FINAL
ENVIRONMENTAL ASSESSMENT

FOR THE PROPOSED

SEISMIC UPGRADE AND SPECIALTY CARE IMPROVEMENTS PROJECTS

FORT HARRISON VA MEDICAL CENTER
3687 VETERANS DRIVE
FORT HARRISON, MONTANA

U.S. DEPARTMENT OF VETERANS AFFAIRS

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EXECUTIVE SUMMARY

This Environmental Assessment (EA) has been prepared to identify, analyze, and document the potential physical, environmental, cultural, and socioeconomic impacts associated with VA's proposed Seismic Upgrade and Specialty Care Improvements projects at the Fort Harrison VA Medical Center (Fort Harrison VAMC) located at 3687 Veterans Drive in Fort Harrison, Lewis and Clark County, Montana. This EA has been prepared as required in accordance with the National Environmental Policy Act of 1969 ([NEPA]; 42 United States Code [USC] 4321 et seq.), the President's Council on Environmental Quality (CEQ) Regulations Implementing the Procedural Provisions of NEPA (40 Code of Federal Regulations [CFR] 1500-1508), *Environmental Effects of the Department of Veterans Affairs Actions* (38 CFR Part 26), and VA's *NEPA Interim Guidance for Projects* (U.S. Department of Veterans Affairs 2010).

In 2015, VA began planning seismic upgrades at the Fort Harrison VAMC campus to rectify identified seismic structural deficiencies. The planned upgrades included the construction of a new bed tower building for acute inpatient care services and the seismic retrofitting and renovation of Buildings 141, 150, 154, and 154A. In addition, a new parking structure was planned to compensate for parking that would be eliminated by the bed tower construction. In 2018, VA prepared a NEPA EA and a Finding of No Significant Impact (FONSI) for the proposed seismic upgrades and renovation. However, the planned seismic correction/renovation projects were not constructed.

VA is now renewing its effort to complete the required seismic corrections at the Fort Harrison VAMC campus. The original seismic upgrade projects have been revised and expanded. Based on the revisions and expansions to the scope of the original seismic upgrade projects, VA has prepared this new EA for the proposed Seismic Upgrade and Specialty Care Improvements projects.

PROPOSED ACTION

VA's Proposed Action is to conduct a series of seismic upgrade and improvement projects to correct seismic deficiencies at the Fort Harrison VAMC and to remodel and expand the retrofitted facilities to accommodate the operational needs of the medical center. The Proposed Action includes construction of a new acute inpatient care space through a three-story, approximately 82,600 building gross square feet (BGSF) bed tower building addition on the south side of Building 154; seismic retrofitting of Buildings 141, 150, 154, 154A and the connecting corridor; remodeling approximately 221,800 BGSF of space within these buildings to meet the current and projected future VAMC operational needs; construction of a new, approximately 15,700 BGSF, two-story, central utility plant (CUP) north of Building 154; construction of an approximately four-story, 660-space parking garage north of Building 154; and infrastructure upgrades.

The Proposed Action construction activities would be conducted in phases over a period of approximately 10 years to minimize campus disruption, support continued campus operations, and minimize the need for of temporary swing space during construction. VA plans to construct the new parking garage and CUP in the first phase of construction. The second phase of construction would include the construction of the acute inpatient care building addition, followed by the sequential seismic retrofitting and renovation of Buildings 141, 150, 154 and 154A. VA is currently in the pre-design phase for the Proposed Action projects. Project design details are not available at this time. VA anticipates that the Proposed Action construction would begin in 2024 and would be completed in 2033.

PURPOSE AND NEED

The purpose of the Proposed Action is to correct seismic deficiencies at the Fort Harrison VAMC campus and to remodel and expand the retrofitted facilities to accommodate the operational needs of the medical center and enhance Veteran health care services.

Executive Order (EO) 12941 of 1994 requires all federal agencies to develop an inventory of their owned and leased buildings in order to identify and mitigate unacceptable seismic risks to those buildings. EO 13717 of 2016 was issued to establish a Federal Earthquake Risk Management Standard. EO 13717 requires federal agencies to adhere to seismic design requirements of current national building codes and standards and encourages agencies to exceed the minimum required codes and standards to ensure that buildings are fully earthquake resilient.

In compliance with EO 13717, VA issued Directive 7512 to establish a policy for the seismic safety of VA buildings. Under VA Directive 7512, seismic compliance for existing buildings requires adoption of the latest version of the *Standards of Seismic Safety for Existing Federally Owned and Leased Buildings*. For new buildings, VA Directive 7512 requires adoption of the 2015 edition of the International Building Code (IBC). On November 1, 2019, VA released VA Handbook 18-8: *Seismic Design Requirements* to help inform facility planning with regard to seismic standards. This guidance was revised May 1, 2020.

The Fort Harrison VAMC is identified on the Federal Emergency Management Agency (FEMA) Earthquake Hazard Map for the Western U.S. as being located within an area near several active seismic faults, with a moderately high potential for ground shaking. Buildings in this earthquake hazard area are subject to the IBC Seismic Design Class C (may experience strong shaking) requirements. VA's Office of Facilities Planning also characterizes Fort Harrison as being located within an area of moderately high seismic activity.

The Proposed Action is needed to ensure the Fort Harrison VAMC campus facilities can provide protection to Veterans, employees, and other building occupants and can maintain health care and administrative operations in Critical and Essential facilities in the event of a major earthquake (VA Directive 7512).

VA's seismic inventory and evaluation efforts required by EOs 12941 and 13717, VA Directive 7512 and VA Handbook 18-8, identified four buildings at the Fort Harrison VAMC campus (Buildings 141, 150, 154 and 154A) and the corridor connecting these buildings as seismically deficient. Building 154 was classified as Seismic Deficiency Category 1 (in danger of collapse) and Category 2 (may not collapse, but may be heavily damaged), Buildings 141 and 150 were classified as Category 3 (may be damaged), and Building 154A was classified as Category 4 (may have non-structural deficiencies). These buildings were all constructed prior to modern seismic codes and do not meet current seismic building standards. As a result, they do not conform to current rules, standards, and design criteria for building seismic structural performance.

The Proposed Action is also needed to correct functional and space deficiencies at the Fort Harrison VAMC, including:

- A number of departmental deficiencies within the Seismic Program project buildings, such as departmental spaces that are too small to meet current space requirements, departments that are not located adjacent to related departments and clinics as required by operational guidance, and the lack of clear patient flow patterns.
- A current boiler plant (Building 171) that does not meet seismic standards, requires repairs/upgrades for safe operation, and is insufficient to heat and cool the proposed expanded facility. In addition, this facility does not include a central chiller plant.
- Operating with a current parking deficit of approximately 50 parking spaces and the deficit would grow with the proposed expansion. In addition, all campus parking is currently provided by large, surface level parking lots, resulting in long distances from some parking spaces to the main hospital entrance.

- Insufficient existing building space at the campus, requiring VA to locate the Helena Medical Care Collections Fund, Network Authorization Office, and Helena Sleep Lab in leased facilities away from the main campus.

ALTERNATIVES

This EA examines in depth two alternatives, the Proposed Action and the No Action Alternative:

Proposed Action

The Proposed Action includes the construction of a bed tower addition on the south side of Building 154, performing seismic corrections and renovations for Buildings 141, 150, 154 and 154A, constructing a new CUP, constructing a new parking garage, and all appurtenant infrastructure upgrades. The proposed project locations are mostly paved parking lots, maintained grassy areas, and areas near existing buildings within the Fort Harrison VAMC campus.

The primary components of the Proposed Action include:

- Constructing a three-story, approximately 82,600 BGSF addition on the south side of the main hospital building (Building 154). The building addition would 1) allow the acute inpatient care and associated functions to relocate to the new space and continue to provide life-saving medical care while the existing medical center complex is seismically retrofitted; 2) provide departments with the necessary space to expand their operations to meet current space allocation standards; 3) allow departments to reorganize locations within the building, enabling staff and patients to travel more efficiently within the facility and meet current operational guidelines; and 4) allow off-campus departments to relocate to the Fort Harrison VAMC.
- Structurally retrofitting the administration building (Building 141), dietetics building (Building 150), main hospital building (Building 154) and the outpatient building (Building 154A) to correct seismic building code deficiencies. Retrofitting would include the demolition of the interiors of the buildings and the installation of the structural upgrades and new mechanical systems within the building interiors. Following the completion of the upgrades, the building interiors would be redesigned and constructed to meet the current and future anticipated operational needs of the buildings. Approximately 221,800 BGSF would be seismically corrected and renovated.
- Bracing/securing mechanical, electrical, and plumbing utilities within the connecting corridor between Buildings 141, 150, 154 and 154A.
- Constructing a new, approximately 15,700 BGSF, two-story, CUP north of Building 154. The new CUP would include more efficient steam boilers and a chilled water plant sized to meet anticipated heating and cooling demands of the expanded facility.
- Constructing an approximately four-story, 660-space parking garage north of Building 154A. The new parking garage would 1) correct the current parking space deficit at the campus; 2) replace parking spaces lost from the proposed building addition and CUP; and 3) allow more parking spaces, including Americans with Disability Act-accessible parking spaces, to be located closer to the main building entrance.
- Associated infrastructure upgrades to support the proposed development, including the installation, relocation, and removal of campus utilities and roads, as necessary, based on the final design.

No Action Alternative

Under the No Action Alternative, seismic corrections and functional/operational building improvements for the Fort Harrison VAMC campus would not be implemented. VA would continue to use the four Seismic Program buildings (Buildings 141, 150, 154 and 154A) with no seismic upgrades. The buildings would remain structurally deficient and at risk of significant damage or failure from a major seismic event. This alternative would not improve patient, staff, and visitor safety in the event of a major earthquake and would not enable the facility to return to operation quickly in the aftermath of such a seismic event, and thus would not meet the requirements of VA's Seismic Program.

Additionally, functional and space deficiencies would persist at the Fort Harrison VAMC, which would limit VA's ability to provide health care services to regional Veterans consistent with VA's modern standards of care. The No Action Alternative would not meet the purpose of or need for the Proposed Action. However, the No Action Alternative was evaluated in this EA as required under the CEQ regulations; it also provides a benchmark for comparing potential impacts of the Proposed Action.

AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

The affected environment of the Fort Harrison VAMC campus and its immediate surroundings, or the region of influence of the Proposed Action, is discussed in Section 3 of this EA.

The two considered alternatives are evaluated in this EA to determine their potential direct or indirect impact(s) on the physical, environmental, cultural, and socioeconomic aspects of the Proposed Action's region of influence. Technical areas evaluated in this EA are:

- *Aesthetics*
- *Air Quality*
- *Cultural and Historic Resources*
- *Geology and Soils*
- *Hydrology and Water Quality*
- *Wildlife and Habitat*
- *Noise*
- *Land Use*
- *Floodplains, Wetlands, and Coastal Zone Management*
- *Socioeconomics*
- *Community Services*
- *Solid Waste and Hazardous Materials*
- *Traffic, Transportation, and Parking*
- *Utilities*
- *Environmental Justice*
- *Cumulative Impacts*
- *Potential for Generating Substantial Controversy*

Potential Effects of the Proposed Action

The Proposed Action would result in impacts to the area as identified throughout Section 3 and summarized in the table below. These include short-term and/or long-term potential adverse impacts to aesthetics, air quality, cultural resources, soil and geology, hydrology and water quality, wildlife and habitat, noise, solid waste and hazardous materials, transportation, parking (short-term only), and utilities. All of these potential impacts are less than significant and would be further reduced through careful coordination and implementation of general best management practices (BMPs); management, minimization, avoidance, and mitigation measures; and adherence to applicable regulatory requirements, as identified in Section 4.

The entire Fort Harrison VAMC campus is located within the National Register of Historic Places (NRHP)-listed Fort Harrison Veteran's Hospital Historic District. One building that is planned for seismic retrofitting/renovation (Building 141) is a contributing resource to the Historic District. In addition, Buildings 141 and 154 are located along the northeastern side of the historic parade ground, which is also a contributing resource to the Historic District. However, the seismic retrofitting/renovation of Building 141 would be conducted only within the interior of the building, which no longer retains historic integrity, and would have no effect on the Historic District. The proposed addition to the south side of Building 154

would likely encroach into the parade ground, which would be an adverse effect to the Historic District; however, the level of effect cannot be determined until the design in completed.

The full range of effects on historic properties cannot be determined at this time. Consequently, VA developed a Programmatic Agreement (PA) for the Proposed Action in consultation with the Montana Historical Society (MHS), (which serves as the Montana State Historic Preservation Office (SHPO)), the Advisory Council on Historic Preservation (ACHP), and the Helena-Lewis and Clark County Certified Local Government. The PA includes project design review by MHS for the Building 154 addition to avoid, minimize, and/or mitigate adverse effects to historic properties. If adverse effects to the parade ground are identified, mitigation may include development of a campus-wide landscape initiative (such as a Cultural Landscape Study and Management Plan). In addition, the PA requires archaeological monitoring during ground disturbing activities to ensure proper handling of any archaeological resources encountered. With the implementation of the PA stipulations, cultural resources impacts would be less than significant.

The Proposed Action would have significant long-term beneficial impacts by mitigating existing seismic hazards at the campus. In addition, the Proposed Action would result in significant long-term beneficial socioeconomic impacts by providing improved and modernized health care facilities and services to regional Veterans.

Potential Effects of the No Action Alternative

Under the No Action Alternative, proposed seismic upgrades and space/functional improvements would not be implemented. No beneficial impacts attributable to the Proposed Action would occur. Buildings 141, 150, 154 and 154A would remain structurally deficient and at risk of significant damage or failure from a major seismic event and no improvements to the current level of VA's regional health care services or capability would occur.

Summary of Impact Analysis

Resource Area	Proposed Action	No Action
Aesthetics	The Proposed Action would not result in an abrupt change to the visual resources of the area. New project buildings would be constructed in an area that is currently developed and would be consistent with the size and character of the existing campus buildings in the area. Minor, long-term adverse impact.	None
Air Quality	Dust, particulate matter, and construction equipment emissions during construction managed with BMPs. Additional vehicle and stationary equipment emissions during operation. Campus is located within a NAAQS full attainment area. In addition, emissions are anticipated to be below general conformity de minimis levels. Less-than-significant, short-term and long-term adverse impacts.	None

Resource Area	Proposed Action	No Action
Cultural Resources	Building 141 is a contributing resource to the NRHP-listed Fort Harrison Veteran's Hospital Historic District. The seismic retrofitting/renovation of Building 141 would be conducted only within the interior of the building, which no longer retains historic integrity, and would have no effect on the Historic District. The proposed addition to the south side of Building 154 would likely encroach into the parade ground, which would be an adverse effect to the Historic District; however, the level of effect cannot be determined until the design in completed. VA executed a Programmatic Agreement (PA) under Section 106 of the NHPA with MHS and ACHP to avoid, minimize, and/or mitigate historic property impacts from the Proposed Action. No significant impact with implementation of the PA stipulations.	None
Geology and Soils	Soil erosion and sedimentation impacts during construction managed with BMPs. Proposed Action would mitigate existing seismic building hazards associated with four main buildings at the campus. Less-than-significant, short-term adverse impact. Significant, long-term beneficial impact.	Four main buildings at the campus would remain structurally deficient and at risk of significant damage from a major seismic event.
Hydrology and Water Quality	Construction related stormwater runoff during construction managed through BMPs. The Proposed Action would include system evaluation, design, and construction of improvements to the on-campus stormwater management system to ensure it complies with EISA Section 438 requirements. These would include any required improvements to the existing stormwater detention pond (which is anticipated to receive additional stormwater as a result of the Proposed Action), and other on-campus stormwater management and retention structures (to capture stormwater from the proposed parking garage and CUP development). Less-than-significant, short-term adverse impact.	None
Wildlife and Habitat	Campus does not contain habitat for federally-listed species. Montana does not have a list of state-protected species. Proposed Action construction areas may contain marginal habitat for migratory birds and prairie dogs. Potential impacts to these species during construction would be addressed through BMPs. Minor short-term adverse impact during construction.	None

Resource Area	Proposed Action	No Action
Noise	Short-term noise impacts during construction managed through BMPs. Minor operational impacts associated with vehicle traffic, HVAC systems, and grounds maintenance, similar to existing noise levels. Less-than-significant, short-term and long-term adverse impact.	None
Land Use	Proposed Action is consistent with existing use of the Fort Harrison VAMC campus and current zoning and is compatible with surrounding land use. No/negligible impact.	None
Floodplains, Wetlands, and Coastal Zone Management	No wetlands or floodplains located on the Fort Harrison VAMC campus or immediately adjacent properties. Campus not located in a designated coastal zone. No impact.	None
Socioeconomics	Short-term local beneficial impact to employment during construction. Significant long-term beneficial socioeconomic impacts by addressing seismic hazards associated with existing campus buildings and providing improved and modernized health care facilities and services to regional Veterans.	Seismically deficient buildings would continue to pose life-safety and VAMC operational risks
Community Services	Proposed Action would not put a significant additional load on local community services. No/negligible adverse impact.	None
Solid Waste and Hazardous Materials	Existing project buildings contain asbestos and may contain lead-based paint. Asbestos would be removed prior to interior building demolition/renovation. Interior demolition BMPs to control dust would control potential lead-based paint emissions. Potential impacts from petroleum and hazardous substance handling during construction and operation would be managed through BMPs and regulatory compliance. Less-than-significant, short-term and long-term adverse impacts.	None

Resource Area	Proposed Action	No Action
Transportation and Parking	Minor short-term adverse impact from construction traffic and temporary loss of parking. A traffic impact study (TIS) found area roads currently operate at a good level of service (LOS A) and would continue to operate at a good LOS with the Proposed Action (LOS A or B). No potential vehicle queueing concerns were identified. Less-than-significant, long-term adverse traffic impact. Additional parking spaces created by the Proposed Action would exceed the anticipated future parking demand and would eliminate the current parking space deficit, a long-term, beneficial parking impact.	The campus would continue to operate with a parking space deficit
Utilities	Proposed Action would result in an increase in the consumption of utilities. Capacity of local utility providers appear to be adequate to support the Proposed Action. Portions of the on-campus sanitary system piping are at or near capacity. Proposed Action would include further system evaluation, and design/construction of targeted sanitary system improvements required to meet projected sanitary discharge from the Proposed Action. Less-than-significant, long-term adverse impact.	None
Environmental Justice	Located in an area with a lower minority population and a lower low-income population than the State of Montana. Proposed Action would have little impact on area residents. Low-income and minority Veterans would benefit from the implementation of the Proposed Action at the Fort Harrison VAMC. Negligible impact.	None

Cumulative Impacts

This EA also examines the potential cumulative effects of implementing each of the considered alternatives. This analysis finds that the Proposed Action, with the implementation of the BMPs; management, minimization, avoidance, and mitigation measures; and regulatory compliance measures specified in this EA, would not result in significant adverse cumulative impacts to the human environment.

AGENCY AND PUBLIC INVOLVEMENT

Agencies and organizations consulted for this EA include:

- U.S. Fish and Wildlife Service
- U.S. Environmental Protection Agency
- U.S. Army Corps of Engineers
- USDA Natural Resource Conservation Service
- Montana Department of Environmental Quality, various divisions
- Montana Fish, Wildlife and Parks
- Montana Historical Society (Montana SHPO)

- Montana Natural Heritage Program
- Montana Department of Natural Resources and Conservation, various divisions
- Montana Department of Transportation
- Montana Department of Public Health and Human Services
- Montana Public Service Commission
- Lewis and Clark County, various departments
- City of Helena Community Development and Planning - Planning Division
- Montana Department of Military Affairs - Veteran's Affairs Division
- Montana Army National Guard
- Helena-Lewis & Clark County Certified Local Government
- Lewis and Clark County Historical Society
- Preserve Montana
- Fort William Henry Harrison Museum Foundation/Montana Military Museum
- Montana American Legion
- Montana Veterans of Foreign Wars
- Montana Disabled American Veterans

VA initiated the NEPA scoping process with these agencies and organizations in March 2023, which included emailing the agencies/organizations scoping letters with a request for information and comment based on the available information regarding the campus area and the Proposed Action. Responses were received from the Montana Natural Heritage Program, Montana Department of Transportation, and Lewis and Clark County Public Works Department. Input provided by these agencies is summarized in Section 6. Agency information and comments have been incorporated into this EA, as and where appropriate. Copies of relevant correspondence can be found in Appendix B.

On May 11, 2023, VA initiated NHPA Section 106 consultation for the Proposed Action with MHS, ACHP, Helena-Lewis and Clark County Certified Local Government, Lewis & Clark County Historical Society, Fort William Henry Harrison/Montana Military Museum, Preserve Montana, and federally-recognized Indian tribes identified as having possible ancestral ties to the Fort Harrison VAMC area and Indian tribal organizations consulted during previous projects at the Fort Harrison VAMC campus (Apache Tribe of Oklahoma, Blackfeet Tribal Business Council, Chippewa Cree Business Community, Confederated Salish and Kootenai Tribes of the Flathead Reservation, Crow Tribe of Montana, Fort Belknap Indian Community of the Fort Belknap Reservation of Montana, Fort Peck Tribal Executive Board, Little Shell Chippewa Tribe, Northern Cheyenne Tribal Council, and Shoshone-Bannock Tribes of the Fort Hall Reservation). Responses were received from MHS, ACHP, Helena-Lewis and Clark County Certified Local Government, Northern Cheyenne Tribe, Crow Tribe of Montana, and Shoshone-Bannock Tribes. Section 106 agency and tribal information and comments have been incorporated in this EA (Section 3.4) and are summarized in Section 6. Section 106 correspondence is provided in Appendix C.

VA published and distributed the Draft EA for a 30-day public comment period, as announced by a Notice of Availability published in the Helena Independent Record on October 17 and 21, 2023. The Draft EA was posted for public review on the VA Office of Construction and Facilities Management Environmental Program website: (https://www.cfm.va.gov/environmental/index.asp). In addition, a hard copy of the Draft EA was made available for public review at the Lewis and Clark Library, located at 120 S. Last Chance Gulch, Helena, MT. VA also emailed notification of the release of the Draft EA to the stakeholders previously contacted during the NEPA scoping and NHPA Section 106 consultation. The notice contained a link to the Draft EA on VA's website and invited stakeholders to provide comments on the document. VA did not receive any agency or public comments on the Draft EA.

CONCLUSIONS

This EA concludes there would be no significant adverse impact, either individually or cumulatively, to the human environment associated with the Proposed Action, provided the management, minimization, mitigation, and regulatory compliance measures described in this EA are implemented.

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ACRONYMS AND ABBREVIATIONS

ACHP	Advisory Council on Historic Preservation
AADT	annual average daily traffic
ACM	asbestos-containing materials
amsl	above mean sea level
AST	above ground storage tank
bgs	below ground surface
BMP	best management practice
CEQ	President's Council on Environmental Quality
CFR	Code of Federal Regulations
CZMA	Coastal Zone Management Act
dBA	decibels, A-weighted scale
DoD	Department of Defense
EA	environmental assessment
ESA	environmental site assessment
EUL	enhanced use lease
HPWD	Helena Public Works Department
IPaC	USFWS Information for Planning and Conservation
JD	jurisdictional determination
LCCO	Lewis and Clark County Ordinances
LOS	level of service
MBTA	Migratory Bird Treaty Act
MTDOT	Montana Department of Transportation
MHS	Montana Historical Society
MTNHP	Montana Natural Heritage Program
MOA	memorandum of agreement
MPDES	Montana Pollutant Discharge Elimination System
MTDEQ	Montana Department of Environmental Quality
NAAQS	National Ambient Air Quality Standards
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
REC	recognized environmental condition
ROW	right-of-way
SHPO	State Historic Preservation Office
SWPPP	stormwater pollution prevention plan
TIS	transportation impact study
U.S.	United States of America
USACE	U.S. Army Corps of Engineers
USC	U.S. Code
USDA	U.S. Department of Agriculture
USEPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
UST	underground storage tank
VA	U.S. Department of Veterans Affairs
VAMC	VA Medical Center
WOTUS	Waters of the U.S.

1.0 INTRODUCTION, INCLUDING PURPOSE OF AND NEED FOR THE ACTION

1.1 Introduction

This Environmental Assessment (EA) has been prepared as required in accordance with the National Environmental Policy Act of 1969 ([NEPA]; 42 United States Code [USC] 4321 et seq.), the President's Council on Environmental Quality (CEQ) Regulations Implementing the Procedural Provisions of NEPA (40 Code of Federal Regulations [CFR] 1500-1508), *Environmental Effects of the Department of Veterans Affairs Actions* (38 CFR Part 26), and VA's *NEPA Interim Guidance for Projects* (U.S. Department of Veterans Affairs 2010). Federal agencies are required to consider the environmental effects of their proposed actions. This EA is required to determine if VA's Proposed Action would have significant environmental impacts.

This EA has been prepared to identify, analyze, and document the potential physical, environmental, cultural, and socioeconomic impacts associated with VA's proposed Seismic Upgrade and Specialty Care Improvements projects at the Fort Harrison VA Medical Center (Fort Harrison VAMC) located at 3687 Veterans Drive in Fort Harrison, Lewis and Clark County, Montana.

In 2015, VA began planning seismic upgrades at the Fort Harrison VAMC campus to rectify identified seismic structural deficiencies. The planned upgrades included the construction of a new bed tower building for acute inpatient care services and the seismic retrofitting and renovation of Buildings 154, 150, 154A, and 141. In addition, a new parking structure was planned to compensate for parking that would be eliminated by the bed tower construction. In 2018, VA prepared a NEPA EA and a Finding of No Significant Impact (FONSI) for the proposed seismic upgrades and renovation. However, the planned seismic correction/renovation projects were not implemented.

VA is now renewing its effort to complete the required seismic corrections at the Fort Harrison VAMC campus. The original seismic upgrade projects have been revised and expanded. The proposed Seismic Upgrade and Specialty Care Improvements projects now include construction of the new acute inpatient care space through a three-story, approximately 82,600 building gross square feet (BGSF) bed tower building addition on the south side of Building 154; seismic retrofitting of Buildings 141, 150, 154, 154A and the connecting corridor; remodeling approximately 221,800 BGSF of space within these buildings to meet the current and projected future VAMC operational needs; construction of a new, approximately 15,700 BGSF, two-story, central utility plant (CUP) north of Building 154; construction of an approximately four-story, 660-space parking garage north of Building 154; and infrastructure upgrades. VA is currently in the pre-design phase for these projects. Based on the revisions and expansions to the scope of the original seismic upgrade projects, VA has prepared this new EA for the proposed Seismic Upgrade and Specialty Care Improvements projects (Proposed Action).

In accordance with the cited regulations, this EA allows for public input into the federal decision-making process; provides federal decision-makers with an understanding of potential environmental effects of their decisions, before making these decisions; identifies measures the federal decision-maker could implement to reduce potential environmental effects; and documents the NEPA process.

1.2 Background

The Fort Harrison VAMC is the flagship of the VA Montana Health Care System (VAMHCS) and is the only medical center within the health care system. VAMHCS provides health care services to approximately 47,000 Veterans. The Fort Harrison VAMC is a 32-bed acute care medical-surgical facility that provides a wide range of inpatient and outpatient services to Veterans living in western Montana.

The approximately 90-acre Fort Harrison VAMC campus is located approximately 1.5 miles northwest of the City of Helena, in Lewis and Clark County, Montana. The land surrounding the VAMC campus is part of the Fort William Henry Harrison Military Reservation. The land immediately surrounding the military reservation is rural and mostly undeveloped. Figures 1-1 and 1-2 depict the location of the Fort Harrison VAMC campus.

The Fort Harrison VAMC property has been owned by the federal government since 1892 and was originally part of Fort Harrison, a military reservation used to assemble troops for the Spanish American War and later used by the Army National Guard. In 1894, the original hospital buildings were constructed at the campus. After World War I, in 1922, VA took possession of the campus and operated a tuberculosis sanitarium at the property. In 1932, a new hospital building (Building 141) was constructed at the campus. In 1935, an earthquake struck seven miles away and damaged ten campus buildings, including the heating system for the main hospital building, forcing the hospital to close for two years. The buildings were repaired and two years later the hospital reopened. In 1963, the VAMC was expanded, including the construction of Building 154 (the current main hospital building). Since that time, the Fort Harrison VAMC campus has been transformed to meet the changing health care needs of area Veterans.

The entire Fort Harrison VAMC campus is located within the National Register of Historic Places (NRHP)-listed Fort Harrison Veteran's Hospital Historic District. One building that is planned for seismic retrofitting/renovation (Building 141) is a contributing resource to the Historic District. In addition, Buildings 141 and 154 are located along the northeastern side of the historic parade ground, which is a contributing resource to the Historic District.

Figure 1-3 is an aerial photograph depicting the current development at the Fort Harrison VAMC campus and the surrounding area.

Figure 1-1 Regional Location Map

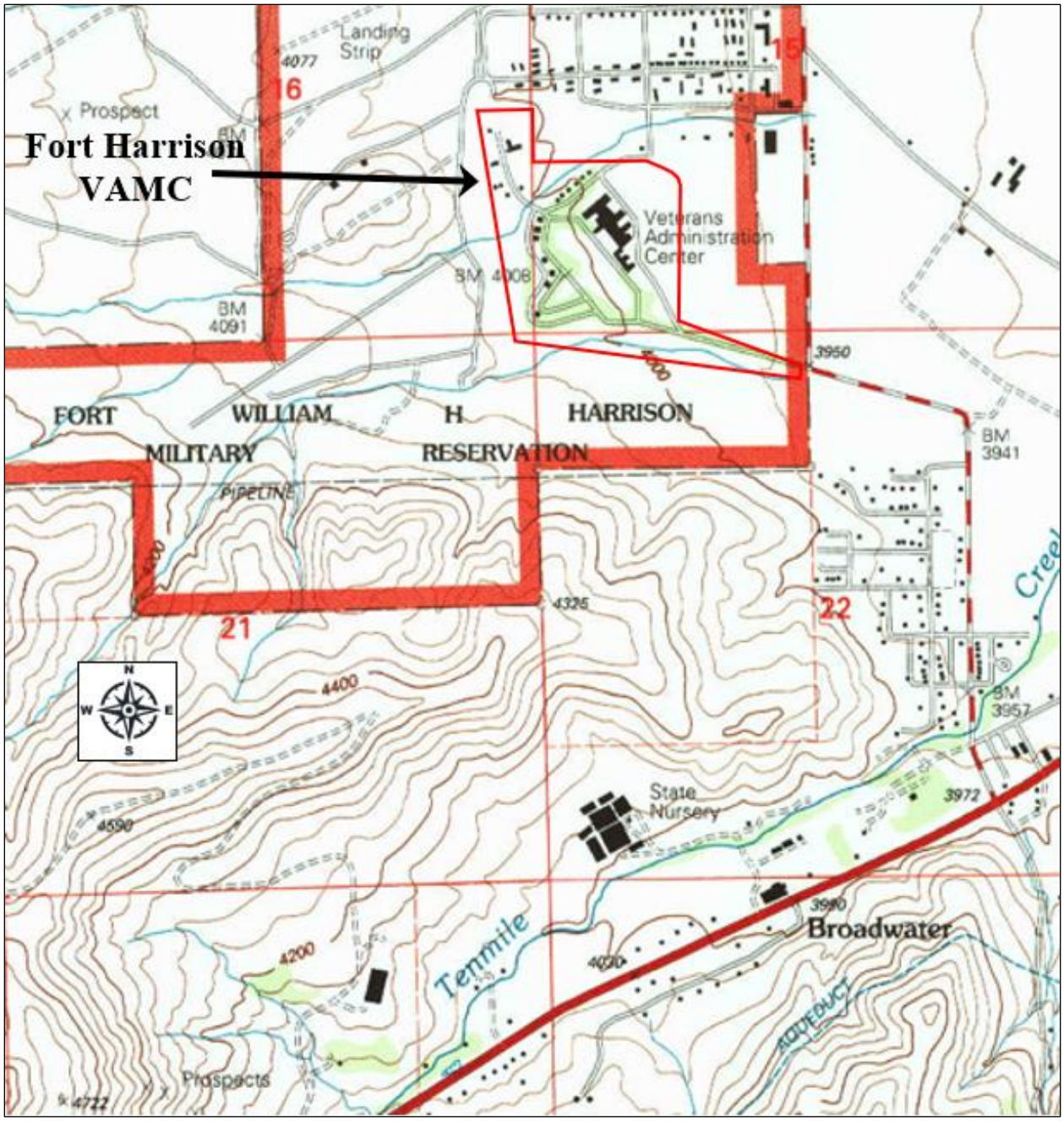

Figure 1-2 Topographic Location Map (Helena, MT 2001)

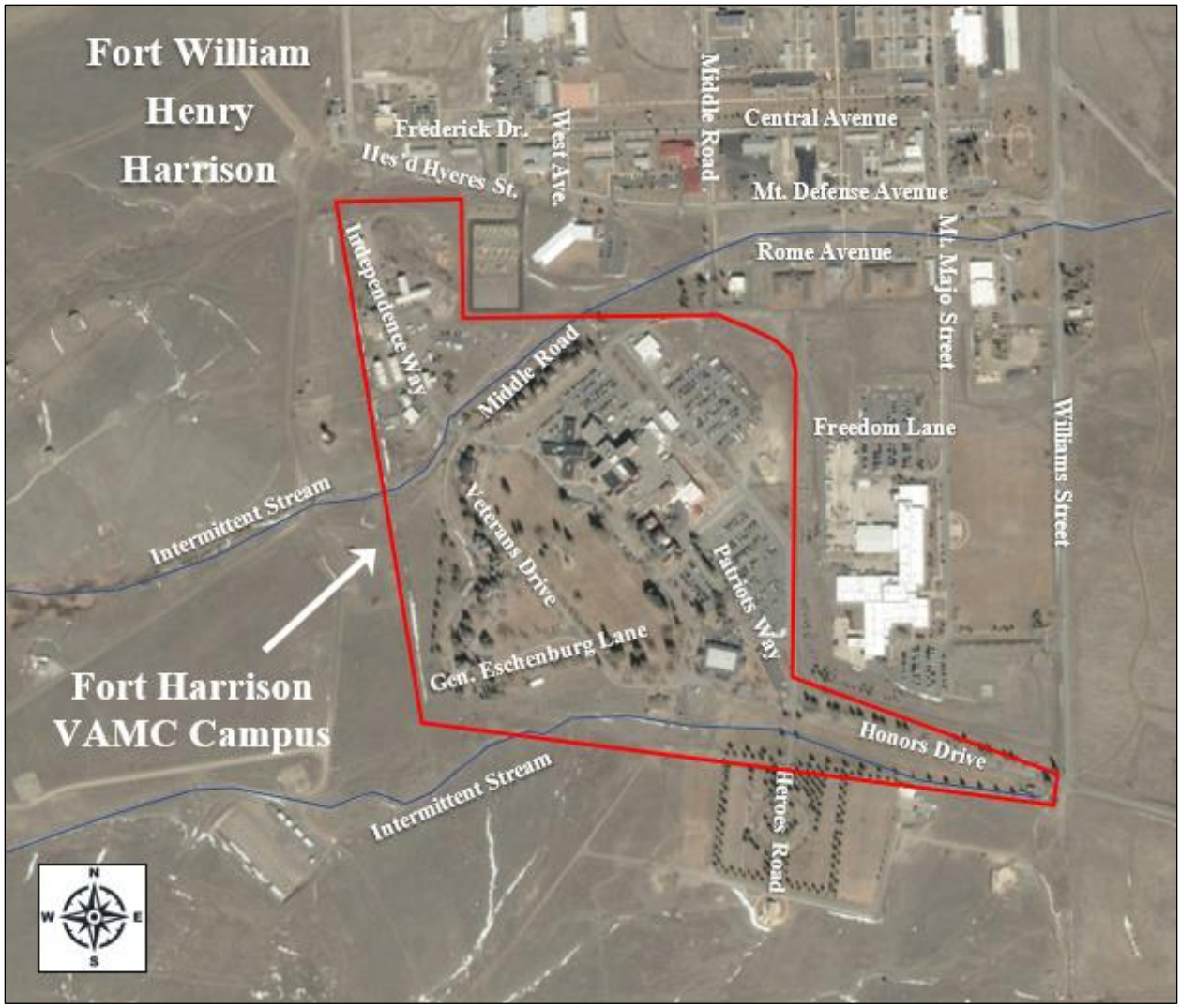

Figure 1-3 Aerial Photograph of Fort Harrison VAMC Campus

1.3 Purpose and Need

The purpose of the Proposed Action is to correct seismic deficiencies at the Fort Harrison VAMC campus and to remodel and expand the retrofitted facilities to accommodate the operational needs of the medical center and enhance Veteran health care services.

Executive Order (EO) 12941 of 1994 requires all federal agencies to develop an inventory of their owned and leased buildings in order to identify and mitigate unacceptable seismic risks to those buildings. EO 13717 of 2016 was issued to establish a Federal Earthquake Risk Management Standard. EO 13717 requires federal agencies to adhere to seismic design requirements of current national building codes and standards and encourages agencies to exceed the minimum required codes and standards to ensure that buildings are fully earthquake resilient.

In compliance with EO 13717, VA issued Directive 7512 to establish a policy for the seismic safety of VA buildings. Under VA Directive 7512, seismic compliance for existing buildings requires adoption of the latest version of the *Standards of Seismic Safety for Existing Federally Owned and Leased Buildings*. For new buildings, VA Directive 7512 requires adoption of the 2015 edition of the International Building

Code (IBC). On November 1, 2019, VA released VA Handbook 18-8: *Seismic Design Requirements* to help inform facility planning with regard to seismic standards. This guidance was revised May 1, 2020.

The Fort Harrison VAMC is identified on the Federal Emergency Management Agency (FEMA) Earthquake Hazard Map for the Western U.S. as being located within an area near several active seismic faults, with a moderately high potential for ground shaking. Buildings in this earthquake hazard area are subject to the IBC Seismic Design Class C (may experience strong shaking) requirements. VA's Office of Facilities Planning also characterizes Fort Harrison as being located within an area of moderately high seismic activity. Figure 1-4 depicts the location of Fort Harrison on the VA Seismic Zone Map.

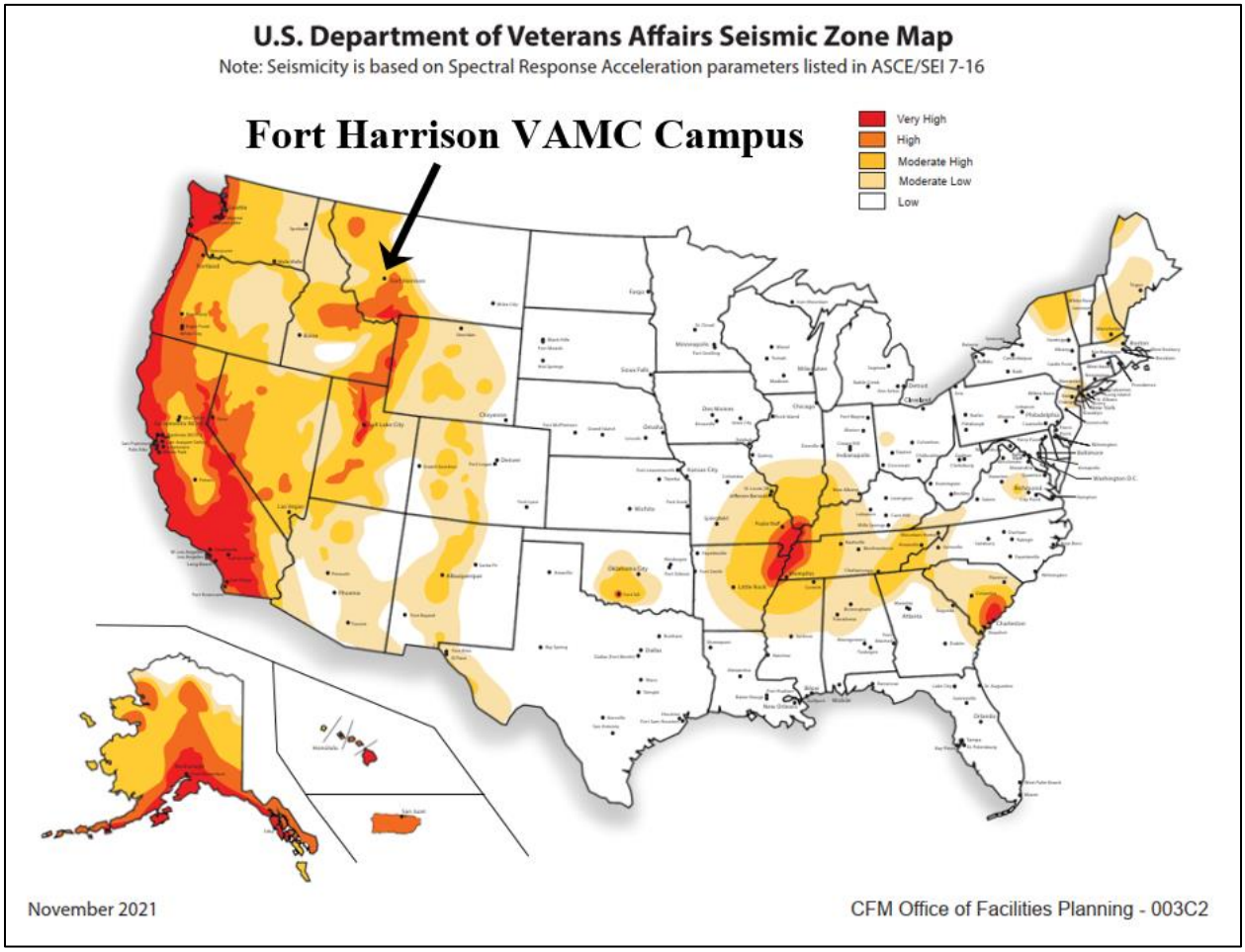

Figure 1-4 VA Seismic Zone Map

The Proposed Action is <u>needed</u> to ensure the Fort Harrison VAMC campus facilities can provide protection to Veterans, employees, and other building occupants and can maintain health care and administrative operations in Critical and Essential facilities in the event of a major earthquake (VA Directive 7512).

VA's seismic inventory and evaluation efforts required by EOs 12941 and 13717, VA Directive 7512 and VA Handbook 18-8, identified four buildings at the Fort Harrison VAMC campus (Buildings 141, 150, 154 and 154A) and the corridor connecting these buildings as seismically deficient. Building 154 was classified as Seismic Deficiency Category 1 (in danger of collapse) and Category 2 (may not collapse, but may be heavily damaged), Buildings 141 and 150 were classified as Category 3 (may be damaged), and Building 154A was classified as Category 4 (may have non-structural deficiencies). These buildings were

all constructed prior to modern seismic codes and do not meet current seismic building standards. As a result, they do not conform to current rules, standards, and design criteria for building seismic structural performance.

The four Seismic Program project buildings include:

- Building 141 – Built in 1932. Former hospital building. Currently used as an administration building. Three- to four-story building on a concrete foundation with a basement, penthouse, and attic. A connecting corridor links Building 141 to Buildings 150 and 154. Approximately 52,000 BGSF.
- Building 150 – Built in 1936. Former dining hall and kitchen. Currently used as a dietetics building. Two- to three-story building on a concrete foundation with a basement and penthouse. The facades are connected to Buildings 154 and 154A. Approximately 13,172 BGSF.
- Building 154 – Built in 1963 with numerous additions. The building has remained in use as the main hospital building. Four-story building on a concrete foundation with a basement and penthouse. The facades are connected to Buildings 150 and 154A. Approximately 103,214 BGSF (approximately 132,381 BGSF including the existing additions).
- Building 154A – Built in 1976. Currently used as an outpatient building. One-story building on a concrete foundation with a basement. The facades are connected to Buildings 150 and 154. Approximately 41,667 BGSF.

The Proposed Action is also needed to correct functional and space deficiencies at the Fort Harrison VAMC, including:

- A number of departmental deficiencies within the Seismic Program project buildings, such as departmental spaces that are too small to meet current space requirements, departments that are not located adjacent to related departments and clinics as required by operational guidance, and the lack of clear patient flow patterns.
- A current boiler plant (Building 171) that does not meet seismic standards, requires repairs/upgrades for safe operation, and is insufficient to heat and cool the proposed expanded facility. In addition, this facility does not include a central chiller plant.
- Operating with a current parking deficit of approximately 50 parking spaces and the deficit would grow with the proposed expansion. In addition, all campus parking is currently provided by large, surface level parking lots, resulting in long distances from some parking spaces to the main hospital entrance.
- Insufficient existing building space at the campus, requiring VA to locate the Helena Medical Care Collections Fund, Network Authorization Office, and Helena Sleep Lab in leased facilities away from the main campus.

1.4 Decision-Making

This EA has been prepared to identify, analyze, and document the potential physical, environmental, cultural, and socioeconomic impacts associated with VA's proposed Seismic Upgrade and Specialty Care Improvements projects at the Fort Harrison VAMC campus.

Under NEPA, VA is required to incorporate environmental considerations into their decision-making process for major federal actions they propose to undertake. This is done in accordance with the regulations identified in Section 1.1.

The analysis presented in this EA regarding potential environmental, cultural, and socioeconomic effects is part of the VA decision making process for consideration of implementation of the Proposed Action, and, as appropriate, implementation of management, minimization, and mitigation measures to reduce potential effects on the environment.

2.0 DESCRIPTION OF THE PROPOSED ACTION AND ALTERNATIVES

2.1 Introduction

This Section provides information regarding the Proposed Action and its alternatives, including those that VA initially considered, but eliminated, and the reasons for eliminating them. The processes developed and applied by VA provide an understanding of VA's rationale for analyzing the Proposed Action in this EA.

2.2 Proposed Action

VA's Proposed Action is to conduct a series of seismic upgrade and improvement projects to correct seismic deficiencies at the Fort Harrison VAMC and to remodel and expand the retrofitted facilities to accommodate the operational needs of the medical center. The Proposed Action includes construction of a new acute inpatient care space through a three-story, approximately 82,600 BGSF bed tower building addition on the south side of Building 154; seismic retrofitting of Buildings 141, 150, 154, 154A and the connecting corridor; remodeling approximately 221,800 BGSF of space within these buildings to meet the current and projected future VAMC operational needs; construction of a new, approximately 15,700 BGSF, two-story, CUP north of Building 154; construction of an approximately four-story, 660-space parking garage north of Building 154; and infrastructure upgrades.

The Proposed Action construction activities would be conducted in phases over a period of approximately 10 years to minimize campus disruption, support continued campus operations, and minimize the need for temporary swing space during construction. VA plans to construct the new parking garage and CUP in the first phase of construction. The second phase of construction would include the construction of the acute inpatient care building addition, followed by the sequential seismic retrofitting and renovation of Buildings 141, 150, 154 and 154A. VA is currently in the pre-design phase for the Proposed Action projects. Project design details are not available at this time. VA anticipates that the Proposed Action construction would begin in 2024 and would be completed in 2033.

2.3 Alternatives Development

After identifying the seismic structural deficiencies of Buildings 141, 150, 154 and 154A, VA examined other potential buildings and spaces within the Fort Harrison VAMC campus for relocating the functions of these buildings. No existing suitable space for these services is available at the campus. VA also considered leasing new facilities, acquiring existing off-campus facilities, or contracting out health care services, but found that none of these options were viable (see Section 2.5). Consequently, VA determined that seismically retrofitting and renovating the four buildings was the only viable and reasonable alternative to meet the purpose and need for the Proposed Action. As part of the seismic retrofit alternative, a new acute inpatient care building is required to maintain inpatient health care services during the retrofitting of the other buildings. Following the completion of the Proposed Action construction activities, this new building would also provide the additional space needed to correct existing operational and space deficiencies.

In a 2018 Project Book pre-design analysis, VA examined potential locations at the Fort Harrison VAMC campus for the new acute inpatient care building. Three possible stand-alone building locations were identified to the north, south, and west of the main hospital building (Building 154). The western stand-alone building option was considered the preferred alternative and was selected for the proposed action within the 2018 EA and FONSI. In 2021, a Draft Concept Report was prepared for the new acute

inpatient care building that further evaluated and refined potential building locations. The Draft Concept Report evaluated the new acute inpatient care building as an addition to the north, south, and west sides of Building 154. The analysis found that an approximately 82,600 BGSF, three-story addition on the southern side of Building 154 was the preferred alternative for the new acute inpatient care building.

2.4 Alternatives Evaluated in this EA

This EA examines in depth two alternatives, the Proposed Action and the No Action Alternative.

2.4.1 Proposed Action

The Proposed Action includes the construction of a three-story, approximately 82,600 BGSF, bed tower addition on the south side of Building 154, performing seismic corrections for Buildings 141, 150, 154 and 154A, renovations totaling approximately 221,800 BGSF, constructing a new CUP, constructing a 660-space parking garage, and infrastructure upgrades. The proposed project locations are mostly paved parking lots, maintained grassy areas, and areas near existing buildings. All of the projects are located entirely within the Fort Harrison VAMC campus on land owned by the federal government.

The primary components of the Proposed Action include:

- Constructing a three-story, approximately 82,600 BGSF addition on the south side of the main hospital building (Building 154). The addition would include a partial basement and mechanical penthouse. VA established the size of the building addition based on evaluations of the facility and the forecasted needs for the next 20 years. The building addition would 1) allow the acute inpatient care and associated functions to relocate to the new space and continue to provide life-saving medical care while the existing medical center complex is seismically retrofitted; 2) provide departments with the necessary space to expand their operations and comply with current operational standards; 3) allow departments to reorganize locations within the building, enabling staff and patients to travel more efficiently within the facility and meet current operational guidelines; and 4) allow off-campus departments to relocate to the Fort Harrison VAMC, which would enable VA to terminate off-campus leases and save approximately $800,000 in annual lease payments.
- Structurally retrofitting the administration building (Building 141), dietetics building (Building 150), main hospital building (Building 154) and the outpatient building (Building 154A) to correct seismic building code deficiencies. Retrofitting would include the demolition of the interiors of the buildings and the installation of the structural upgrades and new mechanical systems to the building interiors. Following the completion of the upgrades, the building interiors would be redesigned and constructed to meet the current and future anticipated operational needs of the buildings. Approximately 221,800 BGSF would be seismically corrected and renovated.
- Bracing/securing mechanical, electrical, and plumbing utilities within the connecting corridor between Buildings 141, 150, 154 and 154A.
- Constructing a new, approximately 15,700 BGSF, two-story, slab-on-grade, CUP north of Building 154. The existing boiler plant (Building 171) contains a boiler system that supplies steam heat to the medical center buildings. The current boiler plant is insufficient for the forecasted needs of the expanded facility. Deficiencies were also identified in the boiler plant requiring repairs/upgrades for the safe operation of the plant. VA determined that one deficiency could not be corrected. The new CUP would include upgraded steam boilers and a chilled water plant and would be properly sized to meet forecasted heating and cooling demands of the expanded facility. Following the construction and activation of the new CUP, Building 171 would

be deactivated and vacated. Potential future reuse of Building 171 is not as of yet defined and is not part of the Proposed Action.

- Constructing an approximately four-story, slab-on-grade, 660-space parking garage north of Building 154A. The new parking garage would 1) correct the current parking space deficit at the campus; 2) replace parking spaces lost from the proposed building addition and CUP; and 3) allow more parking spaces, including Americans with Disability Act-accessible parking spaces, to be closer to the main building entrance. Prior to constructing the building addition and structures, a temporary asphalt-paved parking lot with concrete curb and gutter would be installed in the northern portion of the campus to provide parking during construction.
- Infrastructure upgrades to support the proposed development, including but not limited to the installation, relocation, and removal/upgrade and/or installation of campus utilities and roads, as necessary, based on the final design.

Figure 2-1 identifies the locations of the current Fort Harrison VAMC campus buildings. Figure 2-2 depicts the general locations of the proposed new CUP, parking garage and Building 154 addition.

Prior to construction, VA would obtain all applicable, required federal, state, and local permits for the Proposed Action projects from the appropriate government authorities. As a federal agency conducting a project on land owned by the federal government, VA is not subject to State of Montana or Lewis and Clark County regulations and permitting requirements that are not based on federal statutes. However, VA intends to implement the Proposed Action generally consistent with applicable state and local regulations, where such regulations are consistent with VA's mission and are not in conflict with federal law and VA policy.

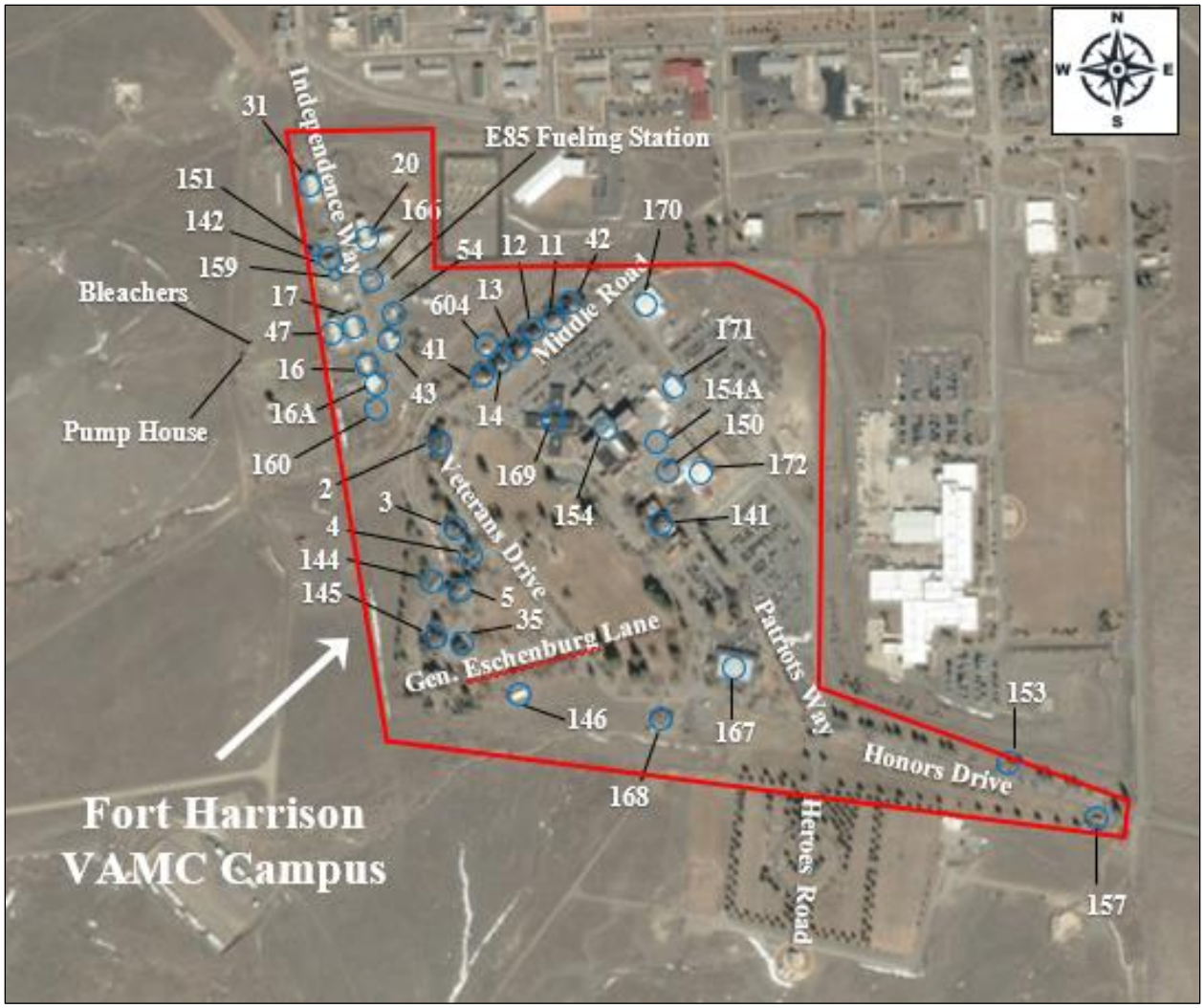

Figure 2-1 Existing Fort Harrison VAMC Campus Configuration

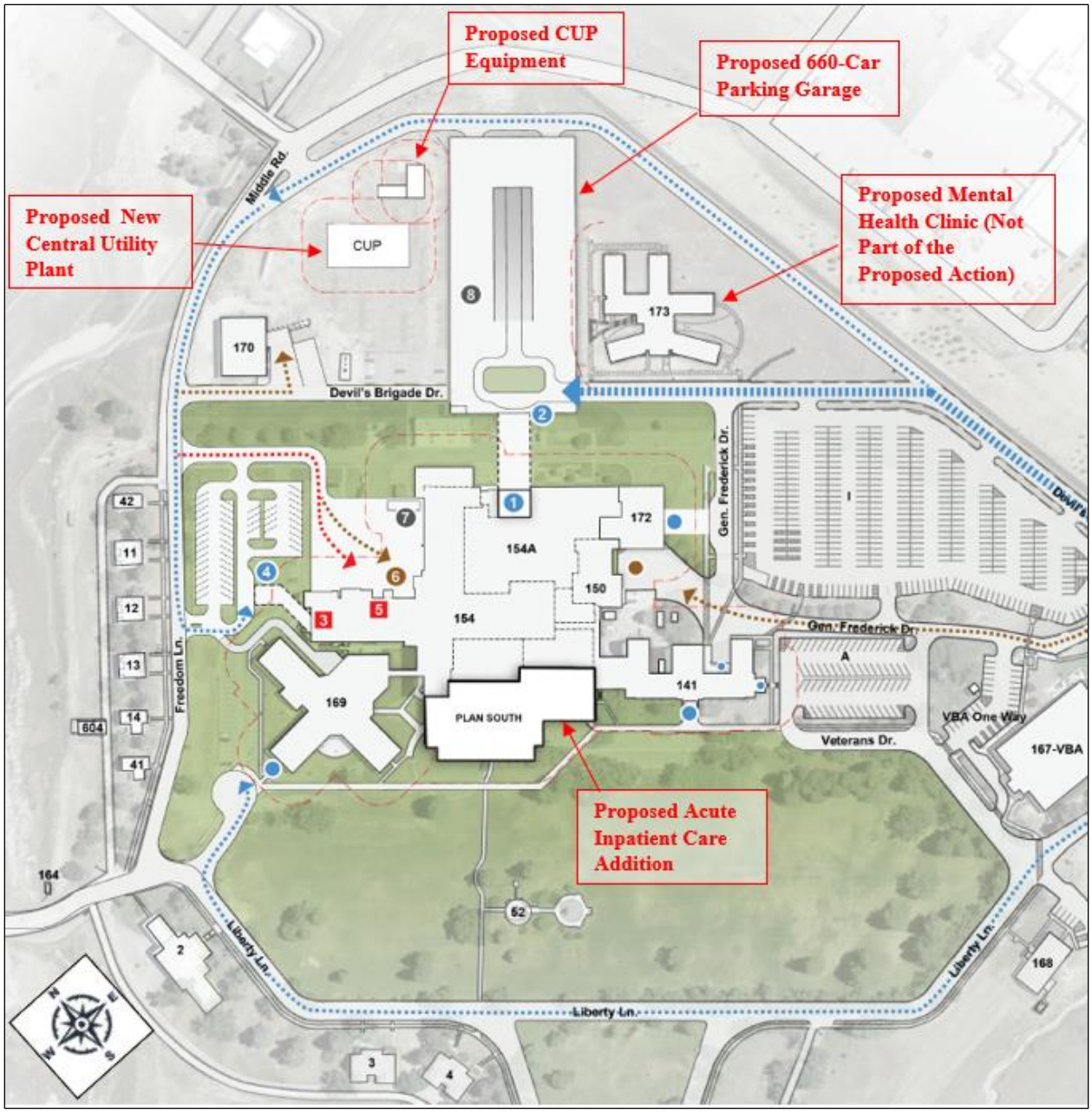

Figure 2-2 Approximate Locations of Proposed CUP, Parking Garage, and Building 154 Addition

As a result of the Proposed Action, VA would terminate three off-campus leases totaling approximately 21,600 BGSF and would relocate these services to the new/renovated VAMC buildings. These leased facilities include:

- Helena Medical Care Collections Fund – 2905 N. Montana Ave, Helena
- Network Authorization Office – 2905 N. Montana Ave, Helena
- Helena Sleep Lab – 2271 Deerfield Lane, Helena

In addition to the Proposed Action projects, VA is proposing to construct a new outpatient mental health building (Building 173) at the Fort Harrison VAMC campus. Building 173 would be approximately 18,000 BGSF and would be located southeast of the proposed parking garage. Additionally, VA is

planning a permit exchange with the U.S. Army to formally document the use and control of six small parcels of land along the boundaries of the Fort Harrison VAMC campus. Upon the completion of the permit exchange, land that is currently used by VA and is generally considered part of the Fort Harrison VAMC campus, but is part of the U.S. Army property, would be formally under the control of VA. Land outside of this area that is currently used by Army/Montana National Guard, but is part of VA's property, would be formally under the control of the U.S. Army. No change in land use would occur; the permit exchange would formalize the boundaries of the Fort Harrison VAMC campus. All of the land would remain owned by the federal government. Figures included in this report reflect the boundaries of the Fort Harrison VAMC campus as currently used by VA and would be under VA control following the planned permit exchange. The Proposed Action does not rely on or include the proposed future development of Building 173 or the proposed land permit exchange with the U.S. Army and both actions will be separately funded and authorized. As such they are not considered as part of the subject Proposed Action. These proposed actions will be addressed under separate NEPA analyses.

2.4.2 No Action Alternative

Under the No Action Alternative, the proposed seismic corrections and functional/operational building improvements for the Fort Harrison VAMC campus would not be implemented. VA would continue to use the four Seismic Program buildings (Buildings 141, 150, 154 and 154A) with no seismic upgrades. The buildings would remain structurally deficient and at risk of significant damage or failure from a major seismic event. This alternative would not improve patient, staff, and visitor safety in the event of a major earthquake and would not enable the facility to return to operation quickly in the aftermath of such a seismic event, and thus would not meet the requirements of VA's Seismic Program.

Additionally, functional and space deficiencies would persist at the Fort Harrison VAMC, which would limit VA's ability to provide health care services to regional Veterans consistent with VA's modern standards of care. The No Action Alternative would not meet the purpose of or need for the Proposed Action. However, the No Action Alternative was evaluated in this EA as required under the CEQ regulations; it also provides a benchmark for comparing potential impacts of the Proposed Action.

2.5 Alternatives Eliminated from Further Consideration

As described in Section 2.3, VA eliminated other initially considered alternatives for addressing the seismic structural deficiencies of Buildings 141, 150, 154 and 154A. Options considered and the reasons for their elimination are summarized below.

- **Relocation to Existing Fort Harrison VAMC Facilities:** Relocation of some or all of the services provided by Buildings 141, 150, 154 and 154A to other the existing Fort Harrison VAMC buildings was not considered a feasible option due to the space limitations, age, and functionality of the existing campus buildings. The Fort Harrison VAMC does not have sufficient vacant building space that would enable this option to be developed.
- **Lease a Newly Constructed Facility:** The lease option assumes that a lessor would build new facilities off-campus to accommodate some or all of the services provided by Buildings 141, 150, 154 and 154A. Leasing off-campus space is an expensive option that would break the continuity of care provided at the Fort Harrison VAMC campus. This option would also be operationally inefficient due to its remoteness from the main Fort Harrison VAMC clinical and ancillary support and would require Veterans and staff to travel from the leased space to the Fort Harrison VAMC campus.
- **Contract Out Veteran Services on a Fee Basis Arrangement:** VA considered contracting out health care services to private health care providers in the Helena area. However, this alternative is not cost-effective and would not guarantee clear access and consistent standard and continuity of care.

In addition, it is unlikely that existing private health care providers in the region have sufficient capacity to meet the health care needs of area Veterans.

- **Acquire an Existing Facility:** VA considered the acquisition and renovation of an existing facility in the Helena area for some or all of the services provided by Buildings 141, 150, 154 and 154A. However, there are no suitable facilities available in the Helena area. In addition, like the lease of a newly constructed facility option, this option would break the continuity of care provided by the Fort Harrison VAMC and would be operationally inefficient.
- **VA/DoD Joint Project:** A VA/DoD joint venture project is not a feasible alternative as there are no DoD facilities in proximity of the Fort Harrison VAMC that would be suitable for this function.

For the reasons stated above, these other alternatives were eliminated from further consideration.

3.0 AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

3.1 Introduction

This Section describes the baseline (existing) environmental, cultural, and socioeconomic conditions at the Fort Harrison VAMC campus (see Figures 1-1 through 1-3 and 2-1) and its general vicinity (the Proposed Action's region of influence), with emphasis on those resources potentially impacted by the Proposed Action. Appendix D contains photographs of the campus and the surrounding area. Under each resource area (Sections 3.2 through 3.16), the potential direct and indirect effects of implementing the Proposed Action and the No Action Alternative are identified. Potential cumulative impacts are discussed in Section 3.17.

In this EA, impacts are identified as either significant, less than significant (that is, impacts that would not be of the context or intensity to be considered significant under the CEQ regulations), or no/negligible impact. As used in this EA, the terms "effects" and "impacts" are synonymous. Where appropriate and clearly discernible, each impact is identified as either adverse or beneficial.

The CEQ regulations specify that in determining the significance of effects, consideration must be given to both "*context*" and "*intensity*" (40 CFR 1508.27):

Context refers to the significance of an effect to society as a whole (human and national), to an affected region, to affected interests, or to just the locality. Significance varies with the setting of the Proposed Action.

Intensity refers to the magnitude or severity of the effect and whether it is beneficial or adverse.

In this EA, the significance of potential direct, indirect, and cumulative effects has been determined through a systematic evaluation of each considered alternative in terms of its effects on each individual environmental resource component.

Resource areas considered in this EA are as follows:

- *Aesthetics*
- *Air Quality*
- *Cultural and Historic Resources*
- *Geology and Soils*
- *Hydrology and Water Quality*
- *Wildlife and Habitat*
- *Noise*
- *Land Use*
- *Floodplains, Wetlands, and Coastal Zone Management*
- *Socioeconomics*
- *Community Services*
- *Solid Waste and Hazardous Materials*
- *Traffic, Transportation, and Parking*
- *Utilities*
- *Environmental Justice*
- *Cumulative Impacts*
- *Potential for Generating Substantial Controversy*

3.2 Aesthetics

The approximately 90-acre Fort Harrison VAMC campus is located in an unincorporated area of Lewis and Clark County, approximately 1.5 miles northwest of the City of Helena. The land surrounding the VAMC campus is part of the Fort William Henry Harrison Military Reservation, which includes institutional buildings to the north and east of the VAMC campus, Montana State Veterans Cemetery and undeveloped grassland to the south of the campus, and a military training area and undeveloped grassland to the west of the campus. The land immediately surrounding the military reservation is rural and mostly

undeveloped. Figure 1-3 is an aerial photograph depicting the Fort Harrison VAMC campus and surrounding area.

The Fort Harrison VAMC campus includes 27 buildings, 17 structures, and 14 enhanced use lease (EUL)/non-VAMC buildings of various ages, sizes, and architectural styles. The mostly grassy former parade ground is located in the central portion of the campus. The main hospital buildings and associated parking lots are located in the northeastern portion of the campus. The northwestern portion of the campus is generally used for VAMC engineering, storage, and maintenance activities. The north-central and southwestern portions of the campus include the EUL quarters and dormitory. The southern portion of the campus includes the Veterans Benefits Administration regional office and the Liberty House.

The northeastern portion of the campus contains the administration building (Building 141), a three- to four-story brick building with a Neoclassical style exterior, constructed in 1932. The northeastern portion of the campus also contains the hospital complex, an amalgamation of one- to four-story brick medical and service buildings, including Buildings 150, 154, and 154A. The complex is connected to Building 141 by a corridor. The main hospital building (Building 154), constructed in 1963, contains numerous additions that have altered the building's shape. The dietetics building (Building 150) was constructed in 1936, and the outpatient building (Building 154A) was constructed in 1976.

The proposed building addition location is currently a paved parking area, road, and grass lawn adjacent to the southwest of Building 154 (three-story tall section) in the central portion of the campus. The proposed CUP and parking garage areas are mostly located within a paved VAMC parking lot northeast of the one-story boiler house building (Building 171) and Building 154A (two-story tall section) in the northeastern portion of the campus.

Lewis and Clark County enforces and controls aesthetics in unincorporated areas of the County through various Chapters of the Lewis and Clark County Ordinances (LCCO) and Lewis and Clark County Zoning Regulations. As a federal agency, VA is not subject to the Lewis and Clark development standards or permitting requirements not based on federal statues; however, it is anticipated that the proposed Seismic Upgrade and Specialty Care Improvements projects would be generally consistent with these requirements.

3.2.1 Effects of the Proposed Action

The Proposed Action would result in minor, long-term adverse aesthetic impacts. The Proposed Action projects would change the appearance of the Fort Harrison VAMC campus and would be visible from the surrounding properties but would not result in an abrupt change to the visual resources of the area. The proposed new buildings would be constructed within areas that are currently developed with minimal encroachment on the campus parade ground and would be consistent with the size and character of the existing campus buildings in the area; the proposed buildings would be no greater than four stories tall. In addition, no visually sensitive off-campus properties are located within the vicinity of the proposed new buildings.

Aesthetics impacts associated with the Proposed Action construction activities would be minor and temporary.

3.2.2 Effects of the No Action Alternative

Under the No Action Alternative, no aesthetic impacts would occur as the Fort Harrison VAMC would continue its current operations with no new construction.

3.3 Air Quality

3.3.1 Ambient Air Quality

The ambient air quality in an area can be characterized in terms of whether it complies with the primary and secondary National Ambient Air Quality Standards (NAAQS). The Clean Air Act (CAA) requires the U.S. Environmental Protection Agency (U.S. EPA) to set NAAQS for pollutants considered harmful to public health and the environment. NAAQS are provided for the following principal pollutants, called "criteria pollutants" (as listed under Section 108 of the Clean Air Act):

- Carbon monoxide
- Lead
- Nitrogen oxides
- Ozone
- Particulate matter, divided into two size classes:
  - Aerodynamic size less than or equal to 10 micrometers
  - Aerodynamic size less than or equal to 2.5 micrometers
- Sulfur dioxide

Areas are designated by the U.S. EPA as "attainment", "non-attainment", "maintenance", or "unclassified" with respect to the NAAQS. Regions in compliance with the standards are designated as attainment areas. In areas where the applicable NAAQS are not being met, a non-attainment status is designated. Areas that have been classified as non-attainment, but are now in compliance, can be re-designated as maintenance status if the state completes an air quality planning process for the area. Areas for which no monitoring data are available are designated as unclassified and are by default considered to be in attainment of the NAAQS.

Information from the Montana Department of Environmental Quality (MTDEQ) and USEPA Green Book internet websites indicates that part of Lewis and Clark County is a designated maintenance area for lead and sulfur dioxide. The maintenance area is located in the vicinity of East Helena, located approximately 7 miles east of Fort Harrison. The previously elevated ambient air levels of lead and sulfur dioxide were primarily associated with the former ASARCO lead smelter in East Helena, which shut down its smelter operations in 2001. The Fort Harrison VAMC is located in an area of full attainment for the NAAQS pollutants.

The general conformity provision of the CAA prohibits the federal government from conducting, supporting, or approving any actions that do not conform to a U.S. EPA-approved State Implementation Plan (SIP), the state's plan for achieving and maintaining compliance with the goals of the CAA. Federal actions with emissions below de minimis levels specified in 40 CFR 93.153(b) are exempt from the general conformity regulations. The general conformity provision does not apply to criteria pollutants that are in attainment of the NAAQS. As the Fort Harrison VAMC is located in an area of full attainment for the NAAQS pollutants, the conformity regulations are not applicable to the Proposed Action.

3.3.2 State and Local Regulations

Federal CAA Sections 111 and 112 allow U.S. EPA to transfer primary implementation and enforcement authority for most of the federal air quality standards to state regulatory agencies through a process called delegation. Pursuant to such delegation, the MTDEQ Air Quality Bureau (AQB) oversees a coordinated statewide program to control present and future sources of emissions of air contaminants through Section 75 – Environmental Protection of the Montana Code Annotated (MCA), Clean Air Act of Montana, Section 75 – Environmental Protection, Chapter 2 – Air Quality, and Title 17 – Environmental Quality of the Administrative Rules of Montana (ARM).

MTDEQ AQB oversees air compliance and enforcement data management and provides required data to U.S. EPA. A Montana Air Quality Permit (MAQP) is required for incinerators and any other sources with the potential to emit regulated pollutants above 5 tons/year of lead or 25 tons/year of any other pollutant. The Fort Harrison VAMC currently operates its equipment under MCA Sections 75-2-204 and 211 and ARM 17.8.740. MTDEQ reissued a Montana Air Quality Permit (MAQP #5198-01) for the Fort Harrison VAMC in January 2023 for emissions associated with campus boilers and equipment for water and steam production. Additional equipment or modification to existing equipment at the Fort Harrison VAMC as part of the Proposed Action, such as the boilers associated with the new CUP, would require a new or revised MAQP from the MTDEQ.

In addition, ARM 17.8.308 (airborne particulate matter) requires measures to control airborne particulate emissions from construction and demolition sites, as well as streets, roads, and parking lots.

Lewis and Clark County assists MTDEQ with local air quality management through the Lewis and Clark County Outdoor Air Quality Regulations (AQR). The Lewis and Clark County AQR apply to all sources of air pollution within the Air Pollution Control District, which includes the southern portion of Lewis and Clark County, the City of Helena, and Fort Harrison. The intent of the Air Pollution Control District is to maintain levels of air pollutants at or below State of Montana ambient air quality standards.

As a federal agency, VA is not subject to Lewis and Clark County air quality standards or permitting requirements not based in federal statutes; however, it is anticipated that the Proposed Action would be generally consistent with these requirements.

3.3.3 Greenhouse Gases and Climate Change

In January 2023, CEQ released revised interim guidance for federal agencies on consideration of greenhouse gas (GHG) emissions and the effects of climate change in NEPA reviews, which describes how federal agencies should consider the effects of GHG emissions and climate change in their NEPA decision-making documents. The guidance indicates that federal agencies should consider both the potential effect of a proposed action on climate change, as indicated by its estimated GHG emissions, and the implications of climate change for the environmental effects of a proposed action. The guidance indicates that the agency analysis should be commensurate with the projected GHG emissions and climate impacts of the proposed action. The 2023 interim guidance does not include a threshold or screening level for GHG emission evaluations. CEQ's December 2014 guidance recommended that agencies consider 25,000 metric tons of carbon dioxide equivalent emissions on an annual basis as a threshold for GHG emissions, below which quantitative analysis of GHG is not recommended.

3.3.4 Sensitive Receptors

Sensitive air quality receptors in the vicinity of the Fort Harrison VAMC campus include:

- Fort Harrison VAMC users.
- Fort Harrison VAMC Freedom Path EUL Apartments located in the northern and western portions of the campus (Buildings 2, 3, 4, 5, 11, 12, 13, 14, 35, 36, 41, and 42).
- Fort Harrison VAMC Liberty House located in the southern portion of the campus (Building 168).
- Montana State Veterans Cemetery located southerly adjacent to the campus.
- Fort Harrison RV Park located adjacent to the north of the campus.
- Tenmile Creek Park located adjacent to the east of the campus entrance, across Williams Street.
- Four residences located approximately 0.25 mile east of the campus, across Williams Street.

Sensitive receptors are depicted on Figure 3-1.

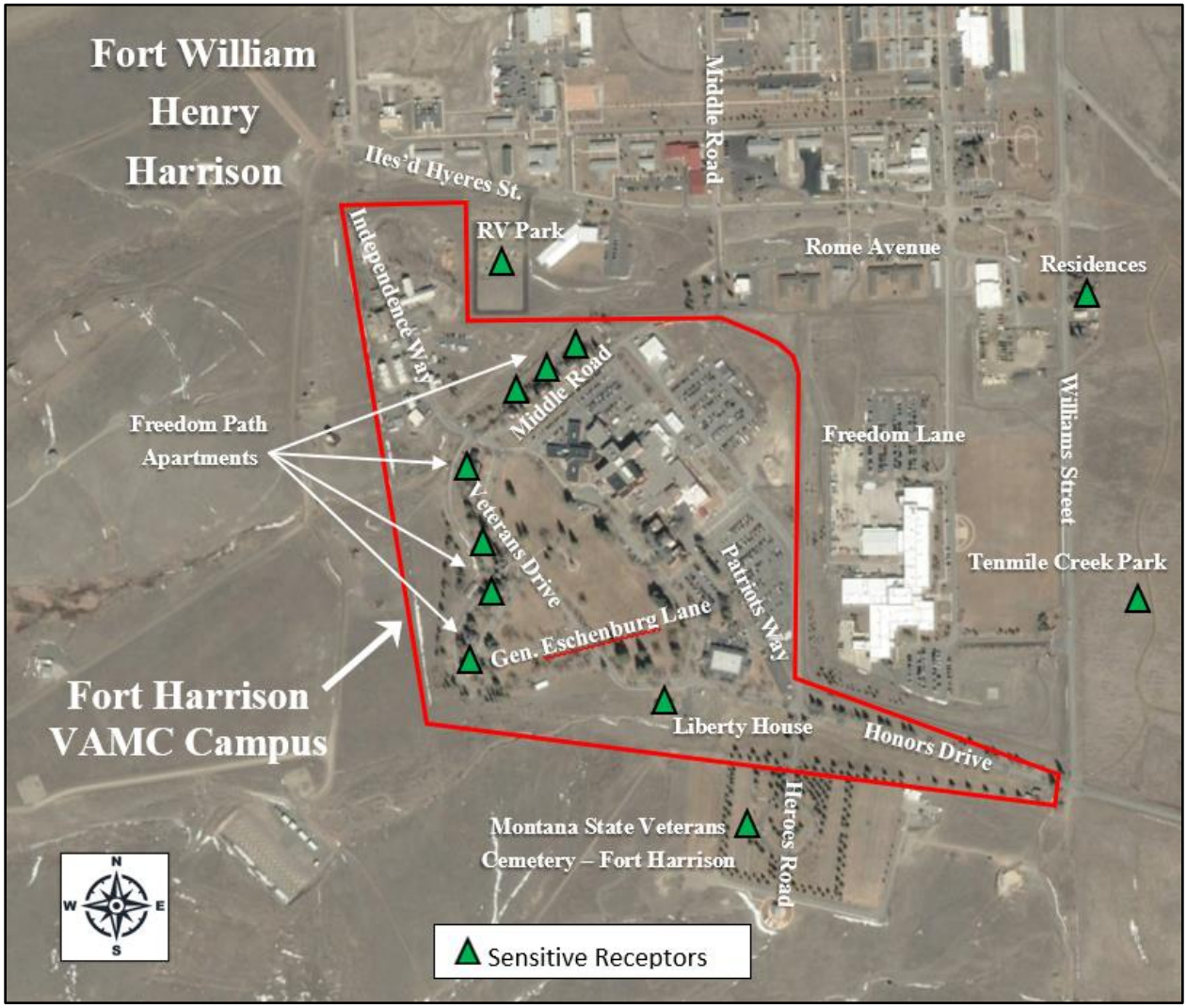

Figure 3-1 Sensitive Receptors Map

3.3.5 Effects of the Proposed Action

Air emissions generated from the Proposed Action would have less-than-significant direct and indirect, short-term and long-term adverse impacts to the existing air quality environment around the Fort Harrison VAMC campus. Impacts would include short-term air emissions as a result of proposed construction activities and long-term increased air emissions associated with the operation of the new, expanded Fort Harrison VAMC campus facilities.

Construction activities would be performed in accordance with federal and state air quality requirements. Construction-related emissions are generally short-term, but may still have adverse impacts on air quality, primarily due to the production of dust. Dust can result from a variety of activities, including excavation, grading, and vehicle travel on paved and unpaved surfaces. Dust from construction can lead to adverse health effects and nuisance concerns, such as reduced visibility on nearby roadways. The amount of dust is dependent on the intensity of the activity, soil type and conditions, wind speed, and dust suppression

activities used. Implementing dust control measures (BMPs) substantially reduces dust emissions from construction. Construction-related emissions also include the exhaust from the operation of construction equipment, including diesel particulate matter (DPM). The use of newer construction equipment with emissions controls and minimizing the time that the equipment is idling (BMPs) reduces construction equipment exhaust emissions. Implementation of BMPs, discussed in Section 4, would minimize these anticipated less-than-significant adverse, short-term construction-related, air quality impacts.

The structures to be renovated at the Fort Harrison VAMC campus contain asbestos-containing building materials (ACM) and may contain lead-based paint (LBP). Identified ACMs would be removed by licensed asbestos abatement contractors in accordance with the federal Clean Air Act National Emission Standards for Hazardous Air Pollutants (NESHAP) and State of Montana requirements prior to building interior demolition and renovation. Asbestos abatement procedures require the removal of ACM with various controls and monitoring to prevent asbestos emissions. The interior demolition and renovation of buildings containing LBP can result in the generation of LBP-containing dust. Standard construction BMPs to control dust would reduce LBP dust emissions during interior demolition/renovation to less-than-significant levels.

The Proposed Action would also result in short-term air emissions from the operation of off-road construction equipment at the campus and on-road construction-related vehicles. Construction criteria pollutant and GHG emissions were preliminarily modeled for each Proposed Action construction project for calendar years between 2024 and 2032 based on assumed project construction phasing and schedules, assumed construction equipment use, and estimated associated construction vehicle traffic. The modeling found that annual construction emissions for all of the proposed construction projects are well below the general conformity de minimis levels (100 tons per year) for criteria pollutants in maintenance areas, although these criteria are not applicable to the Proposed Action as the Fort Harrison VAMC is located within a full attainment area. Estimated GHG emissions are also well below the 25,000 metric tons carbon dioxide equivalent threshold below which CEQ did not recommend quantitative analysis.

The Proposed Action would result in long-term (operational) air quality impacts associated with stationary source emissions from the operation of the new CUP (boilers, generators, etc.) and transportation-related emissions associated with patients, staff, and visitors using the expanded Fort Harrison VAMC campus facilities. The new CUP emissions are estimated to be below the general conformity de minimis levels for criteria pollutants in maintenance areas. VA estimates that approximately 607 additional daily one-way vehicle trips to the Fort Harrison VAMC campus would result from the Proposed Action. Preliminary modeling was conducted to estimate criteria pollutant and GHG emissions from the additional vehicle traffic associated with the completed projects in 2032. The modeling found that annual additional long-term vehicle emissions associated with the Proposed Action would be well below the general conformity de minimis level for criteria pollutants in maintenance areas and the GHG emissions would be well below the 25,000 metric tons carbon dioxide equivalent threshold.

3.3.6 Effects of the No Action Alternative

Under the No Action Alternative, no air quality effects from the Proposed Action would occur. Air emissions from operational activities at the Fort Harrison VAMC campus would remain near current levels.

3.4 Cultural and Historic Resources

Section 106 of the National Historic Preservation Act of 1966 (NHPA) requires federal agencies to consider the effects on historic properties of projects they carry out, assist, fund, permit, license, or approve throughout the country. The process begins when a federal or federally-assisted project has the potential to affect historic properties, if any are present.

The Fort Harrison VAMC campus property has been owned by the federal government since 1892 and was originally part of Fort Harrison, a military reservation used to assemble troops for the Spanish American War and later used by the Army National Guard. In 1894, the original hospital buildings were constructed at the campus. In 1922, VA took possession of the campus and operated a tuberculosis sanitarium at the property. In 1932, a new hospital building (Building 141) was constructed. In 1963, the VAMC was expanded, including the construction of Building 154 (the current main hospital building). Since that time, the Fort Harrison VAMC campus has been transformed to meet the changing health care needs of area Veterans.

In May 2023, Row 10 Historic Preservation Solutions, LLC (Row 10) completed a Built and Cultural Resources Survey (BCRS) of the Fort Harrison VAMC campus. The BCRS included records and literature search of the Montana Historical Society (MHS, the Montana State Historic Preservation Office or SHPO), National Historic Landmarks, and NRHP data, and a pedestrian survey of the campus by an architectural historian.

The BCRS indicated that the entire Fort Harrison VAMC campus was listed in the NRHP as the Fort Harrison Veterans' Hospital Historic District in 2016. The Historic District was listed for its history as a military post and later a VA hospital, with a period of significance between from 1894 to 1967. The Historic District was also listed for its architecture. Twenty-nine Fort Harrison VAMC campus buildings, structures and/or objects were identified as contributing resources to the Historic District. Building 141 and the central parade ground are contributing resources to the Historic District. Buildings 150, 154, 154A and 171 are not contributing resources to the Historic District.

The BCRS report also noted that there are two archaeological sites at the Fort Harrison VAMC campus. One site includes the entire campus and is associated with the history of the area as former military reservation and later as a Veterans hospital. However, the BRCS noted that no artifacts associated with this archaeological site that meet the criteria for listing in the NRHP have been identified. The second archaeological site is associated with a former golf course that was mostly located south of the campus in the vicinity of the current Montana State Veterans Cemetery, although a small portion of the golf course extended on to the very southern portion of the Fort Harrison VAMC campus. No artifacts meeting the criteria for listing in the NRHP have been identified at this archaeological site either. In 2017, VA completed a study of the archaeological potential of the Fort Harrison VAMC campus. The study determined that some areas of the campus had higher potential to retain archaeological deposits than others. The areas with higher potential to contain archaeological resources include the land surrounding the former fort quarters buildings (current EUL areas), the current engineering section of the campus (northwestern portion of the campus), and the southern portion of campus that formerly contained a portion of the former golf course. Proposed Action construction areas are generally located outside of areas identified as having higher archaeological potential.

3.4.1 Effects of the Proposed Action

The Proposed Action has the potential to adversely affect historic properties. One building that is planned for seismic retrofitting/renovation (Building 141) is a contributing resource to the Historic District. In addition, Buildings 141 and 154 are located along the northeastern side of the historic parade ground, a contributing resource to the Historic District. The seismic retrofitting/renovation of Building 141 would be conducted only within the interior of the building, which no longer retains historic integrity, and would have no effect on the Historic District. The proposed bed tower addition to the southwest side of Building 154 would likely encroach into the parade ground, which would be an adverse effect to the Historic District; however, the level of effect cannot be determined until the design in completed. In addition, Proposed Action construction, particularly excavation activities, has the potential to adversely affect unidentified archaeological deposits. Interior modification of non-contributing Buildings 150, 154 and 154A would not affect historic properties. In addition, construction of the new CUP and parking garage,

located northeast of Buildings 154 and 154A, which would shield the view of the new buildings from the parade ground, would have no adverse effect to historic properties.

On May 11, 2023, VA initiated NHPA Section 106 consultation for the Proposed Action with MHS, the Advisory Council on Historic Preservation (ACHP), Helena-Lewis and Clark County Certified Local Government, Lewis & Clark County Historical Society, Fort William Henry Harrison/Montana Military Museum, Preserve Montana, and federally-recognized Indian tribes identified as having possible ancestral ties to the Fort Harrison VAMC area and Indian tribal organizations consulted during previous projects at the Fort Harrison VAMC campus (Apache Tribe of Oklahoma, Blackfeet Tribal Business Council, Chippewa Cree Business Community, Confederated Salish and Kootenai Tribes of the Flathead Reservation, Crow Tribe of Montana, Fort Belknap Indian Community of the Fort Belknap Reservation of Montana, Fort Peck Tribal Executive Board, Little Shell Chippewa Tribe, Northern Cheyenne Tribal Council, and Shoshone-Bannock Tribes of the Fort Hall Reservation). As part of this effort, VA submitted information regarding the undertaking (Proposed Action), the delineation of the area of potential effects (APE) of the undertaking (the entire Fort Harrison VAMC campus), the identification of historic properties (the findings of the BCRS), and VA's determination of potential adverse effects to historic properties. VA determined the proposed bed tower addition to the south side of Building 154 would likely encroach into the parade ground, which would be an adverse effect to the Historic District; however, the level of effect cannot be determined until the design in completed. Consequently, VA determined that it is appropriate to develop a Programmatic Agreement (PA) to evaluate and address potential historic properties effects as the bed tower addition is designed. A draft PA was included in the consultation package.

On May 22, 2023, ACHP responded, indicating an interest to participate in consultation to develop a PA for the Proposed Action. On July 24, 2023, MHS concurred with VA's delineation or APE, identification of historic properties, and assessment of adverse effects on historic properties.

VA hosted a consultation meeting with the consulting parties on July 19, 2023. Representatives of MHS, ACHP, and Helena-Lewis and Clark County Certified Local Government attended the meeting. VA provided information and answered questions regarding the Proposed Action. Consulting parties provided input regarding the draft PA.

On August 18, 2023, VA submitted the revised draft PA to the Section 106 consultation parties for further review and comment. The Shoshone-Bannock Tribe provided comments on August 21, 2023; MHS provided comments on August 31, 2023; and ACHP provided comments on September 7, 2023. The comments were generally minor. VA accepted the comments and recommendations.

The final PA was fully executed by VA, MHS and ACHP on October 17, 2023. The PA includes project design review by MHS for the Building 154 addition to avoid, minimize, and/or mitigate adverse effects to historic properties. If adverse effects to the parade ground are identified, mitigation may include development of a campus-wide landscape initiative (Cultural Landscape Study and Management Plan). In addition, the PA requires archaeological monitoring during ground disturbing activities to ensure proper handling of any archaeological resources. With the implementation of the PA stipulations, cultural resources impacts would be less than significant.

3.4.2 Effects of the No Action Alternative

Under the No Action Alternative, the Proposed Action demolition and construction activities would not occur and there would be no cultural resources impacts.

3.5 Geology and Soils

The Helena, Montana U.S. Geological Survey (USGS) Topographic Quadrangle (dated 2001) indicates the Fort Harrison VAMC campus is located within the western portion of the Helena Valley, near the base of westerly and southerly located hills/mountains. The campus area slopes to the east with elevations generally ranging from approximately 4,040 feet above mean sea level (amsl) in the western portion of the campus to approximately 3,960 feet amsl in the eastern portion of the campus. The nearest surface water bodies are unnamed ephemeral streams that cross the northern portion of the campus (known as the Mt. Defensa Drainage Ditch) and the southern portion of the campus. The ground surface in the campus area generally slopes down to the east towards Tenmile Creek (elevation 3,900 feet amsl), located approximately 0.75-mile east of the campus. Figure 1-2 depicts the topography of the Fort Harrison VAMC campus and surrounding area.

The USGS *A Tapestry of Time and Terrain* (USGS 2000) indicates that Lewis and Clark County is located in the Northern Rocky Mountains physiographic province of the Rocky Mountain System physiographic region in Montana. The USGS *Groundwater Atlas of the United States* (USGS 1996) indicates the geology of western Montana is extremely complex. Tectonic activity has created basins, uplifts, and faults, and in areas near the Continental Divide, older rocks have been lifted upward and shifted eastward over younger rocks along thrust fault lines.

According to the Montana Bureau of Mines and Geology (MTBMG), the near-surface geology of the Fort Harrison VAMC area consists of gravel formed from alluvial terraces, abandoned channels and floodplains, remnant alluvial fans, and local glacial outwash. Deposits range in size from pebbles to boulders, and include sand, silt, and clay. The underlying bedrock in the campus area consists of sedimentary rocks including argillite, siltite, quartzite, sandy limestone, calcite, dolomite, and limestone ranging from approximately 2,000 to 8,200 feet thick. The Fort Harrison VAMC campus is not located in an area with known karstification (creation of cavities due to dissolving rock).

The Intermountain Seismic Belt is a belt of seismicity along western Montana (up to 62 miles wide), extending from the Flathead Lake region in the northwest corner of the state to the Yellowstone National Park region where Montana, Idaho, and Wyoming meet. The Centennial Tectonic Belt is a branch of the Intermountain Seismic Belt in the southwestern portion of Montana that extends west into central Idaho. At least eight major active faults are located in the Centennial Tectonic Belt. According to MTBMG, the last destructive earthquake in Montana occurred approximately 40 years ago; however, small earthquakes are common in the region and occur at an average rate of 7 to 10 earthquakes per day.

Fort Harrison VAMC is in a seismically-active area of the Intermountain Seismic Belt. As previously noted, a 1935 earthquake centered approximately seven miles from the campus damaged ten campus buildings. In addition, a 5.8 magnitude earthquake occurred in 2017 near Lincoln, Montana, approximately 35 miles northwest of Fort Harrison VAMC. The earthquake effects were felt at the Fort Harrison VAMC campus.

The USGS Quaternary Faults Map internet application (in conjunction with the USGS Quaternary Faults and Seismicity in Western Montana map) indicates the closest mapped active fault to the Fort Harrison VAMC campus is the Fort Harrison Class A fault, located approximately 1,000 feet south of the campus. Ten additional known faults are mapped within approximately 20 miles of the campus.

Fort Harrison, Montana is identified on the FEMA Earthquake Hazard Map for the Western U.S. as being located within an area near several active seismic faults, with a moderately high potential for ground shaking. Buildings in this earthquake hazard area are subject to the IBC Seismic Design Class C (may experience strong shaking) requirements. VA's Office of Facilities Planning also characterizes Fort Harrison as being located within an area of moderately high seismic activity (Figure 1-4).

The U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) Web Soil Survey indicates that the soils at the campus consist of Sappington-Musselshell gravelly loams (2 to 8 percent slopes) and Musselshell-Crago complex (2 to 8 percent slopes). The Sappington series consists of well-drained soils that are formed from coarse, loamy alluvium. The Musselshell series consists of well-drained soils that are formed from coarse, loamy alluvium and coarse, loamy slope alluvium derived from limestone. The Crago series consists of well-drained soils that ares formed from gravelly alluvium derived from limestone, gravelly colluvium derived from limestone, and gravelly slope alluvium derived from limestone. The Fort Harrison VAMC campus soils are shown on Figure 3-2.

Terracon Consultants, Inc. (Terracon) completed a geotechnical investigation for the Fort Harrison VAMC campus in 2018. Six soil borings were conducted during the geotechnical investigation in the areas north and northeast of Building 154. General subsurface stratigraphy encountered in the borings included fill material (sand and gravel) to a depth up to 6 feet below ground surface (bgs), underlain by variable layers of sandy clay, silty sand, sandy gravel, and clay to a depth of approximately 60 feet bgs. Volcanic ash was present in the deep soil boring from 60 to 96 feet bgs and was underlain by weathered limestone.

Figure 3-2 Soils Map

3.5.1 Prime and Unique Agricultural Land Soils

Prime and unique farmland soils are protected under the Farmland Protection Policy Act (FPPA). The intent of the FPPA is to minimize the extent to which federal programs contribute to the unnecessary or irreversible conversion of farmland soils to non-agricultural uses. The FPPA also ensures that federal programs are administered in a manner that, to the extent practicable, will be compatible with private, state, and local government programs and policies to protect farmland. The USDA NRCS is responsible for overseeing compliance with the FPPA and has developed the rules and regulations for implementing the Act.

According to the USDA NRCS Web Soil Survey, all of the campus soils are classified as farmland of local importance. However, the majority of the Fort Harrison VAMC campus, including the primary Proposed Action construction area, is located with an area identified by the U.S. Census Bureau as an "urbanized area" as is, therefore, exempt from the FPPA.

3.5.2 Effects of the Proposed Action

The Fort Harrison VAMC campus is located within an area near several active seismic faults, with a moderately high potential for ground shaking. The Proposed Action would rectify existing seismic deficiencies for four primary buildings at the Fort Harrison VAMC campus that do not meet current seismic building standards and are at risk for significant damage or failure from a seismic event. The Proposed Action would have a significant long-term beneficial effect of mitigating existing seismic hazards at the campus.

Less-than-significant impacts to soils are anticipated. No major changes to topography or drainage would occur on the Fort Harrison VAMC campus due to the Proposed Action. The Proposed Action construction projects would be designed in concert with the current campus topography. It is anticipated that minor cutting and filling would be required to establish relatively level areas for the construction of buildings and maintaining campus drainage patterns; however, no significant cutting or filling would be required.

During construction, less-than-significant, direct and indirect, short-term soil erosion and sedimentation impacts would be possible as the proposed buildings and other project components are constructed. Construction would expose and disturb the soil surface and compact the soil. The soil would then be susceptible to erosion by wind and surface runoff. Exposure of the soils during construction has the potential to result in increased sedimentation to stormwater management systems and offsite discharges of sediment-laden runoff. However, such potential adverse erosion and sedimentation effects would be prevented through utilization of appropriate BMPs (Section 4) and adherence to the terms of an approved MTDEQ Montana Pollution Discharge Elimination System (MPDES) stormwater permit, including the development and implementation of a site-specific Storm Water Pollution Prevention Plan (SWPPP).

Once construction is complete, no long-term erosion and sedimentation impacts would be anticipated. Areas where soils are exposed during construction would be mostly covered with pavement or buildings. Stormwater would be managed through the campus stormwater management system. Additional information regarding stormwater management is provided in Section 3.6.

3.5.3 Effects of the No Action Alternative

Under the No Action Alternative, no construction would occur and there would be no impacts to soil, topography, or geology. However, Buildings 141, 150, 154 and 154A would remain structurally deficient and at risk of significant damage or failure from a major seismic event.

3.6 Hydrology and Water Quality

This section describes the affected environment, regulatory setting, and potential Proposed Action impacts for hydrology and water quality (surface water and groundwater). Wetlands, floodplains, and coastal zones are discussed in Section 3.10.

The Federal Water Pollution Control Act, commonly referred to as the Clean Water Act (CWA), governs the control of water pollution in the U.S. The CWA authorizes the USEPA to regulate point sources that discharge pollutants into waters of the U.S. (WOTUS). USEPA has authorized the MTDEQ Water Quality Division (WQD) to implement the NPDES stormwater permitting program in Montana.

Under section 303(d) of the CWA, states are required to develop and update, every two years, a list of waters that are impaired by one or more pollutants. Impaired waters are those that do not meet Water Quality Standards (WQSs) for their designated use. After identification as impaired, the state creates and prioritizes Total Maximum Daily Loads (TMDLs) to target and implement pollution reduction strategies and watershed plans to improve water quality. MTDEQ oversees the water quality assessment program for the 303(d) listed waterbodies in Montana.

Section 438 of the Energy Independence and Security Act of 2007 (EISA) requires federal agencies to reduce stormwater runoff from federal development projects to protect water resources. Section 438 requires any development or redevelopment of a federal facility with a footprint exceeding 5,000 square feet to maintain or restore, to the extent technically feasible, the predevelopment hydrology of a property with regard to the temperature, rate, volume, and duration of flow.

3.6.1 Surface Waters

No permanent surface waters are located at the Fort Harrison VAMC campus or on the surrounding properties. One ephemeral stream (Mt. Defensa Avenue Drainage Ditch) runs southwest-northeast across the northwestern portion of the campus and one ephemeral stream (southern ditch) runs west-east across the southern portion of the campus. USACE evaluated these ephemeral streams in 2017 and determined that they capture snowmelt and stormwater runoff, flow through the military reservation, and dissipate into grazed fields east of the military reservation with no discernable connection to other ditches or surface waters (see Section 3.10). Fort Harrison VAMC representatives confirmed that the streams/ditches are generally dry except during snowmelt.

Tenmile Creek, located approximately 0.75-mile south and east of the campus, is listed on the 303(d) list for various pollutants.

Guidon Design (Guidon) completed a Hydrology Evaluation for the campus and Proposed Action in July 2023. Stormwater in undeveloped and lightly developed portions of the campus generally infiltrates into the soil in unpaved areas or runs off via sheet flow to the two ephemeral streams/ditches. Stormwater in the developed portions of the campus is collected in the campus stormwater management system and discharged to the northern ditch, a stormwater detention basin in the northeastern portion of the campus, or off-campus to the east to the Army/Montana National Guard stormwater system. The paved areas in the northeastern portion of the campus where the proposed CUP and parking garage are planned mostly sheet flow to adjacent unpaved areas. Stormwater in the proposed building addition area that does not infiltrate into unpaved areas is conveyed through piping to the eastern border of the campus and appears to discharge to a drainage ditch on the Army/Montana National Guard property, approximately 100 feet of the campus. This drainage ditch flows north to a retention pond on the Army/Montana National Guard property located northeast of the Fort Harrison VAMC campus. Stormwater in the large surface parking lot in the eastern portion of the Fort Harrison VAMC campus flows to the on-campus detention basin. Overflow from the detention basin, if any, discharges to the drainage ditch on the Army/Montana National Guard property.

The Hydrology Evaluation found that the majority of the existing Fort Harrison VAMC campus stormwater system (all but one stormwater lateral pipe segment) can accommodate a typical 2-year storm event; however, VA design criteria require that the on-campus stormwater management system be fully capable of accommodating a 100-year storm event. The report goes on to note that several stormwater laterals and structures cannot accommodate stormwater flow associated with 10-year and 100-year storms. The report also noted that the on-campus detention pond is undersized to accommodate for 50-year and 100-year storms and that additional on campus detention and related improvements would be required to address stormwater from the proposed parking garage and CUP development.

The Hydrology Evaluation recommended further stormwater analysis during design of the Proposed Action to support inclusion of design and construction of any required system improvements in the Proposed Action to comply with EISA 438 and VA design criteria.

As such the Proposed Action would include further stormwater design analysis and construction of necessary upgrades to comply with these requirements.

3.6.2 Groundwater

According to the *Groundwater Atlas of the United States*, the Fort Harrison VAMC area is underlain by the Northern Rocky Mountains Intermontane Basins Aquifer System. The system primarily consists of unconsolidated deposit aquifers of sand and gravel that overlie upper bedrock aquifers in structural basins. Groundwater from the Northern Rocky Mountains Intermontane Basins Aquifer System can be obtained in most places from wells that are 200 feet deep or less.

Groundwater was not encountered during the 2018 geotechnical investigation at the campus, which included 6 soil borings to depths up to approximately 100 feet below grade. However, the geotechnical report noted that area well log records indicated numerous wells had been completed on the campus over the years with static water levels recorded at depths ranging from 18 to 73 feet bgs.

The Fort Harrison VAMC campus is not located within an U.S. EPA-designated sole source aquifer area, per the U.S. EPA Sole Source Aquifers internet application.

3.6.3 Effects of the Proposed Action

It is not anticipated that groundwater would be used or impacted by the Proposed Action. The proposed expanded Fort Harrison VAMC facilities would be serviced by the City of Helena municipal water system. Groundwater is not expected to be encountered during construction. If shallow groundwater is encountered, appropriate engineering controls would be utilized to ensure there are no adverse impacts to groundwater.

Surface water impacts associated with the construction of Proposed Action would be minor. VA would implement BMPs as described in Section 4 to control construction-related impacts of soil erosion and sedimentation and would provide on-campus stormwater management consistent with EISA Section 438 requirements following the completion of the proposed construction. VA would further evaluate and upgrade the existing stormwater infrastructure, as necessary, as a part of the Proposed Action.

3.6.4 Effects of the No Action Alternative

Under the No Action Alternative, no construction would occur and there would be no change in impacts to hydrology and water quality; however, existing stormwater management system deficiencies would remain.

3.7 Wildlife and Habitat

Helena has a semi-arid climate with long, cold, and moderately snowy winters, hot and dry summers, and short springs and autumns. Precipitation mainly falls in the spring and averages approximately 11.4 inches annually.

The Fort Harrison VAMC campus is located within the western portion of the Helena Valley, near the base of westerly and southerly located hills/mountains. The nearest surface water bodies are unnamed ephemeral streams that cross the northwestern portion of the campus (Mt. Defensa Avenue Drainage Ditch) and the southern portion of the campus.

The Fort Harrison VAMC campus is developed with several VAMC buildings and structures, EUL residential buildings, small and large asphalt-paved parking areas, and grassy and landscaped areas. The central former parade ground area, residential EUL areas west and north of the parade ground, and the area along the entrance drive to the campus contain irrigated, regularly maintained turfgrass and several planted coniferous (spruce and pine) and deciduous trees (cottonwood, ash, American elm, crab apple, and birch). The trees generally line the borders of these areas. Additional trees are present in landscaped areas along some buildings and parking areas. Some of the cottonwood and American elm trees at the campus are more than 75 years old. Unpaved areas northeast of the main hospital buildings (the primary Proposed Action construction area) contain mostly unmaintained grasses and bare soil. The campus is bordered on all sides by the Fort William Henry Harrison Military Reservation (Army/Montana National Guard Base), which includes buildings to the north and east, the Montana State Veterans Cemetery and grassland to the south, and a military training area and mostly unmaintained grassland to the west. The campus and surrounding area support wildlife species associated with rural areas of Lewis and Clark County.

3.7.1 Threatened and Endangered Species

The United States Fish and Wildlife Service (USFWS), Montana Natural Heritage Program (MTNHP), and Montana Department of Fish, Wildlife and Parks (MTFWP) were contacted to identify the potential presence of threatened and endangered species in the vicinity of the Fort Harrison VAMC campus.

A federal Endangered Species Act (ESA) protected species list for the Fort Harrison VAMC campus was obtained through the USFWS Information for Planning and Conservation (IPaC) internet application. The IPaC report indicated the campus is within the range of two federally-listed threatened mammal species (Canada lynx and grizzly bear), one federally-listed proposed threatened mammal species (North American wolverine), and one federally-listed candidate insect species (monarch butterfly). The IPaC report did not identify any critical habitat of protected species on or near the campus.

Table 3-1 provides a summary of the federally-protected species listed in the IPaC report, their habitat requirements, and the potential presence of their required habitat at the campus.

Table 3-1 Federally Listed Species in the Vicinity of the Fort Harrison VAMC Campus (Site)

Species	Federal ESA Status	Habitat	Potential Habitat Present at the Site
Mammals			
Canada Lynx *(Lynx canadensis)*	Threatened	Boreal and montane regions dominated by coniferous or mixed forest with thick undergrowth, but also sometimes enters open forest, rocky areas, and tundra to forage for abundant prey.	No
Grizzly Bear (*Ursus arctos horribilis*)	Threatened	Found mostly in arctic tundra, alpine tundra, and subalpine mountain forests.	No
North American Wolverine (*Gulo gulo luscus*)	Proposed Threatened	Alpine and arctic tundra, boreal and mountain forests (primarily coniferous).	No
Insects			
Monarch Butterfly (*Danaus plexippus*)	Candidate	Breeding areas are mid-successional grasslands containing a significant milkweed component (larvae feed exclusively on milkweed). Adult butterflies need nectar producing plants in bloom for food.	No

The Fort Harrison VAMC campus does not contain the habitat required by the federally listed species identified for the campus vicinity. None of these species are likely to be present at the campus.

The IPaC report also identified 15 Birds of Conservation Concern (BCC) protected under the Migratory Bird Treaty Act (MBTA) and/or the Bald and Golden Eagle Protection Act (Eagle Act) for the campus area. Based on their general habitat requirements, four of the identified MBTA BCC and Eagle Act species (bobolink, Cassin's finch, evening grosbeak, and golden eagle) have the potential to be present in the general campus area. Based on their nesting habitat requirements, Cassin's finch and evening grosbeak may nest at the campus. Evening grosbeaks nest in trees and Cassin's finches typically nest in conifer trees but may also nest in deciduous trees or shrubs. The Fort Harrison VAMC campus contains several trees, mostly within the parade ground, EUL residential, and campus entrance drive areas. Proposed Action construction areas are mostly asphalt-paved or grassy land with minimal trees.

MTNHP provides information on Montana's species and biological communities to inform stakeholders in environmental review, permitting and planning. MTFWP is one of the principal data source agencies for MTNHP. On April 4, 2023, MTNHP provided an Environmental Summary Report (ESR), which identified the documented and potential occurrence of federally protected species and state species of concern/potential concern within a one to two-mile radius of the Fort Harrison VAMC campus.

Montana Species of Concern (SOC) are considered at risk due to declining populations, threats to their habitats, and/or restricted distribution. Montana Potential Species of Concern (PSOC) are species for which limited information suggests potential vulnerability. The SOC and PSOC designations are based on

the Montana Status Rank for the purpose of conservation but are not statutory or regulatory classifications. Montana does not have a list of state-protected species. Montana Special Status Species (SSS) are species for which a legal protection is in place, such as under the Eagle Act, that are not otherwise identified as a Montana SOC or PSOC.

The MTNHP ESR listed 26 species (23 SOC, 2 PSOC, and 1 SSS) as previously observed in the vicinity of the campus. Based on their habitat requirements obtained from the NatureServe Explorer and Montana Field Guide internet applications, the Fort Harrison VAMC campus contains potential habitat for 6 of the 26 SOC, PSOC and SSS species. These species include one mammal (black-tailed prairie dog), two bats (little brown myotis and spotted bat), and three birds (Cassin's finch, evening grosbeak, and loggerhead shrike).

Suitable habitat for the black-tailed prairie dog (open grassland areas) was identified in some of the unmaintained grassy areas that are generally located near the perimeter of the campus. A prairie dog colony was relocated from the northeastern portion of the campus, approximately 250 feet east of Building 170, in 1998. Prairie dogs were also relocated from the adjacent Montana National Guard Base, north of the campus, in 1998. However, there are currently no known prairie dogs or prairie dog burrows at the campus.

The campus provides marginal foraging habitat for spotted bats (open spaces in a wide variety of habitats); however, this species roosts near cliffs, which are not present in the campus area. The campus also provides marginal maternal and summer roosting habitat for little brown myotis (warm sites in buildings and other structures) but does not provide foraging habitat for this species (generally near water). The campus does not provide winter hibernation habitat for either bat species.

Based on their general habitat and nesting habitat requirements, Cassin's finch, evening grosbeak, and loggerhead shrike, which were previously observed in the campus area, may nest at the campus. These birds nest in trees and/or shrubs. The Fort Harrison VAMC campus contains several trees; however, Proposed Action construction areas are mostly asphalt-paved or grassy land with minimal trees.

3.7.2 Effects of the Proposed Action

Based on information obtained through the USFWS IPaC report, the habitat requirements for protected species identified in the campus area, and campus observations, no federally-listed species are likely to be present at the campus or affected by the Proposed Action. No further actions under Section 7(a)(2) of the ESA are required. Montana does not have a list of state-protected species.

Two MBTA BCC species identified in the IPaC report (Cassin's finch and evening grosbeak) and loggerhead shrike (Montana SOC) may nest in trees at the campus. However, little tree/shrub removal is anticipated as part of the Proposed Action, which would occur in areas of the campus that are mostly asphalt-paved or grassy land. It is anticipated that tree/shrub removal would occur outside of the breeding seasons for these species (May 15 through August 10). If tree/shrub removal during the bird breeding season is necessary, a qualified biologist would survey the area for active nests no more than five days prior to tree/shrub removal. If active nests are discovered, a buffer around the nests would be maintained until the young birds have fledged.

Suitable habitat for black-tailed prairie dogs (Montana SOC) is present near the perimeter of the campus, including near the Proposed Action construction areas. No prairie dog burrows were observed or known to remain at the campus. However, based on the former presence of prairie dogs at the campus (1990s), the Proposed Action construction areas would be inspected for active prairie dog burrows prior to ground disturbance. If active prairie dog burrows are discovered, VA would consult with the MTFWP to develop a plan to relocate prairie dogs that could be impacted by the Proposed Action construction activities.

With the implementation of these management and avoidance measures, wildlife and habitat impacts associated with the Proposed Action would be less than significant.

3.7.3 Effects of the No Action Alternative

Under the No Action Alternative, no impacts to biological resources would occur.

3.8 Noise

The existing noise environment at the Fort Harrison VAMC campus is dominated by vehicle traffic/parking, delivery/service trucks, mechanical equipment, and routine landscaping and maintenance at the campus. Off-site noise sources in the campus vicinity include vehicle traffic and general operational noise at the adjacent Army/Montana National Guard Base, noise from military training exercises at the adjacent military training area (military helicopters, gun ranges, etc.), and vehicle traffic on Williams Street. A helicopter pad at the National Guard Base, located approximately 300 feet north of the campus entrance drive, and a small grass/gravel runway at the National Guard Base, located approximately 1,300 feet northwest of the VAMC campus, also have occasional helicopter and small aircraft landing/take off noise. No other notable noise-generating sources are present in the immediate vicinity of the campus. Other than military training noises at the National Guard Base, noise levels in the VAMC campus vicinity are typical of those in a rural area.

Daytime noise levels in this type of setting typically range from approximately 50 dBA to 65 dBA or more, based on proximity to noise-generating sources, such as roads and mechanical equipment. Higher day time noise levels occur as a result of landscaping and other maintenance operations. However, these noise sources are intermittent and of short duration. Nighttime noise levels are typically approximately 10 dBA lower than daytime noise levels.

3.8.1 Sensitive Receptors

Sensitive receptors are land uses for which there is a sensitivity to noise, such as residences, schools, hospitals, libraries, churches, nursing homes, auditoriums, playgrounds, and parks. Sensitive noise receptors in the vicinity of the Fort Harrison VAMC campus are identified in Section 3.3.4 and depicted on Figure 3-1.

3.8.2 Effects of the Proposed Action

The proposed Seismic Upgrade and Specialty Care Improvements projects would have temporary (short-term) impacts to the existing noise environment due to construction activities. Noise generating sources during construction would be associated primarily with standard construction equipment and construction equipment and material transportation. These increased noise levels could directly affect the identified sensitive receptors and neighboring areas.

Construction activities generate noise by their very nature and are highly variable, depending on the type, number, and operating schedules of equipment. Construction projects are usually executed in stages, each having its own combination of equipment and noise characteristics and magnitudes.

Construction activities would include excavation for the new foundations for the parking garage, CUP and Building 154 addition; installation of the foundations; construction of the building shells and the exterior façades; complete interior build out; utility installation; paving; and landscaping. Construction activities for the seismic retrofit and renovation of Buildings 141, 150, 154 and 154A would be conducted mostly within the interiors of the buildings and would include the demolition of ceilings, interior walls

and flooring; the installation of structural sheathing, concrete shear walls, and other seismic upgrades; and the installation of new interior walls, ceilings, and flooring.

Construction activities are expected to generally be typical of other similar construction projects and would include mobilization, site preparation, excavation, placing foundations, utility development, heavy equipment movement, and paving. The most prevalent noise source at typical construction sites is the internal combustion engine. General construction equipment using engines includes, but is not limited to: heavy, medium, and light equipment such as excavators; roller compactors; front-end loaders; bulldozers; graders; backhoes; dump trucks; water trucks; concrete trucks; pump trucks; utility trucks; cranes; and lube, oil, and fuel trucks. Based on preliminary geotechnical information, it is anticipated that deep foundations would be required for the Building 154 addition, which could be installed as drilled caissons or driven piles. Pile driving would create higher levels of noise and vibration, which would be noticeable by nearby receptors. However, pile driving, if conducted, would be completed during a small part of the construction (anticipated within 30 days).

Peak noise levels vary at a given location based on line of sight, topography, vegetation, and atmospheric conditions. Peak noise levels would be variable and intermittent because each piece of equipment would only be operated when needed. However, peak construction noise levels would be considerably higher than existing noise levels. Relatively high peak noise levels in the range of 93 to 108 dBA would occur on the active construction site, decreasing with distance from the construction areas. Generally speaking, peak noise levels within 50 feet of active construction areas and material transportation routes would most likely be considered “striking” or “very loud”, comparable to peak crowd noise at an indoor sports arena. At approximately 200 feet, peak noise levels would be loud - approximately comparable to a garbage disposal or vacuum cleaner at 10 feet. At 0.25-mile, construction noise levels (74 dBA) would generally be quiet enough so as to be considered insignificant, although transient noise levels may be noticeable at times. Table 3-2 presents peak noise levels that could be expected from a range of equipment during proposed construction activities.

Table 3-2 Peak Noise Levels Expected from Typical Construction Equipment

Source	Peak Noise Level (dBA, attenuated)							
	Distance from Source (feet)							
	0	**50**	**100**	**200**	**400**	**1,000**	**1,700**	**2,500**
Heavy Truck	95	84-89	78-93	72-77	66-71	58-63	54-59	50-55
Dump Truck	108	88	82	76	70	62	58	54
Concrete Mixer	108	85	79	73	67	59	55	51
Jack-hammer	108	88	82	76	70	62	58	54
Scraper	93	80-89	74-82	68-77	60-71	54-63	50-59	46-55
Bulldozer	107	87-102	81-96	75-90	69-84	61-76	57-72	53-68
Generator	96	76	70	64	58	50	46	42
Crane	104	75-88	69-82	63-76	55-70	49-62	45-48	41-54
Loader	104	73-86	67-80	61-74	55-68	47-60	43-56	39-52
Grader	108	88-91	82-85	76-79	70-73	62-65	58-61	54-57
Pile driver	105	95	89	83	77	69	65	61
Forklift	100	95	89	83	77	69	65	61
Worst-Case Combined Peak Noise Level (Bulldozer, Jackhammer, Scraper)								
Combined Peak Noise Level	**Distance from Source (feet)**							
	50	**100**	**200**	**¼ Mile**	**½ Mile**			
	103	97	91	74	68			

Source: Tipler 1976

Combined peak noise levels, or worst-case noise levels when several loud pieces of equipment are used in a small area at the same time, are expected to occur rarely during the project. However, under these circumstances, peak noise levels could exceed 90 dBA within 200 feet of the construction areas, depending on the equipment being used.

Although noise levels would be quite loud in the immediate area, the intermittent nature of peak construction noise levels would not create the steady noise level conditions for an extended duration that could lead to hearing damage. Construction workers would follow standard Federal Occupational Safety and Health Administration (OSHA) requirements to prevent hearing damage.

Much of the Fort Harrison VAMC campus would be directly or indirectly affected by the Proposed Action construction projects as a result of building construction, road construction, utility installation/replacement, and material/equipment transportation and storage. However, the three areas where new buildings would be constructed are anticipated to have the highest and most pervasive construction noise levels. A composite of the three building construction areas was used as the noise generating source areas to estimate worst-case peak noise levels from the Proposed Action construction activities (Figure 3-3). Noise contours depicted on Figure 3-3 illustrate the estimated peak construction noise levels at varying distances from the primary construction areas.

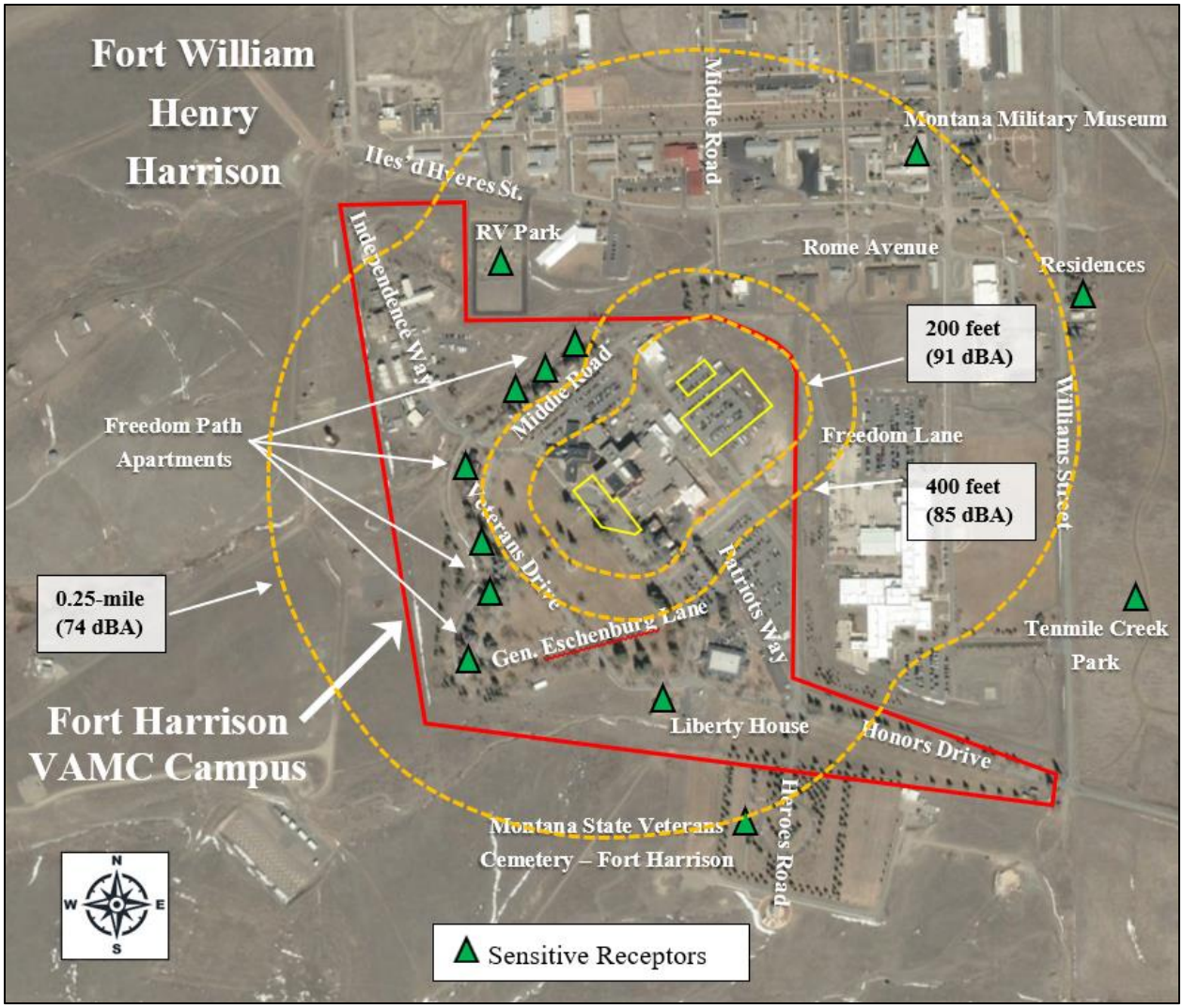

Figure 3-3 Estimated Peak Construction Noise Level Contour Map

Areas that could be most affected by noise from construction are those closest to the construction footprint, including the remainder of the Fort Harrison VAMC campus (including the Freedom Path Apartments and Liberty House), the Montana State Veterans Cemetery, the Fort Harrison RV Park, and the Montana Military Museum (see Figure 3-3). Indoor noise levels would be expected to be 15-25 decibels lower than outdoor levels. In addition, BMPs, described in Section 4, would reduce temporary construction noise impacts.

Indirect impacts include noise from workers commuting and material transport. Area traffic volumes and noise levels would increase as construction employees commute to and from work at the project area, and delivery and service vehicles (including trucks of various sizes) transit to and from the site. Persons in the project area would experience temporary increases in traffic noise during day-time hours. These effects are not considered significant because they would be temporary, intermittent, and generally similar to existing traffic noise levels in the area.

No notable additional long-term operational noise impacts would be associated with the proposed Seismic Upgrade and Specialty Care Improvements projects. The Fort Harrison VAMC campus would continue to be used for medical and administrative support functions with dedicated parking areas, similar to its existing uses. No significant new noise-generating activities or operations would be conducted at the Fort

Harrison VAMC campus. A minor increase in vehicle traffic is expected with the operation of the expanded Fort Harrison VAMC facilities; however, noise levels associated with vehicle traffic are anticipated to be similar to current conditions at the campus.

3.8.3 Effects of the No Action Alternative

Under the No Action Alternative, the noise environment surrounding the Fort Harrison VAMC campus would not change. The Fort Harrison VAMC campus would continue its current operations.

3.9 Land Use

The Fort Harrison VAMC campus includes numerous buildings of various ages, sizes, and architectural styles. The mostly grassy former parade ground is located in the central portion of the campus. The main hospital buildings and associated parking lots are located in the northeastern portion of the campus. The northwestern portion of the campus is generally used for VAMC engineering, storage, and maintenance activities. The north-central and southwestern portions of the campus include the EUL quarters and dormitory. The southern portion of the campus includes the Veterans Benefits Administration regional office and the Liberty House.

The land surrounding the campus is part of the Fort William Henry Harrison Military Reservation, which includes institutional buildings to the north and east of the campus, Montana State Veterans Cemetery and undeveloped grassland to the south of the campus, and a military training area and undeveloped grassland to the west of the campus. The land surrounding the military reservation is rural and mostly undeveloped.

The Lewis and Clark County Community Development and Planning Department (LCCCDPD) manages zoning in unincorporated Lewis and Clark County. The majority of the Fort Harrison VAMC campus is located within the Fort Harrison Urban Growth Area (FHUGA) Zone District. The western portion of the campus is located within the Fort Harrison Rural Growth Area (FHRGA) Zone District. The areas surrounding the campus area also located within the FHUGA and FHRGA Zone Districts. Zoning designations for the Fort Harrison VAMC campus and surrounding properties are shown on Figure 3-4.

The Proposed Action construction areas are located with the FHUGA Zone District. One of the purposes of this zoning district is to limit the density of residential development to reduce conflicts with adjoining land uses and increase compatibility with the military operations at Fort Harrison. Medical centers and hospitals are permitted uses of FHUGA and FHRGA Zone Districts. FHUGA and FHRGA zoning regulations prohibit the construction of structures within specified areas, Fort Harrison Aircraft Imaginary Surface Areas (FHAISAs), near the military reservation runway and helicopter pad. The FHAISA for the helicopter pad includes the Fort Harrison VAMC campus entrance drive. No portions of the campus are within the FHAISA for the runway. The Proposed Action construction areas are not located within a FHAISA. The FHAISAs are depicted in gray, red and green on Figure 3-5.

Figure 3-4 Area Zoning Map

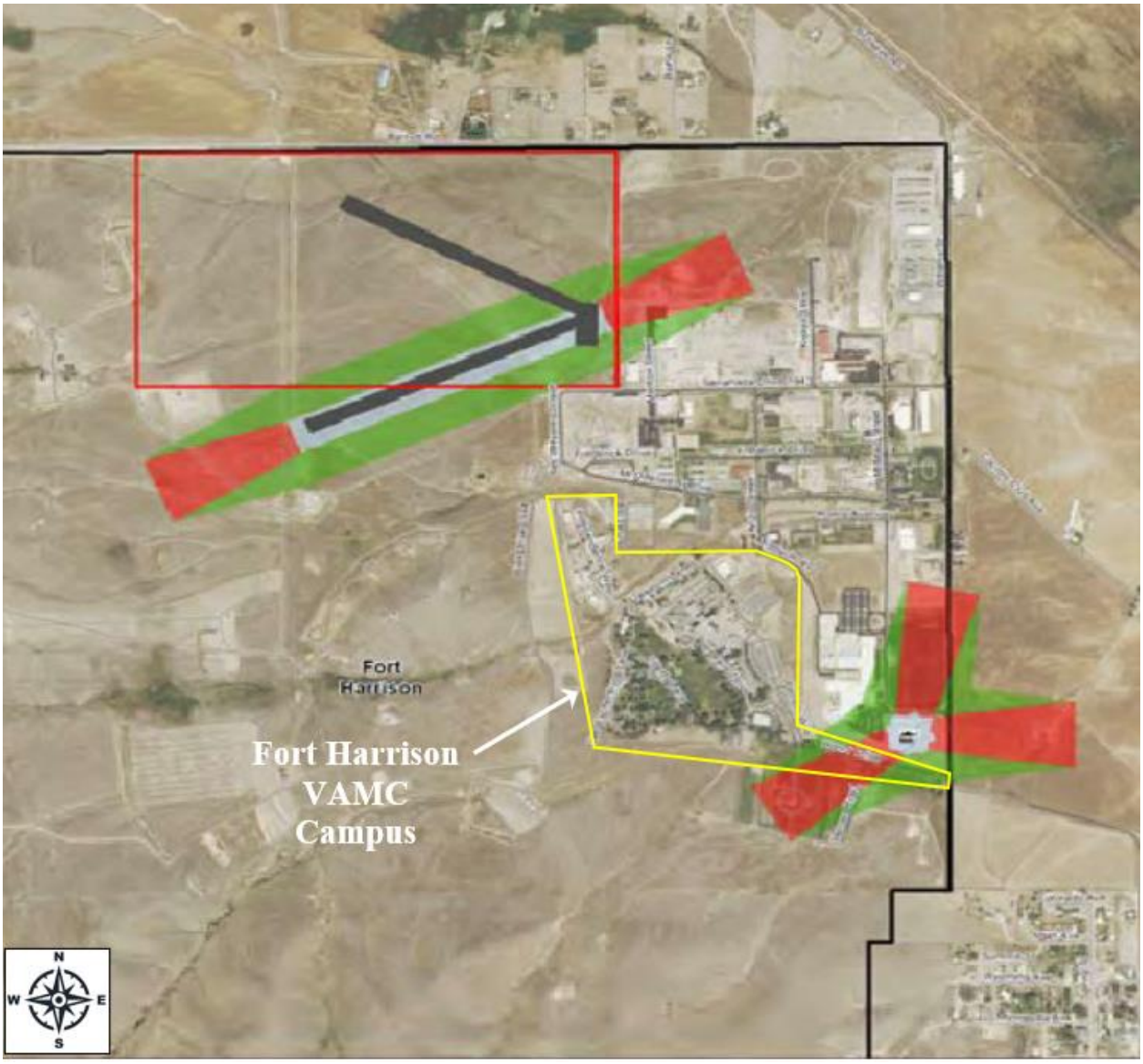

Figure 3-5 Fort Harrison Aircraft Imaginary Surface Areas

3.9.1 Effects of the Proposed Action

The Proposed Action would result in negligible land use effects. The Fort Harrison VAMC has been in operation since 1922. The proposed Seismic Upgrade and Specialty Care Improvements projects would enhance and expand Veteran health care services at the campus; the overall use of the campus would not change. In addition, the Proposed Action would be consistent with local zoning and compatible with surrounding land use. No new structures would be constructed within the FHAISA that overlaps the eastern, entrance drive area of the campus.

Federal actions on federal government-owned property are exempt from local zoning regulations. Although, as a federal agency, VA is not subject to local zoning regulations or restrictions, the Proposed Action projects would be designed and implemented in consonance with Lewis and Clark County development standards, to the extent practicable, to ensure they are consistent with other Fort Harrison

VAMC campus and surrounding area developments. No adverse on-site building function or architecture impacts are anticipated.

3.9.2 Effects of the No Action Alternative

Under the No Action Alternative, no land use impacts would occur.

3.10 Wetlands, Floodplains, and Coastal Zone Management

3.10.1 Wetlands

The USFWS National Wetland Inventory (NWI) Mapper identified two riverine systems at the Fort Harrison VAMC campus (Figure 3-6). The riverine systems correspond to ephemeral streams located along the northern and southern portions of the campus. No other potential wetlands were identified on or near the campus on the NWI map. USACE completed a Jurisdictional Determination (JD) for the campus in December 2017. The JD included a data review and field inspection by USACE. The JD stated that the two riverine systems (referred to as "ditches" in the JD) capture snowmelt and stormwater runoff, flow through the military reservation, and dissipate into grazed fields east of the military reservation, with no discernable connection to other ditches or waters. The ditches were noted to have beds and banks, but no ordinary high-water marks. USACE concluded the ephemeral streams/ditches are isolated waterways and not regulated by USACE under Section 404 of the CWA and/or Section 10 of the Rivers and Harbors Act.

3.10.2 Floodplains

The Federal Emergency Management Agency (FEMA) National Flood Hazard Flood Layer FIRMette internet mapping application was used to determine if the Fort Harrison VAMC campus or surrounding properties are located in designated floodplains. The FEMA Flood Insurance Rate Map (FIRM) indicates the Fort Harrison VAMC campus (Zone X) is not located within 100-year or 500-year floodplains (Figure 3-7). No floodplains are located in the vicinity of the campus.

3.10.3 Coastal Zone

The Coastal Zone Management Act (CZMA) was promulgated to control nonpoint pollution sources that affect coastal water quality. The CZMA encourages states to preserve, protect, develop, and where possible, restore or enhance valuable natural coastal resources such as wetlands, floodplains, estuaries, beaches, dunes, barrier islands, and coral reefs, as well as the fish and wildlife using those habitats. The CZMA requires that federal actions within and outside the coastal zone that could have reasonably foreseeable impacts on land, water, and natural resources of the coastal zone be consistent with the state's federally-approved Coastal Management Program. The State of Montana does not have any designated coastal zones or a CMP.

3.10.4 Effects of the Proposed Action

No wetlands were identified on or adjacent to the Fort Harrison VAMC campus. In addition, the campus and surrounding areas are not located within the 100-year or 500-year floodplains or a designated coastal zone. No impacts to wetlands, floodplains, or coastal zones would occur as a result of the Proposed Action.

3.10.5 Effects of the No Action Alternative

Under the No Action Alternative, no impacts to wetlands, floodplains, or coastal zones would occur.

Figure 3-6 NWI Wetlands Map

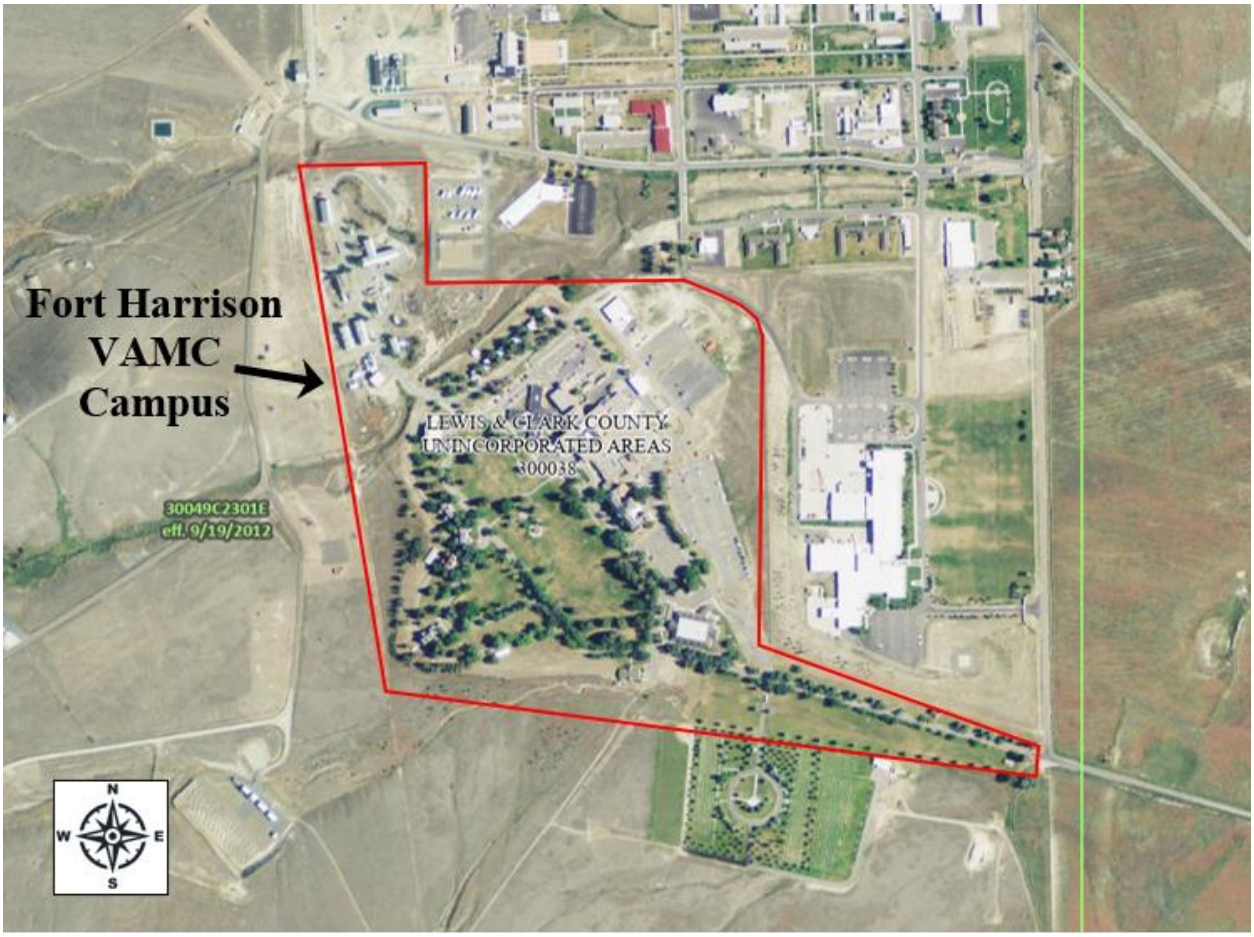

Figure 3-7 FEMA Floodplains Map

3.11 Socioeconomics

The following subsections identify and describe the socioeconomic environment of Lewis and Clark County and the State of Montana. Presented data provide an understanding of the socioeconomic factors that have developed the area. Socioeconomic areas of discussion include the local demographics of the area, regional and local economy, and local housing. Data used in preparing this section were obtained from the U.S. Census Bureau through a QuickFacts report utilizing 2020 U.S. Census information and subsequent U.S. Census Bureau data, and the U.S. Department of Commerce Bureau of Economic Analysis.

Demographics

Lewis and Clark County has a lower minority population than the State of Montana. Minority populations specific to the Fort Harrison VAMC campus area are discussed in Section 3.16 (Environmental Justice). Age distributions and high school graduation rates are generally similar between Lewis and Clark County and the State of Montana (Table 3-3).

Table 3-3 Demographic Data for Lewis and Clark County and Montana

Area	All Individuals (2022 Estimate)	Population Under 18 Years of Age (2022 Estimate)	Population Over 65 Years of Age (2022 Estimate)	Minority (2022 Estimate)	High School Graduates (2022 Estimate)	Veterans (2022 Estimate)
Montana	1,122,867	21.3%	19.6%	14.5%	94.4%	84,430
Lewis and Clark County	73,832	21.3%	19.7%	9.3%	95.6%	6,189
Source: US Census Bureau, QuickFacts (U.S. Census Bureau 2022).						

Employment and Income

Lewis and Clark County has a higher median household income and a lower population below the poverty line than the State of Montana as a whole (Table 3-4). Household incomes specific to the Fort Harrison VAMC campus area are discussed in Section 3.16. Unemployment rates are generally similar between Lewis and Clark County and the State of Montana.

Table 3-4 Regional Income for Lewis and Clark County and Montana

Area	Number of Households	Median Household Income	Population Below Poverty Level	Unemployment Rate (March 2023)
Montana	436,481	$60,560	11.9%	2.3%
Lewis and Clark County	30,011	$66,486	9.0%	2.4%
Source: US Census Bureau, QuickFacts (U.S. Census Bureau 2022) and U.S. Bureau of Labor Statistics, Unemployment Rate in States and Local Areas (U.S. Bureau of Labor Statistics 2022)				

Commuting Patterns

Residents of the Fort Harrison area are largely dependent on personal automobiles for transportation to and from work. No public transportation services the Fort Harrison VAMC campus. The average commuting time in Lewis and Clark County was approximately 17.5 minutes in 2021.

Protection of Children

Because children may suffer disproportionately from environmental health risks and safety risks, EO 13045, *Protection of Children from Environmental Health Risks and Safety Risks*, was introduced in 1997 to prioritize the identification and assessment of environmental health risks and safety risks that may affect children and to ensure that federal agencies' policies, programs, activities, and standards address environmental risks and safety risks to children. This section identifies the distribution of children and locations where numbers of children may be proportionately high (such as schools, childcare centers, family housing) in areas potentially affected by the Proposed Action.

Children are not regularly present within the medical center areas of the Fort Harrison VAMC campus. However, children may be present at the Freedom Path EUL Apartments located in the north-central and southwestern portions of the campus. Additionally, the VA Liberty House located in the southern portion of the campus offers temporary lodging for Veterans and family members. The nearest off-campus residences are located approximately 0.25-mile east and 0.25-mile southeast of the campus. Kessler Elementary School is located approximately one mile southeast of the campus. No other schools are

located within one mile of the campus. No childcare centers or playgrounds are located within one mile of the campus.

3.11.1 Effects of the Proposed Action

The Proposed Action would provide additional temporary construction jobs in the private sector, providing short-term socioeconomic benefit to the area through increased employment and increased spending at local businesses. The Proposed Action would also provide additional long-term employment for the area through the addition of full-time service and professional jobs at the Fort Harrison VAMC. Most importantly, the Proposed Action would result in significant long-term beneficial socioeconomic impacts by addressing seismic hazards associated with existing campus buildings and providing improved and modernized health care facilities and services to regional Veterans.

No significant adverse health or safety risks to children are anticipated to result from the Proposed Action. Children may be present at the Freedom Path Apartments and the Liberty House. However, children would only be present within the medical center areas of the campus as visitors. Construction areas would be secured to prevent unauthorized access by children from the on-campus and nearby off-campus residential areas. The construction contractors would limit and control dust and noise, as discussed in Section 4, thereby minimizing adverse effects to children in the area.

3.11.2 Effects of the No Action Alternative

The No Action Alternative would result in no construction and no increased short-term or long-term economic benefit due to VA's action.

Most importantly, the No Action Alternative would limit VA's ability to address seismic deficiencies in campus buildings and provide life-safety protection to Veterans, employees, and other building occupants, a significant adverse, long-term, direct impact to Veterans in the region.

3.12 Community Services

The Fort Harrison VAMC campus is located in the Helena School District. Kessler Elementary School is located approximately one mile southeast of the campus. No other schools are is located within one mile of the campus.

Saint Peters Hospital and Shodair Childrens Hospital are located approximately five miles southeast of the Fort Harrison VAMC campus. No other major medical facilities are located with the vicinity of the campus.

The Lewis and Clark County Sheriff's Office and Fire District provide police and fire protection and emergency medical services to the campus and its vicinity.

The Lewis and Clark County Public Works Department and the Montana Department of Transportation (MTDOT) provide maintenance to primary roads and bridges in the vicinity of the campus.

Tenmile Creek Park, a 180-acre property with hiking trails, is located east of Williams Road and across Williams Road from the Fort Harrison VAMC campus entrance. Spring Meadow Lake State Park is located approximately 0.8-mile southeast of the campus. No other public recreational facilities are located in the immediate vicinity of the campus.

Capital Transit provides on demand public transportation within the Helena city limits. No public transportation services the Fort Harrison VAMC campus or immediate campus area.

3.12.1 Effects of the Proposed Action

No significant additional load is expected to be placed on the fire or police departments as the result of implementing the Proposed Action. Use of other public or community services would be minor and consistent with the existing Fort Harrison VAMC. The Proposed Action is not anticipated to impede existing public services. Consequently, the Proposed Action is expected to have a negligible impact on local public services.

3.12.2 Effects of the No Action Alternative

Under the No Action Alternative, there would be no impacts to community services.

3.13 Solid Waste and Hazardous Materials

Hazardous and toxic materials or substances are generally defined as materials or substances that pose a risk (through either physical or chemical reactions) to human health or the environment.

TTL Associates, Inc. (TTL) completed a Draft Phase I Environmental Site Assessment (Phase I ESA) for the 90-acre Fort Harrison VAMC campus in March 2023. The Phase I ESA included a site visit, interviews with persons knowledgeable about the campus, a review of historic information, and review of local, state, and federal regulatory information for the campus and surrounding area. The Phase I ESA identified potential environmental concerns and recognized environmental conditions (RECs) associated the campus.

Potential environmental concerns identified within the northeastern portion of the campus where the primary Proposed Action construction activities are planned include three petroleum underground storage tanks (USTs). One 4,000-gallon diesel UST (installed in 1993) is located northeast of Building 158 and fuels the emergency generator in this small building. This UST is located near the northern corner of Building 154A. The other two USTs include one 10,000-gallon heating oil/diesel UST (installed in 2012) located approximately 125 feet north of Building 171 that provides backup fuel for the Building 171 boilers and serves the emergency generator for Building 171 and one 8,000-gallon heating oil/diesel UST (installed in 2010) located south of Building 150 that provides secondary fuel for the boilers located in Building 141. No spills or releases have been reported for any of these USTs. Based on its age (approximately 30 years), the Building 158 UST was considered a REC. Based on their relatively recent installation and modern design, the USTs associated with Buildings 171 and 141 were not considered to be RECs.

In addition to the current USTs, the Phase I ESA identified an area east of Building 170, at the northeastern corner of the campus, where aqueous film forming foam (AFFF) may have been used to assist in the removal and relocation of prairie dogs in the late 1990s. AFFF is a potential source of per- and polyfluoroalkyl substances (PFAS). However, soil sampling conducted in this area in June 2023 did not identify elevated levels of PFAS compounds. Consequently, the possible use of AFFF in this area in the late 1990s is not considered to be a REC.

Figure 3-8 depicts the current UST locations and prairie dog relocation area in the northeastern portion of the campus.

Figure 3-8 Current UST Locations

3.13.1 Effects of the Proposed Action

Implementing the Proposed Action would result in short-term, less-than-significant adverse impacts due to the increased presence and use of petroleum and hazardous substances during construction. An increase in construction vehicle traffic would increase the likelihood for release of vehicle operating fluids (such as oil, diesel, gasoline, and antifreeze) and maintenance materials. As such, a less-than-significant, direct,

short-term adverse impact is possible. Implementation of standard construction BMPs would serve to ensure this impact is further minimized.

No Proposed Action construction is anticipated in the vicinity of the existing UST near Building 158. So long as there is no evidence of a release, this UST can continue to be operated in accordance with MTDEQ requirements. It is anticipated that the UST associated with Building 171 and possibly the UST located near Building 150 would be removed as part of the Seismic Upgrade and Specialty Care Improvement projects. Any USTs removed as part of the Proposed Action would be removed in accordance with MTDEQ requirements, including closure assessment soil sampling. If the closure assessment sampling identifies contamination, further investigation and/or remediation would be conducted, as required by MTDEQ.

The structures to be retrofitted and renovated contain ACM and may contain LBP. Identified ACMs would be removed by licensed asbestos abatement contractors in accordance with the NESHAP and State of Montana requirements prior to building interior demolition and renovation. Asbestos abatement procedures require the removal of ACM with various controls and monitoring to prevent asbestos emissions and worker exposure. The interior demolition and renovation of buildings containing LBP can result in the generation of LBP-containing dust. Standard construction BMPs to control dust (Section 4) would reduce LBP dust emissions during interior demolition/renovation to less-than-significant levels.

No significant adverse long-term impacts during operation of the proposed expanded Fort Harrison VAMC facilities are anticipated. Long-term operational solid wastes, hazardous materials, and medical wastes would be managed in accordance with applicable federal and state laws. Wastes would be collected and properly disposed of by licensed, contracted transportation and disposal companies.

New emergency power generators may be installed as part of the Proposed Action. The generators would likely be fueled by diesel stored in new USTs or aboveground storage tanks (ASTs) located near the generators. In addition, the proposed CUP would use heating oil/diesel stored in one or more USTs as a backup fuel source for the campus boilers. Petroleum storage and handling would be conducted in accordance with the Fort Harrison VAMC's Spill Prevention, Control and Countermeasures (SPCC) Plan and, if applicable, MTDEQ requirements. With these BMPs, potential impacts associated with petroleum storage for emergency power generators and the CUP boilers would be less than significant.

3.13.2 Effects of the No Action Alternative

Under the No Action Alternative, the proposed Seismic Upgrade and Specialty Care Improvements projects would not be implemented and no potential petroleum and hazardous substances impacts associated with the Proposed Action would occur.

3.14 Traffic, Transportation, and Parking

3.14.1 Traffic and Transportation

Traffic in the vicinity of the Fort Harrison VAMC campus is regulated by the Lewis and Clark County Public Works Department and MTDOT. No public transportation is currently provided to the campus area.

Access to the Fort Harrison VAMC campus is from a gated entrance at the southeastern corner of the campus, where the campus entrance road (Honors Drive) intersects with Williams Street. Honors Drive also provides access to the Montana State Veterans Cemetery. Veterans Drive and Patriots Way, internal VAMC campus roads, provide access to campus buildings and parking lots from Honors Drive.

Williams Street is a north-south oriented, two-lane, undivided paved road along the eastern boundary of the campus. Williams Drive intersects with US-12 approximately one mile south of the campus entrance.

Country Club Avenue is a generally east-west oriented, two-lane, undivided road that intersects with Williams Street approximately 0.6-mile north of the campus entrance. Honors Drive is a generally east-west oriented, two-lane, undivided road along the southern portion of the campus. Veterans Drive and Patriots Way are generally northwest-southeast oriented, two-lane, paved campus roads. Roads and intersections near the Fort Harrison VAMC campus are illustrated on Figure 3-10.

Traffic count data available from MTDOT indicates the 2022 annual average daily traffic (AADT) for Williams Street just north of the campus entrance was 1,353 vehicles and south of the campus, just north of US-12, was 3,050 vehicles. The 2022 AADT for Country Club Avenue in the vicinity of the campus was 2,975 vehicles. Table 3-5 provides information regarding campus area roads.

Table 3-5 Fort Harrison VAMC Campus Area Roadways

Type	Route	Direction	Road Width (feet)	Lanes	Average Daily Traffic (year)
Major Collector	Williams Street	north-south	24	2	1,353 to 3,050 (2022)
Major Collector	Country Club Avenue	east-west	24	2	2,975 (2022)
Private (VA owned)	Honors Drive	east-west	24	2	Not Available
Private (VA owned)	Veterans Drive	northwest-southeast	24	2	Not Available
Private (VA owned)	Patriots Way	northwest-southeast	24	2	Not Available
AADT Source: (Montana Department of Transportation 2022) Additional Data Source: Traffic Impact Study, Wells + Associates March 24, 2023					

Wells + Associates completed a Traffic Impact Study (TIS) for the Fort Harrison VAMC campus in March 2023 that identified current traffic conditions in the campus area and modeled projected transportation and parking impacts associated with the proposed Seismic Upgrade and Specialty Care Improvements projects. The TIS evaluated the following intersections:

- Williams Street/Country Club Avenue (1).
- Williams Street/Mount Defensa Avenue (2).
- Williams Street/Honors Drive (Fort Harrison VAMC Access) (3).
- Patriots Way/Heroes Road/Honors Drive/Veterans Drive (4).
- Western Parking Lot/Veterans Drive (5).

Note: Numbers in parentheses denote the intersection numbers on Figure 3-9.

All five intersections are unsignalized. Study intersection locations and configurations are shown on Figure 3-9.

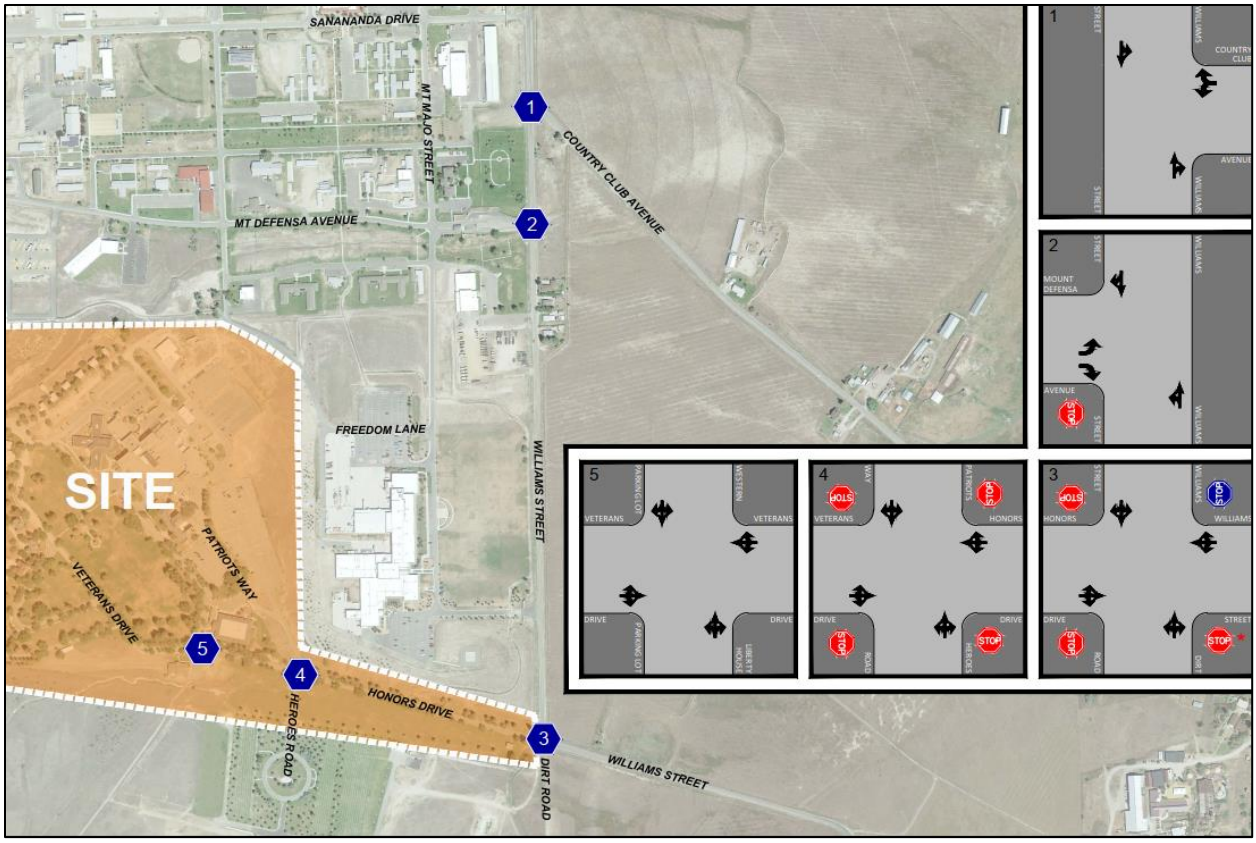

Figure 3-9 Fort Harrison VAMC Campus Traffic Study Intersections

Traffic counts collected during the TIS found that 407 vehicles entered/exited the campus during the a.m. peak hour (approximately 7:00 to 8:00 am) and 335 vehicles entered/exited the campus during the p.m. peak hour (approximately 4:00 to 5:00 pm).

The TIS used site-specific trip generation data developed during a 2018 TIS for the Fort Harrison VAMC campus to estimate the additional vehicle trips that would be generated by the proposed expanded Fort Harrison VAMC facilities when fully operational in 2033. This approach was compared to the Institute of Transportation Engineers (ITE) Trip Generation Manual and found to be more conservative, because it generated a high number of peak hour trips. The 2023 TIS projected approximately 607 additional one-way daily vehicle trips would be generated by the Proposed Action, with approximately 89 additional one-way daily vehicle trips during the a.m. peak hours and 77 additional one-way daily vehicle trips during the p.m. peak hours.

The TIS evaluated each of the five study intersections for existing traffic conditions (2023) and predicted future traffic conditions in 2033 without (no build) and with (build) the proposed expanded Fort Harrison VAMC facilities. The 2033 no build and build evaluations both included a regional traffic growth rate of 2.2 percent per year and the anticipated traffic generated by Building 173, an approximately 18,000 square-foot outpatient mental health building that is planned to be constructed at the campus and operational by 2033. The TIS assessed worst-case peak traffic conditions, during the a.m. and p.m. weekday rush hours, for each scenario. Level of Service (LOS) evaluations of each intersection were conducted in accordance with the Highway Capacity Manual. LOS is a qualitative measure of traffic flow and is represented by letter designations ranging from "A" to "F" with an LOS of A representing the best conditions and an LOS of F representing the worst conditions. The TIS noted that overall intersection

operations of LOS D or better are considered acceptable. The peak hour LOS results for the five studied intersections are summarized in Table 3-6.

As shown in Table 3-6, the existing, background 2033 (no build), and 2033 (build) LOS results are similar for each traffic movement, indicating the new traffic generated by Proposed Action would only have a minor impact on the intersections. All intersections currently operate at LOS A and would operate LOS A or B in the background 2033 (no build) and 2033 (build) scenarios.

Table 3-6 Summary of Peak Hour LOS Results

Approach/ Lane Group	Existing Conditions				Future Conditions without Development				Future Conditions with Development			
	AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
	LOS	Delay (s)	LOS	Delay (s)	LOS	Delay (s)	LOS	Delay (s)	LOS	Delay (s)	LOS	Delay (s)
1. Williams Street/Country Club Avenue - Unsignalized												
EBLR	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0
NBTR	A	8.7	A	9.4	A	8.8	A	9.8	A	8.8	B	10.0
SBLT	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0
Overall TWSC	**A**	**0.9**	**A**	**7.5**	**A**	**0.9**	**A**	**7.9**	**A**	**0.9**	**A**	**8.1**
2. Williams Street/Mount Defensa Avenue - Unsignalized												
EBLR	B	10.4	A	9.8	B	11	B	10.3	B	11.2	B	10.4
NBLT	A	6.1	A	0.4	A	6.2	A	0.4	A	6.1	A	0.3
SBTR	A	0.0	A	0.0	A	0	A	0	A	0.0	A	0.0
Overall TWSC	**A**	**1.4**	**A**	**5.3**	**A**	**1.4**	**A**	**5.5**	**A**	**1.4**	**A**	**5.3**
3. Williams Street/Honors Drive - Unsignalized*												
EBLTR	A	7.9	B	10.1	A	8.1	B	10.5	A	8.3	B	12.0
WBLTR	B	10.3	A	7.3	B	10.9	A	7.5	B	12.6	A	7.7
NBLTR	A	8.3	A	7.3	A	8.4	A	7.4	A	8.6	A	7.7
SBLTR	A	8.4	A	8.5	A	8.7	A	8.7	A	9.1	A	9.0
Overall AWSC	**A**	**9.6**	**A**	**9.4**	**B**	**10.1**	**A**	**9.8**	**B**	**11.4**	**B**	**11.0**
4. Patriots Way/Heroes Road/Honors Drive/Veterans Drive - Unignalized												
EBLTR	A	7.4	A	8.1	A	7.5	A	8.1	A	7.6	A	8.4
WBLTR	A	8.9	A	7.4	A	9.1	A	7.4	B	10.2	A	7.6
NBLTR	A	0.0	A	6.8	A	0.0	A	6.9	A	0.0	A	7.0
SBLTR	A	8.1	A	9.4	A	8.2	A	9.6	A	8.5	B	10.8
Overall AWSC	**A**	**8.8**	**A**	**9.0**	**A**	**9.0**	**A**	**9.2**	**A**	**9.9**	**A**	**10.0**
5. Veterans Drive/Western Parking Lot - Unsignalized												
EBLTR	A	7.1	A	7.2	A	7.1	A	7.2	A	7.1	A	7.2
WBLTR	A	7.0	A	6.9	A	7.0	A	6.9	A	7.0	A	6.9
NBLTR	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0
SBLTR	A	7.4	A	7.4	A	7.4	A	7.4	A	7.4	A	7.4
Overall AWSC	**A**	**7.0**	**A**	**7.3**	**A**	**7.0**	**A**	**7.3**	**A**	**7.0**	**A**	**7.3**

To further evaluate the traffic conditions and potential impacts of the Proposed Action at the study intersections, the TIS reviewed intersection queueing by movement for existing, background 2033 (no build), and 2033 (build) scenarios. No potential queueing/traffic backup concerns were identified at the study intersections for the background 2033 (no build) and 2033 (build) scenarios.

3.14.2 Parking

Parking at the Fort Harrison VAMC campus is distributed across 13 surface-level parking lots, totaling approximately 909 parking spaces. Current Fort Harrison VAMC campus parking areas are depicted on Figure 3-10.

Parked vehicle counts were taken as part of the 2018 TIS. The 2018 TIS found that the total campus parking occupancy peaked at 80 percent during the mid-morning hours. No parking areas reached 100 percent occupancy during the day; however, Parking Lots A, C, D, and M (patient/visitor lots located closest to the primary medical buildings) exceeded 90 percent occupancy (practical capacity) during the morning hours. VA estimates the campus currently operates at a deficit of approximately 50 parking spaces.

Based on VA's parking demand model, the 2023 TIS estimated that the existing Fort Harrison VAMC, plus the addition of Building 173 and the Proposed Action expansion, would result in a parking demand of 1,198 parking spaces, assuming a practical parking capacity of 90 percent. The anticipated demand would be 289 parking spaces more than currently provided at the campus.

The proposed parking garage would add approximately 660 parking spaces. However, the proposed garage and CUP would be located within existing parking lots. The construction of these structures is estimated to result in a loss of approximately 212 existing parking spaces. Therefore, the Proposed Action is anticipated to result in a net gain of approximately 448 parking spaces. A total of approximately 1,357 parking spaces would exist at the campus following the completion of the Proposed Action, exceeding the anticipated future parking demand (1,198 parking spaces).

Figure prepared by Anderson Engineering of Minnesota, LLC in 2018 TIS Report

Figure 3-10 Existing Fort Harrison VAMC Parking Areas

3.14.3 Effects of the Proposed Action

The Proposed Action would have less-than-significant adverse, short-term (construction) transportation and parking impacts. The Proposed Action would also have less-than-significant adverse, long-term (operational) transportation impacts and beneficial long-term parking impacts.

Construction traffic, consisting of trucks, workers' personal vehicles, and construction equipment, would increase traffic volumes in the local area, and could cause delays if this occurred during morning and evening peak periods. However, roads and intersections in the campus area operate efficiently (LOS A or B) even during peak traffic hours; therefore, no significant delays area anticipated. Construction traffic would be minimized by utilizing available staging areas within the 90-acre campus and minimizing interruptions to campus roadways and parking lots during construction.

Following the completion of the Proposed Action construction, public roads in the vicinity of the campus would experience additional traffic; the TIS estimates that 607 additional one-way vehicle trips would be

generated by the operation of the expanded Fort Harrison VAMC facilities. The TIS found that approximately 25 percent of the vehicles entered/existed the campus from Williams Road north of the campus and approximately 75 percent of the vehicles entered/exited the campus from Williams Road south of the campus. The increased traffic volume on Williams Road north of the campus (152 daily one-way trips) and south of the campus (455 daily one-way trips) would represent approximately 11 percent and 15 percent increases over existing daily traffic volumes, respectively. A potential significant traffic impact is defined by 38 CFR 26(26.62)(ii) as "an increase in average daily traffic volume of at least 20 percent on access roads to a site or the major roadway network." The increased traffic on the local roadways accessing the Fort Harrison VAMC campus would be less than the 20 percent threshold that indicates a potential significant traffic impact. In addition, the TIS found that new traffic generated by Proposed Action would only have a minor impact on area intersections. All intersections would continue to operate at LOS A or B in 2033 with the implementation of the Proposed Action. In addition, no potential queueing/traffic backup concerns were identified at the study intersections for the 2033 (build) scenario.

Existing parking lots at the campus would be temporarily closed during construction, a temporary adverse impact. Approximately 212 existing parking spaces would be eliminated as a result of the Proposed Action. However, the proposed parking garage would create approximately 660 new parking spaces, resulting in a net gain of approximately 448 parking spaces. The total number of parking spaces at the campus following the completion of the Proposed Action (approximately 1,357 parking spaces) would exceed the anticipated future parking demand (1,198 parking spaces), eliminating the current parking space deficit. In addition, the parking garage would provide more parking spaces closer to the entrance of the main medical buildings. The Proposed Action would have long-term beneficial parking impacts.

3.14.4 Effects of the No Action Alternative

Under the No Action Alternative, no transportation or parking impacts associated with VA's Proposed Action would occur. The Fort Harrison VAMC would continue to operate at a parking deficit of approximately 50 spaces with an insufficient number of parking spaces near the main medical building, an adverse parking impact.

3.15 Utilities

The Fort Harrison VAMC campus is currently serviced by natural gas, electricity, potable water, sanitary sewerage, and telecommunication utilities. The proposed expanded Fort Harrison VAMC facilities would also be serviced by these utilities. Utility providers to the Fort Harrison VAMC include the following:

- **City of Helena Public Works Department (HPWD)** supplies potable water service and provides sanitary sewer service to the campus.
- **Northwestern Energy/Sage Energy Trading, LLC** supply natural gas to campus. Northwestern Energy owns and operates the supply lines; the natural gas is partially brokered by Sage Energy.
- **Northwestern Energy** supplies electricity to the campus.
- **Lumen/AT&T** provide telecommunication services to the campus.

The Fort Harrison VAMC domestic water system supplies potable water to all campus buildings and provides water for the campus fire hydrants and sprinkler systems. The on-campus system is fed by a VA-owned and operated 500,000-gallon aboveground storage tank (reservoir) located west of the campus that is filled with water from the City of Helena. The City obtains its water from Ten-Mile Reservoir. The campus domestic water system is a MTDEQ Public Water Supply Bureau permitted Public Water System

(MT0000246) and is subject to design, monitoring and reporting requirements to ensure compliance with the federal Safe Drinking Water Act and State of Montana regulations.

The Fort VAMC campus uses water obtained from a well located on the Army/Montana National Guard property for campus irrigation.

The Fort Harrison VAMC has two sets of sanitary sewer lines. One services the small buildings in the northwestern portion of the campus, the other services the remainder of the campus. Both systems flow to the north to the Army/Montana National Guard sanitary sewer lines/system. The combined VAMC/Army National Guard sewage flows to a City of Helena lift station, from which it is pumped to the City's main wastewater treatment plant.

Northwestern Energy provides natural gas service to the Fort Harrison VAMC campus that is partially sourced from/brokered by Sage Energy. The boilers in the current central boiler plant (Building 171) and Building 141 use natural gas as the primary fuel source and heating oil/diesel as the secondary/backup fuel source. Heating oil/diesel provides a redundant fuel source at the campus, allowing campus operations to continue in the event of a natural gas failure or shortage. The VAMC is a large consumer of natural gas in the area. In the event of a natural gas shortage, the fuel source can be switched to heating oil/diesel to reduce natural gas consumption and limit Fort Harrison VAMC's impact on natural gas supply and distribution in the local community.

3.15.1 Effects of the Proposed Action

The Proposed Action would result in an increase in the consumption of utilities, including electricity, natural gas, potable water, and sanitary sewer discharges. A Utilities Identification and Capacity Report (Utilities Report) prepared by S&B Christ Consulting, LLC (SBCC) in June 2023 investigated the current campus utilities and provided a preliminary analysis of their capacities to meet the needs of the Proposed Action. The Utilities Report found that the existing utilities that service the campus appear to have sufficient capacity to meet the increased demand of the Proposed Action. Potable water, natural gas, electricity/power, and telecommunications lines that service the campus were found to be sufficient to meet the needs of the proposed facilities without service upgrades, although some on-campus improvements may be required. In addition, HPWD indicated that the City's off-campus lift station currently has sufficient additional capacity to meet the increased sanitary sewer demands of the proposed facilities. However, upgrades to the on-campus sanitary sewer system were recommended to address existing sanitary flows and provide capacity for the proposed expanded facilities. VA would further evaluate and upgrade the sanitary sewer system, as necessary, as part of the Proposed Action.

No utility service upgrades are anticipated to be required for the Proposed Action. Each utility provider would require a review of detailed design drawings to determine the connection and service requirements. The Proposed Action is not anticipated to require alteration of the existing utility mains or affect off-site utility consumers. Proposed Action utility impacts would be negligible.

The proposed expanded facilities may require modification of Fort Harrison VAMC's current MTDEQ Public Water System permit. VA would consult with the MTDEQ Public Water Supply Bureau to determine the specific permit modification requirements.

3.15.2 Effects of the No Action Alternative

Under the No Action Alternative, the proposed Seismic Upgrade and Specialty Care Improvements projects would not be implemented. Utility use at the Fort Harrison VAMC campus would remain unchanged.

3.16 Environmental Justice

In 1994, EO 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*, was issued to focus attention of federal agencies on human health and environmental conditions in minority and low-income communities and to ensure that disproportionately high and adverse human health or environmental effects on these communities are identified and addressed. The USEPA-developed EJSCREEN, an environmental justice mapping and screening internet application, was used to obtain information regarding minority and low-income populations within a one-mile radius of the Fort Harrison VAMC campus.

The EJSCREEN results indicate the Fort Harrison VAMC campus is located in an area with a lower minority population (9 percent) and lower low-income population (21 percent) than the State of Montana as a whole (15 percent and 32 percent, respectively).

3.16.1 Effects of the Proposed Action

The Proposed Action would have negligible environmental justice effects. The Fort Harrison VAMC campus is located in an area with smaller than average minority and low-income populations and the Proposed Action would have only a minor impact on the residents in the area. During construction, effects on nearby residents, such as through noise and dust, would be limited and controlled through BMPs described in Section 4, thereby minimizing adverse effects to minority and low-income populations within the region of influence.

3.16.2 Effects of the No Action Alternative

Under the No Action Alternative, the proposed Seismic Upgrade and Specialty Care Improvements would not be constructed and there would be no direct environmental justice effects. However, Veterans in the Fort Harrison area, including low-income and minority populations, would continue to be served by seismically-deficient buildings, limiting VA's ability to provide life-safety protection to Veterans, employees, and other building occupants.

3.17 Cumulative Impacts

As defined by the CEQ regulations in 40 CFR Part 1508.7, cumulative impacts are those which "result from the incremental impact of the Proposed Action when added to other past, present, and reasonably foreseeable future actions, without regard to the agency (federal or non-federal) or individual who undertakes such other actions." Cumulative impact analysis captures the effects that result from the Proposed Action in combination with the effects of other actions taken before, during, or after the Proposed Action in the same geographic area.

The approximately 90-acre Fort Harrison VAMC campus is located in an unincorporated area of Lewis and Clark County, approximately 1.5 miles northwest of the City of Helena. The campus is surrounded by the Fort William Henry Harrison Military Reservation, which includes institutional buildings to the north and east of the VAMC campus, Montana State Veterans Cemetery and undeveloped grassland to the south of the campus, and a military training area and undeveloped grassland to the west of the campus. The land immediately surrounding the military reservation is rural and mostly undeveloped.

Several new buildings have been constructed at the Fort Harrison VAMC campus over the last 20 years. The VBA Regional Office (Building 167) and Liberty House (Building 168) were constructed in southern portion of the campus in 2006; the warehouse building (Building 170) was constructed in the northeastern portion of the campus in 2009; the current boiler plant (Building 171) was constructed in 2010; the inpatient mental health building (Building 169) was constructed in the northeastern portion of the campus

in 2011; and the outpatient primary care building (Building 172) was constructed in the northeastern portion of the campus in 2018. In 2017-2018, eleven existing historic buildings located in the north-central and southwestern portions of the campus were converted to EUL Freedom Path Apartments. In association with this development, EUL Building 36 was constructed in 2019.

VA proposes to construct a new approximately 18,000 square-foot outpatient mental health building (Building 173) southeast of the proposed parking garage within the next 5 to 10 years. There are no additional notable development plans for the Fort Harrison VAMC campus at this time.

Fort William Henry Harrison Military Reservation is occupied by various armed service branches, including the Army National Guard, Montana National Guard, and U.S. Naval Reserve. Between 1995 and 2002, several new buildings, structures, and parking lots were constructed at the military reservation adjacent to the campus, including the U.S. Naval Reserve Center and Fort Harrison Fire Station north of the VAMC and the large Fort Harrison Armed Forces Reserve Center east of the campus. Otherwise, there has been no large-scale development in the vicinity of the Fort Harrison VAMC campus in at least the last 20 years.

The portions of the military reservation located west and south of the VAMC campus and the properties surrounding the military reservation are mostly undeveloped land and could be developed in the future. However, no specific development plans for off-campus properties in the Fort Harrison VAMC campus area were identified.

3.17.1 Effects of the Proposed Action

The Proposed Action would result in impacts to the Fort Harrison VAMC campus area as identified throughout Section 3. These include short-term and/or long-term potential adverse impacts to aesthetics, air quality, cultural resources, soil and geology, hydrology and water quality, wildlife and habitat, noise, solid waste and hazardous materials, transportation, parking (short-term only), and utilities. All of these potential impacts are less than significant and would be further reduced through careful coordination and implementation of general BMPs and management measures, and compliance with regulatory requirements, as identified in Section 4. Given the nature of the Proposed Action and the limited recent and potential future large, off-campus development in the Fort Harrison VAMC campus area, no significant cumulative adverse impacts to any of these resource areas are anticipated. Other potential off-campus development in the area of the Fort Harrison VAMC (outside of the military reservation) would be subject to zoning requirements and site plan approval by Lewis and Clark County, which would serve to maintain and control regional, potentially cumulative impacts.

The Proposed Action could have cumulative impacts with respect to other recent and future Fort Harrison VAMC campus projects. Collectively, these projects provide significant beneficial cumulative impact to the health of Veterans in the Fort Harrison area. VA planned the sequencing of campus improvement projects to avoid potential adverse cumulative effects caused by conducting several construction projects the same time. VA would continue to carefully coordinate projects at the campus to minimize impacts to campus operations and the surrounding area. With this coordination, potential cumulative impacts would be minor.

No significant adverse cumulative impacts to the environment induced by the Proposed Action are anticipated within the region. Close coordination between federal and state agencies, Lewis and Clark County, and community representatives would serve to manage and control cumulative effects within the region, including managing regional transportation increases with adequate infrastructure. Implementation of local land use and resource management plans would serve to control the extent of environmental impacts, and continued planning would ensure future socioeconomic conditions maintain the quality of life the area’s residents currently enjoy. Implementation of effective resource management

plans and programs should minimize or eliminate any potential cumulative degradation of the natural ecosystem, cultural, or human environment within the region of influence of the Proposed Action.

3.17.2 Effects of the No Action Alternative

Under the No Action Alternative, no adverse cumulative impacts due to the Proposed Action would occur.

3.18 Potential for Generating Substantial Public Controversy

As discussed in Sections 5 and 6, VA has solicited input from the public and various federal, state, and local government agencies regarding the Proposed Action. Government agencies have provided input; none of the input has identified opposition or controversy related to the Proposed Action. No input was received from the public in response to the scoping notice. VA published and distributed the Draft EA for a 30-day public comment period. No comments of opposition or controversy related to the Proposed Action were received.

4.0 MANAGEMENT, MINIMIZATION, AND MITIGATION MEASURES

This section summarizes the management, minimization and avoidance measures, and mitigation measures (if necessary), that are proposed to minimize and maintain potential adverse effects of the Proposed Action at acceptable, less-than-significant levels.

Per established protocols, procedures, and requirements, VA and its contractors would implement BMPs and would satisfy all applicable regulatory requirements in association with the Proposed Action. These "management measures" are described in this EA and are included as components of the Proposed Action. "Management measures" are defined as routine BMPs and/or regulatory compliance measures that are regularly implemented as part of proposed activities, as appropriate, in western Montana. In general, implementation of such management measures would maintain impacts at acceptable levels for all resource areas analyzed. These are different from "mitigation measures," which are defined as project-specific requirements, not routinely implemented as part of development projects, necessary to reduce identified potentially significant adverse environmental impacts to less-than-significant levels.

The management, minimization, and mitigation measures summarized in Table 4-1 would be included by VA in the Proposed Action to minimize and maintain adverse effects at less-than-significant levels.

Table 4-1 Management, Minimization, and Mitigation Measures Incorporated into the Proposed Action

Technical Resource Area	Measure
Aesthetics	Comply with the development standards of the Lewis and Clark County Ordinances (LCCO) and Lewis and Clark County Zoning Regulations, to the extent practicable.
Air Quality	Use appropriate dust suppression methods (such as the use of water, dust, palliative, covers, and suspension of earth moving in high wind conditions) during onsite construction activities.
	Stabilize disturbed area through re-vegetation or mulching if the area would be inactive for several weeks or longer.
	Implement measures to reduce diesel particulate matter emissions from construction equipment, such as reducing idling time and using newer equipment with emissions controls.
	Comply with the federal Clean Air Act as adopted in MTDEQ air quality regulations. Obtain a new or revised MTDEQ Montana Air Quality Permit for the new campus boilers and equipment.
Cultural and Historic Resources	Comply with the stipulations of the executed Programmatic Agreement (PA) to avoid, minimize, and/or mitigate potential adverse effects to historic properties.
	Should potentially historic or culturally significant items be discovered during project construction, the construction contractor would immediately cease work in the area until VA, a qualified archaeologist, the MHS, and other consulting parties are contacted to properly identify and appropriately treat discovered items in accordance with applicable state and federal laws.

Technical Resource Area	Measure
Geology and Soils	Control soil erosion and sedimentation impacts during construction by implementing erosion prevention measures and complying with the MTDEQ-issued Montana Pollutant Discharge Elimination System (MPDES) permit required under the federal Clean Water Act, including the development and implementation of a site-specific Stormwater Pollution Prevention Plan (SWPPP). The MPDES permit would require stormwater runoff and erosion management using BMPs, such as earth berms, vegetative buffers and filter strips, and spill prevention and management techniques. The construction contractor would implement the sedimentation and erosion control measures specified in the MPDES permit and the SWPPP to protect surface water quality.
Hydrology and Water Quality	Control soil erosion and sedimentation impacts during construction by complying with the MTDEQ MPDES permit.
	Use low impact development practices, to the extent possible, during the Proposed Action design.
	Ensure Fort Harrison VAMC stormwater infrastructure affected by the Proposed Action is upgraded, as necessary, to accommodate a 100-year stormwater event and all other related VA design criteria and requirements.
	Design and construct stormwater system improvements as needed to comply with the requirements of Energy Independence and Security Act Section 438 with respect to stormwater runoff quantity and characteristics.
Wildlife and Habitat	Use native species to the extent practicable when re-vegetating land disturbed by construction to avoid the potential introduction of non-native or invasive species.
	Conduct vegetation clearing between August 11 and May 14 or conduct a survey for active bird nests prior to clearing. If active nests are discovered, maintain a buffer around the nests until the young birds have fledged.
	Inspect construction areas for active prairie dog burrows prior to ground disturbance. If active prairie dog burrows are discovered, consult with MTFWP to develop a plan to relocate prairie dogs that could be impacted by Proposed Action construction activities.
	Use downward facing outdoor lighting.
Noise	Limit, to the extent possible, exterior construction and associated heavy truck traffic to occur between 7:00 a.m. and 7:00 p.m. on Monday through Friday, and between the hours of 8:00 a.m. and 7:00 p.m. on Saturdays and legal holidays.
	Locate stationary operating equipment as far away from sensitive receptors as possible.
	Shut down noise-generating heavy equipment when it is not needed.
	Maintain equipment per manufacturer's recommendations to minimize noise generation.
	Encourage construction personnel to operate equipment in the quietest manner practicable (such as speed restrictions, retarder brake restrictions, engine speed restrictions).
Land Use	Comply with the applicable Lewis and Clark County zoning regulations and development standards, to the extent practicable.
Wetlands, Floodplains, and Coastal Zone Management	None required.

Technical Resource Area	Measure
Socioeconomics	Secure construction areas to prevent unauthorized access by children from nearby residential areas.
Community Services	None required.
Solid Waste and Hazardous Materials	Comply with applicable federal and state laws governing the use, generation, storage, transportation, and disposal of solid and hazardous materials and medical wastes.
	Conduct UST removals, if necessary, in accordance with MTDEQ requirements, including closure assessment soil sampling. If closure assessment sampling identifies contamination, conduct further investigation and/or remediation, as required by MTDEQ.
	Remove asbestos containing materials (ACMs) in accordance with the federal and state requirements prior to building renovation or interior demolition activities.
	Implement dust control measures during interior demolition/renovation to control possible lead-based paint emissions.
	Register, install, and operate new emergency generator and boiler USTs and ASTs in accordance with Fort Harrison VAMC's Spill Prevention, Control and Countermeasures (SPCC) Plan, and MTDEQ requirements, as applicable and to the extent practicable.
Traffic, Transportation, and Parking	Ensure construction traffic does not adversely affect traffic flow on local roadways. Time construction traffic and select transportation routes to minimize transportation impacts, to the extent practicable. If disruptive construction traffic impacts cannot be avoided, notify Lewis and Clark County Public Works Department (LCCPWD) and the public in advance.
	Ensure debris and/or soil is not deposited on local roadways during the construction activities.
	Monitor for construction traffic road impacts on Williams Street near the campus. Work with LCCPWD to prepare a road mitigation plan, if warranted.
Utilities	Further evaluate the campus sanitary sewer system during project design Phase and design and implement any necessary improvements to accommodate the increased flow associated with the Proposed Action.
	Submit design plans to each utility provider to determine the specific connection/extension requirements and implement the necessary requirements.
	Obtain a modified MTDEQ Public Water System permit, if required.
Environmental Justice	None required.

5.0 PUBLIC PARTICIPATION

VA invites public participation in decision-making on new proposals through the NEPA process. Public participation with respect to decision-making on the Proposed Action is guided by 38 CFR Part 26, VA's regulations for implementing NEPA. Additional guidance is provided in VA's *NEPA Interim Guidance for Projects* (U.S. Department of Veterans Affairs 2010). Consideration of the views and information of all interested persons promotes open communication and enables better decision-making. Members of the public with a potential interest in the Proposed Action are encouraged to participate. A record of the public involvement associated with this EA is provided in Appendix F.

5.1 SCOPING

VA initiated the NEPA public scoping process for the Proposed Action in March 2023, which included a public notice published in the Helena Independent Record on March 31 and April 2, 2023. No public comments or input were received in response to the scoping notice.

5.2 PUBLIC REVIEW

VA published and distributed the Draft EA for a 30-day public comment period, as announced by a Notice of Availability published in the Helena Independent Record on October 17 and 21, 2023. The Draft EA was posted for public review on the VA Office of Construction and Facilities Management Environmental Program website: (https://www.cfm.va.gov/environmental/index.asp). In addition, a hard copy of the Draft EA was made available for public review at the Lewis and Clark Library, located at 120 S. Last Chance Gulch, Helena, MT. VA also emailed notification of the release of the Draft EA to the stakeholders previously contacted during the NEPA scoping and NHPA Section 106 consultation. The notice contained a link to the Draft EA on VA's website and invited stakeholders to provide comments on the document. VA did not receive any agency or public comments on the Draft EA.

6.0 AGENCIES AND PERSONS CONSULTED

6.1 AGENCY COORDINATION

Agencies and organizations consulted for this EA include:

- U.S. Fish and Wildlife Service
- U.S. Environmental Protection Agency
- U.S. Army Corps of Engineers
- USDA Natural Resource Conservation Service
- Montana Department of Environmental Quality, various divisions
- Montana Fish, Wildlife and Parks
- Montana Historical Society (Montana SHPO)
- Montana Natural Heritage Program
- Montana Department of Natural Resources and Conservation, various divisions
- Montana Department of Transportation
- Montana Department of Public Health and Human Services
- Montana Public Service Commission
- Lewis and Clark County, various departments
- City of Helena Community Development and Planning - Planning Division
- Montana Department of Military Affairs - Veteran's Affairs Division
- Montana Army National Guard
- Helena-Lewis & Clark County Certified Local Government
- Lewis and Clark County Historical Society
- Preserve Montana
- Fort William Henry Harrison Museum Foundation/Montana Military Museum
- Montana American Legion
- Montana Veterans of Foreign Wars
- Montana Disabled American Veterans

VA initiated the NEPA scoping process for the Proposed Action in March 2023, which included emailing the agencies/organizations scoping letters with a request for information and comments based on available information regarding the Fort Harrison VAMC campus and Proposed Action.

Responses were received from the MTNHP, MTDOT, and LCCPWD. Input provided by these agencies is addressed in the appropriate resource sub-sections of Section 3. Written correspondence from the agencies is provided in Appendix B. The following summarizes that input, which VA used to focus this EA's analysis:

- **MTNHP** provided an Environmental Summary Report, which identified the documented and potential occurrence of federally protected species and state species of concern/potential concern within the Fort Harrison VAMC campus area.
- **MTDOT** stated that they do not have any comments regarding the Proposed Action at this time.
- **LCCPWD** stated that they support the Proposed Action as an important project to expand the capabilities of VA to serve the needs of Montana Veterans. LCCPWD commented that the Proposed Action would result in increased construction crew traffic and heavier truck traffic during construction, which would harm Williams Street near the campus. LCCPWD also noted that the additional square footage of the facility would lead to increased traffic at the campus and could have long-term impacts on Williams Street near the campus. LCCPWD stated that road

repair, restoration, or improvements may be necessary after project construction is completed. LCCPWD requested VA consider a road mitigation and impact plan. LCCPWD also requested that VA consider public outreach and community involvement for logistics and community impacts.

6.2 NATIONAL HISTORIC PRESERVATION ACT SECTION 106 CONSULTATION

On May 11, 2023, VA initiated NHPA Section 106 consultation for the Proposed Action with MHS, ACHP, federally-recognized Indian tribes, Helena-Lewis and Clark County Certified Local Government, Lewis & Clark County Historical Society, Fort William Henry Harrison/Montana Military Museum, and Preserve Montana. As part of this effort, VA submitted information regarding the undertaking (Proposed Action), the delineation of the APE (the entire Fort Harrison VAMC campus), the identification of historic properties, and VA's determination of potential adverse effects to historic properties. VA determined the proposed bed tower addition to the south side of Building 154 would likely encroach into the parade ground, which would be an adverse effect to the Historic District; however, the level of effect cannot be determined until the design in completed. Consequently, VA determined that it is appropriate to develop a PA to evaluate and address potential historic properties effects as the bed tower addition is designed. A draft PA was included in the consultation package. It should be noted that three small buildings located in the northwestern portion of the campus, two of which are contributing resources to the Historic District (Buildings 142 and 151), were originally included within the Proposed Action, but were removed in late July 2023.

On May 22, 2023, ACHP responded, indicating an interest to participate in consultation to develop a PA for the Proposed Action. On July 24, 2023, MHS concurred with VA's delineation or APE, identification of historic properties, and assessment of adverse effects on historic properties.

VA hosted a consultation meeting with the consulting parties on July 19, 2023. Representatives of MHS, ACHP, and Helena-Lewis and Clark County Certified Local Government attended the meeting. VA provided information and answered questions regarding the Proposed Action. Consulting parties provided input regarding the draft PA.

On August 18, 2023, VA submitted the revised draft PA to the Section 106 consultation parties for further review and comment. The Shoshone-Bannock Tribe provided comments on August 21, 2023; MHS provided comments on August 31, 2023; and ACHP provided comments on September 7, 2023. The comments were generally minor. VA has accepted the comments and recommendations.

The final PA was fully executed by VA, MHS and ACHP on October 17, 2023. The PA includes project design review by MHS for the Building 154 addition to avoid, minimize, and/or mitigate adverse effects to historic properties. If adverse effects to the parade ground are identified, mitigation may include development of a campus-wide landscape initiative (Cultural Landscape Study and Management Plan). In addition, the PA requires archaeological monitoring during ground disturbing activities to ensure proper handling of any archaeological resources. With the implementation of the PA stipulations, cultural resources impacts would be less than significant.

Section 106 correspondence is provided in Appendix C.

6.3 NATIVE AMERICAN CONSULTATION

On May 11, 2023, VA initiated consultation with five federally-recognized Indian tribes (Apache Tribe of Oklahoma, Confederated Salish and Kootenai Tribes of the Flathead Reservation, Crow Tribe of Montana, Fort Belknap Indian Community of the Fort Belknap Reservation of Montana, and Shoshone-Bannock Tribes of the Fort Hall Reservation) as part of this NEPA and NHPA Section 106 process, in

accordance with 36 CFR 800.2 and EO 13175, *Consultation and Coordination with Indian Tribal Governments*, November 2000. These Tribes, identified as having possible ancestral ties to the area of the Fort Harrison VAMC campus, were invited by VA to participate in the NHPA Section 106 consultation process as Sovereign Nations per EO 13175.

In addition, on May 11, 2023, VA initiated consultation with Indian tribal organizations consulted during previous projects at the Fort Harrison VAMC campus (Blackfeet Tribal Business Council, Chippewa Cree Business Community, Fort Peck Tribal Executive Board, Little Shell Chippewa Tribe, and Northern Cheyenne Tribal Council) as part of this NEPA and NHPA Section 106 process.

On June 14, 2023, the Northern Cheyenne Tribe responded that the Proposed Action would have no adverse effect. On July 20, 2023, the Crow Tribe of Montana requested a summary of the July 19, 2023, consultation meeting and associated presentation (provided by VA) but has not yet commented on the Proposed Action. In a letter dated August 21, 2023, the Shoshone-Bannock Tribe concurred with the undertaking and provided comments on the draft PA. No other tribes have responded or elected to participate in the NHPA Section 106 consultation process.

Tribal correspondence is provided in Appendix C.

7.0 LIST OF PREPARERS

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Montana Department of Transportation: https://www.mdt.mt.gov/

Montana Fish, Wildlife and Parks: https://fwp.mt.gov/

Montana Historical Society (Montana SHPO): https://mhs.mt.gov/Shpo/

Montana Natural Heritage Program: https://mtnhp.org/

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Various mapping tools: https://www.google.com/maps, https://earth.google.com, etc.

9.0 GLOSSARY

100-Year Flood – A flood event of such magnitude that it occurs, on average, every 100 years; this equates to a one percent chance of it occurring in a given year.

Aesthetics – Pertaining to the quality of human perception of natural beauty.

Ambient - The environment as it exists around people, plants, and structures.

Ambient Air Quality Standards - Those standards established under the Clean Air Act to protect health and welfare.

Aquifer - An underground geological formation containing usable amounts of groundwater which can supply wells and springs.

Asbestos - Incombustible, chemical-resistant, fibrous mineral forms of impure magnesium silicate used for fireproofing, electrical insulation, building materials, brake linings, and chemical filters. Asbestos is a carcinogenic substance.

Attainment Area - Region that meets the National Ambient Air Quality Standard (NAAQS) for a criteria pollutant under the Clean Air Act.

Bedrock - The solid rock that underlies all soil, sand, clay, gravel and loose material on the earth's surface.

Best Management Practices (BMPs) - Methods, measures, or practices to prevent or reduce the contributions of pollutants to U.S. waters. Best management practices may be imposed in addition to, or in the absence of, effluent limitations, standards, or prohibitions (AR 200-1).

Commercial land use – Land use that includes private and public businesses (retail, wholesale, etc.), institutions (schools, churches, etc.), health services (hospitals, clinics, etc.), and military buildings and installations.

Contaminants - Any physical, chemical, biological, or radiological substances that have an adverse effect on air, water, or soil.

Council on Environmental Quality (CEQ) - An Executive Office of the President composed of three members appointed by the President, subject to approval by the Senate. Each member shall be exceptionally qualified to analyze and interpret environmental trends, and to appraise programs and activities of the federal government. Members are to be conscious of and responsive to the scientific, economic, social, aesthetic, and cultural needs of the Nation; and to formulate and recommend national policies to promote the improvement of the quality of the environment.

Criteria Pollutants - The Clean Air Act of 1970 required the USEPA to set air quality standards for common and widespread pollutants in order to protect human health and welfare. There are six "criteria pollutants": ozone (O_3), carbon monoxide (CO), sulfur dioxide (SO_2), lead (Pb), nitrogen dioxide (NO_2), and particulate matter.

Cultural Resources - The physical evidence of our Nation's heritage. Included are: archaeological sites; historic buildings, structures, and districts; and localities with social significance to the human community.

Cumulative Impact - The impact on the environment that results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (federal or non-federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time (40 CFR 1508.7).

Decibel (dB) - A unit of measurement of sound pressure level.

Direct Impact - A direct impact is caused by a Proposed Action and occurs at the same time and place.

Emission - A release of a pollutant.

Endangered Species - Any species which is in danger of extinction throughout all or a significant portion of its range.

Environmental Assessment (EA) - An EA is a publication that provides sufficient evidence and analyses to show whether a proposed system will adversely affect the environment or be environmentally controversial.

Erosion - The wearing away of the land surface by detachment and movement of soil and rock fragments through the action of moving water and other geological agents.

Agricultural land - Cropland, pastures, meadows, and planted woodland.

Fauna - Animal life, especially the animal characteristics of a region, period, or special environment.

Flora - Vegetation; plant life characteristic of a region, period, or special environment.

Floodplain - The relatively flat area or lowlands adjoining a river, stream, ocean, lake, or other body of water that is susceptible to being inundated by floodwaters.

Fugitive Dust - Particles light enough to be suspended in air, but not captured by a filtering system. For this document, this refers to particles put in the air by moving vehicles and air movement over disturbed soils at construction sites.

Geology - Science which deals with the physical history of the earth, the rocks of which it is composed, and physical changes in the earth.

Groundwater - Water found below the ground surface. Groundwater may be geologic in origin and as pristine as it was when it was entrapped by the surrounding rock or it may be subject to daily or seasonal effects depending on the local hydrologic cycle. Groundwater may be pumped from wells and used for drinking water, irrigation, and other purposes. It is recharged by precipitation or irrigation water soaking into the ground. Thus, any contaminant in precipitation or irrigation water may be carried into groundwater.

Hazardous Substance - Hazardous materials are defined within several laws and regulations to have certain meanings. For this document, a hazardous material is any one of the following:

- Any substance designated pursuant to section 311 (b)(2)(A) of the Clean Water Act.
- Any element, compound, mixture, solution, or substance designated pursuant to Section 102 of Comprehensive Environmental Response, Compensation and Liability Act (CERCLA).
- Any hazardous substance as defined under the Resource Conservation and Recovery Act (RCRA).
- Any toxic pollutant listed under TSCA.
- Any hazardous air pollutant listed under Section 112 of the Clean Air Act.
- Any imminently hazardous chemical substance or mixture with respect to which the EPA Administrator has taken action pursuant to Subsection 7 of TSCA.

The term does not include: 1) Petroleum, including crude oil or any thereof, which is not otherwise specifically listed or designated as a hazardous substance in a above. 2) Natural gas, natural gas liquids, liquefied natural gas, or synthetic gas usable for fuel (or mixtures of natural gas and such synthetic gas). A list of hazardous substances is found in 40 CFR 302.4.

Hazardous Waste - A solid waste which, when improperly treated, stored, transported, or disposed of, poses a substantial hazard to human health or the environment. Hazardous wastes are identified in 40 CFR 261.3 or applicable foreign law, rule, or regulation.

Hazardous Waste Storage - As defined in 40 CFR 260.10, ". . . the holding of hazardous waste for a temporary period, at the end of which the hazardous waste is treated, disposed of, or stored elsewhere".

Hydric Soil - A soil that is saturated, flooded, or ponded long enough during the growing season to develop anaerobic (oxygen-lacking) conditions that favor the growth and regeneration of hydrophytic vegetation. A wetland indicator.

Indirect Impact - An indirect impact is caused by a Proposed Action that occurs later in time or farther removed in distance, but is still reasonably foreseeable. Indirect impacts may include induced changes in the pattern of land use, population density or growth rate, and related effects on air, water, and other natural and social systems. For example, referring to the possible direct impacts described above, the clearing of trees for new development may have an indirect impact on area wildlife by decreasing

available habitat.

Industrial Land Use – Land uses of a relatively higher intensity that are generally not compatible with residential development. Examples include light and heavy manufacturing, mining, and chemical refining.

Isolated Wetland – Areas that meet the wetland hydrology, vegetation, and hydric soil characteristics, but do not have a direct connection to the Waters of the U.S.

Jurisdictional Wetland – Areas that meet the wetland hydrology, vegetation, and hydric soil characteristics, and have a direct connection to the Waters of the U.S. These wetlands are regulated by the USACE.

Listed Species - Any plant or animal designated by a state or the federal government as threatened, endangered, special concern, or candidate species.

Mitigation - Measures taken to reduce adverse impacts on the environment.

Mobile Sources - Vehicles, aircraft, watercraft, construction equipment, and other equipment that use internal combustion engines for energy sources.

Monitoring - A process of inspecting and recording the progress of mitigation measures implemented.

National Ambient Air Quality Standards (NAAQS) - Nationwide standards set up by the USEPA for widespread air pollutants, as required by Section 109 of the Clean Air Act. Currently, six pollutants are regulated by primary and secondary NAAQS: carbon monoxide, lead, nitrogen dioxide, ozone, particulate matter, and sulfur dioxide.

National Environmental Policy Act (NEPA) - U.S. statute that requires all federal agencies to consider the potential effects of major federal actions on the human and natural environment.

Non-attainment Area - An area that has been designated by the EPA or the appropriate State air quality agency as exceeding one or more national or state ambient air quality standards.

Parcel - A plot of land, usually a division of a larger area.

Particulates or Particulate Matter - Fine liquid or solid particles such as dust, smoke, mist, fumes, or smog found in air.

Physiographic Region - A portion of the Earth's surface with a basically common topography and common morphology.

Pollutant - A substance introduced into the environment that adversely affects the usefulness of a resource.

Potable Water - Water which is suitable for drinking.

Prime Agricultural land - A special category of highly productive cropland that is recognized and described by the U.S. Department of Agriculture’s Natural Resource Conservation Service and receives special protection under the Surface Mining Law.

Remediation - A long-term action that reduces or eliminates a threat to the environment.

Riparian Areas - Areas adjacent to rivers and streams that have a high density, diversity, and productivity of plant and animal species relative to nearby uplands.

Sensitive Receptors - Include, but are not limited to, asthmatics, children, and the elderly, as well as specific facilities, such as long-term health care facilities, rehabilitation centers, convalescent centers, retirement homes, residences, schools, playgrounds, and childcare centers.

Significant Impact - According to 40 CFR 1508.27, "significance" as used in NEPA requires consideration of both context and intensity.

Context. The significance of an action must be analyzed in several contexts such as society as a whole (human, national), the affected region, the affected interests, and the locality. Significance varies with the setting of the Proposed Action. For instance, in the case of a site-specific action, significance would usually depend upon the effects in the locale rather than in the world as a whole. Both short- and long-term effects are relevant.

Intensity. This refers to the severity of impact. Responsible officials must bear in mind that more than one agency may make decisions about partial aspects of a major action.

Soil - The mixture of altered mineral and organic material at the earth's surface that supports plant life.

Solid Waste - Any discarded material that is not excluded by section 261.4(a) or that is not excluded by variance granted under sections 260.30 and 260.31.

Threatened species - Any species that is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range.

Topography - The relief features or surface configuration of an area.

Toxic Substance - A harmful substance which includes elements, compounds, mixtures, and materials of complex composition.

Waters of the United States - Include the following: Territorial seas and traditional navigable waters; perennial and intermittent tributaries that contribute surface water flow to such waters; certain lakes, ponds, and impoundments of jurisdictional waters; and wetlands adjacent to other jurisdictional waters.

Watershed - The region draining into a particular stream, river, or entire river system.

Wetlands - Areas that are regularly saturated by surface or groundwater and, thus, are characterized by a prevalence of vegetation that is adapted for life in saturated soil conditions. Examples include swamps, bogs, fens, marshes, and estuaries.

Wildlife Habitat - Set of living communities in which a wildlife population lives.