

State of Illinois Department of Veterans' Affairs

Combined Veterans' Capital Needs Task Force Report

May 1, 2018



Veterans' Affairs



STATE OF ILLINOIS DEPARTMENT OF VETERANS' AFFAIRS

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BRUCE RAUNER GOVERNOR

ERICA L. JEFFRIES DIRECTOR

May 1, 2018

To:

Governor Bruce Rauner Senate President John Cullerton House Speaker Michael Madigan Senate Minority Leader Bill Brady House Minority Leader Jim Durkin

The Combined Veterans Capital Needs Task Force is pleased to present the following report for your review. This report encompasses months of research and dialog around the needs facing our veterans of today and for generations to come. The recommendations offered here will support not only the current residents of our Illinois Veterans' Home at Quincy, but will also provide a template for veterans' housing all across the state.

We look forward to your feedback on this report and hope that these recommendations will gain your support and that of the Illinois General Assembly and the United States Department of Veterans' Affairs. We are confident that with a cooperative effort, we will achieve the funding necessary to accomplish the recommendations put forth herein.

Thank you for your consideration in this effort. We look forward to providing our Illinois Heroes with the future Home that they have earned.

Respectfully submitted,

Erica L. Jeffries Director Illinois Department of Veterans' Affairs

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EXECUTIVE SUMMARY

In January 2018, as part of a plan to minimize the risk from *Legionella* bacteria at the Illinois Veterans Home at Quincy, (IVHQ), Gov. Bruce Rauner convened a **Combined Veterans' Capital Needs Task Force**. This Task Force consisted of two separate groups: *The Infrastructure Investment Task Force* and *The Water Management Task Force*. Each of these oversight Task Forces formed a working group to develop and analyze infrastructure needs and water safety and quality initiatives. These Task Forces have developed a forward-looking investment strategy for all Illinois Veterans' Homes, to include IVHQ. The proposal and recommendations for this strategy are presented in this report.

The combined Veterans' Capital Needs Task Force is made up of health experts, Veterans' advocates, state legislators, federal officials and staff from the Governor's office. The goal is to shield our residents from the risks posed by *Legionella* bacteria and to take every reasonable step to improve the delivery of health care services to the Veterans' who reside in the Illinois Veterans' Homes.

Members of the Infrastructure Task Force and the Infrastructure Working Group are listed in <u>Attachment</u> <u>1</u> of this document. Members of the Water Management Task Force and Water Management Working Group are listed in <u>Attachment 2</u> of this document.

BRIEF HISTORY OF THE ILLINOIS VETERANS' HOMES

Under the administration of the Illinois Department of Veterans' Affairs (IDVA), all four Illinois Veterans' Homes are staffed with caring and dedicated professionals who provide quality long-term skilled care and services to resident members. Volunteers from veteran service organizations and the local community provide many additional supporting services and activities for the Veterans'.

Our Homes are located in Quincy, Manteno, LaSalle, and Anna, Illinois. Each of our Homes is licensed by the Illinois Department of Public Health and certified by the US Department of Veterans' Affairs Medical Center of jurisdiction. The Homes work closely with the local healthcare community to ensure that each resident's specific health care needs are available and met. Emphasis is given to ensuring that each resident member is well cared for, has a full quality of life, and enjoys a caring, supportive environment.

This report will address capital assessment needs for all our Homes, with a focus on immediate infrastructure and water quality investments for the Quincy Home.

IVHQ is a 200-acre campus that was founded in 1886. The home currently houses over 350 residents in six residential buildings. Most of these residents receive skilled medical nursing home care, while over 40 residents reside in two independent living dormitories or domiciliary buildings. Three of the four residential buildings are over 52 years old, while the two independent living buildings are each 109 years old. Seven additional buildings used by the Veterans' for ancillary medical services, dining, and recreational activities, have construction dates from 1905 to 1972, with Physical Therapy constructed in 1995 and Fifer completed in 2003.

See Attachment #3 for construction date information.

SUMMARY OF REMEDIATION EFFORTS AT IVH-Q

In 2016, IDVA, with grant funding from the Illinois Environmental Protection Agency, invested \$6.4M in water safety improvements at IVHQ. These improvements included the construction of a water treatment facility, new hot water heaters installed in every building which allowed heating water to 165 degrees to kill the *Legionella* bacteria, water mixing valves at each point of use, and several other projects.

The water management program ensures that the entire water system is flushed twice daily. Additionally, all water flowing throughout the campus is chemically treated and filtered on the cold side and thermally heated and filtered on the hot side - 24 hours a day, 7 days a week. In recent weeks, the engineering team has installed brand new faucets and Pall micron filters, which are specifically designed to block *Legionella* bacteria. These filters are now installed on every faucet (over 700 campus-wide), sprayer, shower, tub, drinking fountain, and ice machine across the campus. Additionally, IVHQ has installed portable water disinfectant chemical bolus injection systems to provide calibrated chemical injections to any of the residential buildings if it is determined there is a need for additional biocide.

The steps taken above are reflected in the water sample tests results at IVHQ. In 2015, the IVHQ water tests showed 64% positive for *Legionella* bacteria; by 2016, that percentage was down to 12%, and today, it's less than 2%. And since the installation of the Pall filters campus wide, IVHQ has seen zero evidence of *Legionella* bacteria post-filter.



Data supplied by Phigenics, LLC, using water test results.

CAPITAL NEEDS RECOMMENDATIONS

Although all proposed options in this report are continued steps to *Legionella* remediation, anything less than complete reconstruction will fall short of providing a proposal with the full confidence and support of the Veterans' Capital Needs Task Force. Therefore, upon final review, the Task Force strongly recommends the following points:

- Campus Reconstruction Including Construction of a New Quincy Residential Building, and include a new water distribution plumbing loop for the Quincy Veterans' Home. A new facility will provide our Veterans a state-of-the-art home, with design, technology, and utilities that will meet the current and future clinical and therapeutic needs of aging veterans. With information currently available, cost for this project is estimated at\$190M-\$230M.
- **Design and construct a new water plumbing loop and building piping.** This project would entail the complete replacement of the underground water distribution system from the current water treatment facility to all existing and proposed buildings. New piping would remove the current system, which is suspected to contain significant amounts of mature biofilm biofilm which may be harboring biological organisms. While new construction is recommended, implementing this recommendation independently will only help remediate *Legionella* in the interim. In order for the water loop to be effective for the long-term, all of the plumbing throughout the campus would need to be replaced with new piping as well. The cost for a new plumbing loop is \$2.2M and new piping is estimated at \$13.4M, however, this does not take into account the cost that will be required for upgrading the existing buildings to meet future healthcare delivery needs. This would be extremely disruptive to the residents.
- **Develop alternative water source.** This project would entail the construction and implementation of an alternate source of water to the Home. This would provide the facility with consistent lower water temperatures, lower organic contaminants, consistent neutral pH, significant savings in water costs, and has the potential to provide higher quality water for the home. Cost for this project is estimated at \$3-\$4.5M.
- **Purchase and renovate an off-site facility** to provide temporary housing for residents during construction and demolition of the IVHQ campus. This project would allow the residents of IVHQ to have a comfortable living space removed from the noise and disturbance caused by the campus reconstruction project. In the longer-term, this facility could be used to house another Veterans population such as homeless Veterans, Veterans exhibiting behavioral health challenges, or Veterans who require adult day care services. This option also provides the contingency for temporary housing if the current and future water management program steps fail to continue to shield our residents from risks of *Legionella* bacteria in the water system. The asking price of the building is \$795,000 and construction costs for this project are under review and tentatively estimated at \$5M-6M.

INITIATIVES CURRENTLY UNDERWAY

CAPITAL AND PHYSICAL PLANT IMPROVEMENTS

The Department of Veterans' Affairs and the Veterans' Home Staff have set out a Request for Proposal to have an underground locator service utilize ground penetrating radar to identify the locations of buried abandoned underground piping that may be backwashing potentially *Legionella* contaminated water into the water circulation loop and continuing to contaminate the water lines.

The central cooling tower was completely serviced, cleaned and disinfected by Walter Louis Fluid Technologies Saturday, April 28th in preparation for summer operation. As an alternate plan, an access port (tap) will be installed on lines at the Physical Therapy Building where the chiller/cooling tower are located, to allow for the use of an auxiliary chiller if we need to take the central cooling tower off line. Normally the chiller is put into operation in May, as dictated by the weather.

Installation of the Bolus Chemical Injection System has been installed in each skilled nursing building on the campus and will be completed in the remaining buildings allowing the flexibility of being able to provide an inoculation of chlorine to the water distribution system of isolated building should the need arise, without increasing the disinfection to the whole campus. Ancillary buildings received the system and a similar system will be applied to the Sycamore property when it has been purchased. The Department of Veterans' Affairs installed over 700 sink faucets campus wide to allow for point of use filters at every hand-wash sink on the campus.

A Request for Proposal has been released to obtain maintenance and cleaning service for the HVAC systems in each building and the packaged thermal air conditioners (through the wall PTAC units) in each residents' room. Only one small business' proposal was received. The proposed price was higher than expected. The request has been posted again for larger companies' bid submissions to increase competition and reduce cost.

The Illinois State Water Survey has been engaged to test water samples and determine the corrosive indices, which may be an indicator of biofilm to provide for *Legionella* growth.

A project is underway to install an in-line filtration system at the point of water entry into each building. This will extend the service life of the mixing valves and the 0.2micron point of use filters, which are requiring frequent replacement due to coarse particulate matter in the water passing through the water distribution system.

Currently, there are two projects actively being designed or constructed on the campus;

- There is a project underway to replace the roofing at Somerville and Anderson Domiciliaries and renovate the porch at Somerville.
- A master plan to guide new construction and improvements on the campus is underway. Selection of a firm for the Veterans' Home Master Plan will occur in May2018. The master plan will consider the immediate and long-term needs of the facility. Phased development and implementation of the master plan may be required to allow priority projects to move forward while completion of the

overall master plan is in progress.

As indicated later in this report, several additional projects will be required to complete the reconstruction of the Illinois Veterans' Home Quincy Campus. These include the following efforts:

- Construct a new 250-300 bed, state-of-the art skilled nursing care building with a new water distribution plumbing loop.
- Construct an underground campus water loop to feed existing buildings and new construction.
- Develop an alternative water source, develop piping system to convey the water to the campus and make improvements to the existing water treatment facility as necessary. Replace the existing obsolete water tower with a water ground tank or new elevated water tower.
- Purchase and renovate the off-site facility to provide a safe and comfortable living environment for the residents of the Quincy campus with as little disruption as possible. This facility would be capable of temporarily housing 150-180 residents and permanently housing around 90 residents.

LEGISLATIVE INITIATIVES

An effort to expedite the various projects recommended for the Quincy Veterans' Home could benefit from passage of certain legislative initiatives.

- Extend the sunset date for the Design Build Act SB 3128 seeks an extension to the sunset date of the Design Build Act (30 ILCS 537/5) which permits CDB to use the design-build delivery method on public projects. Design-build can allow for an expedited construction schedule.
- Access to federal reimbursement funding for capital projects, subject to appropriation Legislation has been filed that contains trailer language to Public Act 98-0245 (SB 667, SB 3127, SB 3144). This Public Act contained contradictory language respective to where federal reimbursement funds for capital facilities projects should be deposited. As a result, the reimbursement funding cannot be released or used for any purpose, and it is collecting in the Capital Development Board Contributory Trust Fund. Currently, over \$12 million is in the fund, with an additional \$4 million expected in the near future. The purpose of this legislation is to allow the Capital Development Board the ability to use the federal reimbursements for capital projects, as appropriated by the General Assembly.
- **Procurement Code-increase thresholds for financial disclosures** Section 50-35 of the Procurement Code (30 ILCS 500/50-35) requires financial disclosures from all vendors and subcontractors with a contract over \$50,000 prior to work beginning on a project. Waiting for compliance from vendors and subcontractors can slow the project start time. Increasing the threshold for financial disclosure requirements from \$50,000 to \$250,000 can help expedite the projects referenced in this report.
- Licensing and Control of Off Campus Buildings For continuity of care for the residents, a modification to the Veterans Affairs Act stating that for the purposes of licensing, supervision, appropriations, home funds, and member benefit funds, the Illinois Veterans Homes includes the main campus and all other residential structures operated by the Department that are located in the city limits of the Illinois Veterans Home.

INFRASTRUCTURE AND WATER MANAGEMENT OVERVIEW

ILLINOIS VETERANS' HOMES CAPITAL NEEDS ASSESSMENT

The recommendations put forth in this Veterans' Capital Needs Task Force report are submitted with input from the Capital Development Board, the Illinois Department of Public Health, and the Illinois Environmental Protection Agency. This proposal requires the approval and appropriation by the Illinois General Assembly for a combined recommendation totaling \$202M - \$245M.

INFRASTRUCTURE

Since August 2015, the Illinois Department of Veterans' Affairs and IVHQ have worked diligently to combat the presence of *Legionella* bacteria to keep our residents and staff safe from the threat of Legionnaires' Disease. IDVA has invested over \$6.4M in a water treatment facility and other infrastructure investments to chemically treat, thermally heat, and filter the water flowing throughout the IVHQ campus.

The aging infrastructure of the Quincy campus includes portions of the water and electrical distribution systems; systems which are located throughout the grounds. Many of the buildings are at maximum electrical capacity and current advances in technology and safety continue to place increasing burdens on the electrical distribution grid.

The current condition and infrastructure of the Home do not adequately meet the needs of our Veterans' today and will certainly not meet the needs of our Veterans' over the next 10-50 years. Only one of the residential buildings currently in use was built in this century. The remaining skilled care residential buildings were all built at the same time as America's involvement in Vietnam began. The Independent Living buildings were both built before World War I.

Skilled nursing facilities in this condition present many and varied challenges. IVHQ's utility distribution systems (including potable water systems) are old and have likely reached capacity limits. Given the age of the systems, they will be both expensive and challenging to update. Problems with these systems can frequently be hidden inside of walls or buried underground, hindering both preventative maintenance and future mitigation efforts. Physical barriers caused by too narrow hallways and doorways present ADA issues, along with fire safety code compliance problems. Installation of new and updated technology, updated quality of life design, and implementation of proper and therapeutic clinical environment, are all severely constrained by buildings that are 60 to 110 years old.

WATER MANAGEMENT

Water distribution systems are also significantly hampered by advanced age. Testing results show many pipes contain significant amounts of biofilm and scale, along with other forms of debris. This debris provides an ideal environment for the development and growth of waterborne organisms and can also

contribute to operational issues in the water system. Galvanized piping is present in sections of this system and is significantly corroded. This corrosion was confirmed when sections of piping were replaced in 2016.

Using guidance and recommendations provided by Federal, State, and Local governments, and water safety consultants, IVHQ implemented leading methodologies to enhance the safety and quality of the Quincy Veterans' Home water. The water management program exceeds current guidelines provided by the CDC and the US Department of Veterans' Affairs. They also conform with and exceed the national standard, *Legionellosis: Risk Management for Building Water Systems*, published in 2015 by the American National Standards Institute (ANSI) and the American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE).

The 2015 water safety project included the installation of a water treatment facility on the grounds which monitors the incoming water supply and injects approved amounts of two different and separate, IEPA approved water disinfectants – sodium hypochlorite and chlorine dioxide. This is in addition to the water treatment performed by the City of Quincy at their municipal water treatment facility. The IVHQ staff take daily monitoring tests of the water to verify the levels of disinfectant and ensure both hot and cold-water temperatures are within safe parameters. Any variation in readings is immediately investigated and corrected. Additionally, water is tested every two weeks at multiple locations across the campus by Phigenics, an independent water safety and quality risk management consultant. When tests show markers indicating the presence of *Legionella*, contingency response procedures are immediately implemented to protect the residents, staff, and visitors.

Coupled with this disinfectant treatment, hot water heating for the facility decentralized by new hot water heaters, installed in 2016, located in each building, ensuring the water remains hot enough to prevent and kill the formation of *Legionella* throughout the system to the point of use. To prevent scald injury to the residents from water that is too hot (165 degrees Fahrenheit), mixing valves were installed on all points of use, reducing the hot water temperature to a safe level at the faucet.

Another key component of the water management plan is the routine flushing of the plumbing system. This improves water safety in two ways. First, the constant flushing prevents water from becoming stagnant, which can lead to bacterial growth. Second, since the water is constantly being moved, older water is leaving the system and being replaced by fresh water, which contains fresh levels of disinfectants. Water is flushed for five minutes, twice a day, at each faucet, shower and tub.

Even though all the above improvements were made via the guidance of CDC, IDPH, and Adams County Health Department, the Quincy Home continues to identify the presence of *Legionella* in the potable water distribution system. While some of this detection is due to the staff at Quincy taking more than 40 water samples every two weeks to test for *Legionella*, it can't be discounted that the aging water distribution infrastructure is part of the challenge.

THE FUTURE OF VETERANS' SKILLED NURSING CARE IN ILLINOIS

The Illinois Department of Veterans' Affairs currently operates (4) Veterans' Homes that provide long term care in the nursing home model, with a fifth home under construction in Chicago. The opening of the Chicago home, tentatively set for the Fall of 2019, will add 200 skilled nursing beds, all in private rooms with private bathrooms. Additionally, IDVA operates a residential program for Homeless Veterans' located on the grounds of the Manteno Home.

Nursing Care/Service Levels currently provided at the Veterans' Homes are:

- Skilled Nursing This is an advanced level of long term care provided to Veterans' who have medical needs which require around the clock skilled medical care and who need assistance with the activities of daily living (ADLs), such as bathing, eating, dressing, medication administration, etc. These services are provided at the Anna, LaSalle, Manteno, and Quincy homes and will also be provided at Chicago.
- SNU Special Needs Unit. The special needs unit provides care on a locked nursing unit to ensure the safety of a Veteran who is at risk for elopement. This level of care is provided at the LaSalle, Manteno, and Quincy homes and will be provided at the Chicago Home as well.
- Domiciliary This level of care is considered independent living. Residents are required to be able to self- medicate and perform all ADLs as minimal supervision is provided. These residents can have vehicles and are able to come and go as they please. This level of care is provided only at the Quincy (88 beds) and Anna (12 beds) Homes.
- Homeless Program The 15-bed Prince Home a residential program at Manteno providing supportive services for homeless Veterans'. In addition to providing a safe and secure living environment for homeless Veterans', the program helps equip the Veterans' to achieve individual growth and independence. This program is currently only provided at the Prince Home, located on the grounds of the Manteno Veterans' Home.

The changing demographics of Veterans' that will be served by the Illinois Veterans' Homes are requiring IDVA to adapt its method of service delivery. These changes are due to differences in life experiences between generations, changing clinical needs, and the service expectations of IDVA's "customers." While many of these changes will be internal to IDVA processes, some of the needed changes will require significant infrastructure investment.

Expected service changes will be brought about by the following:

Skilled Nursing – The largest group of residents in the Veterans' homes has been those Veterans' who served during World War II and this group has significantly declined in numbers. Further, while more Korean War and Vietnam War Era Veterans' are starting to require skilled care services, the number of potential residents in these groups is approximately half of the total number from the WWII era. This will not affect the demand on services, however, it will affect the type of services required for these Veterans', both clinically and socially. Clinically, this group is coming in with a higher acuity of illness, which requires higher staffing levels and more advanced technology. Socially, this group and the groups to follow, expect to have more privacy, single bedrooms, access to more varied activities, and access to updated technology.

- Behavior Health Services The ability to provide long term care to Veterans' who are ineligible for a standard skilled nursing unit due to aggressive and other unsuitable behaviors is a rapidly growing need. Unfortunately, care at this level is not currently provided at any IDVA facility. Approximately 60% of admission application denials for IDVA residency are due to behaviors that are incompatible with a typical skilled nursing unit and this number is expected to grow. So, while the overall numbers of Veterans' needing skilled care is expected to drop, the number of Veterans' needing care that IDVA currently does not currently offer, but *should*, will continue to increase.
- Homeless Programs Currently IDVA has the capacity to house only 15 homeless Veterans'; with this
 housing being in one location for the entire state. According to a 2015 HUD report, there are over 400
 homeless Veterans' in Illinois that are not in a sheltered environment. This is yet another service that
 IDVA could provide, given the resources.
- Quality of Life Along with current USDVA design standards, it has become the expectation of today's
 residents, along with a presumption of resident advocacy groups, that long-term care facilities will
 have the following amenities and service levels:
 - Residents housed in a single occupant room with attached bathroom and shower. This enhances quality of life, resident privacy & dignity, and provides better infectioncontrol.
 - Extended dining hours versus the current process of set mealtimes.
 - Integrated nurse call and tv control systems, providing enhanced safety and service.
 - Physical room layouts and the necessary equipment to serve bariatric residents.
 - On site snack/coffee/gift shop for resident's use.
 - High speed Wi-Fi, with unlimited bandwidth for theresidents.
 - Personal laundry completed in house versus sending out tovendor.
- Safety and Security It is both a regulatory requirement and an expectation from families, that residents are kept safe and secure. To meet this objective the Veterans' Homes need:
 - State of the art security access systems
 - Monitored CCTV systems
 - Resident wandering management system installed throughout the entire building
 - Updated nurse call systems

In addition to infrastructure maintenance and repair needs, the current Homes are not designed to provide care in a manner which is currently promulgated by long-term care advocacy groups. Over 75% of the skilled care rooms in the four Veterans' Homes are semi-private rooms. Décor and layouts of the buildings should be updated to achieve IDVA's goal of providing a "home-like environment" to our heroes. Studies have shown that providing an atmosphere that is warm, welcoming and non-institutional, results in residents having a higher quality of life than those residents who live in an institutional nursing home environment. Privacy, dignity, autonomy and the enjoyment of food (very important to the health of senior citizens) increases, resulting in improvement in overall residenthealth.

The overall infrastructure of the IDVA Homes is dated, and in some instances, beyond its useful life. There is currently a backlog of (50) significant maintenance, repair, and upgrade projects that have not received

funding. The dollar amount of this backlog totals in excess of \$119M. Many of these projects have been on the DVA capital request list an average of 10 years, but without new capital improvement funding since May 2009, these deferred maintenance issues have continued to deteriorate at an exponential rate. Projects consist of roof repair or replacement, energy saving systems, updated air handling systems, life safety code upgrades, roadway and sidewalk repairs to correct safety hazards, demolition of abandoned and unsafe buildings, additions to expand capacity, among others.

See Attachment #4 for additional information on these projects.

INFRASTRUCTURE INVESTMENT TASK FORCE SUMMARY

The primary charter of the Infrastructure Investment Task Force is to focus on the design, build, and construction requirements for projects at the Quincy Veterans' Home. Secondarily, the group is looking at the infrastructure needs of the other Illinois Veterans' Homes. Thinking broadly and innovatively about what the future of care will look like for our Illinois Veterans', the ideas produced for the Quincy Home can and will also be used to create innovative ideas for the other Homes as well. The plan produced by the Infrastructure Investment Working Group (IIWG) includes projects (like roofs or renovations), but also includes the recommendation for new buildings or additions on the homes' campuses. The Infrastructure Investment Working Group is considering the needs that our Veterans' will have in the next 5, 10, 20 years – and beyond.

#	INFRASTRUCTURE INVESTMENT PROJECT OPTIONS	Cost Estimate
1	New residential facility, to include independent living facility (recommended)	\$190 - \$230M
2	Alternate housing – Brick and mortar facility (recommended in conjunction with option #1)	\$795,000 purchase price \$5-6M construction cost
3	Alternate housing – Temporary modular facility (under review, but not currently recommended)	\$18M - \$30M ²

PROJECT COST ESTIMATES

INFRASTRUCTURE PROJECT OPTIONS

OPTION 1: CONSTRUCT NEW QUINCY RESIDENTIAL FACILITY (\$190M - \$230M)

Construction of a new facility will provide an up-to-date life enrichment environment, provided in a "small house" manner more appropriate to the needs of the Veterans' who live at the Veterans' Home today. The primary objective of this style of construction is for our Veterans' to feel that the facility is their "home". This includes creating living spaces which allow the resident to have privacy, comfort and to be personalized for the individual resident.

The Illinois Department of Aging has been supporting this concept since 1999, and most recently, the U.S. Centers for Medicare and Medicaid have made this style of living a primary component of their federal survey process. US Department of Veterans Affairs has also implemented a construction design guide which, when followed, will allow us to leverage 65% of eligible construction costs being returned to the State, referenced in a number of legislative initiatives during this session. (SB 667, SB 3127, SB 3144)

While the proposed facility would be one building, possibly two stories tall, the facility would be broken down into "small houses". Each "small house" will be distinct and contain the same amenities the resident left in their previous home such as a small living room, dining room, rec room, etc. New residential units will allow us to offer single occupancy rooms for all residents with a design that will feature private, in suite bathrooms with a roll-in shower to better meet the needs of the Veterans as they age.

² Cost depends on the number of beds needed. The low-end estimate accounts for approximately 120 beds.

When originally constructed, the buildings were military style barracks for residents able to function independently and the current residential rooms were designed to accommodate two people per room and share a toilet with the two people in the next room. There is a single hand washing sink in each resident room that is shared by the two occupants, with no place to put toiletries, personal items, etc. When residents arrive at the campus, they are assigned to a room to live with a fellow veteran whom they have never met, sharing their toilet time and space with two other Veterans' who are also new acquaintances.

Advantages:

- Improves resident quality of life by adding single bedrooms with attached private bathrooms
- Privacy is increased in single rooms
- Increases square footage of community living and diningspaces
- Enhances infection control program by significantly reducing the risk of spreading adisease
- New water distribution system will replace out of date plumbing
- New cooling system will replace cooling tower
- Allows space and planning for state of the art clinical systems and programs
- Reduces reliance on coal burning power plant by decentralizing utility infrastructure to each household/unit
- "Back of the house" system will be connected to or built into the new buildings, making laundry and food service more readily accessible to the households than the current method of delivering everything via trucks traveling all over the campus

Disadvantages:

- Cost will be significant; estimated at approximately \$190M-\$230M including demolition costs
- Time Frame will be 4-5 years to completion.

OPTION 2: Alternate Housing – Brick and Mortar Facility Using Available Building in Local Area (\$5.8-6.8M)

First and foremost, the focus of leadership in Veterans' Affairs and the State of Illinois is the safety of our residents at all the Veterans' Homes. Despite thirty months of diligent work, and given the aging infrastructure and plumbing that currently exist, it has become abundantly clear that new construction is the best solution for the health and safety of our residents and staff. Building new construction will require the demolition of several buildings – including residential spaces.

While new construction is underway, it will be necessary to have an alternative living space for our residents that is comfortable and conveniently located to ensure our staff can continue to provide the same level of quality care that they provide daily.

The asking/purchase price of the local building under consideration is \$795,000 and the estimate for construction is \$5M - \$6M. A CDB Professional Services Survey of the property was conducted to determine if the building could be brought up to current nursing care standards and to establish the

timeline for licensure and certification. The survey and assessment of the current condition of the facility regarding licensure and certification requirements was conducted with participants from the Capital Development Board, Illinois Department of Public Health, the Illinois Environmental Protection Agency and the Quincy Veterans' Home. As a result of the survey, it was determined that work needed to prepare the facility for occupancy would take approximately 6-9 months to complete once the property purchase and approval is granted to move forward. The agencies are exploring the possibility of phased construction for an earlier partial occupancy at 3-4 months after the start of renovation.

Advantages:

- An existing brick-and-mortar building would allow us to occupy the facility quickly within approximately 6-9 months.
- With proximity to the IVHQ campus, this option will allow our staff to stay with the residents minimizing the risk of transfer trauma by maintaining the same caregivers.
- The purchase and renovation would be eligible for participation in the USDVA State Home Construction Grant Program. This program provides for federal reimbursement of 65% of the cost of purchase and construction.
- Being near the IVHQ campus also ensures the likelihood that residents will continue to use on-campus facilities, like the coffee shop and other social areas.
- IVHQ would be assured of securing a peaceful living environment for each resident while providing minimal disruption to their daily routines.
- The potable water distribution system at the alternative site is not connected in any way to the IVHQ system. Preliminary testing at the alternative site indicates that there are good levels of residual disinfection in the City of Quincy water feed.
- It provides a more substantial building to have residents live in while new facility being built.
- Since it is already set up as a long-term care facility, upgrades to the building are simplified.
- The building is known to licensing agencies.
- Provides safe location for residents while campus reconstruction is occurring.

Disadvantages:

• Remodeling will need to be at the same level of appearance and functionality as IVHQ, which will add cost and time to the project, as it is currently is not up to IDVA's exacting standards.

OPTION 3: TEMPORARY MODULAR FACILITY (\$18M - \$30M)

An alternative to the "brick and mortar' building for alternative housing, would be to construct a temporary, modular, residential nursing care unit on the campus. This would provide nearly the same type of service to the residents that would be supplied by a brick and mortar building. There is an up-front cost to prepare survey and level a site and install water, sewer and electrical service to the building. There is a 6-9 month lead-time to get the site prepared and the modular units delivered and assembled. The estimated cost is \$125-\$150 per square foot and an average of 1,000 square feet per bed is a general rule

of thumb. (This figure includes an allowance for hallways, dining rooms, rec rooms, storage, etc., and is <u>not</u> the size of the actual resident room itself). Cost is approximately \$125,000-\$150,000 per bed, so actual cost of the building is dependent upon the amenities desired and is comparable to new construction.

What should be considered, however, is that due to the short serviceable life of a modular building, this is a very expensive option for a structure that will last a brief time. Per the manufacturers, modular units only have a serviceable life of five years at most.

Advantages:

• Provides an alternate residence location while permanent construction takes place.

Disadvantages:

- This option is expensive. Approximately 6-7 times the cost of purchasing a building already in place.
- Will not be eligible for USDVA Construction Grant Program.
- Short term solution. With a life span of 4-5 years, a new location or building would need to be built in that time frame.
- Will require significant foundation and utility supply engineering and installation.

RECOMMENDATION

The recommendation of this group for IVHQ is twofold. The Task Force proposes constructing an entirely new facility, to include new water distribution system; and purchasing alternative housing using an existing brick and mortar facility. This would provide our Veterans' a state of the art home, with safe, up-to-date utilities, meeting the current and future clinical and therapeutic needs.

The infrastructure of the current campus has aged beyond the useful life of most building systems. Currently, millions of construction and maintenance dollars are needed just to keep the buildings operable, let alone, provide upgrades to better support the needs of the Veterans. A limited list of projects needed to be funded and completed are:

- Replace single pane, steel frame windows
- Replace or upgrade heating and ventilation systems
- Upgrade electrical systems
- Replace old plumbing systems



This chart represents the estimated timelines for completion of the projects recommended by the committee (New Residential Building, Domestic Loop/Alternate Supply, and Off-Site Facility). Each of these project timelines was developed with certain assumptions impacting completion dates, including: 1) a commencement date of 5/31/18, which would require funding to move forward, and 2) the standard process timeframes for procurement and standard work hours were applied. Note that any deviations from these assumptions (such as not obtaining necessary funding or unanticipated procurement issues, like a bid protest) will impact the completion timelines. Timelines are based on normal procurement processes. Timelines may be shortened if there are any waivers granted due to the emergency nature of the work required to ensure the safety of the residents of IVHQ.

This chart also contains the timelines for completion of projects currently being procured or underway at the Quincy Veterans' Home (which include the Master Plan, Emergency Water Monitoring/Filtration, and Point-of-Use Filtration/Bolus).

- The point of use filtration/bolus system allowed the Veterans' Home to contract with a plumber to
 install injection quills on the incoming water main at each building and facilitates the inoculation of
 individual buildings with additional chlorine if water tests reveal low disinfection levels. Additionally,
 IVH-Q was able to install point of use 0.2micron filters at each hand washing sink on campus and the
 purchase and installation of over 700 gooseneck faucets. (Jan-18 to Mar-18 / 60 days)
- The emergency water monitoring/filtration project will provide a water monitoring system that will
 measure the flow and chemical through each buildings' hot and cold-water distribution system and
 notify the Water Treatment Plant of the status. Additionally, the project was expanded to include
 installation of in-line filtration to filter large particulate matter and suspended solids in the water
 which have been found to clog the micro-filters installed at point of use fixtures. This is expected to
 extend the life of the filters so we can take full advantage of their projected 31-day useful life. The inline filters should begin to be installed in May 2018 subject to availability of the parts. (Feb-18 to Nov18 / 278 days)

- Completing a master plan to guide future new construction and improvements on the campus over a 50-year period. This requires careful consideration of the existing campus facilities when determining the best course of action for providing a safe and secure environment for the facility's occupants. This planning effort will require an assessment of the current infrastructure with a critical analysis of how to achieve compliance with current energy and sustainability requirements. The team must be prepared to research, document, evaluate and present concepts that articulate a unique vision sensitive to the Veterans Home's core purpose and functions, while preserving and improving the overall character of the campus environment. Phased development and implementation of the master plan may be required to allow priority projects to move forward while completion of the overall Master Plan is underway. An overall Master Plan with a 5-year, 10-year, 20-year and 50-year phased implementation plan will be required. The final master plan is due December 2018. (Mar-18 to Dec-18 / 280 days)
- The off-site facility has been located and selected. The sale is pending at the publication of this report. The facility needs renovation to bring it up to the standards required by IDVA for the care of our veterans. Assuming purchase of the property in early- to mid-June and renovations taking 6 to 9 months to complete, occupancy could be in December 2018. This will be driven by funding whether an emergency can be declared to expedite the A/E and contractor selections. (May-18 to Nov-18 / 165 days PLUS 90 days for late completion)
- A domestic water loop and alternate water source will also require funding and engineer selection prior to design and construction. The project will involve laying out a new water distribution system on the campus and location of an appropriate, sustainable water source, determining how best to bring the newly sourced water to the campus and any necessary treatment requirements, where to locate new water distribution system and how best to protect it from cross contamination that could lead to the development biofilm and introduce it into the retained existing or newly constructed building(s) on the campus. (May-18 to Jun-20 / 375 days PLUS 540 days for late completion)
- A **new residential building** will require funding prior to advertising for an Architect/Engineer Firm to be interviewed and selected. The new construction must comply with IDPH and USDVA construction standards and will ultimately become licensed by IDPH and certified by USDVA. The goal of the construction is to cause minimal disruption to the residents, families, staff and community as possible. (May-18 to Jul-23 / 1,875 days PLUS 240 days for late completion)

WATER MANAGEMENT TASK FORCE SUMMARY

The primary charter of the Water Management Task Force is to produce an evolved plan for remediation of water at IVHQ. After much discussion and research into numerous technologies and approaches, the Task Force has determined that there are some basic imperatives that will be required for the IVHQ campus before any other efforts take place. The Task Force recommends these imperatives for water remediation at IVHQ. Beyond the imperatives, there are at least two other options that will be presented in this proposal. These options are <u>in addition to</u> the imperative recommendations that must be implemented.

The proposed approach addresses the basic water quality needs of IVHQ. This approach is described in detail below. The recommendations are derived from the best accumulated knowledge and are based on the history of the current situation regarding *Legionella* contamination within the Home's campus. These recommendations will provide a safe living environment for residents and staff for years to come.

Following the description of the basic imperatives, the Task Force has provided two options that can be implemented once the imperatives are complete. Both of the options are viable, but the Task Force has concluded with a preferred recommendation.

WATER MANAGEMENT IMPERATIVES	Cost Estimate
Installation of new water loop on campus (includes replacing all plumbing services to existing buildings) – <i>recommended in</i> <i>conjunction with new facility</i>	\$2.2M
Obtain an alternate source of water supply - recommended	\$3.0M - \$4.5M

PROJECT COST ESTIMATES

#	WATER MANAGEMENT PROJECT OPTIONS	COST ESTIMATE
1	Continue to use microbiological filters on all points of use – cost is annual - <i>recommended</i>	\$840K
2	Replumb all buildings on the campus, to include new campus water loop – <i>not recommended at this time</i>	\$2.2M for water loop \$13.4M for replumbing

WATER MANAGEMENT IMPERATIVES

FIRST IMPERATIVE: INSTALLATION OF NEW WATER LOOP ON CAMPUS (\$2.2M) – STRONGLY RECOMMENDED

The installation of a new water loop would entail the complete replacement of the underground water distribution system from the current water treatment building to every building on campus. New piping

would remove the current system which is suspected to contain significant amounts of biofilm, which may be harboring biological organisms. This would be an extensive project; however, it would offer significant benefits.

New systems will be installed utilizing materials with no predisposition to contamination, which can be readily sanitized in a controlled installation environment. System design will employ optimum design measures, maximizing flow, reducing temperature, and reducing opportunity for harboring bacteria. The new system will be looped eliminating radial feeds, thereby enhancing the opportunity for more continuous flow in the system. The new system would be constructed while the existing system continues to provide service to each building it serves. To the largest degree possible, as domestic water piping is replaced in existing buildings, it would connect to new building service entrances and new site distribution piping. *As such, this imperative should be coupled with the new construction option or the replumbing all building option.*

Advantages:

- IVH-Q would have the opportunity to create a new water loop directly from the water treatment facility and circulate around the campus.
- The water loop would not be affected by the existing potable water loop which is presumed to have a mature, colonized biofilm.
- A new water loop could be connected to the new building piping system in the buildings selected for retention, further insulating the building from introduction of the colonized biofilm.
- The loop will ensure minimal maintenance while providing quality water for the future of the home.
- A dedicated potable water main allows for proper sizing of the main for the use of potable water needs. This ensures minimal low flow performance, as opposed to a larger water main combined service sized for fire suppression, which creates low flow performance.
- A new dedicated potable water loop eliminates the possibility of cross contamination from the fire suppression system.

Disadvantages:

- Significant effect on campus operations and the living environment for the residents. They would need to be moved to other locations to prevent exposure to noise, vibrations, and dust, in addition to having no water service.
- Very high initial cost and will take an extended period of time to complete approximately 2-3 years with the replumbing option.

PROJECT COST ESTIMATES

SECOND IMPERATIVE: OBTAIN AN ALTERNATE WATER SOURCE (\$3.0 - \$4.5M) – STRONGLY RECOMMENDED

The Water Management Task Force recommends that IVHQ obtain an alternate source of water for its needs. At this time, however, the Water Management Task Force continues to review the alternate

source options to determine the best course of action.

Obtaining an alternate source of water has many overall advantages. This will not only result in a significant savings in water costs, but also has the potential to provide a higher quality of water for the home to treat. The water would come from an aquifer or well, rather than the surface water of the Mississippi River. Using natural filtration of rocks and sand, the water will be cooler and the temperature would fluctuate less. This will provide the facility with consistently lower water temperatures, lower organics, and consistent neutral PH, among other benefits.

An alternative water source will require capital investment, including, but not limited, to the following:

- Procurement and purchase of property
- Drilling a test well
- Well ongoing infrastructure needs
- Appropriate security measures
- Access roads for maintenance
- Utilities, to include emergency power supply
- Logistics of the pipeline feed
- Water treatment

Follow up research is being done to determine the best option.

#	WATER MANAGEMENT PROJECT OPTIONS	COST ESTIMATE
1	Drill a well at an off-site aquifer	\$3.2M
2	Ranney collector well (partnering with City of Quincy)	\$3.0M
3	Drill deep well on-site	\$4.5M

Option 1 - Drill a well at an off-site aquifer – Under Review

Advantages:

- Minimal organics and bacteria, as opposed to surface watersource
- Consistent, lower temperatures
- Neutral pH levels
- Minimal cost in water treatment
- Historically water sources of this nature do not contain Legionella
- Minimizes chance of biofilm build up within the new piping system

Disadvantages:

• Initial cost of drilling well, and associated cost of piping to facility

- Hard water must be softened
- Redundant wells will be required to ensure adequate capacity and consistent source water
- Water storage will be needed
- Additional oversight of expanded water system will increase operational needs and costs

Option 2 - Ranney Collector Well (Partnership with City of Quincy) – Under Review

Advantages:

- Cheapest option
- Minimal environmental impact
- Stable water chemistry, similar to option 1
- Consistent, lower temperatures
- City of Quincy municipality operated
- Water storage may not be needed if IVHQ can remain a part of Quincy municipal distribution system

Disadvantages:

- May require a dedicated water main to the campus from the Quincy municipal water treatment plant should disinfectant byproduct formation occur in the Quincy municipal distribution system
 - A dedicated water main would enable the municipal water treatment facility to provide an acceptable disinfectant type if it becomes necessary
 - Water storage would become necessary if the campus must be isolated from the municipal distribution system

Option 3 – Drill Deep Well On-site – Not Recommended

Advantages:

- Well location close to current water treatment building thus requiring minimal piping additions.
- No additional cost of obtaining off-site property.

Disadvantages:

- Very expensive well to drill and maintain due to its depth.
- Lower water quality, with high radon levels, are associated with these wells
 - o This will require an aeration process, with subsequent additional capital investment
- Reverse osmosis treatment may be necessary to comply with maximum contaminant level requirements for naturally occurring radionuclides
- Test well is expensive
- A second redundant well will be needed
- Unknown quantity of water the well will produce and if it will be enough for campus needs

- Additional oversight of expanded water system will increase operational needs and costs
- Wastewater disposal cost

WATER MANAGEMENT PROJECT OPTIONS

OPTION 1: CONTINUED USE OF MICROBIOLOGICAL FILTERS CAMPUS-WIDE (\$840K PER YEAR) – STRONGLY RECOMMENDED

Per CDC technical assist visit in October 2017, IDVA has followed through with the implementation of point of use microbiological filters to mitigate *Legionella*. The engineering team has installed brand new faucets to accommodate the Pall micron filters, which are specifically designed to block *Legionella* bacteria. These filters are now installed on every faucet, sprayer, shower, tub, drinking fountain, and ice machine across the campus. Additionally, IVHQ has installed portable chemical injection bolus systems to provide calibrated chemical injection to one residential building at a time as the need is determined by the water test results for each structure.

Using this system of microbiological filters coupled with the bolus injection systems, provides protection to our residents and staff for an extended period. The challenge to this option is the cost of replacing the filters, however, if given the proper resources, this could be a relatively sustainable option. To date, the Phigenics Lab and the Water Management Working Group have not found *Legionella* bacteria post-filter.

Advantages:

- Microbiological filtration provides an effective barrier from waterborne microbial contamination, including *Legionella*, to 0.2 micron.
- At IVHQ, there has been no detection of *Legionella* bacteria post microbiological filter installation to date.

Disadvantages:

- Although microbiological filters provide an elevated level of safety, they are costly and have the potential to clog, which reduces water flow. This results in the replacement of filter prematurely, adding additional cost. On average, these filters cost \$65 each and require replacement at least every 30 days.
- The reduced flow can contribute to resident dissatisfaction with the water.
- The reduced flow of water due to these filters creates a minimal flow environment within the piping system that can defeat the purpose of the flushing program.
- Microbiological filtration is an excellent option for immediate protection for residents and staff, however, it is not usually recommended as a long-term option for the reasons cited above.
- At approximately 700 points of use filters per a 30-day scheduled change out program, continued use of this filtration system will cost approximately \$840,00.00 per year, until reduced or discontinued use.

(NOTE: Costs might be higher as filters must be changed more frequently when fouled, shortening their effective life.)

OPTION 2: REPLUMB ALL BUILDINGS ON THE CAMPUS (\$13.4M – NOT INCLUDING NEW WATER LOOP COST OF \$2.2M) – NOT RECOMMENDED

Replacement of the water distribution loop and the plumbing supply lines to each building, whether as part of new facility construction or as a standalone remodeling project, would be the only way to guarantee the removal of biofilm from the current water distribution system. This option proposes installing new plumbing in the existing buildings on campus.

While replumbing the existing facilities is a viable option, there are inherent risks and challenges that will arise with this construction. Not only will residents be disrupted, the Illinois taxpayer will be paying to put new pipes in buildings that are completely out of date from a design, infrastructure, and technology perspective.

Advantages:

• Immediate attention to safe guard residents and staff through plumbing replacement renovation, which includes new water source, and HVAC upgrade.

Disadvantages:

- Significant cost will be incurred yet the buildings will still be old and wornout.
- This project will take 2-3 years to design and complete.
- This is not a long-term solution, as said buildings have numerous infrastructure deficiencies, such as requiring roof replacement, window replacement, antiquated HVAC control systems, antiquated nurse call systems, do not meet current ADA requirements, etc.
- All buildings need electrical service updating.
- Tunnel infrastructures and the mechanical support systems that power the buildings, are in desperate need of replacement.
- Building design and layout are not conducive to current nor future needs of our Veterans' clinical care.
- Plumbing renovation while residents reside in place is possible, however, there would be considerable dust, noise, dirt, and vibration and possible respiratory issues.
- Funding would be better utilized in a renovation of a local building that has multiple future use options covering the needs of the facility during new construction or renovation at IVHQ.

RECOMMENDATION:

Although all proposed options are continued steps to *Legionella* remediation, *anything short of total replacement falls short of providing a proposal with our full confidence.* Therefore, the Water Management Task Force recommends implementing the projects for the basic imperatives:

- Installation of a new waterloop
- Obtaining an alternative water source

Lastly, the Task Force recommends Option 1: Continued use of the microbiological filters campus-wide until determined to be no longer needed. This would be the most effective approach to safeguarding our residents and staff with minimal disruption to their daily lives while new construction is underway.

CONCLUSION

After considerable research and deliberation, the Combined Veterans' Capital Needs Task Force has concluded that the most viable and effective long-term option for the future of the IVHQ is a new facility. This recommendation will be optimized by adding a new plumbing water loop and an alternative water source. Implementing these three recommendations will not only ensure the safety and security of our residents and staff, but it also will provide a new state-of-the-art facility with a modern design and technology that will improve the quality of life for our Illinois heroes. This proposal requires the approval and appropriation by the Illinois General Assembly for a combined recommendation totaling \$202M - \$245M. This is a vision for the future needs of our veterans – giving them a home and the highest quality of care that they deserve for generations to come.

INFRASTRUCTURE MANAGEMENT

Infrastructure Management Task Force			Infrastructure Management Working Group				
State Agencies			Illinois Department of Veterans' Affairs				
-	Mike Hoffman	Governor's Office	•	Harry Sawyer	Assistant Director		
-	Erica Jeffries	IDVA Director	•	Lenard Winnicki	Senior I	Homes Administrator	
-	Nirav Shah	IDPH Director	•	Gwen Diehl	Veterar	ns' Homes Coordinator	
-	Alec Messina	IEPA Representative	•	Troy Culbertson	IVHQ	Administrator	
-	Amy Romano	CDB Representative	•	Julie Togarepi	IVHQ	Director of Nursing	
			•	Holly Perrine	IVHQ	Assistant DON	
Feo	deral Agencies		•	Dave Clifford	IVHQ	Chief Engineer	
-	Rep Mike Bost / Staffer		•	Dawn Whitcomb	IVHQ	Adjutant	
-	Rep Darin Lahood / Staff	er	•	Lester Robertson	IVHM	Administrator	
-	Dr. David Shulkin	VA Representative	•	Laurie Williams	IVHM	Asst DON	
-	Scott Pruitt	EPA Representative	•	Bill McLaughlin	IVHM	Chief Engineer	
			•	Tanya Huston	IVHM	Adjutant	
<u>Gen</u>	eral Assembly Members		•	Sherri Whitmer	IVHL	Administrator	
•	Jill Tracy	Senator 47 th District (R)	•	Jackie Cook	IVHL	Director of Nursing	
•	Paul Schimpf	Senator 58 th District (R)	•	Angela Simmons	IVHA	Administrator	
•	Tony Munoz	Senator 1 st District (D)	•	Shelly Miller	IVHA	DON	
•	Martin Sandoval	Senator 11 th District (D)					
•	Linda Chapa LaVia	Representative 83 rd District (D)	Illine	ois Department of Public He	alth		
•	Robert Martwick	Representative 19 th District (D)	•	Debra Bryars	Dep Dir	, Health Care Regs	
•	Randy Frese	Representative 94 th District (R)	•	Justin DeWitt	Environmental Health		
•	Mike McAuliffe	Representative 20 th District (R)	•	Aaron Martin	Environmental Health		
			•	Henry Kowalenko	Life Saf	ety	
			•	Dennis Schmitt	Life Saf	ety	
Quin	cy City Officials						
•	Kyle Moore	Mayor	Illine	ois Capital Development Boa	ard		
			•	Amy Romano	Acting I	Executive Director	
			•	Jaclyn O'Day	Legislat	ive Liaison	
			•	Chris MacGibbon	Project	Manager	
			•	Kathryn Martin	Dep Dir	, Operations	
			•	Mike Wilson	Dep Dir	, Construction	
			•	Ron Wright	Constru	uction	
			•	Lisa Mattingly	Professional Services		
			•	Marcy Joerger	Programming		
			•	Gus Behnke	Fiscal		
			•	Carl Kimble	Mechanical Engineering		
			Amber Evans Programming		nming		
			•	James Cockrell	Regiona	al Manager	

WATER MANAGEMENT

Water Management Task Force			Water Management Working Group			
Stat	e Agencies		Illinois Department of Veterans' Affairs			
-	Mike Hoffman	Governor's Office	-	Renysha Brown	Chief of Staff	
-	Erica Jeffries	IDVA Director	-	Dave Clifford	IVHQ ChiefEngineer	
-	Nirav Shah	IDPH Director	-	Lenard Winnicki	Senior Homes Administrator	
-	Alec Messina	IEPA Representative	-	Gwen Diehl	Veteran Homes Coordinator	
-	Amy Romano	CDB Representative	-	Troy Culbertson	IVHQ Administrator	
			-	Holly Perrine	IVHQ Assistant DON	
Feo	leral Agencies		-	Lindsey Kelley	IVHQ Infection Control	
-	Rep Mike Bost / Staffer		-	Dawn Whitcomb	IVHQ Adjutant	
-	Rep Darin Lahood / Staffe	r	-	Shelly Miller	IVHA DON	
-	Dr. David Shulkin	VA Representative	-	Matt Eddington	Deputy General Counsel	
-	Scott Pruitt	EPA Representative				
			<u>Illir</u>	nois Department of Public Health		
Ge	neral Assembly Members		-	Justin DeWitt	Environmental Health	
-	Bill Haine	Senator 56 th District (D)	-	Aaron Martin	Environmental Health	
-	Jill Tracy	Senator 47 th District (R)	-	Ken McCann	Environmental Health	
-	Dan Swanson	Representative 74 th District (R)				
-	LaShawn Ford	Representative 8 th District (D)	Illin	nois Capital Development Board		
-	Randy Frese	Representative 94 th District (R)	-	Chris MacGibbon	Project Manager	
			-	Mike Wilson	Dep Dir, Construction	
<u>Qui</u>	ncy City Officials		-	Ron Wright	Construction	
-	Kyle Moore	Mayor	-	Lisa Mattingly	Professional Services	
-	Jeff Conte	Director, Water Department	-	Carl Kimble	Mechanical Engineering	
Ada	ams County Health Departr	<u>nent</u>	Illinois Environmental Protection Agency			
-	Jerrod Welch		-	Dave McMillan	IEPA Representative	
-			-	David Cook	IEPA Representative	
Bles	<u>Sing Hospital</u>	650	۸d	ame County Health Donartmont		
-	waureen kann	LEU	Aud		Director ACHD	
			-	Jon Campos	Environmental Health	
			-	Tony Dede		
			Cer	tified Water Operator		
			-	Bill Bainter	Bainter Environmental	
			Cor	nsultant – Water Safety		
			•	Marty Detmer	Phigenics, LLC	
				-,	<u> </u>	

CONSTRUCTION DATES OF SELECTED BUILDINGS

Illinois Veterans' Homes – Quincy

Residential and Recreational Use by Residents

STATE ID	IVHQ ID	BUILDING NAME	DATE BUILT	SQ FOOT	FLOORS
WO603	31	NORTHERN GUEST HOUSE (<i>Overnight Visitors</i>)	1886	6,949	2
WO606	30	LIBRARY (<i>Recreational Activities)</i>	1905	5,910	2
WO612	22	ANDERSON BARRACKS (<i>Residential)</i>	1909	38,680	4
WO610	20	SOMERVILLE DOMICIIARY (<i>Residential)</i>	1909	38,680	4
WO613	36	SMITH HALL COFFEE SHOP (Used for Recreation)	1935	18,286	2
WO600	37	LIPPINCOTT HALL Recreational Activities)	1939	19,324	3
WO646	94	ELMORE INFIRMARY (<i>Residential)</i>	1963	34,126	3
WO643	92	NIELSON DINING/KITCHEN/STORAGE (Central Kitchen/Dietary)	1963	40,929	3
WO644	93	SCHAPERS HOSPITAL (Residential)	1963	35,716	2
WO647	90	MARKWORD INFIRMARY (<i>Residential)</i>	1964	27,504	3
WO649	97	ALL FAITHS CHAPEL (<i>Religious Activities)</i>	1972	5,357	1
WO660	100	MULTI-PURPOSE THERAPY BUILDING (Physical Therapy)	1995	41,100	2
WO661	101	FIFER SKILLED CARE FACILITY (<i>Residential)</i>	2002	43,077	2

Department of Veterans' Affairs CDB Project Report - FY19

CDB Number	Location	Project Title	Estimated Cost
040-000-R01	Statewide	STATEWIDE - Evaluate Veterans Homes compliance with IDPH Temp and Humidity Guidelines	\$100,000.00
040-000-R02	Statewide	LIFE SAFETY Synchronize the Fire Alarm Strobe Lights	\$100,000.00
040-010-097	Quincy	CONSTRUCTION FUNDING - Renovate Kent, Schapers B, Elmore Buildings - Equip & Telecom	\$24,000,000.00
040-010-R	Quincy	Plan and Begin Campus Construction	\$250,000,000.00
040-010-R01	Quincy	Roof Replacement and Renovation at Anderson and Somerville Domiciliary Buildings	\$885,000.00
040-010-R02	Quincy	Plan and Begin Cemetery Renovation	\$100,000.00
040-010-R03	Quincy	Roof Replacement - Elmore, Schapers, Power Plant & Laundry	\$872,800.00
040-010-R04	Quincy	ENERGY Renovate Laundry	\$1,925,400.00
040-010-R07	Quincy	Renovate Central Kitchen	\$454,200.00
040-010-R09	Quincy	ENERGY CONSERVATION Evaluate and Upgrade AHUs in Elmore	\$340,700.00
040-010-R16	Quincy	ENERGY CONSERVATION Upgrade Electrical System - Headquarters Building	\$637,900.00
040-010-R18	Quincy	Water Tower DEMOLITION	\$130,000.00
040-010-R20	Quincy	Tuckpoint Various Buildings Facility wide	\$1,639,200.00
040-010-R21	Quincy	LIFE SAFETY Upgrade Hydraulic Elevators-Code Compliance	\$1,166,600.00
040-010-R23	Quincy	Demolish Fogg Barracks - Asbestos Abatement	\$130,000.00
040-010-R25	Quincy	ENERGY Replace Waste Water Lines - General Stores	\$359,000.00
040-010-R26	Quincy	LIFE SAFETY Install/Replace Emergency Power Generation Capability	\$1,465,500.00
040-010-R46	Quincy	LIFE SAFETY Upgrade Utility Tunnels	\$994,200.00
040-010-R47	Quincy	Resurface Roads, Parking Lots, Sidewalks	\$1,199,200.00
040-010-R48	Quincy	LUMP SUM - Building Shell & Life Safety Improvements, HVAC & Utility Systems Upgrades	\$9,633,000.00
040-010-R49	Quincy	LIFE SAFETY & ENERGY - Replace Chiller - Markword Building	\$509,400.00
040-010-R50	Quincy	ENERGY CONSERVATION - Replace Vacuum and Condensate Pumps	\$572,400.00
040-010-R52	Quincy	Provide Exterior Entrance to Physical Therapy Bldg.	\$560,200.00
040-010-R54	Quincy	EPA Emissions Rule Compliance - Emission Reduction and Monitoring of Coal Fired Power	\$1,000,000.00
040-010-R56	Quincy	Feasibility Study - Decentralize Heating & Cooling Systems and Eliminate Coal Fired Power	\$1,000,000.00
040-020-R01	Manteno	LIFE SAFETY & ENERGY CONSERVATION Central Kitchen Renovation	\$569,900.00
040-020-R02	Manteno	Roof Replacement & Make Structural Repairs as Necessary	\$1,020,800.00
040-020-R03	Manteno	ENERGY Replace HVAC Systems - Buildings A1 & A2	\$701,600.00
040-020-R04	Manteno	Demolish Ten Vacant Buildings	\$1,130,000.00
040-020-R10	Manteno	ENERGY Replace Water Mains Throughout the Facility	\$1,967,400.00
040-020-R14	Manteno	Replace Veterans' Hall in Building S2	\$3,040,000.00
040-020-R25	Manteno	LIFE SAFETY & ENERGY HVAC, Means of Egress, Envelope, North/South Interconnects	\$3,373,900.00
040-020-R26	Manteno	ADA Improvements – ADA Exit Ramps, Install Door Opening Devices, Widen Doors and Frames	\$1,917,500.00
040-020-R28	Manteno	LIFE SAFETY Restroom Renovation - Buildings R1, R2, R3, R4	\$2,620,900.00

CDB Number	Location	Project Title	Estimated Cost
040-020-R29	Manteno	ENERGY Replace Air Handlers - Buildings R1, R2, R3, R4, S1 and S2	\$1,576,000.00
040-020-R30	Manteno	LIFE SAFETY Stabilize Abandoned Tunnels	\$2,092,800.00
040-020-R32	Manteno	Demolish Abandoned Sewage Digester, Chimney and Pumping Station	\$500,000.00
040-020-R34	Manteno	Plan and Begin Cemetery Renovation	\$80,000.00
040-020-R35	Manteno	LUMP SUM - Life Safety Improvements/Upgrade HVAC and Utilities Systems	\$12,910,000.00
040-050-R02	LaSalle	Expand Storage Building and Construct Maintenance Shop and Garage	\$3,276,000.00
040-050-R03	LaSalle	Renovate/Repair Original Portion of Facility	\$674,700.00
040-050-R04	LaSalle	LIFE SAFETY Replace Nurse Call Stations, Security Alarm System and Fire Alarm System	\$919,700.00
040-050-R10	LaSalle	Install Sidewalk, Lighting and Fencing	\$112,200.00
040-050-R11	LaSalle	LUMP SUM - Life Safety Improvements/Upgrade HVAC and Utilities Systems	\$1,159,000.00
040-050-R12	LaSalle	LIFE SAFETY Replace Original Boilers, Chillers, Generator, and Mechanical Systems	\$2,133,500.00
040-050-R13	LaSalle	LIFE SAFETY Repair/Replace Existing Oxygen Storage System	\$557,600.00
040-060-013	Anna	CONSTRUCTION FUNDING - Construct 44-Bed Nursing Home Care Addition; Equip & Telecom	\$23,000,000.00
040-060-R03	Anna	ENERGY CONSERVATION Air Handling Repairs/Improvements	\$722,400.00
040-060-R06	Anna	LUMP SUM - Building Shell Repairs/Life Safety Improvements/HVAC & Utility Systems	\$939,000.00
040-060-R07	Anna	LIFE SAFETY Replace Nurse Call System	\$188,000.00
040-080-001	Chicago	Moveable Equipment	\$2,500,000.00

TOTAL: \$369,457,600.00

*A NEW CAMPUS AT QUINCY MAY AFFECT/ELIMINATE SOME OF THE NEEDS REFLECTED ON THIS LIST