

MAY 25, 2021



DRAFT

ENVIRONMENTAL ASSESSMENT OF THE PROPOSED REHABILITATION OF
THE ILLINOIS VETERANS HOME – QUINCY IVHQ
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EXECUTIVE SUMMARY AND CONCLUSIONS

This draft environmental assessment (EA), identifies, analyzes, and documents the potential physical, environmental, cultural, and socioeconomic impacts associated with the demolition, renovation, and new construction at the Illinois Veterans Home in Quincy, Illinois. This proposed project would occur entirely within the existing Illinois Veterans Home campus, Quincy (IVHQ), Adams County, Illinois.

The purpose of the Proposed Action is to provide a modern, efficient, adaptable facility capable of supporting state of the art skilled nursing care services, related amenities and independent living for the veterans at the IVHQ.

The project is needed to address the aging infrastructure and facilities at IVHQ as well as improved patient/resident hygiene and sanitation. The existing facilities are not equipped to serve Veterans and their families in a small-house skilled care environment of a standard that is being widely adopted by the Veterans Administration across the country. In addition, some buildings are functionally obsolete and do not house residents any longer. Some others are needing an excessive amount of maintenance to keep them serviceable. It can be expected that outdated campus utilities are increasingly difficult to service and could not be expected to provide the level of resilience and dependency expected of them to support a campus of this scale and size.

Two alternatives are analyzed in this EA:

- The **Proposed Action** is for the U.S. Department of Veterans Affairs (USDVA) to award a grant to the State of Illinois to partially fund the construction of a new 210-unit Long-Term Care facility, a new 80-unit Domiciliary, and renovations to various structures on the IVHQ, including mechanical infrastructure and utility system upgrades. The project building footprints are located at the heart of the IVHQ. The infrastructure and utility upgrades, however, extend past this immediate area of impact and extend to other areas of the IVHQ.
- Under the **No Action** alternative, USDVA would not authorize the federal grant reimbursement for the campus rehabilitation project, thereby significantly impacting the project's financial feasibility. Routine maintenance would continue as budgets allow on older buildings and an outdated utility infrastructure, some of which are functionally obsolete. This option would negatively impact the Veterans in the state and in the surrounding rural community as they would go without the services that IVHQ could otherwise have provided and expanded with greater efficiency.

The potential environmental impacts of the Proposed Action and No Action are summarized in **Table 1**.

Table 1 Summary of Impact Analysis

Resource/Issue	Proposed Action	No Action
Aesthetics	Improve the long-term visual quality and aesthetic of the IVHQ	No improvements would occur to the current aesthetic or visual character of the existing IVHQ. However, no action would result in greatly increasing the staffing demands and resources needed to maintain the current levels of upkeep and maintenance. This would place an increased strain on staff and resources. Age related deterioration to buildings and landscape features can be expected.
Air Quality	Short-term, direct, less-than-significant adverse impact on air quality.	Indoor air quality would continue to meet the minimum thresholds, but the aging systems would not see the upgrades needed to meet current building codes and standards and suffer lower efficiencies related to age.
Cultural Resources	The construction of the new Long-Term Care facility and the Domiciliary, along with the utility and site infrastructure improvements includes the demolition of older buildings which constitutes as adverse effect on the campus district. The USDVA's historic preservation specialist is working with the Illinois SHPO to initiate consultation and identify adverse effects of the undertaking for mitigation.	No impacts on cultural resources. However, age and constrained budgets are likely to place significant hurdles in the upkeep of such a large campus and create a long-term, adverse impact on cultural resources on this campus. Some functionally obsolete buildings would eventually need to be abandoned and left unused.
Geology, Topography, and Soils	No impact on geological resources or lead to seismic events. Negligible adverse impact on topography. No adverse impact on soils	None
Hydrology and Water Quality	No adverse impact on surface water quality. No adverse impact on stormwater volume, and would have a minor, long-term, beneficial impact on stormwater quality. No impact on groundwater quality	None

Resource/Issue	Proposed Action	No Action
Wildlife and Habitat	None	None
Noise	A short-term, direct and indirect, less-than-significant adverse impact on sensitive receptors, but likely no impact on any receptors located elsewhere within or beyond the IVHQ.	None
Land Use	None	None
Floodplains, Wetlands, and Coastal Zone Management	None	None
Socioeconomics and Community Services	A long-term, significant beneficial impact on socioeconomics and community services	None
Solid and Hazardous Materials	A long-term, less-than-significant adverse impact regarding solid wastes	A long-term, direct, moderate adverse impact regarding regulated building materials.
Utilities	A beneficial effect on the IVHQ utilities. The upgraded utilities would have redundancy and resiliency to serve residents, staff, and visitors in a safe and efficient manner.	A lack of investment and upgrade to the existing utilities would place a significant burden on staffing and budgets, as well as dependability, reliability, efficiency and overall campus resilience as these utilities age.
Transportation and Parking	A short-term adverse impact to the parking capacity.	None
Environmental Justice	Investment in a part of the state that is distant from large urban centers and the resulting expansion of services for an under-served community.	The USDVA has encouraged states to adopt a small-house model environment for long term care of veterans and the no-action alternative would make it extremely difficult to fulfil this vision within the constraints of older facility environments. With Quincy being located away from major metropolises, the campus provides much needed services for veterans in a largely rural area of the state.
Cumulative Impacts	None	None
Potential for Generating Substantial Controversy	None	None. Administration will need to engage with the public and respond to the public's interest in seeing positive change on campus.

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ACRONYMS AND ABBREVIATIONS

ACM	Asbestos Containing Material	LTC	Long-term care
APE	Area of Potential Effects	MSL	Mean Sea Level
BCC	Birds of Conservation Concern	NAAQS	National Ambient Air Quality Study
BMP	Best Management Practices	NEPA	National Environmental Policy Act
BNSF	Burlington Northern Santa Fe	NESHAP	National Emission Standards for Hazardous Air Pollutants
BPF	Blows per Foot	MOA	Memorandum of Agreement
BSG	Below Surface Grade	NPDES	National Pollutant Discharge Elimination System
CAA	Clean Air Act	NPS	National Park Service
CDB	Illinois Capital Development Board	NRHP	National Register of Historic Places
CEQ	White House Council on Environmental Quality	OSHA	Occupational Safety and Health Administration
CFR	Code of Federal Regulations	OSHPD	Office of Statewide Health Planning and Development
dB	Decibels	PCB	Poly Chlorinated Biphenyls
EA	Environmental Assessment	PGA	Peak Ground Acceleration
EISA	Energy Independence and Security Act	PTE	Permit to Emit
EO	Executive Order	QRABF	Quincy Regional Airport Baldwin Field
ESA	Endangered Species Act	ROW	Right of Way
FY	Fiscal Year	SHPO	State Historic Preservation Office
GCR	General Conformity Rule	SIP	State Implementation Plan
GHG	Greenhouse Gas	SPT	Standard Penetration Test
HABS	Historic American Building Survey	SPZ	Seismic Performance Zone
HAP	Hazardous Air Pollutants	SWPPP	Storm Water Pollution Prevention Plan
IAC	Illinois Administrative Code	TPY	Tons per Year
IDNR	Illinois Department of Natural Resources	USC	US Code
IDOT	Illinois Department of Transportation	USEPA	US Environmental Protection Agency
IDVA	Illinois Department of Veterans Affairs	USFWS	US Fish and Wildlife Service
IHPA	Illinois Historic Preservation Agency	USGS	US Geological Survey
ILCS	Illinois Compiled Statutes	USDVA	United States Department of Veterans Affairs
IVHQ	Illinois Veterans Home Quincy		
LBP	Lead based paint		

1 INTRODUCTION

The State of Illinois's Capital Development Board ('CDB') intends to construct a new Long-Term Care Building and Domiciliary for the Illinois Department of Veterans Affairs (IDVA). The site chosen for this development lay at the heart of the Illinois Veterans Home at Quincy (IVHQ) in the city of Quincy in Adams County, Illinois.

At approximately 220 acres, the IVHQ is comprised of 47 buildings of different functions including residential, lodging, healthcare, office, cultural, community/dining center, auditorium, religious and support logistics uses in a campus setting. The IVHQ is bordered by North 12th Street to the east, North 5th Street to the west, Locust Street to the south and Burlington Northern Santa Fe (BNSF) railway to the north. Along the northern border is Cedar Creek that serves as a connection to the wider stream network throughout the Mississippi River area. The IVHQ is surrounded by residential neighborhoods to the east, west and south, with Cedar Creek Park/ Veterans Cemetery to the north. The IVHQ is approximately 1.5 miles away from downtown Quincy via N. 12th Street or N. 5th Street. (Refer to **Figure. 1**)

Figures 1 and 2 reflect the general location and site boundary of the IVHQ property to be used for this Proposed Action. **Figures 3, 4, and 5** depict the stages of the Proposed Action.

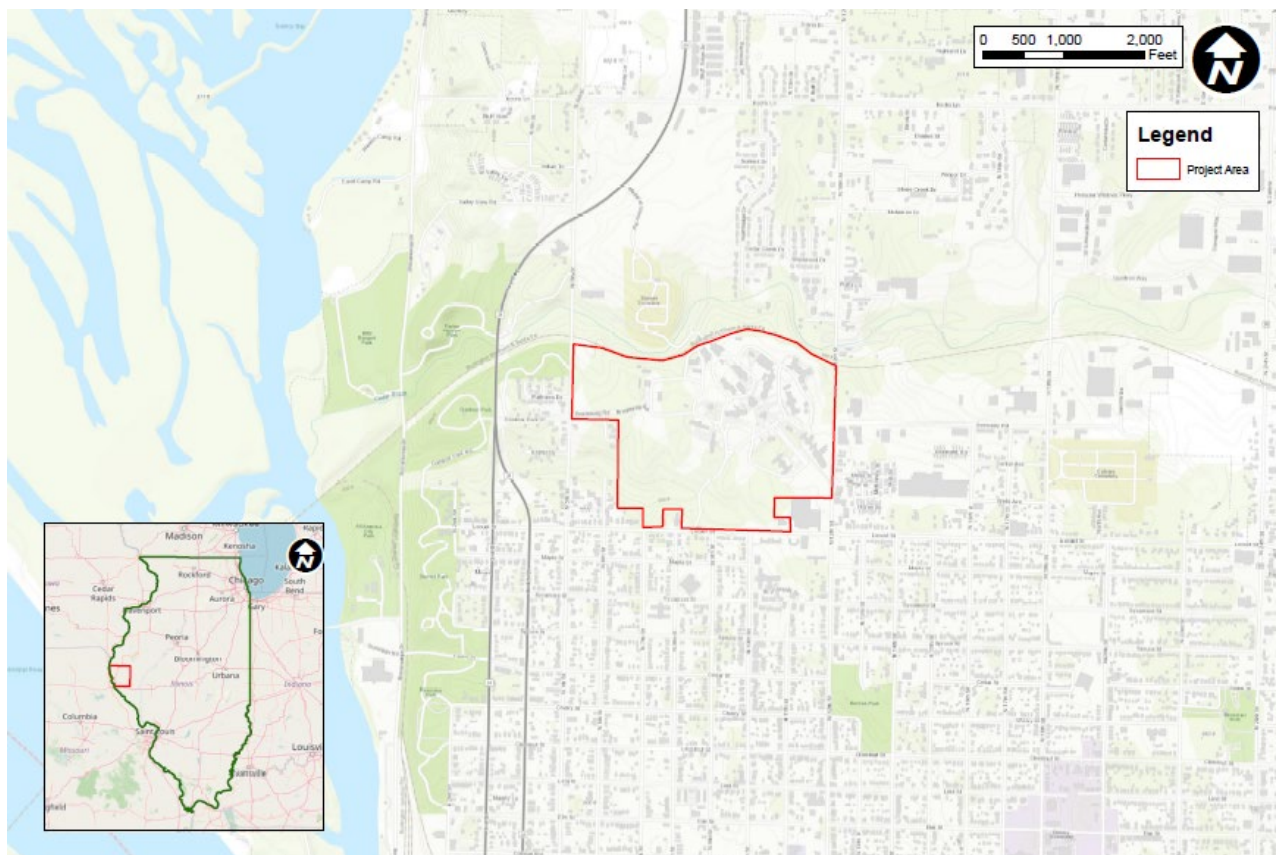


Figure 1 Site Location Map



Figure 2 IVHQ property boundary

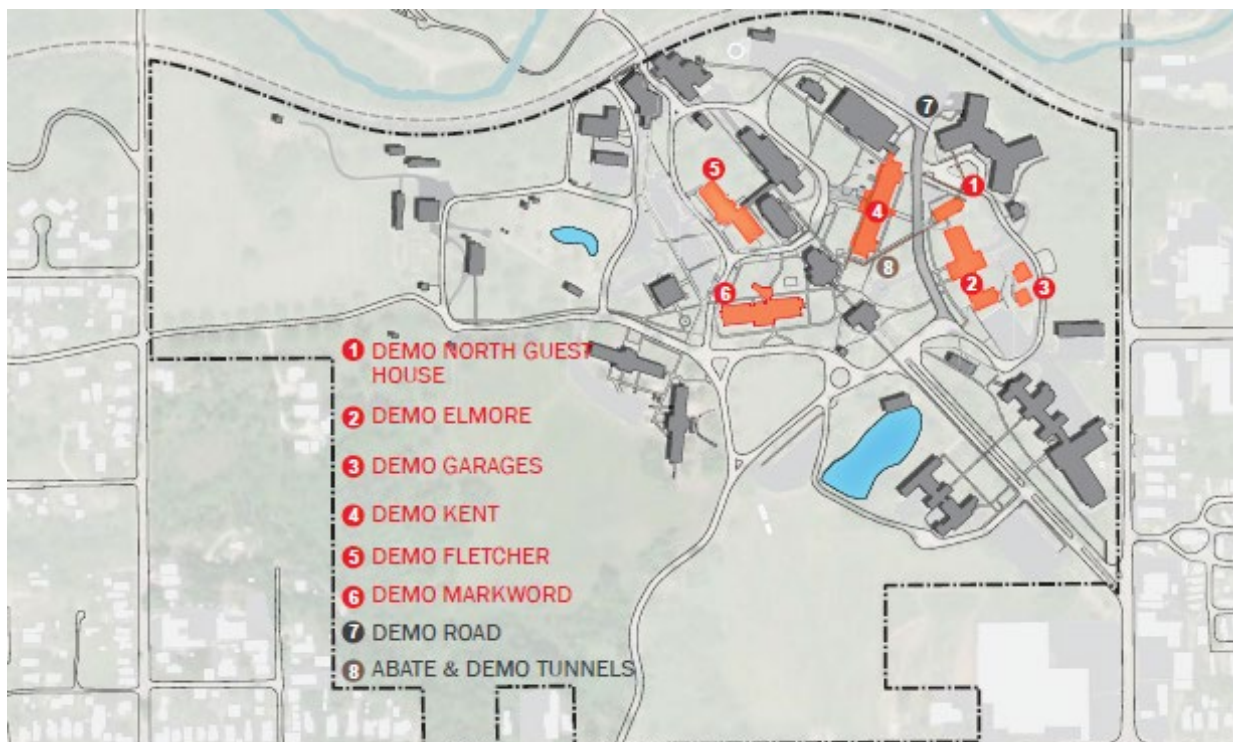


Figure 3 Phase 2B of Proposed Action (Actual phasing of construction dependent upon Design/Build Contractor)

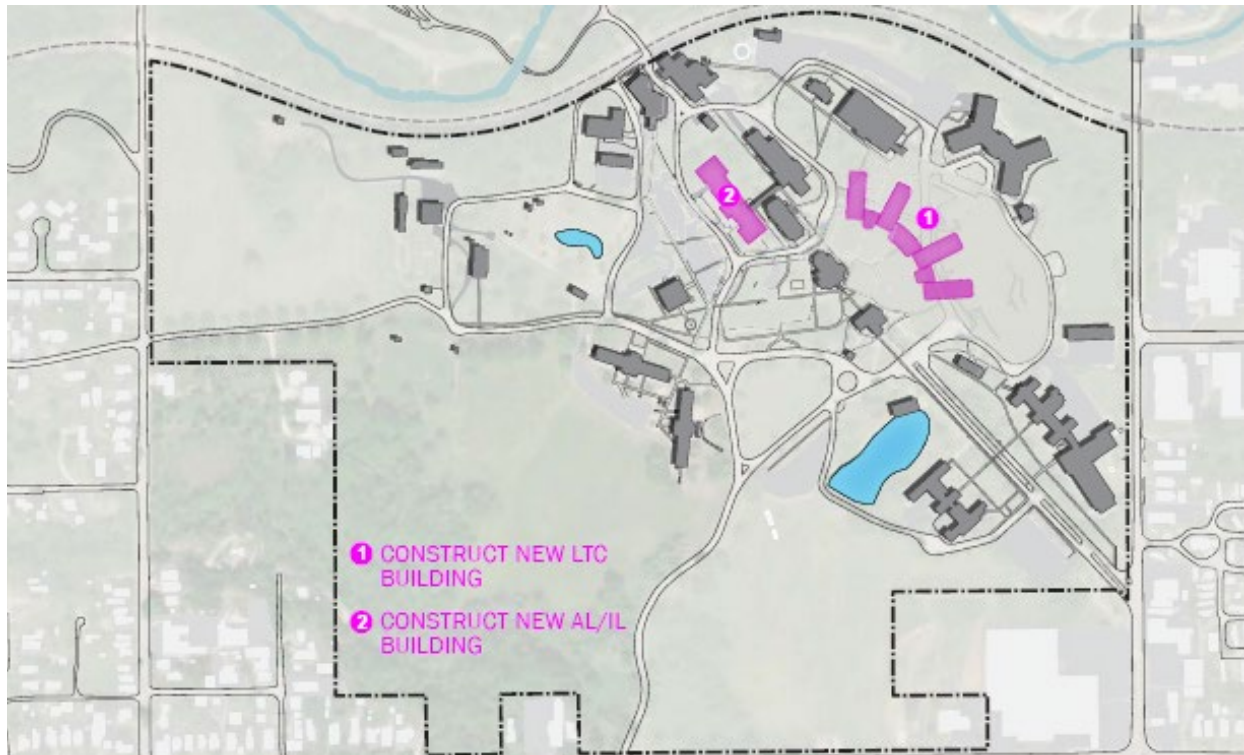


Figure 4 Phase 3 of the Proposed Action (Actual phasing of construction dependent upon Design/Build Contractor)

The IVHQ was developed starting in 1886 and is an active and well-established Veterans home in Illinois. It has a campus with many veteran and public amenities and attracts people from all over the state due to its location by the Mississippi River and the quiet, peaceful surroundings. IVHQ is responsible for providing economical and quality Long-Term Care for veterans and their eligible spouses which includes skilled and domiciliary care. These services are provided by a multi-disciplinary group of long-term-care and health care professionals as well as an array of supportive staff. These services are directed to provide multiple physical services as well as restorative services to maintain maximum functioning capacity. Residency in the IVHQ is available to honorably discharged Illinois Veterans and their spouses.

A series of events in 2015 and 2016 propelled the need for a major overhaul of the IVHQ. Due to the vulnerable health situation of the home's general population, an outbreak of Legionnaires disease in 2015 resulted in a rapid spread of the infection and losses of life (Affairs, 2020). The outbreak cast a spotlight on the underlying needs of the aging IVHQ infrastructure. Immediately thereafter, the work to update the IVHQ became a governmental priority.

In this environmental assessment (EA), CDB and IDVA identify, analyze, and document the potential physical, environmental, cultural, and socioeconomic impacts associated with USDVA supporting renovation and new construction of the State Veterans Home in Quincy, Illinois.

Two alternatives are analyzed in this EA:

- The **Proposed Action** is for USDVA to award a grant to the State of Illinois to partially fund the construction of a new 210-unit Long-Term Care facility, a new 80-unit Domiciliary, and renovations to various structures on the IVHQ, including mechanical infrastructure and utility

system upgrades. The project building footprints are located at the heart of the IVHQ. The infrastructure and utility upgrades, however, extend past this immediate area of impact and extend to other areas of the IVHQ.

- Under the **No Action** alternative, USDVA would not issue a federal grant to support the redevelopment of the IVHQ described herein. Routine maintenance would continue as budget allows. Challenges to offering newer state of the art models of veteran resident long term care, negative impacts to operations and maintenance, and impacts to campus utility reliability and resilience are explored.

1.1 Purpose and Need

The **purpose** of the Proposed Action is to provide a modern, efficient, adaptable facility capable of supporting state of the art skilled nursing care services for the veterans at the IVHQ.

The project is **needed** to address the deteriorating infrastructure and structures at IVHQ as well as patient/resident hygiene and sanitation. The existing facilities are not equipped to address the current needs of the Veterans and their families who need services at IVHQ.

1.2 Project Background and Existing Site

The State of Illinois budget included funding for a programmatic and needs assessment for the IVHQ. The contractors (Perkins Eastman) presented CDB and IDVA with a Programmatic and Needs Assessment dated July 20, 2019. This assessment recommended that CDB and IDVA renovate the IVHQ facility. The IVHQ and City of Quincy expressed considerable interest in the proposal. The project would occur entirely within existing IVHQ grounds in Quincy, IL.

1.3 Decision Making

The Proposed Action is subject to the procedural requirements of the National Environmental Policy Act of 1969 (NEPA). NEPA requires federal agencies to consider environmental consequences in their decision-making process. The Council on Environmental Quality (CEQ) issued regulations (40 Code of Federal Regulations [CFR] Parts 1500-1508) to implement NEPA that include provisions for both the content and procedural aspects of the required environmental analysis. The USDVA complies with NEPA and CEQ implementing regulations in accordance with 38 CFR Part 26 (51 FR 37182, Oct. 20, 1986, Environmental Effects of the Department of Veterans Affairs Actions). The CEQ regulations were revised with an effective date of September 14, 2020; as a NEPA analysis that was initiated before that date, this EA was conducted using the previous regulations, as allowed under the revised regulations.

This EA provides the necessary information for the USDVA to make an informed decision regarding the proposed action. This EA was performed to analyze, and document the potential physical, environmental, cultural, and socioeconomic impacts associated with implementing the construction and operational elements of the Proposed Action. Additionally, this EA evaluates the potential impacts associated with taking No Action (that is, not implementing the Proposed Action), where the conditions as they currently exist at IVHQ would remain unchanged.

CDB and IDVA are required to incorporate environmental considerations into their decision-making process for the actions they propose to undertake. This is done according to the regulations and guidance identified above. As such, this EA:

- Informs the public of the possible environmental impacts of the Proposed Action and its considered alternatives, as well as methods to reduce these impacts;
- Provides for public, state, inter-agency, and tribal input into the CDB and IDVA’s planning and evaluation;
- Documents the NEPA process; and
- Supports informed decision-making by the federal government.

As the decision document for this proposed federal undertaking, this EA also identifies the actions to which CDB and IDVA would commit to minimize environmental effects, as required under NEPA, its implementing regulations from CEQ (40 CFR 1500–1508) and USDVA (38 CFR Part 26), and USDVA’s NEPA guidance (Department of Veterans Affairs, 2010). The decision to be made is whether—having considered the potential physical, environmental, cultural, and socioeconomic effects—USDVA should issue a federal reimbursement grant to support the Proposed Action including, as appropriate, measures to reduce adverse effects.

2 DESCRIPTION OF THE PROPOSED ACTION AND ALTERNATIVES

This chapter summarizes the process used to develop alternatives and provides a description of the subsequently selected Proposed Action and its alternative.

The alternatives evaluated in this EA are the Proposed Action and No Action. The Proposed Action is described in detail in the following section. The No Action Alternative is evaluated in this EA pursuant to NEPA requirements and provides a baseline against which the Proposed Action may be evaluated.

2.1 Proposed Action

The Proposed Action involves a combination of demolishing existing buildings, renovating existing buildings, and new construction. The “W####” appended to the name of each building is the CDB and IDVA’s building number assigned to each building on the IVHQ.

Demolition

As a part of the Proposed Action, the following buildings would be demolished throughout different phases of the project.

- Elmore Infirmary Building #94 (W0646): Low-rise Masonry structure constructed circa 1963 containing approximately 36,000 square feet.
- Kent Infirmary Building #91 (W0650): Low-rise masonry structure constructed circa 1972 containing approximately 57,000 square feet.
- Fletcher Infirmary Building #26 (W0618): Low-rise masonry structure constructed circa 1954 containing approximately 35,000 square feet.
- Northern Guest House Building #31 (W0603): Masonry structure constructed circa 1886 containing approximately 7,500 square feet.
- Truck Maintenance Garage Building #32 (W0653): Masonry structure constructed circa 1927 containing 5,000 square feet.
- Vehicle Garage Building #24 (W0637): Masonry structure constructed circa 1951 containing approximately 2,000 square feet.
- Markword Infirmary #90 (W0647): Low-rise masonry structure constructed circa 1964 containing approximately 27,000 square feet.

Intended for limited area selective utility de-commissioning as required to accommodate larger campus renovation goals:

- Ehle Laundry #89 (W0645): Masonry structure constructed circa 1963 containing approximately 11,000 square feet.
- Power Plant #40 (W0615): Masonry structure constructed circa 1886 containing approximately 17,000 square feet.

- Tunnel System (W0656): Old stone masonry and concrete walled below grade structures constructed over the years starting circa 1885 and laid out across campus serving multiple buildings.

Renovation

As a part of the Proposed Action, the Nielson Dining would be renovated to change the service from the main kitchen and main dining area for the IVHQ to the main service loading dock to service the new Long-Term Care (LTC) building and Domiciliary. The renovation would also allow for the additional storage and staff areas to serve the IVHQ.

- Nielson Dining #92 (W0643): Masonry structure constructed circa 1967 containing approximately 43,000 square feet.
- Nielson Building is currently functioning as the main IVHQ Kitchen and central dining location. It also houses the main Kitchen storage, has large freezers and coolers for dry and other perishable goods storage, and functions as one of the larger IVHQ general storage buildings. When the old kitchen is decommissioned, the interior will be renovated into resident and or staff use areas. The building would also receive a remodeling of its receiving areas and loading dock and trash removal areas, to support the services for both new LTC building and Domiciliary.
- As the main central kitchen is proposed to be housed in the new LTC building, the entire space devoted to the IVHQ kitchen and all its immediate cooking, plating, cleaning, and distribution is proposed to be reconfigured into storage, staff amenities, locker rooms and staff dining and break rooms.
- The lower levels of the Nielson building would continue to serve as general stores. The loading dock, receiving and trash handling areas are upgraded and supported with tunnel connections to the new LTC building.

New Construction

New Long-Term Care Building

A new LTC building is proposed and designed to care for the 210 residents that would be displaced by the demolition of older skilled-care buildings.

The approximately 250,000 square feet new building is designed with a common ‘Town-center’ connecting two wings. The North and South wings each have three to four stories of resident rooms and supporting care services and spaces. The Town-center houses the welcome and arrival spaces and functions that would serve as the hub for the renovated IVHQ. An exterior promenade faces the interior of the IVHQ and its historic core. Service and utility connectivity is provided to other neighboring buildings with underground tunnel links.

Small House design guidelines from the USDVA were used as a basis for the design along with skilled nursing standards for licensure in the State of Illinois. Multiple households connected to a spine would allow for a variety of care levels. This was intended to support the changing needs of the veteran population over the next century.

Each typical upper-level floor has 60 resident beds laid out in the form of a neighborhood on each wing with a connector between them for ease of staffing and operational management. A typical 30-bed neighborhood is itself laid out in the form of two connected 15-bed households. The basis for the design of the whole building is the creation of this 15-bed household unit and all the support spaces it needs.

Feeling and memories of home would be created using small household sizes and intimate living environments. This was intended to support the changing needs of the veteran population over the next century. Each household was equipped with a kitchen and a complement of living, dining and social spaces centered on resident wellness.

Domiciliary

As a part of the Proposed Action, a new general-purpose Domiciliary building is proposed to support and enhance the lives of the more independent and able residents on IVHQ. 80 adaptable apartments of different sizes were organized around a fabric of social spaces that would support life-long learning and strong sense of community in this resident type.

The roughly 80,000 square feet building intends to house residents that are currently in older, obsolete and accessibility-challenged buildings that are not suited to serve the range of needs of a typical domiciliary resident on IVHQ. The apartments are laid out in the form of studio and one-bed units. Shared amenity dining, wellness, and classroom/learning spaces for the residents are clustered on the main entry level, where smaller groupings of lounges are distributed across the different floors.

Site Utility Service Upgrades

The current condition of the overall site infrastructure poses many challenges. There is a significant amount of deferred maintenance on the heating plant and the electrical primary distribution system. The system efficiencies are low, circulating pumps are not fully functional, a lot of treated water for the boiler plant is not recirculated and wasted. The burden on yearly maintenance is increasing.

At some locations, electrical duct bank covers have structural risks from age and need significant maintenance and upkeep to remain functional. Much of the distribution infrastructure like transformers and generators are at the end of their useful life and have limited replacement part availability. Many buildings offering resident care in living environments do not have access to redundant or reliable sources of electrical energy and heating and cooling.

The Proposed Action includes upgrades to existing steam distribution or alternative solutions using natural gas distributed as the heating source for the new buildings. Redundant and reliable heating and cooling are provided for in the new building designs. The entire electrical infrastructure distribution is slated for complete replacement. These Proposed Actions are intended to vastly improve IVHQ resilience and redundancy. N+1 redundancy is used as a basis for the design of the staging and modulating of supporting systems.

Renovation and upgrade work for various other utility and infrastructure systems would be implemented as follows:

Tunnels: The general condition of the main utility tunnels is relatively good; however limited portions of the old stone tunnel to the east were rated in “poor condition”. The tunnels carry the main steam lines as

well as water and low voltage cables. Corroded pipe footings, unstable supports, insulation repairs are all slated for continued maintenance. Tunnels below new building footprints would be demolished to make way for new buildings, and tunnels outside the construction footprint area would be maintained or repaired as needed by IVHQ maintenance outside of the scope of this project.

Electrical Distribution: Loads are not expected to increase on IVHQ because modern systems and buildings are more efficient than currently on IVHQ. However, the vulnerable state of the existing IVHQ Medium Voltage service and distribution has been scrutinized and presents a risk in the event of a failure due to a lack of redundancy. The overall system has been studied in detail and plans developed for replacement. A combination of new medium voltage electrical service has been proposed in the form of a loop around the critical core of the IVHQ, supported by radial distribution to peripheral buildings. The loop is set in a duct bank around the core of the IVHQ and is in direct bores on the peripheral supplies. New switches, transformers and electrical gear help connect the new distribution to both new and existing IVHQ electrical infrastructure.

Underground Sanitary/ Storm Sewer Systems. Sanitary and storm sewer systems are proposed to be upgraded under the footprint of major construction areas. Camera investigation would be carried out prior to, during, and after construction to determine the condition of the sanitary and storm sewers outside of the construction areas and to create a IVHQ condition update. The underground sewer systems of the older buildings do not appear to have been upgraded as part of the various renovation projects. It is believed that all of the underground systems are still serviceable and provide the required function.

Water: The water distribution on site is perhaps the most pressing infrastructure system upgrade due to the safety concerns regarding the Legionella bacteria. A comprehensive study of the water system was carried out recently by others and this prior study proposed several potential strategies to prevent a recurrence of the prior problem. Chief among these was the recommendation to build a new water distribution network on site to serve the new and existing buildings.

The CDB and IDVA hired an independent engineer to design a new domestic water distribution system on IVHQ and the builder would coordinate and integrate efforts to tap into that line for new services.

Technology infrastructure: The technology distribution on IVHQ has been mapped for coordination purposes. The backbone would be upgraded with new fiber optic distribution.

Natural Gas: Gas would be extended to more buildings. While suggested routing has been shared, the actual routing would be subject to field coordination by the builders.

2.2 No Action Alternative

The No Action alternative serves as a benchmark against which the effects of the Proposed Action can be evaluated and is required to be considered in an EA under the NEPA Regulations (40 CFR Part 1502.14). For this project, No Action is defined as VA not awarding the grant, with the result that the campus-wide project as described under the Proposed Action would not be implemented or would have to be reconsidered with a substantially reduced scope.

Under the **No Action** alternative, USDVA would not authorize a federal grant to support the construction of the proposed action. CDB and IDVA would need to revisit budgets and scope with the CDB and IDVA in response to the decisions. Kent and Fletcher buildings would remain vacant for the foreseeable future,

with deteriorating structures. At the remaining care buildings, veteran care would continue to be offered in facilities that are not equipped to serve residents with latest technology and a newer resident focused environment which would otherwise have been in tune with the small-house guidelines released by the USDVVA. These guidelines were intended for adoption in State VA Homes across the country. Ventilation, heating, cooling, electrical resilience, technology distribution and water quality would all remain concerns on IVHQ necessitating continued budgetary spending on deferred maintenance and the related staffing implications. Furthermore, the IVHQ has suffered from Legionella disease outbreak in the past, and as a result, the No Action alternative would continue to pose challenges to a comprehensive and resilient campus upgrade.

3 AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

This section presents the detailed analysis of potential impacts to the physical, environmental, cultural, and socioeconomic resources anticipated from implementing the Proposed Action or the No Action alternative. The analysis for each resource includes a description of the baseline existing conditions, applicable regulatory requirements associated with construction and operation of the Proposed Action, and any resource-specific management or mitigation measures necessary to minimize any potential adverse impacts from implementing the Proposed Action.

For the purposes of this EA, the Project Study Areas for the Proposed Action include the building footprint and the landscaped area immediately surrounding each building where construction equipment would be staged, as well as the utility corridors for selected utilities (electric, water, sanitary sewer) that would be disturbed during removal of existing lines and replacement with new lines. A broader “Region of Influence” is considered for those selected topics (air quality, noise, community services) that could potentially be indirectly or directly impacted by construction and operation of the Proposed Action.

The analyses consider both administrative and physical elements of the Proposed Action on each resource.

3.1 Aesthetics

Aesthetics include the physical and biological features of the landscape and built environment that contribute to the visual character or scenic quality of the affected area. Scenic quality is a measure of the visual appeal of the landscape, which is subjective and varies.

3.1.1 Existing Environment

Located about 2 miles northeast of downtown Quincy, the IVHQ is surrounded by residential neighborhoods to the east, west and south, with Cedar Creek Trail to the north. The IVHQ provides sizeable green buffers from surrounding areas with ample open green spaces to the west and south. The IVHQ is accessible with the main gate on 12th Street and two side gates from the west and south.

The existing layout of the IVHQ is organized in a loose concentric pattern along a central axis with the main gate, the Stone building, Smith Community Hall, and Lippincott Hall. The residences are located to the west and south of the dining and community facilities, spread out along a loosely organized east-west road/axis. Administration buildings are located to the south of the core IVHQ areas along the main gate entrance from North 12th Street. A layout of the IVQ is shown in **Figure 6**.

As referenced in Section 3.3 Cultural Resources, many of the buildings and structures collectively as IVHQ possess varying degrees of significance in the history, architecture, culture with vernacular aesthetic, materials, design, setting, workmanship, and/or association with historical events.

While the buildings and surrounding grounds are well maintained by the IVHQ staff, many of the buildings and site infrastructure have significant deferred maintenance needs. Some buildings and structures have had to be abandoned due to recurring environmental and water quality issues. In addition, several buildings, including the Kent Infirmary and Fletcher Infirmary, have been left vacant for several years, adversely impacting the feeling of a cohesive, vibrant active campus environment.

The project site areas are not generally visible from the outside of the IVHQ, due to their central location and green buffer surrounding the core of the IVHQ.



Figure 5 Map of Illinois Veterans Home- Existing Layout.

3.1.2 Environmental Consequences

3.1.2.1 Proposed Action

Under the Proposed Action, some of the existing buildings are proposed to be demolished to make space for the new buildings, along with renovations of the existing buildings and site/utility improvements. The new buildings and the site infrastructure/landscape improvement have been carefully planned to enhance the long-term visual impact of the historic IVHQ.

DESIGN AND PLANNING

The overall development and planning has been thoughtfully designed to pay respect to the rich historic nature of the IVHQ, while complementing surrounding context with residential and vernacular aesthetic characters inspired by the IVHQ. From the site planning perspectives, emphasis has been given to revitalize the past glory of the historic IVHQ, by enhancing the IVHQ historic core with meaningful open spaces. The new landscape and site features are designed to improve the IVHQ-wide pedestrian safety and bring cohesion and hierarchy within the IVHQ.

The new LTC building and the Domiciliary would bring the updated aesthetics to the aging IVHQ, with residential design features and scale, rather than institutional and commercial aesthetic. In addition, the building materials such as limestone, terracotta, large windows, and bricks, have been carefully selected to provide durability while harmoniously blending in within the existing IVHQ context.

For the renovation of the Nielson dining, most of the construction would be interior renovations, with some improvements to the outdoor loading dock area and staff entry space. Currently underutilized Nielson dining would then serve as a new hub for staff's amenities (dining and breakroom) for the entire IVHQ as well as a new central service and loading. The front glassy elevation of the Nielson dining would remain to face the center of the IVHQ, without altering the aesthetics of the IVHQ.

DURING CONSTRUCTION

During construction, heavy equipment would be used for demolition, site work, and the new construction. The presence of heavy equipment and unfinished stages of site preparation and construction would temporarily impact the visual quality of the affected area throughout different phases of construction.

Short-term impacts would be minimized through implementation of the following:

- Conduct construction activities with a sensitivity toward maintaining the respect of the community.
- To the extent possible, construction activities would be limited to daylight hours to minimize impacts from equipment lights.
- All areas disturbed during construction, including temporary staging and disturbance areas, would be restored, at a minimum, to their pre-existing condition.
- To minimize the impact of construction activities on aesthetics, the construction contractors would erect a security fence around the building construction areas and prevent damage to existing ground-cover vegetation surrounding each building.
- The potential for fugitive dust emissions would be limited by using water trucks or other dust control measures to prevent fugitive dust from being emitted into the air and its potential deposition on nearby surfaces.

CONCLUSION

As a result, under the Proposed Action, the new development would improve the long-term visual quality and aesthetic of the IVHQ. The proposed new buildings would be consistent with the aesthetics of the surrounding area and would be compatible with surrounding land uses. The new development is not anticipated to result in significant adverse changes to the aesthetics.

3.1.2.2 No Action

Under the No Action alternative, no changes would occur to the current aesthetic or visual character of the existing IVHQ. However, taking no action would result in greatly increasing the staffing demands and resources needed to maintain the current levels of upkeep and maintenance. This would place an increased strain on staff and resources. Age related deterioration to buildings and landscape features can be expected.

3.2 Air Quality

3.2.1 Regional Climate

Weather and climate are important influences on air quality. The IVHQ is in Adams County, approximately 1.5 miles east of the Mississippi River, at an elevation of approximately 575 to 600 feet above mean sea level (msl). Local climatological data station details provided from the Quincy Regional Airport-Baldwin Field (QRABF) indicate that the average summer temperature is 87°F (July) and average winter temperature is 35°F (January). The driest month in Adams County is January with 1.47 inches of precipitation, and May is the wettest month with 4.59 inches (NOAA, 2020).

The predominant average hourly wind direction in Quincy varies throughout the year. The wind is most often from the north for 1.5 months, from February 15 to April 1, with a peak percentage of 31% on March 7. The wind is most often from the south for 8.0 months, from April 1 to December 1, with a peak percentage of 40% on June 20. The wind is most often from the west for 2.5 months, from December 1 to February 15, with a peak percentage of 35% on January 1.

As shown below in **Figure 7**, the predominant wind direction is from south to north, based on historical hourly measurements and model reconstructions from 1980 to 2016 (WeatherSpark.com, 2020).

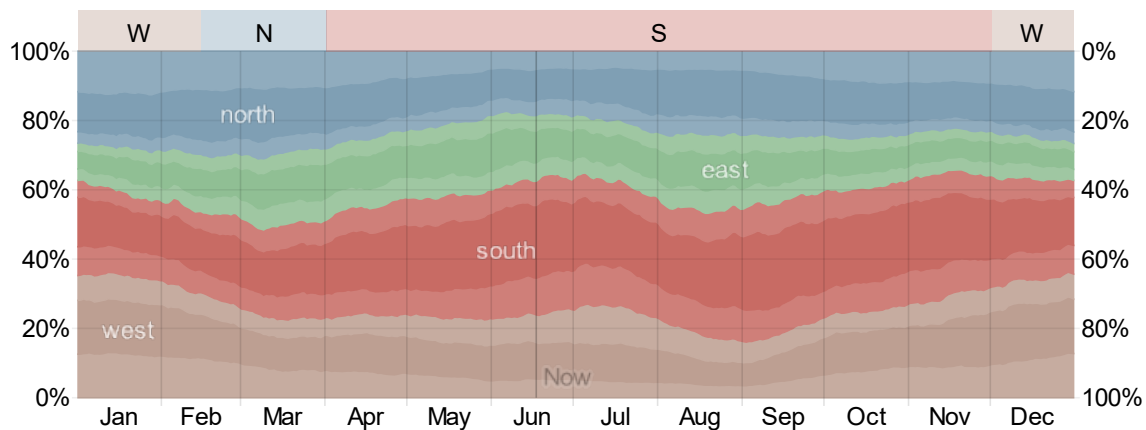


Figure 6 Wind Direction

Note: The percentage of hours in which the mean wind direction is from each of the four cardinal wind directions, excluding hours in which the mean wind speed is less than 1.0 mph. The lightly tinted areas at the boundaries are the percentage of hours spent in the implied intermediate directions (northeast, southeast, southwest, and northwest). (Source: WeatherSpark.com)

3.2.2 Air Quality Standards

3.2.2.1 National Ambient Air Quality Standards

The Clean Air Act (CAA) and its subsequent amendments require the U.S. Environmental Protection Agency (USEPA) to establish National Ambient Air Quality Standards (NAAQS) for pollutants considered harmful to public health or welfare (USEPA, 2020). The USEPA has promulgated primary and secondary NAAQS for six criteria pollutants:

- Carbon monoxide (CO),
- Nitrogen dioxide (NO₂),
- Ozone (O₃),
- Lead (Pb),
- Sulfur dioxide (SO₂),
- Particulate matter (PM), including:
 - particulate matter sized 10 micrometers or less (PM₁₀), and
 - particulate matter sized 2.5 micrometers or less (PM_{2.5}).

Primary standards set limits to protect public health, and secondary standards set limits to protect public welfare. The CAA also gives the authority to states to establish air quality rules and regulations stricter than the federal standards. Illinois has adopted the NAAQS.

Areas are designated as “attainment”, “nonattainment”, “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 “nonattainment” status is designated. Areas that have been classified as “nonattainment” but are now in compliance can be re-designated “maintenance” status if the state completes an air quality planning process for the area. Areas for which no monitoring data is available are designated as “unclassified” and are by default considered to be in attainment of the NAAQS.

Based on the Illinois EPA 2018 Air Quality Report, Ozone is the only air pollutant been monitored in Quincy, Illinois. The three-year average of the fourth high concentration for the period between 2014 and 2018 have been below 0.070 parts per million (ppm), the National Ambient Air Quality Standards. No other air pollutant data were monitored. The location is in attainment with the NAAQS.

3.2.2.2 Hazardous Air Pollutants

In addition to the six criteria pollutants, the CAA regulates 188 specifically listed hazardous air pollutants (HAPs). The Title V Operating Permit Program under 40 CFR 70 requires sources that meet the definition of a “major source” of criteria pollutants or HAPs to apply for and obtain a Title V operating permit. A major source of HAPs has the potential to emit (PTE) more than 10 tons per year TPY of any individual HAP, or 25 TPY of any combination of HAPs. The definition of major source for criteria pollutants is dependent on the air quality attainment status of the region where the source is located (that is, areas that are in attainment or non-attainment with the NAAQS). Major sources have a PTE more than 100 TPY of any criteria pollutant in an attainment area or lower levels in various classifications of nonattainment (identified as marginal, moderate, serious, severe, and extreme).

The IVHQ currently operates under a Title V Facility Permit (Permit No. 95090015, Facility Identification No. 00165ABP) issued by the IEPA on June 16, 2004 (pending permit review as of October 19, 2017) (IEPA, Construction Permit, 2011). The operating equipment at the IVHQ covered under this permit includes three (3) traveling grate overfeed stoker coal fired boilers and associated air pollution control equipment in the Power Plant (Building 40). The annual emissions in TPY of criteria pollutants from the IVHQ in 2017 (the most recent data available) are summarized below (IEPA, 2018):

- Carbon monoxide (CO): 25.82 TPY
- Carbon dioxide (CO₂): 21,884.45 TPY
- Lead (Pb): Not Applicable
- Nitrogen oxides (NO_x): 32.27 TPY
- Particulate matter (PM): 3.87 TPY
- Sulfur dioxide (SO₂): 601.01 TPY
- Volatile organic material (VOM): 0.22 TPY

The IVHQ is currently in compliance with the permit conditions, though two (2) notices of violation were issued, one on November 26, 2003, for failing to submit a 2002 Compliance Certificate, , and one on September 26, 2012, for a late Compliance Certificate.

The IVHQ is within a 1-mile radius of one other facility with a current Title V permit (as listed on the IEPA and USEPA ICIS-AIR database) (USEPA, NEPAAssist Tool, 2020). The Title V permit (No. 001065AMN) identifies this facility as an All Other Miscellaneous Manufacturing facility operated by “M Mardy Inc DBA Hardys Auto Sales” (Hardys), 2140 North 12th St Quincy, IL 62305 (IEPA, Agency Facility Inventory and Information Search System (AFIIS), 2020). This facility is located approximately 0.5-mile northeast of the IVHQ. Hardys is currently exempt from its Title V permit requirements (IEPA, 2020). Based on the predominant wind direction, from south to north, in Quincy (WeatherSpark.com, 2020), emissions from the Hardys facility would generally migrate to the north, away from the IVHQ, and would not be anticipated to cause a direct adverse impact on air quality at the IVHQ.

3.2.2.3 Greenhouse Gas Emissions

Gases that trap heat in the atmosphere are often called greenhouse gases (GHGs). Some GHGs, such as carbon dioxide, occur naturally and are emitted to the atmosphere through natural processes and human activities. Other GHGs (such as fluorinated gases) are created and emitted solely through human activities. The principal GHGs that enter the atmosphere because of human activities are carbon dioxide (CO₂), methane, nitrous oxide, and fluorinated gases (including hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride).

Gases in the atmosphere can contribute to the greenhouse effect both directly and indirectly. Direct effects occur when the gas itself absorbs radiation. Indirect radiative forces occur when chemical transformations of the substance produce other GHGs, when a gas influences the atmospheric lifetimes of other gases, or when a gas affects atmospheric processes that alter the radiative balance of the earth. Other than USEPA requirements for Mandatory Reporting of Greenhouse Gases Rule (40 CFR Part 98) (USEPA, Mandatory Reporting of Greenhouse Gases, Final Rule, 2009), which requires reporting of GHG data and other relevant information from large sources and suppliers in the United States, no general GHG regulatory guidelines are in place. The purpose of the rule is to collect accurate and timely GHG data to inform future policy decisions. The GHG goals in the USDVA Strategic Sustainability Performance Plan (updated June 30, 2016) (DOA, 2016) include reducing Scope 1 and Scope 2 GHG emissions by 29.8% by 2020, relative to Fiscal Year (FY) 2008, and reducing Scope 3 GHG emissions by 10% by 2020, relative to FY 2008.

3.2.2.4 **USEPA National Emission Standards for Hazardous Air Pollutants and other Regulated Building Materials**

The following buildings are scheduled to be demolished or renovated and are known to contain asbestos-containing building materials (GSG, 2018):

- Building 40 – Power Plant
- Building 90 – Markword Infirmary
- Building 92 – Nielson Hall - Dining/Kitchen/Store
- Sections of Underground Tunnels

The following building have been remediated for the presence of asbestos since preparation of the GSG, 2018 report:

- Building 24 – Vehicle Garage
- Building 26 – Fletcher Infirmary
- Building 31 – Northern Guest House
- Building 32 – Truck Maintenance Garage
- Building 91 – Kent Infirmary
- Building 94 – Elmore Infirmary

Asbestos is a carcinogen and is categorized as a hazardous air pollutant by the USEPA. Air toxics regulations under the CAA specify work practices for asbestos to be followed during demolitions and rehabilitations of all facilities, including, but not limited to, structures, installations, and buildings (excluding residential buildings that have four or fewer dwelling units). The regulations require a thorough inspection where the demolition or rehabilitation operation would occur. The regulations require the owner and/or the operator of the renovation or demolition operation to notify the appropriate delegated entity before demolition or renovations of buildings that contain a certain threshold amount of regulated asbestos-containing material (ACM).

The USEPA delegated to IEPA the authority to enforce the federal asbestos National Emission Standards for Hazardous Air Pollutants (NESHAP) and the IEPA Asbestos Unit is the local/state enforcement authority for asbestos demolition, renovation, and disposal. The 415 Illinois Compiled Statutes (ILCS) 5/9.1 (IPCB, Illinois Compiled Statutes (ILCS) 5/9.1 Environmental Safety, Environmental Protection Act, 1991) and 77 Illinois Administrative Code (IAC) 855.10 incorporates the requirements of the federal asbestos requirements found in NESHAP under 40 CFR Part 61, Subparts A and M. The 415 ILCS 5/9.1 and 77 IAC 855.10 establishes survey requirements, notification actions, and work practice requirements to prevent asbestos emissions from emanating during building rehabilitation and demolition activities, waste packaging, transportation, and disposal.

NESHAP generally requires that waste ACM be sealed in a leak-tight container while wet, labeled, and disposed of properly in a landfill qualified to receive ACM waste. Landfills have special requirements for handling and securing the ACM to prevent release of asbestos into the air. Transportation vehicles that move the waste from the point of generation to the asbestos landfill are required to have special labeling requirements and waste shipment recordkeeping requirements.

3.2.3 Existing Emissions Sources

The Power Plant (Building 40) has a regulated emissions source (a series of three [3] coal-fired boilers) regulated under a Title V air permit.

3.2.4 Sensitive Receptors

NEPA regulations require evaluation of the degree to which the proposed action affects public health (40 CFR 1508.27). Children, elderly people, and people with illnesses are especially sensitive to the effects of air pollutants; therefore, hospitals, schools, convalescent facilities, and residential areas are considered to be sensitive receptors for air quality impacts, particularly when located within 1 mile from the emissions source.

The residences nearest to Project Study Area are on IVHQ, including Building 20 Somerville Barracks, Building 101 Fifer Building, Building 90 Markword, and Building 93 Schapers Building 22 - Anderson Barracks, and Building 34 - Medical Staff Building. The buildings are used to house between 520 to 580 on-Site Veterans and their families and an unspecified number of Medical staff. Other nearby residential areas are located off-IVHQ approximately 200 feet to the east and south of the IVHQ. These residences are physically and visually separated from the IVHQ by a forested area approximately 160 feet wide. There are four (4) schools within a 1-mile radius of the IVHQ. The nearest school is the Washington Elementary School, approximately 0.4 miles south of the IVHQ (NEPAssist, 2020). There are seven (7) religious institutions within a 1-mile radius of the IVHQ (NEPAssist, 2020). The nearest is the St. John Roman Catholic Church, located approximately 0.4 miles south of the IVHQ. The nearest major medical buildings are on IVHQ (Building 90 – Markword Infirmary, Building 91 – Kent Infirmary (currently vacant), Building 93 – Schapers Hospital, Building 94 – Elmore Infirmary, and Building 101 - Fifer Skilled Care Facility); all of these buildings except Building 101 are scheduled for demolition. The nearest off-IVHQ major medical building is the Blessing Hospital, located in the south approximately 1.0 mile south of the Project Study Area.

3.2.5 Environmental Consequences

3.2.5.1 Proposed Action

CONSTRUCTION

Airborne Particulate Emissions

The building rehabilitation activities would disturb building surfaces containing regulated building materials, such as ACM, lead-based paint (LBP), and polychlorinated biphenyls (PCBs). This disturbance could result in the release of these materials as particulates into the air.

Based on the distance between each building and the connection to the respective utility mains, it is anticipated that excavations within existing utility corridors would be performed over a total of approximately 943.35 linear feet, at a width of approximately 8 to 10 feet, and at depths ranging from approximately 5 to 10 feet below grade (for electrical conduit) up to 10 feet below grade (for gravity-fed water and stormwater piping). The excavation would be completed in short segments, not over one continuous length, following the existing alignment of each specific and separate utility corridor. The anticipated area of disturbance is equal to approximately 20.67 acres, and would require excavation through paved surfaces (roads, sidewalks) as well as grass-covered grounds.

Removing the ground cover would temporarily expose subsurface soils, which could then be subject to wind erosion, potentially creating an airborne dust nuisance.

Combustion Emissions

Construction activities associated with the Proposed Action would generate emissions of criteria pollutants from the operation of gas and/or diesel-fuel powered combustion engines associated with building demolitions and rehabilitations, and from excavating existing utility corridors to install new electric, water, and sanitary sewer lines.

As previously discussed, since the City of Quincy is not located in a NAAQS Designated Area, there are no classifications for ozone, PM_{2.5}, and lead. Nonetheless, since construction associated with the Proposed Action would result in the emission of these regulated air pollutants, a review has been conducted to determine if the Proposed Action is subject to the GCR.

A federal action is exempt from the GCR requirements if the action's total net emissions are below the *de minimis* threshold or are otherwise exempt per 40 CFR 51.153. If net emissions exceed the *de minimis* value, or if a project is regionally significant, a formal conformity determination process must be followed.

To assess whether the Proposed Action construction emissions would exceed the *de minimis* levels, the estimated total suspended particulate emissions (associated with PM_{2.5}) from the anticipated construction activities were calculated using the emission factors for heavy construction operations from "AP-42, Compilation for Air Pollutant Emission Factors" (USEPA, Compilation of Air Pollutant Emission Factors, Vol. 1 (AP-42), 1995). As previously described, the Proposed Action is likely to disturb or expose soil over an estimated total area of approximately 20.67 acres, during an approximately 56-month construction period. A conservative estimate of PM emissions is shown in **Table 2**.

Table 2 Estimate Total Suspended Particulate Emissions during Construction of the Proposed Action

Area to be Disturbed (acres)	Emission Factor (tons/acre/month)	Control Efficiency (%)	Total Suspended Particulate Emissions (tons)
20.67	80 lbs total suspended particulates/acre	80	0.336

Off-road construction vehicles would emit criteria pollutants during the approximately 56-month period for building rehabilitations and extension of utilities along the existing utility corridors. Criteria pollutant emissions from construction equipment were calculated assuming the use of typical construction equipment including a crane, excavator, forklift, paver, roller, and skid steer loader, operating for various durations during the different construction periods.

Table 3 shows the anticipated non-road construction equipment and estimated operating duration.

Table 3 Estimated Hours of Operation for Non-Road Construction Equipment per Year

Equipment Type	Number	Hours/Day	Total Days	Total Hours
Backhoe	1	8	420	3360
Excavator	1	8	420	3360
Loader	1	8	530	4240
Skid Steer Loader	1	8	510	4080
40-ton Crane	4	8	3710	29680
Dump Truck (12 CY)	3	8	2440	19520
Dozer	1	8	350	2800
Concrete/Asphalt Paver	1	8	570	4560
Asphalt Roller (SY)	1	8	150	1200
Concrete Saw	1	8	256	2048
Water Truck/Dust Control	1	8	256	2048
Concrete/Grout Mixer	1	8	560	4480
Tool Truck	1	8	365	2920
Manlift	1	8	292	2336
Forklift	1	8	292	2336
Tractor Trailer- Delivery	1	8	204	1632

Table 4 presents the estimated average composite emission factor for each type of equipment listed in **Table 3**.

Table 4 Average Estimated Emission Factors

Equipment (1)	VOCs(2) (lbs/hr)	CO (lbs/hr)	NOx (lbs/hr)	SOx (lbs/hr)	PM(3) (lbs/hr)	CO2 (lbs/hr)
Backhoe	0.0436	0.3616	0.2744	0.0008	0.0134	66.8
Excavator	0.0733	0.5124	0.4042	0.0013	0.0184	120
Loader	0.0436	0.3616	0.2744	0.0008	0.0134	66.8
Skid Steer Loader	0.0222	0.2125	0.1614	0.0004	0.0050	30.3
40-ton Crane	0.0898	0.3917	0.6610	0.0014	0.0256	129
Dump Truck (12 CY)	0.0092	0.0314	0.0582	0.0001	0.0022	7.6
Dozer	0.2118	0.8006	1.5773	0.0025	0.0630	239
Concrete/Asphalt Paver	0.0989	0.4920	0.5450	0.0009	0.0355	77.9
Asphalt Roller (SY)	0.0584	0.3837	0.3793	0.0008	0.0232	67.0
Concrete Saw	0.0484	0.3783	0.3410	0.0007	0.0196	58.5
Water Truck/Dust Control	0.1443	0.5514	0.8306	0.0027	0.0280	260
Concrete/Grout Mixer	0.0086	0.0415	0.0536	0.0001	0.0021	7.2
Tool Truck	0.1443	0.5514	0.8306	0.0027	0.0280	260
Manlift	0.0320	0.2160	0.1691	0.0006	0.0070	54.4
Forklift	0.0320	0.2160	0.1691	0.0006	0.0070	54.4
Tractor Trailer- Delivery	0.1470	0.6517	1.0657	0.0017	0.0497	151

Notes:

1 - Composite emission factors used; emission factors are for year 2020 (SCAQMD, 2018)

2 – Volatile organic compounds (VOCs) based on reactive organic gases

3 – Combined PM2.5 and PM10

By multiplying the operating hours in **Table 3** by the emissions factors in **Table 4**, the estimated emissions were calculated for non-road construction equipment associated with each major phase of construction for the Proposed Action, as shown in **Table 5**.

Table 5 Estimated Criteria Pollutant Emissions from Non-Road Construction Equipment

Equipment(1)	VOCs(2) (lbs)	CO (lbs)	NOx (lbs)	SOx (lbs)	PM(3) (lbs)	CO2 (lbs)
Backhoe	146.50	1214.98	921.98	2.69	45.02	224448.00
Excavator	246.29	1721.66	1358.11	4.37	61.82	403200.00
Loader	184.86	1533.18	1163.46	3.39	56.82	283232.00
Skid Steer Loader	90.58	867.00	658.51	1.63	20.40	123624.00
40-ton Crane	2665.26	11625.66	19618.48	41.55	759.81	3828720.00
Dump Truck (12 CY)	179.58	612.93	1136.06	1.95	42.94	148352.00
Dozer	593.04	2241.68	4416.44	7.00	176.40	669200.00
Concrete/Asphalt Paver	450.98	2243.52	2485.20	4.10	161.88	355224.00
Asphalt Roller (SY)	70.08	460.44	455.16	0.96	27.84	80400.00
Concrete Saw	99.12	774.76	698.37	1.43	40.14	119808.00
Water Truck/Dust Control	295.53	1129.27	1701.07	5.53	57.34	532480.00
Concrete/Grout Mixer	38.53	185.92	240.13	0.45	9.41	32256.00
Tool Truck	421.36	1610.09	2425.35	7.88	81.76	759200.00
Manlift	74.75	504.58	395.02	1.40	16.35	127078.40
Forklift	74.75	504.58	395.02	1.40	16.35	127078.40
Tractor Trailer- Delivery	239.90	1063.57	1739.22	2.77	81.11	246432.00
Total Pounds/year	1174.22	5658.76	7961.52	17.70	331.08	1612146.56
Total Tons/year	0.587	2.829	3.981	0.009	0.166	806.073

Notes:

- 1 – Data from Table 2.
- 2 – VOCs based on reactive organic gases
- 3 – Combined PM2.5 and PM10

In addition to non-road construction equipment, on-road construction equipment (for example, material haul trucks) would be utilized during construction of the Proposed Action. For this EA, a total of 5,280 on-road truck trips, each totaling 50 miles, served as the basis for estimating on-road vehicle emissions. The estimated on-road vehicle emissions were calculated by multiplying the estimated number of on-road trucks (165) and distance by their estimated emission factors (USAF, 2013) . **Table 6** presents the estimated emissions for these on-road vehicles.

Table 6 Estimated On-Road Haul Truck Emissions for Construction of the Proposed Action

Pollutant	VOC	CO	NOx	SO ₂	PM ₁₀	PM _{2.5}	CO ₂
Emissions factor grams/mile ⁽¹⁾	0.325	0.832	2.817	0.012	0.110	0.083	1,243.90
Emissions (lbs.) for 165 trucks making a 50- mile round trip	189.16	484.24	1,639.55	6.98	64.02	48.31	723,975.73
Emissions, tons	0.095	0.242	0.820	0.003	0.032	0.024	361.988

Notes:

1 - Emissions factors for all pollutants for Heavy Duty Diesel Vehicle Average Emission Factors (USAF, 2013).

A summary of the estimated total annual emissions of criteria pollutants associated with construction of the Proposed Action is presented in **Table 7**.

Table 7 Sum of Estimated Total Emissions of Criteria Pollutants during Construction

Criteria Pollutant	VOC ⁽³⁾	CO	NOx	SOx	PM ⁽⁴⁾
Off-Road Emissions (TPY) ⁽¹⁾	0.587	2.829	3.981	0.009	0.166
On-Road Emissions (TPY) ⁽²⁾	0.0189	0.0484	0.1640	0.0007	0.0112
Total Emissions (TPY)	0.6060	2.8778	4.1447	0.0096	0.1768
General Conformity de minimis threshold (TPY)	50	100	100	100	100

Notes:

1 – From Table 4

2 – From Table 5, converting total tons to TPY

3 – VOCs based on reactive organic gases

4 – Combined PM_{2.5} and PM₁₀

As shown in **Table 7**, the estimated total annual emissions for construction of the Proposed Action would be below the GCR *de minimis* thresholds.

Additionally, the Proposed Action incorporates activity- and material-specific Best Management Practices (BMPs) to limit the emissions of criteria pollutants from engines, control airborne dust, and avoid the release of dust that may be laden with regulated building materials. Implementing these BMPs would minimize the potential for creating adverse impacts on air quality.

Short-term air quality impacts would be minimized through implementation of the following:

- Prior to performing rehabilitation activities that may disturb asbestos-containing building materials (based on an asbestos survey completed by GSG, an IEPA/OSHA certified asbestos consultant), the construction contractors would complete the IEPA registration and notification required under 415 ILCS 5/9.1 and 77 IAC 855.10. All ACM that may be disturbed would be abated by an IEPA licensed abatement contractor. This management approach would eliminate potential asbestos emissions from building rehabilitation activities. Additionally, prior to disturbing building materials containing PCBs or LBP, perform abatement and/or encapsulation or implement duct control measures in accordance with the NESHAP regulations and other applicable, state, and local regulations. Only licensed contractors would perform these activities.

- Contractors would use equipment with Tier 4-compliant engines to reduce emissions of particulate matter and nitrogen oxides to meet emission standards established by USEPA.
- Cover beds of all incoming and outgoing haul trucks with tarps.
- Visually monitor all construction activities daily, and particularly during extended periods of dry weather; implement additional dust control measures as needed.
- Implement dust suppression methods identified in USDVA's Specification 01 57 19: Temporary Environmental Controls. Available methods include application of water, dust palliative, or soil stabilizers; use of enclosures, covers, silt fences, or wheel washers; and suspension of dust-generating activities during sustained high wind conditions (10 to 40 miles per hour [mph] with gusts at or above 50 mph).
- Maintain speed of construction vehicles on paved roads within the IVHQ and the vicinity at posted limits. This would minimize dust generated by vehicles and equipment on paved surfaces. On any unpaved surfaces at each construction area, vehicle speeds would be maintained at or below 5 mph to prevent dust generation of exposed soil.
- Stabilize exposed soil with vegetation or mulching to minimize erosion and dust generation.
- The construction contractor would implement BMPs such as use of compressed natural gas as fuel and minimizing idling of construction and delivery vehicles to the extent practicable to minimize impacts.

Therefore, construction would have a short-term, direct, less-than-significant adverse impact on air quality.

OPERATION

Under the Proposed Action, seven buildings (Buildings 24, 26, 31, 32, 90, 91, and 94) would be demolished and one building (Building 92) would be renovated, and therefore no longer require the use of the current steam utility service provided by the IVHQ central steam plant in Building 40 (Power Plant). This would result in a decrease in the amount of coal consumed, and the amount of emissions released, associated with generating this steam. There are three (3) emergency electric generators at various locations on the IVHQ, which would either remain or be replaced with newer, more energy-efficient models. No regulated air emissions sources would be required to operate the Proposed Action.

Negligible quantities of regulated emission would be generated from gasoline-powered maintenance equipment associated with mowing/landscaping, trash removal, and minor maintenance activities at each building. These operational emissions would be below the *de minimis* thresholds.

In summary, emissions of criteria air pollutants generated during construction and operation of the Proposed Action would be emitted at rates less than *de minimis* thresholds. Therefore, the Proposed Action would have a short-term, direct, less-than-significant adverse impact on air quality. Furthermore, the Proposed Action would be exempt from the GCR requirement to prepare a full Conformity Determination, and a detailed analysis of emissions is not warranted for this EA.

3.2.5.2 No Action

Under the No Action alternative, current *de minimis* emissions associated with routine operation and maintenance to all buildings, utility tunnels, roads, and parking lots, as well as landscaping, would continue. No short- or long-term changes in emissions quantities or types are anticipated to occur. Therefore, under the No Action alternative, current baseline air emissions would continue unchanged for

the foreseeable future. Indoor air quality would continue to meet indoor air quality standards, but the aging systems would not see the upgrades needed to meet current building codes and standards and suffer lower efficiencies related to age.

3.3 Cultural Resources

Cultural resources include both historic and prehistoric archaeological resources, as well as historic structures in the built environment. This impact analysis focused on sites and structures listed in, or eligible for nomination to, the National Register of Historic Places (NRHP), the regulations (36 CFR Part 800) for implementing Section 106 of the National Historic Preservation Act of 1966, and an assessment conducted in coordination with the Illinois SHPO.

Under Section 106, Federal agencies are responsible for identifying historic properties within the Area of Potential Effects (APE) for an undertaking, assessing the effects of the undertaking on those historic properties, if present, and considering ways to avoid, minimize, and mitigate any adverse effects of its undertaking on historic properties.

3.3.1 Existing Environment

The original site of the IVHQ used to be an active farm, created and maintained by Mr. Edward Dudley until his death in 1879. On October 20, 1886, with the help of town of Quincy, Dudley's property became the first Veterans Home in Illinois (IVHQ). The IVHQ functions in its original capacity as a facility for the care of elderly veterans and their spouses. However, the buildings and grounds have evolved over the years with many of its original buildings having become obsolete. Many such buildings have been replaced over the years with more modern structures that better meet the needs of the veterans housed at the facility. **Figure 8** shows the buildup of the IVHQ over the years.

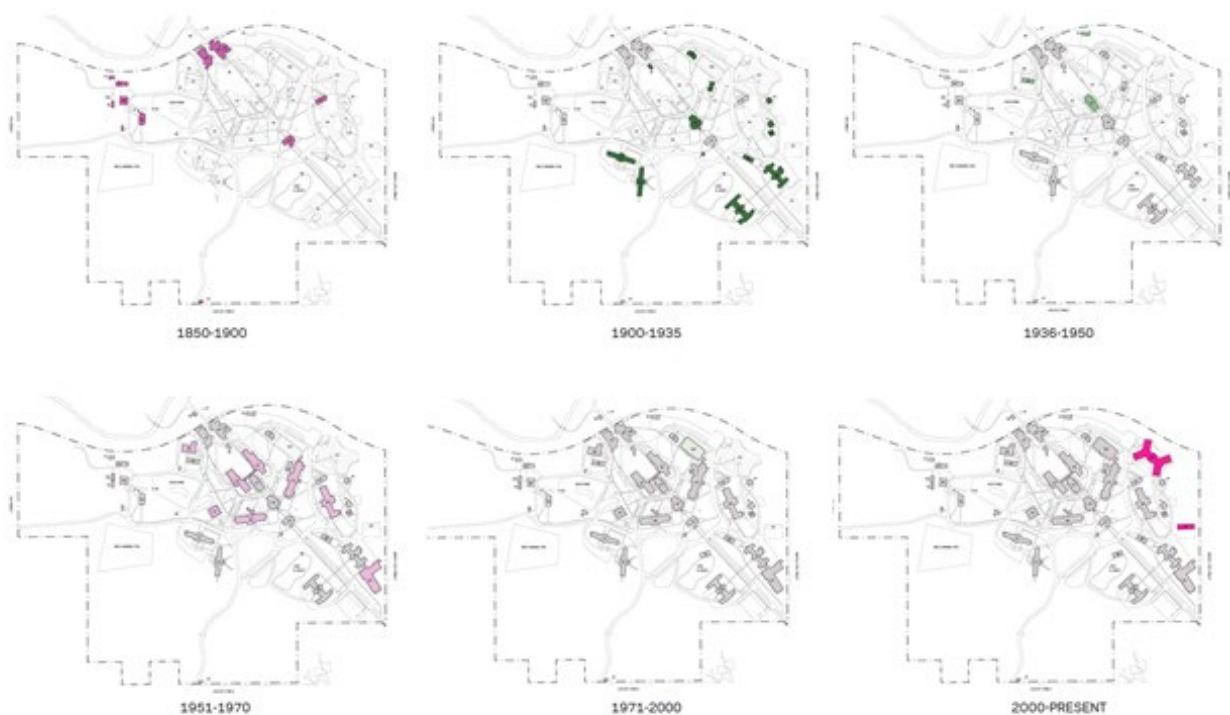


Figure 7 Diagram courtesy of Report 1 of 4 Existing Conditions Report, by (HOK, 2018)

A number of buildings and structures at the IVHQ have been determined to be eligible for the NRHP. The criteria for determining the eligibility of a property to the NRHP is established by the National Park Service (NPS). In the State of Illinois, this is administered by the State Historic Preservation Office (SHPO) which is the Historic Preservation Division of the Department of Natural Resources [formerly the Illinois Historic Preservation Agency (IHPA)]. The criteria stipulate that a property, site, or site feature must typically be a minimum of 50 years old and qualify for significance.

In 2012 an Illinois Historic American Building Survey (Field River Research, 2013) was prepared for the IVHQ to respond to the demolition of Roland Barracks, which has been subsequently demolished. The 2012 documentation was utilized as reference material for the current HABS. The 2012 HABS documentation included photographic record and a narrative of the historical significance of the structures at the IVHQ. The IVHQ is currently one of the largest and oldest of the 4 state-owned veterans' homes in Illinois.

As the planning principles for the campus and the architecture of its individual buildings evolved over time in response to changing veteran care needs and veteran population demands from different engagements and wars, , the campus of IVHQ has been determined to be a NRHP-eligible historic district.

Per Section 4 of the Illinois State Agency History Resources Preservation Act (20 ILCS 3420/1 et. Seq.), SHPO has reviewed the documentation and provided comments on the Project Area on February 21, 2019. Its letter indicates that the proposed undertaking on Kent Infirmary, Elmore Infirmary, the Northern Guesthouse, the Truck Maintenance Garage, the Vehicle Garage, Schapers Hospital, and Ehle Laundry are

all eligible for listing on the NRHP as contributing structures to the Illinois Veterans Home at Quincy Historic District. A copy of the Illinois SHPO letter is provided in **Appendix A**.

In July 2020, the IDVA, CDB, and SHPO embarked on a process to put the project in compliance with the Illinois State Agency Historic Resources Preservation Act in preparation for coordination with the USDVA. As mitigation for the buildings that would be removed, HABS documentation would be collected. The HABS reporting is anticipated to be completed and submitted for review in 2021. On March 19, USDVA sent a Section 106 initiation letter to the Illinois SHPO and consulting parties. Consultation is ongoing.

3.3.2 Environmental Consequences

The analysis considers potential effects to cultural resources located in and within view of the Proposed Action site.

3.3.2.1 Proposed Action

Under the Proposed Action, the construction of the new Long-Term Care building and the Domiciliary, along with the utility and site infrastructure improvements includes the demolition of seven existing buildings that are deemed eligible for listing on the NRHP. As a result, the proposal to demolish these buildings constitutes as adverse effect as defined in the aforementioned Act.

In order to mitigate the adverse effects of the Proposed Action and informed by the Illinois State Agency Historic Resources Preservation Act, CDB, IDVA and the SHPO agreed that the CDB and IDVA shall retain a historic contractor(s) who will complete the following tasks to be submitted to the SHPO, who shall coordinate with the USDVA for confirming compliance with federal requirements. (Refer to **Appendix A** for more details).

- Recordation: HABS report for each NRHP eligible buildings that are planned to be demolished. Upon final approval of each building's package, the SHPO will submit the HABS recordation package to the Heritage Documentation Programs in the National Park Service for eventual deposit in the Library of Congress, and the SHPO will deposit the recordation package with the Abraham Lincoln Presidential Library in Springfield, Illinois.
- A written narrative (along with illustration) on Historic Context and Significance of the Illinois Veterans Home in Quincy, its development and maturity must be prepared, for the SHPO's review and approval.
- In the event of an unanticipated discovery of human remains or burials, CDB and IDVA understand and agree that work must immediately stop within the area of discovery, notify the SHPO, and comply with the Human Skeletal Remains Protection Act (20 ILCS 3440) as administered by Illinois Department of Natural Resources (IDNR), which provides that no human skeletal remains shall be disturbed without a permit issued by IDNR.

3.3.2.2 No Action

Under the No Action alternative, the project site would not undergo any demolition and new development, as a result, there would be no impacts on cultural resources. However, age and constrained budgets are likely to place unsurmountable hurdles in the upkeep of such a large campus and create a long-term, adverse impact on cultural resources on this campus.

3.4 Geology, Topography, and Soils

3.4.1 Existing Environment

3.4.1.1 Geology

Regional geology information was obtained from the Geologic Map of the Quincy West Quadrangle, (USGS, 2012). According to the Illinois State Geological Survey Online Handbook of Illinois Stratigraphy (ILSTRAT) website (https://isgs.illinois.edu/ilstrat/index.php/Main_Page) to determine the regional geological setting of the IVHQ. The bedrock in the Quincy area is primarily Mississippian limestone, consisting of the Valmeyeran Series, Meppen Limestone, the Fern Glen Formation and the Burlington-Keokuk Limestone.

The Valmeyeran Series is characterized by lateral changes due to depositional pinchouts and lateral gradation. In central Illinois, the Burlington and Keokuk Limestones pinch out eastward and the lower part of the Valmeyeran consists of the thick Borden Siltstone. The sediment of the Borden Siltstone was transported from the northeast by a major river and deposited in the inland sea as a delta that spread to and overlapped the Keokuk and Burlington carbonates. The deep-water, sediment-starved basin adjacent to the delta was later filled with Fort Payne and Ullin sediments.

The Meppen Limestone is a tan or buff, very fine-grained, slightly crinoidal, dolomitic limestone or calcareous dolomite that commonly contains many calcite geodes 0.5-2 inches in diameter.

The Fern Glen Formation consists of green and red calcareous shale and of gray, green, and red limestone and dolomite that is partly argillaceous. The lower part is generally shaly and noncherty, while the upper part is mainly limestone containing small nodules of greenish gray chert.

In the northwestern part of its extent, the Burlington Limestone consists largely of very pure, coarsely crystalline, light gray limestone in medium to thick beds. It contains a few beds of fine-grained, brownish gray, dolomitic limestone. Beds and nodular masses of light gray or white chert are common, especially in the middle and upper parts of the formation. Some beds are glauconitic. Chert in some places forms as much as 50 percent of the formation, but the chert is exceedingly lenticular and the amounts vary greatly.

Like the Burlington, the Keokuk Limestone is primarily a biocalcarenite. The lower 30 feet is very cherty and is differentiated as the Montrose Chert Member. The part of the Keokuk above the Montrose is composed of beds of fossiliferous, crinoidal limestone interbedded with fine-grained limestone, argillaceous dolomite, and calcareous gray shale. The shale beds increase upward in number and thickness. The limestone is light gray, speckled with darker gray, brown, or black, and contains beds and nodules of chert. It is generally thinner bedded and darker than limestone of the Burlington, and the shale partings are more numerous. The contact with the overlying Warsaw Shale is gradational.

In the southern area the Burlington and the overlying Keokuk can be distinguished only by their fossils and are generally referred to as the Burlington-Keokuk Limestone.

There are no exposed bedrock outcrops at the Project Study Areas. Depth to bedrock is believed to be between 30 and 38 feet below the existing surface grade (BSG) (GSG, 2019).

SEISMIC CONDITION ASSESSMENT

The IVHQ is located approximately 250 miles northwest of the New Madrid Seismic Zone. According to the U.S. Geological Survey (USGS), there have been no earthquakes in Adams County within the last 200 years. Most earthquakes within the state of Illinois have occurred in and around the New Madrid Fault Zone, near the borders of Illinois, Missouri and Kentucky, approximately 250 miles southeast of the IVHQ.

SEISMIC DESIGN REQUIREMENTS

The seismic hazard for the site was analyzed per IBC 2018 (International Code Council, Inc., 2018) and ASCE 7-16 (American Society of Civil Engineers, 2016) requirements and procedures, based upon site-specific information generated as part of a geotechnical investigation conducted at the IVHQ by GSG in 2019.

The Seismic Soil Site Class was determined per Chapter 1613.2.2 of IBC 2018, and the soil properties evaluated in accordance with Chapter 20 of ASCE 7-16. The Site Class of the Domiciliary and LTC building sites were both estimated as Class D, based on the average standard penetration test (SPT) blow counts and undrained shear strength for the upper 100 feet of the soil profiles. A Seismic Design Maps tool developed by Office of Statewide Health Planning and Development (OSHPD) was used to determine the peak ground acceleration coefficient (PGA), and the short (SD_s) and long (SD_1) period design spectral acceleration coefficients for the proposed structures as shown in **Table 8**. According to ASCE 7-16, the seismic design category was Category C for both the building and the LTC building.

The Seismic Performance Zone (SPZ) was determined using Figure 2.3.10-3 in the Illinois Department of Transportation (IDOT) Bridge Manual and was found to be Seismic Performance Zone 1. All the cohesive soil at the site had plasticity index (PI) Larger than 12 and a water content to liquid limit ratio less than 0.85, therefore are not considered liquefiable. The granular soil below the cohesive soil layer had corrected SPT N-values above 25 blows per foot (bpf) and therefore are not considered liquefiable. PGA modified by the zero-period site factor (F_{PGA}), PGA_M , was less than 0.15. Based on all the above conditions, the potential for liquefaction is minimal at this site.

Table 8 Seismic Design Parameters

Site	Building Code Reference	Site Class	PGA	PGA_M	SDS	SD1	Seismic Zone	Occupancy Category	Seismic Design Category
Domiciliary	IBC 2018 & ASCE 7-16	D	0.063g	0.1g	0.141g	0.132g	SPZ 1	IV	C
LTC								IV	C

3.4.1.2 Topography

The USGS 7.5-minute West Quincy, IL Quadrangle (USGS, 2018) shows the project area to be generally sloping to the west, toward the Mississippi River. The IVHQ vicinity, as estimated from West Quincy Quadrangle Map, has an elevation range of 540 to 610 feet above sea level. Significant topographic change also occurs in and around the Deer park and along the railroad tracks and creek at the north boundary of the IVHQ.

Along the southwest portion of the IVHQ, the site has a “valley” that runs from approximately 9th Street and Locust to 5th Street and Scenic Drive. The most extreme elevation difference in this zone changes from 540 feet above MSL up to 582 feet above MSL.

3.4.1.3 Soils

Soil information was obtained from the United States Department of Agriculture (USDA) – Natural Resources Conservation Service (NRCS) (USDA, NRCS, 2020). The USDA NRCS classifies the IVHQ as being located on Stookey Silt Loam, Stookey-Timula Orthents Complex soils, Stookey and Timula soils, and Blyton Silt Loam. Stookey Silt Loam is described as “consist(ing) of very deep, well drained, moderately permeable soils formed in loess on convex slopes on the bluffs along the Mississippi River Valley. Slope ranges from 2 to 70 percent.” Timula soils are described as consisting of “very deep well drained soils formed in loess on uplands. Slope ranges from 2 to 60 percent.” Blyton Silt Loam is described as consisting of “very deep, moderately well drained soils that formed in stream alluvium on flood plains. Slopes range from 0 to 2 percent.”

The soils at the IVHQ are currently covered with vegetation (landscaped grasses, shrubs, trees), buildings, paved parking areas, and concrete paths.

3.4.2 Environmental Consequences

3.4.2.1 Proposed Action

GEOLOGY

Construction and Operation. Construction and operation of the Proposed Action would not require contacting or exposing the bedrock underlying or in vicinity of either IVHQ or utility corridors. Additionally, the construction activities do not cross a known seismic fault line and would not have any mechanisms, such as bedrock fracturing, fluid injections, or blasting, to directly or indirectly cause an increase in seismic activity. Therefore, the Proposed Action would have no impact on geological resources or lead to seismic events.

TOPOGRAPHY

Construction and Operation. Construction and operational activities associated with the Proposed Action would not require any substantial modifications to the existing topography at or in vicinity of the IVHQ and utility corridors. During construction, the exterior grounds immediately surrounding the building exterior would be regraded in order to divert stormwater away from the foundation and basement. This grade would be maintained during operation. Overall, this regrading activity would represent an insubstantial change relative to existing topographic conditions. Further, any changes to the existing grade caused by construction activities would be corrected and returned to the original grade by the end of the construction phase. Therefore, the Proposed Action would have a negligible adverse impact on topography.

SOILS

Construction. Construction activities would require excavating subsurface soils along selected existing utility corridors (electric, water, sanitary sewer), proposed building foundations and proposed parking lot subgrade. These soils have already been compacted and disturbed during the original subsurface utility installations and are predominantly covered by landscape, with some areas covered with hardscape

(asphalt, concrete) Excavation would generally be required along approximately 19,000 linear feet of utility corridors and tunnels, at a width of 4-6 feet, and at depths ranging from 3 to 10 feet below grade, with the deeper excavations required for utilities in the proposed parking areas and utility tunnels. Utility corridor excavations would remain open only while a short segment of piping or conduit is being installed.

Short-term erosion and sedimentation impacts would be minimized through implementation of the following:

- Minimize the amount of exposed soils at any given time during construction activities. Quickly revegetate disturbed areas following completion of activities.
- Develop a Stormwater Pollution Prevention Plan, consistent with the requirements of the NPDES general permit.
- The contractor would minimize potentially adverse impacts from erosion by implementing best management practices and conformance with National Pollutant Discharge Elimination System (NPDES) permit requirements and would obtain a General Construction Permit.
- The Contractor would implement the Erosion and Sediment Control plan, including erosion control BMPs, during and after construction to stabilize soils.
- Excavated soil would be managed in accordance with applicable local, State, and Federal regulations. If contaminated materials are discovered during construction activities, work would cease until the appropriate procedures could be implemented.
- Soil excavated from each segment of the utility corridor would either be containerized (placed in a dump truck bed) or stockpiled and covered with a tarp adjacent to the excavation.

Operation. Long-term erosion and sedimentation impacts would be minimized through implementation of routine landscaping and storm water infrastructure maintenance.

3.4.2.2 **No Action**

Under the No Action alternative, no changes to current conditions at the IVHQ would occur. The No Action alternative would have no impact on other geological conditions, topography, or soils. Baseline conditions would remain, as described above.

3.5 **Hydrology and Water Quality**

This section covers the effects on hydrology, including surface water, stormwater, and groundwater. Wetlands and floodplains are discussed in Section 3.9.

3.5.1 **Existing Environment**

3.5.1.1 **Surface Water**

There are two (2) ponds located on the IVHQ: one inside of Lynn Deer Park, southwest of Building 42, Tradesman Workshop, and Lake Illinois, north of Building 29, Reig Administration. The closest surface water body to the IVHQ is Cedar Creek, directly north of the IVHQ. Quincy Bay and the Mississippi River are approximately 0.6 miles west of the IVHQ.

The current 2018 USGS topographic map (USGS, 2018) shows no surface water changes on or in the vicinity of the IVHQ when compared to the historical USGS maps from 1925 through 2012 (USGS, 1925); (USGS, 1944); (USGS, 1945); (USGS, 1971); (USGS, 1996); and (USGS, 2012). The USGS map depicts one

solid blue line stream, Cedar Creek, flowing from east to west toward Quincy Bay, north of the rail line, north of the IVHQ, one dashed blue line stream running east to west toward the Mississippi River, on the southern end of the IVHQ, and one pond, Lake Illinois, near the center of the IVHQ. A site survey in 2019 confirmed the presence of these surface waters in the locations depicted and also identified the second pond inside of Lynn Deer Park.

3.5.1.2 Stormwater

Stormwater is defined by USEPA as the runoff generated when precipitation from rain events flows over land or impervious surfaces without percolating into the ground.

Stormwater is an important component of surface water systems because of its potential to introduce sediments and other contaminants that could degrade lakes, rivers, and streams. Stormwater flows, which can be exacerbated by high proportions of impervious surfaces associated with buildings, roads, and parking lots, are important to the management of surface water. Stormwater management systems provide the benefit of reducing sediments and other contaminants that would otherwise flow directly into surface waters.

The present IVHQ is situated such that the central IVHQ is at the high point of the approximately 220-acre site. The IVHQ generally drains in four directions. The north portion drains towards Cedar Creek, the west portion drains to the City of Quincy storm sewers, the south portion drains to Lake Illinois, and the east portion drains towards the 12th street combined sewer. Appropriate BMPs would be used to catch stormwater runoff from vegetated and paved areas, respectively.

Within the IVHQ, impervious surfaces cover approximately 29 acres (13%) of the grounds based on an analysis of the site development plans associated with the Proposed Action. Stormwater generated within the IVHQ is conveyed into a storm drain system that includes several dozen catch basins. Information about the IVHQ storm sewer system is incomplete. A number of buildings were present at the site prior to the IVHQ opening in 1886, and buildings have been constructed at the IVHQ in almost every decade since the 1900s. It is assumed that the drainage has been expanded and updated, as needed, in and around the areas where buildings have been built, but no complete documentation of the IVHQ drainage system exists. Existing documents show drainage structure locations around buildings, along roadway edges, and in parking areas, but indicate no corresponding pipes or connections to sewers.

Sewer sizes range from 6-inch to 18-inch and are primarily located in three areas: around Lake Illinois; in the center of the IVHQ; and in the northeast portion of the IVHQ. A significant number of sewer lines collect and discharge into Lake Illinois. This includes roof drains from Building #28, Andrew Barracks, Building #29, Reig Administration, Building #90, Markword Domiciliary, Building #91, Kent Infirmary, and Building #93 Schapers Hospital. The central IVHQ area drains to the northwest, towards Cedar Creek. Sewers in the northeast area collect stormwater behind Elmore and southeast of Fifer and discharge to grade via a 12-inch sewer. Conversation with the City of Quincy engineering department indicate that storm water flows along 12th street towards the railroad ROW.

REGULATORY CONDITIONS

National Pollutant Discharge Elimination System

Section 402 of the Clean Water Act established the National Pollutant Discharge Elimination System (NPDES) program to limit pollutant discharges into streams, rivers, and bays. Soil erosion and sediment control would be designed to meet the requirements of the Illinois Urban Manual. A SWPPP would be required before construction begins. Best Management Practices would be incorporated within the earthwork design to the extent practical.

In Illinois, the Illinois Environmental Protection Agency (IEPA) oversees implementation of the Clean Water Act and the NPDES program. In Illinois, NPDES permits are also referred to as waste discharge requirements, which regulate discharges to waters of the United States.

Construction General Plan (CGP) Permit/ Storm Water Pollution Prevention Plan

Construction projects that disturb one or more acres of soil, or less than one acre but are part of a larger common plan of development that in total disturbs one or more acres, are required to obtain coverage under the NPDES General Permit for Storm Water Discharges from Construction Site Activities (ILR10) (IEPA, 2018).

Construction activity subject to this permit includes clearing, grading, and disturbances to the ground such as stockpiling, or excavation. The ILR10 requires the development of a Storm Water Pollution Prevention Plan (SWPPP). The SWPPP is a document that outlines how a construction project would minimize sediment and other pollutants in stormwater runoff commonly associated with construction activities. The project specific ILR10 and SWPPP would be the responsibility of the CDB construction contractor performing the construction.

The Proposed Action is anticipated to disturb greater than one acre of soil (primarily associated with excavations along the existing electric, potable water, and sanitary sewer utility corridors). Therefore, a CGP permit would be required. However, should the CDB design engineers revise the projects such that less than one acre of soil is disturbed, then a CGP permit would not be required.

EISA Section 438

Under the Energy Independence and Security Act (EISA), Section 438, “The sponsor of any development or rehabilitation project involving a federal facility with a footprint that exceeds 5,000 square feet shall use site planning, design, construction, and maintenance strategies for the property to maintain or restore, to the maximum extent technically feasible, the predevelopment hydrology of the property with regard to the temperature, rate, volume, and duration of flow.” This regulatory requirement pertains to protecting surface water through the management of stormwater runoff volume and quality. For this Proposed Action, CDB would be considered the project sponsors. However, the CDB construction contractor performing the rehabilitation can be directed to demonstrate compliance with EISA 438 on behalf of CDB and IDVA.

3.5.1.1 Groundwater

The IVHQ is located within the Mississippi River Watershed (Illinois State Water Survey, 2001, revised 2011). Groundwater flows throughout the IVHQ and regionally is anticipated to flow toward the west.

Actual groundwater flow direction underlying the Project Study Areas may vary due to the presence of underground utility corridors and heterogeneous subsurface soil conditions. During the geotechnical investigation conducted at the site (GSG, 2019), groundwater was encountered between 28 and 44 feet BGS, typically in the granular soil layer.

Based on the color change of the material from brown to gray, it is assumed the long-term water table is approximately 45 feet below grade (elevation 553 to 569 feet above MSL). Perched water could be encountered at higher elevations during construction, particularly in areas where silty sands or clayey sands underlain by low permeability soil.

3.5.2 Environmental Consequences

3.5.2.1 Proposed Action

SURFACE WATER

Construction and Operation. As previously described, there are two (2) surface water bodies on the IVHQ. Lake Illinois receives the primary runoff and discharge from the IVHQ, while the pond in Lynn Deer Park receives surface run off from the surrounding area. The closest surface water body to the IVHQ is Cedar Creek, directly north of the IVHQ. Quincy Bay and the Mississippi River are approximately 0.6 miles west of the IVHQ. The construction and operational activities associated with the Proposed Action have no mechanisms that would directly impact Cedar Creek. Potential indirect impacts could occur if construction of the proposed buildings, parking lots or utility corridors resulted in substantial soil erosion and sedimentation of run-off into the northwest drainage network that discharges to the open area and eventually to Cedar Creek.

STORMWATER

Construction. Construction of the Proposed Action would disturb greater than one acre of soil. As such, the CDB would obtain coverage under ILR10 and submit a Notice of Intent at least thirty days prior to that start of construction of the Proposed Action. The CGP permit would require development of a site-specific SWPPP that specifies the structural controls (such as mulching, catch basin inlet protection, silt fencing) and non-structural controls (minimizing ground disturbances, good housekeeping) to minimize the potential for sedimentation of runoff at the Project Study Areas.

All construction activity and site disturbance would follow the minimum standards set by the IEPA for the SWPPP.

The stormwater management system is designed to meet the considerations from the Quincy Storm Water Detention Requirements. The system would convey stormwater from the new buildings and impervious surfaces through a detention system using Best Management Practices for water quality measures. Per the Quincy Storm Water Detention Requirements, the stormwater leaving the site would have the same intensity as the undeveloped site for the 10-yr 24-hr and 100-yr 24-hr storm events. The stormwater engineer shall verify design storms correlate to 95th percentile storm required for LEED credits as defined in specification SECTION 018113.14 - SUSTAINABLE DESIGN REQUIREMENTS - LEED® v4 – v4.1 BD+C for Building Design and Construction" New Construction (NC).

New development impacts the natural hydrology of a site, both through soil compaction and the addition of impervious surfaces where pervious surfaces existed previously. Stormwater design would address

runoff rate and volume to minimize erosion concerns and discharge to natural drainage paths and the municipal stormwater system, as well as runoff quality to minimize downstream sedimentation, contamination, and flooding.

Site grading is designed to promote the flow of stormwater runoff to the proposed underground storm sewer system with the use of ditches and swales. There is approximately 48' of elevation change between the northeast corner and the high point at the Old Stone Building and 68' of elevation change from the Old Stone Building to the stream on the south side of the property. The change in elevation would require some mass grading of materials onsite to accommodate the construction of new buildings. Slopes and grades would be designed to provide gentle slopes and grades where possible. Retaining walls would be utilized as required. Therefore, construction of the Proposed Action would have no adverse impact on stormwater.

Operation. Operation of the Proposed Action would increase the existing impervious surface area in the area around the proposed new buildings and parking lots. Therefore, the volume of stormwater generated would increase above current conditions under similar rainfall events. However, surface runoff from the new and/or expanded parking lots would be directed into the new stormwater detention system, keeping runoff rates within allowable levels.

The rehabilitations associated with the Proposed Action would continue to capture stormwater runoff from the building roofs and impervious surfaces.

Soil erosion and sediment control would be designed to meet the requirements of the Illinois Urban Manual. A SWPPP would be required before construction begins. Best Management Practices would be incorporated within the earthwork design to the extent practical.

All construction activity and site disturbance would follow the minimum standards set by the IEPA for the SWPPP. However, as this remains an actively used and operated IVHQ housing our veterans during the construction phase, all construction activity on IVHQ shall be well planned, scheduled and coordinated carefully. Access to IVHQ and emergency services and utilities need to be operational through the process of construction and coordinated with the IVHQ leadership and CDB and IDVA project manager.

The stormwater management system is designed to meet the considerations from the Quincy Storm Water Detention Requirements. The system would convey stormwater from the new buildings and surrounding site improvements through a detention system using Best Management Practices for water quality measures. Per the Quincy Storm Water Detention Requirements, the stormwater leaving the site would have the same intensity as the undeveloped site for the 10-yr 24-hr and 100-yr 24-hr storm events. Detailed designer shall verify design storms correlate to 95th percentile storm required for LEED credits as defined in specification SECTION 018113.14 - SUSTAINABLE DESIGN REQUIREMENTS - LEED® v4 – v4.1 BD+C for Building Design and Construction" New Construction (NC)

For the north section, detention would be provided by a storm trap detention basin located underneath the proposed section of parking lot. The west section would drain into a series of bio swales located in the center strip of the proposed parking lot to achieve a portion of the required detention. The overflow for the bioswales would drain into a storm trap located underneath the north portion of the parking lot to provide the additional detention required. The south portion detention requirements would be met by

the existing Lake Illinois. The re-developments in the east portion would reduce the amount of detention required to a minimal amount. No additional detention is proposed for the south and east portions.

Runoff was calculated using the Soil Conservation Service runoff equation in Autodesk Storm and Sanitary Analysis 2018. A Curve Number of 61 was used for the pervious areas and 98 was used for all the impervious areas. Weighted curve numbers were used for each sub-catchment. The model also included the existing and proposed pipe networks to determine flow rates to the detention basins and outlets using the kinematic-wave method.

GROUNDWATER

Construction and Operation. Construction and operational activities associated with the Proposed Action would not require contact with or exposure of groundwater underlying or in the vicinity of the Project Study Areas. However, to ensure that any accidental releases of petroleum-based fluids do not impact groundwater resources, the construction contractors would maintain an emergency spill response kit and complete cleanup efforts as previously described under the Soils heading in Section 3.4.2.1.

Short-term erosion and sedimentation impact on hydrology and water quality would be minimized through implementation of the following:

- Potential impacts would be minimized with implementation of a SWPPP and associated erosion and sediment control BMPs for soil stabilization as required in the Construction General Permit that would be required for the Proposed Action.
- Utilize native vegetation and drought-resistant vegetation for area landscaping.
- Route stormwater runoff from impervious surfaces to stormwater retention and drainage areas.
- Implement spill and leak prevention and response procedures, including maintaining a complete spill kit at the project area, to reduce the impacts of incidental releases of vehicle fluids.

3.5.2.2 No Action

No changes to the existing conditions at the IVHQ would occur under the No Action alternative. Therefore, no impacts to hydrology or water quality would occur. Baseline conditions would remain, as described above.

3.6 Wildlife and Habitat

The Endangered Species Act (ESA) (16 USC 1531-1544) provides a program for the conservation of threatened and endangered plants and animals and their habitats. Under Section 7 of the ESA, all Federal agencies, in consultation with the U. S. Fish and Wildlife Service (USFWS) and/or National Oceanic and Atmospheric Administration's National Marine Fisheries Service, are required to ensure that actions they authorize, fund, or carry out are not likely to jeopardize the continued existence of federally listed threatened or endangered species, or designated critical habitats. IDNR Endangered Species Protection Board maintains a statewide database for conservation planning and project review, protects land for the conservation of biodiversity, and protects and manages the natural heritage resources of Illinois. The IDNR is responsible for managing and conserving the state's animal species.

3.6.1 Existing Environment

The IVHQ falls within the Interior River Valleys and Hills Ecoregion of the Southeastern USA Plains Region. The area is characterized as many wide, flat-bottomed terraced valleys, forested valley walls, and dissected glacial till plains. In contrast to the generally rolling to slightly irregular plains in adjacent ecological regions to the north, east and west, where most of the land is cultivated for corn and soybeans, a little less than half of this area is in cropland, about 30 percent is in pasture, and the remainder is in pasture (Woods, 2006).

The IDNR Upper Mississippi River and Illinois River Bottomlands Natural Division (Anderson, 2020) describes the following major habitats and challenges within the region:

- *Forests- loss of diversity and dominance of undesirable adventive species due to changes in hydrology, frequency and duration of flood events, and over-browsing by white-tailed deer,*
- *Grassland- scarcity due to establishment on forested soils, dominated by switchgrass with few or no forbs, invaded by cottonwoods,*
- *Wetland- sedimentation, unnatural flood regimes, exotic and invasive species (reed canary grass, phragmites, willow, cattails, bighead and silver carp); many wetlands are still farmed; limited funds available for restoration and management,*
- *Lakes & Ponds- Sedimentation has led to a lack of deep-water fish habitat. Flocculent lake bottoms, summer floods, and common carp have led to an absence of aquatic plants in backwater lakes. Conflicting goals of providing river connectivity for fish compared to aquatic vegetation for migrating waterfowl,*
- *Streams- sedimentation, lack of riparian vegetation, channelization and dredging, altered hydrology.*

Wildlife likely to be observed on the project site include species primarily adapted to a semi-urban environment, grasslands, and forested fringe, such as grey squirrels, shrews, chipmunks, rabbits, voles, mice, white-tailed deer, and raccoon. Birds would include a mixture of forest, forest edge, and open habitat species, including migratory grassland species and songbirds, many of which are protected by the Migratory Bird Treaty Act. Raptors, shore birds, and waterfowl are likely to occasionally use the site due to the proximity to the Mississippi River.

The IVHQ consists of a grouping of residential and healthcare facilities interconnected with paved walkways and roadways/parking lots. The areas between buildings are maintained lawns and landscaping among mature trees and rolling hills. In the southwestern portion of the IVHQ, separated from the main residential area is a small pasture where a managed herd of white-tailed deer and American bison are kept for the viewing pleasure of the residents.

3.6.1.1 Federally Listed Plants and Wildlife

Federally listed species are those plant and animal species protected by the federal government pursuant to the Endangered Species Act of 1973, as amended. Federally listed species are classified as endangered or threatened. State-listed species are classified as endangered, threatened, species of special concern (animals), or commercially exploited (plants).

Federally Listed Threatened and Endangered Species and Habitat

The USFWS Illinois-Iowa Ecological Services Field Office (IPaC, 2021) identified 6 protected species that have the potential to be impacted by activities at the Project Site (**Table 9**). Potential summer roosting habitat for the Indiana bat (*Myotis sodalis*) and Northern Long-eared bat (*Myotis septentrionalis*) was observed within the IVHQ. No other potential habitat for endangered species was encountered during surveys performed at the IVHQ in March and July 2019. According to Illinois EPA records (Grider, 2021), as of March 2021, the closest known hibernacula is approximately 9 miles southeast of the IVHQ. Both Indiana and Northern Long-eared bat are present in the hibernacula. The closest known Indiana bat maternity trees are about 10.8 miles northeast of the project and 12.5 miles southeast. The closest known NLEB maternity tree is approximately 20 miles northeast.

Additionally, the IVHQ does not contain designated critical habitat for any federally listed species or wildlife corridors to support the movement or migration of wildlife other than birds or insects.

Table 9 Federally Listed Species Potentially Occurring at the IVH

Common Name	Scientific Name	Federal Status	USFWS Office	Habitat Requirements/Notes	Habitat present at IVH
<i>Mammals</i>					
Indiana Bat	<i>Myotis sodalis</i>	Endangered	Illinois-Iowa Ecological Services Field Office	Summer habitat includes small to medium river and stream corridors with well-developed riparian woods; woodlots within 1 to 3 miles of small to medium rivers and streams; and upland forests. Caves and mines as hibernacula.	Yes
Northern Long-eared Bat	<i>Myotis septentrionalis</i>	Threatened	Illinois-Iowa Ecological Services Field Office	Hibernates in caves and mines - swarming in surrounding wooded areas in autumn. During late spring and summer roosts and forages in upland forests.	Yes
<i>Clams</i>					
Higgins Eye (pearly mussel)	<i>Lampsilis higginsii</i>	Endangered	Illinois-Iowa Ecological Services Field Office	Mississippi River and some of its larger northern tributaries (i.e., St. Croix and Wisconsin Rivers) in gravel or sand	No
Sheepnose Mussel	<i>Plethobasus cyphus</i>	Endangered	Illinois-Iowa Ecological Services Field Office	Shallow areas in larger rivers and streams	No
Spectaclecase (mussel)	<i>Cumberlandia monodonta</i>	Endangered	Illinois-Iowa Ecological Services Field Office	Large rivers in areas sheltered from the main force of the current	No
<i>Flowering Plants</i>					
Eastern Prairie Fringed Orchid	<i>Platanthera leucophaea</i>	Threatened	Illinois-Iowa Ecological Services Field Office	Mesic to wet prairies and meadows	No
<i>Insects</i>					
Monarch Butterfly	<i>Danaus plexippus</i>	Candidate	Illinois-Iowa Ecological Services Field Office	Habitats supporting milkweed sp. Diverse prairies and grasslands, riparian corridors,	No

Migratory Bird Treaty Act

The USFWS administers the Migratory Bird Treaty Act (MBTA; 16 U.S.C. §§ 703-712, as amended), which protects migratory bird species in the United States. The MBTA prohibits, unless under permit, to pursue, hunt, take, capture, kill, attempt to take, capture or kill, possess, offer for sale, sell, offer to purchase, purchase, import, export, or transport of any native migratory bird, nests, eggs, or any bird, nest, or egg parts. Additionally, Executive Order (EO) 13186 (Clinton, 2001), Responsibilities of Federal Agencies to Protect Migratory Birds, directs federal agencies to implement the MBTA.

Table 10 lists migratory birds that are of concern either because they occur on the USFWS Birds of Conservation Concern (BCC) list or warrant special attention in the vicinity of the IVHQ. None of the species were observed during site investigations of the IVHQ.

Table 10 Migratory Birds

Common Name	Scientific Name	Breeding Season
Bald Eagle	<i>Haliaeetus leucocephalus</i>	Oct 15 – Aug 31
Kentucky Warbler	<i>Oporornis formosus</i>	Apr 20 – Aug 20
Lesser Yellowlegs	<i>Tringa flavipes</i>	Breeds Elsewhere
Prothonotary Warbler	<i>Protonotaria citrea</i>	Apr 1 – Jul 31
Red-headed Woodpecker	<i>Melanerpes erythrocephalus</i>	May 10 – Sep 10
Rusty Blackbird	<i>Euphagus carolinus</i>	Breeds Elsewhere
Semipalmated Sandpiper	<i>Calidris pusilla</i>	Breeds Elsewhere

3.6.1.2 State-Listed Plants and Wildlife

The Illinois Natural Heritage Database, summarized in **Table 11**, shows the following protected resources may be in the vicinity of the IVHQ (EcoCAT, 2020). The EcoCAT report is included in **Appendix A**:

Table 11 EcoCAT Results

Common Name	Scientific Name	State Status	Habitat Requirements/Notes	Habitat present at IVH
<i>Clams</i>				
Butterfly	<i>Ellipsaria lineolate</i>	Threatened	Large rivers with a stable substrate containing rock, gravel, and sand in swift current- (WDNR, Butterfly, 2020)	No
Ebonysell	<i>Fusconaia ebena</i>	Endangered	Large rivers on a gravel, sand, or mud bottom in water at least six feet deep where the current is swift- (WDNR, Ebonysell (Fusconaia ebena), 2020)	No

3.6.2 Environmental Consequences

3.6.2.1 Proposed Action

CONSTRUCTION

Construction activities associated with the Proposed Action would require clearing mature vegetation at or immediately adjacent to the construction areas. Some of the mature vegetation is near the end of the lifespan, or diseased, and not likely to survive the IVHQ upgrade. A tree and landscape protection plan would be incorporated into the project design documents. Habitat (trees, shrubs, herbaceous vegetation) in adjacent areas would remain available for use by urban fauna (squirrels, common birds). However, construction activities may be a temporary nuisance to urban fauna and cause their temporary displacement from the immediate construction area.

Short-term impacts on wildlife and habitat would be minimized through implementing the following measures.

- If vegetation is damaged or removed during construction, it would be replaced with native, non-invasive, varieties prior to the conclusion of the construction phase.
- Tree clearing would be completed between October 15 and March 30 to avoid potential impacts to endangered bats.

USDVA has received concurrence from USFWS under Section 7 of the Endangered Species Act, with a finding of may affect - not likely to adversely affect the Indiana bat and Northern long-eared bat on April 14, 2021. With this concurrence, USFWS has indicated that USDVA has adequately addressed the potential impacts of the Proposed Action on fish and wildlife resources and federally listed threatened and endangered species in the project area. USFWS's concurrence is included in Appendix A. (USFWS, 2021).

Construction of the proposed action would have no impacts on federally or state listed wildlife or habitat.

OPERATION

Operation of the Proposed Action would not result in the loss of habitat or the creation of new or improved habitat; therefore, no changes in the type of wildlife at the Proposed Action site would be anticipated. Operation of the Proposed Action would have no impact on federally or state listed wildlife or habitat.

3.6.2.2 No Action

Under the No Action alternative, there would be no changes to the habitat at the Project Study Areas; therefore, there would be no impacts to wildlife in these areas. Baseline conditions would remain, as described above.

3.7 Noise

3.7.1 Existing Environment

The Noise Control Act of 1972 (42 USC 4901 et seq.) (USEPA, Noise Control Act of 1972, 1972) directs Federal agencies to comply with applicable Federal, State, interstate, and local noise control regulations. Sound occurs when vibrations that travel through a medium are interpreted by the biological elements of the ear. Noise occurs when sounds become undesirable, unpleasant, or damaging. Noise-sensitive receptors include residences, hospitals, libraries, recreation areas, and religious institutions.

Sound pressure levels are quantified in decibels (dB), which depend on both frequency and intensity, and are identified by a level on a logarithmic scale. The way the human ear hears sound intensity is quantified in dBA, which are weighted according to the “A” weighting curve. Three dBA is the volume at which humans perceive an apparent audible change. Sound levels for common activities and construction work are presented in **Table 12** below.

The National Institute for Occupational Safety and Health (NIOSH) recommends that individuals working in an environment of 85 dBA or louder for an eight-hour workday limit their exposure to this noise level and wear protective earwear to help manage and prevent hearing loss due to noise exposure (NIOSH, 1998). **Table 12** below shows estimated sound levels for various household, industrial, and commercial devices (OSHA, 2011).

Table 12 Common Household, Industrial, and Construction Sound Levels

Sound Level (dBA)	Common Sounds	Effect
140	Jet engine	Painful
130	Near air-raid siren	Painful
120	Jet plane takeoff, siren	Painful
110	Chain saw, thunder, garbage truck	Extremely loud
100	Hand drill	Extremely loud
90	Subway, passing motorcycle	Extremely loud
85	Backhoe, paver	Very loud
80	Blow-dryer, kitchen blender, food processor, cement mixer, power saw	Very loud
70	Busy traffic, vacuum cleaner, alarm clock	Loud
60	Typical conversation, dishwasher, clothes dryer	Moderate
50	Moderate rainfall	Moderate
40	Quiet room	Moderate
30	Whisper, quiet library	Faint

The City of Quincy (City) enforces a “No Construction Work” ordinance between the hours of dawn and dusk (no night-time work). This ordinance prohibits any construction work or noise during daylight hours, and any such disturbance (including noise) across a residential or commercial real-property line, would

open grounds for a complaint and investigation by City of Quincy Police Department except for emergency work of public service utilities or by variance issued by the county health officer.

The City does not have a comprehensive noise ordinance (Bevelheimer, 2020); therefore, the City falls under the jurisdiction of the state Illinois Environmental Protection Act (415 ILCS 5) Title V regulations (Act) by the Illinois Pollution Control Board (Board) (IPCB, Illinois Compiled Statutes 415 ILCS 5, Environmental Safety, Environmental Protection Act, Title V, 2019) for determining whether a construction project would have a significant impact related to noise. Under these regulations, a noise (in this case construction-related) would be considered to have a significant impact if:

- Section 23: Activities associated with “excessive noise endangers physical and emotional health and well-being, interferes with legitimate business and recreational activities, increases construction costs, depresses property values, offends the senses, creates public nuisances, and in other respects reduces the quality of our environment”.
- Section 24: “No person shall emit beyond the boundaries of his property any noise that unreasonably interferes with the enjoyment of life or with any lawful business or activity, so as to violate any regulation or standard adopted by the Board under this Act”.
- Section 25: “The Board, pursuant to the procedures prescribed in Title VII of this Act, may adopt regulations prescribing limitation on noise emissions beyond the boundaries of the property of any person and prescribing requirements and standards for equipment and procedures for monitoring noise and the collection, reporting, and retention of data resulting from such monitoring.”

NOISE RECEPTORS

Noise sensitive receptors are defined as properties where frequent human use occurs and where a lowered noise level would be of benefit. These noise sensitive receivers are residences, hospitals, libraries, recreation areas, and religious institutions.

The nearest on-IVHQ residential area to the Project Area is Building 31 - Northern Guest House (currently vacant), which has functioned as permanent supportive housing for Veterans since the late 1800s. Other on-IVHQ residential buildings including Building 34 – Medical Staff Building (non-residential), Building 20-Somerville Domiciliary, Building 22 - Anderson Barracks, Building 90 - Markword Infirmary, Building 93 - Schapers Hospital, Building 94 - Elmore Infirmary (currently vacant), and Building 101 - Fifer Skilled Care Facility. The few individual trees located near these buildings are not likely to substantially limit the construction noises generated during demolition, renovation, and new construction activities on IVHQ.

The nearest off-IVHQ residential areas are the neighborhoods located approximately 200 feet east, south, and west of the IVHQ property line. Most construction-related work is to occur in the central IVHQ area. Open and forested areas are located approximately 400 feet to the south and 1,000 feet to the west and would provide some buffer protection from noise levels to the off-IVHQ residential areas to the south and west.

The nearest on-IVHQ patient building (Building 101 - Fifer Skilled Care Facility) is located approximately 400 feet northwest of the central IVHQ area where construction activities are to occur. There are four (4) schools within a 1-mile radius of the Project Area. The nearest school is the Washington Elementary

School, approximately 0.4 miles south of the Project Area (USEPA, NEPAassist Tool, 2020). There are seven (7) religious institutions within a 1-mile radius of the Project Area, the nearest being the St. John Roman Catholic Church, located approximately 0.4 miles south (USEPA, NEPAassist Tool, 2020). Given these distances and the sounds generated within this urban environment, noises generated at any portion of the Project Area would not be apparent at these receptor locations.

Current Noise Conditions

Limited noise is generated from on-IVHQ activities, including power generation at the Power Plant (Building 40). Other noises are generated by truck deliveries, food preparation, and related operations. Noise is primarily generated by visitor and staff vehicles traveling to and from on-IVHQ buildings. Because the activities in these buildings are for typical work and office environments, noise generated from within these buildings would not be apparent to receptors located outside of the buildings. There are no noise generating activities associated with Building 21 - Fogg Barracks, Building 26 - Fletcher Infirmary, Building 31 - Northern Guest House, Building 91 - Kent Infirmary, and Building 94 - Elmore Infirmary as these buildings are currently vacant.

Limited noise is generated from routine activities at the residence buildings listed above. Noise is primarily generated from residents and their visitors, as well as cars traveling along roads entering the IVHQ. The noise generated within this building would be typical of a residential setting and therefore would generally not be audible to by receptors located outside of the building. Distant traffic along North 12th Street to the east, Locust Street to the south, and 5th Street to the west; and Heating, Ventilation, and Air Conditioner (HVAC) units at surrounding IVHQ buildings also comprised the ongoing background soundscape, with audible insects chirping in the evening.

A noise survey has not been conducted in Project Area; a typical noise survey measures the ambient noise level at key locations, including street intersections, near sensitive receptors. However, based on the current low noise conditions at IVHQ, a noise survey is not warranted.

3.7.2 Environmental Consequences

3.7.2.1 Proposed Action

CONSTRUCTION

Noise would be generated by construction equipment and other contractor vehicles entering and leaving the Project Area during the approximate 56-month construction period. Noise from these activities would vary depending on the type of equipment being used, and the impact from this noise on a receptor would depend on the distance between the receptor and the source of the noise.

The following buildings are scheduled for demolition:

- Building 24 – Vehicle Garage
- Building 26 – Fletcher Infirmary
- Building 31 – Northern Guest House
- Building 32 – Truck Maintenance Garage
- Building 90 – Markword Infirmary (*scheduled for demolition dependent on contractor's construction scheduling*)
- Building 91 – Kent Infirmary

- Building 94 – Elmore Infirmary

The following buildings are scheduled for renovation:

- Building 92 – Nielson Hall - Dining/Kitchen/Store

The following buildings are scheduled for new construction:

- New Skilled Nursing Care Building
- New Domiciliary Facility

Note: *several utility tunnels and duct banks, roadways, and parking lots are also scheduled for various degrees of demolition, renovation, and new construction.*

Noise from construction work performed inside of buildings would not likely be audible to receptors outside of the building. Construction noises outside of buildings scheduled for demolition, renovation, or new construction, could be audible to receptors (residents, visitors, and staff) in Building 34 – Medical Staff Building, Building 20 - Somerville Domiciliary, Building 22 - Anderson Barracks, Building 90 - Markword Infirmary, Building 93 - Schapers Hospital, and Building 101 - Fifer Skilled Care Facility.

Because noise levels generally decrease by approximately 6 dBA for every doubling of distance for point sources (such as a single piece of construction equipment), and approximately 3 dBA for every doubling of distance for line sources (such as a stream of motor vehicles on a busy road at a distance), construction noise levels of approximately 85 dBA, generated at any of the construction sites within the Project Area, would decrease to approximately 50 dBA at 60 feet away. A noise level of 50 dBA is similar to the ambient noise level measured at the intersection of North 12th Street and Locust Street. This noise level (50 dBA) is not likely to be considered a nuisance by the nearest receptors to the Project Area. Additionally, construction noise is unlikely to be evident to receptors located greater than 60 feet from the noise sources at the Project Area.

However, as previously described in Section 3.7.1, several residential buildings that provide housing for Veterans and are in close proximity to the construction zones within the Project Area areas. There are limited vegetation or other physical features separating this Project Area and potential receptors located in residence buildings that would lessen construction noises.

Short-term and long-term noise impacts would be minimized through implementation of the following:

- Schedule construction activities for normal business hours, attempting to minimize impacts to the surrounding community.
- Maintain mufflers and sound shielding on construction equipment and routine maintenance equipment.
- Minimize equipment idling and shut down construction equipment when not in use.
- Equipment and machinery used at the project site would meet all local, State, and Federal noise regulations;
- Minimize work would occur on Federal holidays or Sundays; and
- Personnel exposed to noise levels exceeding OSHA limits from heavy equipment during construction would be required to wear appropriate hearing protection and practice safety BMPs in accordance with OSHA regulations.

Any construction activity noise that is anticipated to disturb residents or cannot be performed during the aforementioned daytime period is expected to be infrequent, of limited duration, and would not exceed safe levels at the receptor's location, and thus would be a less than significant impact.

Construction workers in close proximity to equipment could be temporarily exposed to noise levels above 90 dBA, which is above the permissible noise exposure level defined by the Occupational Safety and Health Administration (OSHA). These noise levels would be reduced to permissible levels by implementing BMPs such as the use of hearing protection equipment, ensuring compliance with applicable OSHA standards.

Therefore, construction noise associated with the Proposed Action would have a short-term, direct and indirect, less-than-significant adverse impact on sensitive receptors, including those at buildings listed above, but likely no impact on any receptors located elsewhere within or beyond the IVHQ.

OPERATION

Operation of the Proposed Action would generate a noise profile similar to typical residential and office activities. These activities include vehicles arriving and leaving the buildings and general routine maintenance activities such as landscaping (mowing) and building cleaning. These operational activities are currently performed at or in the vicinity of the Project Area. These operational noises would not be disruptive to future residents, visitors, and staff, and would not be evident to potential receptors located beyond the immediate vicinity of buildings listed above.

Therefore, noise from operation of the Proposed Action would have a long-term, direct, negligible adverse impact on the aforementioned receptors.

3.7.2.2 No Action

Under the No Action alternative, the Proposed Action would not be implemented. Existing noise generated at the Project Area from residents, visitor, and staff activities would continue. These existing noises have had no documented adverse impact on receptors at or adjacent to the IVHQ.

3.8 Land Use

3.8.1 Existing Environment

The IVHQ is situated on the Northern boundary of the city limits. The IVHQ itself is historic in nature and its presence has preceded the land uses that have developed harmoniously and organically around it.

The analysis of surrounding land use context relied on the Zoning Map published by the City of Quincy (City of Quincy, 2020).

The city and the continuous unincorporated territory within one and one-half miles of the Quincy corporate limits are divided into seven types of districts:

- RU Districts - Rural
- RE Districts - Resort
- R Districts - Residential
- NR Districts - Neighborhood Residential
- C Districts - Commercial
- D Districts - Downtown

- M Districts - Industrial

The seven districts are further divided into the following specific districts:

- RU1 Rural District
- RE1 Resort District
- RS Single-Family District
- R1A Single-Family District
- R1B Single-Family District
- R1C Single-Family District
- R2 Two-Family District
- R3 Multi-Family District
- NR1 Neighborhood Residential District
- NR2 Neighborhood Residential District
- C1A Limited Local Commercial District
- C1B Limited Local Commercial District
- C2 Commercial District
- C3 Planned Commercial District
- D1 Downtown Retail District
- D2 Downtown General Business District
- D3 Downtown Riverfront District
- D4 Downtown Office and Medical Facility District
- D5 Downtown Industrial District
- M1 Light Industrial District
- M2 Heavy Industrial District
- M3 Planned Industrial District

In addition to the specific districts, property may also acquire the following identifiers:

- L Landmark
- H Historic District

Surrounding Area

The IVHQ is surrounded by a mix of land uses and zoning districts distributed mainly between Industrial and Rural/Residential uses. They include the following uses:

- M1 – Light Industrial District
- M2 – Heavy Industrial District
- RU1 – Single Family District
- R2 – Two-family District uses

Small pockets of the following Commercial uses are present do not dominate the uses:

- C2 – Commercial District and

- C3 – Planned Commercial District

The surrounding uses are generally congruent with the scale and nature of activity on this large IVHQ.

IVHQ

An analysis of IVHQ land use shows a mix of uses supporting the core IVHQ goal of care for veterans of various abilities. The uses are distributed among various clusters of buildings on the IVHQ. Such a mix of uses invites the community to use the buildings and grounds and is seamlessly integrated with its neighbors.

- Skilled nursing care, skilled nursing with memory care, and general purpose Domiciliary care with on-call services are located in the different two to four story care buildings.
- A full-service kitchen with dining services and storage is in a standalone three storied building.
- A therapy pool, physical therapy, restorative therapy, audiology, and occupational and speech therapy are provided in a general-purpose Therapy Building.
- Salon, beauty, hair, nails, personal grooming are provided for within the care buildings.
- Community oriented services that are enjoyed by residents, families, staff and visitors include a Café that is open to public, a Post office and bank within a one-story community building (Smith Hall).
- A Library, in an older two-story building is open to public.
- An All-wars museum, that is open to public.
- A Chapel for worship services.
- A deer and bison park, open to public.
- Veteran support services, open to veterans in the larger community is available in the administrative buildings.
- Apart from this, there are a multitude of support services, carpenters' shops, workshops, laundry building, an engineering building, a power plant etc.
- A history of the development of the IVHQ is available in a IVHQ HABS report referenced in Section 3.3 Cultural Resources.

3.8.2 Environmental Consequences

3.8.2.1 Proposed Action

The Proposed Action is consistent with current land use designations for the property and would not require changing land use designations at or beyond the IVHQ.

The proposed action is not intended to have any detrimental environmental consequences on IVHQ. The proposed use types (Long-Term Care and Domiciliary) are merely replacements to obsolete older buildings and structures intended for demolition. In addition, they are not seen as expansion of uses or a change in uses. The impacts from a zoning and land use standpoint, therefore, remain unchanged.

The Proposed Action would be concentrated near the center of the large IVHQ campus. Therefore, no impacts are expected on site edges and boundaries and in general, the land use patterns at a neighborhood or city scale. In fact, the addition of dining, staff and landscape amenities are seen as a

welcome community resource and potential community anchors in the neighborhood. The investment into updated utilities and building stock is seen to be beneficial to the general health of the IVHQ facility.

The Proposed Action would have a long-term, significant beneficial impact for IVHQ and the surrounding community.

3.8.2.2 No Action

Under the No Action alternative, the Proposed Action development would not occur. Some buildings would remain underutilized and/or vacant. Baseline land use conditions would remain, as described above.

However, the lack of action on a large IVHQ showing significant deferred maintenance and renovation needs would not be beneficial to the long-term health of the surrounding land uses. Abandoned buildings, obsolete infrastructure and less-than-ideal long-term care options for the veterans on IVHQ are not seen as conducive to the long-term well-being of the neighborhood or the city.

Negative publicity and public perceptions could impact the stability of land uses in neighborhood. Therefore, the no action alternative could lead to negative impacts to the stability of land uses in the neighborhood.

3.9 Floodplains, Wetlands, and Coastal Zone Management

3.9.1 Existing Environment

3.9.1.1 Wetlands

EO 11990, Protection of Wetlands, directs federal agencies to "avoid to the extent possible the long- and short-term adverse impacts associated with the destruction or modification of wetlands and to avoid direct or indirect support of new construction in wetlands whenever there is a practicable alternative." Federal agencies shall minimize impacts to wetlands and preserve and enhance the natural and beneficial values of wetlands in carrying out their responsibilities for the use, management, or development of federal lands.

The National Wetland Inventory (NWI) Map (USFWS, 2020), shown on **Figure 9**, and the Quincy West Quadrangle indicate the presence of three wetlands in and around the IVHQ. The three wetlands identified on the NWI and Quincy West Quadrangle were: Lake Illinois, a pond located on the southeast side of the IVHQ, near the main entrance from N. 12th Street; a Riverine habitat located on the southwest side of the IVHQ, northwest of the southern entrance to the IVHQ; and a Freshwater Emergent Wetland located on the north side of the IVHQ, north of Parking Lot M. Per the Phase I Environmental Site Assessment in 2019, there are two ponds located on the IVHQ: one inside of the Lynn Deer Park and Lake Illinois, north of Building 29, Reig Administration. The third wetland depicted to be on the north side of the IVHQ, north of Parking Lot M, was not observed during the site reconnaissance, however a wetland delineation has not been performed by a qualified wetland scientist. This feature is located outside of the potential area of disturbance from the Proposed Action.

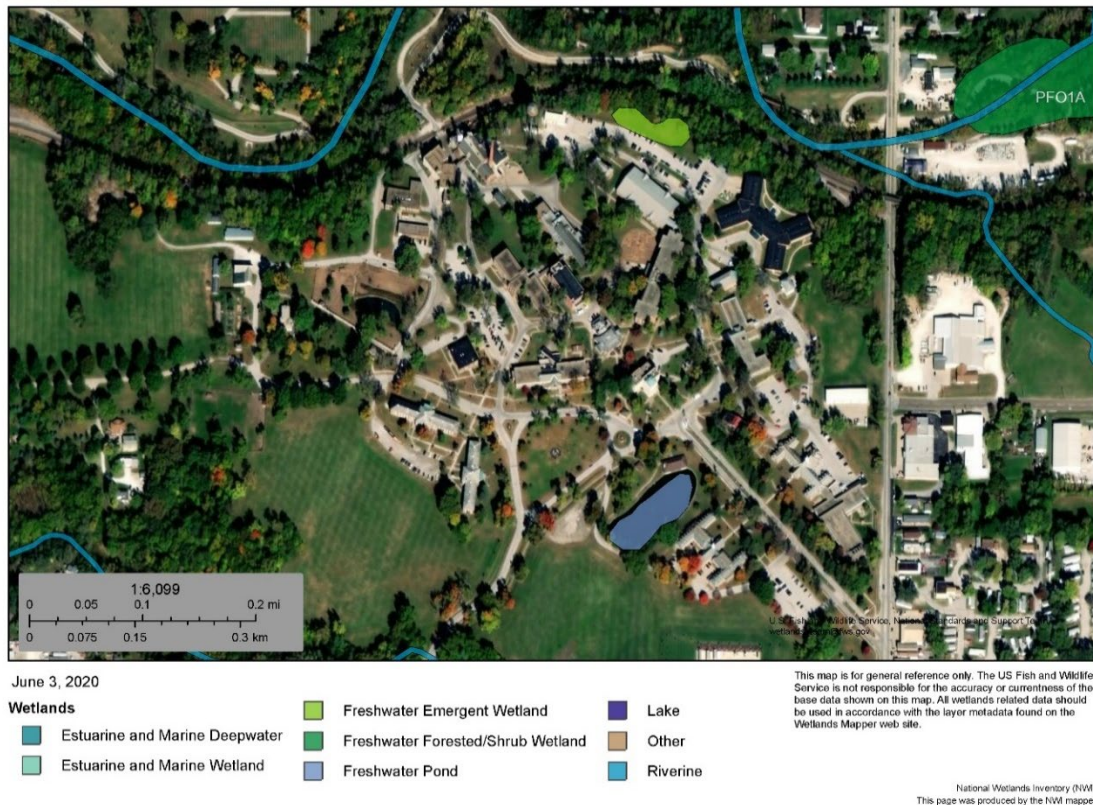


Figure 8: National Wetland Inventory Map

A pond, Lake Illinois, is located on the southeast side of the IVHQ, near the main entrance from N. 12th Street. The pond is classified as Palustrine, Unconsolidated Bottom, Intermittently Exposed, Excavated (PUBGx) wetland. Lake Illinois was observed during the site reconnaissance.

A Freshwater Emergent Wetland is indicated to be located on the north side of the IVHQ, north of Parking Lot M. The wetland is classified as Palustrine, Emergent, Persistent, Seasonally flooded (PEM1C) wetland. A wetland delineation, performed by a qualified wetland scientist has not yet been completed. This feature is located outside of the potential area of disturbance from the Proposed Action.

A Riverine habitat is located on the southwest side of the IVHQ, northwest of the southern entrance to the IVHQ. The Riverine habitat is classified as Riverine, Intermittent, Streambed, Seasonally flooded (R4SBC) wetland. The riverine habitat was observed during the site reconnaissance.

3.9.1.2 Floodplains

Executive Order EO 11988, Floodplain Management (Carter, 1977), was issued in 1977 in furtherance of NEPA and the National Flood Insurance Act of 1968 and the Flood Disaster Protection Act of 1973, as amended (42 U.S.C. §4001 et seq.). EO 11988 requires federal agencies to "avoid to the extent possible the long-and short-term adverse impacts associated with the occupancy and modification of floodplains and to avoid direct or indirect support of floodplain development whenever there is a practicable alternative".

The Project Study Areas are located on the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRM) No. 17001C0309D (FEMA, 2011) shown on **Figure 10**. According to the FIRMs, the Project Study Areas are in an area of minimal flood hazard, outside of the 0.2%-and 1%-annual-chance (500-year and 100-year, respectively) flood zones, and have a low risk of flooding. Due to the low risk of potential flooding, the purchase of flood insurance is not required in these areas (FEMA, 2013)

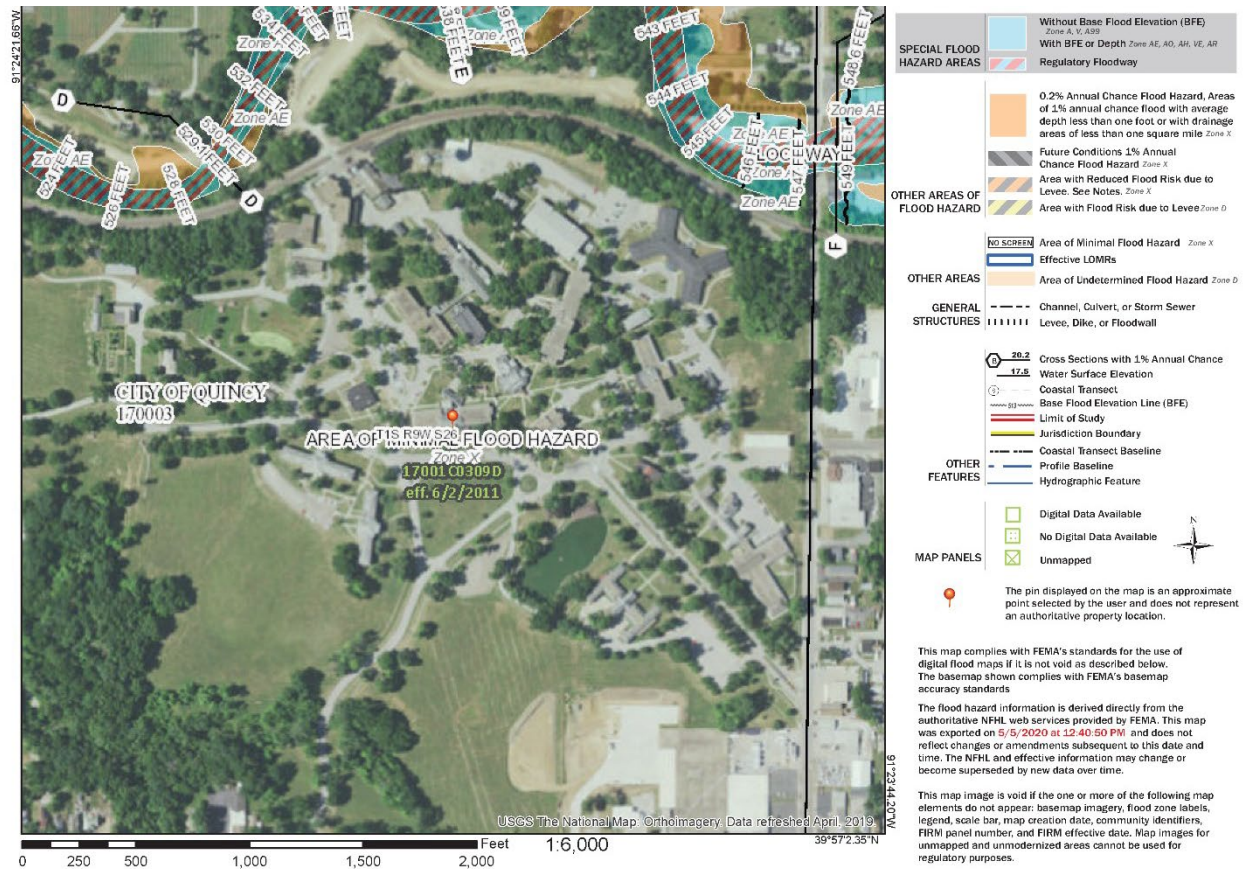


Figure 9 Federal Emergency Management Agency National Flood Hazard Layer

3.9.1.3 Coastal Zone Management

The Coastal Zone Management Act (CZMA) was enacted in 1972 to preserve, protect, develop, and where possible, restore and enhance the resources of the nation's coastal zone. Coastal states are encouraged to develop state coastal management programs, and comprehensively manage and balance competing uses of, and impacts to, coastal resources. The United States Department of Commerce National Oceanic and Atmospheric Administration (NOAA) approves coastal management programs. The CZMA requires that any federal actions affecting any land or water use, or natural resource of the coast be consistent with the enforceable policies of a state's federally approved coastal management program. The Illinois Coastal Management Program was approved by NOAA in 2012. Federal consistency evaluations under the CZMA in Illinois are conducted by the IDNR.

According to the IDNR (IDNR, 2012), the IVHQ is not located within a designated Coastal Management Zone (CMZ). The nearest CMZ is located along the Lake Michigan Shoreline in the vicinity of Chicago, greater than 200 miles from the IVHQ.

3.9.2 Environmental Consequences

3.9.2.1 Proposed Action

The Proposed Action would have no effect on wetlands, floodplains, or coastal zone resources. The existing potential wetlands and floodplains are located outside of the potential area of disturbance from the Proposed Action.

3.9.2.2 No Action

The No Action alternative would have no effect on wetlands, floodplains, or coastal zone resources.

3.10 Socioeconomic and Community Services

The development of the IVHQ has been integral to the growth of the city of Quincy. The variety of services offered has always been well tied into the development of the general economy of the city. Public involvement in assisting the veterans on a voluntary basis is at the heart of many of the IVHQ's activities. As an example, the following services offered on IVHQ are open to the general public.

- A café, and post office.
- A library.
- An All-wars museum.
- A chapel for worship services.
- A deer and bison park.
- Veteran support services, open to veterans in the larger community.

More independent and mobile veterans on IVHQ that visit local retail, food, and medical treatments at specialists and Blessing Hospital support the local economy. Visitors, guests and family members also visit the IVHQ and support the surrounding economy.

SOCIOECONOMIC

The Proposed Action is intended to benefit the socioeconomic conditions of Veterans and their families in Adams County and the surrounding region by providing long-term care services at IVHQ. This section analyzes the potential impacts of the Proposed Action on the socioeconomic conditions of this population, and community services as it relates to the long-term care and independent living residents for domiciliary.

COMMUNITY SERVICES

Community services include police protection, fire protection, emergency services, schools, health care, and parks and recreation.

3.10.1 Existing Environment

The IVHQ welcomes its residents from throughout Illinois. Its idyllic setting, historic feel, and reputation for care is key to its success. However, recent challenges stemming from deferred and/or under-resourced maintenance and modernization needs has hindered this reputation.

The IVHQ serves the needs of almost 300 residents needing skilled nursing care and an additional 50 or so residents needing on-call services in a general Domiciliary setting.

In a study titled ‘Characteristics of Rural Veterans: 2014 Data from the American Community Survey’, prepared by the National Center for Veterans Analysis and Statistics in August 2016, it was noted that the geographic isolation of rural areas creates different circumstances and challenges for people who live in these communities.

Rural communities were said to differ from urban communities in four distinct ways: demographic composition, social ties and social capital, culture, as well as infrastructure and institutional support. The study noted that a significant Veteran population resides in rural areas which explains the popularity of the supportive services offered on site. Such studies support the need for a development of the IVHQ and services for the Veteran population in homes set away from large urban centers.

SOCIOECONOMIC

Veterans Population

The USDVA’s National Center for Veterans Analysis and Statistics (NCVAS) provides a broad range of data and statistics about Veteran populations and programs throughout the U.S. In this context, the population of IVHQ has remained steady over the last decade.

The Proposed Action is a replacement of obsolete structures and environments with an equivalent number of beds set in a new Center of Excellence environment of care. An increased need for flexible Domiciliary Care is noted in the general age and need trends as observed by the Association of Veterans Homes Administrators. Veteran Population projections (Holder, 2017) show a Veteran population that is both declining in number and becoming more evenly distributed in age. This can be observed in Figure I “Veteran Age Trends” published as part of a ‘Veteran Population’ report published by the National Center for Veteran Analysis and Statistics dated May 3, 2019. The general trend in long term care reflects a need for accommodation that allow for greater independence, mobility, and learning and social needs as compared to a clinical or institutional environment.

Veterans Long-Term Care

There is currently a need for long-term care for veterans in the region. The Veterans Administration has acknowledged over time the need to support the renewal of State Homes in rural settings, a population demographic that is underserved across the country. A January 2017 study by the Census Bureau (US Census Bureau, 2017) noted that nearly one-quarter of veterans live in rural areas. Long-term care assures that a wider safety net is available for veterans needing care and assistance in multiple ADL’s (Activities of Daily Living), medication management, grooming, nutrition, mental wellness and maintaining their physical abilities.

Domiciliary

The National Association of State Homes Administrators has presented to Congress that the demand for general purpose Domiciliary Care, Memory Care, Assisted Living with Memory Care are expected to rise. This shows a need for general purpose, flexible household design models that are adaptable over time.

State Home Domiciliary Care programs provide alternative long-term support for veterans who are not in need of skilled nursing care, but who need shelter and supportive services. There are approximately 6,000 Domiciliary Care beds in 50 State Veterans Homes in 30 states, including California, Florida, Illinois, Michigan, Pennsylvania, Ohio, and Virginia. The State Home Domiciliary Care program can play an integral role in USDVA's mission of helping the homeless and providing a safety net for veterans in their communities. The level of care in domiciliary varies from state to state, with some providing only basic food and shelter, and others offering more enhanced levels of support that may include social, vocational and employment services.

During a presentation made before the House Veterans Affairs Subcommittee on Health as part of a hearing entitled “The Silver Tsunami: is [USD]VA Ready?” on March 03, 2020, it was stated that the average age of Domiciliary residents is about 75 and the average length of stay is 3.5 years. A Domiciliary is an ideal setting for a more independent, mobile, socially active veteran that is engaged with their larger IVHQ community by volunteering, participating in group activities, gardening, clubs, social and recreational activities, and the invaluable task of volunteering in and supporting the lives of their friends and family members in skilled nursing care.

COMMUNITY SERVICES

The IVHQ is in an area where the local community provides community services including police protection, fire protection, emergency services, schools, health care, and parks and recreation. Police, fire, and other emergency services are provided by the City of Quincy and Adams County.

3.10.2 Environmental Consequences

3.10.2.1 Proposed Action

SOCIOECONOMIC

Construction.

Construction of the Proposed Action would have a long-term beneficial impact on the local economy by providing construction jobs to local qualified contractors. These benefits would end once the construction phase is completed. The construction contractors would also be anticipated to purchase selected building materials and supplies from local suppliers in Quincy region. This is expected to drive improvements in the local hotel and housing stock as an added benefit. These expenditures would have a long-term beneficial impact on the local economy.

The proposed action is expected to lay the foundation for more long-term improvements to the socio-economic fabric in and around the IVHQ. Such benefits may include updates to older buildings and neighborhood revitalization.

Additionally, the long-term benefits from the infusion of capital investment and the update to land and buildings include a healthy and vibrant IVHQ life driven by younger and more independent veterans in the expanded Domiciliary. This would serve to further strengthen the local fabric of retail, food, and services establishments.

Community organizations serving veterans are also expected to show interest in the reimagined IVHQ. The State has established strong minority participation goals and monitors them through construction

activity to ensure the benefits are distributed. It is expected that the proposed action would result in an improved sense of general well-being, and a demand from the community in both accessing and offering supportive services for the veterans at large.

Operation.

Following construction, operation of the Proposed Action would provide approximately 210 Long-Term Care beds and 80 Domiciliary Units for veterans and their families. Operation of the Proposed Action would not decrease or eliminate existing services and are anticipated to improve factors for staff retention and employee wellness through the conversion to a small house model of long-term care.

Therefore, it is anticipated that the Proposed Action would have a long-term, significant beneficial impact on socioeconomics and community services provided to Veterans and their families, as well as improved environments and facilities for the medical and administrative, nursing, therapy, and supportive professionals who serve the veterans.

Community Services

Under the Proposed Action, no additional load is expected to be placed on the fire or police departments, and changes are not expected in use of or access to other public or community services as a result of the construction of the new Long-Term Care and Domiciliary at the site. On the contrary, new and updated security, access control, fire-fighting and mechanical and electrical systems would aid in improved delivery of services.

The vision for change includes a vibrant new IVHQ that offers an expanded range of supportive services and amenities to the residents, their families, and staff. These include care, therapy, worship, gathering, dining, learning and staff training uses distributed around the new connected, walkable IVHQ. The flexible household design and the updated Domiciliary allow the CDB and IDVA to react to the changing needs and demographics of the veteran community over the next century.

3.10.2.2 No Action

SOCIOECONOMIC

The No Action alternative would have no direct effect on socioeconomic resources of the IVHQ or the surrounding Quincy area. There would be no economic investment into the community, nor construction related jobs or purchasing.

COMMUNITY SERVICES

The No Action alternative would have no direct effect on community services at the IVHQ or the surrounding Quincy area. Community services would continue to be strained to meet growing needs in an outdated environment, with unreliable infrastructure and physical plant layouts.

3.11 Solid Waste and Hazardous Materials

3.11.1 Existing Environment

3.11.1.1 Hazardous Materials Management Regulatory Framework

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. Regulated hazardous substances are identified through a number of federal laws and regulations. The most comprehensive list is contained in 40 CFR 302, and identifies quantities of these substances, when released to the environment, that require notification to a federal agency. Hazardous wastes, defined in 40 CFR 261.3, are considered hazardous substances. Generally, hazardous wastes are discarded materials (solids or liquids) not otherwise excluded by 40 CFR 261.4 that exhibit a hazardous characteristic (ignitable, corrosive, reactive, or toxic), or are specifically identified within 40 CFR 261. Petroleum products are specifically exempted from 40 CFR 302, but some are also generally considered hazardous substances due to their physical characteristics (such as fuel products) and their ability to impair natural resources.

ASBESTOS-CONTAINING MATERIALS

The rehabilitation of asbestos-containing building materials is regulated under the USEPA NESHAP and the OSHA Asbestos Construction Standard (29 CFR 1926.1101). The state agencies regulating asbestos are IEPA (Title 35 Ill. Adm. Code, Parts 720-723, Hazardous Waste Operating Requirements) and Illinois Department of Public Health (IDPH) (Title 77 Ill. Adm. Code Part 855, Asbestos Abatement for Public and Private Schools and Commercial and Public Buildings in Illinois). Additionally, any building material potentially disturbed during construction or rehabilitation activities is required to be managed according to USDVA *Specifications 02 82 11 Traditional Asbestos Abatement* through *02 82 13.41 Asbestos Abatement for Total Demolition Projects*.

LEAD-BASED PAINT

The disturbance of lead-based paint is regulated by OSHA and the NESHAP statute for general dust control. The disposal of commercial waste materials containing lead from rehabilitation, abatement, and/or demolition is regulated by the Resource Conservation and Recovery Act. Painted surfaces scheduled for disturbance are required to be tested and abated in accordance with USDVA Specification *02 83 33.13 Lead-Based Paint Removal and Disposal*, and IDPH (Title 77 Ill. Adm. Code Part 845, Lead Poisoning Prevention Act).

POLYCHLORINATED BIPHENYLS

Building materials “coated or serviced” with PCB bulk product waste (for example, caulk, paint, mastics, sealants) at concentrations equal to or greater than 50 ppm at the time of designation for disposal are to be managed as PCB bulk product waste in accordance with 40 CFR 761.3 and the USEPA “PCB Bulk Product Waste Reinterpretation” memorandum dated October 24, 2012.

CFCS, HCFCs AND REFRIGERANTS

Regulations for the proper handling and disposal of ozone-depleting substances have been established under Section 608 of the Clean Air Act as identified in 40 CFR Part 82, Subpart F. The regulation contains several provisions to protect the environment including the following requirements:

- Requires that practices be used to maximize recovery and recycling of ozone-depleting substances (both chlorofluorocarbons [CFCs] and hydrochlorofluorocarbons [HCFCs] and their blends) during the servicing and disposal of air-conditioning and refrigeration equipment.
- Requires that persons servicing or disposing of air-conditioning and refrigeration equipment certify to USEPA that they have acquired refrigerant recovery and/or recycling equipment and are complying with the requirements of the rule.
- Establishes safe disposal requirements to ensure removal of refrigerants from goods that enter the waste stream with the charge intact (e.g., motor vehicle air conditioners, home refrigerators, and room air conditioners).

Refrigeration and air-conditioning equipment that is typically dismantled on-site before disposal (e.g., retail food refrigeration, central residential air conditioning, chillers, and industrial process refrigeration) must have the refrigerant recovered in accordance with USEPA's requirements for servicing prior to their disposal. However, equipment that typically enters the waste stream with the charge intact (e.g., motor vehicle air conditioners, household refrigerators and freezers, and room air conditioners) are subject to special safe disposal requirements.

Under these requirements, the final person in the disposal chain (e.g., a scrap metal recycler or landfill owner) is responsible for ensuring that refrigerant is recovered from equipment before disposal of the equipment. If the final person in the disposal chain accepts appliances that no longer hold a refrigerant charge, that person is responsible for maintaining a signed statement from whom the appliance is being accepted. The signed statement must include the name and address of the person who recovered the refrigerant, and the date that the refrigerant was recovered, or a copy of a contract stating that the refrigerant would be removed prior to delivery.

Technician certification is not required for individuals removing refrigerant from small appliances, motor vehicle air conditioners, and motor vehicle-like air conditioners, when preparing them for disposal. However, the equipment used to recover refrigerant from appliances prior to disposal must meet the same performance standards as refrigerant recovery equipment used prior to servicing. Persons involved in the disposal of appliances must certify to their EPA Regional Office that they have obtained and are properly using USEPA certified refrigerant recovery equipment.

MERCURY

Mercury may be found in thermostats, thermometers, barometers, switches and other measurement devices. Quantities of mercury in these components may range from 275 to 3,000 milligrams. Mercury ampoules or free liquids would not be removed from their containers or devices. In Illinois, these mercury-containing components may be recycled at an off-site mercury recovery facility.

Although regulations requiring pre-renovation or pre-demolition surveys do not exist for mercury-containing light tubes, contractors would be notified of the presence of these materials in areas where

demolition/renovation activities might result in potential employee exposure to mercury, so that they can take the necessary actions to comply with Occupational Safety and Health Administration (OSHA) requirements and USEPA disposal requirements. Disposal of mercury-containing fluorescent light tubes as universal waste is regulated under 40 CFR 273 Standards for Universal Waste Management. Disposal of mercury from other sources is regulated under 40 CFR 260-262 Hazardous Waste standards.

APPLIANCES AND WHITE GOODS

Items that fall under the classification of appliances include refrigerators, freezers, ranges, water heaters, air conditioners, humidifiers, and other similar domestic and commercial large appliances. These items, also referred to as “white goods”, that have not had their components removed were banned from landfills on July 1, 1994. These components may include mercury switches, chlorofluorocarbon (CFC) refrigerant gas (Freon), and polychlorinated biphenyls (PCBs). Appliances that contain CFCs or PCBs must be processed by an appliance de-manufacturer registered with the IEPA.

MISCELLANEOUS MATERIALS

During the investigation, an assessment of other potentially regulated materials was performed including batteries, self-luminous exit signs, smoke detectors, compressed gas cylinders, containerized liquid wastes and other materials.

Batteries would be separated from other waste streams and taken to a recycling facility or business that accepts batteries for recycling. Smoke detectors that contain a small amount of radioactive material would be labeled and would be returned to the manufacturer for disposal. Fire extinguishers or other compressed gasses that may be present at the Site may typically be recycled and reclaimed. All remaining suspect hazardous materials identified during demolition and renovation activities would be appropriately handled and disposed of in accordance with applicable regulations.

3.11.1.2 Building-Specific Phase 1 Environmental Site Assessments

As part of the preparation of this document, GSG reviewed previous investigations conducted at the site. As part of the preparation of the Master Plan Documents in 2018, GSG conducted a Limited Environmental Assessment, equivalent to a Universal Waste Survey, for the entire IVHQ. Additionally, GSG prepared Phase I and Phase II Environmental Site Assessments in 2019 for the buildings and the tunnel system within the proposed construction areas. True North Consulting performed two (2) Universal Waste Surveys, one in 2019 and one in 2020, for the buildings and tunnel system within the proposed construction area.

LIMITED ENVIRONMENTAL ASSESSMENT

GSG Consultants conducted a Limited Environmental Assessment (GSG, 2018) as part of the Illinois Veterans Home Quincy IVHQ Master Plan. GSG’s survey was conducted for the entire IVHQ in July 2018 and consisted of the following: a visual inspection of suspected Asbestos Containing Materials (ACMs) and review of existing Asbestos Management Plan (AMP) documents; a limited Lead-Based Paint (LBP) inspection; a visual inspection for mold; an Underground Storage Tank/Above Ground Storage Tank (UST/AST) inspection; and a hazardous materials survey.

The results of the surveys indicated the following:

- ACM was confirmed or suspected to be present in all eleven structures. ACM were determined to be in good to fair condition in all structures, with the exception of Building #32, Truck Maintenance Garage, Building #89, Ehle Laundry, and the Tunnel System. ACM in these structures were determined to be in poor condition.
- LBP was confirmed to be on selected painted surfaces in all structures, with the exception of Building #90, Markword Domiciliary, Building #91, Kent Infirmary, and Building #92, Nelson Dining/Kitchen/Storage.
- Mold growth and/or water damage was observed to be present in all structures, near windows, along the ceilings, in the basements (in structures with basements), and along the walls and floors in the tunnels. Additionally, standing water was found in the sub-basement of Building #40, Power Plant, and significant water damage was observed in the two (2) sub-basements in Building #92, Nelson Dining/Kitchen/Storage.
- USTs were determined to be present at the following buildings: Building #32, Truck Maintenance Garage; and Building #89, Ehle Laundry. ASTs were determined to be present at the following buildings: Building #90, Markword Domiciliary; Building #91, Kent Infirmary; and Building #93 Schapers Hospital. Two (2) USTs and a pump island are present at Building #32, Truck Maintenance Garage. The USTs are one (1) 1,000-gallon gasohol tank and one (1) 600-gallon unleaded gasoline tank. The USTs were installed in 1993 after previous USTs at this location were removed. Two (2) USTs of unknown size and content were present at Building #89, Ehle Laundry. Based on conversations with site employees, the USTs are believed to contain laundry and dry-cleaning related products. It was unknown at the time of GSGs inspection if the USTs were still in use. The ASTs were attached to diesel generators and were approximately 50-gallons (Building #93, Schapers Hospital), or 200-gallons in capacity. The ASTs appeared to be in good condition and were leak free.
- The following hazardous materials were found in each building:
 - Building #24, Vehicle Garage: Based on the age of the building, PCB containing equipment is expected to be present; Containerized chemicals; and vehicle parts.
 - Building #26, Fletcher Infirmary: Based on the age of the building, PCB containing equipment is expected to be present; approximately 400 ballasts and 800 fluorescent light bulbs; containers of different sizes containing various amounts of chemicals (utilized for a variety of reasons); leaking transformers in the basement.
 - Building #31, Northern Guest House: Based on the age of the building, PCB containing equipment is expected to be present; approximately 34 ballasts and 68 fluorescent light bulbs; containers of different sizes containing various amounts of chemicals (utilized for a variety of reasons).
 - Building #32, Truck Maintenance Garage: Based on the age of the building, PCB containing equipment is expected to be present; approximately 2 ballasts and 4 fluorescent light bulbs; containers of different sizes containing various amounts of chemicals (utilized for a variety of reasons).
 - Building #40, Power Plant: Based on the age of the building, PCB containing equipment is expected to be present; approximately 75 ballasts and 150 fluorescent light bulbs; containers of different sizes containing various amounts of chemicals (utilized for a variety of reasons);

- leaking transformers in the electrical pit; three (3) coal-burning boilers with coal ash cleanouts.
- Building #89, Ehle Laundry: Based on the age of the building, PCB containing equipment is expected to be present; approximately 300 ballasts and 600 fluorescent light bulbs; containers of different sizes containing various amounts of chemicals (utilized for a variety of reasons).
- Building #90, Markword Domiciliary: Based on the age of the building, PCB containing equipment is expected to be present; approximately 300 ballasts and 620 fluorescent light bulbs; containers of different sizes containing various amounts of chemicals (utilized for a variety of reasons).
- Building #91, Kent Infirmary: Based on the age of the building, PCB containing equipment is expected to be present; approximately 850 ballasts and 1700 fluorescent light bulbs; containers of different sizes containing various amounts of chemicals (utilized for a variety of reasons).
- Building #92, Nelson Dining/Kitchen/Storage: Based on the age of the building, PCB containing equipment is expected to be present; approximately 500 ballasts and 1000 fluorescent light bulbs; containers of different sizes containing various amounts of chemicals (utilized for a variety of reasons).
- Building #93, Schapers Hospital: Based on the age of the building, PCB containing equipment is expected to be present; approximately 400 ballasts and 800 fluorescent light bulbs present at the site; containers of different sizes containing various amounts of chemicals (utilized for a variety of reasons).
- Building #94, Elmore Infirmary: Based on the age of the building, PCB containing equipment is expected to be present; approximately 110 ballasts and 220 fluorescent light bulbs; containers of different sizes containing various amounts of chemicals (utilized for a variety of reasons).
- Tunnel System: Based on the age of the building, PCB containing equipment is expected to be present.

UNIVERSAL WASTE SURVEY

True North Consultants, Inc. (True North) was retained by Tropical Environmental Inc., (Client) to conduct an assessment of hazardous and other regulated materials within the eleven (11) structures scheduled for demolition at the Illinois Veterans Home Quincy IVHQ as part of the Master Plan. Surveys were conducted in August 2019 and January 2020 (True North Consultants, 2019) (True North Consultants, 2020).

As part of the Survey, True North investigated the following structures: Building #24, Vehicle Garage; Building #26, Fletcher Infirmary; Building #31, Northern Guest House; Building #32, Truck Maintenance Garage; Building #40, Power Plant; Building #89, Ehle Laundry; Building #90, Markword Domiciliary; Building #91, Kent Infirmary; Building #92, Nelson Dining/Kitchen/Storage; Building #93, Schapers Hospital; Building #94, Elmore Infirmary; and the Tunnel System.

The results of the surveys indicated the following:

- Fluorescent lights and ballasts were observed to be present within all structures, with the exception of Building #24, Vehicle Garage, and the Tunnel System.

- Transformers were found in all structures, with the exception of Building #32, Truck Maintenance Garage, and the Tunnel System. Two (2) PCB-oil containing transformers were found to be present at Building #40, Power Plant. The transformers in the remaining buildings were not quantified, because they appeared to have been manufactured after July 1, 1984.
- Hydraulic oil was found to be present in the following structures: Building #89, Ehle Laundry (approximately 500 gallons); Building #90, Markword Domiciliary (approximately 500 gallons); Building #91, Kent Infirmary (approximately 750 gallons); Building #92, Nelson Dining/Kitchen/Storage (approximately 500 gallons); Building #93, Schapers Hospital (approximately 250 gallons); and Building #94, Elmore Infirmary (approximately 250 gallons).
- Electrical panels, breakers, and switches were observed in all structures, with the exception of the Tunnel System.
- Mercury containing thermostats were determined to be present in the following structures: Building #26, Fletcher Infirmary; Building #31, Northern Guest House; Building #89, Ehle Laundry; Building #90, Markword Domiciliary; Building #91, Kent Infirmary; Building #92, Nelson Dining/Kitchen/Storage; Building #93, Schapers Hospital; and Building #94, Elmore Infirmary.
- Potentially hazardous substances were determined to be present in the following structures: Building #40, Power Plant; Building #89, Ehle Laundry; Building #90, Markword Domiciliary; Building #92, Nelson Dining/Kitchen/Storage; and Building #93, Schapers Hospital.
- Petroleum products were determined to be present in the following structures: Building #32, Truck Maintenance Garage (1 fuel pump, and 2 USTs); Building #40, Power Plant [12 electrical motors, 1 back-up generator]; Building #89, Ehle Laundry (12 electrical motors); Building #90, Markword Domiciliary (12 electrical motors); Building #91, Kent Infirmary (18 electrical motors); Building #92, Nelson Dining/Kitchen/Storage (10 electrical motors); Building #93, Schapers Hospital (14 electrical motors); and Building #94, Elmore Infirmary (8 electrical motors).
- Devices suspected of containing CFCs, HCFCs and refrigerants were determined to be present in at following structures: Building #26, Fletcher Infirmary (27 A/C units); Building #31, Northern Guest House (16 A/C units); Building #32, Truck Maintenance Garage (1 A/C unit); Building #40, Power Plant (1 window-mounted A/C unit); Building #89, Ehle Laundry (2 window-mounted A/C units); Building #91, Kent Infirmary (88 A/C units); and Building #94, Elmore Infirmary (2 A/C units).
- White goods (domestic appliances) were observed within all structures, with the exception of the Tunnel System.
- Miscellaneous materials (batteries, self-luminous exit signs, smoke detectors, compressed gas cylinders, containerized liquid wastes and other materials) were observed to be present in all structures, with the exception of the Tunnel system.
- Miscellaneous cleaning chemicals were observed to be present within all eleven on-site structures, with the exception of the Tunnel System.
- Two (2) aboveground oxygen storage tanks were observed to be present outside of Schapers Hospital.
- Underground storage tanks (USTs) are suspected to be present outside of the Truck Maintenance Garage structure and at the Power Plant.
- Hazardous or regulated materials were not observed within the portion of the tunnel system included within the scope of work.

PHASE I ENVIRONMENTAL SITE ASSESSMENT

A Phase I Environmental Site Assessment (ESA) of the proposed construction area was conducted by GSG in May 2019 (GSG, 2019). The Phase I ESA included a site visit, interviews with persons knowledgeable about the site, a review of historic information, and a review of local, state, and federal environmental regulatory information for the site and surrounding area. The following Recognized Environmental Conditions (RECs) were identified during the Phase I ESA:

- **Building 32, Truck Maintenance Garage**
 - An NFR Letter has been recorded indicating that a LUST incident has been closed. The NFR Letter states that the “existing soil must remain over the contaminated area.” This constitutes a Controlled Recognized Environmental Condition for the Campus.
 - Two currently operating USTs (one 1,000-gallon gasohol tank and one 600-gallon unleaded gasoline tank) are located southeast of the building.
- **Building 40, Power Plant**
 - Demolition / construction actions at Building 40, Power Plant, are not part of the proposed improvement, so potential RECs identified in the Phase I ESA localized to this building are not further addressed.
- **Building 83, Water Treatment Plant**
 - Demolition / construction actions at Building 83, Water Treatment Plant, are not part of the proposed improvement, so potential RECs identified in the Phase I ESA localized to this building are not further addressed.
 - A 560-gallon gasoline UST located on the eastern side of the building, was removed (January 2016), and a LUST Incident #20160283 was assigned April 13, 2016 as a result of a release. Based on the IEPA records, the LUST incident was closed as a pre-1974 heating oil UST, and such no further regulatory action is required.
 - An estimated 500-gallon diesel AST and pump and an approximately 20 drums of various water treatment chemicals were observed on the east side of the building. No secondary containments for the AST or drums were observed at the time of the Phase I ESA site visit.
- **Building 94, Elmore Infirmary**
 - Stressed vegetation was observed during the previous Limited Environmental Building Assessment, at the location of the former diesel-powered generator on the east side of the building. Due to snow cover at the time of the site reconnaissance, no stressed vegetation was observed.
- **Unpermitted Landfill**
 - An unpermitted landfill facility was suspected to be located north of Parking Lot M, according to coordinates in the SWF/LF database.

Phase II Environmental Site Assessment

A Phase II Environmental Site Assessment (ESA) was completed in the vicinity of the RECs identified in the Phase I ESA in July 2019. The Phase II ESA included advancing twenty-six (26) soil borings to a maximum depth of ten (10) feet across the entire site.

Soil analytical results were compared to 35 Illinois Administrative Code (IAC) Part 742, Tiered Approach to Corrective Action Objectives (TACO), Appendix B, Table A Tier 1 Soil Remediation Objectives (SROs) for residential properties, dated July 15, 2013 (IPCB, 2013). No shallow groundwater was encountered during the Phase II ESA activities; therefore, no groundwater samples were collected during the Phase II ESA. GSG also compared the soil analytical results to the Clean Construction or Demolition Debris regulations, pursuant to *Subpart F of 35 IAC Part 1100.605*, dated August 27, 2012 (IPCB, 2012) to determine if soils could be disposed of at CCDD facility or non-contaminated soil facilities.

The Phase II ESA revealed the following environmental conditions within the proposed improvement:

- **Building 32, Truck Maintenance Garage**
 - Several polynuclear aromatic (PNA) and inorganic heavy metal constituents were detected in sample E-05. The concentrations of the detected constituents were below the Tier 1 SROs for residential properties, none of the detected constituents are vapor intrusion hazards per 35 IAC Part 742, Appendix A, Table J.
- **Building 83, Water Treatment Plant**
 - Arsenic soil contamination at borings E-01, E02, and E-03 was detected above the Tier 1 SRO for residential properties. Arsenic is not considered vapor intrusion hazards per 35 IAC Part 742, Appendix A, Table J.
- **Unpermitted Landfill**, the result of the Phase II ESA revealed the presence of soil contamination at borings E-06, E-07, and E-09.
 - **Soil Contamination at Boring E-06**
 - Total mercury was detected in boring E-06. The concentration of the total mercury is below the Tier I SROs for residential properties in accordance with 35 IAC 742 Appendix B, table A. The concentration of total mercury exceeded the Tier 1 SROs for construction workers for elemental mercury.
 - **Soil Contamination at E-07**
 - Total arsenic was detected above the Tier 1 SROs for residential properties within the top 2 feet.
 - Elevated Photo-ionization Detector (PID) readings were recorded above the ambient air concentration.
 - Residual concentration of acetone and mercury were detected at E-07. The detected concentrations of acetone and mercury were 0.23 mg/kg and 0.028 mg/kg, respectively.
 - **Soil Contamination at E-09**
 - Total arsenic was detected above the Tier 1 SROs for residential properties within the top 2 feet.

- **Soil exceeding the maximum allowable concentrations for CCDD facility disposal**, the results of the Phase II revealed the presence of several inorganic constituents exceeding the maximum allowable concentrations provided in 35 IAC Part 1100.605 for CCDD facility disposal in borings E-04, E08, and E-11 through E26. None of the detected constituents exceeded the Tier 1 SROs for residential properties.

3.11.2 Environmental Consequences

3.11.2.1 Proposed Action

CONSTRUCTION

The Phase I and Phase II reports prepared by GSG Consultants, Inc identified potential and confirmed RECs in soil at the IVHQ. THE CDB contractor would develop project-specific documentation to assist the construction contractor's management of soil contamination in accordance with Federal and State of Illinois requirements, ensuring there are no significant environmental impacts from the identified RECs.

RECs and soil contaminations identified in the Phase I and Phase II would be addressed in the following manners, ensuring no environmental impact as a result of the proposed action:

- **Building 32, Truck Maintenance Garage**
 - An NFR Letter has been recorded indicating that a LUST incident has been closed. The NFR Letter states that the “existing soil must remain over the contaminated area.” This constitutes a Controlled Recognized Environmental Condition for the Campus.
 - If the existing engineered barrier is to be disturbed during the construction activities, all impacted soils required for removal from the site would be disposed of as a Non-Special Waste at Subtitle D landfill.
 - The engineered barrier would be restored in accordance with the conditions of the LUST NFR letter.
 - Two currently operating USTs (one 1,000-gallon gasohol tank and one 600-gallon unleaded gasoline tank) are located southeast of the building.
 - The result of the Phase II ESA revealed the presence of several polynuclear aromatic (PNA) and inorganic heavy metal constituents in sample E-05. The concentrations of the detected constituents were below the Tier 1 SROs for residential properties. None of the detected constituents are listed as a potential vapor intrusion hazard, per 35 IAC Part 742, Appendix A, Table J. Therefore, no corrective action is required.
 - All impacted soils within the vicinity of boring E-05 would be disposed of as a Non-Special Waste at Subtitle D landfill if require removal from the site because the PNA constituents detected are attributed to the UST release.
 - The UST would be removed during construction activities at the site. Confirmation soil samples would be collected from the UST basin, and corrective action would be implemented to close the LUST incident in accordance with the IEPA LUST requirements.

The UST would be disposed of in accordance with the Office of the Illinois Fire Marshal requirements.

- **Building 40, Power Plant**

- Demolition / construction actions at Building 40, Power Plant, are not part of the proposed improvement, so RECs identified in the Phase I ESA localized to this building is not further addressed.

- **Building 83, Water Treatment Plant**

- Demolition / construction actions at Building 83, Water Treatment Plant, are not part of the proposed improvement, so potential RECs identified in the Phase I ESA localized to this building is not further addressed.
- If construction activities require removal of contaminated soil from the vicinity of the LUST incident, the soils would be disposed of as a Non-Special Waste at Subtitle D landfill.
- Arsenic soil contamination at borings E-01, E02, and E-03 was detected above the Tier 1 SRO for residential properties. An engineered barrier would be installed where soils exceed the Tier 1 SROs in accordance with 35 IAC 742.1105, Engineered Barrier Requirements, to prevent exposure to contaminated soils.
- All impacted soils within the vicinity of borings E-01, E-02, and E-03 would be disposed of as a Non-Special Waste at Subtitle D landfill if required for removal from the site.

- **Building 94, Elmore Infirmary**

- Stressed vegetation was observed during the previous Limited Environmental Building Assessment, at the location of the former diesel-powered generator on the east side of the building. Due to snow cover at the time of the Phase I ESA site reconnaissance, no stressed vegetation was observed. If evidence of soil contamination, such as stained soils or petroleum olfactory, is encountered during construction activities, the soil would be evaluated in accordance with 35 IAC 742 TACO, Appendix B, Table A.
 - An engineered barrier would be installed if the concentrations of soil contaminations exceed the Tier 1 SROs for residential properties. The engineered barrier would be installed in accordance with 35 IAC 742.1105, Engineered Barrier Requirements, to prevent exposure to contaminated soils.
 - All soils with chemical constituents exceeding the maximum allowable concentrations provided in 35 IAC Part 1100.605 would be disposed of as a Non-Special Waste at Subtitle D landfill if required for removal from the site.

- **Unpermitted Landfill**

- Soil Contamination at boring E-06
 - The concentration of the total mercury is below the Tier I SROs for residential properties. Therefore, no corrective action is required.

- Construction Worker safety precaution would be implemented during construction activities within the vicinity of boring E-06 unless is confirmed the detected total mercury does not include elemental mercury.
- Soil Contamination at E-07
 - An engineered barrier would be installed where soils exceed the Tier 1 SROs in accordance with 35 IAC 742.1105, Engineered Barrier Requirements, to prevent exposure to arsenic contaminated soil.
 - The concentrations of acetone and mercury are below Tier 1 SROs for residential properties inhalation exposure route. Therefore, the indoor inhalation exposure route would be excluded from further consideration in accordance with 35 IAC 742.312, which requires verifying soil gas concentration is below the Tier 1 remediation objectives for residential properties or placing an approved building technology over contaminated soil gas exceeding Tier 1 remediation objectives for residential properties.
 - All impacted soils within the vicinity of boring E-07 would be disposed of as a Non-Special Waste at Subtitle D landfill if require removal from the site.
- Soil Contamination at E-09
 - An engineered barrier would be installed where soils exceed the Tier 1 SROs in accordance with 35 IAC 742.1105, Engineered Barrier Requirements, to prevent exposure to arsenic contaminated soil.
 - All impacted soils within the vicinity of boring E-09 would be disposed of as a Non-Special Waste at Subtitle D landfill if required for removal from the site.
- **Soil exceeding the maximum allowable concentrations for CCDD facility disposal.**
 - All soils with chemical constituents exceeding the maximum allowable concentrations provided in 35 IAC Part 1100.605 would be disposed of as a Non-Special Waste at Subtitle D landfill if required for removal from the site.

Prior to any construction activities that may physically impact regulated building materials, the construction contractors would make appropriate notifications and obtain required permits. During rehabilitation, appropriate containment and safety measures would be implemented by licensed contractors to ensure that regulated building materials are not released to the air (as dust) or soil.

Construction debris would be segregated based on its content (with or without regulated building materials) and containerized in covered roll-offs temporarily staged in a designated area within the project area. The debris would be transported off-site for disposal, recycling, or reuse based on its content. The nature and quantities of the debris generated during construction would be similar to a typical medium-scale commercial construction/rehabilitation project.

Additionally, all construction contractors would comply with the federal and state regulations for managing solid waste and hazardous materials. All solid waste and hazardous debris would be transported by a licensed contractor in accordance with all state and federal requirements and disposed of at an EPA-approved facility. These solid waste and hazardous materials management measures would ensure that no adverse impacts from construction activities would occur.

Impacts involving solid waste and hazardous materials would be minimized through implementation of the following:

- Continue proper vehicle maintenance and inspection to reduce the potential for incidental releases of vehicle fluids.
- Proper handling and storage of hazardous materials would minimize the risk of impacts from a spill.
- Solid wastes generated during construction would be managed and disposed of in accordance with local, state, and federal regulations.
- Spill prevention and control measures that would be contained within the erosion and sediment control plan and SWPPP would also help to minimize potentially adverse impacts.
- Waste generation activities and management from operation of the proposed Veterans home would comply with federal state and local regulations. Adherence to these regulations and proper management of solid and hazardous wastes would minimize the risk of accidental releases or environmental degradation.
- Waste soils shall be managed in accordance with all local, state, and federal regulations; including, but not limited to, 35 Illinois Administrative Code (IAC) 734, 35 IAC 742, and 35 IAC 1100.
- Implement spill and leak prevention and response procedures, including maintaining a complete spill kit at the Project Area, to reduce the impacts of incidental releases of construction vehicle fluids (such as diesel or hydraulic fluids) to soil quality.
- The construction contractors would be required to report releases of regulated quantities of petroleum-based fluids to CDB, IDVA, USDVA, and the Illinois Emergency Management Agency and be responsible for performing cleanup according to applicable regulatory requirements.

OPERATION

The operation of the Proposed Action would not require the storage, handling, or use of hazardous materials. The types of solid wastes generated would be similar to other domiciliary and long-term care facilities, and include discarded recyclable materials (glass, paper, metal), non-recyclable debris, and food waste. Compared to current conditions, there would be an increase in the volume of solid sanitary wastes generated at each building.

According to the US EPA, in 2013 Illinois residents generated approximately 5.2 pounds of waste per person per day (United States Environmental Protection Agency, 2014). Based on an occupancy rate of 290 individuals, operation of the Proposed Action would generate approximately 1,500 pounds of waste per day, which is equivalent to approximately 275 TPY. In 2013, Illinois landfilled approximately 12.2 million tons of waste. Therefore, the volume of waste generated during operation of the Proposed Action would account for less than 0.001% of the anticipated total annual volume of waste generated in Illinois. During operations, solid wastes would be segregated for disposal or recycling in designated areas and collected on a routine basis by a qualified vendor for appropriate off-site disposal.

Therefore, operation of the Proposed Action would have a long-term, less-than-significant adverse impact regarding solid wastes.

3.11.2.2 No Action

Under the No Action Alternative, regulated building materials (ACMs, LBP, and PCBs), USTs and impacted subsurface soils and would remain in Buildings. Deterioration of these regulated building materials could pose a long-term, moderate adverse impact to the health of the individuals working in or visiting these buildings. However, CDB and IDVA would continue to minimize this risk of exposure to regulated building materials by implementing routine operational and maintenance control measures. No other changes to solid waste and hazardous materials management would occur under the No Action alternative. Therefore, the No Action alternative would have a long-term, direct, moderate adverse impact regarding regulated building materials.

3.12 Utilities

3.12.1 Existing Environment

3.12.1.1 Sanitary Sewer

A network of sanitary sewers connects the existing buildings. Manholes are distributed around the site, picking up all the sewer line feeds and eventually leaving from the property and connecting to the City of Quincy municipal combined sewer system. While much of the existing sewer system is functional, it involves a major time and staff commitment to televise it frequently and keep it functional. Some of the lines need constant maintenance due to their age and condition.

Stormwater runoff generally drains in four directions from the IVHQ. The north portion drains towards Cedar Creek, the west portion drains to the City of Quincy combined sewers, the south portion drains to Lake Illinois, and the east portion drains towards the 12th street combined sewer.

3.12.1.2 Potable Water

Due to the prior presence of legionella bacteria in the water distribution system, the potable water filtration and distribution system on the site has been extensively studied and a main central filtration plant added over the last five years. Building level filtration has also been added to every residential care building currently in use, as well as terminal end-of-run filtration at the points of use like sinks and faucets. A program for continuous and on-going monitoring of water quality is conducted by the IVHQ.

3.12.1.3 Electric Utility

The IVHQ electrical infrastructure is operational but requires near-constant attention and maintenance to sustain reliable operation due to the age and condition of the infrastructure. An existing 2400 V loop circles the IVHQ and is mostly routed within duct banks. Distribution infrastructure is old and outdated, but functional.

Portions of the duct bank are in need of repair and replacement and have left the electrical supply distribution network somewhat vulnerable to catastrophic events. The system is unable to provide the level of redundancy or reliability for current needs or expansion.

3.12.1.4 Natural Gas Utility

Natural gas is routed to multiple buildings on IVHQ to serve natural gas boilers, heaters, and furnaces for heating. Table 13 identifies the status of the gas service as design and construction are presently envisioned.

Table 13 Building Gas Service Status

Building	Status
Schapers	Remains in Service
Andrew	Remains in Service
Elmore	Demolished
Fifer	Remains in Service
Northern Guest House	Demolished
Multi-Therapy	Remains in Service
Nielson	Remains in Service, but load reduced
Fletcher	Demolished
Markword	Demolished
Anderson	Remains in Service, but building is idled to be repurposed
Somerville	Remains in Service, but building is idled to be repurposed

3.12.2 Environmental Consequences

3.12.2.1 Proposed Action

The Proposed Action includes a significant and massive overhaul and update of IVHQ utilities including mechanical distribution, redundancy, electrical supply, distribution and switching, water distribution and filtration, and fire alarm and technology infrastructure.

Demolition and removal of existing sanitary service as well as new service shall be designed to ensure continuous services throughout construction of new facilities. It would also address longstanding maintenance issues through sewer rodding and televising to improve service. The sewer network under the area of construction shall be new, and it shall be connected to the existing outflows at the periphery of the work zones.

The stormwater management system would convey stormwater from the new buildings and surrounding site improvements through a detention system using Best Management Practices for water quality measures. Stormwater runoff from vegetated and paved areas would use a series of pipe networks to convey the stormwater to storm trap detention basins (if required) and to existing or proposed outlets generally in keeping with the existing patterns of discharge.

As to the water supply, a separate CDB and IDVA project, Number 040-010-114, has the main objective to replace the domestic water mains throughout the Veterans Home IVHQ. The water source, secondary treatment processes if any, and location of site distribution piping would be coordinated with the building team. Filtration would be used even for construction water use and best practice protocols would be followed prior to filling the new lines for eventual use.

New natural gas service to the Nursing Home and the Domiciliary would be provided.

The medium voltage electrical distribution system would be replaced and significantly upgraded to accommodate the phased plan for new buildings and renovation of existing buildings electrical distribution. Reliability and accommodation of future growth are important principles in design. The existing 2400V and the new medium voltage systems would operate together until all the existing loads

on this IVHQ are transferred to the new system. The distribution voltage of the new system would be determined by the Design-Build contractor.

The Proposed Action would have a beneficial effect on the IVHQ utilities. The upgraded utilities would have redundancy and resiliency to serve residents, staff, and visitors in a safe and efficient manner.

3.12.2.2 No Action

The No Action alternative would only allow for continued routine maintenance activities to IVHQ utilities, with repairs/modifications as permitted/budgeted. The water supply project, a separate CDB and IDVA project, Number 040-010-114, would continue as planned with the primary objective to replace the domestic water mains throughout the Veterans Home IVHQ. Therefore, the lack of investment and upgrade to the existing utilities would place a significant burden on staffing and budgets, as well as dependency, efficiency, and campus resilience as utilities age.

3.13 Transportation and Parking

Transportation and parking address the roadway network and physical structures that move a population throughout a specific area. The availability of transportation infrastructure and its capacity to support growth are generally regarded as essential to an area's economic growth.

3.13.1 Existing Environment

3.13.1.1 Transportation

The IVHQ is located in the northwest area of the City of Quincy and is generally framed by three public roadways, including 12th Street on the east, Locust Street on the south, and 5th Street on the west. The north side of the IVHQ is bound by the BNSF railway.

The IVHQ is proximate to a regional medical center and is centrally located in west central Illinois accessible from regional transportation facilities and services, including interstate freeways and State highways, airports, passenger train service, and intercity bus service.

- ½ mile from Greyhound & Trailways intercity bus stop
- 1 mile from Blessing Hospital
- 1 mile from US Route 24
- 2 miles from Quincy Amtrak Station
- 5 miles from Interstate 172 interchange
- 12 miles from Quincy Regional Airport

PUBLIC TRANSIT SERVICE

Quincy Transit Lines provides fixed-route bus service, on-call door-to-door service for senior citizens, and on-call door-to-door paratransit service for disabled individuals under age 60. There are four fixed-routes (Red, Yellow, Green, Blue) that circulate through Quincy on weekdays generally between 6:00 A.M. and 7:15 P.M., and two fixed routes (North, South) that circulate on weekends and holidays between 6:45 A.M. and 5:00 P.M.

SHUTTLE SERVICE

The IVHQ has a small fleet of shuttle buses that are housed at the new truck garage. These shuttles transport residents to appointments at various off-IVHQ locations, including medical facilities, shopping centers, or recreational activities.

RIDE SHARE SERVICE

Currently, there is only one ride share program available in the general Quincy area. As there is lesser demand for the ride share program, the IVHQ currently does not have any designated area for the rideshare pick up/drop off area.

BICYCLE AND PEDESTRIAN NETWORK

The City of Quincy has been developing a bicycle/walking trail network that is guided by its 1999 Quincy Greenway & Trails Plan. The nearest trail to the IVHQ is the Cedar Creek Trail that currently extends from 18th Street at Bob Mays Park past the IVHQ north entrance by the railroad crossing and through Parker Heights Park to Bonansinga Drive at Bob Bangert Park. Future plans include an easterly extension of this trail along Cedar Creek to 36th Street.

The major public roadways serving the IVHQ have sidewalks along one or both sides of the road. On 12th Street, there is a sidewalk on both sides, south of the IVHQ access drive and along sections of the east side of the road, north of the IVHQ drive. On Locust Street, there is a sidewalk along both sides, west of the IVHQ access drive and along the south side, east of the IVHQ drive. On 8th Street there are sidewalks along both sides. There are no sidewalks along 5th Street in the vicinity of Bredeweg Drive. There are also pedestrian safety features at the signal-controlled intersection of 12th Street and Locust Street, including crosswalks and pedestrian signals.

PRIMARY ROADWAYS

The primary roadway system on the IVHQ consists of one large loop road and two smaller loop roads, all connected to the public roadway system at 12th Street by a boulevard-style main entrance. All primary roadways accommodate two-way traffic flow. The larger loop road extends from the main entrance drive past the front of the Old Administration building, between Elmore Infirmary and Kent Infirmary, past the north side of the Multi-Purpose Therapy Building, past the Water Tower and east side of the Nielson Dining Facility, between Lippincott Hall and Smith Hall, between Markword Infirmary and the All Faiths Chapel, and past the Sunken Garden and bus depot back to the main entrance. The smaller loop road to the east branches off the main loop road at the Library and extends past Andrew Barracks, the truck maintenance garage, and the Fifer Skilled- Care Facility and ties back into the larger loop at the Northern Guest House. The smaller loop road to the west branches off the main loop road at Fletcher Infirmary and extends past the Engineering Building and Power Plant and ties back into the larger loop at the Nielson General Stores Building.

SECONDARY ROADWAYS

The secondary roadways on the IVHQ consist of secondary entrance drives to the IVHQ that connect with Locust Street and Bredewig Road, and with US 24 through Sunset Cemetery. The secondary roadways also consist of several narrow loop roads that branch off the primary roadways and accommodate one-way or two-way traffic flow.

INTERSECTION TRAFFIC CONTROL

Intersections of the primary and secondary roadways on the IVHQ are either controlled with traffic signs or are uncontrolled. Those that are controlled are typically under stop sign or yield sign control on one of the intersection approaches. The posted speed limit throughout the IVHQ is 20 mph.

3.13.1.2 Parking

There are surface parking lots throughout the IVHQ that are available to residents, staff and visitors at no cost. In total, there are currently 656 parking stalls on the IVHQ, including 558 standard stalls, 39 accessible stalls, 29 reserved stalls, 26 visitor stalls, and 4 loading zone stalls. Most of the parking stalls are used by the IVHQ's approximately 500-person staff, 96 percent of whom drive to IVHQ. Staff are required to register their cars to park on IVHQ and are issued a parking sticker to display in their cars. The clinical staff represents 60 percent of the total staff (or approximately 300 persons), and the parking demand from the clinical staff is spread over three work shifts each day of the week. The parking demand for the non-shift personnel occurs during typical weekday business hours and generally ranges from 8:00 AM to 4:30 PM.

The parking stalls are also used by 21 (6%) of the 364 IVHQ residents that have a car on IVHQ, all residing in the domiciliary, and by visitors that come to the IVHQ each day. Residents may only park one car on IVHQ at a time and are issued blue stickers to display in their car.

The IVHQ parking lots are also used by the Physical Therapy employees, YMCA employees and approximately 5 off-site participants in a pool therapy program, a vehicle that transports patients from the Veterans Administration Outpatient Clinic on Broadway Street to the IVHQ Radiological Services department, and visitors to the IVHQ cardiology and podiatry clinics.

A few of the annual events draw more visitors and cars than can be accommodated by the IVHQ parking supply, such as the 4th of July activities and the Lugnuts Car Show, which can draw from 500 to 5,000 visitors. For these events, the IVHQ utilizes turf areas of the IVHQ to park cars, including the field off of Bredeweg Road.

3.13.2 Environmental Consequences

3.13.2.1 Proposed Action

TRANSPORTATION

Under the Proposed Action, construction-related activities would result in a short-term adverse impact to the transportation network within the IVHQ and in the immediate project vicinity. An increase in the number of construction related vehicles would take place during construction. While the Proposed Action would result in increased traffic levels to the area, there would be no changes in local traffic patterns and the addition of visitor, worker, delivery truck and ambulance trips is not anticipated to result in significant adverse impacts to the roads in the surrounding community. In addition, the Proposed Action would greatly enhance the local transportation pattern within the IVHQ by improved wayfinding with clear road signs and layouts.

Short-term transportation impacts during construction activities would be minimized through implementation of the following:

- Schedule construction activities such that traffic increases do not coincide with typical morning and evening periods of increased traffic.
- Route transportation of construction equipment (namely truckloads of excess soils) to minimize impacts on neighboring communities.
- A dedicated, temporary construction access could be created by the builders in coordination with the IDVA and the City of Quincy if it assists in reducing pedestrian-vehicle conflicts during the construction period.

PARKING

Under the Proposed Action, some limited existing parking capacity would be demolished but replaced in the form of expanded short term, visitor, staff and general parking lots to serve both the new development and existing buildings.

The following parking lots would be demolished (approximately totally 100 parking stalls) to make way for the new IVHQ repositioning.

- South short-term parking by the Fifer Infirmary (approximately 13 parking stalls)
- East parking by the Old Stone Building (approximately 7 parking stalls)
- Parking lots along the Northern Guest House, Elmore Infirmary, Truck Maintenance Garage, and Vehicle Garage (approximately 71 parking stalls)
- Street parking by existing Markword Infirmary (approximately 9 parking stalls)

The new parking lots are proposed in the following locations with a total of approximately 258 parking stalls in them:

- Temporary visitor parking spaces for both Long-Term Care building and Fifer Infirmary Building (approximately 16 parking stalls).
- Consolidated and extended parking spaces by east of the new Long-Term Care and the Library (approximately 130 parking stalls).
- Extended parking by the northern parking lot (approximately 54 additional parking stalls)
- New staff parking spaces by Nielson (approximately 32 parking stalls).
- New visitor parking spaces by Smith Hall and Old Stone Building (approximately 26 parking stalls) *(subsequent to the demolitions of Markword)*

** Note: All parking counts are subject to refinement by selected Design Build team, in coordination with the Using Agency.*

The new Domiciliary would utilize the existing parking lot across from the existing Fletcher Infirmary.

Under the Proposed Action, construction-related activities would result in a short-term adverse impact to the parking capacity. Upon completion of the Proposed Action, the IVHQ would provide approximately additional 158 parking stalls which would significantly serve the increased the demand for the residents, staffs, and visitors.

Short-term parking impacts during construction activities would be minimized through implementation of a short-term arrangement to shuttle staff from remote, or off-site parking facilities.

3.13.2.2 No Action

Under the no action alternative, the project site would not have any major construction activities, and no construction or operational impacts to transportation and parking would occur.

3.14 Environmental Justice

3.14.1 Existing Environment

The IVHQ has a rich history of serving veterans need for long-term care, access to community services, and need for a social congregate living setting. Cottage style housing once dominated the IVHQ which was then replaced after the Great Wars with infirmary style housing to support the demand. The future, however, demands that skilled care facilities meet the changing needs of veterans. New challenges in veteran care include mental wellness, memory care, buildings to support age and gender diversity, as also severe physical disabilities, and larger physiques. These trends place new demands on the facilities; demands that were never intended to be supported in these older building types.

It is expected that the new building would follow the most updated guidelines for care environments released by the USDVA and therefore, afford a level of care and amenities not possible to achieve from the older buildings. Apart from providing for long-term care and independent living options, the IVHQ provides physical and restorative therapy, and a variety of supportive services to fulfil the needs of the most vulnerable in the veteran population.

The current project is in response to the emergency need to replace old and functionally obsolete buildings with beds relocated to new state of the art buildings and facilities meeting the current standards of care. Deferred maintenance and obsolete infrastructure have taken its toll on the services offered on IVHQ. Staff attention is diverted to managing infrastructural needs. The IVHQ is very diverse in its resident and staff populations and is one of the major employers in the Quincy area, offering jobs to those wanting to be employed by and enjoy the benefits of working for the State of Illinois. The project would replace beds that are already in good demand.

3.14.2 Environmental Consequences

The project envisions the expansion of services to care for an underserved veteran population in a generally rural area of Illinois. Mental wellness along with spiritual, physical, emotional wellbeing is assured in a long-term care setting as compared to deteriorating conditions and isolation that a veteran would face in their homes or immediate community. While that is not always the case, enough reports in the news and studies have argued for better care in well designed, home-like institutional settings.

The IVHQ and DVA leadership wish to help reimagine and reinvent this IVHQ into a Center of Excellence. The buildings are generally in line with current services offered on IVHQ. There is no increase in the footprint or replacement of uses with more detrimental uses that may be incongruent with surrounding land uses.

3.14.2.1 Proposed Action

The Proposed Action would have a long-term, significant beneficial impact on the local veteran population and their families through the investment in Improved care environments. The renovated IVHQ would be capable of a higher degree of care for people of all backgrounds, abilities, physiques, mental states, and

memory care needs. Improvements in accessibility to existing services and an increased connectivity between buildings are all seen as positive impacts to reinvigorating existing buildings in the new, connected IVHQ.

In the short-term during construction, the state has established strong minority participation goals and monitors them through construction activity to ensure the benefits are distributed through the Fair Employment Practices program.

The Proposed Action would demonstrate an investment into a rural, underserved segment of the population, aging, and/or disabled American veterans. It is expected that the Proposed Action would result in an improved sense of general well-being, and a demand from the community in both accessing and offering supportive services for the veterans at large.

3.14.2.2 No Action

The United States DVA has continued to support rural and underserved communities with increased opportunities for services and investment. The USDVA has encouraged states to adopt a small-house model of care for veterans and the no-action alternative would make it extremely difficult to fulfil this vision within the constraints of older facility environments.

3.15 Cumulative Impacts

This section addresses the cumulative impacts of the Proposed Action. Cumulative impacts are defined by the CEQ in 40 CFR 1508.7 as “impacts on the environment which result 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). This EA considers past, present, and reasonably foreseeable short-term and long-term future effects from implementing the Proposed Action.

There is no known or foreseeable future development or projects within the vicinity of the IVHQ and surrounding Quincy area. The area around the IVHQ is fully developed and there is no foreseeable redevelopment initiative. Potential actions that could contribute to cumulative impacts would primarily include new construction in the areas surrounding the IVHQ and would likely result in cumulative effects on several resources, which are described below. However, as described below, none of these cumulative effects would be considered significant.

Aesthetics: The IVHQ is being designed to maintain the aesthetics and character of the historic IVHQ and structures that would remain undisturbed. The Proposed Action would occur in the center of the IVHQ, visually buffered from surrounding residential and commercial developments. The Proposed Action would not be visible from an off-site location.

Land Use: The Proposed Action would have no effect on land use within the IVHQ, nor to the surrounding community. The Proposed Action would not influence any future development or changes in land use or planning in or around the IVHQ.

Air Quality: The increase in air pollutant emissions associated with the Proposed Action construction and operations would result in negligible additions of air quality pollutants including greenhouse gas emissions at a local and regional scale. Therefore, CDB and IDVA do not anticipate any significant impacts on air

quality or climate change under the Proposed Action when combined with other reasonably foreseeable actions. Compliance with State and Federal permitting requirements would ensure cumulative air quality effects do not exceed the threshold of significance.

Cultural Resources: The Proposed Action would result in ground disturbing activities and minor changes in the viewshed for the above-ground historic structures. Historic structures that would be demolished or renovated would be catalogued and recorded for historical purposes. Therefore, there would be no adverse cumulative impact on cultural resources. In the even that cultural material is inadvertently encountered during the implementation of the Proposed Action, work would be halted in the vicinity of the finds until they can be inspected and assessed by the appropriate consulting parties.

Soils: Ground-disturbing activities during construction of the Proposed Action and other reasonably foreseeable actions would result in short and long-term potentially adverse impacts on soils from removal of topsoil and from erosion. Compliance with construction best management practices (BMPs) for all on-site construction projects, in accordance with erosion and sediment control plan, would ensure that individual and cumulative effects are not significant.

Water Resources: With implementation of construction and permanent stormwater management BMPs, there would be no adverse impact to offsite water quality and quantity from stormwater runoff, and no cumulative impacts to surface waters would be anticipated. Some groundwater dewatering may be required during construction, but dewatering BMPs would be implemented and CDB AND IDVA does not anticipate adverse impacts on groundwater; therefore, there would be no significant cumulative impacts on groundwater when combined with other reasonably foreseeable action in the surrounding areas.

Vegetation and Wildlife: Temporary loss of vegetation and wildlife habitat, and noise and light disturbances to wildlife during construction and operation are likely to result in short and long-term minor adverse impacts on vegetation and wildlife. The Proposed Action, coupled with other reasonably foreseeable actions, would continue to result in development in the area. Due to the commercial and residential zoning in the area, any cumulative impacts are not expected to be significant.

Noise: Currently the IVHQ is an actively operating healthcare and residency facility with all applicable noise, light and traffic created by typical industrial and commercial uses. Construction projects in the surrounding areas are likely to occur at different times than the construction of the Proposed Action and be spaced out geographically so that multiple projects, and therefore multiple noise sources, would not occur simultaneously for noise receptors adjacent to the IVHQ. In addition, the majority of the Proposed Action is isolated to the center of the IVHQ campus, providing a natural buffer, thus reducing the potential for short-term adverse cumulative impacts from increased noise levels during construction. Over the long-term, the activities and operations when combined with reasonably foreseeable noise sources would not significantly adversely affect the local noise environment.

Socioeconomics: During construction, the Proposed Action would make a slight contribution to the local economy by using local construction labor, local lodging, and dining, and through the possible use of local construction materials and supplies, but the impact when combined with other potential foreseeable projects would be negligible to minor. Operation of the facility would provide employment opportunities and result in indirect benefits to local businesses, which may result in minor beneficial cumulative impacts in the surrounding communities.

Transportation: The Proposed Action is not anticipated to produce impacts that would adversely impact the adjoining transportation systems. The existing roadway network has the capacity to handle the anticipated traffic. Although access and traffic would likely be affected during various stages of construction, IVHQ would implement mitigation measures, such as appropriate signage and safety measures for construction areas and lane closures, to manage these effects to reasonable levels. Construction projects in the surrounding areas are likely to occur at different times and be spaced out geographically so that multiple projects would not affect the roads immediately surrounding the IVHQ simultaneously, thus reducing the potential for short-term adverse impacts from changes in access and an increase of construction-related vehicles on local roads. Over the long-term, no activities or operation are proposed or reasonably foreseeable that would cumulatively adversely affect the local traffic conditions.

Summary: Based on the above analysis, cumulative impacts attributable to the Proposed Action in combination with potential foreseeable actions would not be significant. IVHQ would ensure that the Proposed Action follows the permits and regulations, Illinois Stormwater NPDES Regulations, County Ordinance, along with other local, state and federal regulations.

3.16 Potential for Generating Substantial Controversy

As discussed in Section 4, CDB and IDVA have solicited input from various federal, state, local, and tribal entities regarding the Proposed Action. None of the input has identified opposition or controversy related to the Proposed Action. The CDB and IDVA have published and distributed this Draft EA for a 30-day public comment period. Public comments will be considered and addressed in the Final EA.

The Proposed Action would improve the quality of life for many Veterans and their families in need of long-term care and independent housing in the IVHQ service area. This improvement is anticipated to be perceived positively within both the Veteran and non-Veteran communities throughout the IVHQ service area. Further, based on the analyses in the previous sections, no major elements or impacts associated with the Proposed Action were identified that are anticipated to generate negative public perception or reaction. Considering these factors, implementing the Proposed Action would be positively perceived by the public.

The public is generally not anticipated to have a negative reaction if the Proposed Action is not implemented. Residents, staff, families and the community has been supportive of this rehabilitation project and have been awaiting positive change. Therefore, while the No Action alternative is not anticipated to generate substantial adverse public controversy, the administration would need to engage with the public and respond to the public's interest in seeing positive change on campus.

4 AGENCY COORDINATION AND PUBLIC INVOLVEMENT

4.1 Agency and Tribal Coordination

CDB and IDVA coordinated with the following agencies to request review and provide comments on the Proposed Action (agency coordination is provided in **Appendix A**). Consultation required under Section 106 of the NHPA, including with federally recognized tribes, has been completed.

STATE AGENCIES

Illinois Department of Natural Resources (IDNR)

- EcoCAT automated reply

Illinois State Historic Preservation Office (IHPA)

- HABS review February 2019

FEDERAL AGENCIES

- USDVA has received concurrence from USFWS under Section 7 of the Endangered Species Act, with a finding of may affect - not likely to adversely affect the Indiana bat and Northern long-eared bat on April 14, 2021. With this concurrence, USFWS has indicated that USDVA has adequately addressed the potential impacts of the Proposed Action on fish and wildlife resources and federally listed threatened and endangered species in the project area. USFWS's concurrence is included in Appendix A

4.2 Public Involvement

The Illinois Capital Development Board (CDB), in conjunction with the Illinois Department of Veterans Affairs (DVA), is following the National Environmental Policy Act (NEPA) compliance requirements for the campus rehabilitation of the Illinois Veterans Home, Quincy, referred to as the proposed action by publishing the Environmental Assessment document and allowing for public commentary. It is the responsibility of the CDB and IDVA to ensure that the NEPA documents are responsive to the needs of the community while complying with all NEPA provisions.

This EA is available for public review online at the following locations:

- The website of the Illinois DVA at <https://www2.illinois.gov/veterans/homes/Pages/Quincy.aspx>
- The website of the Illinois CDB at <https://www2.illinois.gov/cdb/procurement/Pages/Quincy-Veterans-Home.aspx>

A hard copy of the EA is available at the following location:

The Library
Illinois Veterans Home Quincy
1707 North 12th St.
Quincy, IL 62301

The document is also available by request from:

The Public Affairs Officer,
Illinois Veterans Home Quincy,
1707 North 12th St.,
Quincy, IL 62301
Or
IDVA.QuincyVetHome.EA.Comments@illinois.gov

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Comments may be submitted until the close of the 30-day public comment period ending June 30, 2021 using one of the following methods:

- Send your comments via email to IDVA.QuincyVetHome.EA.Comments@illinois.gov
- Or send them by mail to:
The Public Affairs Officer,
Illinois Veterans Home Quincy,
1707 North 12th St.,
Quincy, IL 62301

All responses will be compiled and addressed in the Final EA, which is estimated to take between 90-120 days after the close of the public comment period for the Draft EA.

Public comments received will be included in **Appendix B** in the Final EA.

5 BEST MANAGEMENT PRACTICES AND IMPACT MINIMIZATION MEASURES

The best management practices, impact minimization techniques, and monitoring opportunities to maintain the impacts of the Proposed Action at acceptable levels are described below. The IVDA and CDB commit to ensuring the following items are adhered to during construction:

AESTHETICS

Short-term impacts would be minimized through implementation of the following:

- Conduct construction activities with a sensitivity toward maintaining the respect of the community.
- To the extent possible, construction activities would be limited to daylight hours to minimize impacts from equipment lights.
- All areas disturbed during construction, including temporary staging and disturbance areas, would be restored, at a minimum, to their pre-existing condition.
- To minimize the impact of construction activities on aesthetics, the construction contractors would erect a security fence around the building construction areas and prevent damage to existing ground-cover vegetation surrounding each building.
- The potential for fugitive dust emissions would be limited by using water trucks or other dust control measures to prevent fugitive dust from being emitted into the air and its potential deposition on nearby surfaces.

AIR QUALITY

Short-term air quality impacts would be minimized through implementation of the following:

- Prior to performing rehabilitation activities that may disturb asbestos-containing building materials (based on an asbestos survey completed by GSG, an IEPA/OSHA certified asbestos consultant), the construction contractors would complete the IEPA registration and notification required under 415 ILCS 5/9.1 and 77 IAC 855.10. All ACM that may be disturbed would be abated by an IEPA licensed abatement contractor. This management approach would eliminate potential asbestos emissions from building rehabilitation activities. Additionally, prior to disturbing building materials containing PCBs or LBP, perform abatement and/or encapsulation or implement duct control measures in accordance with the NESHAP regulations and other applicable, state, and local regulations. Only licensed contractors would perform these activities.
- Contractors would use equipment with Tier 4-compliant engines to reduce emissions of particulate matter and nitrogen oxides to meet emission standards established by USEPA.
- Cover beds of all incoming and outgoing haul trucks with tarps.
- Visually monitor all construction activities daily, and particularly during extended periods of dry weather; implement additional dust control measures as needed.
- Implement dust suppression methods identified in USDVA's Specification 01 57 19: Temporary Environmental Controls. Available methods include application of water, dust palliative, or soil stabilizers; use of enclosures, covers, silt fences, or wheel washers; and suspension of dust-generating activities during sustained high wind conditions (10 to 40 miles per hour [mph] with gusts at or above 50 mph).

- Maintain speed of construction vehicles on paved roads within the IVHQ and the vicinity at posted limits. This would minimize dust generated by vehicles and equipment on paved surfaces. On any unpaved surfaces at each construction area, vehicle speeds would be maintained at or below 5 mph to prevent dust generation of exposed soil.
- Stabilize exposed soil with vegetation or mulching to minimize erosion and dust generation.
- The construction contractor would implement BMPs such as use of compressed natural gas as fuel and minimizing idling of construction and delivery vehicles to the extent practicable to minimize impacts.

CULTURAL RESOURCES

Impacts to cultural resources would be minimized through implementation of the following measures.

- Recordation: HABS report for each NRHP eligible buildings that are planned to be demolished. Upon final approval of each building's package, the SHPO will submit the HABS recordation package to the Heritage Documentation Programs in the National Park Service for eventual deposit in the Library of Congress, and the SHPO will deposit the recordation package with the Abraham Lincoln Presidential Library in Springfield, Illinois.
- A written narrative (along with illustration) on Historic Context and Significance of the Illinois Veterans Home in Quincy, its development and maturity must be prepared, for the SHPO's review and approval.
- In the event of an unanticipated discovery of human remains or burials, CDB and IDVA understand and agree that work must immediately stop within the area of discovery, notify the SHPO, and comply with the Human Skeletal Remains Protection Act (20 ILCS 3440)

GEOLOGY AND SOILS

Short-term erosion and sedimentation impacts would be minimized through implementation of the following:

- Minimize the amount of exposed soils at any given time during construction activities. Quickly revegetate disturbed areas following completion of activities.
- Develop a Stormwater Pollution Prevention Plan, consistent with the requirements of the NPDES general permit.
- The contractor would minimize potentially adverse impacts from erosion by implementing best management practices and conformance with National Pollutant Discharge Elimination System (NPDES) permit requirements and would obtain a General Construction Permit.
- The Contractor would implement the Erosion and Sediment Control plan, including erosion control BMPs, during and after construction to stabilize soils.
- Excavated soil would be managed in accordance with applicable local, State, and Federal regulations. If contaminated materials are discovered during construction activities, work would cease until the appropriate procedures could be implemented.
- Soil excavated from each segment of the utility corridor would either be containerized (placed in a dump truck bed) or stockpiled and covered with a tarp adjacent to the excavation.
- Long-term erosion and sedimentation impacts would be minimized through implementation of routine landscaping and storm water infrastructure maintenance.

HYDROLOGY AND WATER QUALITY

- Short-term erosion and sedimentation impact on hydrology and water quality would be minimized through implementation of the following: Potential impacts would be minimized with implementation of a SWPPP and associated erosion and sediment control BMPs for soil stabilization as required in the Construction General Permit that would be required for the Proposed Action.
- Utilize native vegetation and drought-resistant vegetation for area landscaping.
- Route stormwater runoff from impervious surfaces to stormwater retention and drainage areas.
- Implement spill and leak prevention and response procedures, including maintaining a complete spill kit at the project area, to reduce the impacts of incidental releases of vehicle fluids.

WILDLIFE AND HABITAT

Short-term impacts on wildlife and habitat would be minimized through implementing the following measures.

- If vegetation is damaged or removed during construction, it would be replaced with native, non-invasive, varieties prior to the conclusion of the construction phase.
- Tree clearing would be completed between October 15 and March 30 to avoid potential impacts to endangered bats.

NOISE

Short-term and long-term noise impacts would be minimized through implementation of the following:

- Schedule construction activities for normal business hours, attempting to minimize impacts to the surrounding community.
- Maintain mufflers and sound shielding on construction equipment and routine maintenance equipment.
- Minimize equipment idling and shut down construction equipment when not in use.
- Equipment and machinery used at the project site would meet all local, State, and Federal noise regulations.
- Minimize work would occur on Federal holidays or Sundays.
- Personnel exposed to noise levels exceeding OSHA limits from heavy equipment during construction would be required to wear appropriate hearing protection and practice safety BMPs in accordance with OSHA regulations.
- Any construction activity noise that is anticipated to disturb residents or cannot be performed during the daytime period is expected to be infrequent, of limited duration, and would not exceed safe levels at the receptor's location, and thus would be a less than significant impact.

SOLID WASTE AND HAZARDOUS MATERIALS

Impacts involving solid waste and hazardous materials would be minimized through implementation of the following:

- Continue proper vehicle maintenance and inspection to reduce the potential for incidental releases of vehicle fluids.

- Proper handling and storage of hazardous materials would minimize the risk of impacts from a spill.
- Solid wastes generated during construction would be managed and disposed of in accordance with local, state, and federal regulations; including, but not limited to, 35 Illinois Administrative Code (IAC) 734, 35 IAC 742, and 35 IAC 1100. All soils exceeding the maximum allowable concentrations for CCDD facility disposal would be disposed of as a Non-Special Waste at Subtitle D landfill if require removal from the site.
- Soils exceeding the Tier 1 SROs for residential properties would be covered if stockpile on site during site grading activities. Soil handling and management plan would be developed by the Design-Build contractor to show locations of contaminated soil to disturbed and managed on site.
- Contaminated soil excavation, management, and disposal would be monitored and documented by an independent environmental consultant.
- Spill prevention and control measures that would be contained within the erosion and sediment control plan and SWPPP would also help to minimize potentially adverse impacts.
- Waste generation activities and management from operation of the proposed Veterans home would comply with federal state and local regulations. Adherence to these regulations and proper management of solid and hazardous wastes would minimize the risk of accidental releases or environmental degradation.
- Implement spill and leak prevention and response procedures, including maintaining a complete spill kit at the Project Area, to reduce the impacts of incidental releases of construction vehicle fluids (such as diesel or hydraulic fluids) to soil quality.
- The construction contractors would be required to report releases of regulated quantities of petroleum-based fluids to CDB, IDVA, USDVA, and the Illinois Emergency Management Agency and be responsible for performing cleanup according to applicable regulatory requirements.
- **Building 32, Truck Maintenance Garage**
 - An NFR Letter has been recorded indicating that a LUST incident has been closed. The NFR Letter states that the “existing soil must remain over the contaminated area.” This constitutes a Controlled Recognized Environmental Condition for the Campus.
 - If the existing engineered barrier is to be disturbed during the construction activities, all impacted soils required for removal from the site would be disposed of as a Non-Special Waste at Subtitle D landfill.
 - The engineered barrier would be restored in accordance with the conditions of the LUST NFR letter.
 - Two currently operating USTs (one 1,000-gallon gasohol tank and one 600-gallon unleaded gasoline tank) are located southeast of the building.
 - The result of the Phase II ESA revealed the presence of several polynuclear aromatic (PNA) and inorganic heavy metal constituents in sample E-05. The concentrations of the detected constituents were below the Tier 1 SROs for residential properties. None of the detected constituents are listed as a potential vapor intrusion hazard, per 35 IAC Part 742, Appendix A, Table J. Therefore, no corrective action is required.

- All impacted soils within the vicinity of boring E-05 would be disposed of as a Non-Special Waste at Subtitle D landfill if require removal from the site because the PNA constituents detected are attributed to the UST release.
- The UST would be removed during construction activities at the site. Confirmation soil samples would be collected from the UST basin, and corrective action would be implemented to close the LUST incident in accordance with the IEPA LUST requirements. The UST would be disposed of in accordance with the Office of the Illinois Fire Marshal requirements.
- **Building 40, Power Plant**
 - Demolition / construction actions at Building 40, Power Plant, are not part of the proposed improvement, so RECs identified in the Phase I ESA localized to this building is not further addressed.
- **Building 83, Water Treatment Plant**
 - Demolition / construction actions at Building 83, Water Treatment Plant, are not part of the proposed improvement, so potential RECs identified in the Phase I ESA localized to this building is not further addressed.
 - If construction activities require removal of contaminated soil from the vicinity of the LUST incident, the soils would be disposed of as a Non-Special Waste at Subtitle D landfill.
 - Arsenic soil contamination at borings E-01, E02, and E-03 was detected above the Tier 1 SRO for residential properties. An engineered barrier would be installed where soils exceed the Tier 1 SROs in accordance with 35 IAC 742.1105, Engineered Barrier Requirements, to prevent exposure to contaminated soils.
 - All impacted soils within the vicinity of borings E-01, E-02, and E-03 would be disposed of as a Non-Special Waste at Subtitle D landfill if required for removal from the site.
- **Building 94, Elmore Infirmary**
 - Stressed vegetation was observed during the previous Limited Environmental Building Assessment, at the location of the former diesel-powered generator on the east side of the building. Due to snow cover at the time of the Phase I ESA site reconnaissance, no stressed vegetation was observed. If evidence of soil contamination, such as stained soils or petroleum olfactory, is encountered during construction activities, the soil would be evaluated in accordance with 35 IAC 742 TACO, Appendix B, Table A.
 - An engineered barrier would be installed if the concentrations of soil contaminations exceed the Tier 1 SROs for residential properties. The engineered barrier would be installed in accordance with 35 IAC 742.1105, Engineered Barrier Requirements, to prevent exposure to contaminated soils.
 - All soils with chemical constituents exceeding the maximum allowable concentrations provided in 35 IAC Part 1100.605 would be disposed of as a Non-Special Waste at Subtitle D landfill if required for removal from the site.

- **Unpermitted Landfill**
 - Soil Contamination at boring E-06
 - The concentration of the total mercury is below the Tier I SROs for residential properties. Therefore, no corrective action is required.
 - Construction Worker safety precaution would be implemented during construction activities within the vicinity of boring E-06 unless is confirmed the detected total mercury does not include elemental mercury.
 - Soil Contamination at E-07
 - An engineered barrier would be installed where soils exceed the Tier 1 SROs in accordance with 35 IAC 742.1105, Engineered Barrier Requirements, to prevent exposure to arsenic contaminated soil.
 - The concentrations of acetone and mercury are below Tier 1 SROs for residential properties inhalation exposure route. Therefore, the indoor inhalation exposure route would be excluded from further consideration in accordance with 35 IAC 742.312, which requires verifying soil gas concentration is below the Tier 1 remediation objectives for residential properties or placing an approved building technology over contaminated soil gas exceeding Tier 1 remediation objectives for residential properties.
 - All impacted soils within the vicinity of boring E-07 would be disposed of as a Non-Special Waste at Subtitle D landfill if require removal from the site.
 - Soil Contamination at E-09
 - An engineered barrier would be installed where soils exceed the Tier 1 SROs in accordance with 35 IAC 742.1105, Engineered Barrier Requirements, to prevent exposure to arsenic contaminated soil.
 - All impacted soils within the vicinity of boring E-09 would be disposed of as a Non-Special Waste at Subtitle D landfill if required for removal from the site.
- **Soil exceeding the maximum allowable concentrations for CCDD facility disposal.**
 - All soils with chemical constituents exceeding the maximum allowable concentrations provided in 35 IAC Part 1100.605 would be disposed of as a Non-Special Waste at Subtitle D landfill if required for removal from the site.

TRANSPORTATION AND PARKING

Short-term transportation impacts during construction activities would be minimized through implementation of the following:

- Schedule construction activities such that traffic increases do not coincide with typical morning and evening periods of increased traffic.
- Route transportation of construction equipment (namely truckloads of excess soils) to minimize impacts on neighboring communities.

- A dedicated, temporary construction access could be created by the builders in coordination with the IDVA and the City of Quincy if it assists in reducing pedestrian-vehicle conflicts during the construction period.
- To accommodate the temporary reduction in available parking, a short-term arrangement would be made during the construction to shuttle staff from remote, or off-site parking facilities.

6 LIST OF ENVIRONMENTAL PERMITS, APPROVALS, AND DETERMINATIONS POTENTIALLY REQUIRED

The following federal or state environmental permits, approvals, or determinations are potentially required as part of this Proposed Action:

1. General Permit for Discharges of Storm Water Associated with Construction Activities Storm Water General Permit (ILR10) (NPDES compliance), including preparation of a SWPPP. Submit a notice of intent at least thirty days prior to the start of construction.
2. Asbestos -NESHAP regulations require the owner or the operator of the rehabilitation or demolition operation to notify the appropriate delegated entity (Illinois Department of Public Health and IEPA) before any demolition, or before any rehabilitations of buildings that contain a certain threshold amount of regulated asbestos-containing material. Comply with Illinois Administrative Code Title 77: Public Health, and the IDPH Commercial and Public Building Asbestos Abatement Act (225 ILCS 207/).

7 LIST OF PREPARERS

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9 GLOSSARY

Sources:

- Army NEPA Glossary, <http://aec.army.mil/portals/3/nepa/glossary00.pdf>
- Glossary of Terms Used in Department of Energy NEPA Documents, http://energy.gov/sites/prod/files/NEPA_Glossary%2008_2011.pdf
- NEPA Glossary, U.S. Fish and Wildlife Service, <http://www.fws.gov/r9esnepa/Intro/Glossary.PDF>

Aesthetic resources: The components of the environment as perceived through the visual sense only. Aesthetic specifically refers to beauty in both form and appearance.

Affected environment: A portion of the NEPA document that succinctly describes the environment of the area(s) to be affected or created by the alternatives under consideration. Includes the environmental and regulatory setting of the proposed action.

Alternative: A reasonable way to fix the identified problem or satisfy the stated need.

Attainment area: An area that the Environmental Protection Agency has designated as being in compliance with one or more of the National Ambient Air Quality Standards (NAAQS) for sulfur dioxide, nitrogen dioxide, carbon monoxide, ozone, lead, and particulate matter. An area may be in attainment for some pollutants but not for others.

Conformity analysis: The Clean Air Act requires the Environmental Protection Agency to promulgate rules to ensure that federal actions conform to the appropriate state implementation plans (SIP) for air quality. Two sets of rules (one for transportation and one for all other actions) developed by USEPA establish the criteria and procedures governing the determination of this conformity. A conformity analysis follows these criteria and procedures to quantitatively assess whether a proposed federal action conforms with the SIP.

Council on Environmental Quality (CEQ): Established by Congress within the Executive Office of the President as part of the National Environmental Policy Act of 1969, CEQ coordinates federal environmental efforts and works closely with agencies and other White House offices in the development of environmental policies and initiatives. The Council's Chair, who is appointed by the President with the advice and consent of the Senate, serves as the principal environmental policy adviser to the President. The CEQ reports annually to the President on the state of the environment, oversees federal agency implementation of the environmental impact assessment process, and acts as a referee when agencies disagree over the adequacy of such assessments.

Criteria pollutant: An air pollutant that is regulated by National Ambient Air Quality Standards (NAAQS). Criteria pollutants include sulfur dioxide, nitrogen dioxide, carbon monoxide, ozone, lead, and two size classes of particulate matter, PM10 and PM2.5. New pollutants may be added to, or removed from, the list of criteria pollutants as more information becomes available.

Cumulative effect (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.

Decibel (dB): A unit for expressing the relative intensity of sounds on a logarithmic scale from zero for the average least perceptible sound to about 130 for the average level at which sound causes pain to humans. For traffic and industrial noise measurements, the A-weighted decibel (dBA), a frequency-weighted noise unit, is widely used. The A-weighted decibel scale corresponds approximately to the frequency response of the human ear and thus correlates well with the loudness perceived by people.

Effects: Effects and impacts, as used in NEPA, are synonymous. Effects include ecological (such as the effects on natural resources and on the components, structures, and functioning of affected ecosystems), aesthetic, historic, cultural, economic, social, or health, whether direct, indirect, or cumulative. Effects may also include those resulting from actions that may have both beneficial and detrimental effects, even if on balance the agency believes that the effect would be beneficial. There are direct effects and indirect effects. Direct effects are caused by the action and occur at the same time and place. Indirect effects are caused by the action and are later in time or farther removed in distance but are still reasonably foreseeable. Indirect effects may include growth-inducing effects and other effects related to induced changes in the pattern of land use, population density or growth rate, and related effects on air and water and other natural systems, including ecosystems.

Endangered species: Plants or animals that are in danger of extinction through all or a significant portion of their ranges and that have been listed as endangered by the U.S. Fish and Wildlife Service or the National Marine Fisheries Service following the procedures outlined in the Endangered Species Act and its implementing regulations.

Environmental assessment (EA): A concise public document for which a federal agency is responsible that serves to briefly provide sufficient evidence and analysis for determining whether to prepare an environmental impact statement (EIS) or a finding of no significant impact; aid an agency's compliance with NEPA when no environmental impact statement is necessary; or facilitate preparation of an EIS when one is necessary. Includes brief discussions of the need for the proposal, of alternatives, of the environmental impacts of the proposed action and alternatives, and a listing of agencies and persons consulted.

Environmental impact statement (EIS): A detailed written statement required by Section 102(2)(C) of NEPA, analyzing the environmental impacts of a proposed action, adverse effects of the project that cannot be avoided, alternative courses of action, short-term uses of the environment versus the maintenance and enhancement of long-term productivity, and any irreversible and irretrievable commitment of resources.

Environmental justice: The fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. Fair treatment means that no group of people, including racial, ethnic, or socioeconomic groups, would bear a disproportionate share of the negative environmental consequences resulting from industrial, municipal, and commercial operations or the execution of federal, state, local, and tribal programs and policies. Executive Order 12898 directs federal agencies to make achieving environmental justice part of their missions by identifying and addressing

disproportionately high and adverse effects of agency programs, policies, and activities on minority and low-income populations.

Finding of no significant impact (FONSI): A public document issued by a federal agency briefly presenting the reasons why an action for which the agency has prepared an environmental assessment has no potential to have a significant effect on the human environment and, thus, would not require preparation of an environmental impact statement.

Floodplain: The lowland and relatively flat areas adjoining inland and coastal waters including flood-prone areas of offshore islands, including at a minimum, that area subject to a 1% or greater chance of flooding in any given year.

Fugitive emissions: Emissions that do not pass through a stack, vent, chimney, or similar opening where they could be captured by a control device. Any air pollutant emitted to the atmosphere other than from a stack. Sources of fugitive emissions include pumps; valves; flanges; seals; area sources such as ponds, lagoons, landfills, and piles of stored material (such as coal); and road construction areas or other areas where earthwork is occurring.

Hazardous material: Any material that poses a threat to human health and/or the environment. Hazardous materials are typically toxic, corrosive, ignitable, explosive, or chemically reactive.

Historic property: Any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion in, the National Register of Historic Places maintained by the Secretary of the Interior. This term includes artifacts, records, and remains that are related to and located within such properties. The term includes properties of traditional religious and cultural importance to an Indian tribe or Native Hawaiian organization and that meet the National Register criteria.

Impacts: see Effects.

Impervious surface: A hard surface area that either prevents or retards the entry of water into the soil or causes water to run off the surface in greater quantities or at an increased rate of flow. Common impervious surfaces include, but are not limited to, rooftops, walkways, patios, driveways, parking lots, storage areas, concrete or asphalt paving, and gravel roads.

National Ambient Air Quality Standards (NAAQS): Standards defining the highest allowable levels of certain pollutants in the ambient air (i.e., the outdoor air to which the public has access). Primary standards are established to protect public health; secondary standards are established to protect public welfare (for example, visibility, crops, animals, buildings).

National Pollutant Discharge Elimination System (NPDES): A provision of the Clean Water Act that prohibits discharge of pollutants into waters of the United States unless a special permit is issued by the Environmental Protection Agency, a state, or, where delegated, a tribal government on an Indian reservation.

National Register of Historic Places: The nation's inventory of known historic properties that have been formally listed by the National Park Service (NPS). The National Register of Historic Places is administered by the NPS on the behalf of the Secretary of the Interior. National Register listings include districts, landscapes, sites, buildings, structures, and objects that meet the set of criteria found in 36 CFR 60.4.

No action alternative: The alternative where current conditions and trends are projected into the future without another proposed action.

Particulate matter (PM), PM10, PM2.5: Any finely divided solid or liquid material, other than uncombined (that is, pure) water. A subscript denotes the upper limit of the diameter of particles included. Thus, PM10 includes only those particles equal to or less than 10 micrometers (0.0004 inch) in diameter; PM2.5 includes only those particles equal to or less than 2.5 micrometers (0.0001 inch) in diameter.

Proposed action: In a NEPA document, this is the primary action being considered. Its impacts are analyzed together with the impacts from alternative ways to achieve the same objective and the required no action alternative, which means continuing with the status quo.

Runoff: The portion of rainfall or irrigation water that flows across ground surface and is eventually returned to streams. Runoff can pick up pollutants from the air or the land and carry them to streams, lakes, and oceans.

Scope: Consists of the range of actions, alternatives, and impacts to be considered in an environmental analysis. The scope of an individual statement may depend on its relationships to other statements (also see tiering).

Scoping: An early and open process for determining the extent and variety of issues to be addressed and for identifying the significant issues related to a proposed action (40 CFR 1501.7). The scoping process helps not only to identify significant environmental issues deserving of study, but also to deemphasize insignificant issues, narrowing the scope of the NEPA process accordingly, and for early identification of what are and what are not the real issues (40 CFR 1500.5(d)). The scoping process identifies relevant issues related to a proposed action through the involvement of all potentially interested or affected parties (affected federal, state, and local agencies; recognized Indian tribes; interest groups, and other interested persons) in the environmental analysis and documentation.

Significant: As used in NEPA, requires considerations of both context and intensity. Context— significance of an action must be analyzed in its current and proposed short-and long-term effects on the whole of a given resource (for example, affected region). Intensity—refers to the severity of the effect.

Solid waste: Non-liquid, non-soluble materials ranging from municipal garbage to industrial wastes that contain complex and sometimes hazardous substances. Solid wastes also include sewage sludge, agricultural refuse, demolition wastes, and mining residues. Technically, solid waste also refers to liquids and gases in containers.

Tiering: Tiering is a staged approach to NEPA described in CEQ's Regulations for Implementing the Procedural Provisions of the National Environmental Policy Act (40 CFR 1500 – 1508). Tiering addresses broad programs and issues analyses, and analyzes site-specific proposals and impacts in subsequent tier studies. The tiered process supports decision-making on issues that are ripe for decision and provides a means to preserve those decisions.

Utility Line: Any item of public or private property which is buried or placed below ground or submerged for use in connection with the storage or conveyance of water, sewage, telecommunications, electric energy, cable television, oil, petroleum products, gas, or other substances, and includes but is not limited

to pipes, sewers, combination storm/sanitary sewer systems, conduits, cables, valves, lines, wires, manholes, attachments, and those portions of poles below ground.

Wetlands: Those areas that are inundated by surface water or groundwater with a frequency sufficient to support, and under normal circumstances do, or would support, a prevalence of vegetative or aquatic life that requires saturated or seasonally saturated soil conditions for growth and reproduction. Wetlands generally include swamps, marshes, bogs, and similar areas.

Jurisdictional wetlands are those wetlands protected by the Clean Water Act. They must have a minimum of one positive wetland indicator from each parameter (vegetation, soil, and hydrology). The U.S. Army Corps of Engineers requires a permit to fill or dredge jurisdictional wetlands.

APPENDICES

Appendix A – Agency Coordination

Appendix B – Public Comments (Final EA only)

Appendix A – Agency Coordination



Illinois Department of Natural Resources

One Natural Resources Way Springfield, Illinois 62702-1271

www.dnr.illinois.gov

Mailing Address: 1 Old State Capitol Plaza, Springfield, IL 62701

JB Pritzker, Governor

Wayne A. Rosenthal, Director

FAX (217) 524-7525

Adams County

Quincy

Demolition and New Construction of a Nursing Home and Domiciliary

1707 N. 12th St., Kent Infirmary, Elmore Infirmary, Northern Guesthouse, Truck Maintenance Garage, Vehicle Garage,

Schapers Hospital, Ehle Laundry

SHPO Log #013012819

February 21, 2019

Henry Zimoch

HPZS

213 W. Institute Pl., Suite 502

Chicago, IL 60610

Dear Mr. Zimoch:

Thank you for requesting comments from our office concerning the possible effects of your project on cultural resources. Our comments are required by Section 4 of the Illinois State Agency Historic Resources Preservation Act (20 ILCS 3420/1 et. seq.) [Act].

We have reviewed the documentation provided for the proposed undertaking. Kent Infirmary (W0650), Elmore Infirmary (W0646), the Northern Guesthouse (W0603), the Truck Maintenance Garage (W0653), the Vehicle Garage (W0637), Schapers Hospital (W0644), and Ehle Laundry (W0645) are eligible for listing on the National Register of Historic Places as contributing structures to the Illinois Veterans' Home at Quincy Historic District (District).

The proposal to demolish these buildings (Kent Infirmary, Elmore Infirmary, Northern Guesthouse, Truck Maintenance Garage, Vehicle Garage) constitutes an adverse effect as defined in the aforementioned Act.

At this time you should work with this office to develop a plan to mitigate this adverse effect. Please note that these buildings must not be demolished prior to the resolution of the disposition of these historic properties.

Please submit plans and specifications for the new construction when they become available for our review and comment.

Based upon this submission we received on January 28, 2019, the Schapers Hospital and Ehle Laundry are not part of this undertaking. They both are contributing buildings to the District, any work proposed to these buildings must be submitted to our office pursuant to the Act.

If you have any questions, please call 217/782-4836.

Sincerely,

Robert F. Appleman
Deputy State Historic
Preservation Officer

**MEMORANDUM OF AGREEMENT AMONG
THE ILLINOIS DEPARTMENT OF VETERANS' AFFAIRS,
THE ILLINOIS CAPITAL DEVELOPMENT BOARD, AND THE
ILLINOIS STATE HISTORIC PRESERVATION OFFICER
REGARDING THE DEMOLITION OF CERTAIN BUILDINGS AT
THE ILLINOIS VETERANS' HOME AT QUINCY, ILLINOIS
(SHPO LOG #013012819)**

WHEREAS, the Illinois Department of Veterans' Affairs (DVA) owns and administers the Illinois Veterans' Home at 1707 North 12th Street in the City of Quincy, Adams County, IL (Home); and

WHEREAS, the Department of Veterans' Affairs ('DVA'), working with the Illinois Capital Development Board ('CDB') propose to undertake the demolition of Kent Infirmary (W0650), Elmore Infirmary (W0646), Fletcher Infirmary (W0618), Markword Infirmary (W0647), the Northern Guesthouse (W0603), the Schapers Hospital (W0644), the Truck Maintenance Garage (W0653), and the Vehicle Garage (W0637) (collectively referred to as Buildings) in the Home (Undertaking); and

WHEREAS, the CDB, in its role at the State of Illinois' construction management agency, is to oversee the design and construction of all work on these Buildings as part of the CDB's project number 040-010-115; and

WHEREAS, all Undertakings at the Home are subject to review pursuant to the Illinois State Agency Historic Resources Preservation Act (20 ILCS 3420) and its implementing rules (17 IAC 4180) (Act); and

WHEREAS, the State Historic Preservation Office currently resides within the Illinois Department of Natural Resources (IDNR), and the Director of IDNR is the duly designated State Historic Preservation Officer (SHPO); and

WHEREAS, the SHPO determined on February 21, 2019 that the Home is eligible for listing to the National Register of Historic Places (NRHP) as a historic district, and that the Buildings contribute to that historic district; and

WHEREAS, the SHPO has determined that the Undertaking will have an adverse effect on the Buildings that are eligible for the NRHP; and

NOW, THEREFORE, the DVA, the CDB and the SHPO agree that the Undertaking shall be implemented in accordance with the following stipulations in this Memorandum of Agreement (Agreement) in order to mitigate the adverse effects of this Undertaking to the NRHP-eligible properties as a result of this project.

STIPULATIONS

I. MITIGATION

CDB, working with the DVA, shall retain a historical contractor(s) of their choice (Contractor) who meets the Secretary of the Interior's Qualifications (36 CFR Part 61, https://www.nps.gov/history/local-law/arch_stnds_9.htm) to complete the measures described below. Prior to the completion of the demolition of the Undertaking, CDB and DVA will ensure that the following HABS recordation (see: <https://www.nps.gov/hdp/standards/index.htm>) is completed by the Contractor for:

Elmore Infirmary
Fletcher Infirmary
Kent Infirmary
Markword Infirmary
Northern Guest House
Schapers Hospital
Truck Maintenance Garage
Vehicle Garage

The Contractor must consult with the SHPO prior to the initiation of the work to ensure that expectations are understood.

A. Recordation

1. Fieldwork: Site Visit, Photography, Measurements

- a. The Contractor shall take site, interior, and exterior digital images of the eight buildings. These photos should be used for reference in developing the architectural description outlined in I.A.2.d. Field notes/sketches should be used to create the CAD-based sketch plans outlined in I.A.2.a.
- b. The Contractor shall submit draft digital images of the same or very similar views that are proposed for HABS photography to the SHPO for comment. Selection of view and quantity of images shall be done in consultation with the SHPO. Images must include site, elevations, distinctive exterior and interior architectural features, primary interior spaces, and representative non-primary interior spaces. Upon SHPO concurrence in writing of the selected draft views, the Contractor may proceed with taking the final HABS photography as outlined in I.A.1.c.
- c. Final HABS photographs must be taken by a professional photographer and must include all the views agreed to in I.A.1.b. Photographs must be taken with a large-format film camera using 4" x 5" or larger black-and-white negatives, processed according to HABS guidelines, with in-camera perspective correction (as

needed).

- d. Upon completion of I.A.1.a, b, and c, the Contractor shall digitally submit the images and copies of field notes to the SHPO for review and comment. Upon SHPO confirmation in writing that all of the information necessary to complete HABS recordation has been collected, the demolition of the Buildings may commence.

2. Recordation components shall consist of the following items.

- a. Sketch plans. These will be as defined by HABS guidelines. For the three buildings: Northern Guest House, Truck Maintenance Garage and Vehicle Garage for which no drawings exist, they would be letter sized and digitally drawn of the buildings in their current condition. Of the remaining five buildings, they would be 24" x 36" reproductions of original drawings printed drawing-size. All drawings shall be on vellum with either a large-format inkjet printer using a HABS-designated ink set or with a large-format laser printer (i.e., photocopier).
- b. HABS photographs. Prints from the negatives taken in I.A.1.c must be either wet processed on regular (not resin-coated) photo paper or inkjet-printed, according to HABS guidelines. The final size of the prints (either 5" x 7" or 8" x 10") and their mounting and labeling shall be done in accordance with guidance provided by the NPS. Final recordation package must contain the photo prints, original negatives, and a contact sheet, per HABS standards.
- c. Archival digital photography. This set of labeled photos are those taken as a part of the reconnaissance and agreed to as stated in I.A.1.a. They should be printed as directed by HABS staff.
- d. Narrative and description. A written historic narrative and an architectural description of the eight buildings using HABS-designated outline format printed single sided on regular-weight, archival (non-recycled, with 25% cotton fiber content) bond paper.
- e. Original and/or historic drawings. Any original and/or historic drawings of the eight buildings scanned at a minimum of 400 dpi, dropped full-size onto HABS title blocks, and printed on vellum with either a large-format inkjet printer using a HABS-designated ink set or with a large-format laser printer (i.e., photocopier). The Contractor must consult with the SHPO to determine which extant plans warrant scanning and inclusion in the recordation package.

- f. Original field notes, if applicable (i.e., field sketches, laser-scan info, photogrammetric data info.)
 - g. Historic images and maps. Photographic copies of illustrative historic images and maps must be scanned, and printed, and labeled according to HABS guidelines. The Contractor must consult with the SHPO to determine which historic images and maps warrant scanning and inclusion in the recordation package.
 - h. CD/DVD. Digital versions of items I.A.2.a through I.A.2.g must be saved onto an archival CD/DVD.
3. Draft submission. The Contractor shall email in pdf format and mail a hardcopy of the 95% draft of the items in I.A.2.a through g for each of the eight building to the SHPO for review and comment. When the SHPO accepts in writing each building's 95% draft submission, the Contractor will complete the final documentation for that building as directed in I.A.4.
4. Final submission. Upon completion of the final documentation, the Contractor shall submit the following for each Building to the SHPO:
- a. One (1) HABS recordation package containing items I.A.2.a, b, c, d, e, f, g, and h.
 - b. One (1) recordation package containing items I.A.2.a, c, d, e, g, and h in an archival clamshell.

Upon final approval of each building's package, the SHPO will submit the HABS recordation package to the Heritage Documentation Programs in the National Park Service for eventual deposit in the Library of Congress, and the SHPO will deposit the recordation package with the Abraham Lincoln Presidential Library in Springfield, Illinois.

B. Historic Context and Significance

A written historic context (with illustrations, as necessary) and significance of the Illinois Veterans' Home in Quincy, its development and maturity, including the construction of post-war buildings, must be developed. The Contractor shall email in pdf format and mail a hardcopy of the 95% draft of the Historic Context and Significance to the SHPO for review and comment. When the SHPO accepts in writing the 95% draft submission, the Contractor will complete the final Historic Context and Significance in HABS-designated format printed single sided on regular-weight, archival (non-recycled, with 25% cotton fiber content) bond paper and submit it to the SHPO to be included with the Recordation packages.

II. DURATION

This Agreement shall terminate if its stipulations are not carried out within five (5) years from the date of its execution. Prior to such time, DVA may consult with the other signatories to reconsider the terms of the Agreement and amend it in accordance with Stipulation V AMENDMENTS below. DVA shall notify the signatories as to the course of action it will pursue.

III. POST-REVIEW DISCOVERIES

If potential historic properties are discovered or unanticipated effects on historic properties found, DVA shall consult with the SHPO immediately and make reasonable efforts to avoid, minimize, or mitigate adverse effects to such properties. In the event of an unanticipated discovery of human remains or burials, DVA understands and agrees that it must immediately stop work within the area of discovery, notify the SHPO, and comply with the Human Skeletal Remains Protection Act (20 ILCS 3440) as administered by DNR, which provides that no human skeletal remains shall be disturbed without a permit issued by DNR.

IV. DISPUTE RESOLUTION

Should any signatory to this Agreement object at any time to any actions proposed or the manner in which the terms of this Agreement are implemented, DVA shall consult with the signatories to resolve the objection. If the signatories cannot agree regarding a dispute, the signatories shall utilize the procedures provided in 20 ILCS 3420/4e.

V. AMENDMENTS

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

VI. TERMINATION

If any signatory to this Agreement determines that its terms become impossible to carry out, that party shall immediately consult with the other parties to attempt to develop an amendment per Stipulations IV and V above. If within thirty (30) days an amendment cannot be reached, any signatory may terminate the Agreement upon written notification to the other signatories.

VII. COUNTERPARTS; FACSIMILE OR .PDF SIGNATURES

This Agreement may be executed in counterparts, each of which shall be considered an original and together shall be one and the same Agreement. A facsimile or .pdf copy of

this Agreement and any signatures thereon will be considered for all purposes as an original.

VIII. EFFECTIVE DATE

This Agreement is effective on the date signed by DVA.

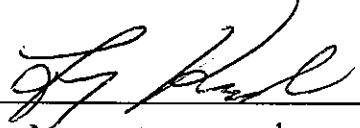
EXECUTION of this Agreement and implementation of its terms evidences that DVA has afforded the SHPO an opportunity to comment on the effects of the Undertaking in compliance with the Act.

[Signature Pages to follow]

**MEMORANDUM OF AGREEMENT AMONG
THE ILLINOIS DEPARTMENT OF VETERANS' AFFAIRS,
THE CAPITAL DEVELOPMENT BOARD, AND THE
ILLINOIS STATE HISTORIC PRESERVATION OFFICER
REGARDING THE DEMOLITION OF CERTAIN BUILDINGS AT
THE ILLINOIS VETERANS' HOME AT QUINCY, ILLINOIS
(SHPO LOG #013012819)**

SIGNATORY

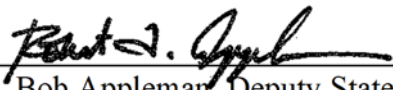
ILLINOIS DEPARTMENT OF VETERANS' AFFAIRS

Signature:  Date: 7/22/2020
Name: Tony Kalbeck
Title: Chief of Staff

**MEMORANDUM OF AGREEMENT AMONG
THE ILLINOIS DEPARTMENT OF VETERANS' AFFAIRS,
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(SHPO LOG #013012819)**

SIGNATORY

ILLINOIS DEPUTY STATE HISTORIC PRESERVATION OFFICER

By:  Date: July 21, 2020
Bob Appleman, Deputy State Historic Preservation Officer
Illinois Department of Natural Resources

**MEMORANDUM OF AGREEMENT AMONG
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THE ILLINOIS VETERANS' HOME AT QUINCY, ILLINOIS
(SHPO LOG #013012819)**

SIGNATORY

CAPITAL DEVELOPMENT BOARD (CDB)

Signature:  Date: 7 23 2020

Name: Jim Underwood

Title: Executive Director



Amy Romano 7/23/2020
General Counsel
Capital Development Board

Applicant: GSG Consultants
Contact: Nicole Wahlborg
Address: 623 Cooper Ct
Schaumburg, IL 60173

Project: Quincy
Address: 1707 N. 12th Street, Quincy

IDNR Project Number: 2007605
Date: 03/13/2020

Description: Campus renovations

Natural Resource Review Results

This project was submitted for information only. It is not a consultation under Part 1075.

The Illinois Natural Heritage Database shows the following protected resources may be in the vicinity of the project location:

Butterfly (*Ellipsaria lineolata*)
Ebonyshell (*Fusconaia ebena*)

Location

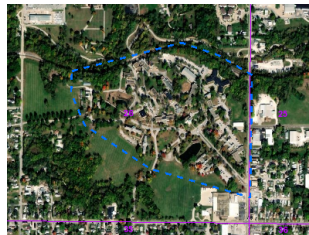
The applicant is responsible for the accuracy of the location submitted for the project.

County: Adams

Township, Range, Section:

1S, 9W, 25

1S, 9W, 26



IL Department of Natural Resources

Contact

Impact Assessment Section
217-785-5500
Division of Ecosystems & Environment

Disclaimer

The Illinois Natural Heritage Database cannot provide a conclusive statement on the presence, absence, or condition of natural resources in Illinois. This review reflects the information existing in the Database at the time of this inquiry, and should not be regarded as a final statement on the site being considered, nor should it be a substitute for detailed site surveys or field surveys required for environmental assessments. If additional protected resources are encountered during the project's implementation, compliance with applicable statutes and regulations is required.

Terms of Use

By using this website, you acknowledge that you have read and agree to these terms. These terms may be revised by IDNR as necessary. If you continue to use the EcoCAT application after we post changes to these terms, it will mean that you accept such changes. If at any time you do not accept the Terms of Use, you may not continue to use the website.

1. The IDNR EcoCAT website was developed so that units of local government, state agencies and the public could request information or begin natural resource consultations on-line for the Illinois Endangered Species Protection Act, Illinois Natural Areas Preservation Act, and Illinois Interagency Wetland Policy Act. EcoCAT uses databases, Geographic Information System mapping, and a set of programmed decision rules to determine if proposed actions are in the vicinity of protected natural resources. By indicating your agreement to the Terms of Use for this application, you warrant that you will not use this web site for any other purpose.

2. Unauthorized attempts to upload, download, or change information on this website are strictly prohibited and may be punishable under the Computer Fraud and Abuse Act of 1986 and/or the National Information Infrastructure Protection Act.

3. IDNR reserves the right to enhance, modify, alter, or suspend the website at any time without notice, or to terminate or restrict access.

Security

EcoCAT operates on a state of Illinois computer system. We may use software to monitor traffic and to identify unauthorized attempts to upload, download, or change information, to cause harm or otherwise to damage this site. Unauthorized attempts to upload, download, or change information on this server is strictly prohibited by law.

Unauthorized use, tampering with or modification of this system, including supporting hardware or software, may subject the violator to criminal and civil penalties. In the event of unauthorized intrusion, all relevant information regarding possible violation of law may be provided to law enforcement officials.

Privacy

EcoCAT generates a public record subject to disclosure under the Freedom of Information Act. Otherwise, IDNR uses the information submitted to EcoCAT solely for internal tracking purposes.



EcoCAT Receipt

Project Code 2007605

APPLICANT	DATE
-----------	------

GSG Consultants
Nicole Wahlborg
623 Cooper Ct
Schaumburg, IL 60173

3/13/2020

DESCRIPTION	FEE	CONVENIENCE FEE	TOTAL PAID
EcoCAT Consultation	\$ 25.00	\$ 1.00	\$ 26.00
		TOTAL PAID	\$ 26.00

Illinois Department of Natural Resources
One Natural Resources Way
Springfield, IL 62702
217-785-5500
dnr.ecocat@illinois.gov



United States Department of the Interior

FISH AND WILDLIFE SERVICE

Illinois-Iowa Field Office
1511 47th Avenue
Moline, Illinois 61265
Phone: (309) 757-5800 Fax: (309) 757-5807



IN REPLY REFER
TO:
IL-IAFO

Jason Sturm
Veterans Administration

Electronic Mail
April 14, 2021

We have reviewed your letter dated April 5, 2021, regarding plans for the Quincy, Illinois, State Veterans' Home, Adams County, Illinois, and have the following comments. Funding for the project is expected from the U.S. Department of Veterans Affairs Office of Construction & Facilities Management (VA); the use of Federal funding makes this a Federal action. The proposed project (Consultation Code: 03E18000-2021-TA-1060, Event Code: 03E18000-2021-E-02817) involves the construction of a new 210-unit long-term care facility, a new 80-unit domiciliary, renovations to various structures, replacement of the onsite water supply loop, and demolition of six buildings at the existing Illinois Veterans' Home in Quincy, Illinois, with associated minor tree clearing.

VA has reviewed the list of threatened or endangered species which may be present in Adams County and has determined that there may be suitable habitat in the project area for the Indiana bat (*Myotis sodalis*), and Northern long-eared bat (*Myotis septentrionalis*). A tree clearing date restriction will be included to avoid direct impacts to bat species. VA has determined that the project is not likely to adversely affect bat species provided the tree clearing date restriction is in place. We concur with this determination.

Further, VA has adequately addressed the potential impacts of the project on fish and wildlife resources and federally listed threatened and endangered species in the project area.

This precludes the need for further action on this project as required under Section 7 of the Endangered Species Act of 1973, as amended. Should this project be modified or new information indicate endangered species may be affected, consultation should be initiated.

Heidi Woeber
Fish and Wildlife Biologist
Ecological Services
U.S. Fish and Wildlife Service
1511 47th Avenue
Moline, IL 61265
309/757-5800, ext. 209
309/757-5807 Fax
heidi_woeber@fws.gov



United States Department of the Interior

FISH AND WILDLIFE SERVICE
Illinois-Iowa Ecological Services Field Office
Illinois & Iowa Ecological Services Field Office
1511 47th Ave
Moline, IL 61265-7022
Phone: (309) 757-5800 Fax: (309) 757-5807



In Reply Refer To:
Consultation code: 03E18000-2021-TA-1060
Event Code: 03E18000-2021-E-02817
Project Name: Quincy IL State Veterans Home

March 30, 2021

Subject: Verification letter for the 'Quincy IL State Veterans Home' project under the January 5, 2016, Programmatic Biological Opinion on Final 4(d) Rule for the Northern Long-eared Bat and Activities Excepted from Take Prohibitions.

Dear Jason Sturm:

The U.S. Fish and Wildlife Service (Service) received on March 30, 2021 your effects determination for the 'Quincy IL State Veterans Home' (the Action) using the northern long-eared bat (*Myotis septentrionalis*) key within the Information for Planning and Consultation (IPaC) system. This IPaC key assists users in determining whether a Federal action is consistent with the activities analyzed in the Service's January 5, 2016, Programmatic Biological Opinion (PBO). The PBO addresses activities excepted from "take"^{[1](#)} prohibitions applicable to the northern long-eared bat under the Endangered Species Act of 1973 (ESA) (87 Stat.884, as amended; 16 U.S.C. 1531 et seq.).

Based upon your IPaC submission, the Action is consistent with activities analyzed in the PBO. The Action may affect the northern long-eared bat; however, any take that may occur as a result of the Action is not prohibited under the ESA Section 4(d) rule adopted for this species at 50 CFR §17.40(o). Unless the Service advises you within 30 days of the date of this letter that your IPaC-assisted determination was incorrect, this letter verifies that the PBO satisfies and concludes your responsibilities for this Action under ESA Section 7(a)(2) with respect to the northern long-eared bat.

Please report to our office any changes to the information about the Action that you submitted in IPaC, the results of any bat surveys conducted in the Action area, and any dead, injured, or sick northern long-eared bats that are found during Action implementation. If the Action is not completed within one year of the date of this letter, you must update and resubmit the information required in the IPaC key.

This IPaC-assisted determination allows you to rely on the PBO for compliance with ESA Section 7(a)(2) only for the northern long-eared bat. It **does not** apply to the following ESA-protected species that also may occur in the Action area:

- Eastern Prairie Fringed Orchid *Platanthera leucophaea* Threatened
- Higgins Eye (pearlymussel) *Lampsilis higginsii* Endangered
- Indiana Bat *Myotis sodalis* Endangered
- Monarch Butterfly *Danaus plexippus* Candidate
- Sheepnose Mussel *Plethobasus cyphyus* Endangered
- Spectaclecase (mussel) *Cumberlandia monodonta* Endangered

If the Action may affect other federally listed species besides the northern long-eared bat, a proposed species, and/or designated critical habitat, additional consultation between you and this Service office is required. If the Action may disturb bald or golden eagles, additional coordination with the Service under the Bald and Golden Eagle Protection Act is recommended.

[1]Take means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct [ESA Section 3(19)].

Action Description

You provided to IPaC the following name and description for the subject Action.

1. Name

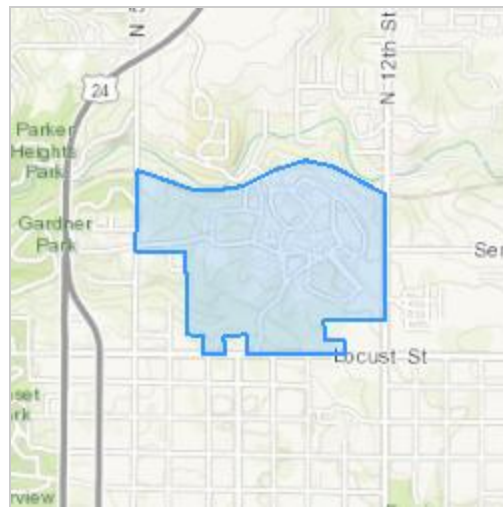
Quincy IL State Veterans Home

2. Description

The following description was provided for the project 'Quincy IL State Veterans Home':

Rehabilitation of existing state veterans home, including construction, demolition, and renovation of buildings.

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@39.9539314,-91.40117203693575,14z>

**Determination Key Result**

This Federal Action may affect the northern long-eared bat in a manner consistent with the description of activities addressed by the Service's PBO dated January 5, 2016. Any taking that may occur incidental to this Action is not prohibited under the final 4(d) rule at 50 CFR §17.40(o). Therefore, the PBO satisfies your responsibilities for this Action under ESA Section 7(a)(2) relative to the northern long-eared bat.

Determination Key Description: Northern Long-eared Bat 4(d) Rule

This key was last updated in IPaC on May 15, 2017. Keys are subject to periodic revision.

This key is intended for actions that may affect the threatened northern long-eared bat.

The purpose of the key for Federal actions is to assist determinations as to whether proposed actions are consistent with those analyzed in the Service's PBO dated January 5, 2016.

Federal actions that may cause prohibited take of northern long-eared bats, affect ESA-listed species other than the northern long-eared bat, or affect any designated critical habitat, require ESA Section 7(a)(2) consultation in addition to the use of this key. Federal actions that may

affect species proposed for listing or critical habitat proposed for designation may require a conference under ESA Section 7(a)(4).

Determination Key Result

This project may affect the threatened Northern long-eared bat; therefore, consultation with the Service pursuant to Section 7(a)(2) of the Endangered Species Act of 1973 (87 Stat.884, as amended; 16 U.S.C. 1531 et seq.) is required. However, based on the information you provided, this project may rely on the Service's January 5, 2016, *Programmatic Biological Opinion on Final 4(d) Rule for the Northern Long-Eared Bat and Activities Excepted from Take Prohibitions* to fulfill its Section 7(a)(2) consultation obligation.

Qualification Interview

1. Is the action authorized, funded, or being carried out by a Federal agency?
Yes
2. Have you determined that the proposed action will have "no effect" on the northern long-eared bat? (If you are unsure select "No")
No
3. Will your activity purposefully **Take** northern long-eared bats?
No
4. [Semantic] Is the project action area located wholly outside the White-nose Syndrome Zone?
Automatically answered
No
5. Have you contacted the appropriate agency to determine if your project is near a known hibernaculum or maternity roost tree?

Location information for northern long-eared bat hibernacula is generally kept in state Natural Heritage Inventory databases – the availability of this data varies state-by-state. Many states provide online access to their data, either directly by providing maps or by providing the opportunity to make a data request. In some cases, to protect those resources, access to the information may be limited. A web page with links to state Natural Heritage Inventory databases and other sources of information on the locations of northern long-eared bat roost trees and hibernacula is available at www.fws.gov/midwest/endangered/mammals/nleb/nhisites.html.

Yes

6. Will the action affect a cave or mine where northern long-eared bats are known to hibernate (i.e., hibernaculum) or could it alter the entrance or the environment (physical or other alteration) of a hibernaculum?
No
 7. Will the action involve Tree Removal?
Yes
-

8. Will the action only remove hazardous trees for the protection of human life or property?

No

9. Will the action remove trees within 0.25 miles of a known northern long-eared bat hibernaculum at any time of year?

No

10. Will the action remove a known occupied northern long-eared bat maternity roost tree or any trees within 150 feet of a known occupied maternity roost tree from June 1 through July 31?

No

Project Questionnaire

If the project includes forest conversion, report the appropriate acreages below. Otherwise, type '0' in questions 1-3.

1. Estimated total acres of forest conversion:

0

2. If known, estimated acres of forest conversion from April 1 to October 31

0

3. If known, estimated acres of forest conversion from June 1 to July 31

0

If the project includes timber harvest, report the appropriate acreages below. Otherwise, type '0' in questions 4-6.

4. Estimated total acres of timber harvest

0

5. If known, estimated acres of timber harvest from April 1 to October 31

0

6. If known, estimated acres of timber harvest from June 1 to July 31

0

If the project includes prescribed fire, report the appropriate acreages below. Otherwise, type '0' in questions 7-9.

7. Estimated total acres of prescribed fire

0

8. If known, estimated acres of prescribed fire from April 1 to October 31

0

9. If known, estimated acres of prescribed fire from June 1 to July 31

0

If the project includes new wind turbines, report the megawatts of wind capacity below. Otherwise, type '0' in question 10.

10. What is the estimated wind capacity (in megawatts) of the new turbine(s)?

0

Appendix B – Public Comments (Final EA only)