Memorandum



TO: Health Advisory Commission

FROM: Adam Meier, Director DATE: September 28, 2021

SUBJECT: Montana Veterans' Home, Columbia Falls

Overview: Public Law 117-2 Section 8004 signed on March 11, 2021 provides \$250 million for an additional one-time payment for projects identified as COVID-19 prevention and/or operational projects to improve the quality of life of the residents at state facilities for veterans. Allocations are based on each state's share of the total number of veterans who are residents, as of March 11, 2021, in veterans' homes across the United States.

Allocation Request and Deadlines: The Montana Veterans Home received \$1,004,788 to improve living conditions at state veterans' homes. This one-time payment must be used by September 30, 2022 for projects identified as COVID-19 prevention and/or operational projects to improve the quality of life of the residents. HAC approval is necessary by September 1, 2021 to complete all project deliverables by September 30, 2022.

Eligibility: Each project is an eligible facility improvement project.

Structure: This funding will be used to expand the wander prevention system; repair/replace old decaying sewer system pipes; replace older transport vehicles with newer models, and to improve air handling and ventilation systems to protect residents from COVID-19 and other air borne pathogen transmission. The Montana Veterans Home will use standard state procurement processes to accomplish the following improvements:

Wander Prevention System Upgrade

The Montana Veterans Home campus in Columbia Falls sits adjacent to the Flathead River on nearly 150 acres of undeveloped green space. There are various walking paths on the campus for residents to enjoy. During the most recent health survey, the facility was cited (CFR 483.25(d)(1)(2)) for not having an adequate system and process to monitor residents when they are outside. Rather than impacting the ability for residents to move freely, MVH believes a reasonable solution would be the expansion/improvement of the existing wander prevention system. This solution would require purchasing additional equipment and modifying the electrical power. This project can be completed as a contract for goods and services. The newest estimate from the vendor is \$135,000.

Performance Metric: Success will be measured when project has been completed. Specific markers include: enhanced freedom of movement for residents while ensuring their safety and protection as evidenced by no further citations and no resident elopements.

Sewer System Pipe Replacement

The sewer pipes in the 1970 building (the DOM and Administration) and the 1973 40- bed addition are approximately 50 years old. Cast iron pipes can last anywhere from 50 to 65 years. However, these sewer pipes are showing signs of failure as evidenced by slow leaking sewage and sewer gas odors wafting into resident living quarters. This situation was discovered in May 2021 and is an immediate life-safety issue that needs quick resolution.

At this time, MVH is aware that the first two feet of pipes are failing. However, there is a total of 112 feet that may be impacted. The sewer pipes are encased in concrete and maintenance staff have a difficult time accessing the faulty pipes. A plumber will be needed to run a camera down the line to determine actual damage. Once the length of damaged pipe is determined, potential solutions could include abandoning the old lines and re-routing the sewer lines with new lines and/or performing a trenchless replacement (pipe-bursting and replacement) of the old lines. Estimated cost to re-route the sewer lines is \$60-\$260 per linear foot, with a verbal total estimated at \$200,000.

The temporary solution of the odiferous problem is a seal to the concrete, scatter cat litter around the floors that are accessible to staff (to soak up any residual leaks) and apply a strong deodorizer solution to the cat litter to mask the raw sewage odor. This is not an optimal long-term solution because it does not solve the life-safety violation due to the presence of sewage.

Performance Metric: Success will be measured when each sequence/project has been completed. Specific markers include: restored pipes to enhance air quality and meet basic sanitation standards and avoid life-safety citations.

Vehicle Replacement

The facility will upgrade vehicles with any funds remaining after the completion of the operations projects. The vehicles in line to be replaced include: 1993 Ford Aero Star Van with 121,000 miles; 1999 Dodge Dakota Truck with 133,000 miles; 2006 Dodge grand caravan with 110,000 miles, 2006 Dodge Stratus with 75,000 miles). The estimated replacement cost per vehicle ranges between \$25,000 and \$32,000

 Performance Metric: Success will be measured when each sequence/project has been completed. Specific markers include: enhanced safe transport of residents and staff, with more reliable vehicles resulting in lower repair and maintenance costs in comparison to the previous 12 months.

HVAC Improvements

A facility air handling system that processes air to decrease contaminated particulates from recirculating into the shared living spaces will help prevent the spread of COVID-19 and other air borne pathogens at this skilled nursing facility. In June 2021 Morrison-Maierle (attached)

provided a detailed evaluation of the MVH ventilation systems along with recommendations for improvement.

For a typical resident room, with a size of 200 sq-ft and a standard 8-ft ceiling height, the recommended continuous ventilation rate for these rooms should be at least 2-air changes per hour (53-CFM) of 100% outdoor air with no recirculated air. The current ventilation airflow to these rooms is provided through the fan coil's wall louver and is only active when the unit is in heating or cooling demand. The ventilation rate is zero when the unit is not operating.

The recommended method for increasing the ventilation rates to these areas is with the addition of new (roof mounted) Dedicated Outdoor Air Systems (DOAS Units) and/ or heat-recovery ventilation units. Due to ceiling space constraints, it may be necessary to reroute some ductwork.

The cost of this project is \$590,000 which includes new ventilation, duct work and controls, as well as structural and electrical upgrades. According to 18-2-102 (2)(a), MCA, the Governor may authorize emergency repair or alteration of a building and is authorized to transfer funds and authority as necessary to accomplish the project. Conversations with A&E indicated available federal authority, while Senior and Long Term Care holds the funds. If this project is approved by the HAC and subsequently the Governor, this project can be completed without the consent of the full legislature.

Performance Metric: Success will be measured at project completion. An air quality data collection process will be designed to include tracking the percentage of air borne pathogens circulating in the building.

Recommendation: Allocate \$1,004,788 to cover the wander system upgrade, the urgent sewer pipe project, the purchase of vehicles, and the improvements to the HVAC system to increase protection against air borne pathogens and improve air and facility humidity, to the extent allowed under all applicable laws, regulations, and guidance.

Memorandum



TO: Health Advisory Commission

FROM: Adam Meier, Director DATE: September 28, 2021

SUBJECT: Eastern Montana Veterans' Home, Glendive, MT

Overview: Public Law 117-2 Section 8004 signed on March 11, 2021 provides \$250 million for an additional one-time payment for projects identified as COVID-19 prevention and operations projects to improve the quality of life of the residents at state facilities for veterans. Allocations are based on each state's share of the total number of veterans who are residents, as of March 11, 2021, in veterans' homes across the United States.

Allocation Request and Deadlines: The Eastern Montana Veterans Home (EMVH) received \$546,723 to improve living conditions at state veterans' homes. This one-time payment must be used by September 30, 2022 for projects identified as COVID-19 prevention and/or operations projects to improve the quality of life of the residents. HAC approval is necessary to complete all project deliverables by September 30, 2022.

Structure: This funding will be used to improve infection control and quality of life in EMVH by upgrading resident rooms and corridors by replacing resident room laminate countertops with solid surface countertops, updating all cracked and worn wardrobe closets, swapping all existing carpet to vinyl flooring, and painting the interior of the facility. All the cabinetry and countertops are original to the 25-year-old facility and pose many infection-control concerns throughout the facility.

The three projects below are considered life-safety issues as each has risen to a "tag" level citation for the facility. CMS citations can range from A to L, where the combination I/J represents an immediate jeopardy to residents in the facilities. Tag levels over F include civil monetary fines. The two tags that appear are:

F880 Infection Control: The facility must establish and maintain an infection prevention and control program designed to provide a safe, sanitary, and comfortable environment and to help prevent the development and transmission of communicable disease and infection.

F584 Clean and Safe Environment: Residents have the "right to a safe, clean comfortable and home-like environment, including but not limited to receiving treatment and supports for daily living safely," including that the physical layout of the facility "maximizes resident independence" and does not create a safety risk. This includes housekeeping and maintenance services necessary to maintain a sanitary, orderly, and comfortable interior.

The Eastern Montana Veterans Home will use standard state procurement processes to accomplish the following improvements:

Hard Surface Countertops and Cabinetry

Health and safety problems exist throughout the resident bedrooms and other patient care areas due to chipped laminate, ill fit drawers and doors, and otherwise broken surfaces related to original cabinets and countertops (>25 years old). EMVH has been and will continue to be cited under infection control tag F880 until the situation is resolved. This citation does come with a fine. Any break in a hard surface such as a laminate countertop or cabinet door can create an infection control issue. Additionally, if these areas are damaged enough, they can present a danger for residents to receive skin tears or splinters which can lead to pain and risk of infection.

Professional services to complete the above work includes plumbing and electrical services. Both are related to the reuse of sinks and facets as well as electrical outlets. The total cost to remedy the infection control issues and the survey tag is \$215,000 for the countertops and cabinetry, plus \$39,000 for professional plumbing and electrical work.

Upgrade Flooring

Historically, a mixture of tile, laminate, and carpet have been used to surface the floors of EMVH to provide a home-like atmosphere, so carpet is present in every unit and resident rooms. The carpet has become uncleanable in several areas and the hard surfaces have damage and worn spots throughout the building that are also difficult to disinfect. Replacing this carpeting with hard surface flooring throughout the facility will increase the ability of housekeeping staff to disinfect each resident care and living area routinely and thoroughly.

The total cost of the project is \$190,000. Replacing the current flooring will satisfy citations and assist in maintaining a clean environment.

Ceiling Tiles

EMVH has received citations periodically for damaged, stained, or ill fitted ceiling tiles. The contractor has replaced the tiles routinely as needed, but the result is mismatched tiles due to inability to get the same product across a 25+ year span. When the facility has attempted to use a Bioquel machine (hydrogen peroxide air decontaminant) to clean rooms where COVID positive residents have resided, it has often failed due to the air leaks between rooms. The proposed expenditure would ensure good fitting tiles that block unintended air flow containing contaminants and improve the appearance of the newly remodeled resident rooms.

For ceiling tiles to fit snuggly to create a smoke and airborne contaminate barrier, all ceiling tiles need to be replaced. The cost of this project is \$54,000.

Painting

The general appearance of the painting throughout the facility is worn, mismatched, and not professional in appearance. There are areas throughout the building where the paint is chipped, damaged, or cracked which presents as a poorly cleanable surface. Old areas of paint are clearly porous in nature and rough to the touch.

Painting all resident rooms and care areas will provide an improved cleanable surface. The cost of facility painting is \$45,000.

Eligibility: Each project is an eligible facility improvement project.

Performance Metric:

EMVH will not receive citations regarding infection control or clean and safe environment after the completion of all facility projects.

Recommendation: Allocate \$546,723 to resolve citation issues resulting in improved infection control and improve the safety of the resident environment, to the extent allowed under all applicable laws, regulations, and guidance.