during the rehabilitation of parking pads, access roads and sidewalks as well as during construction (e.g. adhesives, sealants, moisture control). These materials would be properly contained and managed in accordance with federal and state regulations. The Civil Engineering Office would coordinate and approve any hazardous materials to be used or maintained on base (MHAFB 2010b). Therefore, no impacts related to or from hazardous materials would be expected under the No-action alternative.

Asbestos, Lead Based Paint, Environmental Restoration Program. Under the No-action Alternative for Building 291, there would be no impact to the baseline conditions for asbestos, LBP, or ERP described in Sections 3.5.2.

Pesticides. Under the No-action Alternative there would be no change to the baseline conditions related to the pesticide use in Building as described in section 3.5.1.3. Pest control services for Building 291 would continue including the quarterly application of rodenticide to the exterior of the facility; placement of rodent traps within the facility, and refilling the rodent bait boxes with the rodenticide Contrac bait blox.

4.4.3 Hazardous Waste

4.4.3.1 Proposed Action

Implementation of the Proposed Action would include renovation to the existing infrastructure which would result in the generation of regulated hazardous wastes. In the event of a spill of any amount of hazardous waste or hazardous material (petroleum products included), the contractors would take immediate action to contain and clean up the spill, in accordance with the Base Spill Prevention Control and Countermeasures Plan (MHAFB 2010b). The contractor would be responsible for proper characterization and disposal of any waste and cleanup materials generated. All waste and associated cleanup material would be removed from the project site and transported and/or stored in accordance with regulations until final disposal. The Proposed Action is not anticipated to cause noncompliance with environmental regulations or generate waste that could not be accommodated by current base hazardous materials and waste management capacities.

4.4.3.2 No-action Alternative

Under the No Action Alternative, there would be no impact to the baseline conditions described in Section 3.5.1.4. Installation activities would continue as is; no hazardous waste would be generated or disposed of.

4.4.4 Measures to Reduce Impacts

All hazardous materials and wastes would be managed according to state, federal, and local regulations.

4.5 BIOLOGICAL AND NATURAL RESOURCES

Evaluation of impacts is based upon 1) the importance (legal, commercial, recreational, ecological, or scientific) of the resource, 2) the rarity of a species or habitat regionally, 3) the sensitivity of the resource to proposed activities, and 4) the duration of the impact. Impacts to biological resources would be considered significant if priority species or habitats are adversely affected over relatively large areas and/or disturbances cause reductions in population size or distribution of a priority species.

4.5.1 Vegetation

4.5.1.1 Proposed Action

Implementation of the Proposed Action would not require the disturbance of any currently vegetated areas. Training at the facility would likely occur within Building 291 or on paved surfaces within the 103-acre Alert Complex. None of the building's exterior features would be modified during the renovation of Building 291 and no ground disturbing activities are anticipated under the Proposed Action. The grounds could possibly be used to stage equipment or erect tents in support of training activities, which would have temporary minimal effects on vegetation resources. Following implementation of the Proposed Action, the project sites would be

maintained to prevent the encroachment or spread of noxious or invasive vegetation in accordance with Mountain Homes AFB's INRMP. Therefore, no adverse impacts to vegetation are anticipated as a result of the Proposed Action.

4.5.1.2 No-action Alternative

Under the No Action Alternative, there would be no change in the baseline conditions described in Section 3.6.2.1.

4.5.1.3 Measures to Reduce Impacts

Vegetative resources would continue to be managed under the INRMP and all applicable environmental laws with the intent of managing military installation lands to support the military mission while providing sustainable populations of biological resources.

4.5.2 Wildlife

4.5.2.1 Proposed Action

Implementation of the Proposed Action would not require the disturbance of any vegetated areas or wildlife habitat. All renovations will occur within Building 291 or on paved surfaces, which is not typical wildlife habitat. Possible staging equipment on the grounds during renovations or establishment of temporary infrastructure (i.e. tents) during training exercises would have temporary minimal effects on habitat for small rodents and birds. However, there would be no long-term adverse impacts to populations of wildlife expected as a result of the Proposed Action.

Under the Proposed Action, there would be an increase in human visitors to the Alert Complex. Increased human disturbance would not likely deter most wildlife species using the areas around the Alert Complex, since these animals would already be accustomed to the sights and sounds of an area of high human impact located at the end of the runway.

More human visitors to the rodent infested Building 291 could increase the risk of exposure to HPS, but the increased risk would likely be minimal, given the low reported incidence of transmittal of HPS to humans at Mountain Home AFB and the effectiveness of preventative exposure measures. In an effort to limit the potential exposure of HPS, the Proposed Action may include an increase in preventative exposure methods including an increase of pesticide application within Building 291. Some pesticides are toxic to fish and wildlife, so all label cautions and instructions would be followed to reduce hazards to non-target animals from off-target impact. All applications of pesticide would meet all federal, state, and local requirements and would comply with FIFRA, AFI 32-1053 Integrated Pest Management Program (implemented at Mountain Home AFB through the IPMP), DoDI 4150.7 Integrated Pest Management, and DoDI 4715.4 DOD Pest Management Program, and as such would impact the target species only. Therefore, no adverse impacts to non-target wildlife or humans are anticipated as a result of the Proposed Action.

4.5.2.2 No-action Alternative

Under the No Action Alternative, there would be no change in the baseline conditions described in Section 3.6.2.2.

4.5.2.3 Measures to Reduce Impacts

Wildlife and conservation management practices would be followed in order to ensure that the habitat necessary for all or part of the life cycle of a species is not lost and that the ecological processes are not damaged to the extent that biodiversity is impaired or ecosystems are no longer sustainable. Wildlife resources would continue to be managed under the INRMP and all applicable environmental laws with the intent of managing military installation lands to support the military mission while providing sustainable populations of biological resources.

A discussion on the minimization of risk of human exposure to HPS while occupying Building 291 is included in Section 4.7.

4.5.3 Threatened, Endangered and other Protected Species

4.5.3.1 Proposed Action

Implementation of the Proposed Action would not require the disturbance of any threatened, endangered, and other protected species habitat. All renovations will occur within Building 291 or on paved surfaces throughout the 103-acre Alert Complex, which is not threatened, endangered, and other protected species habitat. Possible staging equipment on the grounds during renovations or establishment of temporary infrastructure (i.e. tents) during training exercises would have temporary minimal effects on adjacent vegetation, but there would be no long-term adverse impacts to populations of threatened, endangered, and other protected species as a result of the Proposed Action.

Under the Proposed Action, there would be an increase in human visitors to Building 291 in the Alert Complex. The only species of concern likely to occur on the Alert Complex (burrowing owl and long-eared myotis) are species that adapt to human impacts; therefore, would likely not be bothered by human activity. No burrows or occurrences of the burrowing owl have been documented within the Alert Complex. In addition, potential ground disturbance under the Proposed Action is limited to the potential need to replace utilities along existing buried utility corridors which is an unlikely location for a burrow. Therefore, disturbance of burrows or an active burrowing owl nest are not anticipated under the Proposed Action. No adverse impacts to threatened, endangered, and other protected species are anticipated as a result of the Proposed Action.

4.5.3.2 No-action Alternative

Under the No Action Alternative, there would be no change in the baseline conditions described in Section 3.6.3.

4.5.3.3 Measures to Reduce Impacts

Wildlife and conservation management practices would be followed in order to ensure that the habitat necessary for all or part of the life cycle of a threatened, endangered, and other protected species is not lost and that the ecological processes are not damaged to the extent that biodiversity is impaired or ecosystems are no longer sustainable. To avoid any adverse impacts to the burrowing owl, ground nesting surveys should be conducted prior to any (currently unforeseen) ground disturbance that would occur during the nesting season from approximately 1 April through 15 July. If nesting burrowing owls are reported during the survey, then no ground disturbance should occur. To avoid adverse impacts to the long-eared myotis, buildings should be inspected for roosting bats prior to the start of proposed building renovation activities. USFWS should be contacted if any protected species are incidentally encountered during activities associated with the Proposed Action.

Threatened, endangered, and other protected species resources would continue to be managed under the INRMP and all applicable environmental laws with the intent of managing military installation lands to support the military mission while providing sustainable populations of biological resources. Procedures outlined in the MBTA and National Defense Authorization Act will be followed for the protection or mitigation of impacts to migratory birds.

4.6 CULTURAL RESOURCES

A number of federal regulations and guidelines have been established for the management of cultural resources. Section 106 of the NHPA, as amended, requires federal agencies to take into account the effects of their undertakings on historic properties. Historic properties are cultural resources that are listed in, or eligible for listing in, the NRHP. Eligibility evaluation is the process by which resources are assessed relative to NRHP significance criteria for scientific or historic research, for the general public, and for traditional cultural groups.

Significant impacts to cultural resources could occur only if the proposed or alternative actions would adversely affect those resources. Under federal law, impacts to cultural resources may be considered adverse if the resources have been determined eligible for listing in the NRHP or have been identified as important to Native Americans.

Analysis of potential impacts to cultural resources considers direct impacts that may occur by 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; or neglecting the resource to the extent that it deteriorates or is destroyed. Direct impacts can be assessed by identifying the types and locations of proposed activity and determining the exact location of cultural resources that could be affected. Indirect impacts generally result from increased use of an area.

4.6.1 Proposed Action

Under the proposed action, the Alert Complex would be utilized for training by the 366 CES Readiness and Emergency Management Flight and the 366 FW. None of the building's exterior features, including the earthen berm, would be modified for re-use of the facility. Also, all measures would be followed by the training units per the 2015 Programmatic Agreement (MHAFB 2015b).

The proposed action would not alter the original taxiways, aprons, parking stubs, earthen exterior berm, the roadway system or the security fence. No changes would be made to the vestibules, tunnels, or ramps. The roof configuration would remain in its current form and in-kind materials would be used for replacing the existing roof. Therefore, the Alert Complex will not be adversely affected per the 2015 Programmatic Agreement (MHAFB 2015b).

Replacement of utilities, signage, doors, and lighting would not alter the historic significance of Building 291 and creation of dormitory space would constitute "minor modifications to interior spaces that do not include portions of the building that contribute to the historical integrity or uniqueness to buildings considered eligible to the NRHP". The creation of the dormitory would be in keeping with historic use of Building 291 and would not require construction or elimination of walls or changes in the interior view. All of these actions would be in accordance with the 2015 Programmatic Agreement Regarding the Management of Historic Properties at Mountain Home Air Force Base that covers routine undertakings that do not pose a potential threat to historic properties (MHAFB 2015g). The Cultural Resources Manager has determined that the Proposed Action would not result in an adverse effect to this historic property and further consultation with the SHPO is not required.

Based on the proposed renovations, there would not be a significant direct or indirect impact to the location, setting, design, materials, workmanship, feeling, and association of the Building 291 Alert Complex.

4.6.2 No-action Alternative

Under the No-Action Alternative, the Alert Complex would be managed according to the terms and conditions identified within the 2015 Programmatic Agreement (MHAFB 2015a). The routine activities proposed within the Programmatic Agreement will not cause not adverse effects to the significance of the complex.

4.6.3 Measures to Reduce Impacts

Building 291 and its accompanying 103 acres would not directly or indirectly be impacted by proposed renovation and use and therefore, there are no mitigation measures.

4.7 SAFETY AND OCCUPATIONAL HEALTH

The potential to increase or decrease safety risks to the public, the military, and property were analyzed in this section. Measures to reduce risk potential are also addressed. The primary safety categories discussed in this analysis include Ground, Aircraft and Traffic, and Construction Safety. Significant impacts to ground; aircraft and traffic; or construction safety would occur if there is an increase in the number and severity of incidents at the Alert Complex.

4.7.1 Proposed Action

Ground Safety. With the exception of potential HPS exposure, Under the Proposed Action military personnel would not be exposed to biological or climatological hazards during the proposed training activities under the Proposed Action would occur within Building 291 and. The potential presence of HPS within Building 291 is a safety concern for any building occupants. Pest management at Mountain Home AFB applies pesticide quarterly to the exterior of the facility in order to limit rodent activity within and around the building. Additionally, rodent traps are set within the building and are inspected weekly. To remove existing rodent droppings and urine, personnel should first wear rubber or plastic gloves, then a mixture of bleach and water should be sprayed on the urine and feces and allowed to soak for five minutes. Then a paper towel would be used to wipe up the mess. The paper towel would be thrown away and then the area would be mopped with a disinfectant or bleach solution. Gloves should then be sprayed with a disinfectant or bleach solution prior to their removal. Personnel who are disinfecting the area should wash their hands with soap and warm water after removing their gloves. This cleaning regime should be conducted regularly, as well as immediately after noticing any rodent droppings or urine (CDC ND). Implementation of this cleaning regime would minimize the risk of personnel contracting HPS; therefore, the number and severity of HPS incidents at the Alert Complex would not be expected to increase.

Workers would potentially be exposed to these hazards prior to entering and exiting the building. Safety briefings with personnel could greatly reduce the potential for bodily injuries by identifying dangerous insects, snakes, and climatological hazards and how to avoid them.

Since the Alert Complex is located within QD arcs, worker's exposure to man-made hazards would be limited to potential damage or injury from nearby potential explosion sites at the LOLAs. When a C-5 aircraft carrying explosive cargo must make an emergency landing at Mountain Home AFB, the aircraft are parked on a LOLA until the emergency has been resolved. During this time, no non-mission essential personnel can occupy the area within the QD arcs. In other words, the Alert Complex must be vacant any time potentially explosive materials are located at the LOLAs. Therefore, under the Proposed Action, training instructors would coordinate training times with the Airfield Manager so as not to conflict with scheduled LOLA occupation by a C-5 aircraft. Additionally, in the event that an aircraft carrying explosive cargo must make an emergency landing at Mountain Home AFB, the Airfield Manager would immediately notify the training instructor, wherein the instructor would begin an immediate evacuation of the property such that all personnel would relocate outside the QD Arcs for that aircraft's location on the LOLA. This safety plan would be implemented to reduce potential explosive incidents at the Alert Complex.

The number and severity of ground safety incidents would not be expected to increase provided that these BMPs and the safety plan for explosives were implemented.

Aircraft and Ground Traffic Safety. Under the Proposed Action, training activities within the Alert Complex would not necessitate a change to the land use classification which would remain as Air Operations and Maintenance. This is considered a compatible land use with the APZ I. Additionally, although structures within runway clear zones are not normally compatible and are typically prohibited, Building 291 has received an exemption because the facility was constructed under a previous standard. As recently as 2007 the facility was used for training purposes. It is not expected that future occupation of the building would increase the potential for incidents beyond that which existed during the most recent training activities at the building.

Since there would be no base population increase as a result of the Proposed Action, traffic at Mountain Home AFB would not be expected to increase; however, traffic counts within the area of the Alert Complex would increase. Additional signage would be placed at the Alert Complex and in the area that would provide direction on traffic flow and parking areas. Traffic safety briefings could also help to lessen traffic incidents in the area. As a result, the number or severity of traffic incidents at Mountain Home AFB is not expected to change.

Construction Safety. Construction is typically an inherently dangerous activity due to the use of large, powerful and noisy pieces of equipment; however, use of heavy equipment would be limited during construction activities associated with the Proposed Action. During rehabilitation of existing parking pads, access roads, and sidewalks; and repaving of existing roads and parking areas, workers would use heavy equipment such as jackhammers, pavers, and rollers. Roof repair introduces an additional hazard of working at an elevated height. Measures would be taken in order to protect both the construction workers and the residents of the installation from injury during all construction activities.

Clear demarcation of the work area as well as fencing would be needed to keep construction activities and debris in the area and bystanders out of the potentially dangerous work areas. All construction contractors would be accountable for maintaining a safety program which protects their employees and limits the exposure to all base personnel during the time of work. Construction employees would be given the proper training to identify hazards as well as all necessary PPE to do their jobs safely. The PPE would include hard hats, steel toed boots, hearing protection, work gloves, reflective vests, safety harnesses, signaling flags, communication devices and any other equipment deemed necessary in the safety plan. Use of PPE and signage at the construction site would protect workers and bystanders from sharp or heavy tools and construction materials, loose construction debris, large and noisy moving equipment. Therefore, an increase in the number or severity of construction accidents would not be expected under the Proposed Action.

Building 291 does contain ACM, LBP, mercury, and PCBs which would be removed by a competent contractor. Appropriate PPE would be required for the workers performing the removal to minimize their exposure to these hazardous materials. All ACM, LBP, mercury, and PCBs removed would be managed in accordance in accordance with all federal, state, and local regulations and DoD and USAF policies and. Removal of these hazardous materials from Building 291 would result in a beneficial impact in that the materials would no longer present a hazard to

building occupants. Proper handling of these materials and use of PPE would minimize the potential for safety impacts.

Construction workers could also potentially be exposed to HPS during work within and around Building 291. However, following the cleaning regime described above in the ground safety section would help to minimize risk of exposure. If interior work is being performed after long periods of Building 291 vacancy, the cleaning regime should be conducted prior to initialization of work.

4.7.2 No-action Alternative

Under the No-action Alternative, the only personnel who would be potentially exposed to biological or climatological hazards would be maintenance personnel, pest management personnel, and construction workers. Safety briefings with personnel could greatly reduce the potential for bodily injuries by identifying dangerous insects, snakes, and climatological hazards and how to avoid them.

Building 291 would not be considered an occupied building so the threat of explosive hazards would only be present during routine site maintenance. Non-mission essential maintenance workers would coordinate maintenance times with the Airfield Manager so as not to conflict with scheduled LOLA occupation by a C-5 aircraft. Additionally, in the event that an aircraft carrying explosive cargo must make an emergency landing at Mountain Home AFB, the Airfield Manager would immediately notify the maintenance shop, wherein they would begin an immediate evacuation of the property such that any maintenance personnel would relocate outside the QD Arcs for that aircraft's location on the LOLA.

There would be no impacts to the APZ I or Clear Zone as a result of the No-action Alternative because the building would not be occupied and it would continue to exist under a facility exemption. Traffic impacts are not expected, as the amount of personnel accessing the site for maintenance activities would be minimal.

Construction impacts from rehabilitation of existing parking pads, access roads, and sidewalks; and repaving of existing roads and parking areas would be similar to those described for the Proposed Action. Use of PPE and signage would protect workers and bystanders from any potential safety hazards. LBP and ACM would not be disturbed under the No-action Alternative; therefore, there would be no safety impacts associated with these hazardous materials. Quarterly pest control activities would occur at the building; however, since the building would not be occupied, there would be no HPS threat to building inhabitants. Any maintenance personnel accessing the site should follow safety protocols identified in the Centers for Disease Control and Prevention document *Facts About Hantavirus* (CDC ND).

4.7.3 Measures to Reduce Impacts

No measures to reduce impacts are required. BMPs to limit safety hazards would include briefings with personnel to identify dangerous insects, snakes, and climatological hazards and how to avoid them; briefings on HPS; briefings on traffic patterns; signage posted to indicate parking areas and

required traffic flow patterns; signage and fencing to indicate construction areas; and PPE for construction workers and those conducting LBP, ACM, mercury, and PCB removal. Implementation of pest management practices and a standard cleaning regime at Building 291 would minimize worker's and personnel's risk of contracting HPS. Additionally, preparation and implementation of an emergency action plan within the QD arcs would minimize the risk of injury to workers due to unforeseen explosions.

4.8 UTILITIES AND INFRASTRUCTURE

Impacts to utilities and infrastructure would be considered significant if the alternatives resulted in one or more of the following:

- Prolonged disruption of utility services
- Non-compliance with the 2015 Programmatic Agreement for the Alert Complex
- A change in demand which exceeds the capacity of the utility providers

4.8.1 Proposed Action

Under the Proposed Action, all utility systems including electrical, lighting, fire alarms, plumbing, and mechanical (including heating, cooling, and ventilation systems) would be replaced or renovated. These utility upgrades would be in compliance with the 2015 Programmatic Agreement for the Alert Complex. All utility systems would be renovated such that their new capacity would meet the demands of proposed training activities within Building 291.

Replacement of underground utilities would require the temporary use of trenching equipment which would result in short-term disturbance to previously disturbed soils. Any soils removed during utility replacement/renovation would be placed back in the trench once activities were completed. The closest waterbody to the project site, the CJ Strike Reservoir, is located approximately 3 miles southwest of the site. Due to its distance from the project site, it is not likely to be impacted by erosion from trenching activities. Fugitive dust may be generated during trenching; however, this disturbance would be minor and short-term, would fall off rapidly with distance from the construction site, and would last only as long as the duration of soil disturbance. Implementation of a Stormwater Pollution Prevention Plan (SWPPP), and incorporation of best management practices within the SWPPP would assist in erosion control during trenching activities.

Communication ports, smoke detectors, and emergency lighting would be installed to support occupation of Building 291 by training units. Improvements such as exit signage replacement; replacement/repair of egress/fire doors; rehabilitation of existing parking pads, access roads, and sidewalks; repaving of existing roads or existing parking areas; maintenance of an exterior berm; and roof replacement would serve to correct infrastructure deficiencies and prepare the Building for occupancy. In order to maintain safety during pavement and road rehabilitation/repairs, signage would be posted and fencing erected to identify construction areas.

Since no changes to impervious surfaces are expected under the Proposed Action, and since the stormwater infrastructure at the Alert Complex is in average to good condition, no impacts to

stormwater drainage systems are expected under the Proposed Action. Training at the Alert Complex would not involve industrial activities; therefore, no industrial activity stormwater discharges would be released to surface waters as part of the Proposed Action.

Solid waste generated at the Alert Complex during training activities would be limited to MSW. MSW would be collected by the base solid waste contractor and disposed at the Simco Regional Landfill. Any recyclable materials collected at Building 291 would be transported to the Recycling Center. Construction, repair, and renovation solid waste would be collected, managed, and disposed by the construction contractor. Any hazardous materials/wastes removed (i.e. ACM, LBP, mercury, and potential PCBs) would be managed in accordance with all federal, state, and local regulations and DoD and USAF policies and requirements.

None of the changes to utilities or infrastructure at the Alert Complex would be expected to cause a prolonged disruption of utility services. Additionally, existing utility providers have sufficient capacity to cover any increased demand that would result from the Proposed Action. Impacts to utility and infrastructure systems at the Alert Complex would be beneficial and no adverse effects would be expected.

Bomber Road is the current access route for personnel participating in the ongoing 366 CES Readiness and Emergency Management Flight training exercises at the MOAB site. Therefore, since the Alert Complex is also accessed via Bomber Road, traffic on this route would not be anticipated to change from baseline conditions as a result of the proposed 366 CES Readiness and Emergency Management Flight training exercises. In addition, it is currently not anticipated that the visiting units that would utilize the Alert Complex would do so concurrently with 366 CES Readiness and Emergency Management Flight personnel, so no impacts related to increased traffic along Bomber Road would be anticipated under that training scenario. Rehabilitation of existing parking pads, access roads, and sidewalks with in-kind materials and features within previously disturbed areas as well as repaving of existing roads or existing parking areas are currently proposed under the Programmatic Agreement and would be implemented under baseline conditions. Therefore, no adverse impacts related to transportation would be anticipated under the Proposed Action.

4.8.2 No-action Alternative

Under the No-action Alternative all management components of the 2015 Programmatic Agreement would be implemented, including placement, maintenance, or replacement of below ground utility lines and transmission lines within previously disturbed areas. Additionally, since the building would remain unoccupied, there would be no disruption of utility services to building occupants and no change in utility demand. No adverse impacts to utilities and infrastructure would be realized as a result of the No-action Alternative. Erosion impacts would be similar to those described under the Proposed Action.

4.8.3 Measures to Reduce Impacts

Contractors may need to spray water over the soil during trenching activities in order to reduce fugitive dust. Additionally, erosion control measures, such as silt fences or other barricades may

be necessary to prevent soil runoff and would be included as BMPs within the SWPPP. Safety BMPs such as posting signage and erecting fencing around construction areas would minimize hazards to workers and base personnel

4.9 CUMULATIVE EFFECTS

Currently, there are no known past, present, or foreseeable future projects that would affect or be affected by actions at the Alert Complex.

CHAPTER 5
LIST OF PREPARERS

Name	Degree	Resource Area	Years of Experience
Tana Jones	BS Natural Resource Management	Project Manager; Resource Lead	17
Barry Peterson	BS Meteorology; MS Atmospheric Sciences	Resource Specialist, Air Quality	16
Ann Erickson	MS Natural Resources	Resource Specialist, Biological and Natural Resources	15
Tamara Carroll	BS Bioenvironmental Science	Resource Specialist, Noise, Land Use, Safety and Occupational Health, Utilities and Infrastructure	14
Stacey Gray	BS Environmental Science	Resource Specialist, Hazardous Materials and Wastes	10
Teresa Rudolph	MA Anthropology	Resource Lead, Cultural Resources	35
Isla Nelson	BA Anthropology	Resource Specialist, Cultural Resources	15
Patricia Beckley	BS Geology/ Hydrogeology	Geographic Information Systems	9
Douglas Johnson	BA Government/Geology	Technical Review	39

(no document text this page)

CHAPTER 6
PERSONS AND AGENCIES CONTACTED

Federal Agencies

Mountain Home Air Force Base, Idaho
Lt Col Kevin Osborne, Commander, 366 CES
Lt David Gillette, R&EM Flt/CC, 366 CES
MSgt Stacy Miller, Airfield Manager, 366 OSS/OSAA
Nathan Rowland, Deputy BCE, 366 CES/CD
Scott Mayberry, Engineering Chief, 366 CES/CEN
Sam Shearman, Community Planner, 366 CES/CENP
Ed Jackson, Solid Waste/EIAP, 366 CES/CEIEA
Sheri Robertson, Chief, 366 CES/CEIEA

United States Fish and Wildlife Service

Government

Governor of Idaho
The Honorable C.L. Otter

United States House of Representatives
The Honorable Mike Simpson
The Honorable Raul Labrador

United States Senate
The Honorable James Risch
The Honorable Michael Crapo

Idaho House of Representatives
The Honorable John Vander Woude
The Honorable Jason A. Monks
The Honorable Richard Wills
The Honorable Pete Nielsen

Idaho Senate
The Honorable Lori Den Hartog
The Honorable Bert Bracket

Mayor of Mountain Home, Idaho
The Honorable Rich Sykes

Mayor of Boise, Idaho
The Honorable David H. Bieter

Mayor of Twin Falls, Idaho
The Honorable Shawn Barigar

Mayor of Grand View, Idaho
The Honorable Franklin D. Hart

Mountain Home City Council

Mountain Home Chamber of Commerce

Twin Falls Chamber of Commerce

Boise Metro Chamber of Commerce

Elmore County Commission
Mr. Wes Wootan
Mr. Bud Corbus
Mr. Al Hofer

Other Agencies and Individuals

Special Assistant, Military Affairs
Col. Billy F. Richey, USAF Retired

State Historic Preservation Office
Tricia Canaday, State Architectural Historian, National Register Coordinator
Jamee Fiore, Preservation Review Officer, Section 106 Review

Idaho Fish and Game
Mr. Virgil Moore
Mr. Daryl Meints

Advisory Council on Historic Preservation
Ms. Katharine Kerr

National Trust for Historic Preservation (Washington D.C.)

National Trust for Historic Preservation (Western Field Services)
Ms. Sherri Freemuth

Warhawk Air Museum
Mr. John R. Paul

Preservation Idaho
The Idaho Historic Preservation Council

Idaho Professional Archaeological Council

University of Idaho, College of Art and Architecture
Mr. Randall Teal

American Legion Auxiliary Unit 26

Weitze Research

(no document text this page)

CHAPTER 7
REFERENCES

ACC. 2013. Feasibility Study Ready Alert Facility Building 291. Mountain Home Air Force Base, Elmore County, Idaho. August.

Ash. 2015. Email correspondence from David Ash, Entomology, Mountain Home Air Force Base, to Tamara Carroll, Weston Solutions. 23 October 2015.

Bailey, R.G. and A.W. Kuchler. 1996. Potential Natural Vegetation of the United States. U.S. Geological Survey. Washington, DC.

CDC. No date. Facts About Hantavirus. What You Need To Know To Prevent the Disease Hantavirus Pulmonary Syndrome (HPS). Department of Health and Human Services Centers for Disease Control and Prevention. Available at: http://www.cdc.gov/hantavirus/pdf/hps_brochure.pdf. Accessed January 2016.

CH2M Hill. 2012. 95% Design Volume 2 Environmental Sampling Report Building 291for the construction of the Demolish building 291 Alert Facility Mountain Home Air Force Base, Mountain Home, Idaho Contract No. FA4897-07-D-3002, December 2012.

Chase, M.K. and B.A. Carlson. 2002. Sage Sparrow(*Amphispiza belli*). In The Coastal Scrub and Chaparral Bird Conservation Plan: A Strategy for Protecting and Managing Coastal Scrub and Chaparral Habitats and Associated Birds in California. California Partners in Flight.

DoD. 2006. DoDI 4710.02, Interaction with Federally Recognized Tribes. 14 September.

DoD. 2004. The Department of Defense Response to Executive Order 13287, "Preserve America". 30 September.

DoD. 1996. DoDI 4715.9, Environmental Planning and Analysis. 3 May.

DoD PIF. 2010. List of Priority Species for the Great Basin. 7 December 2010 [Data file].

FEMA. 1989. Federal Insurance Rate Map ID 160212 0600. Elmore County, Idaho. Panel 600 of 850.

Holliday Lt Col. 2012. Letter from Lt Col Holliday to Ms. Suzi Pengilly regarding the proposed undertaking of demolition of Building 291. 4 May.

ICDC. 2009. Special Status Plants and Animals in Elmore and Owyhee Counties, Idaho. Idaho Department of Fish and Game, Boise. Accessed November 9, 2009. Available at http://fishandgame.idaho.gov/cdc/county_spp_lists/elmore_plants.cfm, http://fishandgame.idaho.gov/cdc/county_spp_lists/owyhee_plants.cfm, http://fishandgame.idaho.gov/cms/tech/cdc/county_spp_lists/elmore_animals.cfm, and http://fishandgame.idaho.gov/cms/tech/cdc/county_spp_lists/owyhee_animals.cfm

IDEQ. 2013. Properly Managing Universal Wastes Hazardous Waste in Idaho State Office of Waste Management and Remediation Division. https://www.deq.idaho.gov/media/613199-properly_managing_universal_waste.pdf. July.

IDWR 2016. Idaho Department of Water Resources Water Quality Map http://maps.idwr.idaho.gov/map/edms#. Accessed on January 14, 2016.

ISHS. 2014. Letter from Janet Gallimore to Col Iverson regarding the Cold War Alert Facility/Building 291 PA. 17 June.

Jackson. 2016. Personal communication with Eddie Jackson, Solid Waste/EIAP Manager, Mountain Home AFB, and EA preparers. 2 March 2016.

Jackson. 2015. E-mail correspondence between Eddie Jackson, Solid Waste/EIAP Manager, Mountain Home AFB, and Tamara Carroll, Weston Solutions. 18 December 2015.

Knick, S.T. and J.T. Rotenberry. 1995. Landscape Characteristics of Fragmented Shrubsteppe Habitats and Breeding Passerine Birds. Conservation Biology, 9, 1059-1071.

Manning, R.W. and J.K. Jones. 1989. *Myotis evotis*. Mammalian Species, 329, 1-5.

MHAFB. 2015a. Mountain Home Air Force Base. 366th Maintenance Group Fact Sheet. 18 February 2015.

MHAFB. 2015b. Programmatic Agreement Among the 366th Fighter Wing, The Idaho State Historic Preservation Officer, and the Advisory Council on Historic Preservation Regarding Management of the Cold War Alert Facility at Mountain Home Air Force Base. 8 June.

MHAFB. 2015c. Mountain Home Air Force Base. The Mountain Home AFB's Historic SAC Alert Facility.

MHAFB. 2015d. Hazardous Waste Management Plan. 18 December.

MHAFB. 2015e. Asbestos Operations Management Plan.

MHAFB. 2015f. Lead Based Paint Management Plan.

MHAFB. 2015g. Programmatic Agreement Regarding the Management of Historic Properties Between the Idaho State Historic Preservation Officer and the Mountain Home Air Force Base. 8 June.

MHAFB. 2012a. Integrated Pest Management Plan.

MHAFB. 2012b. Integrated Natural Resource Management Plan. June.

MHAFB. 2012c. B291 Health Risk Evaluation. Memorandum for 366 CES/CEPM. 7 May.

MHAFB. 2012d. National Register of Historic Places Registration Form for Mountain Home Air Force Base Bomber Alert Facility. Prepared by Amy E. Dase and Stephanie L. Katauskas of Prewitt and Associates. 17 May.

MHAFB. 2013. Mountain Home Air Force Base, Ready Alert Facility (Building 291) Historic American Buildings Survey. Prepared by Karen Van Citters. January.

MHAFB. 2014. Mountain Home Air Force Base. 366th Fighter Wing Plan 3205-10 Solid Waste Management Plan. 1 May 2014.

MHAFB. 2014. Mountain Home Air Force Base Final Stormwater System Evaluation for Mountain Home Air Force Base, Idaho. Prepared by Tetra Tech Inc. 10 September 2014.

MHAFB. 2011a. Site LF-23 (Solid Waste Disposal Area) Explanation of Significant Differences to the Record of Decision for Mountain Home Air Force Base, Operable Unit Nos. 1, 3, 5, and 6, Lagoon Landfill, and Fire Training Area 8 (dated 20 October 1995. June.

MHAFB. 2011b. Final Draft Mountain Home Air Force Base ID Integrated Cultural Resources Management Plan.

MHAFB. 2011c. Mountain Home Air Force Base. Draft Environmental Assessment Addressing the Privatization of Military Family Housing. September.

MHAFB. 2010. Proposed Plan Operable Unite 1, 3, 5, and 6, with a Proposed Remedy for Site ST-11 and Amendment to the Record of Decision, Environmental Restoration Program, Mountain Home Air Force Base Idaho. April 2010.

MHAFB. 2009. Mountain Home Air Force Base Cold War-Era Historic Property Survey. Prepared by Karen Weitze, Marsha Prior, Michelle Wurtz of Geo-Marine. June.

MHAFB. 2007. Mountain Home Air Force Base Wetland Delineation and Request for Jurisdictional Determination.

MHAFB. 2006a. Wildlife Data Summary Report for Mountain Home Air Force Base and Mountain Home Range Complex. U.S. Air Force, Mountain Home Air Force Base, ID: 366 CES/CEVA, Carl Rudeen, October 2006.

MHAFB. 2006b. Historic Building Inventory and Evaluations, Mountain Home Air Force Base, Elmore County, Idaho. Prepared by Karen Weitze, Mikel Travisano, and Julian Adams of Geo-Marine. August.

MHAFB. 1998. Mountain Home Air Force Base. 1998 AICUZ Report, Volume I and II. March.

NatureServe. 2015. NatureServe Explorer: An online encyclopedia of life [webapplication]. Version 7.1 NatureServe, Arlington, Virginia. Retrieved January 19, 2016 from http://www.natureserve.org/explorer.

Neitzel, Susan Pengilly. 2004. Letter from Susan Pengilly Neitzel to Paula Jo Miller regarding National Register of Historic Places Evaluation (Neutra) Residential Units 4473, 4476, 4478 and Bomber Alert Facility (Bldg 291). 20 August.

POTUS 2010. Presidential Memorandum - Disposing of Unneeded Federal Real Estate. 10 June.

POTUS. 2003. EO 13287: Preserve America. 3 March.

POTUS. 1994. EO 12898: Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations. 11 February.

Rich, T. 1980. Nest Placement in Sage Thrashers, Sage Sparrows and Brewer's Sparrows. Wilson Bulletin, 92, 362-368.

Sibley, D.A. 2000. The Sibley Guide to Birds. (ISBN0-679-45122-6). North America No.425. Philadelphia, Pennsylvania

USAF. 2014. AFI32-7064. Integrated Natural Resources Management. 19 November 2014. Available at http://www.epublishing.af.mil

USAF. 2011. Sustainable Installations and Air Force 20/20 by 2020.

USAF. 2008. AFM 33-363: Management of Records. 1 March.

USEPA 2015. Hazardous Waste Generator Regulatory Summary: http://www.epa.gov/hwgenerators/hazardous-waste-generator-regulatory-summary last updated: June 16, 2015, accessed January 16, 2016.

USEPA. 2009. Persistent Organic Pollutants: A Global Issue, a Global Response, USEPA web page explaining the banning of Chlordane. http://www.epa.gov/international-cooperation/persistent-organic-pollutants-global-issue-global-response. Content last updated December 2009.

USEPA. 2008. United States Environmental Protection Agency. Multi-Sector General Permit For Stormwater Discharges Associated With Industrial Activity (MSPG) Authorization To Discharge Under The National Pollutant Discharge Elimination System. 29 September 2008.

USEPA. 1974. United States Environmental Protection Agency. Information on Levels of Environmental Noise Requisite to Protect Public Health and Welfare with an Adequate Margin of Safety. March.

USFWS. 2009. Endangered and Threatened Wildlife and Plants. Listing *Lepidium papilliferum* (Slickspot Peppergrass) as a Threatened Species Throughout Its Range: Final Rule. Federal Register 74:194 (October8, 2009) p.52014-52064.

USFWS. 2010. Endangered and Threatened Wildlife and Plants; 12-Month Findings for Petitions to List the Greater Sage-Grouse (*Centrocercus urophasianus*) as Threatened or Endangered. Federal Register 75:55 (March 23, 2010) p.13910-14014.

(no document text this page)

APPENDIX A – 2015 PROGRAMMATIC AGREEMENT

(no document text this page)

PROGRAMMATIC AGREEMENT AMONG
THE 366TH FIGHTER WING,
THE IDAHO STATE HISTORIC PRESERVATION OFFICER, AND
THE ADVISORY COUNCIL ON HISTORIC PRESERVATION
REGARDING MANAGEMENT OF THE COLD WAR ALERT FACILITY AT
MOUNTAIN HOME AIR FORCE BASE

WHEREAS, 366th Fighter Wing (FW) plans to carry out a treatment plan to clean up and stabilize Building 291 (the undertaking) which is part of the Cold War Alert Facility (Alert Facility) pursuant to the National Historic Preservation Act, 16 U.S.C. 470h-2(a); and

WHEREAS, the undertaking consists of controlling pests, securing exterior envelope from moisture, and structurally stabilizing the building where needed; and

WHEREAS, the Alert Facility is located on Mountain Home Air Force Base (MHAFB), in Elmore County, Idaho, and includes Building 291, three taxiways, two herringbone alert aprons, access road system, secure fencing, and blast reflectors, and the 366FW has defined the undertaking's area of potential effect (APE) as the 103 acres encompassing the Alert Facility illustrated in Attachment A; and

WHEREAS, the 366FW has determined that the development of a Programmatic Agreement (Agreement), in accordance with 36 CFR § 800.14(b)(3) is warranted because the undertaking consists of multiple actions and long term management plans; and

WHEREAS, the 366FW has determined that the undertaking may have an adverse effect on the Alert Facility, which is eligible for listing in the National Register of Historic Places, and has consulted with the Idaho State Historic Preservation Officer (SHPO) pursuant to 36 C.F.R. Part 800, of the regulations implementing Section 106 of the National Historic Preservation Act (54 U.S.C. § 306108); and

WHEREAS, in accordance with 36 C.F.R. § 800.6(a)(1), the 366FW has notified the Advisory Council on Historic Preservation (ACHP) of its adverse effect determination with specified documentation and the ACHP has chosen to participate in the consultation pursuant to 36 C.F.R. § 800.6(a)(1)(iii); and

WHEREAS, the 366FW completed documentation in accordance with the Historical Architectural Building Survey (HABS) on the Alert Facility (HABS No. ID-118-E) in [YEAR] which is on file with the Library of Congress; and

WHEREAS, the 366FW has completed a Feasibility Study for Building 291 (2013), addressing management option costs; and

WHEREAS, the 366FW is developing guidance to apply to all design and construction work performed within the Alert Facility by either in-house or contractor personnel, to be used for all

projects and construction work conducted within the Alert Facility to avoid adverse effects to historic properties in accordance with 36 CFR Parts 800.5(a)(l) and 800.5(a)(2)(ii); and

NOW, THEREFORE, the 366FW, the SHPO, and the ACHP agree that the undertaking shall be implemented in accordance with the following stipulations in order to take into account the effect of the undertaking on historic properties.

STIPULATIONS

366FW shall ensure that the following measures are carried out:

I. Qualifications

A. The 366FW Wing Commander is responsible for ensuring that all historic properties on MHAFB that are listed in or may be eligible for the NRHP are managed and maintained in a way that meets NHPA requirements. The 366FW Wing Commander shall designate the Cultural Resources Manager (CRM) with the authority to implement the stipulations identified in this Agreement. All actions performed by 366FW, or on behalf of 366FW, in compliance with the terms of this Agreement shall be conducted by, or under the supervision of, a qualified professional meeting the Secretary of the Interior's Professional Qualification Standards in Archaeology, History, Architecture, Architectural History, or Historic architecture, as applicable.

B. Where contractors are employed to work on the Alert Facility, the 366FW shall ensure that experience in relevant aspects of historic preservation will be an evaluation factor in the contractor selection process, as appropriate.

II. Treatment of Alert Facility

A. Within 180 days of execution of this Agreement, the 366FW shall seek funding for extermination and initial cleanup.

B. Any routine maintenance and repair activity, or an activity that is listed below, shall not require the 366FW to consult with the SHPO or other consulting parties. These activities shall be included in the Annual Report.

1. Preservation maintenance (housekeeping, routine and cyclic maintenance, and stabilization) meeting standards and guidelines;

2. Routine grounds maintenance, such as grass cutting and tree trimming;

3. Rehabilitation of existing parking pads, access roads, and sidewalks with in-kind materials and features within previously disturbed areas;

4. Repaving of existing roads or existing parking areas within previously disturbed areas;

5. Placement, maintenance, or replacement of below ground utility lines, transmission lines, within previously disturbed areas;

C. Within one year of execution of this Agreement, the 366FW shall choose to accomplish the following treatment; all subsets under this section will be completed as defined within five years of execution of this Agreement.

1. Preservation in Place

a) Stabilization shall occur to correct any deficiencies while the building remains vacant to include but not limited to:

(1) controlling pests;
(2) securing exterior envelope from moisture; and
(3) structurally stabilizing the building where needed

b) Maintain the exterior berm

c) Secure the building from vandals and break-ins to include but not limited to:

(4) Securing the roof access panels with locks; and
(5) Boarding up egress tunnel windows to protect corrugated material

d) Maintain interior ventilation per Secretary of Interior Standards

e) In conjunction with the 366th Security Force Squadron (SFS), the 366th Civil Engineer Squadron (CES) shall develop a routine maintenance and law enforcement monitoring plan and routine maintenance plan. Scheduled maintenance and law enforcement monitoring will be documented in the annual MHAFB report to SHPO.

III. Annual Report

A. Annually, the 366FW shall, on the anniversary of the execution of this Agreement, provide to the SHPO and Council a report that summarizes MHAFB undertakings under this PA, in relation to historic resources, and describe the projects that will occur in the coming year.

B. This annual report will include the following:

1. Updated annual list of undertakings affecting the Alert Facility since the previous annual report;

2. Updated annual list of issues encountered during the year associated with the Alert Facility to include the 103 acre site and, list of changes MHAFB proposes to address these issues;

C. As required, MHAFB will arrange an annual meeting with the ACHP and SHPO to discuss areas of concerns which may have been encountered since the submittal of the last annual report.

D. If requested by ACHP and/or SHPO, 366FW shall facilitate, dependent on mission and safety factors which reasonably might influence the response, in-person inspections of the Alert Facility.

E. All signatories to this PA will have 30 days from receipt of the annual report to comment, at which time, the annual report will be considered a final record.

F. At the request of any of the signatories, this Agreement may be reviewed for possible modifications, termination, or extension at any time.

IV. Anti-Deficiency Act

A. The stipulations of this Agreement are subject to the provisions of the Anti-Deficiency Act. If compliance with the Anti-Deficiency Act alters or impairs 366FW's ability to implement the stipulations of this Agreement, 366FW will consult in accordance with the amendment and termination procedures below.

V. Administrative Provisions

A. 366FW CRM is the point of contact between the SHPO, ACHP, and 366FW.

B. This Agreement may be amended when such an amendment is agreed to in writing by all signatories. The amendment will be effective on the date a copy signed by all of the signatories is filed with the ACHP.

C. If any signatory to this Agreement determines that its terms will not or cannot be carried out, that party shall immediately consult with the other parties to attempt to develop an amendment per Stipulation V(B), above. If within 30 calendar days (or another time period agreed to by all signatories) an amendment cannot be reached, any signatory may terminate the Agreement upon written notification to the other signatories.

1. Once the Agreement is terminated, and prior to work continuing on the undertaking, the 366FW must either (a) execute a Memorandum of Agreement pursuant to 36 C.F.R. § 800.6 or (b) request, take into account, and respond to the comments of the ACHP under 36 C.F.R. § 800.7. The 366FW shall notify the signatories as to the course of action it will pursue.

D. Should any signatory to this Agreement object at any time to any actions proposed or the manner in which the terms of this Agreement are implemented, the 366FW shall consult with such party to resolve the objection. If the 366FW determines that such objection cannot be resolved, the 366FW will:

1. Forward all documentation relevant to the dispute, including the the 366FW's proposed resolution, to the ACHP. The ACHP shall provide the 366FW with its advice on the resolution of the objection within 30 calendar days of receiving adequate documentation. Prior to reaching a final decision on the dispute, the 366FW shall prepare a written response that takes into account any timely advice or comments regarding the dispute from the ACHP, signatories and concurring parties, and provide them with a copy of this written response. The 366FW will then proceed according to its final decision.

2. If the ACHP does not provide its advice regarding the dispute within the 30 calendar day time period, the 366FW may make a final decision on the dispute and proceed accordingly. Prior to reaching such a final decision, the 366FW shall prepare a written response that takes into account any timely comments regarding the dispute from the signatories and concurring parties to the Agreement, and provide them and the ACHP with a copy of such written response.

3. The 366FW 's responsibility to carry out all other actions subject to the terms of this Agreement that are not the subject of the dispute remain unchanged.

4. Should any member of the public raise a timely and substantive objection pertaining to the manner in which the terms of this Agreement are carried out, at any time during its implementation, the 366FW shall take the objection into account by consulting with the objector to resolve the objection. When the 366FW responds to an objection, it shall notify the consulting parties of the object and the manner in which it was resolved. The 366FW may request the assistance of (a consulting party) to resolve an objection.

E. This Agreement shall expire 10 years after execution. Six months prior to the expiration date, the 366FW shall review the Agreement in consultation with the SHPO and the ACHP to consider possible modifications or extension. All previous addendums shall be incorporated prior to reapproval.

Execution of this Agreement by the 366FW, SHPO, and ACHP and implementation of its terms evidence that 366FW has taken into account the effects of this undertaking on historic properties and afforded the ACHP an opportunity to comment.

PROGRAMMATIC AGREEMENT AMONG
THE 366TH FIGHTER WING,
THE IDAHO STATE HISTORIC PRESERVATION OFFICER, AND
THE ADVISORY COUNCIL ON HISTORIC PRESERVATION
REGARDING MANAGEMENT OF THE COLD WAR ALERT FACILITY AT
MOUNTAIN HOME AIR FORCE BASE

MOUNTAIN HOME AIR FORCE BASE

BY: _____ DATE: _____
DAVID R. IVERSON, Col, USAF
366FW Commander

ADVISORY COUNCIL ON HISTORIC PRESERVATION

BY: _____ DATE: _____
John M. Fowler
Executive Director

STATE HISTORIC PRESERVATION OFFICE

BY: _____ DATE: _____

State Historic Preservation Officer

(no document text this page)

APPENDIX B – 2013 FEASIBILITY STUDY

(no document text this page)

Feasibility Study – FINAL
Ready Alert Facility Building 291
Mountain Home Air Force Base
Elmore County, Idaho

GEO-MARINE GMI
A Subsidiary of Applied Research Associates, Inc.

August 2013
Project No.: 13.104.001

PROFILE CONSULTANTS, INC.

REPORT DOCUMENTATION PAGE			*Form Approved OMB No. 0704-0188*

1. AGENCY USE ONLY *(Leave blank)*	2. REPORT DATE	3. REPORT TYPE AND DATES COVERED
	August 2012	**Draft Final, April 2013-August 2013**

4. TITLE AND SUBTITLE

Feasibility Study: 90% Review Draft For Ready Alert Facility, Building 291, Mountain Home Air Force Base, Elmore County, Idaho

5. FUNDING NUMBERS

Contract No. **TEC-GMI JV w/ USACE FW (#0068) Subcontract**

Delivery Order No. **004**

6. AUTHOR(S)

Rey Roca

7. PERFORMING ORGANIZATION NAMES(S) AND ADDRESS(ES)

Geo-Marine, Inc.
2201 K Avenue, Suite A2
Plano, Texas
75074

Profile Consultants, Inc
2212 Arlington Downs Rd,
Arlington, TX 76011

8. PERFORMING ORGANIZATION REPORT NUMBER

U.S. Air Force Air Combat Command Series Report of Investigations Number 90

9. SPONSORING/MONITORING AGENCY NAMES(S) AND ADDRESS(ES)

U.S. Army Corps of Engineers, Fort Worth District
PO Box 17300
Fort Worth, Texas
76102-0300

10. SPONSORING/MONITORING AGENCY REPORT NUMBER

11. SUPPLEMENTARY NOTES

12a. DISTRIBUTION AVAILABILITY STATEMENT

Further dissemination only as directed by USAF and USACE Ft. Worth

12b. DISTRIBUTION CODE

13. ABSTRACT *(Maximum 200 words)*

The report explores the feasibility of three potential outcomes for the Ready Alert Facility (Building 291) at Mountain Home Ari Force Base, Idaho, an NRHP eligible building. The engineering feasibility study provides a description of the current physical state of the building, as ascertained through an inspection by a qualified engineer. The report provides recommendations for the selective demolition, full demolition, and adaptive reuse of the building, and also provides certified cost estimates associated with each action. Additional costs associated with environmental remediation are also included in the report.

Name of Federal Technical Responsible Individual: Dr. Jay Newman
Organization: U.S. Army Corps of Engineers, Fort Worth District, CESWF-EV-EC
Phone #: (817) 886-17

14. SUBJECT TERMS	15. NUMBER OF PAGES
Feasibility Study, Engineering, Molehole, Mountain Home AFB, Air Combat Command	120
	16. PRICE CODE

17. SECURITY CLASSIFICATION OF REPORT	18. SECURITY CLASSIFICATION OF THIS PAGE	19. SECURITY CLASSIFICATION OF ABSTRACT	20. LIMITATION OF ABSTRACT
Unclassified	Unclassified	Unclassified	UL

FEASIBILITY STUDY: 90% REVIEW DRAFT FOR READY ALERT FACILITY, BUILDING 291 MOUNTAIN HOME AIR FORCE BASE, ELMORE COUNTY, IDAHO

DRAFT

By
Profile Consultants, Inc.

Under Contract with
Geo-Marine, Inc.

For
Mountain Home Air Force Base, Idaho

Profile Consultants, Inc
2212 Arlington Downs Rd,
Arlington, TX 76011

and

Geo-Marine, Inc.
2201 K Avenue, Suite A2
Plano, Texas 75074

U.S. Air Force Air Combat Command Series,
Reports of Investigations Number 90

August 2013

LIST of PREPARERS

Duane Peter
Vice President – Environmental Services Director - Geo-Marine, Inc.
2201 Avenue K, Suite A2
Plano, Texas 75074
972.423.5480

Marsha Prior, Ph.D
Director, Historical Research Services - Geo-Marine, Inc.
2201 Avenue K, Suite A2
Plano, Texas 75074
972.423.5480

Bill Hersch, LEED AP
Sr. Architectural Historian - Geo-Marine, Inc.
2201 Avenue K, Suite A2
Plano, Texas 75074
972.423.5480

Rey E. Roca
Principal / Sr. Project Manager - Profile Consultants, Inc
5005 West Royal Lane Suite 117
Irving, TX 75063
817-385-8833

Antonio Garza
Project Coordinator - Profile Consultants, Inc
5005 West Royal Lane Suite 117
Irving, TX 75063
817-385-8833

Tommy Tabor, P.E.
Sr. Mechanical Engineer - TTC, LLC
5005 West Royal Lane Suite 117
Irving, TX 75063
817-385-8833

Jose Rivera, P.E.
Sr. Electrical Engineer - Rivera Engineering, LLC
5005 West Royal Lane Suite 117
Irving, TX 75063
817-385-8833

Mark Grier, AIA
Project Manager - CSHQA
200 Broad St.
Boise, Idaho 83702
(208) 343-4635

Tim Montgomery II
Project Estimator - CSHQA
200 Broad St.
Boise, Idaho 83702
(208) 343-4635

Harry Beaulieu, PhD, CIH, CSP
Sr. Scientist - Industrial Hygiene Resources
8312 W. Northview, #100
Boise, ID 83704
(208) 323-8287

Preface

This document if viewed or referenced electronically contains various electronic links identified as "Hyperlinks" to additional documents and miscellaneous forms contained and referenced herein.

READY ALERT FACILITY - BUILDING 291
TABLE OF CONTENTS

1 EXECUTIVE SUMMARY

In December 2012, Mountain Home Air Force Base Cultural Resources personnel requested a feasibility study to be conducted for the Ready Alert Facility - Building 291 (herein referred to as "the facility") located at 12 Bomber Road at Mountain Home Air Force Base, Elmore County, Idaho. The purpose of this study was to determine the potential future usefulness of the facility with consideration to cost impacts necessary for maintenance and upgrades for building occupancy.

A retro-commissioning (R-Cx) approach was utilized to determine the condition of the facility sorted by major building Construction Specifications Institute discipline. An assessment rating scale was developed with particular emphasis on the following current and future criteria:

- Life Cycle Future Usefulness
- Life Safety Issues
- Cause for Personal injury
- Cost Effectiveness

Figure 1-1: Exterior view from the southwest

A. Overview

The facility measures approximately 33,000 square feet and was constructed between 1957 and 1960. During its occupancy, the facility underwent various upgrades to renovate mechanical and electrical systems. The facility continued to be used for base operations until its vacancy in 2007. Since its vacancy, the facility does not appear to have undergone routine maintenance and has been subjected to vandalism and rodent infestation, which has contributed to the environmental hazards identified in this feasibility study.

In April 2013, an assessment team traveled to the facility to perform onsite observations to assess its various building aspects. It should be noted that all information included in this study has been based, in part, on provided reports, record drawing information, and visual observations performed at this site. Please note that destructive laboratory material testing was not performed during the preparation of this study. The assessment documentation provided herein is based on visual inspection and rating conditions of building elements and equipment in their current state.

B. Approach

Professional R-Cx services to support a condition assessment of the facility infrastructure systems were used in the development of this study.

The R-Cx activities included a life cycle evaluation of existing elements and complete observational condition assessment of the structure, interior, envelope, mechanical / HVAC, plumbing, electrical, fire protection, and surrounding site to determine, as best as feasible, the potential continued future use of the facility.

C. Findings

The following provides a summary of the findings produced though on-site investigations and assessments completed. Specific information can be found in the subsequent sections of this study.

Overall Assessment Observation Report Matrix Building Element	Rating
Environmental	0.0
Architectural	1.5
Structural	2.7
Mechanical	0.9
Plumbing	0.6
Electrical	1.8
Fire Protection Systems	1.6

Condition Rating Guide	
3	Good – Condition / Equipment - is above expected normal
2	Average - Condition / Equipment – is as expected from normal
1	Poor - Condition / Equipment is lower than expected from normal
0	Failed - Condition / Equipment has failed
Overall Building Average:	**1.3**

2 FACILITY ASSESSMENT

A. Environmental

Most of the information pertaining to the environmental elements associated with this facility was based on site observations and an Environmental Sampling Study prepared by CH2MHILL dated December 2012.

Interior: It has been confirmed that the facility contains asbestos containing building materials (ACBM), lead-based paint (LBP), mercury, and polychlorinated biphenyls (PCBs) - all readily used during the period of construction for the facility. Any renovation or demolition activities would require abatement of these elements prior to the commencement of work.

Figure 2-1: Asbestos mastic used for wall paneling

Further observations also confirmed the presence and heavy infestation of rodent activity in the facility. Remaining furnishings, finishes, and other materials left in the facility after vacancy have become prime materials for nesting and food source. It should be noted that evidence of rodent droppings and nesting were not as prevalent in areas where no consumable materials existed. Rodent droppings are visible throughout the facility and this is the source of the Hanta virus (via generation of microscopic particles of dust into the air), and inhalation of the dust by humans.

Figure 2-2: Rodent infestation / droppings

Hanta-viruses cause potentially fatal diseases in humans, who can become infected through urine, saliva, or contact with rodent waste products. Any renovation or demolition activities for the facility would require removal of the rodent droppings prior to the commencement of work. Hanta virus remediation and worker protection need to be incorporated into the "pre-cleaning and set-up" portions of the asbestos abatement work.

Environmental Assessment Observation Reports		
Item No.	Description	Rating
B291_N_001	Interior	0
Condition Rating Guide	Overall Average:	0
3	Good Condition	
2	Average Condition	
1	Poor Condition	
0	Failed Condition	

B. Architectural Systems

The facility is a two-level building that encompasses approximately 33,000 square feet and has been unoccupied since 2007. The facility is located in close proximity to the southern apron along the principal runway for Mountain Home Air Force Base. A road system provides access to the two-level building. The lower level of the facility (subterranean) accommodated areas that served as temporary living quarters during the occupancy of the facility from 1960 to 2007. The second level exhibits no windows and accommodated partitioned offices, meeting areas, and restroom facilities.

Site: The drives, roads, and parking areas are composed of asphalt and concrete. Sidewalks to the egress ramps of the facility are constructed of concrete. Landscape is limited to grasses and brush areas of ground cover. Some of these display overgrown vegetation, limiting access to some walking and egress locations. The facility contains 12, round, corrugated steel tunnels that provide access to the building. All but (2) two of these tunnels provide access to the lower level of the facility. Many of the asphalt roadways and parking areas, as well as the former tennis court area on the northeast side of the facility, are in poor condition and would require resurfacing and crack repair.

Figure 2-3: Exterior view from the east

Building Exterior: The building shell consists of reinforced concrete and concrete masonry units (CMU) walls with exterior applied plaster with a painted finish. The walls appear in good condition with no stress fractures or other damages observed. Based on the age of the facility, the building joint seals are in acceptable condition. The exterior of the building requires conditioning and new paint, particularly at the corrugated metal entrance tunnels. The access tunnels require removal and replacement of windows, the installation of security bars as a deterrent from vandals, and new door/door hardware to ensure security.

The roof is a low-pitched gable constructed of a modified asphaltic system using an insulated, 4-ply, built-up roof system on metal deck panels over an open, steel joist structure. Records indicate the roof was last reconditioned in 1991 by Quality Tile Roof Repair. Access to the roof during the site visit performed for this study was not possible due to accessibility difficulty; however, inspection of the lower roof indicates it to be in good condition. Roofs of this type generally have a 40 to 50 year life expectancy according to the manufacturer. Interior roof drains and scuppers that discharge water from the roof appear to be functioning properly. The exterior perimeter metal flashing at the roof edges appears to be in poor condition and may be allowing moisture to enter.

Some deterioration was observed in the ceiling of the mechanical room. Due to the extensive penetrations and failure of roof flashing, water infiltration is occurring. This infiltration and rust is apparent on some of the abandoned electrical and mechanical equipment.

Building Interior: The building interior consists of painted reinforced concrete and CMU partitions. The office areas in both structures are finished with carpet with vinyl base, or VCT (Vinyl Coated Tile) flooring, and lay-in suspended ceilings throughout. It appears that in several areas, a secondary, lower ceiling was installed. These varied from drywall systems to suspended tile systems.

Figure 2-4: Typical interior lower level corridor

Restroom floor finishes consist of ceramic tiles and resilient flooring. Interior doors are metal frame with wood doors. The interior built-out area is used for offices, open administrative areas, and meeting rooms; break rooms and restrooms are located on both levels. A stairwell, accessible from the ground level, provides access to the mechanical room which is below the sub-terrain level along the north side of the building. Two interior stairwells provide access to all levels. The west stairwell includes a ladder with a hatch for roof access.

Figure 2-5: Typical ceiling at lower level interior office

Architectural Assessment Observation Reports		
Item No.	**Description**	**Rating**
B291_A_001	Site	1.3
B291_A_002	Building Interior – Lower Level	1.1
B291_A_003	Building Interior – Upper Level	1.1
B291_A_004	Building Roof	2.5
Condition Rating Guide	**Overall Average:**	**1.5**
3	Good Condition	
2	Average Condition	
1	Poor Condition	
0	Failed Condition	

C. Structural Systems

As already mentioned in this study, the building shell consists of reinforced concrete and CMU with coated plaster walls with a painted finish. The lower level is constructed of a reinforced structural concrete slab while the second level is a concrete slab on metal deck supported by steel joists that are bearing on reinforced CMU walls. The roof is also constructed of metal deck panels with an asphaltic 4-ply roof system.

Site Structural: There are several exterior structures associated with Building 291. A parking canopy located on the south side of the facility appears to be in good condition with no visible deficiencies. Secondary structures such as the guardhouse (Building B289), and the Mechanical / HVAC facility (Building B31291) are in poor condition. Various miscellaneous concrete slabs that once provided foundations for equipment surrounding the facility appear to be in good condition, although no apparent use or need has been determined. No observations reflect any movement of soils or compromised retaining structures. Many of the paved areas surrounding the facility are asphalt, which show signs of deterioration and cracks where vegetation is apparent.

Figure 2-6: Exterior view from the southeast

CMU and Concrete Walls: The walls along the perimeter and interior of the facility appear to be in good condition. No cracks occurring along the courses of the masonry units were observed. In the visual observations performed, the rodent infestation that has occurred was not determined to have been caused due to any failure of the wall systems.

Steel Joists and Metal Decks: Ceiling tiles were removed in certain locations to observe the condition of the metal decks and steel joists supporting the 1st level floor and roof systems. From the visual inspections obtained, both the steel joists and metal deck systems appear to be in good condition. However, visual inspection of the ceiling of the mechanical room indicates deterioration of the metal deck, possibly due to water infiltration. Due to the extensive penetrations, the roof of the mechanical room may have deterioration. The signs of water infiltration are apparent and roof replacement will likely need to occur in this area for the purposes of mechanical and electrical equipment.

Structural Assessment Observation Reports		
Item No.	Description	Rating
B291_S_001	Building Exterior	2.9
B291_S_002	Building Interior – Lower Level	2.8
B291_S_003	Building Interior – Upper Level	2.3
Condition Rating Guide	**Overall Average:**	**2.7**
3	Good Condition	
2	Average Condition	
1	Poor Condition	
0	Failed Condition	

D. Mechanical Systems

The mechanical systems for the facility were designed to be self sustaining, and use a chilled water system for cooling and a steam circulation system for heating. Heat was produced by a fuel oil system as a heating source separated in three zones (A, B, and C). Two primary Air Handling Units (AHU) and Fan Coil Units (FCU) with an insulated ductwork system are located in the corridors and provided air circulation throughout the facility. Various exhaust fan systems were installed throughout the facility, providing restroom, kitchen, and mechanical room exhaust. A make-up air unit provides outside air for the kitchen facilities. Various upgrades to the mechanical system were made between 1969 and 1990.

Figure 2-7: Mechanical room at lower level

Chilled Water System: The principal components of the chilled water system are the air cooled chiller (compressor, condenser, expansion valve, evaporator), and the chilled water pumps and pipes. The components of this unused closed circulation system show physical signs of deterioration. This contributes to impaired efficient operation of the system. Physical damage to the chiller include missing and bare wiring, deteriorating insulation, corrosion, microbiological growth from rodent droppings, and rust in the system. Corrosion results in metal loss, making the system susceptible to contaminants such as air and moisture that are introduced through crevices.

Steam System: The heating system used is a two (2) oil-fired boiler system added during a late 1990s renovation. This system is composed of a heat producing source, a boiler, heat exchange, a distribution system, condensate pumps, pipes, burner by-products elimination system, and control mechanisms (such as the thermostat and master switch). The boiler, originally installed in the 1960s, is located in the basement and has been decommissioned. The facility's steam system is made up of steam distribution piping, steam traps, tracer lines, condensate piping, vents, inlet valves and condensate pumps. The system has been inactive for an extended period of time with water in the system and shows signs of corrosion and rust.

AHU, Fan Coil Units and Ductwork: AHU and associated fan coil units, ductwork, and grilles show signs of deterioration and contamination. Visual inspection indicates excessive particulate debris and microbiological growth contamination on exterior and interior surfaces of the supply ducts and all associated components, as well as deteriorated insulation within the supply system. The sources of these particulate contaminations and microbiological proliferations are mold and rodent droppings. Corrosion was also identified on AHU units and Fan Coil Units.

Fan Systems: The fan system consists of return air circulation, exhaust air, filter, and fresh air intake. Equipment deterioration due to rust on shaft and lack of regular maintenance is evident.

Mechanical Assessment Observation Reports		
Item No.	**Description**	**Rating**
B291_M_001	Chilled Water System	1.0
B291_M_002	Hot Water System	1.0
B291_M_003	AHU, Fan Coil Units and Ductwork	0.6
B291_M_004	Fan Systems	1.0
Condition Rating Guide	**Overall Average:**	**0.9**
3	Good Condition	
2	Average Condition	
1	Poor Condition	
0	Failed Condition	

E. Plumbing Systems

The plumbing systems for the facility were primarily designed to provide domestic hot and cold water to restroom and kitchen areas. A 4" main water service line supplied water to the facility and an 8" sewer line provided sewage disposal. Domestic use hot water was circulated within the facility by a hot water pump produced by a 650 gallon hot water heater supplied by a fuel oil system. The water service for the facility also provided water for various wall hydrants located on the exterior of the building. Various upgrades to the plumbing system were made between 1969 and 1990.

Domestic Water System: The water system is comprised of copper and galvanized piping. The expected life of galvanized pipe is 40 years because corrosion will occur in the pipe where holes are difficult to locate and service. During the visual inspection, no sign of water damage to the walls was found.

Figure 2-8: Rodent infestation at Men's restroom

Plumbing Fixtures: All observed plumbing fixtures in the facility remain mounted and in the locations originally designed. Fixtures located in the restroom areas include: water closets, urinals, lavatories, and showers. Other areas, such as janitor closets, include service sinks. The restroom areas are heavily infested with rodent droppings. Some are located in the water closets indicating infiltration may be occurring from sewer line access. The fixtures do not comply with present day ADA standards.

Piping: As-Built drawings indicate cast iron piping and lead oakum joints were used throughout the facility. Lead piping is no longer prohibited under current plumbing codes and can be used for waste purposes for piping located in concrete which is not subject to vibration. All other piping providing water supply should be replaced.

Plumbing Assessment Observation Reports		
Item No.	**Description**	**Rating**
B291_P_001	Domestic Water System	0.0
B291_P_002	Plumbing Fixtures	1.2
B291_P_003	Piping	0.6
Condition Rating Guide	**Overall Average:**	**0.6**
3	Good Condition	
2	Average Condition	
1	Poor Condition	
0	Failed Condition	

F. Electrical Systems / Fire Alarm Systems

The facility is served by utilizing a simple radial power distribution system. Service power at 120/208V is fed to the building from an outdoor, oil-filled, pad-mounted transformer. The building has two service disconnects; a weather proof switch serving the outside Chiller unit, and a Seven (7) breaker Main Lug Only 1200A main distribution panelboard serving the remaining loads. The 1200A main distribution panelboard is located in the basement Mechanical Room. Also, there is a 400A distribution panelboard serving approximately twelve (12) 100A, 3phase branch circuit panelboards and about the same amount of fractional horse power motor controllers. The branch circuit panelboards are recessed mounted in the corridors throughout the building.

Outdoor Pad Mounted Transformers: The transformers throughout appear to be in working condition and of recent vintage. Oil filled transformers may last over 50 years, with proper maintenance. Therefore, they may continue serving this building or returned to the Owner upon demolition.

Figure 2-9: Main electrical panel at mechanical room

Main Switchgear, Controls, Disconnect Switches: Most of this equipment seems to be of original 1950s vintage. Generally, these are at end of life condition. Some of the breakers display water intrusion damage. For reliability and life safety reasons, this equipment should be demolished. Associated electrical wiring and conduits can be recycled.

Distribution and Branch Circuit Panelboards: Most of this equipment seems to be of original 1950s vintage. Generally, these are at end of life condition. For reliability and life safety reason this equipment should be demolished. Potentially, the branch panel recessed steel enclosures in the corridor walls could be reused if convenient. Associated electrical wiring and conduits can be recycled.

Lighting Systems: Most of this equipment seems to be a mix of original and 1970s vintage. Generally, these are all obsolete lighting systems and are in end of life condition. The fixtures are a mix of T12 fluorescent and incandescent. Most of the lighting fixtures exhibit some damage or extreme signs of wear inclusive of yellowing, broken lenses, faulty wiring/ ballast, and insect intrusion. For reliability, aesthetic, and energy conservation reasons, this equipment should be demolished. The steel housings can be recycled.

Emergency Lighting Systems: Most of this equipment seems to be of 1960-70s vintage. Generally, these are in end of life condition. The bulbs, batteries, and controls may be compromised. The equipment design aesthetics will not fit well into a renovation project. The fixtures are a mix of early LED technology, Exit Signs and incandescent Emergency Lighting Units are of different makes and models. For reliability, aesthetic, and life safety reasons this equipment should be demolished. The steel housings and batteries should be recycled.

Fire Alarm System: This system is controlled by a four (4) zone Fire-Lite MS-4424 Fire Alarm Control Panel (FACP) that appears to have been installed in the 1990s. This panel may still be in working condition, but this could not be confirmed during the site assessment. In addition, a Monaco Enterprises BT2-7 Fire Radio Transmitter seems to be connected to the FACP for Base Fire Department monitoring. The system seems to be fitted with heat detectors in most of the corridors and many of the rooms. Considering the age and condition, all of the heat detectors are in end of life condition and should be removed. The Monaco brand radio transmitter is a high cost device that could remain or be re-used at another location. The FACP could be re-used for limited fire protection, if the building undergoes selective demolition. However, new addressable fire alarm/mass notification system with smoke detectors and visual devices and speakers, should be installed as part of any occupied renovation project.

Electrical Assessment Observation Reports		
Item No.	**Description**	**Rating**
B291_E_001	Electrical Service	2.0
B291_E_002	Electrical Distribution, Power and Lighting	1.6
B291_E_003	Distribution and Branch Circuit Panelboards	1.7
B291_F_001	Fire Alarm System	1.6
Condition Rating Guide	**Overall Average:**	**1.7**
3	Good Condition	
2	Average Condition	
1	Poor Condition	
0	Failed Condition	

3 OPINIONS OF PROBABLE COST

The figures presented in the subsequent pages of this study have been categorized by specific elements based on the recommendations of demolition and repair quantities presented in this study and from data obtained from the original construction documents of the facility. These figures do not take into account credit from recycled materials.

The opinion of probable project cost provided herein is made on the basis of information available and represents the judgments and experience of a professional cost estimator. However, the estimator has no control over the cost of labor, materials, equipment, or services furnished by others, or over other market conditions, or over the methodology used by bidding contractors. The estimates presented herein were developed in collaboration with CHQSA and Industrial Hygiene Resources, both located in Boise, Idaho, were based on construction costs in the Boise, Idaho region and do not guarantee that proposals, or bids for construction will not vary from the opinion of probable cost.

A. Selective Demolition

The cost estimate for selective demolition has been based on removal of specific architectural and MEP systems presented in this study. Please refer to cost estimate for specific information related to systems and quantities included in the subsequent pages of this section and available if viewed electronically via hyperlink: MHAFB BLDG 291 Selective Demolition OOPC

Site . . . . . $ 230,075.80
Facility . . . . . $ 790,271.20
Total Cost. . . . . $ 1,020,347.00*

* Includes hazardous materials abatement costs estimate

B. Complete Demolition

The cost estimate for complete demolition has been based on construction documents and specifications dated Dec 2012 by CH2M HILL. Please refer to cost estimate for specific information related to systems and quantities included in the subsequent pages of this section and available if viewed electronically via hyperlink: MHAFB BLDG 291 Complete Demolition OOPC

Total Cost. $1,612,825.94*

* Includes hazardous materials abatement costs estimate

C. Environmental

The cost estimate for hazardous materials abatement has been prepared based on information obtained, in part, from sampling report entitled ``95% Environmental Sampling Report Building 291" dated December 2012 and produced by CH2M HILL. Please refer to cost estimate for specific information related to systems and quantities included in the subsequent pages of this section and available if viewed electronically via hyperlink:
MHAFB-BLDG 291 Environmental Cost Estimates

D. New Facility Cost

The cost estimate for a facility of similar size and cost has been based on RS Means (Reed Construction Data) model criteria as noted below. Please note these estimates are based on general construction cost guidelines.

Model: Dormitory with Stucco on Concrete Block / Bearing Walls
B291 - Dormitory SquareFootReport
Location: BOISE, ID
Stories (Ea.): 1
Story Height: 12
Floor Area: 33,000
Basement: Yes
Cost per S.F.: $159.13

Building Cost. $5,251,500.00

Model: Warehouse
B291 - Warehouse SquareFootReport
Location: BOISE, ID
Stories (Ea.): 1
Story Height: 12
Floor Area: 33,000
Basement: Yes
Cost per S.F. $97.68

Building Cost. $3,223,500.00

4 CONCLUSIONS AND RECOMMENDATIONS

A. Conclusions

There are several factors that have contributed to the current condition of the facility. In addition to age, major contributors include lack of maintenance, security measures, and environmental hazards. This study concludes that the facility is in good structural condition but does require extensive interior renovations to be of future use. Most of the deterioration of the facility is within its interior although exterior elements show signs of deterioration due to age. Any demolition or renovation work attempted will require abatement and remediation of the environmental and biological conditions identified in this study.

Environmental: The facility poses a hazardous working environment. Any future occupancy will require removal of hazardous biological contaminants and abatement of asbestos containing building materials. The indoor air quality of the facility is poor and a preoccupancy air purge should be considered which involves ventilation preceding occupancy for variable-occupancy spaces to assure that the indoor air is acceptable by the time occupancy begins. Workers who are either hired specifically to perform a clean-up or are asked to do so as part of their work activities should contact their local or state health department, local or state occupational health and safety authority (OSHA), or CDC for information about preventing rodent-borne diseases.

Architectural Systems: The exterior aspects of the facility have deteriorated due to lack of maintenance. Many aspects of the facility inclusive of landscaping, paint, flashing, and security are in need of renovation should occupancy or future use be considered. The interior remaining finishes, furniture, and other materials that are deteriorating and serving as a food source and nesting material to the heavy rodent infestation are of no future value and should be removed. Procedures for removal of contaminants from stationary local sources within the space should be controlled by collection and removal as close to the source as practical and as indicated in ASHRAE 62-2001. The mechanical room roof should be removed in order to allow removal of mechanical and electrical equipment. The ceiling exhibited signs of deterioration due to water infiltration at locations of penetrations. These may also contain asbestos.

Structural Systems: The facility does not exhibit any movement of soil, cracks on exterior or interiors walls, or other structural deficiencies in relation to the steel structure. This indicates the structure is in good condition. It should be noted that asbestos was used as fiber reinforcement in concrete in the early part of the 1900s to reduce likeliness of cracks. Although no destructive construction material testing was performed during this study, it should be noted that demolition of the concrete structure should be performed under EPA guidelines found in NESHAP guidelines (Section 1 – Demolition practices and non-friable materials) EPA NESHAP – Sec 1. The mechanical room roof should be removed in order to allow removal of mechanical and electrical equipment in mechanical room. The steel joist members and connections should be inspected prior to reinstallation. Due to the amount of penetrations in this area of the building, it is recommended the metal deck roof be replaced.

Mechanical Systems: The HVAC systems in the facility have reached the end of their life cycle. The rodent infestation, in addition to the deterioration of insulated materials, indicate many of these systems are sources of contaminates and will require removal should any future occupancy be considered.

Electrical Systems: Most of the power and lighting systems in the facility have reached the end of their life cycle. Cost factors such as low energy efficiency standards, limited replacement parts, and reliability indicate these should be removed and replaced with new updated systems if future occupancy is considered.

Plumbing Systems: Many of the plumbing fixtures associated with the facility appear to be intact; however, cost factors of reconditioning, sanitizing, low efficiency standards, and possible lack of immediate availability of replacement parts indicate these should be removed and replaced with new fixtures if future occupancy is considered.

B. Recommendations

Several factors have been used to explore the potential future use of Ready Alert Building 291. Of these factors, considerations have been given to:

- Cost Effectiveness
- Code Compliance Updates
- Life Safety Issues
- Life Cycle Future Usefulness

The facility has experienced extensive deterioration of its architectural and MEP systems, however, the facility shows no signs of structural deficiency. It does contain serious environmental and biological contaminants that would require remediation should any demolition or occupation be considered. The alternatives explored are:

1. Selective Demolition – removal of specific building systems contributing to deterioration or of no future use.

- Abatement and remediation of all environmental and biological contaminants
- Interior Architectural finishes inclusive of ceilings, flooring, wall coverings, furnishings, and miscellaneous items.
- Demolition of some adjacent site structures
- Existing Mechanical and Plumbing Systems
- Existing Electrical Systems

2. Complete Demolition – demolition of complete facility including utilities, and adjacent structures

- Abatement and remediation of all environmental and biological contaminants
- Demolition of all existing elements associated with building
- Return of land to existing undisturbed conditions

In consideration of the cost implications of demolition and a new facility of similar construction; It is recommended the facility undergo a **selective demolition** to bring the facility to a building shell tenant finish out condition that would enable the owner to use the facility in the future for a broad range of uses. Specific design measures would need to be implemented so that no further deterioration takes place in the facility. These measures will preserve the integrity of the structure. These measures have been provided in form of design narratives included in this section of this study.

C. Design Narrative

Purpose: The following will provide a preliminary description of system implementation for the facility to preserve the integrity of the structure. The Engineered systems are described as follows:

GENERAL SCOPE OF WORK

1. Site: Grounds surrounding the facility should be routinely maintained to eliminate overgrowth and deterioration of facility from vegetation.

2. Building Envelope: Maintaining a secure and waterproof envelope will be required to preserve the integrity of the facility. All access doorways, walkways and/or other exterior means of access should be secured with the installation of new hardware and security measures. All roof and wall penetrations should be properly sealed against weather or wildlife infiltration. Exterior wall paint and roof membrane should be inspected for signs of deterioration and patched accordingly.

3. Building Interior: Relatively no maintenance should be required for the interior of the facility upon implementation of the recommended MEP systems.

4. Mechanical Room:

MECHANICAL SCOPE OF WORK

1. HVAC Systems: Maintaining a level of HVAC in the building will be required to preserve the integrity of the building. The fluctuation of temperatures in should not have an adverse impact on the build, which would consist of steel and concrete. The absence of interior finishes and plumbing fixtures will allow this variation in temperature with minimal adverse consequences. The building will require a degree of ventilation to provide control of the potential buildup of moisture in the building due to condensation. If the condensation and interior moisture condition are not controlled the building could be an ideal location for mold. This can be achieved by providing approximately 20 cfm air circulation per 1000 sq ft of building area. Care must be provided to not create areas within the building of stale air. The building should be "sealed" with fresh air forced into the building at various locations and allowed the escape through fine screens at specific locations.

ELECTRICAL SCOPE OF WORK

1. Electrical Systems: A small 225A distribution system would serve the required mechanical ventilation, lighting and convenience power. A new 225A panelboard would be installed at the main mechanical room, served thru a tap from the existing service wiring. A 100A panelboard would be installed at a centric location on ground level. Branch circuits from these panelboards shall serve the ventilation fan motors, lighting fixtures and convenience power receptacles.

2. Lighting: The lighting fixtures would be industrial type energy efficient fluorescent, controlled by occupancy sensors. These would be evenly installed throughout the space, and in sufficient amount, as needed to provide at least 10 foot-candles (average) of light intensity for general orientation. About 5% of the fixtures shall have emergency battery packs to provide life safety lighting in case of a power outage. Also, LED Exit signs, with emergency battery packs, would be installed as needed to cover the egress paths.

3. Fire Alarm / Security: The existing zoned Fire Alarm Control Panel would be refurbished with new batteries and tested for operation. All the smoke/ heat detectors would be replaced by new units. All wiring would be tested for open or short circuits and repaired/replaced as needed. The detectors would be located following NFPA guidelines. The existing Fire Alarm Radio Transmitter would be refurbished with new batteries and tested as well. The existing Visual and Manual devices would be tested and fixed as needed. New devices would be added, as needed to cover the facility per NFPA requirements.

PLUMBING SCOPE OF WORK

1. Domestic Water: All of the existing hot and cold domestic plumbing pipes should be removed, except for the pipes in the concrete foundation. These should have the ends opened, flushed, and then filled with a flow-able fill or grout material. This will reduce the potential of use in the future. These existing lines have a high probability of contamination and therefore should not be used. The presence of grout or other material will prevent these lines from being inadvertently used in the future.

2. Sanitary Sewer: All of the existing sanitary sewer pipes should be removed, except for the pipes in the concrete foundation. These should have the ends opened, flushed and then plugged with a removable plug. This will allow the existing sewer lines to be used in the future and potentially reduce the construction cost. These sewer lines terminate in the sanitary sewer wet well in the lower level mechanical room. The discharge pipes of the existing sewer lift station should also be purged and plugged.

5 Appendices

A. Environmental Sampling Report

The following link provides electronic access to the Environmental Sampling Report dated December 2012 and provided by CH2M HILL. B291 – Environmental Sampling Report

B. Environmental Protection Agency (EPA) Demolition Practices - NESHAP

The following link provides electronic access to the Demolition Practices Under Asbestos document dated 11/20/1990 and provided by the EPA. B291 – Demolition Practices Under Asbestos

(no document text this page)

APPENDIX C – INTERGOVERNMENTAL COORDINATION

(no document text this page)

DEPARTMENT OF THE AIR FORCE
366TH CIVIL ENGINEER SQUADRON (ACC)
MOUNTAIN HOME AIR FORCE BASE IDAHO

[See distribution list attached] 14 March 2016

Dear Sir or Madam:

The 366th Fighter Wing (FW) at Mountain Home Air Force Base (AFB), Idaho is preparing an Environmental Assessment (EA) addressing potential environmental impacts from reuse options for the Alert Complex at Mountain Home AFB, Elmore County (near Mountain Home), Idaho (Figure 1). The environmental impact analysis process for this EA is being conducted by the Air Force Civil Engineer Center and 366 FW in accordance with Council on Environmental Quality regulations pursuant to the requirements of the National Environmental Policy Act (NEPA) of 1969.

The Alert Complex was constructed between 1957 and 1960 under the Strategic Air Command during the Cold War and is a National Register of Historic Places -eligible facility. The purpose of this EA is to determine the most appropriate end state of the former Alert Complex (comprised of Building 291 and approximately 103-acres adjacent) while considering both the Sustainable Installations and Air Force 20/20 by 2020 memorandum calling for reduction and consolidation of United States Air Force's real property, and Executive Order (EO) 13287: Preserve America which serves to protect cultural resources. This evaluation is needed in order to most efficiently utilize available resources at Mountain Home AFB, while also protecting valuable historic properties.

Although six alternatives were initially considered for future use of the Alert Complex only one met all of the selection standards. Under this alternative (i.e. the Proposed Action), Building 291 and the accompanying 103 acres comprising the Alert Complex would be utilized for various training scenarios. Currently, the 366th Civil Engineer Squadron (CES) Readiness and Emergency Management Flight and the 366th FW are interested in utilizing the facility for training and Building 291 would be renovated such that it could be used to support training operations. The proposed EA analyzes the potential environmental effects at Mountain Home AFB associated with the Alert Complex renovation and its use for training. A 'No-action Alternative' is also examined for this action.

In accordance with EO 12372, Intergovernmental Review of Federal Programs, we request your participation in the NEPA process by providing comments on the Proposed Action and any potential environmental consequences that might concern you. To facilitate cumulative impact analysis, we would also appreciate identification of major projects in the vicinity that may contribute to cumulative effects. Please provide written comments or information at your earliest convenience but no later than 30 days from the date of this letter. We have also attached a listing of federal, state, and local agencies that have been contacted. If there are additional agencies that you feel should review and comment on the proposed activities, please include them in your distribution of this letter and the attachments. Upon request, we will mail a copy of the public draft

EA when complete and the proposed Finding of No Significant Impact, if applicable, for your review.

Please address your questions or comments on this proposed action by mail to Ms. Sheri Robertson (Chief, Environmental Management), 366 CES/CEIE, 1030 Liberator Street, Mountain Home AFB, Idaho 83648.

Sincerely,

Sheri Robertson
Chief, Environmental Management

2 Attachments:
1. Figure 1 – Site Vicinity Map
2. Distribution List

Legend

- Installation Boundary
- Building 291
- Building 291 Historic Site

N

0 0.5 1

Miles

Figure 1

Site Vicinity Map

Mountain Home Air Force Base
Mountain Home, Idaho

ADAPTIVE REUSE POTENTIAL OF BUILDING 291 AT MOUNTAIN HOME AFB
ENVIRONMENTAL ASSESSMENT
DISTRIBUTION LIST

The Honorable C.L. Otter
Governor of Idaho
P.O. Box 83720
Boise, Idaho 83720

The Honorable James Risch
United States Senator
350 N. 9th Street, Suite 302
Boise, Idaho 83702

The Honorable Michael Crapo
United States Senator
251 East Front Street, Suite 205
Boise, Idaho 83702

The Honorable Mike Simpson
U.S. House of Representatives
802 West Bannock, Suite 600
Boise, Idaho 83702

The Honorable Raul Labrador
U.S. House of Representatives
33 East Broadway Avenue, Suite 251
Meridian, Idaho 83642

Col. Billy F. Richey, USAF Retired
Special Assistant, Military Affairs
150 South 3rd Street East
Mountain Home, Idaho 83647

The Honorable Lori Den Hartog
Idaho Senator, District 22
P.O. Box 267
Meridian, Idaho 83680

The Honorable Bert Bracket
Idaho Senator, District 23
48331 Three Creek Highway
Rogerson, Idaho 83302

The Honorable John Vander Woude
Idaho House of Representatives
5311 Ridgewood Road
Nampa, Idaho 83687

The Honorable Jason A. Monks
Idaho House of Representatives
1002 West Washington Drive
Meridian, Idaho 83642

The Honorable Richard Wills
Idaho House of Representatives
P.O. Box 602
Glenns Ferry, Idaho 83623

The Honorable Pete Nielsen
Idaho House of Representatives
4303 Southwest Easy Street
Mountain Home, Idaho 83647

The Honorable Rich Sykes
Mayor of Mountain Home
160 South 3rd East
Mountain Home, Idaho 83647

The Honorable David H. Bieter
Mayor of Boise
150 North Capitol Boulevard
Boise, Idaho 83702

The Honorable Shawn Barigar
Mayor of Twin Falls
P.O. Box 1907
Twin Falls, Idaho 83303

The Honorable Franklin D. Hart
Mayor of Grand View
P.O. Box 69
Grand View, Idaho 83624

Mountain Home City Council
160 South 3rd East
Mountain Home, Idaho 83647

Mr. Wes Wootan
Elmore County Commission
150 South 4th East
Mountain Home, Idaho 83647

Mr. Bud Corbus
Elmore County Commission
150 South 4th East
Mountain Home, Idaho 83647

Mr. Al Hofer
Elmore County Commission
150 South 4th East
Mountain Home, Idaho 83647

Mountain Home
Chamber of Commerce
205 North 3rd East
Mountain Home, Idaho 83647

Twin Falls
Chamber of Commerce
2015 Neilsen Point Place, Suite 100
Twin Falls, Idaho 83301-4071

Boise Metro
Chamber of Commerce
P.O. Box 2368
Boise, Idaho 83701

Mr. Virgil Moore
Idaho Fish and Game
P.O. Box 25
Boise, Idaho 83707

Mr. Daryl Meints
Idaho Fish and Game
324 South 417 East, Suite #1
Jerome, Idaho 83338

U.S. Fish and Wildlife Service
Idaho Fish and Wildlife Office
1387 S. Vinnell Way, Suite 368
Boise, Idaho 83709-1657

ADAPTIVE REUSE POTENTIAL OF BUILDING 291 AT MOUNTAIN HOME AFB
ENVIRONMENTAL ASSESSMENT
DISTRIBUTION LIST

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

National Trust for Historic Preservation
The Watergate Office Building
2600 Virginia Avenue NW
Suite 1100
Washington, DC 20037

Warhawk Air Museum
John R. Paul, President
201 Municipal Drive
Nampa, Idaho 83687

Preservation Idaho
The Idaho Historic Preservation Council
P.O. Box 1495
Boise, Idaho 83701

National Trust for Historic Preservation
Western Field Services
c/o Sherri Freemuth
1420 Ogden Street, Suite 203
Denver, Colorado 80218

Idaho Professional Archaeological Council
967 E. Parkcenter Blvd. # 183
Boise, Idaho 83706

University of Idaho
College of Art and Architecture
Attn: Randall Teal
875 Perimeter Drive MS 2461
Moscow, Idaho 83844

American Legion Auxiliary Unit 26
515 East 2nd South
Mountain Home, Idaho 83647

Veterans of Foreign Wars
815 North 6th East
Mountain Home, Idaho 83647

Weitze Research
708 Bristol Avenue
Stockton, California 95204

(no document text this page)

Karen Weitze
P.O. Box 77770
Stockton, CA 95267

7 April 2016

Sheri Robertson
Chief, Environmental Management
366 CES/CEIE
1030 Liberator Street
Mountain Home AFB, Idaho 83648

Dear Ms. Robertson,

In response to your request for comments or questions regarding the Proposed Action for the Strategic Air Command (SAC) Alert Complex (Building 291 and adjacent 103 acres), I offer the following information.

As conveyed in your letter of 3 March 2016, the Proposed Action for the Alert Complex and its bounded acreage (as depicted on Figures 1 and 2) is interpreted as thoughtful and appropriate for the National Register-eligible property. I fully support the Proposed Action, with several minor questions.

1) Was any consideration given to the full lengths of the taxiways as they extend from the eastern termini of the two linear configurations of stubbed alert parting pads (aircraft staging areas) to the end of the primary runway? As shown on Figures 1 and 2, the boundaries of the site end to the immediate west of the molehole (Building 291), running across the two aircraft staging areas prior to their merger with the alert aircraft taxiways that complete the layout. The site boundary as proposed is acceptable, but maintenance of the full lengths of the alert aircraft taxiways connecting the aircraft staging areas (stubbed alert parking pads) to the main runway better represents the historic mission of the SAC alert area. The two alert aircraft taxiways could be sustained without enlarging the site boundary (that is, could be stated as remaining in place).

2) Mention is made of an "exterior berm" in the Alert Complex area in the discussion under the No-Action Alternative. An "exterior berm" is not called out in the Proposed Action. Is this feature part of the original SAC alert area? If so, does the Proposed Action include keeping this feature, or removing it? If the berm is a later feature, perhaps it should also be mentioned (what it is, when it was added at the site) under the Proposed Action, along with Air Force intentions for its future disposition.

3) In discussing possible future actions for the molehole (Building 291), the Proposed Action notes that its "roof configuration would remain in its current form and in-kind materials would be used for replacing the existing roof." Maintaining the profile and minimal detailing of the roof is important, including the fascia boards as they are in materials, proportions (width and depth), and color scheme. Using in-kind materials for replacing the roof itself is also often overlooked. Oversized roofs with out-of-scale overhangs are often added to facilities of this period, sometimes brightly colored for overhead recognition. This type of treatment would be inappropriate for the SAC alert complex.

Other modifications to Building 291 under the Proposed Action should be accomplished as unobtrusively as possible. As noted, maintenance of the original taxiways, aprons and aircraft parking stubs is central to the integrity of the SAC Alert Complex, as is an unchanged exterior appearance for the egress tunnels and ramps.

In 2010, approximately 28 installations under the jurisdiction of the Department of Defense (DoD) included a SAC alert complex within its boundaries. This comparison pool is about 43% of the original group of such complexes (65 constructed between 1957 and 1960 in the continental U.S., eastern Canada and Puerto Rico). The primary facility of the SAC alert complex, its molehole (such as Building 291), is often heavily altered, or demolished, and can be anticipated to be a rare survivor at this type of historic site in the decades ahead. Within the DoD, 10 or fewer SAC moleholes were intact on their exteriors in 2010, and within this group about seven also continued to have an unaltered, stubbed aircraft parking apron. Within the subset that featured both an intact molehole and stubbed aircraft parking apron, perhaps three exist today of the largest type (150- or 100-man), including the SAC Alert Complex at Mountain Home AFB. The remaining moleholes are each a 70-man facility, the smallest configuration for SAC alert. These combined circumstances make the SAC Alert Complex at Mountain Home the single best, classic example representing the historic SAC alert mission of the Cold War. Contributing to importance of the SAC Alert Complex at Mountain Home is the base's participation in the early evaluation of the SAC alert concept during 1956-1957. SAC conducted these test exercises as Operation Try Out at Hunter AFB in Georgia (1956), Operation Watch Tower at Little Rock AFB in Arkansas (1957) and Operation Fresh Approach at Mountain Home (1957). The 150- and 100-man moleholes at Hunter (now on Fort Stewart) and Little Rock are heavily altered today. Aspects of the SAC alert mission that further support the significance of the SAC Alert Complex at Mountain Home are base location in the northern U.S., the presence of a SAC Special Storage Site, a role as a SAC dispersal base, and mission longevity.

Thank you for the opportunity to participate in the EA process for the Alert Complex.

Regards,

Karen J. Weitze
Historian, PhD
Research Associate, Air Force Historical Research Agency, Maxwell AFB