U.S. DEPARTMENT OF VETERANS AFFAIRS

Proposed Tulsa VA Hospital
Final Environmental Assessment

June 2022

U.S. DEPARTMENT OF VETERANS AFFAIRS
OFFICE OF CONSTRUCTION AND FACILITIES MANAGEMENT
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WASHINGTON, DC 20001

Executive Summary

This environmental assessment (EA) has been prepared in accordance with the National Environmental Policy Act of 1969 (NEPA), the President's Council on Environmental Quality Regulations Implementing the Procedural Provisions of NEPA, and the Department of Veterans Affairs (VA) regulations and guidance for implementing NEPA. This EA is required to determine if VA's proposed action would have significant environmental impacts.

Purpose and Need

The purpose of the proposed action is to enhance and expand services to Veterans by providing a state-of-the-art inpatient hospital facility with medical beds, surgical beds, operating rooms, and an emergency department to meet the need for expanded Veteran health care services and improved quality of care in the VA Eastern Oklahoma Service Area.

Currently, VA health care services in the Eastern Oklahoma Service Area are provided by four community-based outpatient clinics (CBOCs) in Tulsa, Vinita, McAlester, and Idabel, and one hospital in Muskogee, Oklahoma. The services provided in the CBOCs are insufficient to meet the projected needs of Veterans in the Eastern Oklahoma Service Area. A VA Inpatient Facility in Tulsa would increase access to care for a large proportion of the Veterans who reside in the VA's Eastern Oklahoma Service Area and for whom it is difficult or impossible to travel to the Muskogee facility to seek inpatient care.

Proposed Action

VA proposes to acquire by donation and renovate existing buildings and construct a new building to create a new VA Inpatient Facility on a 5.2-acre site at 440 South Houston Avenue, Tulsa, Oklahoma 74127. Primary components of the proposed VA Inpatient Facility are:

- Renovating, constructing, and operating approximately 259,000 square feet within the existing eight-story Kerr Building and the existing four-story Edmondson Building to provide inpatient medical-surgical hospital functions, including space improvements for medical beds, surgical support, operating rooms, and an emergency department.
- Demolishing the existing 25,000-square-foot lobby, connecting link, and auditorium and constructing an estimated 25,000 square feet of new lobbies and connecting link.
- Resurfacing 195 existing surface parking spaces.
- Constructing and operating temporary support areas (construction management trailers, material laydown areas) and utility improvements on and off the proposed VA project site to accommodate the facility.

Affected Environment and Environmental Consequences

The EA describes the baseline environmental conditions at the proposed action site and its general vicinity, with emphasis on those resources potentially impacted by the alternatives. Potential impacts on environmental resources are analyzed for each alternative. Resources considered 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 and wetlands; socioeconomics; community services; solid waste and

hazardous materials; traffic, transportation, and parking; utilities; and environmental justice. Table ES-1 summarizes the findings of the impact analysis.

Table ES-1. Summary of Impact Analysis

Resource	Proposed Action	No Action Alternative
Aesthetics	The VA Inpatient Facility would be consistent with the aesthetics of the surrounding area and would be compatible with surrounding land uses, resulting in less than significant impacts.	None
Air Quality	Renovation and construction activities would have short-term minor impacts related to emissions and fugitive dust. Long-term minor emissions from the operation of the VA Inpatient Facility and vehicle emissions would result in less than significant impacts.	None
Cultural and Historic Resources	A Memorandum of Agreement (MOA) was signed by VA, VHiT, the OK SHPO, and the Muscogee (Creek) Nation, on January 18, 2022, to resolve the adverse effects from the renovation of the Kerr-Edmondson Buildings (Appendix C). With implementation of the mitigation measures identified in the MOA, the adverse effect of the undertaking on historic properties would be less than significant.	None
Geology and Soils	Renovation and construction activities would include ground disturbance of less than one acre. Less than significant impacts expected.	None
Hydrology and Water Quality	Less than one acre of ground disturbance expected. Project would not increase impervious surfaces beyond the existing condition. Less than significant impacts.	None
Wildlife and Habitat	The project site and vicinity do not contain suitable habitat for federally or state listed species or migratory birds of conservation concern; no adverse impacts to special status species are expected. Less than significant adverse impacts are anticipated to local common wildlife.	None
Noise	Construction activities would have noticeably higher noise levels than current levels. Operation of the VA Inpatient Facility would have a minor long-term increase in noise levels from traffic and ground maintenance. Construction and operation noise impacts would be less than significant.	None
Land Use	Converting the state office buildings to the proposed VA Inpatient Facility would be compatible with surrounding land uses. Less than significant impacts.	None
Floodplains and Wetlands	No floodplains or wetlands occur within the proposed project area. No impacts would occur.	None
Socioeconomics	Short-term beneficial impacts related to local employment and personal income during construction. Operation of the VA Inpatient Facility would enhance care for Veterans within the VA Eastern Oklahoma Service Area. Beneficial impacts and less than significant adverse impacts.	None
Community Services	Minor increase in demand for fire protection, police services, and emergency services. Improved access to high quality health care for Veterans. Beneficial and less than significant adverse impacts.	None
Solid Waste and Hazardous Materials	Increased risk for unintentional releases of petroleum and hazardous materials during construction activities. Management of construction and operational waste in accordance with regulatory requirements would ensure less than significant impacts.	None

Resource	Proposed Action	No Action Alternative
Traffic, Transportation, and Parking	Increased traffic conflicts are anticipated, adding to the existing volume of traffic already present. Modeling of projected traffic volumes indicates the project would not cause a significant adverse impact to traffic conditions as defined in 38 CFR 26(2)(ii). Proposed project design improvements for site access drives at 7th Street, Lawton Avenue, and two drives planned for Houston Avenue would reduce traffic delays associated with increased traffic volumes. VA would coordinate with the City of Tulsa to seek additional improvements to the publicly owned traffic controls at the intersections of Houston Avenue & 3rd Street, Houston Avenue & 7th Street, and 7th Street & Lawton Avenue.	None
Utilities	All utility providers have confirmed adequate local capacity to support the proposed project. Less than significant impacts.	None
Environmental Justice	No disproportionate adverse impacts to minority or low-income populations. Less than significant impacts.	None

Agency Coordination and Public Participation

VA has published and distributed the Draft EA for a 30-day public comment period as announced by a Notice of Availability published in The Tulsa World on April 29, and May 1, 2022. The Draft EA was published online at https://www.cfm.va.gov/environmental/.

No comments were received from the public. VA received comments from the City of Tulsa on the Traffic Study which have been addressed incorporated as of June 29, 2022, and are included in Appendix D.

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Acronyms and Abbreviations

BMP	best management practice
CBOC	community-based outpatient clinic
CEQ	President's Council on Environmental Quality
CHIP-IN	Communities Helping Invest Through Property and Improvements Needed for Veterans Act of 2016 (Public Law 114-294)
CRF	Code of Federal Regulations
dBA	A-weighted decibels
EA	environmental assessment
EDR	Environmental Database Report
ESA	environmental site assessment
IPaC	Information on Planning and Conservation
LUST	leaking underground storage tank
MUTCD	Manual on Uniform Traffic Control Devices
NAAQS	National Ambient Air Quality Standards
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NRHP	National Register of Historic Places
NSF	net square feet
ODOT	Oklahoma Department of Transportation
OSU	Oklahoma State University
OSU-CHS	Oklahoma State University Center for Health Sciences
PDF	Program for Design
REC	Recognized Environmental Condition
SHPO	State Historic Preservation Officer
SWPPP	Stormwater Pollution Prevention Plan
TCF	Tulsa Community Foundation

USEPA	U.S. Environmental Protection Agency
USC	United States Code
UST	Underground Storage Tanks
VA	U.S. Department of Veterans Affairs
VHiT	Veterans Hospital in Tulsa, LLC

1. Introduction

This environmental assessment (EA) has been prepared in accordance with the National Environmental Policy Act of 1969 (NEPA; 42 United States Code 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), and Environmental Effects of the Department of Veterans Affairs Actions (38 CFR Part 26). This EA is required to determine if the Department of Veterans Affairs' (VA's) proposed action would have significant environmental impacts. Federal agencies are required to consider the environmental effects of their proposed actions. This EA has also been prepared in accordance with relevant guidance from VA's NEPA Interim Guidance for Projects dated September 2010.

This EA identifies, analyzes, and documents the potential physical, environmental, cultural, and socioeconomic impacts associated with VA's proposed renovation, construction, and operation of an approximately 259,000-square-foot inpatient medical-surgical hospital facility, including space improved for medical beds, surgical beds, operating rooms, an emergency department, and 495 parking spaces in Tulsa, Oklahoma. The inpatient facility would employ approximately 450 staff. On property adjacent to the proposed VA project, the Oklahoma State University Center for Health Sciences (OSU-CHS) will build an approximately 150,000-square-foot 106-bed mental health hospital; the potential combined environmental effects of this adjacent project with VA's proposed action are evaluated in the cumulative impacts analysis of this EA (Section 3.16). Only one location is being considered for the proposed VA inpatient facility, which is property donated by the OSU-CHS (Figure 1-1) at 440 South Houston Avenue, Tulsa, Oklahoma 74127.

In accordance with the cited regulations, this EA allowed 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 the measures the federal decision-maker could implement to reduce potential environmental effects, and documents the NEPA process.

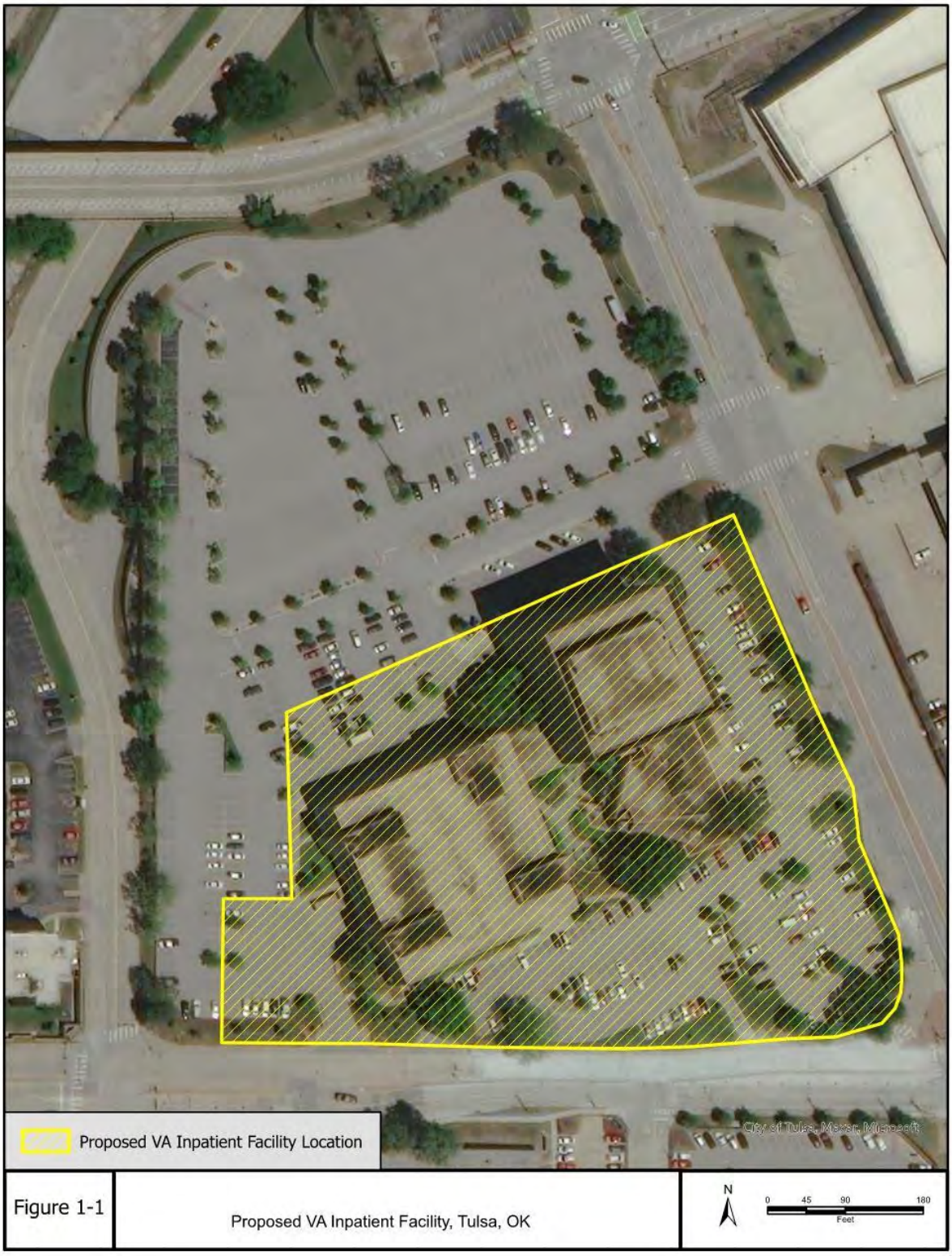
1.1 Background

In December 2018, the OSU-CHS submitted a formal request to the VA Office of Construction and Facilities Management for an opportunity under the VA Communities Helping Invest Through Property and Improvements Needed for Veterans Act of 2016 (Public Law 114-294), referred to as CHIP-IN. Congress appropriated federal funds for construction of a Veterans inpatient hospital in Tulsa as part of the FY2021 appropriations bill in December 2020. VA signed a design and development agreement with the OSU-CHS and the private company Veterans Hospital in Tulsa, LLC (VHiT) dated August 27, 2021, to convert the existing Kerr-Edmondson office building complex into a new 58-bed Veterans Inpatient Facility, adjacent to the new OSU-CHS mental health hospital in downtown Tulsa. The design and development agreement provides for and requires preparation of this EA, as well as a Phase I environmental site assessment and consultation under Section 106 of the National Historic Preservation Act (NHPA).

1.2 Purpose and Need

The purpose of the proposed action is to enhance and expand services to Veterans in eastern Oklahoma by providing a state-of-the-art inpatient hospital facility with medical beds, surgical beds, operating rooms, and an emergency department to meet the need for expanded Veteran health care services and improved quality of care in the VA Eastern Oklahoma Service Area.

The proposed action is needed to correct the existing gap in readily available and convenient healthcare services and allow for VA to adequately provide these services for the rapidly growing Veteran population in the VA's Eastern Oklahoma Service Area. Currently, VA health care services in the Eastern Oklahoma Service Area are provided by four community-based outpatient clinics (CBOCs)—the Ernest Childers VA Outpatient Clinic, 8921 South Mingo Road, Tulsa, OK 74133; the McAlester VA Clinic, 2 East Clark Bass Blvd., McAlester, OK; the Vinita VA Clinic, 269 South 7th Street, Vinita, OK; and the McCurtain County Clinic, 903 SE Washington Street, Idabel, OK—and one hospital, the Jack C. Montgomery VA Medical Center, 1011 Honor Heights Drive, Muskogee, OK 74401 (Figure 1-2). The services provided in the CBOCs are insufficient to meet the projected needs of Veterans in the VA Eastern Oklahoma Service Area. Approximately 300,000 Veterans live in Oklahoma, of which roughly 35% live in the VA's Eastern Oklahoma Service Area, which consists of 25 counties in eastern Oklahoma. Nearly 70% of those Veterans in the Eastern Oklahoma Service Area live and work closer to 440 South Houston Avenue, Tulsa, than to the existing VA hospital in Muskogee. A VA inpatient facility in Tulsa would increase access to care for this proportion of Veterans who reside in the VA Eastern Oklahoma Service Area and for whom it is difficult or impossible to travel to the Muskogee facility to seek inpatient care. In addition, the aging of the Veteran population in Oklahoma is steadily increasing the demand for Veterans' health care services.


Proposed VA Inpatient Facility Location
City of Tulsa, Maxar, Microsoft
Figure 1-1
Proposed VA Inpatient Facility, Tulsa, OK
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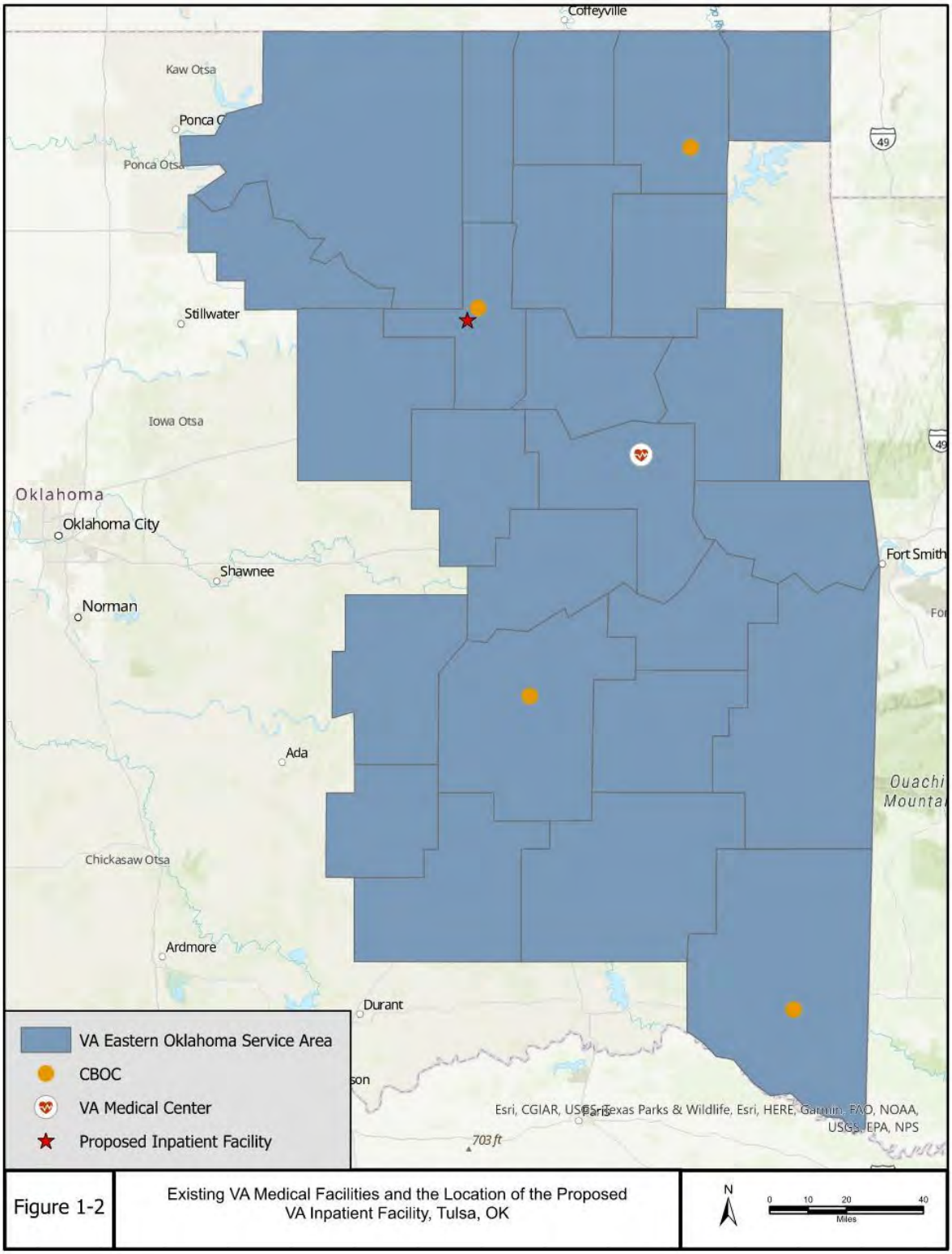

Figure 1-2 Existing VA Medical Facilities and the Location of the Proposed VA Inpatient Facility, Tulsa, OK

2. Alternatives

This section describes the proposed action considered by VA and the no-action alternative.

2.1 Proposed Action

VA proposes to acquire via donation the existing Kerr-Edmondson State office buildings and underlying real property and renovate the structures to serve as a new inpatient medical-surgical hospital facility (the "VA Inpatient Facility") at 440 South Houston Avenue, Tulsa, Oklahoma, through the CHIP-IN process. The property would be acquired from the OSU-CHS. The VA Inpatient Facility would be developed as a collaboration between VA, the OSU-CHS, and the private company VHiT, a new company formed by private donors to serve as project manager for developing the VA Inpatient Facility.

The OSU-CHS would donate to VA 5.2 acres in downtown Tulsa, located at 440 South Houston Avenue, Tulsa, Oklahoma 74127. This property is improved with two buildings that have been evaluated by engineers to be suitable for renovation. During the renovation phase, OSU would retain ownership of the buildings and site proposed for the VA Inpatient Facility and would lease the property to VHiT. When renovations are complete, the lease to VHiT would terminate and OSU would transfer ownership of the inpatient facility to VA.

The resulting facility would be an approximately 58-bed, 259,000-square-foot tertiary care hospital, with an intensive care unit, five surgical suites, imaging, emergency services, and other VA hospital program requirements. The proposed project site includes approximately 195 existing surface parking spaces. VA would also have use of approximately 300 parking spaces in a new 700-space parking garage to be built and owned by the OSU-CHS.

Primary components of the proposed VA Inpatient Facility are:

- Renovating, constructing, and operating approximately 259,000 square feet within the existing eight-story Kerr Building and the existing four-story Edmondson Building to provide inpatient medical-surgical hospital functions, including space improvements for medical beds, surgical support, operating rooms, and an emergency department.
- Upgrading the windows on the Kerr-Edmondson buildings to meet VA medical facility requirements.
- Demolishing the existing 25,000-square-foot lobby, connecting link, and auditorium and constructing an estimated 25,000 square feet of new lobbies and connecting link.
- Resurfacing approximately 195 existing surface parking spaces.
- Constructing and operating temporary support areas (construction management trailers, material laydown areas) and utility improvements on and off the proposed project site to accommodate the facility.

The timeline for the proposed action is as follows:

- Schematic design – January 2022
- Design development – April 2022
- Construction documents – August 2022

- Final design – November 2022
- Begin construction – February 2023
- End construction – December 2024

VA would continue to operate the CBOCs in Tulsa, Vinita, McAlester, and Idabel and the Jack C. Montgomery VA Medical Center in Muskogee, continuing to serve Veterans at these locations as well as the proposed VA Inpatient Facility in Tulsa.

2.2 No Action Alternative

Under the no action alternative, the Proposed Action would not be implemented. VA would continue to provide Veterans' healthcare services at the existing four Eastern Oklahoma CBOCs and the Jack C. Montgomery VA Medical Center in Muskogee.

3. Affected Environment and Environmental Consequences

This section describes the baseline physical, environmental, cultural, and socioeconomic conditions at the proposed action area of potential impact and the general vicinity, with emphasis on those resources potentially impacted by the proposed action and the no action alternative.

CEQ guidelines and regulations encourage agencies to streamline environmental analyses in their EAs (CEQ, 2012) by focusing on significant issues and discussing insignificant issues only briefly, discussing impacts in proportion to their significance, and incorporating by reference other environmental analyses (40 CFR 1500.4(c), 1502.2(b), and 1501.12).

Impacts are identified as either significant or less than significant. The terms “effects” and “impacts” are synonymous in this EA. Where possible, impacts are identified as short-term, temporary, or long-term in relation to the length of time the impact would persist.

Resources considered in this EA are aesthetics; air quality; cultural and historic resources; geology and soils; hydrology and water quality; wildlife and habitat; noise; land use; wetlands and floodplains; socioeconomics; community services; solid waste and hazardous materials; traffic, transportation, and parking; utilities; and environmental justice. This section also evaluates cumulative impacts and the potential for generating substantial controversy.

3.1 Aesthetics

3.1.1 Affected Environment

The proposed VA Inpatient Facility site is located within a fully developed, mixed-use commercial and institutional area. Renovation and construction would occur entirely within the boundaries of the block of 440 South Houston Avenue, Tulsa, Oklahoma 74127, bounded by 7th Street on the south, Lawton Ave. on the west, 3rd Street on the north and Houston Ave. on the east. The Kerr-Edmondson buildings are concrete brutalism architectural style structures built in 1975. Very little landscaping exists except for a strip of ornamental trees and shrubs with small patches of mowed Bermuda grass lawn bordering the parking areas and along the edge of the existing Kerr-Edmondson building complex.

The existing teaching hospital immediately adjacent to south across 7th Street includes a single-story red-brick mostly windowless OSU-CHS Surgicenter building and a five-story concrete block physicians center. Immediately adjacent to the project site to the west is a paved parking lot between the project site and S. Lawton Ave. On the west side of Lawton Ave. is the six-story white concrete Hewgley Terrace apartment building with an adjacent tenant paved parking lot. Directly to the east across Houston Ave. is the Cox Business Center. The business center is a large brown brick and concrete low story box-shaped structure with the delivery side of the center facing Houston Ave. Directly north of the project site is a paved parking lot.

3.1.2 Environmental Consequences

3.1.2.1 Proposed Action

Construction activities such as site preparation, grading, vehicle traffic, movement of heavy equipment, and resurfacing parking areas would be visible from adjacent roadways. These changes to the aesthetic character of the site would have short-term and minor impacts from the presence of construction

management trailers, heavy equipment, construction material staging, and demolition collection bins. Construction worker vehicles would be regularly parked on site in the existing paved parking lots, which would not be utilized during construction as the buildings would be vacant during construction. These temporary impacts would end once construction is complete.

There would be minimal exterior change to the existing eight-story Kerr Building and four-story Edmondson Building. However, the existing 25,000-square-foot lobby, connecting link, and auditorium would be demolished and replaced with the same square footage of new lobbies and connecting link, with little overall aesthetic change to this development. The existing paved parking areas would be resurfaced, and the existing landscaped areas would be relandscaped similarly. The proposed project would remain on the same footprint and generally resemble the existing condition and other development in this portion of downtown Tulsa.

The proposed action would result in less than significant impacts to aesthetics.

3.1.2.2 No Action Alternative

Under the no action alternative, no construction at the proposed project site would occur. No impacts to aesthetics would occur as a result of VA's actions. However, the proposed site could be developed by others with the potential for impacts to aesthetics dependent on that potential development.

3.2 Air Quality

Ambient air quality in an area is characterized by compliance with the primary and secondary National Ambient Air Quality Standards (NAAQS). The United States Environmental Protection Agency (USEPA) sets standards for pollutants considered harmful to public health and the environment. Areas are then classified as attainment, non-attainment, or maintenance with respect to compliance with NAAQS. The USEPA Green Book provides information about the area NAAQS designations and nonattainment status. According to the USEPA Green Book, Tulsa County, Oklahoma, is designated as an attainment area, meaning the area is in compliance with air quality standards and is not under a State Implementation Plan (USEPA, 2021a).

3.2.1 Affected Environment

Sensitive air quality receptors in the area are a hospital, two hotels, and an apartment complex. The OSU-CHS is adjacent to the south boundary of the proposed project site. One hotel is approximately 200 feet southeast of the site and the second hotel is approximately 700 feet to the east-southeast. The apartment complex is adjacent to the west of the proposed project site.

3.2.2 Environmental Consequences

3.2.2.1 Proposed Action

Construction activities and emissions from construction vehicles would have the potential to produce short-term and minor impacts to air quality at the proposed project site. Activities such as demolition, site preparation, grading, and movement of equipment could produce fugitive dust, which can cause short-term health effects and nuisances such as reduced visibility. The amount of fugitive dust that would be produced depends on the soils present, wind speed, size and intensity of construction activities, and the type of dust suppression implemented during construction. Exhaust from the operation of construction

equipment would generate emissions that would have short-term and minor impacts to air quality. Much of the renovation work would be interior in the existing buildings and the area of ground disturbance would be less than one acre. Construction related emissions from the renovation, demolition and construction activities would be minor, temporary, and localized, with less than significant impacts to local or regional air quality.

Operation of the proposed VA Inpatient Facility would have long-term and minor impacts to air quality. Emission from equipment, such as boilers and generators, and exhaust from vehicles used by patients and staff would generate emissions typical of a medical facility and would comply with all permits and local requirements. In addition, the renovations would include energy efficiency improvements to the buildings. Thus, operation of the proposed project would be expected to have a less than significant impact on air quality.

3.2.2.2 No Action Alternative

Under the no action alternative, no construction would occur. No impacts to air quality would occur as a result of VA's actions. However, the proposed site could be developed by others with the potential for impacts to air quality specific to that potential development.

3.3 Cultural and Historic Resources

Cultural resources are defined by the NHPA as historic properties including prehistoric and historic sites, structures, buildings, objects, districts, or any other physical evidence of human activity associated with important historic events, with persons important in history events, with persons important in history, representing the work of a master or exemplary as a type, or have or may yield information important to history or prehistory. Cultural resources are protected through several federal laws and associated regulations, including the NHPA, the Archaeological and Historic Preservation Act of 1974, the American Indian Religious Freedom Act of 1978, the Archaeological Resources Protection Act of 1979, and the Native American Graves Protection and Repatriation Act of 1990.

Section 106 of the NHPA and its implementing regulations, 36 CFR Part 800, requires an assessment of the potential impact of an undertaking on historic properties that are within the proposed project's area of potential effect (APE), which is defined as the geographic area(s) "within which an undertaking may directly or indirectly cause alteration in the character or use of historic properties, if any such properties exist."

3.3.1 Affected Environment

VA determined the APE to be bounded by W. 3rd St. to the north, W. 11th St. to the south, the Cox Business Convention Center and the 616 W 7th St. Parking Garage to the east, and Heavy Traffic Way and S. Lawton Ave. to the west (Figure 3-1). Within the APE, VA identified the Kerr-Edmondson building complex as a historic property, eligible for listing in the National Register of Historic Places (NRHP) under Criterion A for Politics/Government and Criterion C for Architecture as an excellent local example of the Brutalist architectural style.

3.3.2 Environmental Consequences

3.3.2.1 Proposed Action

The proposed action includes renovations to the Kerr-Edmondson building complex. VA determined the undertaking would have an adverse effect on this property, as the proposed renovations would not meet the Secretary of the Interior's Standards for Rehabilitation.

A Memorandum of Agreement (MOA) was signed by VA, VHiT, the OK SHPO, and the Muscogee (Creek) Nation, on January 18, 2022, to resolve the adverse effects from the renovation of the Kerr-Edmondson Buildings (Appendix C). In the MOA, VA, VHiT, the OK SHPO, and the Muscogee (Creek) Nation agree that the undertaking shall be implemented in accordance with the following mitigation measures for the adverse effect of the undertaking on historic properties. VA shall ensure that the following mitigation measures are carried out:

- VHiT will install an interior exhibit documenting, with historical information, graphics, and photographs, the significance of the facility as an Urban Renewal project and an example of the Brutalist style of architecture.
- VHiT will install exterior historic markers at the two main VA Inpatient Facility entrances providing historic recognition of the significance of the facility as an Urban Renewal project and an example of the Brutalist style of architecture.
- VHiT will install interpretation in the main lobby of the building recognizing the legacy of Robert S. Kerr and J. Howard Edmondson, both Veterans, for whom the original buildings were named.
- VHiT will provide designs for the interpretation to the signatories for a 15-day review and comment period prior to finalizing and procuring the interpretation measures.

VHiT will install the interpretation measures prior to turning over the property to the OSU Regents for immediate transfer to VA as prescribed in the design and development agreement among VA, OSU-CHS, and VHiT.

3.3.2.2 No Action Alternative

Under the no action alternative, no construction would occur. No impacts to cultural resources would occur as a result of VA's actions. However, the proposed site could be developed by others with the potential for impacts to cultural resources specific to that potential development.

Figure 3-1 Proposed VA Inpatient Facility, Kerr-Edmondson Buildings and Area of Potential Effect for Cultural and Historic Resource Analyses, Tulsa, OK.

3.4 Geology and Soils

3.4.1 Affected Environment

The proposed VA Inpatient Facility site is located within the Central Lowland Province, which lies between the Great Plains and the Ouachita and Ozark Plateaus physiographic provinces. This province is the largest physiographic province, extending from New York to North Dakota and south to Texas. Elevations in the region are 2,000 feet or less above mean sea level and the region consists of flat lands with geomorphic remnants of glaciation (NPS 2021). The site is located within the Remnants of Older Terrace Deposits geologic region. No faults or seismic areas are known to be present beneath the proposed project site.

One soil type (Kamie-Urban Land Complex) is present at the proposed project site and is identified in Table 3.1. This soil is not prime farmland soil. The soil is not hydric and is classified as well drained.

Table 3.1. Soil Types

Soil Name	Drainage Class	Frequency of Flooding/Ponding	Depth to Water Table (inches)	Prime Farmland Soil	Percentage of Property
Kamie-Urban Land Complex, 1 to 8 percent slopes	Well drained	None/None	More than 80 inches	No	100

3.4.2 Environmental Consequences

3.4.2.1 Proposed Action

Construction of the proposed VA Inpatient Facility would incorporate the current topography. While some grading would be required, it is anticipated that the facility, parking areas, and landscaped areas would remain near current grades. Construction activities, such as site preparation, grading, movement of heavy equipment, and paving of parking areas, could temporarily increase sedimentation and erosion by exposing soil surfaces and increasing the potential for sedimentation and surface runoff. These activities would also disturb and compact the soil. The expected area of ground disturbance from the proposed action is less than one acre, therefore submitting a Notice of Intent under state regulation OKR10 Construction Stormwater is not expected to be required.

During operation of the VA Inpatient Facility, the impervious and hardened surfaces would contribute to surface runoff with the potential for erosion and sedimentation. These impervious areas would remain similar in size and location to the existing condition. The construction and operation for the VA Inpatient Facility would have less than significant impacts to geology and soils.

3.4.2.2 No Action Alternative

Under the no action alternative, no construction would occur. No impacts to geology or soils would occur as a result of VA's actions. However, the proposed site could be developed by others with the potential for impacts to geology and soils specific to that potential development.

3.5 Hydrology and Water Quality

3.5.1 Affected Environment

The major watershed for Tulsa, Oklahoma, is the Upper Arkansas River Watershed, covering 203 square miles (OWRB 2021). The watershed includes reservoirs that provide a source of drinking water and recreation opportunities. The Arkansas River Alluvium aquifer is the major groundwater aquifer in the Tulsa, Oklahoma area. The aquifer is characterized by unconsolidated deposits of gravel, sand, silt, and clay running 1-15 miles from the riverbanks. Water suitable for drinking is located within saturated layers of sand and gravel (Osborn and Hardy 1999).

The nearest surface water is the Arkansas River, located approximately 0.3 miles southwest of the proposed VA Inpatient Facility site. No water features are present within the immediate project vicinity.

Water wells in the area are typically 10 to 15 feet deep and the groundwater typically flows north-northwest. The depth to the water table is generally 15 to 30 feet but may be up to 100 feet in some locations (EDR 2021).

3.5.2 Environmental Consequences

3.5.2.1 Proposed Alternative

Construction activities at the proposed VA Inpatient Facility site, such as site preparation, grading, movement of heavy equipment, and resurfacing and paving of parking areas, could temporarily increase sedimentation and erosion. These activities would expose soil surfaces and could increase the potential for sedimentation and surface runoff. The expected area of ground disturbance from the proposed action is less than one acre, therefore submitting a Notice of Intent under state regulation OKR10 Construction Stormwater is not expected to be required.

During operation of the VA Inpatient Facility, the impervious and hardened surfaces, such as the buildings, parking areas, and other paved areas, would not increase surface runoff beyond the existing condition. Therefore less-than-significant impacts are anticipated.

3.5.2.2 No Action Alternative

Under the no action alternative, no construction by VA would occur. No impacts to hydrology and water quality would occur as a result of VA's actions. However, the proposed site could be developed by others with the potential for impacts to hydrology and water quality specific to that potential development.

3.6 Wildlife and Habitat

3.6.1 Affected Environment

Wildlife habitat within the project site is limited to small strips of maintained bermudagrass lawn, with few scattered ornamental trees and shrubs that border the parking lot areas. The proposed project vicinity includes buildings, paved parking lots, and urban streets. These areas provide poor habitat for mammalian, avian, and nectar- and pollen-requiring insect species.

A review of the U.S. Fish and Wildlife Service's Information, Planning, and Consultation (IPaC) report (USFWS 2022) for the proposed VA Inpatient Facility site identified four federally listed threatened

species: northern long-eared bat (*Myotis septentrionalis*), piping plover (*Charadrius melodus*), red knot (*Calidris canutus rufa*), and American burying beetle (*Nicrophorus americanus*); and one candidate species: monarch butterfly (*Danaus plexippus*). No designated critical habitat for these species includes the project site, and no potential onsite habitat was identified. Eight migratory birds of conservation concern were also identified.

3.6.2 Environmental Consequences

3.6.2.1 Proposed Action

No construction and operation impacts are expected to urban wildlife species who would likely temporarily avoid the area during construction activities. The project site and vicinity do not contain suitable habitat for federally or state protected species; therefore, no effects to special status species are expected from the proposed VA Inpatient Facility project.

Less than significant impacts are anticipated to common wildlife species and habitat are expected. No effects to protected species would occur.

3.6.2.2 No Action Alternative

Under the no action alternative, no construction would occur. No impacts to wildlife and habitat would occur as a result of VA's actions. However, the proposed site could be developed by others with the potential for impacts to wildlife specific to that potential development.

3.7 Noise

3.7.1 Affected Environment

The City of Tulsa has a noise ordinance that applies to disturbing the peace. The City of Tulsa ordinance does not allow for the production of excessive noise from 11 PM to 7 AM (City of Tulsa 2021). Typical daytime noise levels in urban areas might be 45 to 55 A-weighted decibels (dBA) (Federal Highway Administration, 2018). The existing noise environment around the proposed VA Inpatient Facility site is dominated by vehicle traffic/parking, mechanical equipment, and routine landscaping and maintenance. Noise levels are reflective of an urban environment and likely to be within the 45 to 55 dBA range typical of an urban rea.

Sensitive receptors are defined as locations where occupants might be more susceptible to adverse effects of noise. Sensitive receptors around the proposed VA Inpatient Facility site include an apartment building, a hospital, and two hotels. The Hewgley Terrace Apartments is adjacent to the west boundary of the proposed VA Inpatient Facility site. The OSU-CHS is adjacent to the south of the site. The La Quinta hotel is located 200 feet to the southeast and the Double Tree Hotel is located 700 feet to the east-southeast.

3.7.2 Environmental Consequences

3.7.2.1 Proposed Action

Table 3.2 lists typical noise levels from construction equipment that could likely be used in construction of the inpatient hospital.

Table 3-2. Construction Equipment Noise Levels

Equipment	Typical Noise Level 50 Feet from Source (dBA)
Air compressor	81
Backhoe	78
Concrete pump	82
Dozer	85
Generator	81
Grader	85
Loader	85
Paver	89
Pneumatic tool	85
Pump	76
Roller	74
Saw	76
Scraper	89
Truck	88

(Federal Highway Administration 2018)

Construction activities are expected to generate noise and the noise levels can be variable depending on the construction phase; activity; and type, number, and schedule of construction equipment. Construction noise would last through the duration of construction activities and would end once construction is completed. Consistent with local ordinances, construction noise would occur during the daytime and would peak during periods of high activity and heavy use of construction equipment.

Renovation and construction of the VA Inpatient Facility would occur in stages with each having a unique combination of noise characteristics, intensities, and magnitudes. Each stage would have varying combinations of equipment, activities, and workers. These combinations would directly affect the magnitude and intensity of the construction-related noise levels. Noise generated from the renovation and construction of the VA Inpatient Facility is anticipated to be typical of similar construction projects. Prominent construction-related noise sources would be internal combustion engines, construction vehicles, removal of existing landscaping, grading, and excavation. Examples of construction equipment with engines that could be used includes, excavators, bulldozers, backhoes, graders, front-end loaders, dump trucks, roller compactors, water trucks, pump trucks, cranes, paving machines, and concrete mixer trucks.

Peak noise levels associated with construction would be noticeably higher than current noise levels. Based on the noise levels in Table 3-2, construction noise could be in the 74 to 89 dBA range compared

to current noise levels assumed to be 45 to 55 dBA. The magnitude and intensity of these levels would depend on the time of day, duration, and frequency of the noise event. Renovation and construction activities would comply with local noise ordinances and would result in temporary and less than significant impacts.

Operation of the VA Inpatient Facility would have less than significant noise impacts. Operational noise sources would include vehicle traffic; heating, ventilation, and air conditioning systems; and landscape maintenance activities such as lawn mowers and leaf blowers. These noises would be consistent with medical facilities of similar size and would result in less than significant impacts because they would be consistent with ambient noise typical of an urban area.

3.7.2.2 No Action Alternative

Under the no action alternative, no construction would occur. No impacts to noise would occur as a result of VA's actions. However, the proposed site could be developed by others with the potential for impacts to noise specific to that potential development.

3.8 Land Use

3.8.1 Affected Environment

The proposed VA Inpatient Facility site currently consists of two office buildings and a parking lot. Surrounding land uses are commercial, institutional, and multi-family residential. Adjacent properties include the Cox Business Convention Center, the OSU-CHS, the Hewgley Terrace Apartments, and a paved parking lot. According to the Tulsa Planning Office Mapping tool, the site and surrounding areas are zoned as Central Business District (Figure 3-2) (Tulsa Planning Office 2020).

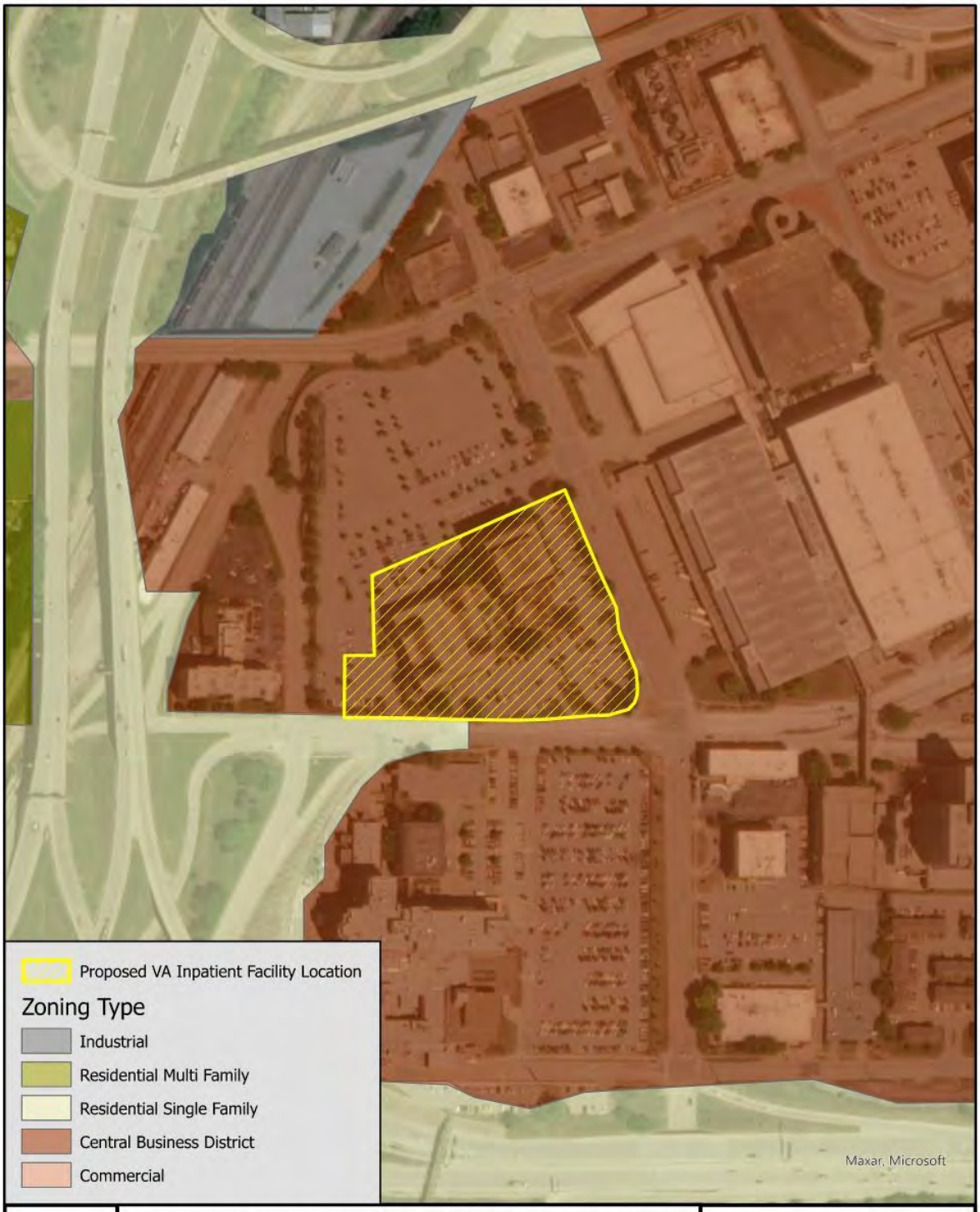

Figure 3-2 Proposed VA Inpatient Facility in Relation to City of Tulsa, Zoning Map

3.8.2 Environmental Consequences

3.8.2.1 Proposed Action

The VA Inpatient Facility would be compatible with the surrounding land use and would have a minor impact on current land use. The proposed plans for design, renovation, and construction of the buildings meet building codes. The construction and operation of the VA Inpatient Facility would not require any rezoning. Less than significant land use change or impacts would occur.

3.8.2.2 No Action Alternative

Under the no action alternative, no construction would occur. No impacts to land use would occur as a result of VA's actions. However, the proposed site could be developed by others with the potential for impacts to land use specific to that potential development.

3.9 Wetlands and Floodplains

3.9.1 Affected Environment

The proposed project site is in FEMA Zone X, an area of minimal flood hazard, and does not contain any wetlands.

3.9.2 Environmental Consequences

No impacts to wetlands or floodplains would occur as a result of the Proposed Action or the No Action Alternative.

3.10 Socioeconomics

Socioeconomics can be characterized as the demographics, employment, and income of a region. U.S. Census Bureau data from the 2019 American Community Survey 1-year estimates were used to evaluate socioeconomic impacts.

3.10.1 Affected Environment

The state of Oklahoma, Tulsa County, and the City of Tulsa have similar population characteristics (Table 3-3). The percentage of individuals under 18 years of age is relatively the same. The percentage of individuals 65 years and over in Tulsa County is lower than for the City of Tulsa and the state as whole. The percentage of Veterans is lower in the City of Tulsa and Tulsa County than in the state of Oklahoma as a whole. Information on minority populations near the proposed VA Inpatient Facility Site is presented in Section 3.15 (Environmental Justice).

Table 2-3. Population and Veteran Status

Geographic Area	Population	Population Under 18 Years	Population 65 Years and Over	Minority	Veterans
Oklahoma	3,956,971	24.1%	16.1%	27.6%	8.8%
Tulsa County	651,552	25.1%	14.8%	29.8%	6.7%

City of Tulsa	401,760	24.5%	15.0%	33.5%	6.2%

(U.S. Census Bureau 2020a, U.S. Census Bureau 2020b)

The median household income in the City of Tulsa is lower than in the county and statewide (Table 3-4). The percent of households below the poverty level and the unemployment rate are higher in the City of Tulsa when compared to the county and statewide data. Information on low-income populations near the proposed VA Inpatient Facility site is presented in Section 3.15 (Environmental Justice).

Table 3-4. Income, Poverty, and Employment

Geographic Area	Number of Households	Median Household Income	Percent Below Poverty Level	Unemployment Rate
Oklahoma	1,495,151	54,449	15.2%	4.4%
Tulsa County	255,352	57,483	14.3%	4.9%
City of Tulsa	163,801	49,158	18.6%	5.5%

3.10.2 Environmental Consequences

3.10.2.1 Proposed Action

Construction of the VA Inpatient Facility would likely result in short-term and beneficial impacts to local employment and personal income. Construction would provide temporary jobs and a minor increase in spending at local restaurants, convenience stores, and gas stations. This would likely result in temporary socioeconomic benefits.

Adverse health and safety risks to child populations would not likely result from the construction and operation of the VA Inpatient Facility. Securing construction areas, fencing service areas and equipment pads outside the VA Inpatient Facility, and using landscaping around the perimeter of the property would prevent unauthorized access and associated risks.

Operation of the VA Inpatient Facility would enhance health care for Veterans in the VA Eastern Oklahoma Service Area. The facility would offer state-of-the-art health services and would have long-term beneficial impacts to the health of Veterans in the VA Eastern Oklahoma Service Area.

The construction and operation of the VA Inpatient Facility would have less than significant adverse impacts and some beneficial impacts on socioeconomics.

3.10.2.2 No Action Alternative

Under the no action alternative, no construction would occur. No impacts to socioeconomics would occur as a result of VA's actions. However, the proposed site could be developed by others with the potential for impacts to socioeconomics specific to that potential development.

3.11 Community Services

3.11.1 Affected Environment

The proposed VA Inpatient Facility site is in the Tulsa Public School System. No schools are within 0.5 miles of the site.

The nearest emergency medical services are at the OSU-CHS, located adjacent to the south of the proposed VA Inpatient Facility site. The OSU-CHS has a full-service emergency department. Ambulance services are provided by Emergency Medical Services. City of Tulsa Fire Department provides fire protection to the current Kerr-Edmondson buildings. The closest fire station is approximately 0.2 miles away. The Tulsa County Sheriff's Office provides emergency services to the current buildings.

Public transportation via bus is provided to the proposed VA Inpatient Facility site by The Metropolitan Tulsa Transit Authority (Tulsa Transit). Tulsa Transit provides transportation within 199 square miles of Tulsa and surrounding areas such as Jenks, Sand Springs, and Broken Arrow, Oklahoma.

3.11.2 Environmental Consequences

3.11.2.1 Proposed Action

The construction and operation of the VA Inpatient Facility would have a minor increase in the demand for fire protection, police services, and emergency services. During construction, there could be an increase in the potential for workplace accidents related to construction activities. The implementation of best construction practices and health and safety procedures by the construction and work crews would minimize such hazards. Construction and work crews would be required to comply with Occupational Safety and Health Administration safety and health regulations for construction detailed in 29 CFR Part 1926. The operation of the VA Inpatient Facility could slightly increase the number of calls for fire protection, police services, or emergency services, but is not expected to increase the demand to service levels that would require additional fire, police or emergency staff or facilities.

The operation of the VA Inpatient Facility would improve access to high quality health care to Veterans in the VA Eastern Oklahoma Service Area. The facility would offer state-of-the-art health services and would have long-term beneficial impacts to the health of Veterans in the VA Eastern Oklahoma Service Area and would have an overall beneficial impact to community services.

3.11.2.2 No Action Alternative

Under the no action alternative, no construction would occur. No impacts to community services would occur as a result of VA's actions. However, the proposed site could be developed by others with the potential for impacts to community services specific to that potential development.

3.12 Solid Waste and Hazardous Materials

A Phase I environmental site assessment (ESA) of the proposed VA Inpatient Facility site was conducted by Olsson in August 2021. The ESA is available in the administrative record for this EA.

3.12.1 Affected Environment

The Phase I ESA confirmed there are no current or historic underground storage tanks or aboveground storage tanks on the proposed VA Inpatient Facility site. The Phase I ESA did not identify any recognized environmental conditions (RECs) associated with the site (Olsson 2021).

The Phase I ESA identified two underground storage tanks at the Tulsa Convention Center, 331 feet upgradient of the proposed project site. There are no indications that the tanks in use at this site should be considered RECs. A leaking underground storage tank was identified at the Downtown Tulsa Central Library, 1,562 feet upgradient of the proposed project site. The contaminated soils and the source of the contamination were removed, and the site is now considered to be a historic REC. A leaking underground storage tank was also identified at a property owned by Tulsa County, located 1,560 feet upgradient from the proposed project site. The contaminated soils and the source of the contamination were removed, and the site is now considered to be a historic REC.

A source of mercury was identified on the proposed project site at the existing Kerr-Edmondson buildings. On November 4, 2021, Terracycle Regulated Waste removed two containers of crushed fluorescent lamps containing mercury. With the removal of the lamps, no hazardous waste sources are known to be present on the proposed VA Inpatient Facility site.

In the 1990s, an asbestos management plan was created for the Kerr-Edmondson Office Building. It identified possible sources of non-friable asbestos in the floor tiles. The tiles were not considered to be a threat to the workers or visitors because non-friable floor tiles are unlikely to release asbestos powder during routine use of a building. In 2012, GMR & Associates created a revised asbestos management plan and surveyed the building for asbestos-containing materials, again identifying the floor tiles as source of non-friable asbestos.

3.12.2 Environmental Consequences

3.12.2.1 Proposed Action

Construction of the VA Inpatient Facility would increase the presence and use of petroleum and hazardous materials and would result in short-term and minor impacts. The operation of construction equipment requires petroleum and hazardous materials such as oil, diesel, gasoline, hydraulic fluids, and lubricants. The use and presence of these substances could increase the potential risk for unintentional releases. BMPs such as proper storage and labeling of these substances in approved containers, storage of the containers on a level and impervious surface and providing a secondary containment system around fuel storage containers and during refueling activities would reduce the potential for unintentional releases.

Wastes generated as part of construction activities would be properly managed and disposed of according to federal, state, and local regulations. Wastes would be collected and properly disposed of by a waste disposal company at an approved disposal facility.

Operation of the VA Inpatient Facility would generate solid waste, hazardous materials, and medical waste. These wastes would be managed and disposed of in compliance with federal, state, and local regulations. The wastes would be collected and properly disposed of by approved waste disposal companies at approved disposal facilities.

The Phase I ESA identified no RECs at the site. Construction and operation waste handling would comply with all applicable requirements. Following the recommendations of the asbestos management plan, the non-friable asbestos-containing floor tiles would be handled by a licensed asbestos abatement contractor in accordance with state and federal requirements and industry standards to ensure that they are not broken, sanded or otherwise caused to be made friable. Routine maintenance and care of these floor tiles would not result in the release of asbestos fibers. Impacts related to solid waste and hazardous materials would be less than significant.

3.12.2.2 No Action Alternative

Under the no action alternative, no construction would occur. No impacts to solid waste and hazardous materials would occur as a result of VA's actions. However, the proposed site could be developed by others with the potential for impacts to solid waste and hazardous materials specific to that potential development.

3.13 Traffic, Transportation, and Parking

3.13.1 Affected Environment

The proposed VA Inpatient Facility is located south of Charles Page Boulevard (3rd Street) along South Houston Avenue, between West 3rd Steet and West 7th Steet, and north of 7th Steet. Lawton Drive is located on the west edge of the site, and Houston Avenue is located on the east edge of the site. The location is currently developed and has two state office buildings; the westernmost building is the Edmondson Building, and the easternmost building is the Kerr Building.

Various existing access points are currently provided to the site along 7th Street, Houston Avenue, and Lawton Avenue. Three site drives currently connect to 7th Street, two connect to Houston Avenue, and one connects to Lawton Avenue.

The weighted average time delay at signalized intersections surrounding the location is 18.4 seconds during peak morning traffic conditions and 16.0 seconds during the afternoon peak period. Estimated maximum queue lengths at the existing site drives are all generally less than 50 feet, or two passenger car vehicle lengths.

3.13.2 Environmental Consequences

3.13.2.1 Proposed Action

A transportation analysis was conducted to evaluate anticipated traffic impacts from construction and operation of the proposed VA Inpatient Facility. The study area was bounded by Houston Avenue, 3rd Street, Heavy Traffic Way, Lawton Avenue, and 7th Street. The analysis followed Institute of Transportation Engineers Recommended Practice Transportation Impact Analyses for Site Development (2010) and City of Tulsa requirements for traffic impact studies. The analysis used available public data and a site-specific November 2021 traffic count to model future traffic levels both with and without the proposed VA Inpatient Facility to estimate traffic impacts immediately post construction and out to a 9-year planning horizon (2030). Estimated future traffic associated with the proposed non-VA OSU-CHS mental health hospital projected for construction adjacent to the proposed VA Inpatient Facility was also considered to assess the cumulative effects of the overall development. The traffic analysis is provided in Appendix D.

Traffic associated with the proposed VA Inpatient Facility is projected to add 1,118 vehicles per day to Houston Avenue, 390 to 7th Street, 92 to 3rd Street, and 30 or fewer to Lawton Avenue. The percent increase in daily traffic associated with the proposed facility is estimated to be 18.3% to Houston Avenue east of the facility, 7.6% to 7th Street south of the facility, 2.0% to 3rd Street north of the facility, and 1.2% to Lawton Avenue west of the facility, which indicates that the proposed VA facility would not produce a significant adverse impact to local traffic conditions as defined in VA's NEPA regulations (38 CFR 26.6(a)(2)(ii)). This regulation defines a potential significant traffic impact as "an increase in average daily vehicle traffic volume of at least 20 percent on access roads to the site or the major roadway network."

Potential impacts to the surrounding transportation grid in the immediate vicinity of the proposed VA Inpatient Facility were also assessed. These included effects on roadway operating conditions and intersection delays. In accordance with applicable highway safety standards and to reduce traffic delays from the additional traffic volume from the proposed facility, the following improvements were incorporated into the project design requirements:

- Turn lane improvements at Houston Ave. and Site Drive 5;
- The addition of Site Drive 7;
- Modifications to Site Drives 3, 4, and 6; and
- The removal of Site Drives 1 and 2.

These mitigation measures are included in Section 4 of this document; detailed descriptions of the improvements are presented in Section 8.1 of the traffic analysis included as Appendix D.

After incorporating the aforementioned improvements and the projected traffic load from the proposed VA facility into the traffic model, the estimated weighted average delay at signalized intersections surrounding the location increased by 1.2 seconds, to less than 19.6 seconds during peak morning traffic conditions and 17.2 seconds during the afternoon peak period. This increase would result in negligible differences to the overall conditions drivers can expect to encounter as a result of the proposed VA Inpatient Facility and would not produce a significant adverse impact.

Additionally, VA would coordinate with the City of Tulsa to seek additional improvements to the publicly owned traffic controls at the intersections of Houston Avenue and 3rd Street, Houston Avenue and 7th Street, and 7th Street and Lawton Avenue. These potential measures are summarized in Section 4 of this document and detailed descriptions of the proposed improvements can be found in Section 8 of the traffic analysis included as Appendix D.

The parking requirements associated with the proposed VA Inpatient Facility are estimated to be 445 spaces during the peak period parking demand, which is consistent with the project design requirements for onsite parking. No impact to surrounding area parking would occur.

Based on the analysis summarized above, construction and operation of the inpatient hospital would result in less than significant impacts to traffic, transportation, and parking.

3.13.2.2 No Action Alternative

Under the no action alternative, no construction would occur. No impacts to traffic, transportation or parking would occur as a result of VA's actions. However, the proposed sites could be developed by others with the potential for impacts to traffic, transportation or parking specific to that potential development.

3.14 Utilities

3.14.1 Affected Environment

The proposed VA Inpatient Facility site is located within a mostly developed urban area with existing public utilities. The City of Tulsa provides water, sewer, trash removal, stormwater maintenance, and recycling for the proposed VA Inpatient Facility site. Natural gas is provided by Oklahoma Natural Gas and electricity is provided by Public Service Company of Oklahoma. In addition, steam and chilled water are available in the Tulsa business district by Vicinity Energy.

3.14.2 Environmental Consequences

3.14.2.1 Proposed Action

The existing Kerr-Edmondson buildings are currently connected to local chilled water utilities. Further evaluation is required to determine whether and how to make connections to existing chilled water and steam utilities or to provide stand-alone generation equipment. The heating and cooling systems would have redundancy and backup fuel to ensure continuity of operations. New dedicated electric, gas, and water services would be provided to the facility from the local utility provider. All utilities for the hospital would be metered at the building level with meters connected to the utility monitoring system. A building automation system for the hospital would be provided. The proposed project would also include appropriately sized telecommunication infrastructure. Stormwater from the VA Inpatient Facility would be collected by stormwater inlets and discharged to existing underground stormwater basins. Utility providers have confirmed adequate capacity to support the proposed project; the determination of whether to supply the facility with natural gas or connect to the downtown steam and chilled water system would be based on a cost-benefit analysis. The construction and operation of the VA Inpatient Facility would result in less than significant impacts to utilities.

3.14.2.2 No Action Alternative

Under the no action alternative, no construction would occur. No impacts to utilities would occur as a result of VA's actions. However, the proposed site could be developed by others with the potential for impacts to utilities specific to that potential development.

3.15 Environmental Justice

The USEPA environmental justice screening and mapping tool, EJSCREEN, was used to identify and compare minority and low-income populations.

3.15.1 Affected Environment

A 0.5–mile environmental justice study area around the proposed VA Inpatient Facility site location was evaluated. Table 3-5 summarizes the data from EJSCREEN (USEPA 2021a).

Table 3-5. Summary of Environmental Justice Data

Demographic Indicator	United States	Oklahoma	Tulsa County	Proposed VA Inpatient Facility Study Area
Minority population	39%	34%	38%	40%
Low-income population	33%	37%	34%	37%

3.15.2 Environmental Consequences

3.15.2.1 Proposed Action

The area within a 0.5-mile radius of the proposed VA Inpatient Facility site has a higher proportion of minority populations than Tulsa County, the State of Oklahoma, and the U.S. This same area has a higher proportion of low-income population than Tulsa County and the U.S., but the same as the State of Oklahoma. Because no significant adverse impacts are expected from the proposed project, there would be no disproportionate adverse impacts to minority or low-income populations. While construction and operation of the VA Inpatient Facility would increase noise and traffic, these less-than-significant effects would be limited to the immediate project site within the central business district of Tulsa. Additionally, Veterans who are members of minority or low-income populations would have timely access to high-quality health care services, resulting in a beneficial impact to Veterans in these populations.

The construction and operation of the inpatient hospital would result in less than significant impacts on low-income and minority populations

3.15.2.2 No Action Alternative

Under the no action alternative, no construction would occur. No impacts to environmental justice would occur as a result of VA's actions. However, the proposed site could be developed by others with the potential for impacts to environmental justice specific to that potential development.

3.16 Cumulative Impacts

Cumulative impacts are defined as the incremental impact of the proposed action when added to other past, present, and reasonably foreseeable future actions, regardless of what agency (federal or non-federal) or person undertakes such actions. Reasonably foreseeable future actions include the following:

- State mental health hospital
- Parking garage

Concurrently, the OSU-CHS will construct a new 150,000-square-foot, 106-bed mental health hospital adjacent to the proposed VA Inpatient Facility. The mental health hospital will be built, owned, and operated by the OSU-CHS. The state mental health hospital is expected to employee 250 full-time staff.

The adjacent OSU-CHS development will include a new four-story 700-space parking garage, with 300 dedicated parking spaces for the proposed VA Inpatient Facility.

These concurrent projects would contribute to cumulative localized noise, traffic, air quality, and aesthetics impacts if construction activities for all are ongoing at the same time. However, with application of BMPs and compliance with local noise ordinances and construction permits cumulative impacts are expected to be less than significant.

3.17 Potential For Generating Substantial Public Controversy

Based on the absence of public concern identified during the scoping period and the low potential for environmental impacts identified in this EA, the construction and operation of the VA Inpatient Facility is not expected to generate substantial controversy. To date, including during the scoping period, no controversy has been identified. The VA Inpatient Facility would have a beneficial impact as it would improve access to high-quality health care for Veterans in the VA Eastern Oklahoma Service Area.

4. Mitigation Measures

Table 4-1 summarizes the mitigation measures identified in Section 3. Mitigation measures are project-specific requirements, not routinely implemented as part of a development project, that are necessary to reduce potentially adverse environmental impacts.

The measures listed in Table 4-1 would be implemented during construction and operation of the Proposed Action.

Table 4-1. Description and Type of Measures by Resource

Resource	Description
Cultural and Historic Resources	The following mitigation measures for the adverse effect of the undertaking on historic properties will be carried out: • VHiT will install an interior exhibit documenting, with historical information, graphics, and photographs, the significance of the facility as an Urban Renewal project and an example of the Brutalist style of architecture. • VHiT will install exterior historic markers at the two main VA Inpatient Facility entrances providing historic recognition of the significance of the facility as an Urban Renewal project and an example of the Brutalist style of architecture. • VHiT will install interpretation in the main lobby of the building recognizing the legacy of Robert S. Kerr and J. Howard Edmondson, both Veterans, for whom the original buildings were named. • VHiT will provide designs for the interpretation to the signatories for a 15-day review and comment period prior to finalizing and procuring the interpretation measures. VHiT will install the interpretation measures prior to turning over the property to the OSU Regents for immediate transfer to VA as prescribed in the design and development agreement among VA, OSU-CHS, and VHiT.
Traffic, Transportation, and Parking	• Houston Avenue and Site Drive 5 – Construct an additional 260-foot-long left turn lane on site leading to the intersection of Site Drive 5 with Houston Avenue along with signage improvements. • Houston Avenue and Site Drive 4 (access modification) – Reconfigure the existing restricted access and coordinate with City to remove the center

Resource	Description
	median to allow full access to both north and southbound lanes on Houston Avenue along with signage improvements. • Center Lane of Houston Avenue – Coordinate with City to construct a 150-foot-long northbound left-turn lane in lieu of the existing raised center median on Houston at Site Drive 4. • 7th Street and Site Drive 3 – align Site Drive 3 where it connects with 7th Street with the existing external driveway cut to the south. • Lawton Avenue and Site Drive 7 – construct a new controlled access drive to serve the loading docks on the west side of the VA Inpatient Facility building. • 7th Street and Ambulance Access Drive – reconfigure the existing access drive located just west of Site Drive 3 on 7th Street to a restricted-to-ambulances-only drive. VA will also coordinate with the City of Tulsa to seek additional improvements intended to further reduce traffic impacts to surrounding intersections. Detailed descriptions of the proposed improvements can be found in Section 8 of the traffic analysis is included in Appendix D. • Houston Avenue and 3rd Street – Request appropriate signal timing adjustments to account for traffic changes approximately two months after VA Inpatient Facility is opened. • Houston Avenue and 7th Street – Request appropriate signal timing adjustments to account for traffic changes approximately two months after VA Inpatient Facility is opened. • 7th Street and Lawton Avenue – Request modification of the northbound channelized right-turn lane to be controlled by the intersection traffic and appropriate signal timing adjustments. Signal timing adjustments should be deployed approximately two months after VA Inpatient Facility is opened.

5. Public Participation

5.1 Agency and Tribal Consultation and Coordination

VA sent notice of scoping letters and notice of availability letters for the Draft EA to federal, state, and local agencies to request comments on the scope of analysis and alternatives. One response was received, from the ODEQ, as summarized in Section 5.3.

VA invited the following entities to consult under Section 106 of the NHPA, providing information that advised of the adverse effect finding and requested their concurrence or feedback: Advisory Council on Historic Preservation, OK SHPO, Muscogee (Creek) Nation, City of Tulsa Planning Office, Alabama-Quassarte Tribal Town, Apache Tribe of Oklahoma, Delaware Tribe of Indians, Osage Nation, Wichita and Affiliated Tribes, Cherokee Nation, and the Cheyenne and Arapaho Tribes. The Advisory Council on Historic Preservation, in a letter dated November 15, 2021, chose not to participate in the consultation pursuant to 36 CFR § 800.6(a)(1)(ii). The OK SHPO responded in a letter dated September 14, 2021, agreeing with the adverse effect finding. Of the eight federally recognized Tribes invited to consult, the Muscogee (Creek) Nation responded on October 7, 2021, requesting to be a consulting party. The Delaware Nation responded with a general comment on the consultation process; however, they did not request to be a consulting party. The City of Tulsa Planning Office responded that they did not request participation as a consulting party. The OK SHPO and Muscogee (Creek) Nation are consulting parties for Section 106 consultation for this undertaking.

VA coordinated with the Oklahoma SHPO for information and data about known NRHP sites within the proposed VA Inpatient Facility site. Section 106 consultation letters were sent to the Oklahoma SHPO June 22, 2021. Consultation with SHPO and Muscogee (Creek) Nation resulted in an MOA, signed by VA, VHiT, SHPO, and the Muscogee (Creek) Nation on January 18, 2022, to mitigate adverse effects from the renovation of the Kerr-Edmondson building complex. Mitigation measures agreed in the MOA are listed in Section 3.4 and Section 4.0 of this EA. Appendix C provides the Section 106 consultation correspondence and documents, including the MOA.

VA also invited scoping input from the eight federally recognized Native American Tribes and OK SHPO as part of the NEPA scoping process in scoping letters sent on December 6, 2021; no additional input was provided The Tribes and SHPO were notified of the availability of the Draft EA for public comment.

5.2 Scoping

VA provided identified stakeholders and the public with an opportunity to participate in scoping. Scoping is a tool for identifying the issues that should be addressed during the NEPA and NHPA compliance processes. Scoping helps define priorities and identifies issues of concern to the community.

VA published a notice of scoping on December 8 and 12, 2021, in the Tulsa World newspaper. requesting scoping input by January 7, 2022. VA also sent scoping notices to federal, state, and local agencies; elected officials; federally recognized Tribes; and special interest groups.

During the public scoping period, VA received one written comment, submitted by the ODEQ. ODEQ stated that there are no adverse environmental impacts under DEQ jurisdiction anticipated and noted the regulatory requirement to submit a Notice of Intent under state permit OKR10 related to managing

construction stormwater prior to beginning any construction activity disturbing more than one acre. Less than one acres of ground disturbance is expected from the proposed project.

5.3 Public and Agency 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 Tulsa World newspaper on April 29, and May 1, 2022. The Draft EA was published online at https://www.cfm.va.gov/environmental/. VA also notified federal, state, and local agencies; public officials; and federally recognized Tribes of the availability of the Draft EA.

No comments were received from the public. VA received comments from the City of Tulsa on the Traffic Study which have been addressed incorporated as of June 29, 2022, and are included in Appendix D.

6. Agencies and Persons Consulted

Name	Title	Entity and Address
Federal Agencies		
Susan Minnick		U.S. Fish and Wildlife Service, Tulsa Ecological Services Office, 9014 East 21st St., Tulsa, Oklahoma, 74129
Steve Nolen		U.S. Army Corps of Engineers, Tulsa District, 2488 E 81st St, Tulsa, OK, 74137
NA	Region 4 External Affairs	U.S. Dept. of Homeland Security FEMA Region IV, Federal Insurance and Mitigation Administration, 800 North Loop 288, Denton, TX 76209-3698
Local Government		
Bruce Dart	Executive Director	Tulsa Health Department, 5051 S. 129th E. Avenue, Tulsa, OK, 74134
Karen Keith	Tulsa County Commissioner	218 W. 6th St., Tulsa, OK, 74119
G.T. Bynum	Mayor, City of Tulsa	City Hall, 175 E. 2nd St., Tulsa, OK 74103
Kara Joy McKee	City of Tulsa Council Person	City Hall, 175 E. 2nd St., Tulsa, OK 74103
Roy Malcolm Porter	Historic Preservation Officer	City of Tulsa Planning Office, 2 W. 2nd St., Suite 800, Tulsa, OK 74103
Oklahoma State Agencies		
Tim Gatz	Secretary/Executive Director	Oklahoma Dept. of Transportation, 200 NE 21st St., Oklahoma City, OK 73105
Jon Roberts	Senior Manager	Oklahoma Dept. of Environmental Quality, 707 N. Robinson Ave., Oklahoma City, OK 73101
J. D. Strong	Director	Oklahoma Dept. of Wildlife Conservation, 1801 N. Lincoln Blvd., Oklahoma City, OK 73105
Kenneth E Wagner	Secretary of Energy and Environment	204 N. Robinson Suite 1010, Oklahoma City, OK 73102
Julie Cunningham	Executive Director	Oklahoma Water Resources Board, 3800 N. Classen, OKC, OK, 73118
Lynda Orzan	Deputy State Historic Preservation Officer	Oklahoma State Historic Preservation Office, 800 Nazih Zuhdi Drive, Oklahoma City, OK 73105
Kary Stackelbeck	State Archeologist	Oklahoma Archeological Survey, 111 Chesapeake St., Norman, OK, 73019-5111
Trey Lam	Executive Director	Oklahoma Conservation Commission, 2800 N. Lincoln Blvd, Ste. 160, OKC, OK 73105
Federally Recognized Tribes		
Terri Parton	President	Wichita and Affiliated Tribes of Oklahoma, PO Box 729 Anadarko, OK 73005
Geoffrey Standing Bear	Principal Chief	Osage Nation of Oklahoma, PO Box 779 Pawhuska, OK 74056
Brad Kills Crow	Acting Chief	Delaware Tribe of Indians of Oklahoma, 5100 Tuxedo Boulevard Bartlesville, OK 74006
Chuck Hoskin	Principal Chief	Cherokee Nation of Oklahoma, PO Box 948 Tahlequah, OK 74465
Wilson Yargee	Chief	Alabama-Quassarte Tribal Town, PO Box 187 Wetumka, OK 74883
Durell Cooper III	Chairman	Apache Tribe of Oklahoma, PO Box 1330 Anadarko, OK 73005
Reggie Wassana	Governor	Cheyenne and Arapaho Tribes, Oklahoma, P.O. Box 167 Concho, OK 73022
David Hill	Principal Chief	Muscogee (Creek) Nation, PO Box 580 Okmulgee, OK 74447

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9. Glossary

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 according to the Clean Air Act to protect health and welfare.

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

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

Best management practices (BMPs)—Methods, measures, or practices to prevent or reduce environmental impacts.

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

Council on Environmental Quality (CEQ)—An agency in the 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. Develop and issue guidance for implementing the National Environmental Policy Act.

Cultural resources—The physical evidence of our Nation's heritage. Includes 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 the 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.

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 project would significantly affect the environment.

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

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 that 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 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.

Hazardous materials—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 (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 CFR 302.4.

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 occurs later in time or farther removed in distance from the action causing it 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.

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 a threatened, endangered, special concern, or candidate species.

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

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.

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.

Remediation—An action that reduces or eliminates a threat to the environment; often used to refer to "clean up" of chemical contamination in soil or water.

Sensitive receptors—Include, but are not limited to 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 1501.3(b):

> In considering whether the effects of the proposed action are significant, agencies shall analyze the potentially affected environment and degree of the effects of the action. Agencies should consider connected actions consistent with § 1501.9(e)(1).
>
> > (1) In considering the potentially affected environment, agencies should consider, as appropriate to the specific action, the affected area (national, regional, or local) and its resources, such as listed species and designated critical habitat under the Endangered Species Act. Significance varies with the setting of the proposed action. For instance, in the case of a site-specific action, significance would usually depend only upon the effects in the local area.
> >
> > (2) In considering the degree of the effects, agencies should consider the following, as appropriate to the specific action:

(i) Both short- and long-term effects.

(ii) Both beneficial and adverse effects.

(iii) Effects on public health and safety.

(iv) Effects that would violate Federal, State, Tribal, or local law protecting the environment.

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 Resource Conservation and Recovery Act regulations (40 CFR 261.4(a)) or that is not excluded by a variance under 40 CFR 260.30 or 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.

Waters of the United States—Include the following: territorial seas and traditional navigable waters; tributaries; lakes, ponds, and impoundments of jurisdictional waters; and adjacent wetlands. The scope of waters protected under the Clean Water Act is determined by the current regulatory definition of this term in 40 CFR Part 23.

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 live