



Bureau of Organizational Services

**Five-Year Capital Outlay Plan
FY2023 - FY2027**

October 30, 2021

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MICHIGAN DEPARTMENT OF HEALTH AND HUMAN SERVICES

2023 Five-Year Capital Outlay Plan

Mission Statement

The Michigan Department of Health and Human Services (MDHHS) provides opportunities, services, and programs that promote a healthy, safe and stable environment for residents to be self-sufficient.

Department History

In April 2015, the Department of Human Services (DHS) was merged with the Department of Community Health (DCH) to create MDHHS.

Department of Human Services

The Department of Human Services was created in 1965 as a principal department with the name of "Department of Social Services." Renamed in 1995 to "Family Independence Agency," the department was once again renamed in 2004 to indicate its status as a principal department as the "Department of Human Services."

Department of Community Health

The Department of Community Health was created in 1996 through an executive order merging Department of Public Health (as Community Public Health Agency), Department of Mental Health, Medical Services Administration from the Department of Social Services, responsibility for Liquor Control Commission, Licensing, Monitoring and Accreditation and Division of Occupational Health from Department of Commerce, Food Service Sanitation from the Department of Agriculture and many functions of Department of Social Services.

Merger

The merger of DHS and DCH was enacted by Governor Rick Snyder's Executive Order No 2015-4.

Department Overview

MDHHS administers a variety of programs that are largely managed by the department's core resource areas – Children, Adults, Family Support, Health Services, Population Health and Workforce. There are also several administrative divisions (for example, Finance and Operations, Policy, Planning and Legislative Services, Legal Affairs, Business Integration, and External Affairs and Communications) that provide vital services in support of the department's program operations.

Well maintained and functional facilities are needed to support programs such as juvenile justice facilities, psychiatric hospitals and centers, laboratories, vocational and technical institutions and customer service offices.

Ongoing maintenance and repairs are needed to preserve the longevity and ensure that the infrastructure remains operable, providing continued support for the programs and overall mission of the department. Proactive repair and replacement of critical infrastructure that is rapidly aging and deteriorating has become increasingly difficult. As maintenance is deferred and needed repairs and improvements continue to go unaddressed due to the lack of available funding, the risk of infrastructure failure increases. As infrastructure failures occur, funding that is available must be directed toward emergency repairs, often at a much greater expense.

Where there is flexibility regarding the allocation of available funding, MDHHS looks to establish priorities for capital outlay planning. These priorities are established focusing on the following factors:

- **Operational need:** The critical nature of the department's mission and responsibility to Michigan citizens and taxpayer's mandates that the department's facilities be sufficient to meet their service functions. Full utilization of the department's varied resources is dependent upon sufficient and functional facilities.
- **Preventative Maintenance:** The department must preserve its existing capital investments so that it may continue to fulfill its mission and provide services to Michigan residents. Effective preventative maintenance practices minimize costs over the long term, prevent health and safety hazards and allow for minimal interruptions of service.
- **Accessibility:** The department must strive to ensure that its facilities, programs and projects are barrier-free and accessible to all users.
- **Energy-efficient facilities:** The department seeks to promote energy-efficient facilities and reduce facility energy consumption. Opportunities include installing energy-efficient lights, water heaters, heating and ventilation systems and low-flow plumbing fixtures. Proper maintenance of roofs, installation of building insulation and the reduction of exterior air infiltration lead to further energy efficiencies.
- **Partnering/consolidation:** Where possible, the department shares facilities with other agencies to promote efficiencies and maximize the use of available funding. The department works with local government agencies and other entities to develop opportunities for Michigan residents.

The strategy for capital outlay planning interconnects with overarching priorities of the department. It focuses on:

- Serving people who have specialty services or support needs related to mental illness, developmental disability, substance use disorders and children with serious emotional disturbance.
- Being a leader in prevention and treatment for juvenile delinquency, building safe and healthy communities through our balanced approach, professionalism, and shared commitment to innovation and effective partnerships.
- Promoting and protecting the health of the population through surveillance and response to health issues, prevention of illness and injury and improvements in access to care.
- Providing emergency aid, food, child care and other services to eligible Michigan residents.
- Coordinating services for Michigan's aging and adult population.

Five-Year Capital Outlay Plan Components

I. Mission Statement

The Juvenile Justice Program will be a national leader in prevention and treatment for juvenile delinquency, building safe and healthy communities through our balanced approach, professionalism and shared commitment to innovation and effective partnerships.

II. Programming Changes

Bay Pines Center is a 40-bed secure treatment facility for either gender who have been adjudicated for one or more felony counts. Bay Pines Center (BPC) has 14 female treatment beds and 22 male treatment beds. BPC also has four detention beds for youth who are awaiting a court decision (two female/two male). Currently Bay Pines Center is licensed to accept up to 35 youth, age 11 to 21. Bay Pines Center has five rooms offline due to them not meeting licensing standards. BPC is a state operated residential facility.

BPC is in the beginning stages of becoming specialized in Mental Health and Behavior Stabilization while utilizing a trauma informed treatment milieu.

III. Facility Assessment

BPC was built in 1994 and is located on 24 acres in Escanaba and is composed of multiple buildings consisting of a total square footage of 38,760.

a. Building utilization rates compared to industry standards:

Utilization is a measure of facility efficiency. The ratios of program (beds) and support space is used as the basis of measure. Bay Pines Center has a ratio of 773 sf./bed which yields a 93 percent efficiency.

b. Mandated facility standards for program implementation, where applicable (for example, federal/industry standards for laboratory facilities, hospitals, compliance with consent decrees, etc.):

The Bay Pines Center maintains compliance with Michigan Child Welfare Licensing standards as well as Department of Justice Prison Rape Elimination Act (PREA) standards.

c. Functionality of existing structures and space allocation to program areas served:

Bay Pines Center - 33,000 sq. ft. (Residential Center)
Frens Building - 1,920 sq. ft. (Storage)

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McKeage Building - 1440 sq. ft. (Storage)
Pavilion - 720 sq. ft.
Pierce Building - 1680 sq. ft. (Storage)

- d. Replacement value of existing facilities (insured value of structure to the extent available):

Unknown.

- e. Utility system condition (such as heating, ventilation, and air conditioning (HVAC), water and sewage, electrical, etc.):

The current domestic hot water heating system has been replaced. Project was completed in 2017/2018.

The Air Handle and Air Conditioning Unit has been both replaced, project was completed in 2018/2019.

The Muffin Monster (sewage grinder) and Sewer Pumps have both been replaced in 2018.

- f. Facility infrastructure condition (such as roads, bridges, parking structures, lots, etc.):

The replacement of the security camera system project was completed in 2018/2019.

When the fire alarm goes off all the doors to the outside yard automatically unlock allowing youth to exit in the event of a fire. Due to the security risk this poses, additional fencing in backyard around emergency exit doors was added. Project completed in 2019 thus eliminating this risk.

Flooring needed to be replaced in the gym/hallway/recreational pods/youth rooms. This area of the flooring is original to Bay Pines Center making it approximately 24 years old. The flooring is composed of a rubberlike material. The flooring was disintegrating very slowly causing a dust-like material to cover the floors. Flooring was replaced in the gym and hallway in 2019 however; the flooring in the youth's rooms was not replaced.

The shower rooms on each of the five living pods and gym needed to be refinished as the tile, plumbing and sufficient ventilation have been deemed a health and safety violation by the Delta County Health Department. This project is completed; however the paint in the showers is now peeling off the walls.

Replacement of all interior/exterior locks to keyless pads will eliminate the cost of repairing/replacing keyed locks and eliminates security concerns regarding lost/stolen keys. Keyless pads would provide better controlled access keeping

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youth, staff, and buildings safe and secure. Project is in the end stages of completion; however due to COVID 19 was on hold. I would also note that this project has not been completed to adequate standards and is currently failing. Specifically, the locks were not mounted correctly; therefore are falling off the door, doors are not opening when swabbed by the key fob, fob boxes have come lose, conduit is exposed, allowing youth to pull off them off wall. This project is ongoing and needs additional funding.

Replace/repair all doors within the secure area of the facility. The building is 25 years old and the doors are extremely heavy; therefore over the years they have worn out the hinges causing them to not shut properly. Some doors are damaged due to use/abuse over the years and some are warped causing them not to close properly. In addition to the above, the youth barricade themselves in the rooms by placing their mattress between the door and the toilet or propping themselves in the same area and using their legs to prevent staff from entering their rooms. In these situations, staff have to use a devise that forces the door open which does cause damage. This has to occur when youth block their windows and staff can't maintain line of sight supervision over the youth. This is a security concern. Estimating approximately 100 doors at \$3,000.00/per door.

Currently Bay Pines Center has numerous windows broken due to the kids throwing rocks at them or kicking or hitting the windows within their room. The windows do not shatter: however the youth are able to pick small pieces of the glass out of the window once broken and use it as a weapon to hurt themselves or someone else. We are replacing broken windows with a product that can't be broken. Each window is \$300.00 to replace (window plus installation). Approximately 70 windows total need to be replaced in order for all youth room windows to be replaced as well as any window that they can throw rocks at while in the outside recreational area. This is a health and safety concern.

Youth are breaking the current light fixtures in their rooms. We are constantly having to have them replaced. We would like to be able to have them replaced with a non-breakable/correctional grade setting material. This is a safety concern as they are breaking the bulbs, plastic, and ripping them out of the ceiling thus exposing wires and utilizing the material as weapons to harm themselves or others. Also, within the youth's rooms there are heat registers that were put in after the building opened due to how cold the rooms were. These are safety concerns as kids can hide things and/or break off metal and use to self-harm. They also kick them repeatedly which leave sharp edges. These need to be covered with an industrial strength metal that is safe and durable. In addition to the above, the current flooring in the youth's rooms is laminate leading to the caulking around the wall and floor to come lose. The youth pick at the floor and hide stuff in cracks or pull chunks of flooring when upset. Some youth use the flooring pieces to self-harm by cutting themselves with the sharp edges of the flooring. It is recommended that the flooring be replaced with a more durable/solid surface. Lastly the current beds for the youth are made out of fiber glass, and the kids kick them, break them/pick at

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them to get sharp objects, hide stuff in the cracks and self-harm with the broken objects. This is a safety risk to the youth, and it is recommended that the beds be replaced with a non-breakable solid surface.

In addition to the above safety concerns, Bay Pines Center needs a two-way PA system that allows staff to hear and speak to youth while they are in their rooms, especially at nighttime to monitor for safety in between 15-minute room checks. Currently staff can hear the youth in approximately half the rooms but not all the rooms due to the system being obsolete. We cannot fix the current system due to part not being available nor is the current wiring/electrical set up properly. It should be noted that over the past 10 years the number of mental health youth that need to be emotionally stabilized has increased dramatically within Bay Pines Center. These youth are exhibiting increased suicidal and self-harm ideations and attempts. This is a health and safety concern.

Currently Bay Pines Center has numerous windows broken due to the kids throwing rocks/objects at them break or the youth are able to get on their beds and kick/hit the windows within their rooms which causes them to break. The windows do not shatter; however the youth are able to pick small pieces of the glass out of the window once broken and use it as a weapon to hurt themselves or someone else. We are replacing broken windows with a product that can't be broken. This is a health and safety concern.

The current Polycom system was inherited by Bay Pines Center from Adrian Training School. This system is highly outdated and is becoming unpredictable and noncompatible with updated court systems. The Polycom system allows for Bay Pines Center staff not to have to transport a youth to and from court hearings. This system is a large cost savings for Bay Pines Center as two staff members are required to transport youth to and from all court hearings. More than 65 percent of the population at Bay Pines Center is from lower Michigan.

Bay Pines Center continues to clean the walls and painted surfaces; however paint is peeling off the walls and is discolored. Bay Pines Center has not had the interior of the building painted in over 10 years. This needs to be completed by a professional in order to ensure the surface area is properly prepared so the paint does not peel/scratch off the walls.

Parking lot needs repair/seal coat and cracks need to be filled to prevent further breakdown of asphalt. Pave the area between the facility and the McKeage outbuilding to the large fenced in area. Currently there is dirt/grass in this area however lots of traffic drives on this area in order to provide maintenance to the building as well as snow removal.

The drop ceiling within the secure residential area is very dirty, water stained and is sagging in multiple areas throughout the building. In addition to the above, the duct work located above the drop ceiling is very loud and is causing sound problems with the camera system. It is recommended that this be

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replaced with a better quality/sounds resistant product. The lack of ability to clearly hear when reviewing video footage is a safety and security risk.

Current medical and dental offices have the original equipment in them when the facility was built in 1994. The equipment has already exceeded the recommended use expectancy due to the contractors only coming into the facility on a limited weekly basis. The equipment is starting to have to be repaired and the cost of replacing it is cheaper than repairing it.

The secure fenced in area the youth use to get outside doesn't have a shaded area for the youth to sit under to help protect them from the UV rays. This area could also be used when the youth have family visits, keeping everyone in a secure area.

- g. Adequacy of existing utilities and infrastructure systems to current and five-year projected programmatic needs:

Current utilities and infrastructure systems are adequate to meet the programmatic needs of the facility five years into the future with the above noted infrastructure and utility improvements. I would note that Bay Pines Center has started the process to become an accredited Juvenile Justice Treatment Facility through CARF. Building safety and security is part of the accreditation process. These improvements are likely to impact the ability to become accredited unless corrected.

- h. Date of most recently completed energy audit, and, if an energy audit has yet to be completed, what is the plan/schedule for doing so?

Last energy audit is unknown.

- i. Land owned by the agency, including a determination of whether capacity exists for future development, additional acquisitions are needed to meet future demands, or surplus land can be conveyed for a different purpose:

The Bay Pines site is currently located on 24 acres, which appears to be very adequate for present day needs and should be fully capable of providing additional space for any program development which may occur during the next five years.

IV. Implementation Plan

- a. Itemized listing of major capital projects by priority, including brief description and estimated cost. (*Adjust previously developed or prior year's figures utilizing industry standard CPI indexes where appropriate*):

See Bay Pines Center (BPC) Capital Outlay Five-Year Plan spreadsheet in this

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document.

- b. Define the impact of addressing deferred maintenance and structural repairs, including programmatic impacts, immediately versus over the next five years:

Failure to provide special maintenance or capital outlay funding to maintain the facility creates increased facility repair costs and unnecessary demands on facility maintenance staff and creates potential health and safety problems for staff and visitors. BPC is a 24-hour juvenile secure residential facility and must maintain a secure, safe and functioning facility to maintain staff, patient and public safety. I would note that Bay Pines Center has started the process to become an accredited Juvenile Justice Treatment Facility through CARF. Building safety and security is part of the accreditation process. These improvements are likely to impact the ability to become accredited unless corrected.

- c. Identify, to the extent possible, a rate of return on planned expenditures. This could be expressed as operational savings that a planned capital expenditure would yield in future years.

Delaying needed repairs until they become critical generally results in costlier future special maintenance project costs and longer disruption in the BPC mission of providing residential treatment to youth. It also results in more youth being harmed by the above identified safety factors.

BAY PINES CENTER (BPC)

Capital Outlay Five-Year Plan (Attachment E - IV. a.)

Building	Project	Brief Project Description	Facility Priority	Cost Estimate	Status	Funding Source
BPC (Residential Center)	Replace Doors/door handles in secure area of residential center	Replace/repair all doors within the secure area of the facility. The building is 25 years old and the doors are extremely heavy therefore over the years they have worn out the hinges causing them to not shut properly. Some doors are damaged due to use/abuse over the years, some are warped causing them not to close properly. In addition to the above, the youth barricade themselves in the rooms by placing their mattress between the door and the toilet or propping themselves in the same area and using their legs to prevent staff from entering their rooms. In these situations, staff have to use a devise that forces the door open which does cause damage. This has to occur when youth block their windows and staff can't maintain line of sight supervision over the youth. This is a security concern. Estimating approximately 100 doors at 3,000.00/per door.	1	\$400,000		
BPC (Residential Center)	Secure Youth Bedroom Upgrades - Replace light fixtures, heat registers covers, new flooring and beds.	1) Youth are breaking the current light fixtures in their rooms. We are constantly having to have them replaced. We would like to be able to have them replaced with a non-breakable/correctional grade setting material. This is a safety concern as they are breaking the bulbs, plastic, and ripping them out of the ceiling thus exposing wires and utilizing the material as weapons to harm themselves or others. 2) Within the youth's rooms there are heat registers that were put in after the building opened due to how cold the rooms were. These are safety concerns as kids can hide things and/or break off metal and use to self-harm. They also kick them repeatedly which leave sharp edges. These need to be covered with an industrial strength metal that is safe and durable. 3) The current flooring is laminate which over time the caulking around the wall and floor has come lose. The youth pick at the floor and hide stuff in cracks or pull chunks of flooring when upset, some youth use th flooring piecing to self harm by cutting themselves with the sharp edges of the flooring. Replace floor with a more durable/solid surface. 4) Current beds are made out of fiber glass and the kids kick them, break them/pick at them to get sharp objects, hide stuff in the cracks and self-harm with the broken objects. (approximate cost: light (includes installation) -120,750/ register covers (includes installation) - 28,175.00/ Flooring - 250,000.00 (includes instalabtion)/ beds - 120,750 (includes installation). This is a health and safety risk.	2	\$519,675		
BPC (Residential Center)	Two-way PA system between staff console and each youth's room	Installation of a PA system that allows staff to hear and speak to youth while they are in their rooms, especially at nighttime to monitor for safety in between 15-minute room checks. Currently staff can hear the youth in approximately half the room but due to the system being obsolete. Due to it being obsolete we can no longer fix the system when it breaks. We cannot talk to any of the youth in their rooms. It should be noted that over the past 10 years the number of mental health youth that need to be emotionally stabilized has increased dramatically within Bay Pines Center. These youth are exhibiting increased suicidal and self harm ideations and attempts. This is a health and safety concern. Approximate cost \$500,000.00	3	\$500,000		
BPC (Residential Center)	Replace all windows within the secure area of the facility with non-breakable glass/product.	Currently Bay Pines Center has numerous windows broken due to the kids throwing rocks at them which causes them to break or the youth are able to get on their beds and kick/hit the windows within their rooms which causes them to break. The windows do not shatter however the youth are able to pick small pieces of the glass out of the window once broken and use it as a weapon to hurt themselves or someone else. We are replacing broken windows with a product that can't be broken. Each window is 300.00 to replace (window plus installation). Approximately 70 windows total need to be replace in order for all youth room windows to be replaced as well as any window that they can throw rocks at while in the outside recreational area. This is a health and safety concern.	4	\$35,000		
BPC (Residential Center)	Polycom	The current Polycom system was inherited by Bay Pines Center from Adrian Training School. This system is highly outdated therefore is becoming unpredictable and noncompatible with updated court systems. The Polycom system allows for Bay Pines Center staff not to have to transport a youth to and from court hearings. This system is a large cost savings for Bay Pines Center as two staff members are required to transport youth to and from all court hearings. Over 65% of the population at Bay Pines Center is from lower Michigan	5	\$40,000		

BAY PINES CENTER (BPC)

Capital Outlay Five-Year Plan (Attachment E - IV. a.)

Building	Project	Brief Project Description	Facility Priority	Cost Estimate	Status	Funding Source
BPC (Residential Center)	Interior painting	Bay Pines Center continues to clean the walls and painted surfaces however paint is peeling off the walls and is discolored. Bay Pines Center has not had the interior of the building painted in over 10 years. This needs to be completed by a professional in order to ensure the surface area is properly prepared so the paint doesn't peel/scratch off the walls.	6	\$200,000		
B+A22-E22PC (Residential Center)	Parking lot sealant/fix cracks and pave area between facility and the McKeage building back to the large fenced in area.	Preventative maintenance to avoid further breakdown in parking lot asphalt. Filling of current cracks and application of sealant. Pave the area between the facility and the McKeage out building to the large fenced in area. Currently there is dirt/grass in this area however lots of traffic drives on this area in order to provide maintenance to the building as well as snow removal.	7	\$150,000		
BPC (Residential Center)	Replace drop ceiling through out BPC secure area	The drop ceiling is very dirty, water stained and is sagging in multiple areas throughout the building. In addition to the above, the duct work located above the drop ceiling is very loud and is causing sound problems with the camera system. It is recommended that this be replaced with a better quality/sounds resistant product.	8	\$225,000		
BPC (Residential Center)	Replace Medical/Dental Office	The medical/dental equipment that is used when examining the youth is 25+ years old. It was installed when the facility was built in 1994 and has outlasted the recommended use expectancy. It is recommended that this be replaced with current/updated equipment	9	\$100,000		
BPC (Residential Center)	Pavilion in Secure Youth Area	Install a pavilion with a cement pad to provide the youth a place to stand under when they are outside in the secured fence area that provides shade. This is a health concern. This would also provide a place for family visits to take place.	10	\$75,000		
BPC (Residential Center)	Replace Sewer Pumps/Muffin Monster	The Muffin Monster (sewage grinder) and Sewer Pumps are currently minimally functioning and ongoing emergency maintenance is to avoid sewage back-up. Replacement is recommended to avoid potential complete failure and/or health and safety concerns due to sewage back-up.		\$30,000	Completed	
BPC (Residential Center)	Replace Camera System	Existing system not working properly and is in progress of being replaced due to the safety and security risk this poses to the youth and staff.		\$545,000	Completed	2016 Agy Operating \$ Project #: 431/16424.RMP
BPC (Residential Center)	Replacement of Boiler/Evaporator System.	Current system is failing and unable to meet facility demands. Complete failure of the system will result in no hot water within the facility. A lack of hot water will be safety risk for staff and residents and cause the facility to be out of licensing standards.		\$573,600	Completed	2015 Agy Operating \$ Project #: 431/15289.RAA
BPC (Residential Center)	Fence in backyard around emergency exit doors preventing escape.	Security/Safety- currently when the fire alarm goes off all the doors to the outside yard automatically unlock allowing youth to exit in the event of a fire. This feature also allows youth to escape from the facility easily by pulling the fire alarm and running out of the building through the doors that open up to a non-fenced in area. Multiple youth could exit at the same time and run multiple different directions. Bay Pines Center's groomed area of the backyard leads to a densely wooded and swamp like terrain which poses a safety risk to both youth and staff if they ran that direction. The fence would eliminate this risk.		\$200,000	Completed	2017 Agy Operating \$ Project #: 431/17358.RAA
BPC (Residential Center)	Flooring - replace gym/hallway/recreational pods/youth rooms.	This area of the flooring is original to Bay Pines Center therefore approximately 22 years old. The flooring is composed of a rubber like material. Currently the flooring is disintegrating very slowly causing a dust like material to cover the floors. This results in staff/youth having to clean the floor often to avoid the safety risk of slippery floors. Youth often slip around in the gym when trying to play recreationally which causes concerns for youth injury.		\$50,000	Completed	2017 Agy Operating \$ File #: 431/17358.RAA
BPC (Residential Center)	Replace Air Handler Units/Air Conditioning Unit	Units are outdated and in need of replacement. Repairs are costly and parts are becoming obsolete. If not addressed this project could become a health and safety concern for staff and visitors; cause facility climate related damage; and damage to the existing functioning units.		\$150,000	Completed	2017 Agy Operating \$ File #: 431/17358.RAA
BPC (Residential Center)	Parking lot sealant/fix cracks	Preventative maintenance to avoid further breakdown in parking lot asphalt. Filling of current cracks and application of sealant.		\$20,000	wasn't enough money - taken off project	2017 Agy Operating \$ Project #: 431/17358.RAA
BPC (Residential Center)	Keyless Pads	Replace all interior/exterior locks with keyless pads/update software and computer.		\$500,000	In Progress	LSSM-491/18057

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Capital Outlay Five-Year Plan (Attachment E - IV. a.)

Building	Project	Brief Project Description	Facility Priority	Cost Estimate	Status	Funding Source
BPC (Residential Center)	Maunal Override System to Keyless Access			\$410,000	In Progress	2017 Agy Operating \$ Project #: 431/17358.RAA
BPC (Residential Center)	Refinish shower rooms located on each living pod.	Phase I: Replace the tile and plumbing fixtures. The ventilation within showers isn't sufficient therefore resulting in mold and needs to be repaired or replaced. This has resulted in citation by the Delta County Health Department.		\$224,000	In Progress	\$50,000, Agy Operating; \$124,000 added from 18390, 16424, and BPC. \$50,000 added from BJJ admin

Five-Year Capital Outlay Plan Components

I. Mission Statement

The Juvenile Justice Program will be a national leader in prevention and treatment for juvenile delinquency, building safe and healthy communities through our balanced approach, professionalism and shared commitment to innovation and effective partnerships.

II. Programming Changes

Shawono Center is a secure treatment facility for male juveniles between the ages of 12 and 21 years who have been adjudicated for one or more felony counts. The center offers three specialized treatment programs. The Sexually Reactive program has 20 beds and limits the contact with the other treatment groups. The other 20 beds are a mixture of General Treatment with mild to medium mental health issues and Addictions/Substance Abuse Treatment. Shawono Center also has up to two detention beds available for youth through 20 years of age.

There are currently no planned programming changes.

III. Facility Assessment

Shawono Center is located on a 10-acre parcel that is heavily wooded and contains a small lake in a secluded area, a few miles from the city of Grayling. The U.S. Military Affairs own the parcel of land.

a. Building utilization rates compared to industry standards:

Utilization is a measure of facility efficiency. The ratios of program (beds) and support space are used as the basis of measure. Shawono Center has a ratio of 1,322 sf/bed, which yields a 54 percent efficiency rating.

b. Mandated facility standards for program implementation, where applicable (such as federal/industry standards for laboratory facilities, hospitals, compliance with consent decrees, etc.):

The Shawono Center maintains compliance with Michigan Child Welfare Licensing standards as well as Department of Justice Prison Rape Elimination Act (PREA) standards.

c. Functionality of existing structures and space allocation to program areas served:

Main Building (1994) - 48,018 sq. ft. (Residential Center)

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Department of Natural Resources Building (1974) - 5,500 sq. ft. (Storage)
Gas Storage Shed (1974) - 120 sq. ft.
Generator Housing (1979) - 100 sq. ft.

- d. Replacement value of existing facilities (insured value of structure to the extent available):

Unknown.

- e. Utility system condition (for example, heating, ventilation, and air conditioning (HVAC), water and sewage, electrical, etc.):

The septic field is quickly beginning to leach. This needs to be a high priority.

The current AC systems in the northeast classroom area, northeast dorms, and north east classrooms need upgrading. The medical A/C was upgraded in 2020, medical corridor.

The emergency electrical system was upgraded within the last several years to include the kitchen area and coolers.

The plumbing in the building is aging. Plumbing for the rooms on South Pod, West Pod, and the isolation room need upgrading as parts are starting to fail. Replacement parts, when available, are being utilized but all rooms need upgrading. The bathrooms in the administrative section were upgraded in 2020.

The control panels for the dorm areas were replaced in the last 18 months. This project is mostly completed. There are four doors left to be complete due to Covid-19 and restriction on entry.

In evaluating electrical efficiency in the building, converting the lighting to LED would create a cost savings. The outside lighting is beginning to fail, replacing the outside lights will create efficiency while also increasing safety to Shawono residents, staff and visitors.

The CCTV system was brought over when the Adrian Training Center closed. The software system and cameras are out of date. The system goes down regularly and must be reactivated manually leading to time lapses in recording events at Shawono. We need an additional 20 cameras for areas in the building that are currently not covered. This a safety issue and would help to monitor the building, youth and staff.

The roof is currently being partially replaced. The most critical areas that were leaking have been addressed. When the current project is completed approximately 60% of the roof will have been replaced. The remainder of the roof will need to be replaced.

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The youth bathrooms and showers in the facility need maintenance and upgrading as they are showing signs of aging.

The boiler is over 20 years old and will need to be replaced at some point in the near future.

- f. Facility infrastructure condition (such as roads, bridges, parking structures, lots, etc.):

Shawono Center did major improvements to the exterior of the building several years ago. The overall building is in good shape except for major maintenance and roof repairs to the main building. This was recently added to the list to be worked on this year. We are in the process of utilizing existing funds to repair the worst areas of the roof. We will need additional funds to finish the roof.

The parking lot was last re-sealed in 2012. The administrative parking area was expanded in 2020.

- g. Adequacy of existing utilities and infrastructure systems to current and five-year projected programmatic needs:

Current utilities and infrastructure systems are adequate to meet the programmatic needs of the facility five years into the future. A repair of this drain system is of the highest priority. The following recommendations are being made to replace/upgrade as soon as possible. This project is currently underway.

The gym floor is beginning to show its age and will need to be addressed at some point in the future.

Site/Architectural Items:

- Re-Sealing Driveway.
- Repairing Roof (Project approved and in initial assessment phase, approved for phase one of the project.)
- Replacing Interior and Exterior Locks (Almost Complete)

Mechanical Items:

- Replacement of two AC Units
- Plumbing for Dorm Rooms and Isolation Rooms
- Boiler

Electrical Items:

- Lighting System
- Control Panels for Keyless Entry for Doors (Completed)

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SHAWONO CENTER**

- h. Date of most recently completed energy audit, and, if an energy audit has yet to be completed, what is the plan/schedule for doing so?

Business Energy Survey completed in 2013 by Great Lakes Energy.

- i. Land owned by the agency, including a determination of whether capacity exists for future development, additional acquisitions are needed to meet future demands, or surplus land can be conveyed for a different purpose:

Shawono Center is situated on a 10-acre site with a small lake, which is well suited to meet the facility's current program needs. There is ample room for future building expansion should there be a need to expand the Treatment/Detention Program or accommodate other specific building space needs. U.S. Military Affairs own the land.

IV. Implementation Plan

- a. Itemized listing of major capital projects by priority, including brief description and estimated cost. (*Adjust previously developed or prior year's figures utilizing industry standard CPI indexes where appropriate*):

See Shawono Center Capital Outlay Five-Year Plan spreadsheet in this document.

- b. Define the impact of addressing deferred maintenance and structural repairs, including programmatic impacts, immediately versus over the next five years:

Failure to provide special maintenance or capital outlay funding to maintain the facility creates increased facility repair costs and unnecessary demands on facility maintenance staff and creates potential health and safety problems for staff and visitors. The Shawono is a 24-hour juvenile secure residential facility and must maintain a secure, safe, and functioning facility to maintain staff, patient, and public safety.

- c. Identify, to the extent possible, a rate of return on planned expenditures. This could be expressed as operational savings that a planned capital expenditure would yield in future years.

Delaying needed repairs until they become critical generally results in costlier future special maintenance project costs and longer disruption in the Shawono Center mission of providing residential treatment to youth.

SHAWONO CENTER
Capital Outlay Five-Year Plan (Attachment E - IV. a.)

Building	Project	Brief Project Description	Facility Priority	Cost Estimate	Status	Funding Source
Shawono Center	Upgrade youth Showers/Bathrooms	Showers and Bathrooms need repair and updating.	1	\$300,000		
Shawono Center	Replace CCTV System	Upgrade the CCTV system with new and additional camera's. Upgrade IT equipment so the system is current.	2	\$300,000		
Shawono Center	Sewage Drain Field	Replace the Sewage Drain Field		\$140,000		
Shawono Center	Convert All Lighting to LED	It would make us cheaper and greener if we could do it.	3	\$150,000		
Shawono Center	Boilers	Replace the Boilers. They are over 25 years old	4	\$120,000		
Shawono Center	Roof Repair	Finish replacing what is not completed this year	5	\$350,000		
Shawono Center	Replace Gym Floor	Replace Gym Floor	6	\$250,000		
Shawono Center	Fire Alarm System	Modernize fire detection system.		\$26,000	Completed	Agency Funds PO #: 431N7700690
Shawono Center	Security Control	Safety & Security concern: Replacement of walk-through metal detectors.		\$5,000	Completed	Agency Funds PO #: 431N7700671
Shawono Center	Security Control	Safety & Security concern: Replacement of 2-way radios for staff use.		\$29,500	Completed	Agency Funds PO #: 431N7700651
Shawono Center	Keyless pads	Replace all interior/exterior locks with keyless pad.		\$500,000	In Progress	LSSM: 431/18064
Shawono Center	Building Improvements: FY15	1) Repair/Paint Exterior; 2) Attic Insulation; 3) Ropes Course; 4) Connect Kitchen Cold Storage to Generator		\$390,854	Completed	MOP
Shawono Center	LP Gas Vaporizer: FY16	Replace and upgrade		\$17,944.00	Completed	Hospital funds
Shawono Center	Individual Room Plumbing Upgrade	The plumbing fixtures and pipes in the residents' room (south unit, west unit, and isolation unit) are failing and causing regular leaks. The plumbing in the rooms is essential to resident safety and meeting Child Welfare Licensing Standards. The parts are outdated and replacement parts are extremely difficult to locate.		\$27,000	Added to MOP 431/17357.TYC	Agency Funds MOP #: 431/17357.TYC
Shawono Center	Administration Area Bathrooms	The bathrooms are backing up. The plumbing pipes need to be replaced, and a septic field installed for the administrative area.		\$42,500	Added to MOP 431/17357.TYC	Agency Funds MOP #: 431/17357.TYC
Shawono Center	Roof Repair	Shawono's metal roof is leaking in numerous places.		\$50,000	Added to MOP 431/17357.TYC	Agency Funds MOP #: 431/17357.TYC
Shawono Center	Upgrade AC Units	Current units are aging, service calls on them are accelerating.		\$30,000	Added to MOP 431/17357.TYC	Agency Funds MOP #: 431/17357.TYC
Shawono Center	Kitchen Equipment	Some of the equipment in the kitchen is over 20 years old and need replacing.		\$100,000	Added to MOP 431/17357.TYC	Agency Funds MOP #: 431/17357.TYC
Shawono Center	Parking Lot	The Administration parking lot needs expansion. The blacktop needs to be re-sealed and painted.		\$38,000		Agency Funds MOP #: 491/18391.TYC

Five - Year Capital Outlay Plan Components

I. Mission Statement

The mission of Caro Center is to provide an appropriate range of active inpatient psychiatric treatment services to best meet the needs of adults with severe mental illness in collaboration with community health agencies and authorities. Divisions of specialized care are identified to meet ongoing treatment needs that reflect multiple medical and psychiatric diagnoses. Consistent with Centers for Medicare and Medicaid (CMS), Joint Commission Standards and other applicable public acts, the environmental needs require ongoing assessment and maintenance to ensure safety and clinical functionality until the new hospital is completed and ready for occupancy in 2023. The prevalence of clinical behaviors and medical disorders that demonstrate self-injurious acts, increased violence and medical needs have created the need for more intensive treatment and physical plant modifications to ensure safety and security measures are maintained in order to provide therapeutic activities for the patients.

II. Programming Changes

Therapeutic programmatic changes have involved the modification and the expansion of the Psychosocial Rehabilitation Program (PSR) in order to provide five (5) hours of scheduled treatment seven (7) days per week for adults with severe chronic mental illness. The programs have an interdisciplinary approach that provide treatment focused on improving the biopsychosocial aspects for the individual patient as well as safety enhancements. The programs provide opportunities to participate in normalized roles and positive therapeutic relationships in an effort to prepare patients for community reintegration. Patient education, individual and group therapies involving recovery and recreational, occupational, music and activity therapies are planned in accordance with the person-centered plan of service. The wide range of therapeutic PSR activities are delivered in the residential treatment areas. The annex at Building 27 North is currently used for the Adult Enrichment PSR program catering to patients from Building 27 North. Since the COVID-19 pandemic, more treatment modalities are provided in the residential treatment areas. For the past two (2) years, virtual/telehealth visits with clinicians, community mental health representatives, court officials and families/guardians have been implemented.

Programmatic revisions in the therapeutic delivery system for patients with neuropsychiatric disorders are anticipated in the next five years in accordance with clinical symptomatology and staffing resources. Because this population has demonstrated increased multiple neurological, physical and mental impairments, the environment requires specialized physical modifications in order to maximize independence and ensure safety, particularly for the elderly who are often physically frail and fragile. Currently, Building 27 North provides residential accommodations for 24 patients who require this type of specialized service.

III. Facility Assessment

Caro Center consists of 14 buildings with a total square footage of 227,038 sq. ft. House 108 was permanently closed in April 2016. The Recreation Center (Building 55) was permanently closed in May 2016. The oldest building was constructed in the early 1900s, while the newest non-residential building was constructed in the 1950s. Some residential buildings were remodeled in the 1970s to meet then existing regulatory standards for the population served. There has been no major remodeling since 1979. Several buildings on the premises of Caro Center are over 60 years old and require maintenance on an ongoing basis. Cosmetic improvements are needed more frequently to create an aesthetic environment compatible for treatment and operational support. All buildings need exterior improvements to facilitate an appropriate and safe presentation for patients, staff and visitors. The general physical condition is considered adequate. However, ongoing emergency repairs/replacements are needed to the exterior of all buildings including windows, doors, improved parking lots, and standard cosmetic enhancements to building interiors until the new hospital is complete and ready for occupancy.

A. Building utilization rates compared to industry standards

Caro Center is one of three public hospitals that provides adult inpatient psychiatric services to residents of the state. The current average census for mentally ill patients is 100.

B. Mandated Facility Standard for Program Implementation

The residential buildings in use are not currently in compliance with Joint Commission and the Center for Medicaid and Medicare Services (CMS) standards but recommendations have been made to halt the required renovations due to the construction of the new hospital.

C. Functionality of Existing Structures and Space Allocation to Program Areas Served

Buildings currently used meet the minimal necessary requirements for existing and projected space for program areas. Increased safety/security and anti-ligature risk concerns for patient therapeutic activities and specialized clinical needs require ongoing maintenance and therapeutic mitigation strategies to address safety and active treatment needs. Minor renovations and cosmetic enhancements are made by hospital maintenance staff only if resources are available.

The physical plant in its current status continues to require repairs to improve orientation and therapeutic measures for the patients, particularly those with neurological impairments. Flooring in multiple buildings requires replacement due to ongoing deterioration and crumbling which may pose a health hazard due to asbestos containing materials.

D. Replacement Value of Existing Facilities

Unknown

E. Utility System Condition

In 1989, an Energy Audit Report recommended decentralization of the center's heating system by installing individual boilers in each occupied building. The recommendation was made because the center's heating plant, distribution and condensate system are deteriorating. This project has been completed for several buildings on the southern part of the 650-acre campus. The water system consists of two (2) deep wells and distribution systems that currently meet Department of Environmental standards. The municipal water system from the City of Caro is being installed for the new hospital. The center is connected to the Caro municipality waste water system. The existing underground primary wire system is over the 25-year life expectancy with several failures noted in recent years. Patient occupied buildings have partial air conditioning provided by several window units which need to be replaced by a more energy efficient central air conditioning system.

F. Infrastructure Condition

In 2004, Campus Drive and several service driveways were repaved. Most of the Center's roadways were capped with an asphalt surface several years ago. All parking lots require repair or expansion for the safety of patients, visitors and employees. Intermittent patching of these areas is inadequate thereby, creating safety hazards and potential hazards to vehicles.

G. Adequacy of Existing Utilities and Infrastructure Systems

The existing infrastructure and utilities will meet current and future projected needs once current projects are implemented. Failure to make these improvements would jeopardize continued operations and safety.

H. Energy Audit

The most recent energy audit was completed in 1989.

I. Land Capacity

Currently, all land on the main campus is utilized by the Caro Center. Local non-profit units of government and private entities have expressed interest in parcels of land that are extended from the main campus; however, these buildings continue to deteriorate with each passing year. All utilities to these buildings have been disconnected. Several breaking and entering incidents have occurred causing damage. These incidents increase the potential of liability to the Caro Center

IV. Implementation Plan

A. Funding of \$115 million was appropriated in the fall of 2017 to construct a new hospital consisting of 200 replacement beds. Plans for the structure are being developed on a 20-acre parcel on the south east part of the premises.

The existing plans were modified in February 2019 to construct a new hospital consisting of 100 beds. Funding for the 100 bed hospital is approximately \$90 million. The projected completion date for the new hospital is January 2023.

B. Emergency repair improvements are being requested consisting of the following:

Door repair/replacement as necessary.

Air Conditioning as necessary.

Replace Flooring – 14, 15 & 27.

Parking Lot Improvements.

C. Delaying needed repairs until they become critical usually results in costlier special maintenance project costs and disruption in the hospital's mission of providing safe patient care, risk reduction and treatment.

Revised: July 2021

Five-Year Capital Outlay Plan Components – FY23

I. Mission Statement

The Center for Forensic Psychiatry's (CFP) mission is to provide quality forensic mental health services to individuals and the Michigan court system.

II. Programming Changes

In April 2021, Unit South 4, female unit, was converted to a coed unit, housing male and female patients. Females are housed downstairs, males are upstairs.

III. Facility Assessment

The CFP is a 357,000 square foot facility consisting of four buildings. The main buildings opened in 2005. The main building comprising 347,554 sq. ft. is a two-story structure constructed of masonry, brick, concrete, and steel. The physical exterior of the building is in very good condition.

a. Building utilization rates compared to industry standards:

The CFP, which is Michigan's sole certified forensic facility, conducts evaluations for all the district and circuit criminal courts in the state's 83 counties pursuant to state statutory requirements. The center is a 272-bed psychiatric facility that provides both diagnostic services to the criminal justice system and psychiatric treatment for criminal defendants adjudicated as incompetent to stand trial or acquitted due to insanity.

b. Mandated facility standards for program implementation, where applicable (such as federal/industry standards for laboratory facilities, hospitals, compliance with consent decrees, etc.):

The CFP maintains its accreditation by the Joint Commission and its certification by the Centers for Medicare and Medicaid Services (CMS).

c. Functionality of existing structures and space allocation to program areas served:

The facility is adequate to meet the current and projected needs of the program.

Main Building - 347,554 sq. ft. (Main Hospital)

Storage Building - 4,000 sq. ft.
Bar Screen Building - 1,440 sq. ft.
Warehouse – 4,006 sq. ft.

- d. Replacement value of existing facilities (insured value of structure to the extent available):

Unknown.

- e. Utility system condition (for example, heating, ventilation, and air conditioning (HVAC), water and sewage, electrical, etc.):

The electrical system at CFP is powered from two primary distribution systems provided by Detroit Edison. The system is in very good condition. The emergency power is provided from two 1000KV generators that supply all life safety, critical power and equipment branch power. The facility's emergency power load is approximately 600KV. The system is in very good condition; however, the manufacturer timeframe to implement preventative maintenance on the automatic transfer switches has been met.

The heating and ventilation system is in fair condition. Existing heating valves are failing. The facility staff has been replacing them, about 35 to date, but the frequency of failures is increasing as there are over 600 installed in the building. Also, all the heating piping though out the Power Plant and the facility has started to leak at the Victaulic fittings. We have started to replace them and, we have spent about \$80,000. The increased frequency of leaks could potentially become an infection control concern (mold). The main building cooling chillers are approaching their end-of- life cycle within the next five years.

CFP has a lift station bar screen building that handles all the sewage from the facility. The solution for addressing the handling of the biowaste by CFP staff is not adequate.

- f. Facility infrastructure condition (for example, roads, bridges, parking structures, lots, etc.):
1. The entire parking lot and all driveways were repaired and sealed in the summer of 2015. We sealed the cracks and seal coated all the asphalt in summer 2018. The cracks should be sealed every year but because of the cost it only has been done every three years, which shortens the life expectancy. All asphalt in the main and handicap parking lot needs to be removed and replaced due to ongoing cracking and heaving, which creates a safety risk and the potential of not meeting ADA requirements. Replace the asphalt and redesign dock area based on usage and the increased traffic in the area.

The facility has four elevators that are in good working condition.

- g. Adequacy of existing utilities and infrastructure systems to current and five-year projected programmatic needs:

The utilities systems are currently adequate.

- h. Date of most recently completed energy audit, and, if an energy audit has yet to be completed, what is the plan/schedule for doing so?

Last energy audit was in 2006.

- i. Land owned by the agency, including a determination of whether capacity exists for future development, additional acquisitions are needed to meet future demands, or surplus land can be conveyed for a different purpose:

The CFP is located on approximately 54 acres in Saline. If there were a need to expand, there is space to do so. Space or open ground around the facility is needed to maintain the privacy and safety of the patients.

V. Implementation Plan

- a. Itemized listing of major capital projects by priority, including brief description and estimated cost. *(Adjust previously developed or prior year's figures utilizing industry standard CPI indexes where appropriate):*

1. **Replace heating control valves and heating system victaulic fitting. (\$950,000)** - Existing valves and Victaulic fitting are failing. The increased frequency of leaks could potentially become an infection control concern (mold).
2. **Replace all countertops and cabinets (\$250,000)** – The laminate countertops and cabinets located in all the patient care areas are breaking which is creating an infection control problem that we have been cited for by JC and CMS.
3. **Replace and/or repair cement in the front entrance area (heated concrete) of the building, including patient yards and other areas. (\$350,000)** – The cement is crumbling, which, creates a safety hazard (trips and falls) for patients, staff, and visits.

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4. **Modify bar screen building to minimize the handling of hazardous waste, (\$475,000)** - Modify the existing lift station/bar screen building to minimize the handling of hazardous waste by staff, including modifying the roof to prevent heavy snow and ice from sliding off and onto someone entering building. This is a health and safety hazard.
5. **Replace the building security system (PLC) (\$600,000)** – The Allen Bradley PLC are at the end of life for support and replacement. Also, Wing Commander station on the units are at the end of life for support.
6. **Replace main building cooling chillers (\$900,000)** – Units are approaching their end-of-life cycle. In need of replacement to eliminate future high maintenance costs and reliability.
7. **Replace audio visual systems (\$100,000)** – The AV systems in the Auditorium, Bureau and Conference Rooms are outdated. It's hard to hold conferences and seminars as the system equipment is not compatible to the current software and operating systems.
8. **Convert fire suppression system in the patient dining rooms and main street hallways (\$300,000)** – Convert existing wet fire suppression system to a dry system. The fire suppression system froze and burst this past weather above the ceilings in the patient dining rooms and on main street.
9. **Cable TV and audio-visual system for the patients' units (\$400,000)** – Replace all outdated and not support analog equipment to ensure the patients units can continue to receive cable TV, including, upgrading the audio visual system to broadcast to all eight units simultaneously.
10. **Exercise equipment for patients (\$300,000)** – Replace old patient equipment, add electrical to all the fitness rooms and check room design to ensure that they meet all codes and Joint Commission requirements.
11. **Medical equipment (\$300,000)** – Replace old outdated medical equipment.
12. **Replace chilled water ice tanks (\$2,100,000)** – Units are approaching their end-of-life cycle. In need of replacement to eliminate future high maintenance costs and reliability.
13. **Repair terrazzo flooring (\$300,000)** – Due to cracking and missing pieces, the terrazzo flooring needs repairs to prevent trips and falls in our main street area (patient activities area) and tweener area leading to the units.

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14. **Replace all the asphalt in the parking lot including the handicap and docking area (\$1,200,000)** – All asphalt needs to be removed and replaced due to ongoing cracking and heaving, which, creates a safety risk and the potential of not meeting ADA requirements. Replace the asphalt and redesign dock area based on usage and the increased traffic in the area.
15. **Replace carpet and furniture in non-patient Areas (\$700,000)** – Carpet and furniture in non-patient areas is becoming worn, discolored, and frayed.
16. **Replace all parking lot and outside building lighting with LED lights. (\$250,000)** - LED lighting is more efficient. The saving on the energy cost and maintenance upkeep will pay for the cost.
17. **Replace heating boilers (\$450,000)** – Boilers are approaching their end of life cycle. In need of replacement to eliminate future high maintenance costs and reliability.
18. **Building landscaping renovation (\$100,000)** - The existing landscaping is unsightly and unappealing. If replaced with a lower annual maintenance requirement type, it would give the facility a new look and feel that could be enjoyed by the visitors, employees and the community.

- b. Define the impact of addressing deferred maintenance and structural repairs, including programmatic impacts, immediately versus over the next five years:

Failure to provide special maintenance or capital outlay funding to maintain the facility creates increased facility repair costs, unnecessary demands on facility maintenance staff, and potential health and safety problems for staff, patients, and visitors. The CFP is a 24-hour psychiatric hospital and must maintain a secure, safe, and functioning facility for patients, staff, and visitors.

- c. Identify, to the extent possible, a rate of return on planned expenditures. This could be expressed as operational savings that a planned capital expenditure would yield in future years.

Delaying needed repairs until they become critical generally jeopardize the health and safety of the patients, staff, and visitors; results in costly special maintenance and/or capital outlay project funding; disrupts the CFP mission of providing psychiatric treatment to patients.

I. MISSION STATEMENT AND PROGRAM DESCRIPTION

The mission of Hawthorn Center is to provide children and adolescents with evidence based/supported and trauma-informed inpatient mental health services that meet the highest standards of quality in the context of an integrated, patient centered, wellness oriented, proactive safety culture.

Hawthorn Center is the only state hospital that offers inpatient psychiatric care to emotionally impaired and mentally ill children and adolescents who are residents of the State of Michigan.

Hawthorn Center treats children and adolescents who have a severe mental illness and serious emotional disturbances. Most of the patients have longstanding histories of trauma, extreme difficulties in functioning at home, in school, and in the community. Almost all have had previous mental health interventions, including multiple inpatient treatment episodes, and many have a variety of medical complications.

An interdisciplinary team provides treatment, with the goal to provide a client centered and trauma informed/integrated treatment approach that includes individual psychotherapy, psychoeducation, milieu, and activity therapy (both in hospital and outside community), individualized special education experience, psychopharmacology treatment and family treatment. Behavior treatment plans and Applied Behavioral analysis/treatments are developed when therapeutically indicated.

Currently, there are four active patient units with a capacity of 14 patients per unit, or 56 patients for the hospital. The physical plant does have two additional units that are in the administrative (Main) portion of the hospital that are not being fully utilized due to their physical condition. Each one of these areas have the capacity to house an additional 14 patients per unit but would require extensive overhaul including modernizing and creating barrier free bathrooms, and showers, improving site lines for patient safety, removing potential ligature risks, and updating bedroom and common room furniture. During the fiscal year minor improvements in terms of functionality and safety were made to these units to house patients on quarantine or isolation status to closely monitor for possible COVID-19 infection.

The hospital's current spending plan, condition of the physical plant, and behavioral exigencies permit up to 56 patients in four units.

The Hawthorn Center has a certified school on site to meet the special education needs of the children and adolescents.

Hawthorn Center's mission statement also makes clear the facility's commitment to integrated patient safety systems. An integrated patient safety system is a health care organizational safety infrastructure that supports the following:

- A learning organization culture
- A fair and just safety culture
- A robust quality improvement system that collects data, analyzes data, uses data to inform decisions, and report findings
- Validated methods to improve processes and systems
- A proactive approach to risk reduction
- Standardized ways for interdisciplinary teams to communicate and collaborate.

- Safely integrated technologies
- A patient centered approach that encourages patient and family activation in the safety process

II. PROGRAMMING CHANGES

Hawthorn Center's mission statement indicates a commitment to respond to the changing needs of the service community. All admissions, other than Incompetent to Standard Trial admissions, require Community Mental Health Authority approval and involvement during patient stay and discharge planning bearing the responsibility for post-discharge treatment.

In recent years, patient presentations have become much more complex – increased symptoms of severe mental illness, extreme behaviors, co-morbid developmental conditions, profound deficits in functional communication skills, and medical conditions are noteworthy. Several patients have minimal or no family supports and have become the responsibility of the Michigan Department of Health and Human Services. An increasing number are involved with the juvenile/family court system. Some have court-ordered treatment for restoration due to incompetence to stand trial (IST) and not guilty for reasons of insanity (NGRI) determinations. As a result of these changes in the nature of our patient population, the average length of stay has drastically increased from 89.9 days in FY 15-16 to about 121.87 days current fiscal year. Additionally, the current COVID crisis has resulted in drastically reduced availability of placement options and treatment services within the community. Consequently, patient movement out of the hospital into community-based services has diminished causing longer lengths of stay during a time when the need for hospitalization has increased.

In order to better meet the needs of our population, we have a Transitional Team for youth who still need hospital level care but who are awaiting return home while sophisticated after care plans are developed. Without such sophisticated aftercare plans, youth are prone to psychiatric hospitalization re-admission. The Hawthorn Center transition managers help to develop these plans and technically assist the community.

Hawthorn Center has developed a Developmental Behavioral Unit for children that have been diagnosed with severe developmental/behavioral presentations such as Autism Spectrum Disorder and Intellectual and Developmental Disability). This unit specializes in the use of applied behavior analysis for the care and treatment of this very challenging population. This requires a very structured and staff intensive treatment environment as well as specialized educational programming.

III. FACILITY ASSESSMENT

Subjective Narrative:

Hawthorn Center is comprised of Main Building (North Wing) which houses two patient living areas that are currently unoccupied, and the South Wing which houses four patient living units that are currently occupied. The facility is about 250,000 square feet on about 45 acres.

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The Main Building was built in 1955 and is a two-story structure constructed of masonry, brick, concrete, and steel. This includes A, B, C, and D sections. E, F and G sections were added to the Main Building in 1962, 1964, and 1967. This building houses two closed patient living areas, clinical, business, and administrative offices, Office of Recipient Right offices, support service areas such as the Main Kitchen and a Maintenance Shop, recreational facilities such as a gym, movie theater, and swimming pool, classrooms for the Special Education services and storage space. All but two, which need extensive renovations are fully used.

The South Wing was built in 1975 and is a two-story structure constructed of masonry, brick, concrete, and steel and is attached to the Main Building. The South Wing includes H, J, K, L, and M sections. The building houses four patient living areas, reception and visiting area, classrooms for Special Education services, clinical office space, kitchen, swimming pool and gym. It is in somewhat better condition than the Main portion. A project to install a new roof on South Wing was completed in 2009.

Both structures are settling resulting in regular and serious foundation and plumbing problems. Asbestos abatement is necessary in both structures in order to make even surface improvements. Heating, ventilation, and cooling systems are manually operated making it very difficult to manage comfort. A great deal of repair and replacement in terms of electrical, structural integrity, heating and cooling systems, generator repair, replacement of unsafe windows, water leakage, etc. work have been ongoing. Additional planned projects include roof replacement and boiler replacements, which is urgent. As a whole, due to adjacency issues, the facility is not conducive to current medical community expectations for behavioral care, treatment, and services.

Funding was approved for the following projects that are in progress. Below are those approved or near completion:

- Galvanized plumbing in the South Wing to be replaced with copper
- Entrance doors in South Wing school and courtyard
- Furniture replacement in the lobby and visitor rooms
- Abatement of floor tiles in Main Building hallways and offices, and installing carpet
- Ligature risks not addressed in Main Building patient activity areas
- Roof Replacement A, B, C, D, E, F, G Sections. Project approved through special funding source and currently in pre-design.
- Boiler replacement in D, G, and H sections including backup boilers as required. Provide South Wing with backup. Current system has exceeded the life expectancy. Project approved through special funding source and currently in pre-design

Specific Narrative:

- a. Building utilization rates compared to industry standards - Hawthorn Center is the only state hospital that offers inpatient psychiatric care to children and adolescents (ages 4 through 17) who have a serious emotional disturbance or severe mental illness and are residents of the State of Michigan.
- b. Mandated facility standards for program implementation - Hawthorn Center maintains its accreditation with Joint Commission for Accreditation of Healthcare Organizations.

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Further, it is monitored by the state Medicaid Services Administration for compliance with the Centers for Medicare and Medicaid Services (CMS) guidelines.

- c. Functionality of existing structures and space allocation to program areas served -There are two gyms, two swimming pools, two occupational therapy rooms, a music therapy room, an art room, and dance therapy. In addition, there are patient care areas, a school, and dining space. These are all separate, presenting significant line-of-sight and adjacency issues which make safe and modern behavioral programming challenging.
- d. Replacement value of existing facilities - \$90-100 million.
- e. Utility system condition - Electrical service to the Main Building was designed and installed 60 years ago. During FY2003, a 500 KVA transformer replaced an undersized 225 KVA transformer.

As a result of the Separation of Utility Services Project at Hawthorn Center in 2006, heat in the Main Building and South Wing is provided from gas fired boilers that produce hot water that is used for radiant heat and domestic use. The HVAC system in the South Wing is 44 years old. The HVAC systems in both buildings are manual/pneumatic making it near impossible to maintain consistent comfort. Hawthorn Center has received several Recipient Rights complaints specifically related to significant temperature fluctuations in the building especially during weather/temperature transitions. Energy efficiency and pneumatic controls still need to be upgraded.

The Main Building had completed an overhaul of the HVAC system on the second floor in FY2002. The overhaul of the first floor HVAC started with the replacement of windows in FY2003. Funding is needed to complete the first floor HVAC project.

A full building inspection of sewage waste lines is necessary due to the building subsidence mentioned earlier. Two fractured lines have been repaired in FY16.

- f. Facility infrastructure condition – the Main building roof has passed its useful life and is currently ponding and leaking into the building. This creates potential health and safety hazards.
- g. Adequacy of existing utilities and infrastructure systems to current and five-year projected programmatic needs – The utilities and infrastructure systems in this post-World War II structure are failing. As noted earlier, the manually controlled pneumatic HVAC system cannot provide consistent comfort for staff and patients. Further, the structure is subsiding resulting in damage to foundation and plumbing. Finally, adjacency issues make safe provision of behavioral treatment, care and services a challenge. Foundations are failing. Transformer(s) are aging, storm drain, and the sewer system is old and needs examination/repair. As noted previously, Hawthorn Center's Main building was built over 60 years ago. Plumbing consists of galvanized pipe. Decades of exposure to water have caused galvanized pipes to corrode and rust on the inside seriously reducing water flow and quality. Some of the galvanized plumbing has rusted through causing leaks. The galvanized plumbing in the hospital's Main building should be replaced eliminating potential exposure from leaching pipes.

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In a new study, researchers clearly show that lead present in the zinc coating of galvanized steel pipes can be a very significant long-term source of lead in water. The Special Enterprise Maintenance fund project has been approved for this and is at the initial stage.

- h. Date of most recently completed energy audit – February 2009.
- i. Land owned by the agency - Hawthorn Center is located on approximately 45 acres. If there were a need to expand, there is space to do so, particularly after the cottages were demolished. A storage pole building was built recently. Space or open ground around the facility is needed to maintain the privacy and safety of the patients.
- j. Conclusion: Given the exigencies noted above, extreme consideration needs to be given regarding viability of the structure where behavioral treatment, care and services are rendered.

IV. IMPLEMENTATION PLAN

Priority 1

Project Title: Main Building Renovations

Estimated Costs: \$7,500,000

Project Description: Living area renovations of two unoccupied living areas to make those areas suitable for patient care; Outside Perimeter fencing for safety and security; Electrical upgrade; Anti-ligature risks not addressed in FY17-18 MOP; Elevator in Main Building; Update A section classrooms including removal of asbestos tiles, new windows and air conditioning; Renovate Main Building Lobby

Priority 2

Project Title: Asbestos Flooring Abatement

Estimated Costs: \$1,000,000

Project Description: Continue flooring abatement and replacement of carpeting A, B, C, D, E, and G sections for infection control per joint commission recommendation

Priority 3

Project Title: Air Conditioning- Main Building

Estimated Costs: \$2,500,000

Project Description: Air Conditioning - Main Building, First and Second Floor- Administrative Offices, intern and resident offices, training area, cafeteria, other patient activity areas. Current air conditioning is provided in minimal locations by window units which is highly ineffective and results in costly electric bills.

Priority 4

Project Title: Ceiling Tiles-Main Building

Estimated Costs: \$500,000

Project Description: Replace metal pan ceiling with lay-in ceiling tile in Main Building that is deteriorated and falling.

Priority 5

Project Title: Parking Lot Lights

Estimated Costs: \$280,000

Project Description: Replace all existing 50+ year old sodium haloid street lamps with new 20' posts and LED lamps. Install new wiring in conduit for future repairs to address several patches that are direct bury. Add several additional lights to the islands. All to increase safety and security of staff and patients and increase the cost effectiveness of the current lighting. Lighting has failed in multiple locations.

Priority 6

Project Title: South Wing Kitchen Equipment

Estimated Costs: \$100,000

Project Description: Replace 40 year plus year old range, dishwasher, and refrigeration unit; replace plumbing for grease trap and fixtures

Priority 7

Project Title: Main Building Window Replacement

Estimated Costs: \$1,500,000

Project Description: Replace windows in Main Building with energy-efficient tempered glass with interior safety glass

Priority 8

Project Title: Facility Electrical Upgrade

Estimated Cost: \$6,000,000

Project Description: Replace outdated electrical panels, wiring, lighting throughout the facility. Inspect, clean, update all transformers, switch gears throughout the hospital

Priority 9

Project Title: Upgrade HVAC System

Estimated Costs: \$10,000,000

Project Description: Install energy management system. Replace pneumatic system with direct digital control, replace air handlers and dampers, remove cellulose fibers from ductwork.

Priority 10

Project Title: Replace Living area Observation Chairs, Office Chairs

Estimated Costs: \$75,000

Project Description: Current upholstery on office chairs cannot be sanitized-need chairs with nonpermeable covering.

Priority 11

Project Title: Office Furniture

Estimated Costs: \$500,000

Project Description: Replace 40-to-60 years old office furniture throughout the hospital.

Priority 12

Project Title: Sewer Lines Repair

Estimated Costs: \$50,000

Project Description: Repair of collapsed sewer lines and drains identified camera inspections.

Priority 13

Project Title: Window Privacy film – South Wing living areas

Estimated Costs: \$50,000

Project Description: Patient Safety/Privacy; patient bedrooms and living area common areas: install privacy film and glass guard on second floor windows in M, K, L, and classroom wings.

Priority 14

Project Title: Rear Playground Fence

Estimated Cost: \$225,000

Project Description: Raise the rear playground fence height to 12” and add tip ins and mini micro mesh to match the Walking Trail Fence.

Five-Year Capital Outlay Plan – Kalamazoo Psychiatric Hospital

I. Mission Statement

The Kalamazoo Psychiatric Hospital will provide trauma informed person-centered inpatient psychiatric service and support, respecting the needs, dignity, individuality and cultural diversity of its patients, employees, volunteers and the communities it serves.

II. Programming Changes

None – Continue to work with nursing department to provide necessary physical improvements to the environment.

III. Facility Assessment

The Kalamazoo Psychiatric Hospital (KPH) provides inpatient adult psychiatric services through a lease agreement with Western Michigan University (WMU) for utilization of specific buildings. KPH operates its hospital service programs from a quadrangle complex of six buildings, with some of its support operations housed in the separate buildings. An assessment of the physical condition of the buildings, leased by KPH, is reflected below by specific hospital service system.

Quad Building Structure (Good Condition)

The hospital structure is in good condition.

The minor concerns are:

- 1) Plaster conditions - A great deal of plaster repair is required due to the age of the facility. Maintenance continues to find and repair these issues as quickly as possible.
- 2) Trees – The property has several dead or dying trees on the property. KPH has started working with a vendor to remove them; however, it will take some time to accomplish the task. Trees that are a safety issue will be dealt with first followed by trees that could affect the structural integrity of the hospital buildings.
- 3) Cooler/freezers – We have at least three cooler/freezers that need to be replaced due age and condition in the kitchen prep area. They need to be replaced with up-to-date and more energy efficient equipment.
- 4) Outside Lighting – Upgrade all outside lighting to LED. Also increase the lighting coverage in all the parking lots at KPH.

The major concerns are:

- 1) Roadway and Parking areas – The roadways around KPH need to be

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repaved in some areas and resealed in other instances. Resealing would go a long way in extending the life of the areas of black top that are in good shape now beginning to show signs of weathering or in the early stages of failure. Any repaving or sealing would also then need to be restriped.

- 2) Sewer Lines – The drainage and sewer lines are very old and have been subjected to years of chemical cleaning that have weakened or destroyed them. Piping is replaced as necessary; however great lengths of it are buried within the facility floors/walls. Our greatest risk is the pipe from the kitchen to the sewer system. Nearly 100 feet of that has been replaced by our licensed plumber; however hundreds more feet need to be addressed. The last section of pipe replaced in July 2017 had sections of piping that had eroded more than 50 percent away. We expect the piping to improve the further we get away from the kitchen area, the point of entry for the harsh cleaning chemicals that were formerly used; however we know that there is more pipe damage down slope from what we have already replaced.
- 3) Elevator Repairs - The elevators at KPH have been in service for many years. The systems are in need of having some major upgrades to improve the longevity and the overall safety of the elevator systems.
- 4) Air Handlers - The air handlers throughout the hospital are in need of a filtration and automation upgrades. As of now our air exchanges and filtration are below industry standards. The air quality within the hospital is of utmost importance to insure the health and safety of everyone within the buildings.
- 5) Switch Gear - Electrical Switch Gear in building needs to be upgraded due to age and condition. The switch gear has failed in pass PM testing. The upgrade would allow for the future growth and use of Building #7.

Projects in process:

- 1) Anti-ligature project. The scope of this project is to address ligature concerns expressed by the Joint Commission during their 2019 inspection. Includes, but not limited to, the replacement or modification of toilet dispensers, sinks and faucets, shower control panels, bathroom dividers, curtains, beds, doorknobs, door closers, grab bars (complete), towel dispensers, hinges, garment hooks, heater grates, interior drain covers, light fixtures, wardrobes, electrical raceways, and fixtures, plumbing fixtures and pipes, patient phones, and more.
- 2) Phone system – The phone system is antiquated at best. We continuously see issues with phone connectivity and programming. Obtaining business set replacement phones are very difficult. All phone sets are refurbished. This is a safety issue for both staff and patients. The phone system will become completely obsolete by 2025. AT&T will not be able to support KPH phone systems. We need to update to voice over IP system.
- 3) Repair/Replace Doors - To be compliant with the Joint Commission and the 2012 Life Safety Code (NFPA 101), we will need to replace many fire doors.

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Most doors are original or near original and with modifications over the years when there were less stringent fire codes have rendered these doors non-compliant. Failure to replace them places patients at risk and will create citations from the Joint Commission and Fire Marshal.

- 4) Install Sprinklers- Phase II- KPH need to be 100% sprinklered per the 2012 NFPA 101 and therefore the Joint Commission as well as for the overall safety of patients and staff. Approximately one-third of the hospital is sprinklered already so much of the infrastructure exists. Phase I was funded with FY 19 enterprise-wide Special Maintenance funds. All patient areas must be done with ligature concerns in mind which dramatically increases the cost. It is recommended to break this project up into smaller chunks over the next several years to make to manageable.

Building Roof (Excellent to Fair Condition)

The building roof has continued to age and shows additional end of life failures such as seam failures in areas not recently coated. KPH coated the front half of the hospital with a 12-year warranty rubber coating which has worked well as expected, but the back half, maintenance building, Gate Cottage, and Chapel all need new roofs. We are working to repair/replace or coat these roofs in 2019 however remaining available funds are expected to be short.

- a. Building utilization rates compared to industry standards

KPH is one of three public hospitals that provide adult inpatient psychiatric services to residents of the state. Hospital overall bed capacity is 205 beds. The current average census is 150.

- b. Mandated facility standards for program implementation, where applicable (for example, federal/industry standards for laboratory facilities, hospitals, compliance with consent decrees, etc.):

KPH follows Joint Commission and Life Safety Code standards; however, our departments are continually looking to further improve our compliance.

- c. Functionality of existing structures and space allocation to program areas served.

The programming areas within the Kalamazoo Psychiatric Hospital have been made as functional and aesthetically pleasing as possible, given the structural limitations of the buildings. The facility is adequate to meet the current and projected needs of the program.

Projects aimed at improving the programming areas available within the hospital include:

- 1) Installation or replacement of air conditioning in various areas.

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- 2) Renovation of a former office wing into a unit to expand the availability of patient beds and streamline patient therapeutic and learning opportunities.
- 3) The addition of a CMMS (computerized maintenance management software) to streamline maintenance efforts, improve communication, and improve repair part stocks not adequately provided by SIGMA.

BUILDING	BUILDING PURPOSE	STATUS	SQ. FT.
Administration (1)	Office Building	Active	58,765
Acute Medical (3)	Hospital	Active	35,147
Booster Pump (72)	Utility Storage	Inactive	N/A
Children's Unit/Pheasant Ridge (7)	Maintenance	Active	37,176
Female Infirmary (4)	Hospital	Active	44,134
Female Receiving (1A)	Hospital	Active	58,909
Gate Cottage (42)	Museum	Active	2,199
Interfaith Chapel (14)	Chapel	Active	6,323
Male Infirmary (2)	Hospital	Active	35,399
Male Receiving (1B)	Hospital	Active	37,016
Shed	Warehouse/Storage	Active	N/A
Shed	Warehouse/Storage	Active	N/A
Shed	Warehouse/Storage	Active	N/A
Water Tower (49)	Utility Storage	Active	0
Grounds Building (8)	Maintenance	Active	1,500

- d. Replacement value of existing facilities (insured value of structure to the extent available):

Not known.

- e. Utility system condition (for example, heating, ventilation, and air conditioning (HVAC), water and sewage, electrical, etc.):

Electrical System (Good Condition)

Under the lease agreement with Western Michigan University (WMU), primary electrical service is the responsibility of the WMU Power Plant.

Power requirements in some areas have outdistanced available panel boards and secondary electrical rewiring is needed in some areas. KPH maintenance staff has undertaken the installation of additional panel boards and the upgrading of electrical wiring when possible. Usage of some current raceways are maxed out based on electrical code. New raceways are needed in some instances. Old incandescent and fluorescent lighting are being replaced with LED lamps and fixtures with the overriding goal to convert all lighting to LED over the next one to two years.

Water System (Good Condition)

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Cold water is provided by the City of Kalamazoo. Cold water lines are operationally solid. Secondary lines are good, but they are very old and need occasional repair.

Hot water is provided under terms out of lease by the WMU power plant. The hot water lines are in fair condition. The installed hot water recirculating system continues to supply hot water on demand to our patient areas but is undersized to provide our own supply of hot water should the power plant fail.

Drain System (Fair Condition)

The drainage/sewer lines are very old and have been subjected to years of chemical clean-out practices that have weakened them. While drainage and sewer piping are replaced as necessary, great lengths of it are buried within the facility floors/walls. Most of the internal piping is in adequate condition. KPH is at risk with the piping coming out of the kitchen preparation area as previously mentioned.

Steam System (Fair to Good Condition)

The steam lines are in fair to good condition. The insulation of the steam piping is problematic from an economic and safety perspective. Because of the insulation's poor condition, large amounts of heat are lost to the atmosphere, increasing utility costs. Also, much of the pipe insulation is an asbestos containing material which is abated as necessary by an independent contractor. Under the lease agreement with WMU, primary steam service is the responsibility of the WMU power plant.

The steam and condensate piping should be considered for replacement pending verification of condition once individual services can be isolated to accomplish the infrastructure repairs. It is suspected that the condensate pipe is in the worst condition, but the steam line has likely been in service since the 1920s and may well require replacement. It is suggested that a renewal program include an allowance for replacement to assure the long-term reliability of these services. A consequence of not performing this work would be the loss of steam to the facility. If it would be in the wintertime, both the high-pressure steam to the kitchen and the facility heat source for the air handlers would be lost.

Last fall we developed a steam leak from the main hospital to the Chapel. While this is a unique system as it is subject to road vibrations, it did indicate to us the potential wear of both the supply and condensate pipes.

Ventilation System (Fair to Good Condition)

The ventilation system is operationally sound but is in need of some upgrades in the near future.

Compressed Air System (Excellent Condition)

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The WMU Power Plant reliably supplies quality compressed air (dried) for use with the hospital's refrigeration and ventilation equipment. KPH has an air compressor with an air dryer that is capable of supplying quality compressed air to equipment in the case of a WMU Power Plant failure.

- f. Facility infrastructure condition (for example, roads, bridges, parking structures, lots, etc.):

Roadway Systems/Parking (Fair to Poor Condition)

The roadway system and parking lots which service our hospital are in fair to poor condition. Certain areas suffer from significant potholes and cracking and patches are failing. Repaving of these areas is needed. Some roads are subject to heavy truck traffic with most of it being trucks associated with WMU.

- g. Adequacy of existing utilities and infrastructure systems to current and five-year projected programmatic needs:

The utilities and infrastructure systems are adequate for current and five-year projected programmatic needs.

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- h. Date of most recently completed energy audit, and, if an energy audit has yet to be completed, what is the plan/schedule for doing so?

2006.

- i. Land owned by the agency, including a determination of whether capacity exists for future development, additional acquisitions are needed to meet future demands, or surplus land can be conveyed for a different purpose:

The Kalamazoo Psychiatric Hospital leases buildings and surrounding areas from Western Michigan University. The hospital buildings and grounds occupy approximately 35 acres, which is maintained by the hospital maintenance staff.

IV. Implementation Plan

- a. Itemized listing of major capital projects by priority, including brief description and estimated cost. (*Adjust previously developed or prior year's figures utilizing industry standard CPI indexes where appropriate*):

See Kalamazoo Psychiatric Hospital (KPH) Capital Outlay Five-Year Plan spreadsheet in this document.

- b. Define the impact of addressing deferred maintenance and structural repairs, including programmatic impacts, immediately versus over the next five years:

This facility has several projects listed on the Capital Outlay Special Maintenance Request. Of those KPH has started on the anti-ligature, fire suppression, and KPH must show continual progress of this anti-ligature project to satisfy the Joint Commission. All other special maintenance requests will be performed in order of priority once funding is secured.

- c. Identify, to the extent possible, a rate of return on planned expenditures. This could be expressed as operational savings that a planned capital expenditure would yield in future years.

Delaying needed repairs until they become critical usually results in costlier special maintenance project costs and disruption in the hospital's mission of providing safe patient care and treatment.

Five - Year Capital Outlay Plan – Walter P. Reuther Psychiatric Hospital 2023

I. Mission Statement

Walter P. Reuther Psychiatric Hospital shall provide an appropriate range of active inpatient psychiatric treatment services to best meet the needs of adults with severe mental illness in collaboration with community mental health agencies and authorities.

II. Programming Changes

Walter P. Reuther Psychiatric Hospital's (WRPH) programming accepts adult patients from 18 years of age and up. WRPH has no planned program eliminations or facility closures.

III. Facility Assessment

Originally constructed in 1973, Walter Reuther Psychiatric Hospital is a 273,844 square foot facility consisting of three buildings. The main tower comprised of 256,982 square feet includes a basement (kitchen, warehouse, training, clinic), six stories where patients are housed, first floor clinical wing, and a seventh-floor maintenance area. Other parts of the main building include the Annex (added in 1981) which provides office space for support staff and conference rooms to facilitate meetings, and the Center for Activity, Rehabilitation, and Therapy, the newest (2014) addition to WRPH includes a gymnasium, a variety of patient activity and therapy programs, and the Reuther Academy that provides secondary education to our younger patients. The other two buildings include the Power Plant and a maintenance shed. There are several updates and repairs required to keep the buildings safe and comfortable for our patients, staff, and visitors.

A Facility Condition Assessment was completed FTC&H Architects and Engineering in collaboration with the Michigan Department of Technology, Management & Budget in January 2015. This assessment identified \$22,725,840 in 2015 dollars of recommended/required infrastructure upgrades or improvements. Some of these have been completed, but many others are still needed.

a. Building utilization rates compared to industry standards:

WRPH is one of five public hospitals that provide inpatient psychiatric services to residents of the state of Michigan. The hospital's authorized census is for 180 patients aged 18 and older. The patient population is comprised of patients committed for mental illness, those found incompetent to stand trial, and those deemed Not Guilty by Reason of Insanity. This range of patients presents the hospital with a unique set of circumstances to provide safe yet essential treatment.

b. Mandated facility standards for program implementation, where applicable (i.e. federal/industry standards for laboratory facilities, hospitals, compliance with consent decrees, etc.):

WRPH is accredited by the Joint Commission (JC) and is a deemed status facility, where the Joint Commission surveys and accredits for the Center for Medicaid and Medicare Services (CMS).

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WRPH has worked within its operating budget to address many of the deficiencies identified by accrediting and regulatory agencies.

Completed Projects as a Result of Citations from Accrediting/Regulatory Agencies

In 2014 the Joint Commission cited minor deficiencies and the repairs were completed using funding from the facility operations budget. These items included:

- Build an Annex egress sidewalk.
- Install mechanical shaft steel platforms.
- Repair and update emergency egress lighting/wiring.
- Air duct cleaning.

More recent repairs completed include:

- Installation of new boiler controls.
- Replacement of fill in cooling towers.
- Replacement of concrete structures.
- Installation of new fire suppression system on seventh floor maintenance area.

The Joint Commission (JC) and Center for Medicaid/Medicare Services (CMS) conducted surveys in 2017 and again in 2018 resulting in WRPH receiving citations for several deficiencies. In 2017 the following repairs were completed using facility operating funds:

- Replaced exam tables.
- Installed ligature resistant handrails in shower room toilet areas on units 1-6.

In 2018 through 2019 projects addressing deficiencies included:

- Installation of ligature resistant doorknobs/hinges on all patient rooms.
- Installation of ligature resistant faucets in all patient bathrooms.
- Replacement of all non-ligature resistant patient beds.
- Replacement of all patient wardrobes with ligature resistant lockers.
- Reinforcement of window sills.
- Replacement of all non-ligature resistant hallway and stairwell handrails throughout the main hospital and patient areas.
- Installation of fire suppression system and smoke detectors throughout hospital.

These projects were funded through the capital outlay process.

In 2018, The Office of the Auditor General Audit completed an audit and cited deficiencies related to key control and insecure entry/exit points to the hospital. Findings related to key control included inaccurate and incomplete records of key assignments. Findings related to insecure entry/exit points included poor key management and frequently broken or damaged locks.

- In 2019, new Best door cores were installed throughout the hospital.
- In 2020, hospital entry doors and doors to the patient units were outfitted with badge readers and card swipe entry system.

The goal is to equip all general access area doors with the card swipe entry system to decrease the reliance upon keys. There are still many doors that need to be addressed.

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In 2020 the update of the surveillance cameras on perimeter and grounds area for patient safety and security of state buildings and land began and was completed. The upgrade of the security system throughout interior and exterior hospital included adding more cameras and replacement of old cameras to improve resolution. Many of these cameras also include audio recording capability to improve care and incident investigation. Along with this upgrade the hospital added thermal camera monitoring to allow non-invasive and the least labor-intensive method to monitor temperatures of all persons entering the hospital at both of our main entries.

In Process Projects as a Result of Citations from Accrediting/Regulatory Agencies

The kitchen area located in the basement of the main tower requires significant renovation according to CMS physical plant findings of 2017. The kitchen floor does not slope to remove water in the dish room and pot and pan tank areas. Condensation removal from dishwashing unit requires upgrading ventilation to exhaust directly out of kitchen to outside. The current system exhausts up through the seventh floor from the basement, resulting in continued leaks and ceiling tile damage. Other problems included standing water on floors, dented equipment, and non-working equipment requires updating and replacement. ***The hospital received funding in 2021 for a complete renovation of the kitchen. This project will begin 8/2021 and should be complete by 12/2021.***

The fencing around the grounds area of the hospital was in poor repair, and not high enough to prevent patient elopement. Replacement and installation of fencing around the grounds area and north parking lot for patient security and safety to conduct required outside activities and programs as required by CMS, as well as to prevent theft and damage to staff/visitor vehicles. ***This project has been funded and began May 2021 with projected completion in August 2021.***

In 2019 the hospital was placed in Immediate Jeopardy by CMS due to hot conditions in the hospital. The two chiller units (air conditioning) were not functioning and were at the end of their useful life. This has necessitated rental of a temporary chiller and generator for the past three spring/summer seasons to keep the hospital at a comfortable temperature. ***The hospital did receive funding and the chiller replacement project is in process with a final completion date of February 17, 2022.***

The chiller replacement project will lead to increased damage to the parking lot area and service roadway. The parking areas have broken concrete, crushed stone, and potholes creating safety concerns for staff and visitors. This leads to increased cost to maintain snow equipment broken from servicing this area. This area is needed to accommodate the number of staff working at the hospital. ***We are waiting to find out if funding will be approved as a part of the chiller replacement project.***

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c. Functionality of existing structures and space allocation to program areas served with additional activity therapy building.

In 2016 WRPB increased its census to approximately 180 patients. In 2020 this was temporarily adjusted to 157 to address the COVID-19 pandemic. The census has again increased to accept up to 180 patients.

WRPB completed the construction build of an 18,000 square foot activity therapy building which is connected to the east side of the hospital. This building addresses the space needs for physical activities and scheduled programs to meet the therapy requirements of our patients.

With both the main hospital building and the activity therapy building, patients are provided with easy access to a full-spectrum of mental health services and programs.

Reuther Hospital - 256,982 sq. ft.
Reuther Administrative Wing - 13,862 sq. ft.
Power Plant – 3,000 sq. ft.

d. Replacement value of existing facilities (insured value of structure to the extent available).

Unknown

e. Utility system condition (i.e. heating, ventilation, and air conditioning (HVAC), water and sewage, electrical, etc.)

All utility systems at WRPB are beyond their useful life currently at 48+ years. The HVAC chillers and cooling tower are beyond their life expectancy. A new HVAC computer system upgrade was completed FY18.

The hospital chiller is broken and beyond repair. In 2019, the hospital was cited by CMS for excessive heat in the building that placed the health of our patients in jeopardy. For the past three years, WRPB has had to use a rented, temporary chiller at significant cost. The hospital is in the process of replacing the chiller and cooling towers.

Upgrading these systems will increase hospital's cooling capacity and greatly reduce energy consumption and will meet life safety requirements.

Replacement of high voltage electrical panels and electrical switchgears, which includes the main distribution panel to the hospital and the main transformer, is needed. The electrical panels require replacement due to excessive water damage and past useful life 48+ years to meet Life Safety Code.

Plumbing systems are of original construction (48+ years) and develop frequent leaks causing disruption to patient care. The system requires updating heat exchanger and hot water pumps. One pump is working, the backup pump is not workable, past its useful life and parts are not replaceable. If system goes down, there is no hot water throughout the hospital. ***The hospital is in process of updating the domestic water heater system.***

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f. Facility infrastructure condition (i.e. roads, bridges, parking structures, lots, etc.)

The main hospital's south parking lot and main roadway was listed in the Facility Condition Assessment by FTC&H Architects and Engineering completed January 2015 and Capital Outlay report. The parking lot and roadway continue to deteriorate rapidly, and significant damage is expected during the chiller replacement project as a multi-ton crane will be parked in this lot. This replacement of parking and roadway was removed from original project included in the AT building construction due to lack of funding.

The facility's north and east parking lot will need to have repair and sealing to improve life expectancy.

g. Adequacy of existing utilities and infrastructure systems to current and five-year projected programmatic needs.

Infrastructure systems are not adequate and require current and five-year projected plan for replacement, update, and repair.

h. Date of most recently completed energy audit, and, if an energy audit has yet to be completed, what is the plan/schedule for doing so:

Last energy audit is unknown. WRPB will reach out to utility companies to see if one has been completed and/or if one can be completed in the future.

i. Land owned by the agency, including a determination of whether capacity exists for future development, additional acquisitions are needed to meet future demands, or surplus land can be conveyed for a different purpose:

The WRPB is located on approximately 14.33 acres in Westland. There is a need to expand and there is space to do so. Space or open ground around the facility is needed to maintain the privacy and safety of the patients.

IV. Implementation Plan

This facility is currently requesting major capital projects and has been submitted in priority order listing total of 21 items.

- 1. Waterproofing (\$75,000)** – Water leaks into the electrical room located in the basement and infiltrates from the first-floor south courtyard between the annex and the main tower of the hospital. This places the hospital at risk for a loss of electrical power.
- 2. Replace the South Parking Lot and Service Drive (\$593,000)** – The South parking lot is over 40 years old and has only been maintained by filling potholes with cold patch asphalt. Further filling of potholes is ineffective. Replacement is needed to prevent future accidents and injury to staff and visitors, and property damage claims.
- 3. Replace North Hospital Drive Roadway (\$500,000)** – The road leading to the hospital west of Merriman Road is one of two roadway entrances to the

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hospital. Ownership of the roadway is unknown but is used almost exclusively by WRPB staff and visitors. This roadway is in poor condition, with crumbling asphalt, extreme potholing, and creates a significant risk to property

- 4. *Replace Exterior Joint Sealants of Windows and Doors (\$350,000)*** – The exterior joint sealants on the main tower and annex are in poor condition. The perimeter sealant around window frames has cracked and is deteriorating. Water is penetrating the building, collects on windowsills, drips onto floors leading to decreased integrity of the interior walls and exterior brick, and increased risk to patient and staff safety.
- 5. *Replace Heat Recovery Unit, Air Handler Unit Dampers, and Actuators (\$412,500)*** – The dampers that direct air no longer control properly to regulate the temperature. The balance of air leaving and entering the building is not maintained, resulting in spaces starved for air and doors that do not open and close properly (potential risk for patient elopement.) Dampers have deteriorated and must be propped open to allow for air flow when the fan is in the “on” position.
- 6. *Upgrade Air Handler Units (\$862,500)*** – Preventive maintenance on the air handler units is no longer sufficient to keep the air handlers functioning without costly need for outside service. Installation of variable motor fans, updating the air handlers and returning fans to balance air flow and ventilation is needed.
- 7. *Replace Grade Mounted 2500kVA Distribution Transformer, Substations, Electrical Distribution Panels, and Motor Control Centers (\$690,000)*** – The transformer is in poor condition and has exceeded its life expectancy and needs to be replaced. The substations need substantial maintenance to be conducted. Due to the ventilation in the electrical room, the electrical distribution equipment is dirty and can cause arcing and other catastrophic failures that could damage the equipment and cause extended down time. The transformers and distribution equipment are the original equipment dating back to 1972 and have exceeded their useful life. The motor control centers are in poor condition and have had extensive and costly maintenance required in recent years.
- 8. *Replace All Dual Duct Terminal Units with New that Include DDC Controllers (\$1,380,000)*** – The current dual duct terminal units are at the end of their useful life and the dampers no longer modulate, causing spaces to overheat or overcool.
- 9. *Replace/Repair All Exterior Doors (\$75,000)*** – The exterior paint on ferrous metal items such as doors, frames, bollards, and lintels are in poor condition. The metal items are beginning to rust. These need to be repaired and/or replaced.
- 10. *Increase the Number of Doors with Card Readers (\$300,000)*** – To address the FY18 OAG audit, addition of card reader entry to all restrooms, conference

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rooms, nursing stations, and other multi-use areas will reduce the number of desks distributed to the 400+ staff at the facility.

- 11. Replace Cubicle and Shared Use Space (\$150,000)** – The cubicle and shared use space in the Annex are over 30 years old. Replacement is needed to meet the demand and changes of the department and staffing. Much of the equipment does not meet ergonomic work requirements and places our staff at risk for injury.
- 12. Replace the Maintenance Equipment Storage Building (\$575,000)** – The current building is past its useful life and permits infiltration of water. There is insufficient space to protect the WRPB trucks and other mobile property maintenance equipment subjecting these items to accelerated degradation due to weather.
- 13. Replace Granite Windowsills (\$144,000)** – The current patient area windowsills are granite. These windowsills are easily broken and become a means for patients to make weapons or articles of self-abuse.
- 14. Replace Furniture in Patient Common Room Areas (\$175,000)** – The furniture in the patient common room areas presents a ligature risk. It is highly recommended that while this area is generally supervised by staff, the furniture should be of an anti-ligature nature.
- 15. Replace and Renovate All Common Area Restrooms (\$400,000)** – All of the common area restrooms for staff and visitors are extremely outdated. There are frequent plumbing problems due to old piping and fixtures. The stalls are rusting and beyond repair. Floor and wall tile and grout present sanitation and infection control risks.
- 16. Replace Vinyl Flooring Throughout the Hospital (\$3,000,000)** – Existing vinyl floor tiles on all seven levels of the main tower building and administration area are aged and deteriorating. We are no longer able to obtain matching tiles to replace damaged tile. This tile requires intensive and continuous upkeep.
- 17. Replace All Patient Cafeteria and On Unit Dining Tables and Chairs (\$100,000)** – The current tables and chairs are 25+ years old and have exceeded their life expectancy. We are no longer able to obtain matching replacements. The current furniture presents an infection control and patient safety risk.
- 18. Replace Office Furniture (\$100,000)** – All office furniture needs to be replaced. Most desks are over 40 years old or items that have been obtained from the Lansing surplus warehouse are not ergonomically adequate.
- 19. Replace Asphalt Walking Path (\$61,000)** – The walking path is used by patients as a form of exercise and a way to de-stress. There are cracks and broken/sinking asphalt that present a safety risk.

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See Attached Spreadsheet.

V. Define the impact of addressing deferred maintenance and structural repairs, including programmatic impacts, immediately versus over the next five years:

Failure to provide special maintenance funding and or Work Order-approved funds to maintain the facility consistent with industry standards and National Patient Safety Goals creates increased facility repair costs and unnecessary demands on facility maintenance staff; creates potential health and safety problems for patients and staff; results in WRPH being non-compliant with Joint Commission and Centers for Medicare and Medicaid Services; and typically results in taking programming areas out of service while critical projects are being performed. Failure to address structural operational issues can result in shut down of basic functions of heat, water, and cooling.

VI. Identify, to the extent possible, a rate of return on planned expenditures. This could be expressed as operational “savings” that a planned capital expenditure would yield in future years.

Delaying needed repairs until they become critical will result in higher cost, increased special maintenance project costs and disruption in the hospital’s mission of providing safe patient care and treatment. Delays in operational equipment replacements such as, electrical panels, dampers, etc., may result in implementation of an emergency plan to ensure safety and security of patients. Delaying repairs may result in non-compliance with Joint Commission and Center for Medicare and Medicaid Services with the potential to lose accreditation.

Building	Project	Brief Project Description	Facility Priority	System Priority	Cost Estimate	Status	Funding Source	Notes	DHHS comments	Cumulative Costs
Hawthorn Center	Roof Replacement A, B, C, D, E, and F sections	Roof Replacement - Roof is currently in disrepair requiring monitoring and patching. Water is ponding on roof. Delaying project increases risk of mold. Consensus discussion that condition needs attention and should proceed even if facility operation is limited to the next 3-5 years. Cost adjusted by SFA per review of actual roof areas and more recent costs projected to future to the extent possible.	3	6	\$1,400,000	Pending Approval - NOTE A	Legislative Appropriation	BOD 2019 report suggested \$2.5M?? Clarification/review of areas essential and cost estimates	DHHS will defer to your expertise on cost	\$10,530,000
CFP	Replace Heating Control Valves & heating system Victaulic fittings.	Existing valves and Victaulic fittings are failing. The increased frequency of leak could potentially become an infection control concern (mold). Consensus agreement dating back to SFA-BOD 2019 assessment report and recommendations that this is a significant issue and consensus/priority items need to be replaced due to water damage and risk. Life Safety Code Center with Joint Commission. SFA recommendation that these are a significant concern and a likely priority however, must review other water infiltration (SFA-BOD 2019 report \$300,000 estimate) and humidity control issues in the lower level spaces concurrent with equipment replacements to mitigate those factors that contributed to the current equipment concerns.	5	9	\$950,000					\$11,480,000
WRPH	Replace Main Distribution Panel and Electrical Panels	The main transformer for hospital is 40+ years old, past useful life, and needs to be replaced. Failure would result in complete power loss presenting significant life safety concerns.	9	14	\$900,000			Increase initial \$600,000 by \$300,000 for water infiltration per BOD 2019 assessment; may need to evaluate additional humidity management needs/costs as well		\$12,380,000
WRPH	Replace Main Transformer and install second Transformer	Continues to be a need to address ligature concerns throughout the hospital. Joint Commission requires that this continue to be an ongoing priority. Jenie Uphous (SFA) suggested potential consideration of Design Professional engaging in Anti-ligature study of all facilities with possible funding prioritization globally based on Joint Commission status and needs since this is a significant area of ongoing consideration for this or other projects.	11	17	\$682,500					\$13,062,500
KPH	Anti-ligature	Continue flooring abatement and replacement of carpeting in A,B,C,D,E and G sections to help with infections control and clean environment.	1	15	\$500,000	\$120,000 remaining on current Anti Lig MOP. KPH continues Anti Lig coverage.		FY21 DHHS Special Maintenance request was \$750,000		\$13,562,500
Hawthorn Center	Asbestos flooring abatement	Modify the existing lift station/bar screen building to minimize the handling of hazardous waste by staff, including modifying the roof to prevent heavy snow and ice from sliding off and onto someone entering the building. This is a health and safety hazard. Consensus discussion that this may not be a priority over other infrastructure serving patient areas; may also be more basic snow management solutions for lower investment levels.	11	10	\$1,000,000	NOTE B				\$14,562,500
CFP	Replace the Building Security System PLC's	The Allen Bradley PLC are at the end of life for support and replacement.	8	12	\$475,000					\$15,037,500
WRPH	Replace South Parking Lot, Roadway, and Lighting	The South parking lot and roadway are over 40 years old. Maintenance and repair of potholes and crumbed asphalt is ineffective. Replacement is needed to prevent future accidents to staff and visitors, and property damage claims. Will need to include lighting upgrade as well. Joint discussion concluded that Chiller project will impact this lot further so any work unlikely until at least 2022; design for parking improvements is currently funded by DHHS, however lot could be pulverized/graded or otherwise continue in use in poor condition if absolutely necessary to allow other building infrastructure improvements to proceed. Demand is primarily at shift change. Lower priority outside initial FY21 allocations.	2	8	\$1,000,000			DTMB 2019 review also contained this project at \$800,000. Part of chiller project? What is utilization level of this road/lot, is there adequate capacity in other lots and access; is this higher priority than equipment or infrastructure in buildings elsewhere?	This is a staff lot, used 24/7. There is not adequate space in both lots during shift change. Due to the location of this lot, it will be shut down during the chiller replacement project, and the weight load of the chillers may further deteriorate the lot. In addition, there is an underground water tank abandoned by Wayne County that is adjacent to this lot. Because there is the potential for future water tank leaks, proper drainage must be incorporated into the parking lot design, which will increase the cost. Agency funds have been added to the Chiller Project to design the lot and get final costs.	\$15,562,500
CFP	Replace Main Building Cooling Chillers	Units are approaching their end of life cycle. In need of replacement to eliminate future high maintenance costs and reliability.	11	18	\$900,000					
CFP	Replace Chilled Water Ice Tanks	Units are approaching their end of life cycle. In need of replacement to eliminate future high maintenance costs and reliability.	14	19	\$2,100,000					
KPH	Replace Existing Roadway	The roadway has numerous potholes that have been patched over the year's and a minimum of 15 storm drains are not working properly, causing water to back up or not otherwise being taken away properly. This is potentially placing the hospital at an environmental risk by having rain run off going to the earth and creating the potential of erosion damage.	3	20	\$300,000			FY20 DHHS Special Maintenance request was \$350,000		
KPH	Storm Drain Repairs	All asphalt needs to be removed and replaced due to ongoing cracking and heaving, which creates a safety risk and the potential of not meeting ADA requirements. Replace the asphalt and redesign docking area based on usage and the increased traffic in the area.	4	21	\$500,000					
CFP	Replace Handicap Parking Lot Service Area	The laminate countertops & cabinets located in all the patient care areas are breaking which is creating an infection control problem that we have been cited to replace unit dampers and actuators - 47 years old past serviceable life. Life safety issue. Joint Commission and Energy Savings SFA recommendation and DHHS concurred that this item and other Air Handler/Duct-VAV/Controls related items are best addressed as an integrated engineered solution system. This will require a significant level of funding and may likely be a future or other wise separate issue from FY21 EW Allocation. SFA did suggest there may be some more minor routine maintenance/repair/replacement of components that could improve operation of the existing system short term at a lower investment level.	17	22	\$1,200,000					
CFP	Replace all Counters & Cabinets on Patients Units	Replace all dual duct boxes to update and include DDC controls - current system is 47 years old and significantly past useful life. Convert Pneumatic to Electronic SFA recommendation and DHHS concurred that this item and other Air Handler/Duct-VAV/Controls related items are best addressed as an integrated engineered solution system. This will require a significant level of funding and may likely be a future or otherwise separate issue from FY21 EW Allocation. Cost increased to BOD Assessment cost of \$3M vs. prior DHHS cost of \$1.2M	6	23	\$350,000					
WRPH	Replace Energy Recovery Unit, Dampers, and Actuators	Replace all dual duct boxes to update and include DDC controls - current system is 47 years old and significantly past useful life. Convert Pneumatic to Electronic SFA recommendation and DHHS concurred that this item and other Air Handler/Duct-VAV/Controls related items are best addressed as an integrated engineered solution system. This will require a significant level of funding and may likely be a future or otherwise separate issue from FY21 EW Allocation. Cost increased to BOD Assessment cost of \$3M vs. prior DHHS cost of \$1.2M	7	7	\$412,500			Does this warrant stand alone status and action separate from AHU replacements, dual duct conversions, controls, etc.? SEE NUMBER 13, 15 and BOD recommended AHU/replace not given a facility priority level	If this is the recommendation by DTMB to best address issues, we will look forward to that funding being allocated accordingly. Would pricing fluctuate 2 years later since this is from 2019?	\$412,500
WRPH	Replace Dual Duct Boxes	Replace all dual duct boxes to update and include DDC controls - current system is 47 years old and significantly past useful life. Convert Pneumatic to Electronic SFA recommendation and DHHS concurred that this item and other Air Handler/Duct-VAV/Controls related items are best addressed as an integrated engineered solution system. This will require a significant level of funding and may likely be a future or otherwise separate issue from FY21 EW Allocation. Cost increased to BOD Assessment cost of \$3M vs. prior DHHS cost of \$1.2M	10	11	\$3,000,000			DTMB 2019 review also contained this project at \$3M	If this is the recommendation by DTMB to best address issues, we will look forward to that funding being allocated accordingly. Would pricing fluctuate 2 years later since this is from 2019?	\$3,412,500
WRPH	Air Handler Upgrade	Replace all dual duct boxes to update and include DDC controls - current system is 47 years old and significantly past useful life. Convert Pneumatic to Electronic SFA recommendation and DHHS concurred that this item and other Air Handler/Duct-VAV/Controls related items are best addressed as an integrated engineered solution system. This will require a significant level of funding and may likely be a future or otherwise separate issue from FY21 EW Allocation. Cost increased to BOD Assessment cost of \$3M vs. prior DHHS cost of \$1.2M	8	13	\$750,000			invest in upgrades when BOD recommendation is to replace AHU and convert to VAV duct (\$8M + \$3M - \$3.1M)?	If this is the recommendation by DTMB to best address issues, we will look forward to that funding being allocated accordingly. Would pricing fluctuate 2 years later since this is from 2019?	\$4,162,500

Building	Project	Brief Project Description	Facility Priority	System Priority	Cost Estimate	Status	Funding Source	Notes	DHHS Comments	Cumulative Costs
WRPH	Replace All Air Handlers	47 years old past serviceable life. SEA-200 2019 assessment long term (5 yr) recommendation. SEA recommendation and DHHS concurred that this item and other Air Handler/Duct-VAV/Controls related items are best addressed as an integrated engineered solution system. This will require a significant level of funding and may likely be a future or otherwise separate issue from FY21 EW Allocation.			\$8,000,000			DTMB 2019 review contained this project		\$12,162,500
WRPH	Replace Heat Exchangers				\$300,000			DTMB 2019 review contained this project. MOP PROJECT IN PROGRESS FOR DHW HEAT EXCHANGERS RELATED OR PARTIALLY COVERED?		
WRPH	Repair All Exterior Water Infiltration Points				\$300,000			DTMB 2019 review contained this project, likely redundant to replace Exterior Joint Sealants		
WRPH	Improve the Current Kitchen Exhaust System				\$300,000			DTMB 2019 review contained this project, assume would be addressed as part of kitchen renovation.		
KPH	Replace Heating and Cooling Systems				\$6,000,000			DTMB 2019 review contained this project		
KPH	Repair/Replace Steam and Condensate Return Piping				\$1,200,000			DTMB 2019 review contained this project		
KPH	Interior drain lines replacement	Replace the drain lines in building 1 from the Servicemen to the sewer system. We have drains in the kitchen and the bathroom. The kitchen drains are rough in some places and have been cutting back by the sewer. The bathroom drains are down into the earth below causing contamination and erosion. Additionally, the lines can back up into the kitchen's food prep area posing food operations and therefore the patients at risk.	8		\$200,000			DTMB 2019 review contained cost estimate of \$150,000		
Hawthorn Center	Install Back-Up Boiler for Patient Living Areas	The South parking lot and roadway are over 40 years old. maintenance and repair of potholes and crumbled asphalt is ineffective. Replacement is needed to prevent future accidents to staff and visitors, and property damage claims. Will need to include lighting upgrade as well			\$150,000			FY21 DHHS Special Maintenance Request		
WRPH	Replace South Parking Lot, Roadway, and Lighting				\$1,000,000	2		DTMB 2019 review also contained this project at \$800,000. Part of chiller project?		
CFP	Replace and/or repair concrete in the front entrance area (located concrete) of the building, including patient yards and other areas.	Replace and/or repair crumbling cement in the entrance area of the building, including patient yards and other areas. Failure to replace and/or repair creates a safety hazard (trips and falls) for Patients, staff and visits.	7		\$350,000					
CFP	Parking lot Maintenance	Perform maintenance on the parking areas to ensure the safety of visitors and staff. This needs to be done annually. Crack sealing annually. Seal coating biannually. If not done it shortens the life expectancy.	9		\$25,000					
CFP	Exercise Equipment	Replace old patient equipment, add electrical to all of fitness rooms and check room design to ensure that they meet all codes and JC requirements.	12		\$300,000					
CFP	Medical Equipment	Replace old cardio medical equipment	13		\$300,000					
CFP	Repair Terrazzo Flooring	Replace terrazzo floor in patient exercise area and twener area	15		\$300,000					
CFP	Audio Visual Systems	The AV systems in the Auditorium, Bureau and Conference room are outdated. It's really hard to hold conferences and seminars as the system equipment is not compatible the current software and operating systems.	16		\$500,000					
CFP	Replace Carpeting and furniture in Non-Patient Areas	Carpet and furniture in non-patient are is becoming worn, discolored and frayed.	18		\$700,000					
CFP	Replace all Parking Lot and outside building lighting with LED lights.	LED lighting is more efficient. The saving on the energy cost and maintenance upkeep will pay for the cost.	19		\$250,000					
CFP	Convert fire suppression system in one parking room and near street hallways	Convert existing wet fire suppression system to a dry system. The fire suppressor system is on one parking room and near the ceiling in the patient dining rooms and on main street.	20		\$300,000					
CFP	Replace Heating Boilers	Boilers are approaching their end of life cycle. In need of replacement to eliminate future high maintenance costs and reliability.	21		\$450,000					
CFP	Building Insulating renovation	The existing insulating is unsightly and unappealing. If replaced with a lower annual maintenance requirement type, it would give the facility a new look and feel that could be employed by the visitors, employees and the community.	22		\$100,000					
CFP	Roadway and Parking lot Repairs				\$350,000			FY20 DHHS Special Maintenance Request		
Hawthorn Center	Air Conditioning - Main Building	Air condition north wing, first floor - administrative offices, intern and resident dining area and a conditioning room in the north wing unit	5		\$2,500,000	Pending Approval	Legislative Appropriation Agency Funds			
Hawthorn Center	Window Protection - South Wing living areas	Protect windows from fire and glass shards on second floor windows in M, L, U, and classroom wings.	6		\$50,000	Pending Approval	Agency Funds			
Hawthorn Center	Parking lot lighting	Replace all existing 30-year old sodium haloid street lamps with new 20' posts and LED lamps. Install new wiring in conduit for future repairs to address several patches that are direct bury. Add several additional lights to the islands. All to increase safety and security of staff and patients and increase the cost effectiveness of the current lighting. Lighting has failed in several locations.	7		\$85,000	Pending Approval	Agency Funds			
Hawthorn Center	Laundry	Replace commercial washers and dryers due to age and heavy use.	8		\$60,000	Pending Approval	Agency Funds			
Hawthorn Center	Upgrade HVAC System throughout the Hospital	Install energy management system; replace pneumatic system with Direct Digital Control system; replace air handlers; remove cellulose fibers from ductwork in South wing	9		\$10,000,000	Pending Approval	Legislative Appropriation Agency Funds			

Building	Project	Brief Project Description	Facility Priority	System Priority	Cost Estimate	Status	Funding Source	Notes	DHHS comments	Cumulative Costs
Hawthorn Center	Main Building Renovations - Living Area Renovations	Hawthorn Center currently has two unoccupied living areas that are located in the Main Building. The following would be needed in order to make these areas suitable for patient care: new bedroom suites, new TV room furniture, new office furniture, bathroom/shower renovations, remove carpet and replace with vinyl flooring, install video surveillance, upgrade electric system, upgrade plumbing, paint rooms/hallways, demolish and move staff office to improve sight lines.	10 Bundle		\$2,000,000					
Hawthorn Center	Main Building Renovations - Electrical Upgrade	Living Areas - St. Clair and Superior, also A and G sections.	10 Bundle		\$175,000					
Hawthorn Center	Main Building Renovations - Anti-bacterial	Secondary ligature risks not addressed in FY17-18 MOP	10 Bundle		\$350,000					
Hawthorn Center	Main Building Renovations - Install Elevator/Main Building	Install elevator in Main Bldg. to serve clients housed on 2nd floor (if Main Bldg. renovations are approved)	10 Bundle		\$2,000,000					
Hawthorn Center	Main Building Renovations - A Section Classrooms	Update A section classrooms, includes removal of asbestos tiles (replacement with vinyl), upgrade electrical, install new lighting (LED), install new windows, install air conditioning, paint walls and ceiling.	10 Bundle		\$200,000					
Hawthorn Center	Main Building Renovations - Renovate Main Building Lobby	Main Building Renovations - remove display cabinets, install new lighting, security cameras, and new ceiling	10 Bundle		\$100,000					
Hawthorn Center	Colling Tiles - Main Bldg.	Replace metal pan ceiling in Main Bldg. that is deteriorated & unsightly	12		\$500,000	Pending Approval	Agency Funds			
Hawthorn Center	Office Furniture - Selt	Replace 40 to 60 year old office furniture throughout hospital	13		\$500,000	Pending Approval	Agency Funds			
Hawthorn Center	Replace Living Area Observation Chairs	Upholstery on office chairs cannot be sanitized - need non-permeable covering.	14		\$60,000	Pending Approval	Agency Funds			
Hawthorn Center	Sewer Lines	Repair of collapsed sewer lines and drains, identified through camera inspection of previous MOP	15		\$50,000	Pending Approval	Agency Funds			
Hawthorn Center	Add 2 New Units (24 & 12 beds) to provide services to 30+ tenants	Central air condition for 1st floor lobby & A section classrooms, furniture, etc. Estimated at \$2.2M (\$750,000 Gross)			\$2,235,200			FY22 DHHS PFC Request - Ongoing staff/operational cost of additional wings estimated at \$300,000/250,000 Gross		
KPH	Repair/Replace Doors	To be compliant with the Joint Commission and the 2012 Life Safety Code (NFPA 101), we will need to replace many fire doors. Most doors are original or near original and with modifications over the years when there were less stringent fire codes have rendered these doors non-compliant. Failure to replace them places patients at risk and will create citations from JIC and Fire Marshal.	5		\$200,000	Original funding approved for \$200,000.				
KPH	Repair/Replace Doors	Phase II for additional funding. To be compliant with the Joint Commission and the 2012 Life Safety Code (NFPA 101), we will need to replace many fire doors. Most doors are original or near original and with modifications over the years when there were less stringent fire codes have rendered these doors non-compliant. Failure to replace them places patients at risk and will create citations from JIC and Fire Marshal.	6		\$100,000	Estimate to replace doors is closer to \$300,000.				
KPH	Install Sprinklers	Phase II: KPH need to be 100% sprinklered per the 2012 NFPA 101 and therefore the Joint Commission as well as for the overall safety of patients and staff. Approximately 1/3 of the hospital is sprinklered already so much of the infrastructure exists. Phase I was funded with FY 19 Enterprise wide Special Maintenance funds. All patient areas must be done with ligature concerns in mind which dramatically increases the cost. It is recommended to break the project up into smaller chunks over the next several years to make it manageable.	7		\$5,200,000	Phase I started. Phase II funding approved, contracts not issued as of 8/3/2020.		Project requested in FY19 as \$9M total project. Was broken into two phases, \$4.2M funding in FY19 and remaining \$4.8 funded in FY20.		
WRPH	Replace Absorption Chillers, Controls, and Cooling tower	Current are past useful life 40+ years. Cooling tower is of inadequate capacity and 30 years past average serviceable life. Life Safety need for patients and staff. Environment and temperature controls are Joint Commission and CMS requirements. Significant energy cost savings. Additional funding will be necessary.	1		\$2,200,000	In Process - additional funding will be necessary.		In process; Removed from summary listed under the assumption funding will be identified. If not, this comes to #1 facility priority.		
WRPH	Replace exterior joint sealants (windows/doors)	Replacement of all exterior joint sealants. CMS recommendation. Energy savings.	3		\$250,000					
WRPH	Replace Fencing Around Outside Patient Access Areas and Add Around North Parking Lot	Secure outside area for patient movement, activity, and programs. Joint Commission, CMS, and ORR requirements. Theft and property damage to staff/visitor vehicles leading to property damage claims.	5		\$300,000					
WRPH	Add Card Reader Entry to All Restrooms, Elevators, and Other Multi-Use Areas	Per FY18 OAG Audit - To reduce the number of keys distributed to 400+ staff to open secured areas of the facility.	12		\$150,000					
WRPH	Upgrade Cubicle and Shared Use Areas	Reconfigure cubicles, update materials and equipment to meet the demand and changes of the department and staffing. Current configurations and equipment exceed 30+ years.	13		\$150,000					
WRPH	Equipment Storage Building	Protect and secure facility maintenance trucks, lawn care and snow removal equipment, store bulk salt, dirt, gravel. Will decrease need for frequent replacement/repair of these items.	14		\$500,000					
WRPH	Replace Granite Window Sills	Replace broken/loose granite sills. These can become weapons or article of self abuse. CMS and Joint Commission Life Safety Standards.	15		\$125,000					
WRPH	Anti-ligature Furniture	Joint Commission Life Safety Standards.	16		\$175,000					

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