

MICHIGAN DEPARTMENT OF CORRECTIONS

“Committed to Protect, Dedicated to Success”

FY2020 FIVE YEAR ASSESSMENT PLAN SUMMARY

The mission of the Michigan Department of Corrections is to create a safer Michigan by holding offenders accountable while promoting their success. The following is the Michigan Department of Corrections Five Year Plan Summary. This plan includes MDOC project priorities for 30 correctional facilities currently open and in full operation. This list encompasses prisons that have been in service since 1889 (Marquette Branch Prison) to the newest prison built in 2001 (Bellamy Creek Correctional Facility).

These 30 open facilities consisting of 1,054 buildings equaling 7.4 million square feet sitting on 4,542 acres. The MDOC must provide a full range of services similar to a small community. These prison complexes must function in a safe and secure manner to ensure public, staff and prisoner safety 24 hours a day, 7 days a week, 365 days a year. In addition to the operational sites, MDOC is responsible for maintaining closed facilities. This group of closed facilities consists of 305 buildings equaling 4.8 million square feet on an additional 1,645 acres.

The MDOC Physical Plant Division with assistance from a large group of Physical Plant Supervisors conduct annual assessments of all Facilities using standardized assessment processes. All available staff who possess the appropriate expertise participate in this process to ensure a diverse skill set, participate in the study and to ensure quality results.

Each of our facilities is similar to a small city where prisoners are provided shelter, clothing, health care, psychological care, education, recreation, and religious needs. Prisoners also maintain ties with the community as allowed through visitation and communication with family and friends. This is a rather involved complex mission to accomplish.

The facility order for this report follows the same order as the Department of Corrections Appropriation Bill P.A. 207 of 2018, Article V, Part 1:

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MICHIGAN DEPARTMENT OF CORRECTIONS

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MEMORANDUM

Date: August 23, 2018
TO: Warden Bauman
FROM: Christopher Wardowski, Physical Plant Supervisor
SUBJECT: Annual Physical Plant Inspection

The LMF Annual Physical Plant Inspection has been completed by maintenance as required by PD 04.03.100. The results are as follows:

Preventive and routine maintenance are continuously being performed.

ACCOMPLISHMENTS

1. New HVAC and Boilers for 100 Bldg. Admin
2. Facility Fire Alarm Upgrade in Progress 75% complete
3. Razor Ribbon Upgrade 95 % complete
4. 500 Bldg. Roof Replacement

LME

Housing Unit Aspen Segregation

This unit is in good condition overall. The brick and mortar have some deterioration and the caulking around the windows is in poor condition. The windows and doors are in good condition. The roof has been replaced. The floor tile is in good condition. The shower stall tiles are in poor condition. Roof warranty repairs completed.

Housing Unit Birch Segregation

This unit is in good overall condition. The brick and mortar have some deterioration and the caulking around the windows is in poor condition. The windows and doors are in good condition. The floor tile is in good condition. The shower stall tiles are in poor condition. Roof warranty repairs completed.

Housing Unit Cedar General Population

This unit is in good condition overall. The brick and mortar have some deterioration and the caulking around the windows is in poor condition. The floor tile is in good condition. The shower stall tiles are in poor condition.

Housing Unit Maple General Population

The unit is in good condition overall. The roof has been replaced. The mortar and brick have some deterioration and the caulking around the windows is in poor condition. The floor tile is in good condition. The shower stall tiles are in poor condition.

Housing Unit Pine General Population

The unit is in good condition. The exterior walls have some stress cracking and the window sills are showing some deterioration and the caulking around the windows is in poor condition. The windows and doors are in good condition. The floor tile is in good condition. The shower stall tiles are in poor condition. New boilers have been installed by contractors waiting for fire up. Roof warranty repairs completed.

Housing Unit Spruce General Population Level II

The unit is in good overall condition. The mortar and brick have some deterioration and the caulking around the windows is in poor condition. There is a stress crack on the northwest corner. The floor tile is in good condition. The shower stalls are in poor condition. The windows and doors are in bad condition on 5 Yr. Plan. Roof warranty repairs completed.

100 Building Administrations

The overall condition of the building is good. The exterior walls, doors, and windows are in overall good condition. The controls of the HVAC system are being switched from pneumatic to a new upgrade automatic system. HVAC replacement 95% complete. Roof warranty repairs completed.

200 Building Food Service

The overall condition of this building is good. All windows and doors are in good condition. The interior is in good shape overall. Roof warranty repairs completed. cooler HVAC system needs to be replaced and upgraded to Automatic system Submitted. PPC approved.

200 Building Health Services

The exterior walls, doors, and windows are in good condition. Roof warranty repairs completed.

300 Building Education and Recreation

The overall condition of this building is good. Some stress cracks were noted on exterior walls and interior floors. The doors and windows are in good condition. The Gym and interior are also in good condition. The boilers are in poor condition and need to be repaired or replaced. HVAC system needs to be upgraded to an automatic system. PPC approved for HVAC upgrade. In the hands of the Professional now. (OHM)

500 Building Warehouse and Maintenance

The overall condition of this building is good. The Warehouse floor has some cracking, but nothing serious. The roof has been patched and the pavers need to be removed. The brick on the upper exterior wall is leaning in at the roof level. This Bldg. Roof and brick and masonry replacement is completed.

600 Building Pole Barn Storage

All buildings and out buildings are in good condition.

Propane Plant

The propane tank is in good repair. It needs to be sandblasted and inspected and painted. LMF's propane system is not operational. **MOP # 4680137-17 is approved and waiting further direction. Is out for Bid Now DTMB**

Fences Gun Towers and Grounds

The perimeter fence is in good condition. The shaker wire was replaced this year. The tower doors are in poor condition. 1 Post will have windows replaced this year. The grounds are in good condition. Razor Ribbon Enhancement on going.

Concrete and Asphalt

The concrete is in fair condition. The sidewalks between the buildings have some holes that need to be repaired and there are some expansion joints raised.

Recreation Yards

The yard equipment is in fair condition except for some needed repairs to weight equipment. The pavement is in good condition. The partition fences are intact and in good condition. The razor ribbon is secure and in good condition. The basketball and handball courts are in good condition. PBF looking into replacement weight equipment.

All the facility building exterior doors are rusted out and need replacement.

cc:

Ed Vallad, Physical Plant Manager
Warden Bauman, Alger Correctional
Daniel Smith, Physical Plant Division
Jeff Niemi, Regional Physical Plant Superintendent
Becki Nylander, Business Manager

**ALGER CORRECTIONAL FACILITY
5-Year Plan FY2020**

Building	Project Description	Reason Description	Quantity & Units	Facility Priority	Cost Estimate
Food Service	Kitchen Floors, PPC #18037LMF	Repair kitchen floors, kettle area and spray. 95% Complete. DTMB File #472/173.13.TAP		1	\$656,250
Facility	Razor Ribbon Enhancement, PPC #18219LMF	The installation of the additional razor wire on the outside fence was specified by the Security System Audit Team. Project 90% complete.		2	\$400,000
4 Housing Units, 2	Upgrade Fire System, LMF.700.502	System antiquated and parts no longer available. Currently 75% complete. DTMB File #472/17128.TAP	6	3	\$328,125
Birch/Cedar	Modular boilers. Replace existing boiler with these. LMF.700.A04	Reduce energy usage. Provide better temperature control. Utility cost savings. Better equipment available. Currently, if boiler goes down, there is no heat to the unit. Replacing one boiler with two more efficient boilers that cycle and have the ability for one boiler to heat the entire building and provide each other as a backup. Cedar	2 Units	4	\$75,000
	Repair Propane Vaporizer, LMF.NEW.04 Project #17052LMF	Alger's backup heating source is exclusively propane. Alger has been experiencing multiple failures when conducting our monthly propane PM. We have had Industrial Propane Service on site two times during Fiscal Year 2016 to make repairs to the system. Our Propane Vaporizer has been recommended to be replaced prior to the		5	\$235,594
Post 1	Replace 6 windows in Post 1 Guard Tower, LMF.800.M07	Old and worn. Vendor scheduled. PO #472P7702757		6	\$1,800
All Buildings	Replace single exterior door/frame/hardware and provide new larger, heavy duty door and frames with smaller sidelite. Recondition the brick and caulking. LMF.600.A05	Worn out. Damaged. Leading to More Serious Problems. To Eliminate High Maintenance Condition. Food carts are damaging all units.	19 Units	7	\$998,000
Facility	Stun Fence Clip Replacement, LMF.NEW.06	Identified on 2018 Facility Review by Central Office.		8	\$500,000
Facility	Gates 1, 2, 3, and 4, LMF.NEW.02	Original gates. Gates and parts are wearing out and need of replacement repair due to continual use daily.	4	9	\$60,000
Facility	Sewer Line Upgrade, LMF.NEW.07	Identified on 2018 Facility Review by Central Office.		10	\$250,000
Aspen/Spruce	Modular boilers. Replace existing boiler with these. LMF.700.A04	Reduce energy usage. Provide better temperature control. Utility cost savings. Better equipment available. Currently, if boiler goes down, there is no heat to the unit. Replacing one boiler with two more efficient boilers that cycle and have the ability for one boiler to heat the entire building and provide each other as a backup.	2 Units	11	\$256,800
Aspen, Birch, Ced	Repair and/or Replace Shower Stalls, LMF.NEW.05	Replace existing shower walls and floors with an alternate acceptable product.	6 Units	12	\$200,000
Warehouse	Main control panel and front-end direct digital controls (DDC) equipment. LMF.1000.M06	None presently installed. Provide monitoring of cooler/freezer in building.	1 Unit	13	\$46,200

**ALGER CORRECTIONAL FACILITY
5-Year Plan FY2020**

Building	Project Description	Reason Description	Quantity & Units	Facility Priority	Cost Estimate
300 Building	Modular boilers. Replace existing boiler and upgrade HVAC System. LMF.700.A04 & LMF.900.A01, Project #46801417	Reduce energy usage. Provide better temperature control. Utility cost savings. Better equipment available. Currently, if boiler goes down, there is no heat to the 300 building. Replacing one boiler with two more efficient boilers that cycle and have the ability for one boiler to heat the entire building and provide each other as a backup. 50% Plan Review. MOP written. #468014-17, (Approved PPC #17206LMF), DTMB File #472/17290.TAP	1	1	\$1,423,713
200 Building	Modular boilers. Replace existing boiler and upgrade HVAC System. LMF.700.A04 & LMF.900.A01,	Reduce energy usage. Provide better temperature control. Utility cost savings. Better equipment available. Currently, if boiler goes down, there is no heat to the 200 building. Replacing one boiler with two more efficient boilers that cycle and have the ability for one boiler to heat the entire building and provide each other as a backup. PPC submitted May 17, 2018.	1	2	\$1,423,713
				Total	\$6,855,195

MICHIGAN DEPARTMENT OF CORRECTIONS

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MEMORANDUM

Date: 8/16/2018

To: Dan LeSatz, Warden
Baraga Correctional Facility

From: Wes Pietila, Physical Plant Supervisor
Baraga Correctional Facility

Subject: Annual Facility Report

An Annual Facility Inspection report was conducted to assess the need for future maintenance and to identify budgetary needs. This year's annual inspection results follow and are noted by building.

Baraga Correctional Facility

Administration - 100 BLDG

- The roof system is in very good condition having been replaced 11 years ago, showing no signs of damage.
- Exterior door frames are rusting due to salt/moisture from winter months. Getting prices to replace employee entrance door.
- The electrical/security system continues to function properly and are tested daily.
- Building exterior wall packs have been replaced with LED fixtures.
- The cement walk in front of building has been replaced.
- The heating/cooling systems are functional and regularly maintained. The pneumatic controls are problematic and in need of constant adjustments. Physical plant request has been submitted to replace pneumatic controls and replace with electronic controls
- The plumbing system operates properly, and normal wear is maintained on a regular basis.
- Physical plant request has been submitted to replace sliding gate doors.

Food Service/Health Service - 200 BLDG

- Roof systems was replaced in 2017 and have no issues to report.
- Exterior of the bldg. is in over all good condition.
- Side door to kitchen needs to be replaced. Working on getting prices.
- Just got in New rebuilt 1200-amp breaker for kitchen and will install when time permits
- Electrical/security systems function properly and are regularly maintained.
- Lighting upgrades are continually done as needed.
- Kitchen equipment is a constant repair/maintenance item. Dish machine has been replaced.

- HVAC systems are regularly maintained, and function properly. Boilers are original but in good working order.
- The pneumatic controls are problematic and in need of constant adjustments. Physical plant request has been submitted to replace pneumatic controls and replace with electronic controls
- The 2nd grease trap system is being monitored but will likely need replacing in the future.
- The cooler doors and walls will need replacing in the future.

Programs - 300 BLDG

- Roof systems was replaced 2017 and have no issues to report.
- Electrical/ security systems function properly and are regularly maintained.
- Plumbing system operates properly, and normal wear is maintained on a regular basis.
- HVAC systems are regularly maintained, and function properly. Heating boiler is original, although functioning properly there is no redundant system.
- The pneumatic controls are problematic and in need of constant adjustments. Physical plant request has been submitted to replace pneumatic controls and replace with electronic controls.

Maintenance/Warehouse - 500 BLDG

- Roof system is in good condition
- Electrical/security systems function properly.
- Plumbing systems operate properly
- HVAC system is regularly maintained and functions properly. The roof top heating units are outdated and becoming very problematic with repair parts hard to find. Will likely need replacing soon.

Housing Units 1-7

- Roof systems was replaced 2017 and have no issues to report.
- Electrical/security systems function properly and are regularly maintained.
- Cell door food slots in units 1-3 are a major concern do to the fact that they are rusting/corroding at the hinges and the slot itself requiring constant repair or replacing. Unit four is done. Working on unit 1.
- Plumbing system operate properly. Icon electronic valves are being added in problem areas. The water heaters in all the HUs have all been changed to new units.
- The recirculation lines are constantly leaking and needs repair.
- HVAC systems are regularly maintained. Working on replacing boiler in unit 6.
- The pneumatic controls are problematic and in need of constant adjustments. Physical plant request has been submitted to replace pneumatic controls and replace with electronic controls
- All housing units have a laundry room with gas dryers' commercial washers that are routinely monitored and maintained.
- The ceiling tiles on various wings are falling, high humidity and no exhaust systems due to showers may have an impact.
- Shower area tile need repair and replacement.
- All cameras function properly.
- The exterior of the HUs are in over all good condition.
- Front doors to units are in rough shape and will likely need replacing soon.

Housing Unit 8

- Roof system is showing signs of wear; any leaking is repaired timely.
- Electrical/security systems function properly and are regularly maintained.
- Plumbing systems operate properly, nominal wear is maintained on a regular basis
- The domestic hot water system was replaced with high efficiency boilers/water makers.
- HVAC systems are regularly maintained and function well.

Sewage Lift Station

- The pumps are daily monitored and serviced as needed.

Propane Backup System

- The system has become unreliable but is regularly monitored and maintained. Options for replacement and repair are being considered. Annual inspections are done by IPS Industrial and any corrections are made.

Facility Grounds

- All fencing is in good condition. Any repair or problems are done timely.
- The perimeter road and parking lot are in good condition.
- Exterior pole lighting is in good working condition.
- The sidewalks are overall in good condition.
- Physical plant request has been submitted for new building on gun range and paving the road and parking area.

Security/Safety Systems

- All systems are tested with the start of each shift and any issues are addressed timely.
- The stun fence operates well.
- The camera systems function properly.
- The monitoring system in control functions properly.
- All fire safety systems are tested as required and function properly
- The PPD system is tested with each shift and operates properly.

Camp Kitwen

- Although the facility has been closed we continue to do minimal grounds work.
- The overall exterior condition of the facility is fair. There are a few cracked windows and some minor exterior damage due to weather and vandalism. Mildew/mold is become an increasing problem, but the overall interior is in fair condition.

cc: Sandra Villa-Mogush, Facility Business Manager
Edward Vallad, - Physical Plant Division
Daniel T Smith-Physical Plant Division-Dept. Analyst

BARAGA CORRECTIONAL FACILITY
5-Year Plan FY2020

Building	Project Description	Reason Description	Quantity & Units	Facility Priority	Cost Estimate
Administration	Replace Power Sliding Doors	Current sliding doors (5) are original and badly worn and problematic. Doors provide secure access to the inside of the facility and security for all foot traffic	5	in progress	\$500,000
Administration	Control Center Renovations	The control center must be renovated to adequately view and operate the new security systems.	1	4	\$25,000
Administration	Replace acoustic ceiling system. Replace 24" x 24" ACP ceiling on second floor - entire floor.	Worn out. Damaged. Cosmetically Necessary or Aesthetically Poor. To Cover up Water Damage. Age and water damage in several locations.	5,000 SF		\$33,936
Administration	RegROUT tile. RegROUT quarry tile floor at lobby, corridors, control passage, and rear lobbies.	Worn out. Cosmetically Necessary or Aesthetically Poor.	6,000 SF		\$30,502
Administration	Misc. projects. Provide ADA accessible sink at employee lounge on second floor.	Does Not Meet ADA Guidelines.			\$2,525
Administration	Tuckpoint brick. Around areas that cracked from lack of control joints to repair said cracking.	Damaged. Leading to More Serious Problems.	500 SF		\$4,242
Administration	Miscellaneous. Insulate piping.	None presently installed. Provide better temperature control.			\$3,434
Administration	Provide control joints. Provide new control joints at all openings and other locations as recommended by I.M.I.	Damaged. Leading to More Serious Problems. To Cover up Water Damage.	1,000 LF		\$5,959
Education	Recaulk/Reseal building joints. Reseal joints in gymnasium where metal columns and CMU have separated (both vertical and horizontal joints).	Damaged. Building settlement.	300 LF		\$919
Education	Heating boiler. Replace existing with new.	Doesn't provide adequate heating. Utility cost savings. Impairs building operation. Personal comfort. Existing does not meet heating demand.	1 Unit	8	\$35,000
Education	Replace ceramic tile. At janitor's closet with monolithic polymer flooring. Replace floor at showers in similar fashion.	Worn out. Damaged. Leading to More Serious Problems. To Eliminate High Maintenance Condition. Tile floors do not bear up under amount of water usage in prisons.	300 SF		\$7,171
Housing Unit 1	Rebuild food slots in segregation cell doors	Rebuild food slots in segregation cell doors for added security and safety	88 units	in progress	\$3,366

Housing Unit 1	Replace Existing Water Control Valves with ICON Valves	Replace existing cell water fixtures with I-con system. Current fixture is problematic, outdated, and costly to repair. I-con are reliable and efficient	76	in progress	\$54,883
Housing Unit 1	Provide control joints. Provide control joints where walls have cracked at 135-degree corners. Remove ex. joint 2 over from cracking and rebuild wall.	Damaged. Leading to More Serious Problems. Building settlement. Joints were located wrong and walls cracked at nearby locations instead. Wall will continue to crack open if steps are not taken to correct.	180 LF		\$2,121
Housing Unit 1	Replace acoustic ceiling system. Replace 12 x 12 applied tile with more durable system.	Damaged. To Eliminate High Maintenance Condition. System sustains damage from leaks when floors are mopped or flooded.	6,000 SF		\$61,105
Housing Unit 1	Replace cell doors and hardware.	Worn out. Damaged. Leading to More Serious Problems. To Eliminate High Maintenance Condition. System needs constant adjustment to work properly.	80 Units		\$339,360
Housing Unit 1	Air handling unit heating only. Replace existing in four years with those that allow more airflow.	Doesn't meet current ventilation standards. Personal comfort. In four years, units will be at end of useful life.	24,600 SF		\$271,286
Housing Unit 1	Replace interior doors/frame/hardware. Replace control room door.	Worn out. Damaged. To Eliminate High Maintenance Condition.	1 Unit		\$2,525
Housing Unit 1	Replace VCT. Replace VCT floor at control area.	Damaged.	1,000 SF		\$6,767
Housing Unit 1	Replace ceramic tile. Replace tile floors in all showers with 2-part epoxy.	Worn out. Damaged. Leading to More Serious Problems. To Eliminate High Maintenance Condition.	600 SF		\$14,241
Housing Unit 1	Misc. projects. Install 2-part epoxy on shower walls.	Worn out. Damaged. Leading to More Serious Problems. To Eliminate High Maintenance Condition. To Cover up Water Damage. Request of Facilities Maintenance. Water works through wall, damages flooring, ceilings below.			\$12,726
Housing Unit 1	Repair brick - selective areas. Repair cracked, spalled, and damaged brick at roof center parapet.	Damaged. Leading to More Serious Problems. Cosmetically Necessary or Aesthetically Poor. To Eliminate High Maintenance Condition. To Cover up Water Damage. Movement and water infiltration have caused cracking and damage.	100 SF		\$2,525
Housing Unit 2	Rebuild food slots in segregation cell doors	Rebuild food slots in segregation cell doors for added security and safety	88 units	in progress	\$3,366
Housing Unit 2	Replace Existing Water Control Valves with ICON Valves	Replace existing cell water fixtures with I-con system. Current fixture is problematic, outdated, and costly to repair. I-con are reliable and efficient	76	in progress	\$54,883
Housing Unit 2	Provide control joints. Provide control joints where walls have cracked at 135-degree corners. Remove ex. joint 2 over from cracking and rebuild wall.	Damaged. Leading to More Serious Problems. Building settlement. Joints were located wrong and walls cracked at nearby locations instead. Wall will continue to crack open if steps are not taken to correct.	180 LF		\$2,121
Housing Unit 2	Replace acoustic ceiling system. Replace 12 x 12 applied tile with more durable system.	Damaged. To Eliminate High Maintenance Condition. System sustains damage from leaks when floors are mopped or flooded.	6,000 SF		\$61,105

Housing Unit 2	Replace cell doors and hardware. System needs constant adjustment to work properly.	Worn out. Damaged. Leading to More Serious Problems. To Eliminate High Maintenance Condition.	80 Units		\$339,360
Housing Unit 2	Air handling unit heating only. Replace existing in four years with those that allow more airflow.	Doesn't meet current ventilation standards. Personal comfort. In four years, units will be at end of useful life.	24,600 SF		\$271,286
Housing Unit 2	Replace interior doors/frame/hardware. Replace control room door.	Worn out. Damaged. To Eliminate High Maintenance Condition.	1 Unit		\$2,525
Housing Unit 2	Replace VCT. Replace VCT floor at control area.	Damaged.	1,000 SF		\$6,767
Housing Unit 2	Replace ceramic tile. Replace tile floors in all showers with 2-part epoxy.	Worn out. Damaged. Leading to More Serious Problems. To Eliminate High Maintenance Condition.	600 SF		\$14,241
Housing Unit 2	Misc. projects. Install 2-part epoxy on shower walls.	Worn out. Damaged. Leading to More Serious Problems. To Eliminate High Maintenance Condition. To Cover up Water Damage. Request of Facilities Maintenance. Water works through wall, damages flooring, ceilings below.			\$12,726
Housing Unit 2	Repair brick - selective areas. Repair cracked, spalled, and damaged brick at roof center parapet.	Damaged. Leading to More Serious Problems. Cosmetically Necessary or Aesthetically Poor. To Eliminate High Maintenance Condition. To Cover up Water Damage. Movement and water infiltration have caused cracking and damage.	100 SF		\$2,525
Housing Unit 3	Rebuild food slots in segregation cell doors	Rebuild food slots in segregation cell doors for added security and safety	88 units	in progress	\$3,366
Housing Unit 3	Replace Existing Water Control Valves with ICON Valves	Replace existing cell water fixtures with I-con system. Current fixture is problematic, outdated, and costly to repair. I-con are reliable and efficient	76	in progress	\$54,883
Housing Unit 3	Redesign HU3 Segregation Yard	Redesign needed for improved visibility and security	1 Unit		\$40,400
Housing Unit 3	Provide control joints. Provide control joints where walls have cracked at 135-degree corners. Remove ex. joint 2 over from cracking and rebuild wall.	Damaged. Leading to More Serious Problems. Building settlement. Joints were located wrong and walls cracked at nearby locations instead. Wall will continue to crack open if steps are not taken to correct.	180 LF		\$2,121
Housing Unit 3	Replace cell doors and hardware.	Worn out. Damaged. Leading to More Serious Problems. To Eliminate High Maintenance Condition. System needs constant adjustment to work properly.	80 Units		\$339,360
Housing Unit 3	Air handling unit heating only. Replace existing in four years with those that allow more airflow.	Doesn't meet current ventilation standards. Personal comfort. In four years, units will be at end of useful life.	24,600 SF		\$271,286
Housing Unit 3	Replace acoustic ceiling system. Replace VCT floor at control area.	Damaged.	1,000 SF		\$6,767

Housing Unit 3	Replace ceramic tile. Replace tile floors in all showers with 2-part epoxy.	Worn out. Damaged. Leading to More Serious Problems. To Eliminate High Maintenance Condition.	600 SF		\$14,241
Housing Unit 3	Misc. projects. Install 2-part epoxy on shower walls.	Worn out. Damaged. Leading to More Serious Problems. To Eliminate High Maintenance Condition. To Cover up Water Damage. Request of Facilities Maintenance. Water works through wall, damages flooring, ceilings below.			\$12,726
Housing Unit 3	Repair brick - selective areas. Repair cracked, spalled, and damaged brick at roof center parapet.	Damaged. Leading to More Serious Problems. Cosmetically Necessary or Aesthetically Poor. To Eliminate High Maintenance Condition. To Cover up Water Damage. Movement and water infiltration have caused cracking and damage.	100 SF		\$2,525
Housing Unit 3	Miscellaneous. Replace existing cell lavatory faucets.	Requirement for other improvements. Maintenance issue.			\$40,703
Housing Unit 3	Miscellaneous. Insulate the cold-water supply entering the Mechanical Room and all other hot and cold piping in Mechanical Room with no piping.	Life safety issue. Requirement for other improvements. Cold water pipe with hot Mechanical Room causes condensation on pipes. Decreases life of piping. Some condensation is dripping onto electrical equipment.			\$343
Housing Unit 4	Replace Existing Water Control Valves with ICON Valves	Replace existing cell water fixtures with I-con system. Current fixture is problematic, outdated, and costly to repair. I-con are reliable and efficient	76	in progress	\$54,883
Housing Unit 4	Provide control joints. Provide control joints where walls have cracked at 135-degree corners. Remove ex. joint 2 over from cracking and rebuild wall.	Damaged. Leading to More Serious Problems. Building settlement. Joints were located wrong and walls cracked at nearby locations instead. Wall will continue to crack open if steps are not taken to correct.	180 LF		\$2,121
Housing Unit 4	Replace acoustic ceiling system. Replace 12 x 12 applied tile with more durable system.	Damaged. To Eliminate High Maintenance Condition. System sustains damage from leaks when floors are mopped or flooded.	6,000 SF		\$61,105
Housing Unit 4	Replace cell doors and hardware.	Worn out. Damaged. Leading to More Serious Problems. To Eliminate High Maintenance Condition. System needs constant adjustment to work properly.	80 Units		\$339,360
Housing Unit 4	Air handling unit heating only. Replace existing in four years with those that allow more airflow.	Doesn't meet current ventilation standards. Personal comfort. In four years, units will be at end of useful life.	24,600 SF		\$271,286
Housing Unit 4	Replace interior doors/frame/hardware. Replace control room door.	Worn out. Damaged. To Eliminate High Maintenance Condition.	1 Unit		\$2,525
Housing Unit 4	Replace VCT. Replace VCT floor at control area.	Damaged.	1,000 SF		\$6,767
Housing Unit 4	Replace ceramic tile. Replace tile floors in all showers with 2-part epoxy.	Worn out. Damaged. Leading to More Serious Problems. To Eliminate High Maintenance Condition.	600 SF		\$14,241
Housing Unit 4	Misc. projects. Install 2-part epoxy on shower walls.	Worn out. Damaged. Leading to More Serious Problems. To Eliminate High Maintenance Condition. To Cover up Water Damage. Request of Facilities Maintenance. Water works through wall, damages flooring, ceilings below.			\$12,726

Housing Unit 4	Repair brick - selective areas. Repair cracked, spalled, and damaged brick at roof center parapet.	Damaged. Leading to More Serious Problems. Cosmetically Necessary or Aesthetically Poor. To Eliminate High Maintenance Condition. To Cover up Water Damage. Movement and water infiltration have caused cracking and damage.	100 SF		\$2,525
Housing Unit 4	Miscellaneous. Replace existing cell lavatory faucets.	Requirement for other improvements. Maintenance issue.			\$4,040
Housing Unit 5	Replace Existing Water Control Valves with ICON Valves	Replace existing cell water fixtures with I-con system. Current fixture is problematic, outdated, and costly to repair. I-con are reliable and efficient	76	in progress	\$54,883
Housing Unit 5	Provide control joints. Provide control joints where walls have cracked at 135-degree corners. Remove ex. joint 2 over from cracking and rebuild wall.	Damaged. Leading to More Serious Problems. Building settlement. Joints were located wrong and walls cracked at nearby locations instead. Wall will continue to crack open if steps are not taken to correct.	180 LF		\$2,121
Housing Unit 5	Replace acoustic ceiling system. Replace 12 x 12 applied tile with more durable system.	Damaged. To Eliminate High Maintenance Condition. System sustains damage from leaks when floors are mopped or flooded.	6,000 SF		\$61,105
Housing Unit 5	Replace cell doors and hardware.	Worn out. Damaged. Leading to More Serious Problems. To Eliminate High Maintenance Condition. System needs constant adjustment to work properly.	80 Units		\$339,360
Housing Unit 5	Air handling unit heating only. Replace existing in four years with those that allow more airflow.	Doesn't meet current ventilation standards. Personal comfort. In four years, units will be at end of useful life.	24,600 SF		\$271,286
Housing Unit 5	Replace man elevator - for ADA accessibility.	The current elevator is outdated, and repair parts are not available. This is needed for use by prisoners requiring ADA accessibility.	1 Unit	in progress	\$120,000
Housing Unit 5	Replace interior doors/frame/hardware. Replace control room door.	Worn out. Damaged. To Eliminate High Maintenance Condition.	1 Unit		\$2,525
Housing Unit 5	Replace VCT. Replace VCT floor at control area.	Damaged.	1,000 SF		\$6,767
Housing Unit 5	Replace ceramic tile. Replace tile floors in all showers with 2-part epoxy.	Worn out. Damaged. Leading to More Serious Problems. To Eliminate High Maintenance Condition.	600 SF		\$14,241
Housing Unit 5	Misc. projects. Install 2-part epoxy on shower walls.	Worn out. Damaged. Leading to More Serious Problems. To Eliminate High Maintenance Condition. To Cover up Water Damage. Request of Facilities Maintenance. Water works through wall, damages flooring, ceilings below.			\$12,726
Housing Unit 5	Repair brick - selective areas. Repair cracked, spalled, and damaged brick at roof center parapet.	Damaged. Leading to More Serious Problems. Cosmetically Necessary or Aesthetically Poor. To Eliminate High Maintenance Condition. To Cover up Water Damage. Movement and water infiltration have caused cracking and damage.	100 SF		\$2,525
Housing Unit 6	Replace man elevator - for ADA accessibility.	The current elevator is outdated, and repair parts are not available. This is needed for use by prisoners requiring ADA accessibility.	1 Unit	in progress	\$120,000

Housing Unit 6	Provide control joints. Provide control joints where walls have cracked at 135-degree corners. Remove ex. joint 2 over from cracking and rebuild wall.	Damaged. Leading to More Serious Problems. Building settlement. Joints were located wrong and walls cracked at nearby location instead. Wall will continue to crack open if steps are not taken to correct.	180 LF		\$2,121
Housing Unit 6	Replace cell doors and hardware.	Worn out. Damaged. Leading to More Serious Problems. To Eliminate High Maintenance Condition. System needs constant adjustment to work properly.	80 Units		\$339,360
Housing Unit 6	Air handling unit heating only. Replace existing in four years with those that allow more airflow.	Doesn't meet current ventilation standards. Personal comfort. In four years, units will be at end of useful life.	24,600 SF		\$271,286
Housing Unit 6	Modular boilers. Replace existing with new.	Doesn't provide adequate heating. Utility cost savings. Impairs building operation. Personal comfort. Existing does not meet heating demand. If the boiler goes down, there is no back-up for heat.	1 Unit	in progress	\$25,000
Housing Unit 6	Replace interior doors/frame/hardware. Replace control room door.	Worn out. Damaged. To Eliminate High Maintenance Condition.	1 Unit		\$2,525
Housing Unit 6	Replace acoustic ceiling system. Replace 12 x 12 applied tile with more durable system.	Damaged. To Eliminate High Maintenance Condition. System sustains damage from leaks when floors are mopped or flooded.	1,000 SF		\$10,201
Housing Unit 6	Replace VCT. Replace VCT floor at control area.	Damaged.	1,000 SF		\$6,767
Housing Unit 6	Replace ceramic tile. Replace tile floors in all showers with 2-part epoxy.	Worn out. Damaged. Leading to More Serious Problems. To Eliminate High Maintenance Condition.	600 SF		\$14,241
Housing Unit 6	Misc. projects. Install 2-part epoxy on shower walls.	Worn out. Damaged. Leading to More Serious Problems. To Eliminate High Maintenance Condition. To Cover up Water Damage. Request of Facilities Maintenance. Water works through wall, damages flooring, ceilings below.			\$12,726
Housing Unit 6	Miscellaneous. Replace existing cell lavatory faucets.	Requirement for other improvements. Maintenance issue.			\$40,703
Housing Unit 6	Repair brick - selective areas. Repair cracked, spalled, and damaged brick at roof center parapet.	Damaged. Leading to More Serious Problems. Cosmetically Necessary or Aesthetically Poor. To Eliminate High Maintenance Condition. To Cover up Water Damage. Movement and water infiltration have caused cracking and damage.	100 SF		\$2,525
Housing Unit 6	Misc. projects. Infill mat recess in entry hallway, retile entire hallway.	Worn out. Damaged. Leading to More Serious Problems. Cosmetically Necessary or Aesthetically Poor. To Cover up Water Damage. Inset for mat fill with water, grows fungus, tile pops up around edges.			\$2,525
Housing Unit 7	Provide control joints. Provide control joints where walls have cracked at 135-degree corners. Remove ex. joint 2 over from cracking and rebuilding wall.	Damaged. Leading to More Serious Problems. Building settlement. Joints were located wrong and walls cracked at nearby locations instead. Wall will continue to crack open if steps are not taken to correct.	180 LF		\$2,121
Housing Unit 7	Replace acoustic ceiling system. Replace 12 x 12 applied tile with more durable system.	Damaged. To Eliminate High Maintenance Condition. System sustains damage from leaks when floors are mopped or flooded.	6,000 SF		\$61,105

Housing Unit 7	Replace cell doors and hardware.	Worn out. Damaged. Leading to More Serious Problems. To Eliminate High Maintenance Condition. System needs constant adjustment to work properly.	80 Units		\$339,360
Housing Unit 7	Air handling unit heating only. Replace existing in four years with those that allow more airflow.	Doesn't meet current ventilation standards. Personal comfort. In four years, units will be at end of useful life.	24,600 SF		\$271,286
Housing Unit 7	Replace single exterior door/frame/hardware. Replace all exterior doors and hardware.	Worn out. Damaged. To Eliminate High Maintenance Condition.	4 Units		\$10,201
Housing Unit 7	Replace interior doors/frame/hardware. Replace control room door.	Worn out. Damaged. To Eliminate High Maintenance Condition.	1 Unit		\$2,525
Housing Unit 7	Replace VCT. Replace VCT floor at control area.	Damaged.	1,000 SF		\$6,767
Housing Unit 7	Replace ceramic tile. Replace tile floors in all showers with 2-part epoxy.	Worn out. Damaged. Leading to More Serious Problems. To Eliminate High Maintenance Condition.	600 SF		\$14,241
Housing Unit 7	Misc. projects. Install 2-part epoxy on shower walls.	Worn out. Damaged. Leading to More Serious Problems. To Eliminate High Maintenance Condition. To Cover up Water Damage. Request of Facilities Maintenance. Water works through wall, damages flooring, ceilings below.			\$12,726
Housing Unit 7	Repair brick - selective areas. Repair cracked, spalled and damaged brick at roof center parapet.	Damaged. Leading to More Serious Problems. Cosmetically Necessary or Aesthetically Poor. To Eliminate High Maintenance Condition. To Cover up Water Damage. Movement and water infiltration have caused cracking and damage.	100 SF		\$2,525
Housing Unit 7	Misc. projects. Infill mat recess in entry hallway, retile entire hallway.	Worn out. Damaged. Leading to More Serious Problems. Cosmetically Necessary or Aesthetically Poor. To Cover up Water Damage. Inset for mat fills with water, grows fungus, tile pops up around edges.			\$2,525
Housing Unit 7	Miscellaneous. Replace existing cell lavatory faucets.	Requirement for other improvements. Maintenance issue.			\$40,703
Level One Housing (HU8)	Classroom Air Conditioning	Installation of an air conditioning in four classrooms. Current system is inefficient and inadequate. This would greatly increase the comfort in the classroom.	2	11	\$60,000
Level One Housing (HU8)	Misc. projects. Remove GPDW on walls in central area, replace with abuse resistant gypsum wallboard, re-enforce corners and install corner guards.	Damaged. Walls sustain heavy abuse, particularly at corners.			\$42,420
Level One Housing (HU8)	Install Exhaust Fan.	Doesn't meet current ventilation standards for bathroom, causing excess moisture problems	2 Units		\$15,150
Level One Housing (HU8)	Replace Level 1 security fence detection system	The current system on the perimeter fence is outdated, there are numerous false alarms require constant maintenance.	1		\$40,500

Level One Housing (HU8)	Addition of a 2nd perimeter fence around level 1 HU8	To provide added security the existing HU. Currently a single fence system is used. Included would be razor wire and electronic monitoring cable. (no cameras or lights)	1		\$364,000
Housing Units 1-7	Install Exhaust Fan.	Exhaust fans would decrease humidity levels that are causing problems and uncomfortable condition in the units	7 units		\$180,600
Housing Units 2,3,5,6,7	Replace A/C in housing unit bubbles	current system requires constant repair and unit failure.	7	1	\$25,000
Administration	Replace A/C in entry control	current system requires constant repair and unit failure.	1	1	\$9,000
Housing Units 4-7	Duct cleaning	The duct has never been cleaned in the housing units. This reduces air flow and air quality.	4	in progress	\$40,000
Site - Hus 1-3,6	Replace pneumatics with digital controls and backup power for smoke purge	Current system is problematic, and system air lines are contaminated with compressor oil, this requires constant repair and unit failure	4	in progress	\$1,185,000
Site - Hus 4,5,7, 100,200, 300 bldg.	Replace pneumatics with digital controls	Current system is problematic, and system air lines are contaminated with compressor oil, this requires constant repair and unit failure	6	2	\$510,000
Site - Hus 1-8, 100,200, 300 bldg.	Replace entrance doors	Current doors are bent and rusted, and lock repair parts are hard to find	11	3	\$300,000
Site	Site Improvements III, Remodel/Repair, Sally port. Add steel I-beam across gate to prevent vehicles from ramming through gate and reconstruct concrete cap that supports the steel grating over the inspection pit. Crack-seal joints within the	Due to age of system. To prevent failure. To fix deteriorated, damaged, failure area. To improve appearance. Long-term/high maintenance issue. Service reliability. Due to snow plow damage. To improve security. Due to frequent use by heavy/large tr	1 Unit		\$101,808
Site	Sanitary Pre-Treatment Mechanism, Bar Screen, New. Locate it adjacent to the existing screw auger. Utilize the existing building and modify it as required to fit the new mechanism. New controls would be required and special	Due to facility request. Existing is undersized. To prevent failure. Long-term/high maintenance issue. Service reliability. To extend life. Existing screw auger device jams frequently and constantly needs to be dismantled to clean the compacted garb	1 Unit		\$981,720
Site	Manhole/Vault, Electric, Remove & Replace. Add (2) new electrical/telecom manholes located east of (2) existing manholes that are located at the bottom of the steep hill behind the Maintenance Building and near Level 1 security	Due to facility request. To prevent failure. To prevent personal injury. Service reliability. Life safety issue. Existing structures fill up with water because they are in a low spot. Maintenance worker runs risk of being electrocuted.	2 Units		\$63,832
Site	Site Improvements I, New, Barbed Wire Chain Link Fence. Install around (2) existing electrical cabinets inside secure perimeter at two locations in the facility. Provide 5' minimum clearance around cabinet and install (1) lockable man gate at	Due to facility growth. To prevent failure. To prevent personal injury. To improve security. Life safety issue. Prisoners have full access to electrical cabinets.	150 LF		\$5,959
Site	Frame & Cover/Grate, Catch Basin, Adjust Existing to Grade & Re-grout. Located on west side of Unit 5, east of main sidewalk.	To improve drainage. Service reliability. Prevent winter freezing hazard. Prevent water from infiltrating building exterior.	1 Unit		\$505
Site	Pavement Areas/Driveways/Roadways, Concrete, New Full Depth. Add 6' x 6' concrete splash pad beneath the outlets of the fire sprinkler drain-down pipe for all buildings.	To prevent failure. To improve appearance. Soil erosion issue. Prevent water from infiltrating building exterior.	400 SF		\$3,434

Site	Site Improvements II, New, Concrete Slab/Pad. Existing muffin monster control building needs to be raised onto a concrete slab. Re-grade around building to avoid water from collecting around building foundation.	Due to facility request. To prevent failure. To prevent personal injury. Long-term/high maintenance issue. Prevent winter freezing hazard. Prevent water from infiltrating building exterior. Existing building is at bottom of embankment and lower than	50 SF		\$1,919
Site	Pavement Areas/Driveways/Roadways, Concrete, New Full Depth. Replace existing gravel shoulder on north side of earth mound outside the Sally Port gate with concrete pavement.	To prevent failure. To fix deteriorated, damaged, failure area. To improve appearance. To improve vehicle traffic flow. Long-term/high maintenance issue. Service reliability. Due to frequent use by heavy/large trucks. To extend life. Not quite eon	500 SF		\$3,434
Site	Miscellaneous Site Improvement Project Remove & Replace. Steel W-beam guardrail and post west of Sally Port in the secure area. Use a steel post in lieu of wood.	To prevent failure. To fix deteriorated, damaged, failure area. To improve appearance. Service reliability. Due to frequent use by heavy/large trucks.			\$8,484
Site	Site Improvements I, New, Handrailing. Along both sides of the loading dock ramp at the Food Service Building.	To prevent personal injury. To improve pedestrian traffic flow. To improve vehicle traffic flow. ADA issue. Prevent winter freezing hazard.	100 LF		\$6,767
Site	Add new equipment. Replace all paging micro-phones.	More cost effective to replace soon. To eliminate potential for future damage. To eliminate high maintenance condition.			\$4,545
Site	Shooting Range	The installation of a storage building with concrete slab and electrical on the shooting range. Current buildings do not provide adequate storage and are badly worn.	1	in progress	\$50,000
Site	Power for gun range building	To provide lights in gun range building and range light for low light shooting	1	5	\$13,925
Site	Replace Propane back up system	Replace the existing system with a new system. The current system is to provides heat as a backup, but it is very problematic and unreliable.	1	9	\$250,000
Site	Repair/replace concrete sidewalk throughout facility and curb and grounds in Sally port.	Remove damaged sections of concrete replace with new. Crumbling concrete poses a safety issue.	2	7	\$30,000
Storage/Hazardous	Replace single exterior door/frame/hardware. Replace rear storage doors.	Damaged. Bottoms rusting out.	2 Units		\$4,141
Support Services	Replace Food Service Grease trap in front of health care	Current trap is original and very corroded/rusted causing the trap not to function as intended and could cause the drain lines to back up into food service resulting in an unsafe and unsanitary environment.	1 unit	6	\$20,000
Support Services	Provide control joints. Provide control joints at all standard locations.	Damaged. Leading to More Serious Problems. Building settlement. Walls cracked at many locations particularly corners and opening due to poor or no control joints.	1,200 LF		\$7,171
Support Services	Tuckpoint brick. Tuckpoint glazed CMU along back corridor in Food Service area.	Worn out. Damaged. Cosmetically Necessary or Aesthetically Poor.	500 SF		\$5,555
Support Services	Misc. projects. Provide bumper rails down length of rear hallway.	To Eliminate High Maintenance Condition. To reduce damage to walls and doors from cart traffic.			\$1,717

Support Services	Replace quarry tile. At kitchen with monumental polymer flooring after repairing drainage system and floor slab.	Damaged. Leading to More Serious Problems. To Eliminate High Maintenance Condition.	5,000 SF		\$84,840
Support Services	Replace concrete floor slab. Remove kitchen floor at drain pits. Replace drainage system with better system and install new floor slab.	Leading to More Serious Problems. To Eliminate High Maintenance Condition. Request of Facilities Maintenance.	1,000 SF		\$12,726
Support Services	Replace interior doors/frame/hardware. Replace doors into rear corridor from kitchen and loading dock.	Worn out. Damaged. Leading to More Serious Problems. To Eliminate High Maintenance Condition.	5 Units		\$12,726
Support Services	Replace interior door hardware. Replace all interior locks.	Damaged. To Eliminate High Maintenance Condition. Request of Facilities Maintenance.	20 Units		\$8,686
Support Services	RegROUT tile. RegROUT all tile in dining and serving areas.	Worn out. Damaged. Cosmetically Necessary or Aesthetically Poor. To Eliminate High Maintenance Condition.	5,000 SF		\$25,452
Support Services	Recaulk/Reseal building joints. Reseal all existing control joints that have cracked.	Damaged.	200 LF		\$616
Support Services	Replace overhead doors. Replace coiling door at loading dock, use door with more reasonable locking system that won't allow motor to operate when door is locked.	Worn out. Damaged. To Eliminate High Maintenance Condition.	64 SF		\$25,250
Warehouse	Recaulk/Reseal building joints. Reseal all control joints.	Damaged. Leading to More Serious Problems. Building settlement. Building movement has cracked joints beyond what caulking could bear.	1,200 LF		\$2,929
Warehouse	Provide waterproofing. On northeast wall where interior of block is damaged.	Damaged. Leading to More Serious Problems. Water infiltration has caused paint peeling and some CMU spalling on interior at slab level.	200 SF		\$2,222
Warehouse	Misc. projects. Create separate sound-proof room within the building for air compressor.	Request of Facilities Maintenance. Currently in same room as lounge/office - can't hear on phones when compressor kicks in, which it does often.			\$1,111
Warehouse	Miscellaneous. Relocate the existing air compressor to a self-contained room.	Requirement for other improvements. Existing compressor is in Maintenance Staff office area and is a nuisance (makes telephone and radio conversations impossible).			\$3,434
Warehouse	Main control panel and front-end direct digital controls (DDC) equipment.	Requirement for other improvements. Allows monitoring of all buildings at facility from a remote location.	1 Unit		\$42,420
Warehouse	Couple the existing pneumatic control system with DDC (new panel and some points).	None presently installed. Provide better temperature control. Requirement for other improvements. Allows monitoring of the building from a remote location.	16,000 SF		\$40,703
Warehouse	Replace roof top heating units	Current heating units are original and problematic. Parts are hard to find	2		\$30,000
				Total	\$10,884,103

MICHIGAN DEPARTMENT OF CORRECTIONS

“Committed to Protect, Dedicated to Success”

MEMORANDUM

DATE: 7/25/18
TO: Tony Trierweiler Warden IBC
FROM: Scott Klein Physical Plant Superintendent IBC
Subject: Annual Physical Plant Report

This report has been prepared in accordance with P.D.04.03.100

Overview of Physical Plant accomplishments

Video enhancements for IBC and Dorm
LED lighting upgraded IBC and Dorm perimeter
IBC Food Service drain repair
IBC Food Service grease trap replacement
Dorm Food Service renovation
Fire panel upgrades to EST-3 in Bldg.200, 300, HU-1,3,5
Generator separation for Dorm and driveway lighting upgraded

Annual review of Physical Plant

Security Systems

Gallagher Stun Fence system is functioning currently. Gallagher will discontinue sales and support of current fence control equipment in near future.

Housing units 1 thru 8

The housing units are in good condition. The roofs have been inspected and are in good shape. We are experiencing random leaks on the roofs that we address as needed. The entrance doors and jambs rusted. HVAC system in good condition routine maintenance performed. Fire alarm system parts are becoming obsolete. Upgrading panels when inoperable. We are replacing water heaters in the units as they start to leak.

Administration Building 100

The Administration Building is in good condition. The entrance doors and jambs rusted. HVAC system in good condition, routine maintenance performed. Roof is in good shape few minor leaks being addressed as needed.

Building 300 School

Building 300 is in good condition HVAC system is in good shape, continuing routine and preventative maintenance. Roof in good shape no leaks currently.

Maintenance Building 500

The maintenance building is in good condition. The entrance doors and jambs rusted. Roof is inspected and in good condition.

MSI building 400

This building is in good condition. HVAC system in good condition routine and preventative maintenance performed.

Health Care Building 200

Health Care is in good condition. HVAC system in good shape routine and preventative maintenance is being completed.

Food Service Building 200

The food service building is in good condition, routine maintenance performed. Entrance doors and jambs rusted. HVAC system in good condition routine maintenance performed. Roof is inspected and in good condition. Food service dish machine is showing age and in fair condition.

Grounds Storage

This building is pole structure and in good condition.

Bellamy Grounds

The drives and roads are in fair condition. Asphalt is showing age. The parking lot cracks are patched and filled as needed.

IBC Backup Generator

The generator is in good condition, annual inspection and service performed by Bridgeway Cummins. Test includes full load test. Staff tests generator per policy.

Backup L.P. system

The L.P. system is working well and tested per policy.

Water Treatment

System was updated and working well.

Dorm Housing Units A, B and C

The Dorm units are in good shape. Roofs are in fair condition, repairs have been completed on an

as need basis. C-unit fire alarm panel obsolete system should be replaced.

Dorm, Food Service, Visit room and Chapel

Roof replacement project started middle of July 2018. New steel roof to be installed.

Dorm Grounds

Grounds are in good shape. Drive way asphalt is in good shape.

Dorm Generator

New Dorm generator installed and being tested per policy.

Dorm Boiler House

All systems are functioning well currently.

**BELLAMY CREEK CORRECTIONAL FACILITY
5-Year Plan FY2020**

Building	Project Description	Reason Description	Quantity & Units	Facility Priority	Cost Estimate
IBC and Dorm	Razor ribbon enhancements	Razor ribbon enhancements for IBC and Dorm		1	\$510,000
Perimeter	Gallagher Stun Fence upgrade	Update and network stun fence electronics. Notified by Gallagher repair part will be obsolete for our system.		2	\$50,000
IBC Grounds	Upgrade fire panels in HU1, HU4, HU6, HU7, Bldg. 100 and Bldg. 500	EST 2 system obsolete parts. Upgrade to EST 3 system.	6 systems	3	\$60,000
Dorm C Unit	Fire detection	Upgrade in C unit only. (A and B units are done).	1 system	4	\$50,000
IBC grounds	Update heating boilers in buildings	Age of the boilers and efficiency of the units.	12 boilers	5	\$360,000
Dorm	Update roofs on A, B and C units.	Outlasted its life expectancy		6	\$150,000
IBC & Dorm ground	Resurface IBC and Dorm parking lot/Walkways inside the facility	Resurface parking lot. Approx. 7 acres of parking lot and drive. Walkways inside the facility, easier to transport food carts, supplies back and forth, etc. Need to roto mill and replace asphalt. (includes expanding Dorm parking lot).		7	\$700,000
IBC Food Service	Dish machine	Replace obsolete dish machine.		8	\$50,000
IBC HU3, HU6 & H	Lockers	add lockers for HU3, HU6 and HU7 for level II property allowed	720	9	\$250,000
				Total	\$2,180,000

MICHIGAN DEPARTMENT OF CORRECTIONS

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MEMORANDUM

DATE: May, 2018

TO: Warden, Shane Jackson

FROM: Ken McComb, Physical Plant Manager
Earnest C. Brooks

SUBJECT: 2018 Annual Physical Plant Inspection

During the month of May, the annual physical plant inspection for both Earnest C. Brooks and West Shoreline Correctional Facilities was completed for the year 2018. This inspection provides an overview of the general condition of the buildings and grounds. Both Facilities are overall in Good condition.

We continue using our asphalt crack sealing kettle to repair cracks in our parking lots and perimeter roads to try and slow down the deterioration of the asphalt. The

The entrance drive into the facilities is new and in good shape. The employee parking lots are new and in very good condition. We have a few Projects currently in different stages of the process. 1. Adding two office spaces in C unit for programing -Approved material on order. 2. Moving H/R staff to upstairs business office area-Waiting approval from regional business office. 3. Updating the front lobby area of the administration building. Project will be forwarded to the regional business office in first part of June 2018. 4. Installing a completely new Air conditioning system in the school building- Approved and in the bidding process. 5. We also continue to upgrade he interior LED pole lights. 6. We have also had a couple of meetings for approved Propane plant replacement project as well as the approved Razor ribbon enhancements.

Earnest C. Brooks Correctional Facility

Administration Building

The roof system is new and the exterior of the building in good condition. As far as the brick and mortar, there are a few door frames that need to be replaced as the old ones are fairly rusted through at the bottoms we continue to work on these. Windows are in good condition. Interior of the building ceilings, walls (paint), floors, lighting and camera system are all in good shape. The boilers are old but appear to be in good condition. This building would be one in line for a new air conditioning unit as it is an older system hopefully 2019.

Allegan housing unit

The roof system is new and the exterior of the building in good condition. The brick and mortar, windows and walkways are all good. The interior of the building has a new camera system, a new PPD system and a new rounds reader system. The ceilings, walls {paint}, floors and glass are all in

good condition. The boiler is old but appears to be in good condition. The wheel chair lift is new and functioning well.

Baldwin housing unit

The roof system is new and the exterior of the building in good condition. The brick and mortar, and walkways are all good. The interior of the building has a new camera system, new PPD system, new rounds reader system and a new high efficiency water heater. The ceilings, walls and Paint are in good condition, windows are all in good operating condition.

Conklin housing unit

The roof system is new and the exterior of the building in good condition. The brick and mortar, windows and walkways are all good. The interior of the building has a new camera system, new PPD system, new rounds reader system and a newer high efficiency heating boiler. The ceilings, walls (paint), floors and glass are all in good condition, recently converted to a programs unit and will be getting two new office spaces for programing.

Dublin housing unit

The roof system is new and the exterior of the building in good condition. The brick and mortar, windows and walkways are all good. The interior of the building has a new camera system, new PPD system and a new rounds reader system, this building has received an upgraded fire alarm panel in 2018. The ceilings, walls (paint), floors and glass are all in good condition. The older heating boiler appears to be in good condition.

Eastlake housing unit

The roof system is new and the exterior of the building in good condition. The brick and mortar, windows and walkways are all good. The interior of the building has a new camera system, new PPD system, a new rounds reader system and a newer high efficiency heating boiler and new high efficiency domestic water boiler. The ceilings, walls (paint), floors and glass are all in good condition. The wheel chair lift is new and functioning well.

Fremont housing unit

The roof system is new and the exterior of the building in good condition. The brick and mortar, windows and walkways are all good. The interior of the building has a new camera system, new PPD system, a new rounds reader system and a newer high efficiency heating boiler and a new high efficiency domestic water boiler. The ceilings, walls (paint), floors and glass are all in good condition. The wheel chair lift is new and functioning well.

Chapel building

A Chapel has been recently constructed and is in very good condition.

Food Service building

The roof system is new and the exterior of the building in good condition. The brick and mortar, windows and walkways are all good. The interior of the building has a new camera system, new PPD system and a new rounds reader system. The ceilings, walls (paint), floors and glass are all in good condition. The two large older style boilers appear to be in good condition. Undergoing some renovations before coming back to state operations.

Health services building

The roof system is new and the exterior of the building in good condition. The brick and mortar, windows and walkways are all good. The interior of the building has a new camera system, new PPD system, a new rounds reader system and a new rooftop air conditioning unit. The ceilings, walls (paint), floors and glass are all in good condition.

School building

The roof system is new and the exterior of the building in good condition. The brick and mortar, windows and walkways are all good. The interior of the building has a new camera system, new PPD system and a new rounds reader system. The ceilings, walls (paint), floors and glass are all in good condition. The two older boilers appear to be in good condition.

The air conditioning unit for this building will be replaced. This is one of the approved projects listed above. To be completed in 2018.

Grounds areas including back 40 rec. areas

All grounds areas inside and outside these two facilities are in good condition and well maintained. Grass is mowed, flowers have been planted and all walkways are in good shape. Guard shacks and weight pits are in good condition. Overall, facility grounds are well maintained. We will be replacing interior site lighting with LED through attrition. Actually, down to just the pole mounted fixtures in the common's areas.

Maintenance/Warehouse building

The roof system is new and the exterior of the building in good condition. The brick and mortar, windows and walkways are all good. The roof system is new. The interior of the building has upgraded LED lighting. The interior ceilings, walls (paint) and flooring are all in good condition the cooler and freezer units are all in very good condition with cooler having all new flooring and cooling equipment.

cc: Dan Smith
Dave Groenhof, Business Manager

EARNEST C. BROOKS CORRECTIONAL FACILITY

West Shoreline

5-Year Plan FY2020

Building	Project Description	Reason Description	Quantity & Units	Facility Priority	Cost Estimate
LRF/Maintenance	Build pole building on west side of maintenance building to house all grounds equipment and tools.	Due to West Shoreline closure we have nowhere to store Grounds equipment and tools.	1	1	\$50,000
LRF administration building	Replace roof top HVAC systems. Original equipment and this are currently R-22 systems which are obsolete.	Due to the age of the systems R-22 obsolete.minimize high maintenance condition and prevent future failure.	1	2	\$160,000
LRF/buildings	Replace original pneumatic building controls with Direct Digital controls. (DDC).	Due to the age of the system to prevent future failure and to become more energy efficient.	9	4	\$330,000
				Total	\$540,000

MICHIGAN DEPARTMENT OF CORRECTIONS

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MEMORANDUM

DATE: August 10, 2018

TO: Daniel Smith
Physical Plant Division, Grandview Plaza

FROM: Benjamin J. Verway; Acting Physical Plant Superintendent
Carson City Correctional Facility

SUBJECT: 2018 Annual DRF Physical Plant Report

This Annual Report has been prepared in accordance with P.D.04.03.100 “Preventive and Emergency Maintenance for Correctional Facilities”. Specifically, section “N” requires CFA Physical Plant Superintendents conduct an annual inspection of their respective facility to assess the need for future maintenance. The results of the inspection are to be submitted in writing to the facility Warden.

Overview of Physical Plant accomplishments:

- Installed new RPZ on both East and West Side and raised East side RPZ above ground.
- Completed E & F unit Renovation.
- Replaced a lift pump at the sewage lift station and re-surfaced the outlet flange.
- Replace 12 perimeter lights and 10 cameras after lightning strikes.
- Installed a new water heater in G/H and E/f housing units.
- IPS completed the annual propane plant inspection.
- Completed the annual Physical Plant evaluation.
- Completed re-paving the Sally-Port entrance on the West side.
- Passed the Tri-Annual inspection by Homeland Security.
- Repaired and replaced the concrete dock on west food service building.
- Replaced 2 main breakers and the tie-breaker in the west side switch gear.

- Cleaned the switch gear.
- Home Works Tri County replaced the metered transformers for both east and west main service.
- Replaced the heating boiler in 700 building.
- Completed Arch Flash training.
- Completed the installation of the new mechanical siren.
- Installed 3 rows of new razor ribbon on the perimeter.
- Completed all CSD 1 testing.
- Upgraded the security monitoring system to Star Net 2.
- Started the fire alarm system upgrade project.

Brickwork

The condition of the Brickwork seems to be in good general order with few signs of weather damage due to freeze or thaw.

I have found no problems with any of the block work or supporting foundations. All the weep-holes that would allow the moisture in the walls to adequately drain appear to be open and functioning properly. Openings for the roof drainage all look good and the sealant at the blow-out joints also looks fine.

Building Architectural and Structural

Inspections of the Building Architectural and Structural components display the facility to be in exceptional condition. None of the buildings show any sign of breaks or settling in the foundations, floors or walls. The steel siding on the temporary units is rotting away at the bottom and needs to be replaced. All the exterior doors on the temporary side of the facility need to be replaced as the frames are rotting at the bottom. Many doors on the regional side of the facility need to be replaced for the same reason. The doors entering the food service dining hall on the regional side need to be replaced.

Many of the roofs on both the east and west side are in poor to failing condition. We have many leaks on the west side flat roofs due to the failure of the adhesive and the wind which billows the rubber causing the seams to split open. We are trying to repair what we can but a total replacement with new fastening of the EDPM is necessary. The east side steel roofs are beyond their life span. We have replaced all the fasteners and addressed leaks with sealant and caulking. The shingled roofs on the food service building and the pavilion are beyond their life span and need full replacement.

The building masonry looks to be in generally decent condition with some slight sign of phosphoresce around the Administration Building visit Yard Wall.

All facility Observation Post and Yard Storage buildings look good apart from 1000 building. The facility is requesting to remove this building as it is no longer used for prisoner rec equipment and is vacant. It is a security issue creating blind spots and hiding areas for contraband.

Concrete/Paving

Inspection of the concrete shows it to be in overall good to fair condition. Maintenance has done some concrete work at 200 Building food service dock including some extensive concrete work with the installation of a new retainer wall. A sidewalk was added between housing unit 900 and the school building. The asphalt pavements located behind the East food service building has failed and is open to the substrate. A temporary repair has been made with compacting coarse aggregate, but a permanent fix is needed soon. The asphalt behind west food service was replaced this past fall. There are multiple areas in the parking lots which must be addressed, we have received quotes to make these repairs and a change request has been submitted. We have also replaced several areas of concrete that were low or heaved causing a trip hazards or impeding door/gate swings.

Flooring

An inspection of the Flooring systems shows it to be in decent condition. We have no sheet vinyl floor coverings, but we do have vinyl tile, carpet and carpet squares, all areas look good, the carpet is showing some wear. We have replaced many of the worst offices.

The only areas in which I have found any problems are the painted finish on the cell room floors; many need refinishing. Also, the tile in both food services is in poor shape. This was mentioned on previous years report and should be addressed as soon as funding permits.

Hollow Metal Work

An inspection of the Hollow Metal Work indicates it to be in fair to good condition. This area consists mainly of Light Poles, Utility Fixtures, Doors, Door casings and Mullions. Some of the doors that access our buildings and cells are rusted out and are being replaced by attrition.

We will need to continue with the replacement of some Level IV Cell Door Trolley Systems and replace some of our entrance doors where the frames have decayed beyond repair. Facility light poles will need repainting as soon as manpower and budget allow. In the recent past we had monies made available for the security upgrades, we have upgraded perimeter lighting fixtures with energy efficient LED fixtures.

Metal and Vinyl Windows and Sash

An inspection of the Metal Window and Sash units shows them to be in generally good condition. Over the past few years, Maintenance staff has replaced over half of the glass in the windows of the West side Housing Units due to a failure of the sash sealant which causes them to fog and fill with water, we will need to continue with the glass replacement as manpower and budget permits. The metal and vinyl windows on the East side continue to be in decent shape with no problems found.

Miscellaneous and Ornamental Metal Work

An inspection of the Miscellaneous and Ornamental Metal Work that is used shows it to be in good condition with no problems found.

Painting

An Inspection of the Painting confirms it to be in generally respectable condition. All building interior walls look to be in good shape. Housing Unit cell floors are showing considerable wear in the paint, which should be addressed as soon as the budget allows. The ceilings in the west side housing units will need to be addressed after the roofs are finished being repaired. We plan to complete painting in both Food Service areas this year.

The parking lots, curbing is due to be repainted, along with some of the light poles. The painting in the Housing Units are done by Housing Unit painters assigned to that task, all areas appear to be kept in good condition.

As mentioned earlier in the report regarding sheet metal, we are experiencing some fading on the fronts of some East Annex buildings along with some rust occurring on the MSI Building metal siding by the exhaust protrusions. DRF East Housing Units need interior painting. Lastly many of the bathroom stalls and partitions need repainting or replacement.

Perimeter Fences and Walls

An inspection of the Fences shows them to be in generally good condition, with only minor problems found in the Perimeter or Buffer fence construction materials (post, fence fabric, razor wire, wire ties, gates, etc.).

We added three control fences one on the east side between the quartermaster building and the administration building. Another control fence was added to the west side between the health care building and the corner of the administration building. The last control fence was run between the west food service building and the close gates to level IV housing. The facility has requested to add four more control fences on the west housing units to restrict the access behind the units.

We have made repairs to the buffer fence in a few places. We have noticed that some sections of the buffer fence will need to be re-stretched as they are beginning to sag and shake with the wind which causes false alarms on the ICS zone system.

Refrigeration, Heating and Air Conditioning

An inspection of the Refrigeration and HVAC components indicates that the AC units that have not been replaced are struggling as they reach the end of their life cycles. I would recommend that we order the replacement units as soon as possible.

We replaced one coil in 200 building and the compressor and condenser. We have replaced two of four coils in the 100 building, but the compressors and the condenser are beginning to fail, and the condenser is no longer able to hold a charge. The condenser on 300 building is also beginning to show signs of its age and will soon be ready for replacement.

We plan to replace the exhaust fans on the west housing units to increase the air flow in those units. Currently they are 8" units and we would like to increase that to a 24" unit that pulls a higher cfm value. The return register will need to be made larger to accommodate the higher volume and the wiring to the fans will need to be increased to accommodate the higher amperage draw.

Roadway and Walkway

The Roadways and Walkways are in fair condition we are repairing some areas in the parking lots and making small patches on the perimeter road. We need to continue with the crack filling. The resurfacing we did on the west sally port entrance and behind west food service has greatly improved the area. We have a large area on the east side behind the food service building that has decayed through to the substrate. We filled and compacted some course aggregate, but this is only a temporary fix. The roadway from east food service going west towards the MSI gate will need to be repaved soon.

Roofing

Inspections of the Roofing systems confirm them to be in poor to failing condition. We are beginning the roof replacement project this fall which will be full replacement of the west buildings; 100, 200, 300, 700, 800, and 1200. This project will greatly improve the quality and longevity of these buildings.

The East annex, school, and housing unit roofs are steel sheeting on a 4/12 pitch slope coated with an asphalt-based coating over the seams and fasteners. Due to the age of these steel roofs we have replaced the fasteners as they have all worked loose. I would recommend that we replace all these steel roofs.

The remaining East side roofs are also 4/12 pitched slopes with asphalt shingles applied, these are found to be in poor to failing condition. We had an evaluation done 4 summers ago by McDonald Roofing Company and the Physical Plant Division staff and as result they listed us a very high priority state wide for having our roofs replaced.

Security and Locking Systems

An inspection of the Locking Systems revealed this as a major security issue. The keyway used for the east side of the facility is a standard C keyway which can be duplicated at any hardware store. The keyway used on the west side is only a little more secure because most hardware stores don't carry the key blanks, but they can now purchase that keyway as the patent for Schlage has expired. I recommend consolidating the two sides to one more secure keyway. We are also adding proximity access controls to all the exterior doors on both administration buildings and some of the interior doors that access staff only areas to help secure these buildings from public access.

The Keywatcher Key Security System is requiring more preventive maintenance than originally thought, with cleaning being needed every month.

The Exit Door crash bars that are used around the facility are starting to show their age and due to the high cost of the replacement bars (over \$600.00 apiece), will be replaced by attrition.

We have noticed that the Roton continuous door hinges used everywhere in the compound need rebuilding, this will mean that we will need to order quite a few rebuild kits at approximately \$40.00 apiece.

Door carriers on the Close Unit cells and the Control Center Security Gates are going to require some extra attention over the next few years. We are working to find a supplier for these carriers as the original source is no longer available.

We are continuing to upgrade our camera security systems, The West side cameras that were added to the Level II Housing Units, the Level IV Housing Units, the Gymnasium and the School Hallway are working well.

We have upgraded our security system to the newer Star Net 2 with the fire alarm project. Training and implementation are in progress, but the system seems to be a welcomed upgrade. The project scope included the addition of a redundant system in the east communication center, so we have a back up to our control center on the west side.

Sheet Metal Work

An inspection of the sheet metal work shows some extensive rusting of the sheet metal panels around the venting ports of the 600 Building (MSI Operation). I would recommend that we repaint the area with a rust inhibitor paint to slow down the deterioration process and consider replacing the siding in the future when manpower and budget allows.

The front of the East side Housing Units are showing signs of fading and rusting, all buildings have developed rust to some degree at or near the main entries from years of de-icing salt use, we have already started to replace steel on some of these buildings and installing ½"x12" composite board at the base of these walls to mitigate the damage from the deicer.

Structural Metal Work

An inspection of the Structural Metal Work appears to be in very good condition with no problems found. The steel roof trusses look good, as does the metal roof decking. Previous roof replacements at 100, 400, and 900, Buildings show the underlying steel roof sheeting looked very good.

The MSI Building structural steel looks to be in generally good condition with the exterior wall sheeting in need of refinishing at the ventilation exhaust areas due to rusting.

Waterproofing

A prior concern with the Waterproofing has had Maintenance staff keeping an eye on possible problems with water leakage in the lower floor of 800 Building. A few years ago, we had a report of moisture

entering one of the cells; it was presumed that it may have entered through the wall, which would indicate that a possible failure of the waterproofing membrane may have occurred.

We had a similar incident in 900 Building, where the problem was corrected by retiling the outside of the basement walls.

We did some work in the problem area of the 800 Building with grading and weep-hole exposure and seemed to have improved the drainage considerably. Over the past few years, we have not had any reported problems at the 800 Building, but these have been very dry years, we will continue to monitor this area.

Most of our buildings have not had any brick resealing /waterproofing agent applied in the last 20 years and it is time to consider having this done when money permits.

Woodwork

An inspection of the Woodwork shows it to be in good condition with no problems found.

Wall and Floor Tile

Inspection of the Wall and Floor Tile in the East and West Buildings shows it to be in generally poor condition. In the areas where Quarry and Ceramic floor tiles are used, I have found missing tiles and damaged tiles mainly in the Food Service areas. The tiles in the west side housing unit showers show considerable damage and need immediate attention. We will be repairing, and epoxy coating these areas to lengthen the life and lesson the time and cost of repairs.

The Food Service corner protectors used to minimize wall damage continue to help. The tiled walls in the facility are looking good.

If you should have any questions, please feel free to contact me. Thank you in advance for your time.

cc: Ed Vallad, Physical Plant Division Administrator
Gene Page, Physical Plant Division Manager
Richard White, Physical Plant Division
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Don Dine, DRF Facility Manager
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File

**CARSON CITY CORRECTIONAL FACILITY
5-Year Plan FY2020**

Building	Project Description	Reason Description	Quantity & Units	Facility Priority	Cost Estimate
Site	Replace the fire alarm system.	The current system is 20 years old and obsolete. We cannot find parts for the old system and we are having many problems with it.	1	1	\$1,500,000
East Admin.	Install an automatic sprinkler system.	Required per fire code. 23.1.6.4	1	2	\$360,000
Flat roof West side.	Replace existing roofs. Fasteners holding roof insulation down over cell block wings is working its way through membrane, causing maintenance problems. Roofs past life span.	Leading to More Serious Problems. To Eliminate High Maintenance Condition.	1	3	\$2,100,000
Site	Replace key system on the east side of the facility to match the system on the west.	The current keyway is a common style keyway able to be purchased and copied at any local retailer rendering the system extremely vulnerable. The lack of continuity between the two sides of the facility causes a surplus of keys and hinders efficient and secure key control. Consolidating to one system for the entire facility will address those	1	4	\$100,000
A/B Housing	Replace/new hot water heater - 250 gallon. Replace existing gas fired 250-gallon water heater with two smaller new high efficiency water heaters.	Beyond useful life. Worn out. Impairs building operation. According to facility maintenance personnel, the water heater is subject to near constant use. Due to the near constant firing, it is believed we have reached the life expectancy for this unit.	1	5	\$30,000
All Level 1 Housing Units	Replace steel siding and vestibule doors.	Major deterioration exists in the siding, door frames and slabs. These components are an integral element of the building structure and security. Replacement is necessary to extend the useful life of these housing units.	1	6	\$92,320
Site	Installation of water supply pressure boosting pumps	Current water pressure is insufficient. Installation of booster pumps would maintain constant adequate pressure.	1	7	\$83,820
1200	Replace existing heat source (one 1.5 million BTU hot water heater) with two high efficiency 750 thousand BTU hot water heaters.	Current heating boiler is beginning to fail. This is the sole source of heat for the housing unit. There will be a reduction in energy consumption and the added redundancy will help ensure no loss of service to the unit.	1	8	\$70,000
West Housing Units	Replace back up heating boiler for west housing units	The backup water heater that provides heat for the housing units on the west side was used to replace the failed unit in housing unit 700. There is a 4-5 week lead time to purchase these and in the event of another housing unit losing the heating boiler we have no backup heat source. All the existing units are the same age and they are all	1	9	\$42,956
Housing Units 500 & 800	Replace Handicap Chair Lifts	We have been experiencing longer down times with these lifts because of the difficulty the technicians are having finding parts to complete the repairs and the overuse of this style of lift.	1	10	\$220,000
1100	Replace pneumatic with direct digital controls (DDC). Upgrade existing pneumatic temperature control system with a direct digital control system...this will allow correlation between the buildings; effective troubleshooting; diagnostics	None presently installed. Reduce energy usage. Provide better temperature control. Utility cost savings. Better equipment available. This will allow correlation between the buildings; effective troubleshooting; diagnostics from remote locations.	1	11	\$94,160
1200	Replace pneumatic with direct digital controls (DDC). Upgrade existing pneumatic temperature control system with a direct digital control system...this will allow correlation between the buildings; effective troubleshooting; diagnostics	None presently installed. Reduce energy usage. Provide better temperature control. Utility cost savings. Better equipment available. This will allow correlation between the buildings; effective troubleshooting; diagnostics from remote locations.	1	12	\$163,680

500	Replace pneumatic with direct digital controls (DDC). Upgrade existing pneumatic temperature control system with a direct digital control system...this will allow correlation between the buildings; effective troubleshooting; diagnostics	None presently installed. Reduce energy usage. Provide better temperature control. Utility cost savings. Better equipment available. This will allow correlation between the buildings; effective troubleshooting; diagnostics from remote locations.	1	13	\$163,680
700	Replace pneumatic with direct digital controls (DDC). Upgrade existing pneumatic temperature control system with a direct digital control system...this will allow correlation between the buildings; effective troubleshooting; diagnostics	None presently installed. Reduce energy usage. Provide better temperature control. Utility cost savings. Better equipment available. This will allow correlation between the buildings; effective troubleshooting; diagnostics from remote locations.	1	14	\$192,390
800	Replace pneumatic with direct digital controls (DDC). Upgrade existing pneumatic temperature control system with a direct digital control system...this will allow correlation between the buildings; effective troubleshooting; diagnostics	None presently installed. Reduce energy usage. Provide better temperature control. Utility cost savings. Better equipment available. This will allow correlation between the buildings; effective troubleshooting; diagnostics from remote locations.	1	15	\$192,390
900	Replace pneumatic with direct digital controls (DDC). Upgrade existing pneumatic temperature control system with a direct digital control system...this will allow correlation between the buildings; effective troubleshooting; diagnostics	None presently installed. Reduce energy usage. Provide better temperature control. Utility cost savings. Better equipment available. This will allow correlation between the buildings; effective troubleshooting; diagnostics from remote locations.	1	16	\$192,390
C/D Housing	Make up air system (2 MAU's, 4 inline exhaust fans, 4 ext. louvers). Replace (or change motor size if possible) existing inline exhaust fans (4 per building) with new fans. Re-use existing ductwork and grilles. Install new indirect gas fired	Doesn't provide adequate heating. Doesn't meet current ventilation standards. Provide better temperature control. Personal comfort. Current ventilation rates are insufficient for the number of occupants. There is not any makeup air currently provided	1	17	\$332,992
A/B Housing	Make up air system (2 MAU's, 4 inline exhaust fans, 4 ext. louvers). Replace (or change motor size if possible) existing inline exhaust fans (4 per building) with new fans. Re-use existing ductwork and grilles. Install new indirect gas fired	Doesn't provide adequate heating. Doesn't meet current ventilation standards. Provide better temperature control. Personal comfort. Current ventilation rates are insufficient for the number of occupants. There is not any makeup air currently provided	1	18	\$332,992
G/H Housing	Make up air system (2 MAU's, 4 inline exhaust fans, 4 ext. louvers). Replace (or change motor size if possible) existing inline exhaust fans (4 per building) with new fans. Re-use existing ductwork and grilles. Install new indirect gas fired	Doesn't provide adequate heating. Doesn't meet current ventilation standards. Provide better temperature control. Personal comfort. Current ventilation rates are insufficient for the number of occupants. There is not any makeup air currently provided	1	19	\$332,992
E/F Housing	Make up air system (2 MAU's, 4 inline exhaust fans, 4 ext. louvers). Replace (or change motor size if possible) existing inline exhaust fans (4 per building) with new fans. Re-use existing ductwork and grilles. Install new indirect gas fired	Doesn't provide adequate heating. Doesn't meet current ventilation standards. Provide better temperature control. Personal comfort. Current ventilation rates are insufficient for the number of occupants. There is not any makeup air currently provided	1	20	\$332,992
C/D Housing	Replace existing pneumatic controls with a new DDC control system. Replacement shall consist of the following as a minimum: 1 heating water 3" flanged 3-way control valve and electric actuator. 1 domestic hot water 2" threaded 3-way	Worn out. Provide better temperature control. Better equipment available. Impairs building operation. Frequent repair is required for the compressor, filters, etc. This will allow remote monitoring, alarming, diagnostics and troubleshooting of the system.	1	21	\$32,065
A/B Housing	Replace existing pneumatic controls with a new DDC control system. Replacement shall consist of the following as a minimum: 1 heating water 3" flanged 3-way control valve and electric actuator. 1 domestic hot water 2" threaded 3-way	Worn out. Provide better temperature control. Better equipment available. Impairs building operation. Frequent repair is required for the compressor, filters, etc. This will allow remote monitoring, alarming, diagnostics and troubleshooting of the system.	1	22	\$32,065
Food Service	Replace existing pneumatic controls with a new DDC control system. Replacement shall consist of the following as a minimum: 1 heating water 3" flanged 3-way control valve and electric actuator. 1 domestic hot water 2" threaded 3-way	Provide better temperature control. Better equipment available. Impairs building operation. Frequent repair is required for the compressor, filters, etc. This will allow remote monitoring, alarming, diagnostics and troubleshooting of the systems. Cos	1	23	\$32,065
G/H Housing	Replace existing pneumatic controls with a new DDC control system. Replacement shall consist of the following as a minimum: 1 heating water 3" flanged 3-way control valve and electric actuator. 1 domestic hot water 2" threaded 3-way	Worn out. Provide better temperature control. Better equipment available. Impairs building operation. Frequent repair is required for the compressor, filters, etc. This will allow remote monitoring, alarming, diagnostics and troubleshooting of the system.	1	24	\$32,065
E/F Housing	Replace existing pneumatic controls with a new DDC control system. Replacement shall consist of the following as a minimum: 1 heating water 3" flanged 3-way control valve and electric actuator. 1 domestic hot water 2" threaded 3-way	Worn out. Provide better temperature control. Better equipment available. Impairs building operation. Frequent repair is required for the compressor, filters, etc. This will allow remote monitoring, alarming, diagnostics and troubleshooting of the system.	1	25	\$32,065
Maintenance/Warehouse	Main control panel and front-end direct digital controls (DDC) equipment. One main control panel/computer located on site which will interface with the individual building control panels. The system shall include one outside air sensor which will	Reduce energy usage. Better equipment available. Requirement for other improvements. Remote monitoring and control of all building systems will be a result. System will be capable of expanding to accommodate future needs such as new building systems,	1	26	\$53,240

Medium & Minimum-Security Units	Addition of Wash Basins and construction of Shower Houses.	The shower houses and wash basins are necessary to bring this facility into compliance with ACA Standard 4-4139 and 4-4138.	1	27	\$66,913
100	Upgrade paging system. Badly in need of new rack cabinet 19" back floor model. Keep from pulling off the wall.	More cost effective to replace soon. Leading to more serious problems. Can't close door or cabinet at this time.	1	28	\$9,680
Site	Storm Drainage System, Sump Pump, New. Existing electrical/telecom. manholes/vaults are flooded constantly. approx. 20 manholes total add storm drainage system to collect water that would be pumped from all manholes and	Due to age of system. Due to facility request. To improve drainage. To prevent failure. To prevent personal injury. Long-term/high maintenance issue. Service reliability. Due to site/soil characteristics.	1	29	\$128,018
200	Replace control panel. Upgrade night panel in health care so it will work with monitoring system.	Dangerous or potentially life threatening. Leading to more serious problems. Panel has been damaged.	1	30	\$5,718
300	Replace entry system - w/ insulated system. Entrance at east and west of academic area.	Worn out. Leading to More Serious Problems. To Eliminate High Maintenance Condition. Request of Facilities Maintenance. High use area.	1	31	\$41,140
600	Replace gutter system. Gutter leaking on south side of building, seams appear to be failing in some locations, standing water in gutters - need to be cleaned.	Damaged. To Eliminate High Maintenance Condition. Seam failure.	1	32	\$1,397
600	Replace metal panels. Rusted at outlet - staining masonry wall below. 100sf west wall. 200sf north wall.	Damaged. Cosmetically Necessary or Aesthetically Poor. To Cover up Water Damage.	1	33	\$27,830
100	ELECTRICAL DISTRIBUTION SYSTEM-Install additional branch panelboard. Install 208V, 400A panelboard in connection with larger transformer installation.	Provides for future growth. Increase system capacity.	1	34	\$7,260
100	ELECTRICAL DISTRIBUTION SYSTEM-Replace Transformer, <150KVA. Replace existing 75 KVA XFMR with a 112.5 KVA XFMR.D	Existing equipment at full capacity. Existing equipment undersized for present load conditions. Provides for future growth. Increase building capacity for current loads and provide for future growth.	1	35	\$8,894
100	ELECTRICAL DISTRIBUTION SYSTEM-Repair existing distribution equipment. Relocate existing XFMR installed underneath cold-water supply. Water damage is evident on XFMR enclosure.	Preventative maintenance. NEC compliance.	1	36	\$3,388
A/B Housing	ELECTRICAL DISTRIBUTION SYSTEM-Install additional branch panelboard. Install additional panelboards. One for each unit.	Existing equipment at full capacity. Provides for future growth. To replace existing residential grade sub-panels.	1	37	\$11,943
A/B Housing	ELECTRICAL DISTRIBUTION SYSTEM-Install additional distribution panel. Install distribution system in connection with larger transformer installation.	Existing equipment at full capacity. Provides for future growth. Increase system capacity.	1	38	\$21,344
A/B Housing	ELECTRICAL DISTRIBUTION SYSTEM-Replace Transformer, <150KVA. Replace existing 75 KVA XFMR with a 112.5 KVA XFMR.	Existing equipment undersized for present load conditions. Provides for future growth. Increase building electrical capacity for current conditions and provide for future growth.	1	39	\$11,053
A/B Housing	ELECTRICAL DISTRIBUTION SYSTEM-Replace Feeder, <600V. Replace existing 100A building service feeders with 200A service feeders.	Existing equipment is obsolete. Provides for future growth. Increase system capacity. Building service upgrade.	1	40	\$36,058

C/D Housing	ELECTRICAL DISTRIBUTION SYSTEM-Install additional branch panelboard. Install additional branch panelboards. One for each unit.	Existing equipment at full capacity. Provides for future growth. To replace existing residential grade sub-panels.	1	41	\$11,943
C/D Housing	ELECTRICAL DISTRIBUTION SYSTEM-Install additional distribution panel. Install distribution panel in connection with larger transformer installation.	Existing equipment at full capacity. Provides for future growth. Increase system capacity.	1	42	\$21,344
C/D Housing	ELECTRICAL DISTRIBUTION SYSTEM-Replace Transformer, <150KVA. Replace existing 75 KVA XFMR with a 112.5 KVA XFMR.	Existing equipment undersized for present load conditions. Provides for future growth. Increase building electrical capacity for current conditions and provide for future growth.	1	43	\$11,053
C/D Housing	ELECTRICAL DISTRIBUTION SYSTEM-Replace Feeder, <600V. Replace existing 100A building service feeders with 200A service feeders.	Existing equipment is obsolete. Provides for future growth. Increase system capacity. Building service upgrade.	1	44	\$36,058
E/F Housing	ELECTRICAL DISTRIBUTION SYSTEM-Replace Transformer, <150KVA. Replace existing 75 KVA XFMR with a 112.5 KVA XFMR.	Existing equipment undersized for present load conditions. Provides for future growth. Increase building electrical capacity for current conditions and provide for future growth.	1	45	\$11,053
E/F Housing	ELECTRICAL DISTRIBUTION SYSTEM-Install additional distribution panel. Install distribution panel in connection with larger transformer installation.	Existing equipment at full capacity. Provides for future growth. Increase system capacity.	1	46	\$21,344
E/F Housing	ELECTRICAL DISTRIBUTION SYSTEM-Install additional branch panelboard. Install additional branch panelboard. One for each unit.	Existing equipment at full capacity. Provides for future growth. To replace existing residential grade sub-panels.	1	47	\$11,943
E/F Housing	ELECTRICAL DISTRIBUTION SYSTEM-Replace Feeder, <600V. Replace existing 100A building service feeders with 200A service feeders.	Existing equipment is obsolete. Provides for future growth. Increase system capacity. Building service upgrade.	1	48	\$36,058
G/H Housing	ELECTRICAL DISTRIBUTION SYSTEM-Install additional branch panelboard. Install additional branch panelboards. One for each unit.	Existing equipment at full capacity. Provides for future growth. To replace existing residential grade sub - panels.	1	49	\$11,943
G/H Housing	ELECTRICAL DISTRIBUTION SYSTEM-Install additional distribution panel. Install distribution panel in connection with larger transformer installation.	Existing equipment at full capacity. Provides for future growth. Increase system capacity.	1	50	\$21,344
G/H Housing	ELECTRICAL DISTRIBUTION SYSTEM-Replace Transformer, <150KVA. Replace existing 75 KVA transformer with a 112.5 KVA XFMR.	Existing equipment undersized for present load conditions. Provides for future growth. Increase building electrical capacity for current conditions and provide for future growth.	1	51	\$11,053
G/H Housing	ELECTRICAL DISTRIBUTION SYSTEM-Replace Feeder, <600V. Replace existing 100A building service feeders with 200A service feeders.	Existing equipment is obsolete. Provides for future growth. Increase system capacity. Building service upgrade.	1	52	\$36,058
Site	Recreation Field/Court Resurface/Renovate, Basketball. Three basketball courts located east of C/D units, west of G/H units and east of A/B units. Crack seal existing court and apply new wearing surface to the court. Provide painted	Due to age of system. To prevent failure. To fix deteriorated, damaged, failure area. To improve appearance. Service reliability.	1	53	\$128,139
Site	Recreation Field/Court Resurface/Renovate, Basketball. Located north of E/F units. Crack seal existing court and apply 1.5" overlay of bituminous pavement. Provide surface treatment with painted markings.	Due to age of system. To prevent failure. To fix deteriorated, damaged, failure area. To improve appearance. Service reliability.	1	54	\$85,305

Food Service	Provide pre-engineered building. Addition to quartermaster should be made due to lack of storage space. Recommend a shoe repair shop for OTF and DRF.	Damage Due to Facility Growth. Request of Facilities Maintenance.	1	55	\$426,888
Administration/Health	Provide pre-engineered building. Provide increased space in health services bldg. for records, exam rooms, and a waiting area.	Damage Due to Facility Growth. Request of Facilities Maintenance.	1	56	\$341,462
Administration/Health	Relief hoods. Install new relief air hoods in boiler room roof.	None presently installed. Impairs building operation. There is excessive heat buildup which may cause damage to existing and new electronics or electrical equipment. There is currently no relief available.	1	57	\$5,717
Site	Recreation Field/Court Resurface/Renovate, Tennis. Located behind A/B unit. Crack seal existing tennis court and then apply a new wearing surface which shall include new paint and markings.	Due to age of system. To prevent failure. To improve appearance. Service reliability.	1	58	\$42,350
Administration/Health	Add power assist doors. Main entrance. ADA compliance.	Does Not Meet ADA Guidelines. Cosmetically Necessary or Aesthetically Poor. To be ADA compliant in visitor area power doors must be installed.	1	59	\$37,752
C/D Housing	Relief hoods. Install new relief air hoods in boiler room roof.	None presently installed. Impairs building operation. There is excessive heat buildup which may cause damage to existing and new electronics or electrical equipment. There is currently no relief available.	1	60	\$5,445
C/D Housing	Toilet exhaust fan. Modify existing exhaust ductwork in order to separate the toilet exhaust from the general housing exhaust system. Install new exhaust ductwork, grilles and rooftop exhaust fan for the toilet and shower rooms.	None presently installed. Reduce energy usage. Doesn't meet current ventilation standards. Personal comfort. Grossly inadequate exhaust in the toilet/shower rooms D One symptom of this problem is excessive flushing of the toilets in attempt to reduce	1	61	\$21,296
A/B Housing	Replace acoustic ceiling system.	Leading to More Serious Problems. Cosmetically Necessary or Aesthetically Poor. To Eliminate High Maintenance Condition. To Cover up Water Damage. Damaged tectum panels because of high humidity and sagging.	1	62	\$1,089
A/B Housing	Relief hoods. Install new relief air hoods in boiler room roof.	None presently installed. Impairs building operation. There is excessive heat buildup which may cause damage to existing and new electronics or electrical equipment. There is currently no relief available.	1	63	\$5,445
A/B Housing	Toilet exhaust fan. Modify existing exhaust ductwork in order to separate the toilet exhaust from the general housing exhaust system. Install new exhaust ductwork, grilles and rooftop exhaust fan for the toilet and shower rooms.	None presently installed. Reduce energy usage. Doesn't meet current ventilation standards. Personal comfort. Grossly inadequate exhaust in the toilet/shower rooms D One symptom of this problem is excessive flushing of the toilets in attempt to reduce	1	64	\$21,296
Food Service	Relief hoods. Install new relief air hoods in boiler room roofs.	None presently installed. Impairs building operation. There is excessive heat buildup which may cause damage to existing and new electronics or electrical equipment. There is currently no relief available.	1	65	\$10,890
G/H Housing	Relief hoods. Install new relief air hoods in boiler room roof.	Not functioning or broken. Impairs building operation. There is excessive heat buildup which may cause damage to existing and new electronics or electrical equipment. There is currently no relief available.	1	66	\$5,445
G/H Housing	Toilet exhaust fan. Modify existing exhaust ductwork in order to separate the toilet exhaust from the general housing exhaust system. Install new exhaust ductwork, grilles and rooftop exhaust fan for the toilet and shower rooms.	None presently installed. Reduce energy usage. Doesn't meet current ventilation standards. Personal comfort. Grossly inadequate exhaust in the toilet/shower rooms.D One symptom of this problem is excessive flushing of the toilets in attempt to reduce	1	67	\$21,296
E/F Housing	Relief hoods. Install new relief air hoods in boiler room roof.	None presently installed. Impairs building operation. There is excessive heat buildup which may cause damage to existing and new electronics or electrical equipment. There is currently no relief available.	1	68	\$5,445

E/F Housing	Toilet exhaust fan. Modify existing exhaust ductwork in order to separate the toilet exhaust from the general housing exhaust system. Install new exhaust ductwork, grilles and rooftop exhaust fan for the toilet and shower rooms.	None presently installed. Reduce energy usage. Doesn't meet current ventilation standards. Personal comfort. Grossly inadequate exhaust in the toilet/shower rooms.D One symptom of this problem is excessive flushing of the toilets in attempt to reduce	1	69	\$21,296
400	Replace Wheel Chair Lift. Current wheel chair lift was installed when this facility was built. It has outlived its useful life and the ongoing cost of repair exceeds the cost of replacement.	Current wheel chair lift was installed when this facility was built. It has outlived its useful life and the ongoing cost of repair exceeds the cost of replacement.	1	70	\$26,000
400	Replace interior door hardware. Re-hinge with continuous hinge.	Worn out. Damaged. To Eliminate High Maintenance Condition. Request of Facilities Maintenance. Doors are at heavy use areas and failing.	1	71	\$6,050
				Total	\$8,983,754

MICHIGAN DEPARTMENT OF CORRECTIONS

“Committed to Protect, Dedicated to Success”

MEMORANDUM

DATE: August 14, 2018

TO: John Christiansen, Warden

FROM: Brad Shaw, Physical Plant Superintendent
Central Michigan Correctional Facility

SUBJECT: Annual Facility Inspection – Central Michigan Correctional Facility

This Annual Report has been prepared in accordance with P.D.04.03.100 “Preventive and Emergency Maintenance for Correctional Facilities”. Specifically, section “N” requires CFA Physical Plant Superintendents to conduct an annual inspection of their respective facility to assess the need for future maintenance. The results of the inspection are to be submitted in writing to the Facility’s Warden.

Physical Plant Accomplishments

- Fire Alarm System: Upgraded facility wide
- Hot Water Tank: West food service hot water tank replaced
- HVAC (boilers) system update in West Administration building
- Pavement Project completed
- West Water Treatment system upgrade: in progress

Facility Inspection:

Administration Building (East)

All building infrastructure (roofing, siding, windows, doors, etc.) are in usable condition. The Two Staff Rest rooms are in need of updating. Air handler units #1 and #2 need replacement, in the process of getting quotes.

School Building (East)

All building infrastructure (siding, windows, doors, etc.) are in usable condition. This building also has exterior doors in need of repair or replacement due to rusting. This building did receive wall patching, painting of doors, windows and walls. New standing seam steel roof was completed in November 2017. All heating and Air conditioning equipment was maintained and is in good working condition at this time.

Food Service (East)/East Quartermaster Building

All building infrastructure (roofing, siding, windows, doors, etc.) are in usable condition. Exceptions to this would be the Prisoner entrance foyer is in bad condition and needs to be removed or replaced. Many floors, walls, doors, windows have been repaired this year. Also, this building has exterior doors in need of repair or replacement due to rusting. The cooler and freezer next to the kettles are aging, and repairs have been made to the refrigeration units. They are keeping the contents at consistent temperatures under normal use. We are routinely checking temperatures to assure proper temps are maintained. The ventilation system in the oven/kettle hood system is under sized for cooking and heat being produced. A PPCR has been submitted for Freezer/Cooler replacement, as well as additional ventilation. A new vent fan was installed and has improved this system. The ventilation system has been cleaned regularly and functioning as it is designed to. Wall repair behind this dish washing machine has been completed. Replaced floor tile/grout in food prep area.

Pavilion Weight Pit (East)

All building infrastructure (roofing, siding, windows, doors, etc.) are in usable condition. This building also has exterior steel doors that need repair or replacement due to rusting. The landscape around this building is very low and water stands in many areas.

Property Trailer (East)

This building had a new steel roof, skirting, and ramp/deck installed in 2018.

Shakedown Building/Storage Pole Barn (East of Food Service Building)

All building infrastructure (roofing, siding, windows, doors, etc.) are in usable condition. Entrance door needs repair or replacement.

Corrections Education Program Trailer (East)

This building is in fair condition and needs repairs to the siding in certain areas. The Skirting on the building needs to be replaced, as well as the two exterior doors, and the roof.

VPP Trailer (East)

This building is in usable condition, however needs new skirting.

Housing Unit J (East)

This building needs new entrance doors. The building is in useable condition and the mechanical equipment is in good condition.

Housing Unit K (East)

This housing unit needs new entrance doors. Repairs to attic insulation in J & K Units which are both incorporated into the same building attic. There is a membrane attached to the trusses which separates a void area above unit ceilings and the attic space itself. This membrane has holes in it and needs to be repaired, along with adding insulation. The roof covering on this building is in good condition.

Housing Unit L (East)

This housing unit has not received the security enhancements or renovations such as bathroom showers, kitchenette replacement, TV coax and relocation. This unit also needs the attic membrane repaired and insulation added. This unit also needs the entrance doors replaced. Some windows need to be replaced also.

Housing Unit M (East)

This unit needs the attic membrane repaired along with adding insulation to the attic area. It also needs new entry doors and windows with bars. Mechanical equipment is in good condition in this building.

Housing Units N & P (East)

This building which includes housing units N & P need replacement entrance doors. The roof coverings and siding on this building is in good/fair condition. The mechanical rooms and the equipment in them are in good condition currently. This building also needs the attic membrane repaired and insulation added. The renovations to the bathrooms, TV coax relocation have not been completed in N Unit but have been completed in P Unit.

Housing Units O & R (East)

This building which includes housing units Q & R also needs replacement doors. Both units have been renovated and security system enhancements have been completed.

The attic membrane and insulation need to be repaired and replaced. The exterior roofing and siding are in usable condition as is the mechanical equipment.

Maintenance Storage Pole Barn (East)

This building is in good condition overall. The old roll-up style doors were replaced with new overhead doors.

Maintenance/Transportation Building (East)

All building infrastructure (roofing, siding, windows, doors, etc.) are in good condition. This building houses the water treatment system for the East Side facility. This water treatment system and main water inlet needs new water main valves. A water main valve and back flow preventer inside the building needs replacement due to rust damage from years of exposure to salt dust in the area. Outside the building, 3 underground water valves were replaced, and generator is in good working condition.

Records Retention Building (East)

This building is pole barn construction and is in good overall condition; however, it needs two new entry steel frames and doors.

Parking Lots, Driveways and Walkways (East)

The parking lots have been upgraded with new asphalt this year.

Administration Building (West)

All building infrastructure (roofing, siding, windows, doors, etc.) are in good condition. New boiler system was installed, but still in need of new air handler units (2).

Food Service (West)

All building infrastructure (roofing, siding, windows, doors, etc.) are in good condition. This building has a steam boiler which supplies steam to the dishwashing machine and to three kettles in the cooking area, that is in good working order. Two existing kettles in the food prep area are in bad shape and will need to be replaced. Many areas of floor tile have been repaired. Areas of the floor tile need replacing and repair every year due to high traffic and use. Food Service equipment constantly needs to be repaired due to age and use. Many wall and ceiling areas have been repaired and more is needed.

School/Quartermaster/Chapel (West)

All building infrastructure (siding, windows, doors, etc.) are in good condition. Need to add data drops to a couple of the classrooms.

Maintenance/Warehouse Building (West)

All building infrastructure (siding, windows, doors, etc.) are in good condition. The West Side water main and water treatment systems are in this building. The current water softener system is problematic. The replacement of the control system is currently in progress. The emergency electrical backup generator is in good condition and tested weekly. The generator room addition foundation failed, and repairs are needed to the foundation and wall.

Housing Units A/B, C/D, E/F & G/H (West)

All building infrastructure (siding, windows, doors, etc.) are in good condition. All boiler systems, both domestic hot water heaters and heating boilers, are currently in good condition in all these units. Minor repairs are needed to drywall and floor coverings. Entrance doors are still in usable condition as is. Attic insulation repairs have been made in G & H units, E & F units still need insulation repairs, as well as cement block repair on outside wall of the card room. Asphalt roofing is near the end of its lifespan on all units.

Psych Trailer (West)

This is a doublewide modular trailer, which is aging, but in decent condition overall requiring minor repairs occasionally including roof patching, vinyl siding and window screen repairs. Overall this building is in usable condition.

State Police Post Building

This building is part of the Central Michigan Correctional Facility's assets and is maintained by our Physical Plant. This building is currently in good condition overall.

Maintenance Storage Pole Barn (West)

The pole barn is in excellent condition and needs nothing. In addition, there is one other building in this area used for maintenance storage. It is in good condition but would better serve our storage needs if it had a cement floor added to it.

Perimeter Road, Driveways, Walkways (West)

We have patched and continue to patch damaged areas both inside and outside the facility gates as needed. Many areas inside and on the perimeter road, need crack filler and sealing. The facility received new parking lots and entrance/service road this year.

Propane/Mixed Gas Back Up System (West)

This system is in good working condition and being tested both weekly and monthly as per our Preventative Maintenance Program. The system was recently inspected and is functioning properly.

Perimeter Fences (East & West)

Perimeter fences are in good condition in all areas.

Sally Ports (East & West)

The East Sally Port has been closed and made to be part of the perimeter fence system. We have one motion sensor in each corner. The West Sally Port was updated in 2017 and is in good working condition.

cc: Administrative Officer

**CENTRAL MICHIGAN CORRECTIONAL FACILITY
5-Year Plan FY2020**

Building	Project Description	Reason Description	Quantity & Units	Facility Priority	Cost Estimate
STF East	Electrical Control Panels and Wiring	Deteriorated Conditions	STF East buildings	1	\$500,000
Site	Health Care Remodel	Deteriorated Conditions	West and East Health Care	2	\$750,000
Site	Renovate Rest Rooms in housing units, LMNP	Deteriorated Conditions	Four Housing Units	3	\$80,000
STF West	West Facility Roofing	Deteriorated Conditions	8 housing units	4	\$500,000
STF East	East Facility Roofing	Deteriorated Conditions	8 housing units	5	\$500,000
STF East	STF Window Replacement	Deteriorated Conditions	8 housing units	6	\$150,000
Site	STF Building Attic Insulation	Deteriorated vapor barriers and insulation	Various as needed	7	\$125,000
STF East	Metal Siding Replacement and add roof drainage	Deteriorated Conditions	STF East buildings	8	\$200,000
				Total	\$2,805,000

MICHIGAN DEPARTMENT OF CORRECTIONS

“Committed to Protect, Dedicated to Success”

MEMORANDUM

DATE: August 14, 2018

TO: Connie Horton, Edson Forrester, Gene Page, Ed Vallad and Jeff Niemi

FROM: Charles Gimpel Physical Plant Supervisor
Chippewa Correctional Facility

SUBJECT: 2018 Annual Infrastructure Report - Chippewa Correctional Facility

As required by PD 04. 03. 100, Preventive and Emergency Maintenance, an annual inspection of all facility buildings and infrastructure was completed. The following is a compilation of information based on the notes from inspections completed over the preceding months.

CONCRETE AND CEMENT WORK:

Sidewalks and pathways inside and outside URF East/West have been constructed of either Asphalt or Cement. Most areas are still holding up well. Staff has completed several minor repairs on sidewalks and entryways throughout the facility as requested. Included with the West Food Service Freezer/Cooler project we will remove and replace cement areas all around the back dock that are broken up from Spalding and constant cart traffic. This has been an ongoing problem that will finally be resolved with pouring of new cement.

BRICK, MASONRY AND EXTERIOR METAL SIDING:

URF East Brick and Masonry exteriors are holding up well. There are no major problems currently to report. We continue to caulk and repair grout lines in the brick buildings as they start to chip and fall out. Masonry at URF West consists of limited areas of concrete block construction for footings and foundations. The metal siding is in good shape except the areas where salt is utilized for ice removal. We have started to remove rusting metal and trim entry ways with treated lumber on all West buildings.

PLASTER AND DRYWALL:

Interior walls and finishes are in good shape. In the Westside housing units, holes continue to be a problem from residents trying to hide contraband and inmate abuse. Holes in drywall are repaired through our work order program as requested. Painting in the East units is ongoing as housing staff request. West housing units continue with painting and drywall repairs and is a yearly project.

ROOFING SYSTEMS:

URF East Roofs are in good shape with only a few minor leaks that were repaired as needed. Every summer we check all roofs for further detreating spots, seam separation and tears. URF West metal roofs are in good shape for their age. We finally have started the

process for replacement of the roofs on the West Food Service building and West Administration buildings. Currently we are in the planning stage and anticipate starting this project in the spring of 2019. We will also add rain gutters to the backside of the Food service building to help protect the new cement that will be poured there.

ROOF SUPPORT SYSTEMS:

URF West still has the original Metal Roofing from start-up. The wood trusses, purlins and rafters are still in good shape. There is no sign of damage or excessive wear. There are some watermarks from past leaks, but the wood is still solid. Staff completed the catwalks in the attics of all buildings. This will help maintenance staff get to all areas in the attic space and not have to walk on trusses. With the Roof Project on West Food Service and the Administration Buildings engineers will check the structural integrity of the existing trusses before adding new roofing material.

WINDOWS:

At URF West, we continue to repair and replace windows as directed. The current windows are obsolete, and we can no longer get parts. We will need to order replacement type window when monies become available. Many of the East windows have broken seals. This causes the window to fog internally and leaves water stains. We replace them as directed. We have some replacement panes but will need to order more in the future. Window openers continue to be a problem on the East side and are addressed through the work order system as needed.

FLOORS:

Flooring throughout the facility is in good shape. Inmate porters do a good job keeping them clean and waxed. Staff has implemented a cleanest unit of the month program and this has helped even more with the floors and overall appearance of the housing units. We have started to try out Epoxy coatings in several areas to replace vinyl tile. If Epoxy products hold up, we will expand on its use in other areas.

DOORS AND HARDWARE:

All doors and hardware are addressed through the work order system. We continue to repair many aluminum doors with new standard hinges and pocket hinges for added support on the East side of the facility. The West housing unit's entry doors have been replaced last year and are holding up well. The interior doors were replaced as needed and we have a couple of spares for future replacements. We will also need to replace two of the exterior doors on **the programs building and one on the West administration main entrance building. (all are double doors) All three have been ordered and we hope to install before winter season.**

LOCKING SYSTEMS:

Locks, hinges, knobs, and closer issues are addressed through the work order program. Overall, this area is in good shape. This high maintenance area requires a lot of time to complete. All locking and closing hardware take a real beating by the inmate population. The Locksmith at URF continues keep these functions trouble free.

FENCES AND PERIMETER SECURITY:

Contractors have updated the security system at URF and all projects are now completed. We now have updated LED lights, cameras, fence security, motion sensors, PPD and fire

alarm systems that report to new head end equipment in our control center. All systems are working well, and any issues are repaired immediately through work order program and daily reports from control center. New perimeter fence razor wire enhancements have been installed and we are also getting new Sally Port openers, gates, Controls and added razor wire under that contract. Chippewa has also started the meetings/planning for replacement of the all entryway gates on both East and West entrances to secure perimeter of the facility.

HEATING AND COOLING SYSTEM:

HVAC systems are all working and get a lot of maintenance work done in the summer months. The heating systems in all buildings are in good operating condition. We rebuilt or replaced all circulating heat pumps in the East Housing units. Leaks are addressed as they appear now. The 1100 mechanical room is still a high problem area and we need to look at replacing or upgrading the whole heating systems here at URF. Performance Contracting might be a good option at our facility for this issue. AC units on buildings 100, 200 and 300 all need to be upgraded and or replaced. The Facility has finally hired two MM-10's with extensive HVAC back rounds. Both works well together, and we should see a noticeable upgrade in that mechanical area.

ELECTRICAL DISTRIBUTION SYSTEM:

The electrical distribution systems have no problems to report. The emergency backup generators have had their yearly P.M. maintenance and bank load tests are due this year. Underground direct buried electrical wire for the West lights has been replaced with the new LED light project. We have a good year with very few brown outs and power pumps.

PLUMBING SYSTEMS / STORM AND WASTE WATER SYSTEMS:

The plumbing system at URF is in good shape. All plumbing issues are addressed through the work order system and continue to be a very high maintenance area. Having to run short two positions at the facility has put an extra load on our plumbing repairs for such a large facility. All ICON water savings equipment on the West housing unit's bathroom toilets, sinks, urinals and showers has been completed. This should help cut down on some of our maintenance repair load, help save the facility on water consumption and help lower our sewer costs.

REFRIGERATION SYSTEMS:

All refrigeration systems currently are in working order. The Facility has finally hired two MM-10's with extensive HVAC back rounds. Both works well together, and we should see a noticeable upgrade in that mechanical area also.

PARKING LOTS/ROADS/GROUNDS:

Chippewa facility grounds area continues to be maintained very well. Potholes have reappeared and will be filled before winter sets in. The perimeter road is starting to break down on the corners/edge areas and this has been made worse with all the construction digging, directional boring and heavy equipment used to install new security systems. This road repair will now be included in our five-year plan.

COMMENTS:

2018 Projects

Trim all evergreen trees along M-80

Complete installation of new ICON flush/shower fixtures Round Unit

Install (per Fire/safety office) Eyewash stations in all laundry areas

Razor wire enhancements (new sally port gates and openers)

New freezer/cooler in West Food Service (start August 20th)

Add 20 LED lights where needed

Exterior doors on West Programs (2) and Administration building entry

Metal replacement (door entry areas)

Dish Tank remodel (west)

New PA system facility wide

Smoke Purge system upgrades

West Food Service/Administration building roofs

Bubble gate replacements both East and West.

Gun Range Renovations.

Wheel chair lift replacements (Pike and Marquette units)

Laundry equipment replacements (4 dryers and two washers)

**CHIPPEWA CORRECTIONAL FACILITY
5-Year Plan FY2020**

Building	Project Description	Reason Description	Quantity & Units	Facility Priority	Cost Estimate
Pike & Marquette Unit	Chairlift replacement= PPC 18-351	Non-functional necessary for ADA service, PPC 18-351	2	1	\$240,000
Site buildings	Public Address system from Control Center to each staff occupied building.	Provide direct communication to staff and prisoners in buildings during severe weather, disturbance or similar emergency. Underground fiber install required to connect old KTF system with URF Control Center	facility wide	1	\$125,000
Sally Port	Replace Sally Port Gate System; 2 gates new metal overhead slide system, poles, fencing and razor wire with new gate locking and operating system. PPC18-178	Current system is worn, outdated, parts to maintain operation are not available. Project 472/18229.TAP is under design and planning.	2 each	1	\$262,500
Administration & Annex buildings	Replace east & west bubble foot gates 1, 2, 3 and operator system.	Current gate mechanical system is obsolete and no longer manufactured, high maintenance and components not functioning properly. PPC pending project 472/17417.TAP in design additional funding required.	3 units	1	\$589,423
Site	Replace facility faucets, flush valves and showers with ICON Water Control System.	I-Con energy efficient electronic controlled valves will reduce water usage, sewage cost and simplify parts ordering and replacement cost. Energy and water savings realized payback 1 year. West housing units, Round unit Showers completed.	facility wide	1	\$180,000
Housing units East 1, 3, 5, 6	Housing Hot Water replacements	Boilers are past life expectancies, failure of tubes is expected.	4 units	2	\$130,000
Administration & West Food Service	Replace existing roof	Damaged. To Eliminate High Maintenance. PPC 18-041 472.17434.TAP	2 Unit	2	\$467,700
Site	Perimeter Road Pavement	Improve surface for two-wheel vehicle low clearance use. Years of pot holes, cold patch cause vehicle damage. Lighting and camera project completed 2016 created additional sand pits from installing light poles	1 Unit	2	\$120,000
Site buildings	Replacement of motor start boxes	Obsolete parts for replacement	150	3; on going as fail	\$10,000
Site buildings	Replacement of floor pumps	Obsolete parts for replacement	150	3; on going as fail	\$10,000
Site	Replacement of UPS facility wide	Uninterrupted power supply back up system are passed the dependability of operation for critical systems.	150	3; on going as fail	\$10,000
Housing Unit Round & Steamboat	Replace cell doors and hardware.	Worn out. Damaged. To Eliminate High Maintenance Condition.	100 Units	3; on going as fail	\$25,500

Facility Wide Buildings	Replace existing window system - w/ insulated system. New frames and window units with better heavy-duty hardware.	Worn out. Damaged. Leading to More Serious Problems. Dangerous or Potentially Life Threatening. To Eliminate High Maintenance Condition. To Cover up Water Damage.	18	3; On going as window fails	\$300,000
West Administration / Education	Replace single exterior door/frame/hardware. With heavy duty frame, door, and hardware.	Damaged.	6 Units	3; on going as funding allows	\$2,200
Administration building 100, Food Service, Health Service, Quarry	Replace current HVAC units on building 100 and 300 with 80 ton air conditioners 2-40-ton circuits. Building 200 with a 30-ton AC unit. All are tied into the building air circulating systems.	Systems are old and worn, should be updated before system failure causing emergency purchases.	3 Units	4	\$100,000
Site	Replace Steamlines, condensate return and traps between west conversion room and steam plant.	Replace the underground steam lines, condensate return and traps. Ware over the years has identified leaks causing loss of treated water increasing utility cost.	1	4	\$875,000
East Housing Units	Add new equipment. New door control and lighting control panels.	More cost effective to replace soon. Obsolete, no longer manufactured, parts unavailable. To eliminate high maintenance condition. Not functioning properly, components failing. Life safety code issue.	5 units	4	\$115,500
West Annex building	Install automatic sprinkler system for temporary holding cells.	New Penial law 23.1.6.4 with deadline of April 2022.	1 Unit/ 4 cells	5	\$360,000
1100 Maintenance	Replace Emergency Power Switch Box Service	Outdated and potentially dangerous situation when operating power change.	1 each	5	\$155,000
Housing units Round, Quarry & Steamboat	Install automatic smoke purge system for secured cell areas. PPC 18-046, 498018-17	Remove the SCBA need from secured housing area replace with automatic smoke purge system.	3 units	5	\$750,000
Shooting Range expansion	Training Range structure and Burm installation	Add shooting building and additional burm to shooting range for multi-use. Need for multi-agency to use shooting range, second burmed range will allow for appropriate qualification on weapons.	1 unit	5	\$109,309
Shooting Range classroom area	Roof, insulation interior finish year-round usage	interior wall finish, base heat and shingle roof with deck replaced. Allow for range use and training during all weather conditions.	1 unit	5	\$23,795
Site	Sanitary Pre-Treatment Mechanism, Bar Screen, Remove & Replace. Located northwest of 400 Unit by Tone Road. Leave existing in-ground bar screen pit, but install automated bar screen mechanism, contained in a building. Existing	Due to facility growth. Due to facility request. To prevent failure. To prevent personal injury. Long-term/high maintenance issue. Service reliability. Life safety issue. To extend life. Existing bar screen is raked twice a week by an inmate.	1 Unit	6	\$565,000
Site	Structures I, Grease Trap, New. Located east of the Food Service Building. Add new 1500-gallon grease trap in line with existing and tie into existing sanitary system.	Due to facility growth. Due to facility request. Existing is undersized. To prevent failure. Long-term/high maintenance issue. Service reliability.	1 Unit	6	\$7,600
Site	Structures I, Manhole, Remove & Backfill. Demo 12' diameter manhole that is connected to the Food Service loading dock catch basin as well as the grease trap on the north side of the Food Service.	Due to facility growth. Existing is undersized. Long-term/high maintenance issue. Service reliability. Food Service Building is being demolished and replaced with another.	1 Unit	6	\$5,000
				Total	\$5,538,527

MICHIGAN DEPARTMENT OF CORRECTIONS

“Committed to Protect, Dedicated to Success”

MEMORANDUM

DATE: August 14, 2018

TO: Joe Barrett, Warden
Cooper Street Correctional Facility JCS
Cassidy Lake Special Alternative Incarceration SAI

FROM: **Jeffrey R. Rice, Physical Plant Superintendent** *Jeffrey R. Rice.*
Cooper Street Correctional Facility JCS/ Cassidy Lake Special Alternative Incarceration SAI

SUBJECT: JCS Annual Physical Plant Evaluation

This Annual Report has been prepared in accordance with PD.04.03.100 “Preventive and Emergency Maintenance for Correctional Facilities”. Specifically, section “N” requires CFA Physical Plant Superintendents conduct an annual inspection of their respective facility to assess the need for future maintenance. The results of the inspection are to be submitted in writing to the facility Warden.

Facility

The MOP project to enhance perimeter fence security by adding razor ribbon in between the fences and to the interior fence is complete. The MOP project to replace the fire alarm system for the facility is almost complete with the punch list being worked on currently. The Mop to add a buffer fence at the front of the facility to prevent introduction of contraband is complete but the fence needs to be extended to cover the entire front of the facility.

Housing Units

The heating system controls within Housing Unit J and K need to be upgraded to permit communications with the main diagnostic computer located in the Administration Building the current controls are obsolete. The exterior doors and windows need to be replaced on all housing units to enhance energy efficiency. New officer’s stations have been added in housing units A and B with housing unit C and D under construction. The domestic hot water boilers and storage tanks need to be replaced in housing unit’s A/B, H/I and F/G. The MOP project for replacement of the roof on housing units H/I is complete. Roofs need to be replaced on housing units’ A/B, C/D, F/G, J/K. Insulation needs to be added to attics of all housing units for better heating of the buildings and energy efficiency.

Programs Building

The heating/cooling system within the building needs some upgrades to permit better control of the heating/cooling of the building, the current controls are obsolete. The exterior doors and windows need replacement to enhance energy efficiency.

Modular units

All the modular units are in good repair.

Food Service/Gym Building

The exterior doors and windows need replacement to operate correctly and be secured.

Administration Building

The exterior doors and windows need replacement to enhance energy efficiency. The heating system controls within the building need to be upgraded to permit communications with the main diagnostic computer. The roof needs to be replaced. Insulation needs to be added to attics for better heating of the building and energy efficiency. The heating/cooling unit for the Warden's suite is beyond its useful life and needs to be replaced.

Grounds

The Perimeter road and employee/visitor parking areas need to have cracks and holes repaired and the blacktop sealed. All the black top road ways and parking areas are at the end of their useful life and need to be resurfaced.

Maintenance Building

The MOP project to replace the roof of the maintenance building is complete.

cc;

Ed Vallad, Physical Plant Manager

Larry Mason, Facility Manager

Gene Page, Physical Plant Division

Andrea Stinson, Physical Plant Division

David Albrecht, Regional Physical Plant Supervisor

Eames Groenleer, Regional Administrative Officer

**JACKSON COOPER STREET CORRECTIONAL FACILITY (JCS)
5-YEAR PLAN FY 2018**

Building	Project Description	Reason Description	Quantity & Units	Facility Priority	Cost Estimate
Site	Construct a multi-purpose building outside of the secure perimeter. This area would be used to strip search gate pass prisoners, store gate pass clothing, provide office space for gate pass supervision, house tether program and record	Improve facility security by providing space for equipment and staffing.	7,000 SF	1	\$1,150,000
Site	Addition to Housing Unit E for Programming /Office needs. Current Programming space in insufficient for a Level 1 facility with a population of 1752.	Increased program space will better meet the needs of the Level 1 population.	6,500 SF	1	\$1,100,000
Housing Units	Update /relocate Housing Unit Officer Stations	Update Officer Stations to include space for camera monitors.	6 units	4	\$40,000
Site	Fence Food Service Back Dock/Delivery/Yard Area	Increase security to the area, reduce theft from Food Service.	450 Feet	3	\$24,000
Site	Parking Lot/Perimeter Road repaving and repair.	Parking lot and perimeter road cracking and breaking up. Safety issue.	TBD	5	\$200,500
Site	Replace double exterior doors/frames, and windows on all buildings	Original windows doors rusted out and beyond life expectancy.	1 Unit	7	\$250,000
Site	Pumps. Add boiler back-up circulating pump.	None presently installed. Potential safety risk.	25,125 SF	5	\$4,000
C Unit Housing	Miscellaneous. Replace convector heaters in all restrooms.	Worn out.	4 Units	6	\$9,500
D Unit Housing	Miscellaneous. Replace convector heaters in restrooms.	Worn out.	4 Units	6	\$9,500
D Unit Housing	Toilet exhaust fan. Add separate exhaust fan for the electrical/phone room.	Doesn't provide adequate cooling. Provide better temperature control. Potential safety risk.	1 Unit	11	\$4,000
Administration Building	Toilet exhaust fan. Add separate exhaust system for the electrical/medical room.	Doesn't provide adequate cooling. Provide better temperature control. Potential safety risk.	1 Unit	11	\$4,000
B Unit Housing	Toilet exhaust fan. Replace exhaust fans serving shower area.	Provide better temperature control. Impairs building operation.	2 Units	11	\$4,000

C Unit Housing	Toilet exhaust fan. Add separate exhaust fan for the electrical/phone room.	Doesn't provide adequate cooling. Provide better temperature control. Potential safety risk.	1 Unit	11	\$4,000
B Unit Housing (now E)	Misc. projects. Provide new stairs in both wings with open risers.	Dangerous or Potentially Life Threatening. Security and safety, to eliminate blind spots.	1 Unit	9	\$57,000
Administration Building	Add power assist doors.	Not to Present Code. Not ADA compliant.	2 Units	6	\$42,300
Food Service Building	Replace quarry tile. With monolithic polymer floor.	Leading to More Serious Problems. To Eliminate High Maintenance Condition. To Cover up Water Damage.	1,200 SF	10	\$42,300
Food Service Building	Add permanent seating to Food Service	Reduce maintenance and repair costs.	45 units	8	\$150,000
C-Fence	Complete Buffer C-fence project	To prevent contraband being introduced to facility.	670 Feet	1	\$100,000
C-Fence	Additional security cameras	Install security camera on new C-Fence. Increased security control of contraband.	5 units	2	\$50,000
Site	Roof Fall protection installed on all building roofs.	for safety of maintenance staff when doing repairs.	11 units	1	\$50,000
				Total	\$3,295,100

**SPECIAL ALTERNATIVE INCARCERATION (SAI)
5-YEAR PLAN FY 2020**

Building	Project Description	Reason Description	Quantity & Units	Facility Priority	Cost Estimate
Site	Relocate the current Control Center in the Administration Building. This would require additional perimeter fencing and moving the current employee parking lot.	Increase facility security.	TBD	1	\$520,000
Site	Additional Facility/Yard lighting.	Increase security. MOP currently in progress	TBD	1	\$50,000
Site	Add new pan & tilt color cameras outside.	For officer and prisoner safety/security. MOP currently in progress	TBD	2	\$10,000
Site	Add new fixed color cameras inside.	For officer and prisoner safety/security. MOP currently in progress	TBD	2	\$15,000
A Company and Programs Building	Replace roofs	Current roofs in poor condition. MOP Currently in progress	2 units	3	\$20,000
Upgrade electrical services	Control Center Building	Current electrical panels are obsolete and unreliable. Wiring outdated and fire hazard.	1 unit	5	\$215,000
Administration Building	Replace chiller	Current chiller is outdated, parts difficult to find. The chiller is beyond its useful life.	1 unit	6	\$46,000
Site	Replace exterior doors inside SAI. Housing units, Food Service, Control Center, and School Building.	Doors are rusted in poor condition, not insulated.	25 units	7	\$52,000
Site	Replace exterior windows in Housing Units, School, Control Center.	Current windows in poor condition, not insulated.	200 units	8	\$115,000
Site	Install overflow system/Underground Water Storage Tank.	Install an overflow system with proper drainage to underground water storage tank. Currently no overflow for the tank. This is to meet recommendations from engineering company during last inspection.	1 unit	12	\$33,000
Food Service/Medical	Upgrade lighting in Food Service Building and Medical.	Current lighting is outdated and does not provide adequate lighting for the area.	30 units	10	\$21,000
Food Service	Replace Grease Trap	Current grease trap doesn't meet current plumbing codes and is unreliable.	1 unit	11	\$32,000
Site	Parking Lot-Entrance Road repaving and repair.	Parking lot and perimeter road cracking and breaking up. Safety issue.	TBD	9	\$30,000

Site	Upgrade/repair service road to Well and Water Reservoir	Current road is dirt and sand. Difficult to maintain during winter months. Access to this area is critical to maintain water system supply.	TBD	14	\$59,000
Housing Units A/B	Repair heating system fin tubes.	Fin tubes and covers are damaged and don't supply sufficient heat.	50	10	\$56,600
				Total	\$1,274,600

MICHIGAN DEPARTMENT OF CORRECTIONS

“Committed to Protect, Dedicated to Success”

MEMORANDUM

DATE: August 21, 2018

TO: Carina Blair, Facility Manager
G. Robert Cotton Correctional Facility

FROM: Ed Dell, Physical Plant Superintendent
G. Robert Cotton Correctional Facility

SUBJECT: Annual Facility Report Fiscal Year 2017

This Annual Report has been prepared in accordance with PD 04.03.100 “Preventative and Emergency Maintenance Manual” Specifically, section “N” for correctional facilities.

Overview of Physical Plant Accomplishments:

- Grout CFS serving line
- Install razor wire on all walls of perimeter
- Removed metal poles protruding from building walls
- Replaced all non-safety glass in all shacks
- Completed building of 600 building intake
- Lowered height of speed bumps added barriers
- Installed stainless steel tables in specific housing units
- Replaced L unit exterior door
- Install school hallway lighting, due to roof/skylight caps
- Added additional razor wire to A fence (8A – 10A)
- Installed electric lock on Wardens door
- Remodel of Admin Asst office
- Carpet Wardens/Conference room/Hallways and front offices
- Replaced Gym floor
- Installed diffusers on lights in control center hallway
- Replaced lockers in (Seg) J unit cells
- Added microwave on perimeter road near T100 building
- PM other half of substation breakers
- Repaired plumbing leaks in all cotton housing shower units (remove/reinstall block wall)
- Repair rotten conduit from shower plumbing leak inside of cell wall and floor
- Repair/rebuild of I/J guard shack
- Repair of Temp activity room doors

- Installed new boilers (heaters) in housing units A – J.
- Installed new perimeter road
- Replaced by bad windows in both towers
- Installed MSI forklift battery charger
- Installed 300 building VRS project
- Installed outlet in control center for copier
- Repair of sally port pit steps
- Install new mixer CFS
- Install new gate controller on sally port “A” side
- Installed guard shack in tunnel
- Relocated/installed med line windows
- Replacement of security fence and head end system
- Electrical Transformer leak repaired
- Camera project completed
- Deaf alarm blue lights complete
- Main drains jet cleaned
- Rebuild 20 & 30-yard dumpsters
- Archiver repairs/replacement
- 300 building gym, brick drainage repaired
- Arch flash training for maintenance staff
- Replaced water heaters in cotton and segregation unit when boilers were removed.
- Installed exterior door on temp housing units

Below is the annual facility inspection report per Policy Directive 04.03.100.

1. Temp Units - TA, TB, TC, TD, TE, TF – With the additional prisoners added to these units, wear and tear on these units has increased. Locks need replacement. Front doors need replacement. In addition, ongoing in all units is locker repair & replacement, shower head, shower handle, drywall repair, painting and roofs.

2. Temp and Cotton Yard Areas – **SAFETY/SECURITY CONCERNS:**

- 1) They are not usable and over the past several years have become a major security concern regarding asphalt and fence heaving in the change of seasons.
- 2) Concrete wear and asphalt problems have been taking their toll and are in dire need of replacement.

3. 600 Building Food Service - Temp Food Service looks used and the prep equipment has out lived its expected life span. Locks need replacement. In addition, this building is ready for a new roof.

4. T-100 Building - The roof is still in poor shape and should have a new roof.

5. 800 Building – Generator testing is done as required for the year with no problems noted. Load testing has been done each month as required. The capacitor cabinet needs replaced, units are bulging. A new roof is critical, and bidding is in process.

6. **A. B. C. D. E. F. G. H Units** These units are in good condition. All units are showing their age. Roof repairs are continuous and need replaced.

7. **I & J Units** - Roof repairs are continuous, and in need of repair. All the cell hand sinks have cracked or busted out drains they all need replaced.

8. **K Unit** - Unit is showing its age.

Annual Facility Report

9. **L Unit** – This building currently in bid process to replace roof.

10. **100 Building** – This building currently in bid process to replace roof.

11. **200 Building Food Service** -This area is in fair condition. The area shows deterioration this year because of constant use. The floor tile needs replacement. The roof is in poor shape and should be replaced in the next year or two, currently in bid process. Boilers have outlived their useful life and need replacement. Equipment has taken a turn for the worse with continuous breakdowns, due to poor cleaning practices.

12. **200 Building Health Services** – The med line area is in dire need of expansion.

13. **300 Building** - General maintenance needs are a constant.

14. **Well House** -This area is clean, neat. The building is working well as a storage area.

15. **Pole Barn** - Meets the current needs for storage. Entrance doors are in dire need of replacing.

16. **Outside Grounds** – Concrete/Asphalt Repair/Replacement throughout the grounds is destroying snow equipment and needs attention.

In conclusion the facility is in good condition considering the temporary units are well over Thirty-five years old. The remaining brick structures appear to be sound other than Maintenance garage and 300 building entrances. We mainly need housing unit roofs and sidewalks.

Areas of concern include:

1. **Concrete/Asphalt Repair/Replacement throughout facility.**
2. **Rework Masonry Wall drainage of 100/200/400/700/500 Buildings**
3. **Rebuild Masonry Wall in Maintenance garage and 300 building entrance**
4. **Housing unit roofs**
5. **Food Service Floor replacement.**

**G ROBERT COTTON CORRECTIONAL FACILITY
5-Year Plan FY2020**

Building	Project Description	Reason Description	Quantity & Units	Facility Priority	Cost Estimate
Yard	Building demolition and rebuild. Yard Restrooms	Worn out. Damaged.	4/Each	11	\$40,000
Education	Rebuild masonry wall.	Damaged. Leading to More Serious Problems. To Cover up Water Damage.	1/Each	8	\$225,000
MS Industries/Gen	Replace/Repair metal flashing.	Damaged. Leading to More Serious Problems. To Eliminate High Maintenance Condition. To Cover up Water Damage.	Each/1	19	\$37,300
Facility Wide	Tuckpoint brick. Recaulk/Reseal building joints.	Damaged. Leading to More Serious Problems.	Each/1	20	\$10,000
Facility Wide	Replace existing window system - w/ insulated system.	Damaged, worn out or Insulated seal broken.	Each/1	21	\$155,000
Facility Wide	Replace acoustic ceiling system.	Worn out. Damaged. To Cover up Water Damage.	Each/1	22	\$200,000
200 Building Educ.	Replace carpet.	Worn out. Damaged. To Cover up Water Damage.	Each/1	18	\$26,200
Support/Seg/K Hou	Misc. projects. Medical waiting area needs 1,000 SF more space.	Damage Due to Facility Growth. Request of Facilities Maintenance.	Sq. Ft/1000	30	\$134,400
Support/Seg/K Hou	Misc. projects. Dental area needs 2,000 SF more space.	Damage Due to Facility Growth. Request of Facilities Maintenance.	Sq. Ft/2000	31	\$268,800
Administration	Misc. projects. Visiting room needs 300 SF more space.	Damage Due to Facility Growth. Request of Facilities Maintenance.	Sq. Ft/300	32	\$40,300
Maintenance	EMERGENCY LIGHTING-Install additional emergency light fixture(s) Wall Mounted.	Personal safety.	Each/10	29	\$6,500
Support/Seg/K Hou	ELECTRICAL DISTRIBUTION SYSTEM-Miscellaneous. Replace internal panels and rewire food serving lines.	Existing equipment has become a safety problem. Personal safety.	Each/30	23	\$6,500

Education	ELECTRICAL DISTRIBUTION SYSTEM-Miscellaneous. Replace feeder and main distribution panel to building.	Provides for future growth. Increase system capacity.	Each/1	24	\$159,600
Support/Seg/K Hou	EMERG. ELEC. DIST. SYSTEM-Miscellaneous. Replace transfer switch, feeder, and distribution panel.	Existing equipment at full capacity. Service reliability. Increase system capacity.	Each/1	25	\$67,200
400 Building	Replace pneumatic with direct digital controls (DDC).	Not functioning or broken.	Each/1	26	\$65,750
700 Building	Replace pneumatic with direct digital controls (DDC).	Not functioning or broken.	Each/1	27	\$65,750
200 Building	Replace pneumatic with direct digital controls (DDC).	Not functioning or broken. Provide better temperature control.	Each/1	28	\$135,000
Cotton Side	Remove & Replace, Concrete Slabs/Pads, sidewalks, asphalt throughout Cotton side of facility	Due to age of system. To prevent failure. To fix deteriorated, damaged, failure area. Safety issues.	Yard/1600	12	\$200,000
Temp side	Remove & Replace, Concrete Slabs/Pads, sidewalks, asphalt throughout Temp side of facility	Due to age of system. To prevent failure. To fix deteriorated, damaged, failure area. Safety issues.	Yard/1600	13	\$200,000
Grounds Non-Security	Remove & Replace, Concrete Slabs/Pads, sidewalks, asphalt throughout Non-Secure side of facility	Due to age of system. To prevent failure. To fix deteriorated, damaged, failure area. Safety issues.	Yard/3200	14	\$400,000
Temp side housing	Automatic Shower control	constant handle replacement, broken or stolen.	Each/6	33	\$36,000
Site	Replace all building roofs (100,200,500,700,400,600,800)	Roofs are beyond years	Each/7	16	\$3,500,000
300 Building	Redesign the basement	Adding Classroom space	Each/1	9	\$150,000
Site	Mower	Need to replace the existing 8-year-old mower	Each/1	15	\$30,000
Support/Seg/K Hou	Misc. projects. Segregation needs 20 more BF cells.	Damage Due to Facility Growth.	Each/20	34	\$600,000
100 and 200 bldg.	Repair weep holes in brick work on 100 and 200 buildings	water is leaking inside the walls	Each/1	1	\$25,000
				Total	\$6,784,300

MICHIGAN DEPARTMENT OF CORRECTIONS

“Committed to Protect, Dedicated to Success”

MEMORANDUM

Date: August 14, 2018

To: Warden Romanowski, Detroit Reentry Center/ Detroit Detention Center

From: Kotzian, Kevin; Physical Plant Superintendent

Subject: **Annual Physical Plant Report Detroit Detention Center**

This Annual Report has been prepared in accordance with P.D.04.03.100 “Preventive and Emergency Maintenance for Correctional Facilities”. Specifically, section “N” requires CFA Physical Plant Superintendents conduct an annual inspection of their respective facility to assess the need for future maintenance. The results of the inspection are to be submitted in writing to the facility Warden.

Ongoing budget restrictions this fiscal year have made improving, upgrading and maintaining the facility a difficult task. The Maintenance Department has however, done an outstanding job maintaining both facilities given available resources. The need for more FTE’s in Maintenance is present.

Overview of Physical Plant accomplishments

New cameras have been added in 500 building and 100 building.

Grounds Beautification.

Vandal proof trash can install in bullpens.

Diamond plate installation in high traffic areas.

Annual review of Physical Plant

Housing Unit 500

The housing unit is where all DPD arrestees are lodged while or before being arraigned. Building is in good shape and ongoing maintenance is being performed. It is extremely hot and stuffy in this unit during summer months. PPCR for AC in 500 bldg. was submitted and denied.

Housing Units 200, 400 and 700

The housing units are in good structural condition. Buildings are currently CLOSED. Buildings are heated in the winter and repairs are ongoing. Repairs are made as needed. The roofs need replacement, per roofing survey. I have obtained quotes and added them to the 5-year plan. Roof repairs are being contracted out to vendors as needed. All cells have been cleaned out of all fixtures, including bunks.

Administration 100 building

The Administration Building is structurally in good condition. DPD and MDOC staff

take pride in this area. Repairs are made as needed; the AC unit needs replacement and I have attached the price in my 5-year plan. I also requested to have a building automated controls installed to make the 2 buildings more energy efficient.

Food Service 800 building

The Food Service Building is in good condition. Building is currently CLOSED. Roof is in fair shape. The building remains heated in the winter and repairs are made as necessary. Stainless steel tables were removed by regional maintenance and there is no cooking equipment.

Grounds

All drives and roads need patching and crack repair annually. Both Administration and facility parking lots need asphalt replaced and cracks repaired. Security zone sensor wiring is addressed as problems arise. Grass and weeds are being attended to weekly.

300 School Building

The School Building is in good condition. Building is currently CLOSED. Some water lines have frozen during the past winter forcing us to drain the system until the repairs were made. The building remains heated during the winter months with repairs being made as necessary.

Health Care 800 building

Health Care is in good condition. Building is currently CLOSED.

Deputy Suite 100 building

The Deputy Suite is in good condition. DPD utilizes this area.

MSI factory 600 building

The factory is good shape and is currently being used for storage of Wayne County jail fixtures.

Roofs

Most roofs were replaced 8 years ago, roof survey showed some needs, which are being addressed. Buildings 200, 400 and 700 need to be replaced and is on the 5-year plan. Repairs are made as necessary.

Security systems

All A zones are functional, staff repair as problems arise. Cameras are essential and are in very good working condition. "A" zone is only active zone. VMS will be upgraded as part of the DRC VMS upgrade.

Boilers

Heating boilers are in fair condition. Boilers are being attended too properly. Being the buildings are closed, winter has caused pipes to freeze and break. Maintenance is aware of this problem as some parts were procured and dropped off. I am scheduling repairs this summer. Many feed pumps and circulating pumps need seal repair kits.

cc: Ken Romanowski
Frank Konieczki
Daniel Smith

**DETROIT DETENTION CENTER CORRECTIONAL FACILITY
5-Year Plan FY2020**

Building	Project Description	Reason Description	Quantity & Units	Facility Priority	Cost Estimate
100	Replace air conditioning system	Unit is 30 years old, parts are obsolete. Controls need to be replaced too.	1	1	\$1,200,000
Site	Install building automated controls for heat and AC, in 100 and 500 bldg. Tying into the existing system at DRC.	Too better monitor and handle adjustments from 1 common location.	1	2	\$275,000
700	Replace roof	Current roof was not replaced, past its life expectancy.	1	3	210,000
400	Replace roof	Current roof was not replaced, past its life expectancy.	1	4	\$125,000
200	Replace roof	Current roof was not replaced, past its life expectancy.	1	5	\$183,000
				Total	\$1,993,000

**DETROIT REENTRY CENTER CORRECTIONAL FACILITY
5-Year Plan FY2020**

Building	Project Description	Reason Description	Quantity & Units	Facility Priority	Cost Estimate
100 ADM	Replace air conditioning unit and all controls.	Unit is over 30 years old, parts are becoming obsolete, more energy effiecient unit is needed, along with updated controls.	1	1	\$1,200,000
Site	Replace quadropole exterior doors/frames and hardware. 100, 300 and 800 building	Worn out, rusting.	3	2	\$75,000
200 and 500 bldg.	wheelchair lift replacement.	Replace worn out units (2).	2	3	\$200,000
Site	Asphalt roadways throughout facility.	Pavement is deteriorating.	1	4	\$3,000,000
100, 800 &300	Replace hot water heaters.	Units are old, and parts are becoming obsolete.	3	5	\$120,000
100 Adm bldg.	Replace acoustic ceiling tiles.	Worn out and discolored.	1	6	\$18,000
800 bldg. F/S	Replace dishwasher exhaust fan.	Parts are obsolete.	1	7	\$12,000
Site	Recaulk/reseal windows 100 bldg., 300 bldg. and 800 bldg.	Worn out.	1	8	\$30,000
Big yard	Soil stabilization/Grading.	To improve drainage.	1	9	\$60,000
Site	Sidewalk by front entrance of Administration.	Concrete needs to be leveled.	1	10	\$65,000
				Total	\$4,780,000

MICHIGAN DEPARTMENT OF CORRECTIONS

“Committed to Protect, Dedicated to Success”

MEMORANDUM

DATE: June 27, 2018

TO: Jeremy Bush, Warden
Charles E. Egeler Reception and Guidance Center

FROM: Robert Weems, Physical Plant Supervisor Charles
E, Egeler Reception and Guidance Center

SUBJECT: RGC/DWHC Annual Physical Plant Report

This Annual Report has been prepared in accordance with P.D.04.03.100 "Preventive and Emergency Maintenance for Correctional Facilities". Specifically, section "N" requires CFA Physical Plant Superintendents conduct an annual inspection of their respective facility to assess the need for future maintenance. The results of the inspection are to be submitted in writing to the facility Warden.

The Maintenance Department has done an outstanding job maintaining the RGC/DWHC considering staff shortages and not being able to determine funding or budget for maintaining DWHC.

Overview of Completed Projects

3N painted and cell doors rebuilt
3 East nursing station updated
Surgery area updated
Exterior of Maintenance painted
Noresco energy project complete
Main Sally port gate replacement project complete
DWHC Chiller was replaced

Annual review of Physical Plant

Housing Unit 1

The overall condition of this unit is good. The roof is scheduled to be replaced. The windows are in need of repair. The IS showers are scheduled to be redone. The IN showers need to be redone soon.

Housing Unit 2

The overall condition of this unit is good. The roof is scheduled replaced. The windows are in

need of replacement. The shower areas need to be done soon.

Housing Unit 3

The overall condition of this unit is good. The roof is scheduled to be replaced. The windows need replacement. The shower areas need to be redone soon. Heating coils for this unit needs replacement in the near future.

C-Unit

The overall condition of this unit is good. The roof is scheduled to be replaced. The exterior brick needs some repairs.

Administration

The overall condition of the building is good. The HVAC system is scheduled to be upgraded.

Food Service

The overall condition of the Food Service area is in good condition. Floor and wall tiles need to be re-grouted and replaced throughout the building. Painting needs to be done. Heating system is scheduled to be upgraded

Building 142

This building is in all around good shape.

Sally Ports

Intake sally port is in great working order. Main sally port gates have been replaced. JMF back sally port is in good working order.

Maintenance Building

The overall condition of this building is good. The exterior of the building has been painted.

Grounds

The facility grounds are in good shape. Walkways and sidewalks are scheduled to be replaced.

DWHC

The overall condition of the building is good. The drain lines are scheduled to be replaced. The O2 system is scheduled to be updated. The heating cooling system has been updated. Some of the roofs need to be replaced soon. The windows need to be updated soon. The exterior bricks need some attention soon.

cc:

File

Mike Balcer

Daniel Smith

**Charles Egeler CORRECTIONAL FACILITY
5-Year Plan FY2020**

Building	Project Description	Reason Description	Quantity & Units	Facility Priority	Cost Estimate
1,2,3 Blocks	Replace Existing windows	The current windows are inefficient and drafty. Replacement would save energy and make the air temperature in the blocks more consistent.		5	\$750,000
Food Service	Food Service tiles and ceiling	Food Service is need of flooring, wall and ceiling tile replacement soon. This is becoming a safety and sanitation concern.		1	\$350,000
1 Block	Replace piping for hot water supply	Hot water supply lines are deteriorating causing constant leaks form age. Required for maintaining good order and conditions for prisoners and adequate water supply.		10	\$350,000
DWH	Replace existing Call-Light system on 3rd and 4th floors	Existing system is nonfunctional, and parts are no longer obtainable.		4	\$400,000
DWH	Update controls and valves on negative pressure patient rooms.	Existing system is obsolete and not reliable causing frequent alarms.		8	\$150,000
1-2 Blocks	Coils in the Blocks	Old and deteriorating systems		9	\$300,000
Arsenal Remodel	Remove existing walls and change the weapon hatch access	Create better storage and flow. Help organize weapon control and inventory and create a dress area for assembly squads		3	\$500,000
DWH	Replace main roof	The roof has reached it life expectancy		6	\$250,000
1-2-3 block	Roof top air handlers	Have exceeded their life expectations		7	\$600,000
1-2-3 block	Shower areas	Tiles are worn out Areas are outdated in need of updating		2	\$1,300,000
				Total	\$4,950,000

MICHIGAN DEPARTMENT OF CORRECTIONS

“Committed to Protect, Dedicated to Success”

MEMORANDUM

DATE: August 15, 2018

To: Dewayne Burton, Warden
Richard A. Handlon Correctional Facility

FROM: Stephen Card, Physical Plant
Superintendent Richard A. Handlon
Correctional Facility

SUBJECT: Annual Physical Plant Inspection

Another year has passed we continue to effectively maintain the Facility with our excellent Maintenance Staff here at MTU. We have worked this year to resolve some issues created from the Energy Savings Project. Kettles, Dish Machine Hot Water Booster, gang shower water valves, heating and hot water boiler issues still happen weekly. We had a failure in our 2400-volt primary lighting loop this year a repair is being set up after approved funding.

Housing Unit A / Healthcare

The roof, fascia, brick and block on the exterior of the building are in good condition with exception of the sky lights which should be replaced soon. The windows are old and drafty they should be considered for replacement. We are working at replacing any bad doors throughout the building. The Electrical System is old and utilized to capacity. The domestic hot and cold-water lines are old, in poor condition, they should be considered for upgrades in the future.

Housing Unit B

The roof on B-Unit is one of three we had out for bids this year look like they will be done in the spring of 2019. The exterior block and brick are in good shape. We are working at replacing bad doors throughout the building. The windows are old and drafty they should be considered for replacement. The Electrical System is old and utilized to capacity. The domestic hot and cold-water lines are old, in fair to poor condition, they should be considered for upgrades in the future. B - Unit is being consider for conversion into a Medical Frail Unit.

Housing Unit C

C-Unit is also scheduled to have the roof replaced in the spring of 2019. The exterior block and brick are in good condition. The windows are old and drafty they should be considered for replacement. Sound proofing the card room has been approved to be installed. This unit is much louder than any of the other Housing Units. We are working on replacing bad doors throughout the building a few at a time. The Electrical System is

old in fair condition but at capacity. The domestic hot and cold-water lines are in poor condition they should be considered for upgrades in the future.

Housing Unit D

D-Unit's roof is scheduled to be replaced in the spring of 2019. The interior floors and block walls are in good condition and we are working on replacing bad doors throughout the building. The exterior block and brick are in good condition and the windows are old drafty and should be considered for replacement. The domestic hot and cold-water lines and Electrical System are old in poor condition they should be considered for upgrades in the future.

Housing Unit E

The roof, fascia, brick, and block on the exterior of the building are in good condition with exception of the sky lights which is an ongoing project to replace on all Housing Units. The interior floors and block walls are in good condition the windows are old and drafty they should be considered for replacement in the future. The water and electrical distribution systems are old in poor condition they should be considered for upgrades in the future.

Housing Unit F

The roof, fascia, block, and brick on the exterior of the building are in good condition. The windows are old drafty and should be replaced in the future. The interior floors and walls are in good condition. We are working on replacing bad doors throughout the building. The Electrical and Water distribution systems are old in fair condition they should be considered for upgrades in the future.

Field House

The roof, fascia, block and brick on the exterior of the building are in good condition. The interior floors and walls are in good condition. The main entrance doors to the gym needs to be replaced. A few others throughout the building are in bad condition and needs to be replaced.

Recreation Building

The roof and fascia are in good condition. The interior and exterior block and brick are in good condition.

Activity Building

We have started the design phase to run a new gas line to this building to install two new furnaces to keep this building heated and prevent any further deterioration. The exterior of this building is steel the roof needs to be coated or painted along with the siding. The Fire Suppression System needs repairs to bring up to code for future use.

School Building

The roof, fascia and brick on the exterior of the building are in good condition. The floors, ceilings and walls on the interior of the building are in good condition. We are working on replacing any bad doors throughout the building. The Electrical System is old in fair condition. The domestic hot and cold-water lines are in poor condition they should be considered for upgrades in the future.

Food Service Building

The roof is less than a year old the fascia and brick on the exterior of the building are in

good condition. The floors, walls and ceilings are in good condition with exception of the steel panels, below the windows where they meet the floor, are rusted and in need of repair or replacement. The floor in the dry goods storage room is in poor condition and should be refinished. We continue to have issues with broken tile in the production area which is an ongoing job to repair. Under MDOC control we hope to see less abuse. The food service Directors door, dry goods the commissary doors were replaced this year. The outside main entry doors were replaced this year. We are working at replacing other doors in poor condition throughout the building. The Dish Machine Booster requires replacing.

Administration Building

The roof, fascia, block, and brick on the exterior of the building are in good condition. The wood siding on parts of the Administration Building needs to be painted. The interior floors, ceilings and walls on the interior of the building are in good condition. We are working on replacing any bad doors throughout the building. With the upgrades to our heating system we hope to have better control the temperatures throughout the building.

Fence, Lighting, Towers, Grounds and Sally Port

The guard towers are in fair condition and need to be painted and need new roofs. Our exterior perimeter fence is in fair condition and our interior perimeter fence is in poor condition. Fence and razor upgrades are currently out for bids for replacement by Central Office. The security systems on both inside and outside fences, our perimeter lighting and cameras are fairly new working well now that we have most of the bugs worked out of them. Our outside grounds are in good condition with exception of our parking lots and perimeter road pavement are in poor condition they should be considered for resurfacing.

Maintenance Area Buildings and New Boiler Room

Our emergency generator building is in good condition both inside and out including our underground diesel tank which is inspected Quarterly. With the addition of our new boiler room to our maintenance building the roof, fascia, block, and brick on the exterior of the building are in good condition. The floors, ceilings, and walls on the interior of the building are in good condition. Our MTU/ICF sewer bar screen is old runs manually and should be replaced with an automated system. Like the rest of the facility our electrical and water distribution systems are old in poor condition they should be considered for upgrading in the future. We have three pole building that, we use to store equipment and supplies, are in good condition. We are still experiencing boiler issues we continue to resolve them.

Gun Range Building

The roof and exterior walls are in fair condition. One door was replaced one was rebuilt. The exterior of the building needs to be painted.

**Handlon Correctional Facility
5-Year Plan FY2020**

Project No.	Building	Project Description	Reason Description	Quantity & Units	Facility Priority	Cost Estimate
MTU.00	A, E, and F unit	Replace bad Roofs	sky lights are failing and need to be replaced, roof is in poor condition		1	\$540,000
MTU.00	Housing units	perform an electrical study of our housing units A - F	Existing system is 60years plus old and appears to be over loaded. There is no room for expansion for any additional electrical needs.		2	\$100,000
MTU.00	Facility Water	replace 60 plus year-old water distribution system	The current system develops leaks nearly every day throughout the system		3	\$4,000,000
MTU.00	Old Radiators	The new heating system runs, and a higher pressure and our old radiators are developing leaks constantly during the heating season.	Many of the MTU housing unit heating radiators are developing leaks due to the age and higher water pressure of the new system.		4	\$200,000
MTU.00	Bar Screen	Install a solids grinder on bar screen for MTU/ICF waste water discharge.	Currently waste stream solids must be hand raked off a strainer device and placed into trash containers. This is then transported to a waste disposal site. This is done to prevent the plugging of our sewer pipes.		5	\$1,000,000
MTU.00	Parking Lots	Pave upper and lower parking lot	Existing pavement is in very bad shape on the lower lot causing trip hazards and vehicle damage. Upper lot is loose stone which requires constant maintenance to prevent pot holes.		6	\$450,000
MTU.00	Perimeter Road	Repave perimeter road including unpaved section	Pot holes and unpaved section make it unsafe to respond quickly with chase vehicle		7	\$250,000
MTU.00	Food Service	Replace two large very old roll ovens	Both roll ovens were re built 10 years ago and are long past their expected life		8	\$400,000
					Totals	\$6,940,000

MICHIGAN DEPARTMENT OF CORRECTIONS

“Committed to Protect, Dedicated to Success”

MEMORANDUM

DATE: August 1, 2018

TO: Sherman Campbell, Warden
Gus Harrison Correctional Facility

FROM: Brent Ford, Physical Plant Superintendent *Brent Ford*
Gus Harrison Correctional Facility

SUBJECT: 2018 Annual Facility Report

As outlined in Policy Directive 04.03.100, Preventive and Emergency Maintenance for Correctional Facilities, the Annual Facility Inspection Report for the Gus Harrison Correctional Facility is as follows:

FINDINGS

NORTH FACILITY

Over the past year the facility continues to fine tune the new security enhancements. The new Administrative Building HVAC system control system was installed as well as a new roof top air conditioner. Master Electric returned and replaced two oversized transformers, many fuses and breakers to lower the arc flash risk in our electrical system. We continue to update lighting to LED as we can.

1. Housing Units 1, 2, & 3

All three of these housing units are in good condition due to regular maintenance and our preventative maintenance program.

We are experiencing more repairs on the boilers, due to their maturity. We are repairing them as needed and will be replacing the boiler in housing unit 3 in the next few months.

The exterior brick and interior block of the buildings are in good shape. Windows are kept in good operating condition however the exterior of the windows need to be re-caulked as the weather allows.

The new wheelchair lift in housing unit 3 requires consistent excessive repair and service over the past year. The original vendor/installer will no longer repair it due to part availability; however, OTIS Elevator has been working diligently to keep it running.

We are updating the facility cell door locks from an outdated model to a new style as our funds allow. This project is ongoing, due to cost.

2. Housing Units 4 & 5

Both housing units are in good condition due to regular maintenance.

Nonetheless, due to their age and the condition of our water, the heating boilers in these housing units do require more maintenance. We repair as necessary.

We have installed ICON water controls in all the inmate cells. These units have reduced maintenance repair time, water, sewer usage, and self-cell flooding. The initial cost was expensive, but the long-range effects are very beneficial.

The exterior brick and interior block of the buildings are in fine shape. Windows are kept in good operating condition however the exteriors need to be re-caulked as the weather allows.

We are experiencing more repairs with the cell doors, due to the age. Repairs are being made and preventative maintenance continues to be a priority.

The wheelchair lift in housing unit 4 has failed and OTIS Elevator is having trouble finding replacement parts. They have provided us a subcontractor who has been able to find some repair parts and has provided an estimate to replace the current system.

3. Housing Unit 6

This housing unit remains closed due to low inmate count statewide.

This housing unit is in good quality condition due to regular maintenance. We will continue to monitor and maintain this unit; even though it is not currently housing prisoners.

Nevertheless, due to its age and the condition of our water, the heating boilers in this housing unit do require more maintenance. We repair as necessary.

The exterior brick and interior block of the buildings are in excellent shape. Windows are kept in good operating condition; however, the exteriors need to be re-caulked as the weather warms.

4. Segregation Unit

Segregation is in great shape and with the installation of ICON water controls in all 22 cells; this has reduced the repairs and limited self-cell flooding and drain plugging while also reducing water and sewer usage. The air conditioner in the segregation bubble requires regular maintenance due to its age.

5. Administrative Building

This building is in excellent shape due to regular maintenance.

The doors and windows are in decent working condition. The exterior brick and interior block are solid.

We still experience periodic bubble gate issues due to the age of the gates. We are currently researching options on controller replacements.

The EM room update project is now 100% complete and functioning as intended.

The heating boilers in this building continue to operate properly. The new air conditioning unit and HVAC controls have been installed and should make the building more comfortable and the system more energy efficient to operate.

We are still waiting for one more bid from an outside contractor regarding the removal of the Visiting Room wall.

6. **Food Service Building**

As in all facilities this is an area that receives heavy traffic and abuse and requires a lot of attention.

The equipment is repaired as needed and is frequent due to the age and use. I would request that we consider replacing the equipment that has become so costly to repair. The Hobart dish machine needs replacement.

The tile floors are maintained with tile replacement as needed.

Due to their age and the condition of our water, the heating boilers do require more maintenance. We repair/replace as necessary. The circulation pumps are re-built as needed and water lines replaced as they become restricted with calcium build up.

7. **Health Services Building**

This area remains a high traffic area; but is in good condition.

8. **School Building**

The school building is in overall excellent shape but does experience some roof leaks which will be addressed as the weather allows.

9. **Maintenance/Warehouse/Generator Building**

This building is in good condition. The exterior brick and interior block are sound.

The main switch gear for the facility has a manufacturer's recommendation of cleaning on a five-year schedule but has never been cleaned. The switch is functioning without interruption.

The generator is in reliable condition. It is tested monthly and gets regular scheduled maintenance. We continue to focus on the preventative maintenance plan to assure the generators are running at 100%.

SOUTH FACILITY

The south side security systems continue to be fine-tuned as necessary. New LED lighting upgrades have been done in 6 of the housing units. Both kettles have been replaced with new Cleveland kettles provided by Trinity.

1. **Housing Units A, B, C, D, E, F, G & H**

The doors and windows are showing deterioration. Some doors have been replaced. Eight prisoners in a cube are expediting wear and tear on these units.

In addition, all units need drywall repair and continuous painting. This is being done throughout the year.

The front and back hall lighting is being replaced with LED lamps and is 100% complete. The LED upgrade has greatly improved lighting especially in the evenings and on overcast days.

The housing units are functional and can remain that way with appropriate preventative maintenance and care. The electrical systems are in good working condition. We monitor the operation of all boilers with

most of them being replaced. The boiler in housing unit A/B was just replaced in April 2017.

2. Food Service Building

The food service building is one of the most used buildings at this facility. Our maintenance staff spend much of their time working in this area and the equipment is in constant need of repair. In South food service we need to replace the Hobart dish machine as it experiences frequent break downs. The second Groen steam kettle has been replaced with another Cleveland steam kettle and both are operating well.

This building is probably the most unappealing one on grounds due its menial size and constant use. Repairs to the building itself are hard to stay on top of because most of the day this building is full of activity.

The hot water boiler is in high demand and requires frequent maintenance.

The South freezer replacement project is nearing completion.

The cooler floor is in serious need of repair due to its age and the weight of the food items stored inside. We are planning on removing the existing floor and replacing it with concrete and sealing it to make it easier to keep clean and sanitary.

3. Education Building

The education building is in good condition. The walls are constructed of drywall, which requires routine patching and painting. The doors get a lot of use and wear shows up quick.

4. Weight Pit/SPA Area

This building is in respectable shape. The two group meeting rooms require little maintenance. The roof is in sound condition.

5. MSI License Plate Factory

The factory is in excellent form and housekeeping is a priority. Staff and prisoners do an excellent job. The roof, doors and windows are in good shape. However, due to their age, the rooftop heating units require seasonal maintenance.

6. Administration Building

This building is in adequate structure. Despite items being transported through on carts and visiting room use, the walls consisting of drywall are in constant need of repair and painting.

The doors get a lot of use and show wear and tear quickly.

The boiler is in good working condition and is repaired as needed.

The health care portion of this building is maxed out as far as occupied space. This is a small area that is used to attend to aid 1280 prisoners.

The visiting room is also small, but staff can make it work.

Since the facility consolidation took place, the Communications Center is adequate for its limited use.

The State Police Post office area is maintained as needed and well kept. Having MSP on grounds is an asset to the facility.

7. Maintenance Building/ERT/Records Retention

This building is in decent shape; but has limited use.

The maintenance portion is used for storing and repairing the grounds equipment.

We have had minimal problems with the generator. We continue to focus on preventative maintenance on the generator. This generator also receives weekly and monthly maintenance.

The ERT portion of this building is in decent shape. Minor drywall repair and painting is always needed.

The records retention area is in reliable condition. This area is heated and well-lit, which is an improvement over our old area.

8. Chapel

This building has a lot of use and normal wear and tear exists on the inside. The exterior finish looks fine.

The roof replacement over one year ago has resolved many leaking issues.

The heating and cooling system is an endless maintenance issue, but an update to both the heating and cooling in this building is in progress.

New carpet has been installed throughout the Chapel building.

9. Parking Lots, Perimeter Roads and inside Sidewalks

The parking lots and perimeter road are in pretty good shape. There are some areas that still need to have new asphalt or concrete replaced especially near the warehouse and the drive from Parr Highway to the Sallyport. There are quite a few areas where the sidewalks are being removed and replaced as the weather permits.

10. Outside Grounds

The grounds outside of the perimeter are in excellent condition and are maintained daily by the groundskeeper and a ground crew of prisoners. This includes large areas of weed control around fences, transformers, signs, buildings, etc.

SUMMARY

Overall, considering the age of the buildings, it is my opinion that the facility is in excellent condition. This is due to the dedicated maintenance staff in our department by utilizing their professional knowledge and skills, prisoner labor to the fullest and following the preventative maintenance program. The entire facility staff and administration also play a vital role in the maintenance through effective communication and cooperation.

We will address concrete walk issues and replace as needed.

With cooperation from the weather we will be finishing the removal of the old HPS yard, yard walk lights, and continue to install new LED lighting. Matching funds have also been applied for to help us begin changing all the lighting in the housing units over to LED's starting with the North housing units.

We, as in the administration staff, have a duty to put forth the legitimate effort into researching cost effective methods to improve reducing energy on all utilities.

We continue to recognize significant energy usage in the south administration building and south school using individual window air conditioner units. A solution to this long term would be to centralize air conditioning. There would be an initial installation cost but savings on the back end.

We are looking forward to completing the following projects over the next few months. As previously mentioned, we are planning on continuing with LED lighting upgrades, visiting room wall removal, housing unit 3 boiler replacement, south food service walk-in freezer replacement, south food service cooler floor, and concrete sidewalk replacement as needed.

If you should have any questions, please feel free to contact me. Thank you.

/BF

Cc: D. Messer, Deputy Warden
A. Johnson, Administrative Officer
File

GUS HARRISON CORRECTIONAL FACILITY
5-Year Plan FY2020

Building	Project Description	Reason Description	Quantity & Units	Facility Priority	Cost Estimate
200	Replace HVAC Air Conditioning Unit and Controls	The current system is over 20 years old and well beyond its usefulness. The Freon is getting hard to find and is extremely expensive. The 300 building gets its heat from the 200 building and the HVAC updates will benefit both buildings.	1 System	1	\$750,000
Unit 4	Replace Unit Wheel Chair Lift	Current wheel chair lift is over 20 years old and breaks down frequently. Repair parts are extremely hard to find. Replacement of this unit should provide many years of reliable service.	1 Each	2	\$30,000
North/South Administrations	Refurbish Security Gate Doors (Levels I & II)	The current mechanical and electrical controls are worn and continually fail. The electronic and mechanical mechanisms of the door system need to be refurbished.	6 Sets	3	\$75,000
Unit 2	Replace the Main Electrical Transformer in HU 2 Electrical Room	The current transformer has begun to get louder and louder as the internal windings and connections begin to fail. The housing unit will only have critical systems should the transformer fail and the generator back up system kicks in.	1 System	4	\$30,000
MSI	Replace Existing Ceiling Lights with new LED Lights	Current light fixtures are becoming more expensive to repair, provide inadequate light and costly to operate. Replacing current fixtures with new LED lights will brighten the factory building, improve safety and work conditions while lowering costs.	111 Each	5	\$50,000
Site/Housing Units	Replace Existing Lighting with Energy Efficient Lamps	Current lighting fixtures are outdated and not very energy efficient. Replacing the existing fluorescent lamps with new LED lamps with reduce energy consumption and operating costs.	5000 Each	6	\$90,000
Admin/200/300	Replace Existing Lighting with Energy Efficient Lamps	Current lighting fixtures are outdated and not very energy efficient. Replacing the existing fluorescent lamps with new LED lamps with reduce energy consumption and operating costs.	8000 Each	7	\$150,000
300	Replace Air Conditioning Unit and Controls in North Programs Building	Current unit is becoming costly to maintain and the Freon coolant is getting hard to find and is extremely expensive. Replacing the pneumatic controls with a computerized control system will result in more efficient operating costs.	1 System	8	\$650,000
Site	Install Sewage Auger Screen System	The current sewage grinder system is old and not very effective in grinding up foreign matter in the sewer lines resulting in damaged sewage pumps. The local county drain commission recommends an auger screening system be installed.	1 System	9	\$100,000
Site	Replace PA System	Current PA system is old and operates sporadically. A new system would provide concise and clear announcements facility wide. This will greatly improve communications for both staff and inmates.	2 Systems	10	\$95,000
Site	Asphalt Sealing	Current asphalt is in good condition but should be crack filled and sealed to extend the life of the product and reduce potholes and other trip hazards.	1 System	11	\$90,000
North/South Food Service	Food Service Floor Tile Removal and Epoxy Installation	Current floor tiles are repeatedly cracking and breaking providing a hazard. Removing the floor tiles and sealing the floor with an epoxy will reduce the hazards and help meet sanitation requirements.	2 Systems	12	\$60,000
Site	Repair Propane Back-Heating System	Current system needs updates. Per the inspections, there were areas noted that will improve the operation of the system. This back-up system is vital in providing heat and hot water if the natural gas system is disrupted.	1 Each	13	\$75,000
South Admin	Enlarge Visitors Room	Enlarge current visiting room by 900 SF. Current SF was sized to accommodate a prisoner population of 480 that has grown to around 1200. The visiting room gets crowded and visitations are cancelled.	900 SF	14	\$250,000
				Total	\$2,495,000

MICHIGAN DEPARTMENT OF CORRECTIONS

“Committed to Protect, Dedicated to Success”

MEMORANDUM

DATE: July 25, 2018
TO: Warden Davids
FROM: Donald Dine, Physical Plant Superintendent Ionia Correctional Facility
SUBJECT: Annual Physical Plant Report 2018

Facility Overview:

Facility asphalt main driveways and main parking lots are in good condition having been replaced in 2016. Facility maintenance parking lot and perimeter road have been replaced in 2018. Sidewalks are generally in fair to poor condition and several areas need replacement. Roofs are in good condition. Some minor leaking still is being reported. Repairs are handled on an as-needed basis.

Facility key and lock system is in process of being upgraded to the BEST lock system.

Facility has had new boilers installed in housing unit 6/7.

Entrance doors and frames throughout the facility are in fair condition and in need of lower frame repair.

Building brick exteriors are in fair/poor condition with several areas needed grout/mortar repair.

The Fire Alarm System was replaced in 2018.

The Duress System (PPD) is in good condition.

Security fencing is in good condition. All security systems are functioning as designed.

Building 100: Administration

The roof was covered in the overview. The HVAC system is in good condition. Plumbing is in good condition. The electrical system is in good condition. The security system is in good condition. Security gates are in good working condition. Interior finishes such as carpet are beyond the useful life expectancy and 2nd floor carpet was replaced in late 2017. Ceiling tiles need replacement. The building is in a general good state with some exterior brick repair needed.

Building 200: Support Services

The roof was covered in the overview. The HVAC system is generally in good condition. Plumbing is generally in good condition. The electrical system is in good condition. General equipment repairs

are high as kettles/ovens/mixers need constant repairs due to abuse and improper operation. Food Service is generally in good condition. Health Care area is in good condition.

Building: 200: Maintenance, Warehouse and Electrical Generator Room

The HVAC system is generally in good condition. The plumbing system is generally in good condition. The electrical system is in good condition. The building is in a general good state with some exterior brick repair needed. Generator has needed a few minor repairs throughout the year. Several standalone ac units are in process of being replaced with mini split units.

Building 300: Education

The roofs were covered in the overview. The HVAC system is generally in good condition. The plumbing system is in good condition. The electrical system is in good condition. Several entry doors are showing signs of deterioration. The elevator in building 300 is in good condition with no repairs noted. Building 300 is in good general repair. Several standalone ac units are in place and should be upgraded to multi zone mini split units in the future.

Units 1-5

The roof problems were covered in the overview. The HVAC systems are generally in good condition. The plumbing systems are generally in good condition; Icon water regulating systems are functioning well. The electrical systems are in good condition. Several entry doors are showing signs of deterioration. Unit 2 is in the process of converting areas to accommodate the Start program.

Units 6-7

The roofs for 6 and 7 show no signs of leaks. The HVAC systems have been replaced and are functioning well. The plumbing systems are generally in good condition with new water softener having been installed in 2018. Icon water regulating systems are functioning well. The electrical systems are in good condition. The courtyard concrete is heaving and very uneven. Concrete will need to be replaced in the near future.

Pole Building:

Pole building is in good condition.

Guard Towers:

All towers are in fair condition and can be manned when needed. Windows are showing signs of leaks during heavy rains and will need replacement. Some interior rust is being noted.

cc:

Phyllis Clement

Dave Albrecht

Eames Groenleer

**Ionia Correctional Facility
5-Year Plan FY2020**

Building	Project Description	Reason Description	Quantity & Units	Facility Priority	Cost Estimate
200	Replace generator with new that would provide full site generation.	The generator we have now only supplies the facility with minimal power. During a power outage it is hard for the facility to continue full operation. Would like to replace with a generator capable of full site power generation.	1	1	\$575,663
All Buildings	Replace Door and gate controls with new.	The door/gate control system we have at ICF is very old with a lot of the parts being obsolete making the system very hard to work on.	1/Lot	2	\$1,300,000
All Buildings	Exterior brick replacement.	Project shall consist of the removal and replacement of existing brick. Re-do brick tuck work. Brick is cracking/grouting is failing.	1/Lot	3	\$120,000
All Buildings	Replace exterior doors	Current doors and frames are rusted and need replacing	1/Lot	5	\$250,000
100/200/300 Buildings	Replace ac condensing units.	Replace condensing units on 100/200/300 buildings. Units are past useful life expectancy.	1/lot	4	\$200,000
				Total	\$2,445,663

MICHIGAN DEPARTMENT OF CORRECTIONS

“Committed to Protect, Dedicated to Success”

MEMORANDUM

Date: 08/03/18

To: Warden Duncan MacLaren, KCF

From: Craig Schopp, Physical Plant Superintendent, KCF

Subject: **Annual Facility Inspection Report for Kinross Correctional Facility**

This Annual Report has been prepared in accordance with P.D.04.03.100 “Preventive and Emergency Maintenance for Correctional Facilities”. Specifically, section “N” requires CFA Physical Plant Superintendents conduct an annual inspection of their respective facility to assess the need for future maintenance. The results of the inspection are to be submitted in writing to the facility Warden.

Kinross Correctional Facility

Administration

- Replace existing roof.
- Replace all windows. Current windows are 28 yrs. old.
- Tracy Time needs to be installed on entrance door for security purposes. - complete
- A cooling source needs to be installed in the electrical/communication room.
- A new heating boiler is needed. The current boiler is 28 yrs. old and it is hard to find replacement parts.
- Replace pneumatic control for the heating system with the new electronic style.
- The Bubble gate needs to be replaced with new controls and mechanical drives.
- Sprinkler system needs to be installed

Education/Programs Building

- Existing roof needs to be replaced with standing seam metal roof.
- All windows are 28 yrs. old and need to be replaced.
- Exterior doors and frames need to be replaced with heavy duty ones.
- Need to replace the heating boiler and controls.

Food Service

- All windows are 28 yrs. old and need to be replaced.
- Exterior doors and frames need to be replaced with heavy duty ones.
- Emergency power needs to be hooked up to more kitchen equipment.
- The kitchen area needs the floor replaced. The current quarry tiles are in bad shape and should be replaced with trazal floor.
- Replace heating boiler and controls.

- Replace domestic hot water boiler- (8/01/18) complete waiting on inspections
- K-unit Kitchen is in need of new doors as well as the admin building.

Quartermaster

- Need to run water line to Quartermaster from the boiler room in A/B Unit underground. It is currently in the attic and freezes and breaks.
- Need new heavy-duty entrance door.
- Need new insulated garage door.

Trash Compactor

- The trash compactor is outdated and rusted out. It is difficult to secure and mounting brackets are breaking out of the concrete.

Housing Units

- Each housing unit needs to have existing roof replaced. (K unit roof replaced 2016)
- Need all existing windows replaced, since they are 28yrs old.
- * The heating boiler needs to be replaced. Boilers are very old and either can't find replacement parts or are very expensive and require a special order.
- Replace all domestic hot water boilers
- The bathroom/shower exhaust fans need to be replaced, along with redoing the duct work and grills. - complete
- The pneumatic heating controls need to be replaced with the electronic type.
- All boiler room doors need to be replaced.
- TV, Dayroom, and pipe chase doors need to be replaced with heavy duty doors, frames and locks.
- K-unit, all doors are need of replacing.
- Each electrical/communication room on the end of each housing building needs to be cooled with AC.
- The attic end room closets need to be cleaned up of cut off and left fiber coax that is no longer used. These are left from when HTF was closed.
- Need to replace the exhaust pipe and roof boots on all the boilers. They are rusted, and some have holes in them.

Pavilion/Weight Pit

- Needs a new roof.
- This building will flood in the spring, so landscaping is needed along with developing drainage.

Maintenance Building/Property/Training Room

- The existing roof needs to be replaced.
- * Existing windows are very old and need to be replaced. It's difficult to find replacement parts for these.

Maintenance Equipment Building

- This building needs insulation and heat.
- Install two new insulated garage doors.

Driveway and Grounds

- The blacktop asphalt needs to have pothole and cracks repaired and sealed in both the parking lot and driveways.
- The entrance-way needs to be redirected to the parking lot area. This is so visitors will not be driving towards the sally port.
- The area in front of the property room and maintenance building needs ground work completed to redirect water from the building entrances and parking area.
- Housing Units, Programs Building, Administration Building and Food Service needs to

have the grounds around the buildings landscaped to allow for water that falls off the buildings to drain away from them.

- Inmates basketball courts need to have cracks repaired and the area needs to be sealed. This would be a PBF purchase.

PPC Requests (w/approval date)

- * PPC 16-019 Move Greenhouse from Old KCF – Structure moved waiting for PBF to purchase new panels (7/27/16) – In Progress
- * PPC 16-258 Build an office for the Librarian (8/10/17) – Completed
- * PPC 17-072 Install window cages on housing units (01/27/17) – Complete
- PPC 17-137 Install a door access control system (06/01/2017)- Complete
- Request for tilt grill from old KCF (05/03/17) Completed
- PPC 17-185 Install an airlock door by control center (08/01/2017) - Complete
- * PPC 17-195 Install a hand sink behind the serving line in the kitchen (06/09/2017) – Complete
- PPC 17-151 Install eyewash stations in the housing units (5/5/17) -Complete
- PPC 17-213 Install a keywatch in the maintenance building (7/17/17) -Complete
- * PPC 17-272 & PPC 18-058(revision) Install an emergency siren at K Unit (9/18/17)– In Progress
- * PPC 17-292 Install security gates on the end of each housing unit hallway leading to prisoner cubes due to closure of half of K Unit (9/18/17) – Complete
- * PPC 18-177 Partition off part of the programs classroom to create a secure office for the RUM's (5/3/18) – In Progress

Projects without a PPC

Install Housing Unit Security Mirrors – complete
Evaluate Housing Unit Ventilation – complete
Install window Velcro screens - complete
Secure housing unit roofs - Install new screws
Install Housing Unit Wall Fans and Exit Lights -complete
Continue to install new housing unit roof fans – complete
Improve ventilation in the holding cells
Install sod on each side of Admin. Entryway - Replacing concrete and landscaping - in progress
Complete a door replacement plan for level II & K Unit
Evaluate Trash Compactor (Keep or lease) -Keeping

DTMB Projects

PPC 17-132 Installation of mobile welding trailer - Approved 3/22/17 – Power upgrades complete underground complete trailer on site, 95% complete.
PPC 17-055 Installation of additional interior yard lights - Approved 1/3/17- Complete
PPC 18-064 Enhancing perimeter fence with mounted razor ribbon – Complete July 2018
PPC 18-043HVAC & Boiler Upgrades/Replacements – In progress starting with 2 units.
PPC 18-085 Lift Station Upgrade for K unit sanitary sewer
PPC 18-044 Replace Food Service Roof – Complete
PPC 18-044 Roof Replacement for housing (Project # 50819-16, 472.16382.TAP)

KINROSS CORRECTIONAL FACILITY
5-Year Plan FY2020

Building	Project Description	Reason Description	Quantity & Units	Facility Priority	Cost Estimate
Site	Roof Replacement of four housing unit buildings, maintenance building, pavilion, programs building and administration building. Replace all purlins that are damaged and install a standing seam metal roof.	Damaged. Leading to More Serious Problems. To Eliminate High Maintenance Condition. To Cover up Water Damage.		Major Project Request	\$2,400,000
Administration	Replace secure perimeter pedestrian gates and controllers (Gates 1 and 2)	The gates require frequent repairs and parts are obsolete.		1	\$105,000
Site	Pave alternative driveway to the parking lot and fix pavement in parking lot area	The current drive to the parking lot goes directly towards the Sallyport then traffic makes a left turn to the parking area. Traffic would be diverted to the back side of the parking lot, away from the Sallyport.		2	\$140,000
K Unit	Add 1 Heating and 1 Domestic Hot Water boiler per building.	Boilers are in overall poor condition, becoming unreliable, and inefficient. Boiler change out will greatly improve safety and security and building operation		3	\$100,000
Housing Unit AB/QTRM	Add 1 Heating and 1 Domestic Hot Water boiler per building.	Boilers are in overall poor condition, becoming unreliable, and inefficient. Boiler change out will greatly improve safety and security and building operation		3	\$100,000
Housing Unit CD	Add 1 Heating and 1 Domestic Hot Water boiler per building.	Boilers are in overall poor condition, becoming unreliable, and inefficient. Boiler change out will greatly improve safety and security and building operation		3	\$100,000
Housing Unit EF	Add 1 Heating and 1 Domestic Hot Water boiler per building.	Boilers are in overall poor condition, becoming unreliable, and inefficient. Boiler change out will greatly improve safety and security and building operation		3	\$100,000
Housing Unit GH	Add 1 Heating and 1 Domestic Hot Water boiler per building.	Boilers are in overall poor condition, becoming unreliable, and inefficient. Boiler change out will greatly improve safety and security and building operation		3	\$100,000
Food Service	Add new heating boiler for Food Service	Boilers are in overall poor condition, becoming unreliable, and inefficient. Boiler change out will greatly improve safety and security and building operation		3	\$100,000
Education/Library/Programs	Add 1 Heating and 1 Domestic Hot Water boiler per building.	Boilers are in overall poor condition, becoming unreliable, and inefficient. Boiler change out will greatly improve safety and security and building operation		3	\$100,000
Administration	Add 1 Heating and 1 Domestic Hot Water boiler per building.	Boilers are in overall poor condition, becoming unreliable, and inefficient. Boiler change out will greatly improve safety and security and building operation		3	\$100,000
Housing Unit K	Replace unit ventilators, Replace pneumatic controls with low voltage controls	Pneumatic motors are, and controls are non-operable and unreliable, provide adequate fresh air to work with building ventilation		4	\$112,000

Housing Unit AB/QTRM	Replace unit ventilators, Replace pneumatic controls with low voltage controls	Pneumatic motors are, and controls are non-operable and unreliable, provide adequate fresh air to work with building ventilation		4	\$112,000
Housing Unit CD	Replace unit ventilators, Replace pneumatic controls with low voltage controls	Pneumatic motors are, and controls are non-operable and unreliable, provide adequate fresh air to work with building ventilation		4	\$112,000
Housing Unit EF	Replace unit ventilators, Replace pneumatic controls with low voltage controls	Pneumatic motors are, and controls are non-operable and unreliable, provide adequate fresh air to work with building ventilation		4	\$112,000
Housing Unit G/H	Replace unit ventilators, Replace pneumatic controls with low voltage controls	Pneumatic motors are, and controls are non-operable and unreliable, provide adequate fresh air to work with building ventilation		4	\$112,000
Administration	Replace unit ventilators, Replace pneumatic controls with low voltage controls	Pneumatic motors are, and controls are non-operable and unreliable, provide adequate fresh air to work with building ventilation		4	\$100,000
Education/Library/Programs	Replace unit ventilators, Replace pneumatic controls with low voltage controls	Pneumatic motors are, and controls are non-operable and unreliable, provide adequate fresh air to work with building ventilation		4	\$100,000
Around the existing perimeter	Buffer Fence	Continue to add additional buffer fence around the perimeter to limit public access from adjoining properties.		5	\$250,000
Shooting Range	80' addition to existing building, with classroom improvements, Build a second berm on site	Improvements to provide training area and create space to have multiple simultaneous firearm training		6	\$66,552
Administration	Provide fully automatic sprinkler system throughout the Administration building	This is required due to new penal rules effective 4/27/17. This project needs to be completed and operational by 4/27/22.		7	\$360,000
Site	ELECTRICAL DISTRIBUTION SYSTEM-Replace Feeder, <600V. Replace existing direct burial building electrical service feeders. Install new underground electrical service feeders to each building and yard light fixtures in PVC.	Existing equipment has become a high maintenance problem. Existing equipment has become a security problem. Service reliability, security lights. Owner request. Numerous cable faults over the past years due to stones and buried debris.		8	\$415,000
K unit Food Service	Make up Air unit	becoming unreliable and in poor condition		9	\$20,000
Food Service	Cooler and Freezer upgrades	Equipment is old and in constant need of repair		10	\$150,000
Grounds	Misc. projects. Provide 3200 SF pole barn addition to Maintenance/Grounds Building.	Secure area to repair large equipment secure storage for snow removal and grounds equipment		11	\$80,000
				Total	\$5,546,552

MICHIGAN DEPARTMENT OF CORRECTIONS

“Committed to Protect, Dedicated to Success”

MEMORANDUM

DATE: June 28, 2018

TO: Noah Nagy, Warden LCF

FROM: David Karney, Physical Plant Superintendent, LCF

SUBJECT: Annual Physical Plant Report

This Annual Report has been prepared in accordance with P.D.04.03.100 “Preventive and Emergency Maintenance for Correctional Facilities”. Specifically, section “N” requires CFA Physical Plant Superintendents conduct an annual inspection of their respective facility to assess the need for future maintenance. The results of the inspection are to be submitted in writing to the facility Warden.

Overview of Physical Plant Accomplishments:

- Re-grouted walls of inmate showers in B and C buildings.
- Re-modeled Records area women’s restroom.
- Re-placed defective hot water returns piping in “D” building.
- Replaced concrete pad at the facility gun range.
- Replaced concrete road that leads to the facility gun range.
- Replaced aggregate on berms at facility gun range.
- Re-modeled building at facility gun range.
- Repaired condensate return leak under “E” building courtyard.
- Constructed wall in C-rec to add to security in room.
- Installed storm drainage on gun range pad.
- Re-modeled Warden’s conference room patio.
- Re-modeled Warden’s restroom.
- Re-modeled Warden’s wing kitchenette.
- Re-modeled Warden’s wing men’s room.
- Removed former security fence around building #60 for training area.
- Replaced aging washing machines in E, F and two in C building.
- Re-located health care offices.
- Removed asbestos from health care hallway and installed suspended ceiling.
- Installed handicapped accessible ramp to access new training area.
- Constructed and installed new sally port cattle gate.
- Replaced walk through gate #3 at entrance of facility.
- Re-carpeted Warden’s hallway and all offices.

- Refurbished bathrooms for training area in building “60”.
- Painted Wardens conference room to look professional.
- Constructed training office in building “60”.
- Constructed training classroom in building “60”.
- Re-located facility mail room, Records offices, and Human Resource offices.
- Replaced all lights in maintenance building with energy efficient LED fixtures.
- Replaced all lights in grounds maintenance building with energy efficient LED fixtures.
- Replaced hot water return piping in “B” building.
- Replaced deteriorating steps on East side of building #29.
- Refurbished all night lights in A, B, and C building so they are energy efficient LED fixtures.
- Continuing to eliminate fluorescent light fixtures in facility and replace them with energy efficient fixtures.
- Replaced deteriorating boards on walk way to horticulture out buildings.
- Re-numbers and re-painted all fire hydrants.
- Cleaned unnecessary items from all accessible buildings at ACF.
- Constructed and installed new outside weapons box and area outside of facility sally port.
- Replaced all entrance door to “D” building.
- Replaced aggregate and asphalt on courtyard of B ¼.
- Replaced and re-modeled all carpet in Record’s offices.
- Replaced wireless well controls and converted them to solar powered ones.
- Completed installation of new video security cameras at LCF.
- Repaired leak on forced sewer pipe leaving facility.
- Re-surfaced inmate walking track with crushed asphalt.
- Installed asphalt on road leading to facility gun range.
- Installed new asphalt parking lot for training area in building #60.
- Installed new side walk for training area in building #60.
- Replaced defective switch gear in main facility generator building.
- Developed and implemented Asset Management Plan for the facility.
- Replaced floor heat pump in building “29”.
- Abated asbestos in building 60 on hot water supply lines.
- Removed main electrical service from buildings 48 and 67.
- Replaced aged fire alarm panel in “F” building.
- Installed new LED lighting for Warden’s patio.
- Installed kitchenet in building 60 for training area.
- Inspected and re-enforced steel around interior and exterior light poles.
- Replaced interior light pole with new one and new LED heads.
- All basement lights in A, B, and C buildings converted to LED light fixtures.
- All lights in E, F, and G buildings converted to LED light fixtures.
- Recreation room lights in B and C buildings converted to LED light fixtures.
- Replaced two exterior doors on food service building.

Annual Review of Physical Plant

Building 11 (CDW): This building has been closed. Minimal power is on. The roof has developed a leak and will not be repaired at this time because it’s an abandoned building. The building has been placed on the demolition list.

Building 12 (CDW): This building has been closed. No heat or water. Minimal power is on. The building has been placed on the demolition list.

Buildings 13 thru 18 (CDW): All buildings have been closed. All utilities have been turned off. Basements are pumped out on an as-needs basis. All buildings have been placed on the demolition list.

Building 19 (ACF): The building has been closed and the heat and water turned off. Minimal power is on for inspections only.

Building 27 (LCF): School and Segregation. This building is in good condition. Roof is less than 18 years old with no problems. Much of the building is air conditioned with mini split systems. The windows have all been replaced with energy efficient windows. The exterior doors have been replaced with new doors. The segregation shower area needs to be re-modeled.

Building 29 (LCF): Administration, Control Center, Healthcare and Inmate Housing. The building is in good condition and operates well, considering its different functions. The roof is fourteen years old. The building is air conditioned. The mechanical systems are in average condition. Updated controls are needed to improve energy savings and environmental conditions. The building has had many of the entrance doors replaced with reinforced security doors. All the walk-through gates are recently new.

Building 42 (ACF): This building has been closed. No heat or water. Some power remains on until the building gets completely cleaned out. The building is on the demolition list.

Buildings 43 (ACF): This building has been closed. No heat or water. Some power remains on until the building gets completely cleaned out. The building is on the facility demolition list.

Buildings 44 & 45 (ACF): All buildings closed. Both buildings are on the demolition list.

Building 46 (LCF): Housing. Building is in fair condition. Roof is less than 18 years old and has no problems. The primary heating system has not been functional for many years. We heat this building with two secondary systems which are marginal when we have extreme cold for extended periods. Funding has been requested to replace the primary heating system, for many years. The court-yard by units B ¼ was replaced this year. The courtyard by units B 2/3 needs to be replaced. The interior electrical distribution system needs to be updated. The sidewalks on the north end of the building need to be replaced. The emergency exit steps on the north side of the building need to be replaced.

Building 47 (LCF): Housing, Laundry and Quartermaster. Condition of this building is about the same as Building 46. The two 60-pound washers in the central laundry were replaced this year. The other laundry equipment is aged but operates fine.

Building 50 (ACF): This building has been closed. The building has been put on the complex demolition list.

Buildings 51 & 52 (LCF): Housing. Buildings are 22 years old and are of pole barn type construction. Roofs and siding are metal. Some minor leakage has occurred. Interior walls and

ceilings are in fair condition. Bathrooms and showers are in fair condition, requiring frequent repair. Exterior entrance doors were all replaced this year. TV room ceilings need to be dry walled to eliminate prisoner access to space above ceiling tiles. New offices for the facility counseling staff were created and air conditioning was installed in these offices. The fastens for the roofs are scheduled to be replaced during an upcoming DTMB roofing Restoration Project.

Building 53 (LCF): School and Programs. This building is pole barn construction and is 22 years old with metal roof and siding. Interior areas are generally in good condition. Mechanical and electrical systems are operating as designed. Air conditioning unit in the library needs to be updated.

Building 54 (LCF): Food Service. This building is pole barn construction and is 22 years old with metal roof and siding. Some leakage has occurred with ice buildup on the eaves and gutters. More freezer and cooler space are needed. An MOP is partially funded to address this issue.

This building continues to be a high maintenance area due to the amount of use and people it is serving. The food prep and dishwasher areas are in fair condition. This building is air conditioned in the dining area. The equipment is in fair condition and requires a lot of maintenance weekly to keep things running. Dining area is in good condition. Exterior is in fair condition; the outside entrance doors were replaced last year. Mechanicals are in good condition and operate as designed. Pots and pans sink were replaced this year. Kosher kitchen is too small. A separate building is needed for storage. The current building is too small and is serving more meals than it was designed for. The roof is scheduled to be replaced as part of a DTMB project this summer.

Buildings 57 and 58 (ACF): All buildings have been closed. Both buildings are on the facility demolition list

Building 60 (CDW): Warehouse and Transportation. This building is currently being used for storage of food products. Warehouse, store, facility ERT functions, the facility training area, and some maintenance functions have been moved to this building. Building infrastructure and mechanical systems are in fair condition. Windows and doors need replacing and some minor roof repairs are needed. The parking lot was re-paved this year. A handicapped accessible ramp was installed this year. The roof is in poor condition and is scheduled to be replaced as part of a DTMB project this summer.

Building 61 (CDW): Power Plant. The building and equipment have been well maintained and is meeting the needs of the complex. Boilers are 44 years old and have had very little done to them since their installation. The boiler controls were replaced and updated last year. Staff continues to install energy saving devices and equipment to make the powerhouse run more efficiently. Generators are being maintained and operate as designed. Current emissions reports are all up to date. A new permit for operating was just completed and approved by DEQ. The roof was replaced on the upper and lower levels last year. The hot water tube bundle was updated last year. The underground condensate return tank was replaced with an above ground unit that is more efficient and does not leak. The power plant is scheduled to have improvements made to it to allow it to become an unmanned plant.

Building 66 (CDW): Sewage Lift Station. The building houses the main sewage pumps for the entire complex. The pumps are in good condition and the new controls and energy saving

devices have been working well to operate more efficiently and to provide early warning in the event of a failure. One of the two chopper pumps was replaced last year. The wet well inside of the building and the wet well outside of the building were both cleaned 2 years ago. Doors and windows need replacing, roof is in fair condition. The force main that starts in this building and goes to the Coldwater treatment plant is 40 plus years old. We have experienced some breaks over the past several years. This will be a major expenditure in the future and will require city and state involvement. Future are to hook up to the City of Coldwater's forced sewer main and replace the sewage lift station.

Building 70 (CDW): Grounds Maintenance. Building is in good condition. The roof leaks at times. AN additional roof drain needs to be added.

Building 71 (CDW): Physical Plant Operations. This building has become the central location for all computer and fiber systems for the complex. This equipment has high priority and security functions. The roof was replaced two summers ago. The doors and windows need to be replaced with energy efficient ones.

Complex Infrastructure: Roads, Tunnels, Piping Systems, Electrical Distribution, Water Distribution and Storage. Roads throughout the closed prison and Camp are in poor condition and need to be replaced. The perimeter road and parking lots for LCF were replaced and re-stripped this year. The interior roads inside of LCF are all recently new and in great shape.

The sally port inspection pit is remodeled to be safer to enter.

Tunnels that serve the Camp continue to deteriorate due to ground water. Tunnels leading to buildings 42 and 43 are in good condition. Half tunnels to LCF and ACF are good to fair. Repairs have been made to some hot water, hot water return and condensate piping. Other areas still need replacing. Some materials are on hand to make repairs this summer. Most tunnels need to have the pipe insulation replaced.

Most steam lines are in good condition. Electrical distribution lines are in good condition.

The gun range building, roads and concrete pad were replaced this year. The gun range building was re-furbished.

Most water mains are in good condition. The water tower is in good condition. Cathodic protection was inspected last year.

Perimeter Fence and Security System: The fence security system was upgraded last year. The perimeter lights are currently being upgraded to LED lights. The perimeter cameras, as well as several interior cameras, are being replaced and/or added. A new cattle gate was installed on the inside of the facility this year.

CC:

Susan Mittelstadt

Daniel Smith

**Lakeland Correctional Facility
5-Year Plan FY2020**

Building	Project Description	Reason Description	Quantity & Units	Facility Priority	Cost Estimate
Power Plant	Replace existing DA tank, controls, and alarms	Very aged. To increase efficiency and update power plant operations	1 Units	1	\$330,000
LCF Site	Gun Range berms need to be made taller	current height of berms needs to be raised	1 Units	2	\$88,000
Sewage Plant	Misc. sewerage/drainage project, repair/fix.	Existing line is old/worn out. Repairs are costly. Replace existing sewer line to connection with city and connect to new/larger sewer line run by the city in 2016. Replace lift station which is also aging. The City of Coldwater would take over maintenance of new lift station and sewer line to street which would alleviate the facility	1 Units	3	\$1,100,000
LCF Food Service	Misc. projects. Addition of 2500 SF to kitchen prep area.	Damage Due to Facility Growth. Request of Facilities Maintenance. Double number of meals compared to original design capacity.	2,500 SF	4	\$800,000
LCF Food Service	Add additional freezer and cooler space to facility.	Current system is too small for the current population at LCF	1 Units	5	\$458,450
Power Plant	Automate controls and plant operations	Save money on staffing	1	6	\$600,000
LCF Food Service	Replace HVAC equipment.	Current heating and cooling equipment are aged and requires a lot of maintenance. Also, to increase efficiency.	2	7	\$308,000
LCF Site	Upgrade/replace lighting inside secure perimeter.	Increase visibility for staff and cameras around buildings and yard.	1 Units	8	\$242,000
CDW Site - All	Building demolition.	Damaged. Request of Facilities Maintenance.	655,950 SF	9	\$2,000,000
LCF 'A, B & C' Housing E, F, H	Replace existing roofs.	Roofs are worn and needs replacing.	142,100 SF	10	\$2,000,000
Power Plant	Replace existing salt storage tank	Current tank is deteriorating and needs to be replaced	1	11	\$220,000
LCF A housing	Replace central air conditioning equipment in A building housing, health care, and the administration areas.	Current system is very aged and require a lot of maintenance.	2 units	12	\$700,000

LCF Admin./A & B' Housing	Replace horns with horn strobes.	Code issue. None presently installed.	27 Units	13	\$57,375
LCF 'D' School	Air handling Units heating only. Replace steam heating air handling Units in segregation area.	Not functioning or broken. Future major expense.	3,000 SF	14	\$100,000
LCF	Install fall protection on roof areas of A, B, C, D, E, F, G and H buildings	Provide a safe way in which maintenance staff can access and repair maintenance equipment located on the roofs of housing, programs, and administration buildings.	8	15	\$242,000
LCF site	Food service truck dock	lower dock so it is the right height to accept truck deliveries. Currently a dock leveler is used. It would be much safer to lower the concrete and have the dock at the correct height.	1	16	\$181,500
LCF site	Replace deteriorating asphalt around food service building	Existing roadways are becoming uneven and dangerous to traverse.	1	17	\$330,000
LCF B building	Remodel inmate shower areas in B-2 and B-3 so they are handicapped accessible.	Due to the aging population of the facility, more handicapped fixtures are becoming necessary.	2	18	\$104,500
LCF B, C Housing	Replace steam coils in housing units	current coils are aged and have periodic leaks	13 units	19	\$176,000
LCF C building	Replace central laundry equipment	Existing equipment is becoming aged. Replace existing steam dryers and two large washing machines.	10	20	\$199,000
Maintenance	Replace pneumatic with direct digital controls (DDC).	Beyond useful life. Not functioning or broken.	17,530 SF	21	\$38,720
LCF Admin 'A' Housing and 'B & C' Housing	Fintube radiation. Only in housing Units.	None presently installed. Doesn't provide adequate heating. Underflow heating system is not working.	109,000 SF	22	\$458,953
LCF Warehouse	Replace existing single pane windows with energy efficient windows.	Worn out. Damaged. Future site for ERT & Training.	30 Units	23	\$550,000
LCF 'B & C' Housing	Replace drop ceilings with drywall ceilings	Provide more security for institution.	21,500 SF	24	\$1,040,600
ACF Site	Replace asphalt on the road from State Street in a northern direction ending at First Street.	Existing asphalt is past its' useful life.	1 Units	25	\$550,000
A, B, C, D, E, F, G, H	Couple the existing pneumatic control system with direct digital controls.	Request will provide energy savings and a better working/living environment and reduce maintenance work orders.	212,900 SF	26	\$145,200

ACF Site - All	Building demolition.	Damaged. Request of Facilities Maintenance.	328,940 SF	27	\$1,550,000
LCF Site	Replace electronic detection cable on inside and outside perimeter fence.	Cable needs to be replaced before its useful life is up.	2 Units	28	\$302,500
LCF Site	Pavement/Driveway/Perimeter Road, Bituminous, Remove & Replace Full Depth. Interior drives from C Bldg. north to delivery area at 'B' housing.	Due to age of system. Due to facility request. To prevent failure. To fix deteriorated, damaged, failure area. To improve appearance. Long-term/high maintenance issue. Drives (fire route) have reached their life expectancy and have cracked and are broken.	30,000 SF	29	\$242,000
LCF Site	Pave parking lot on East side of facility warehouse	easier to maintain and keep dust down	1	30	\$200,000
Grounds Maint.	Replace grounds maintenance building roof	roof is worn and needs replacing.	1	31	\$250,000
LCF 'A, B, C & D' School	Replace/new steam to hot water converter system - 800 GPM. Replace heat exchange (150 GPM approx.).	Worn out.	4 Units	32	\$175,450
LCF "B" Building	Upgrade the main distribution lines and service panels.	Current service is too small and outdated.	1 Units	33	\$165,000
Power Plant	Replace existing window system - w/ insulated system.	Worn out. Damaged. To Cover up Water Damage.	1,550 SF	34	\$121,000
LCF Generator Building	Site Improvements III, new, above ground tank	Upgrade above ground generator fuel tank to include overflow protection.	1 Units	35	\$21,000
Power Plant	Install reverse osmosis system for boiler feed water	Provide better water for boiler operation	1 Units	36	\$110,000
LCF site	Install new pole barn	Install pole barn and connect to the grounds maintenance building to provide staff adequate room to service equipment and allow for necessary storage for the facility equipment.	1	37	\$330,000
LCF bldg. E, F, G, H	Replace existing windows in food service, program building, and two housing units.	Current windows are single pane and inefficient.	60	38	\$990,000
LCF site	Install garbage compactor on East side of prison	Additional compactor to keep inmates from traversing behind food service building. Also, to give the facility redundancy for their waste disposal needs.	1 Units	39	\$77,000
Bldg. 71 Maintenance	Replace existing window system - w/ insulated system.	Worn out. To Eliminate High Maintenance Condition. Request of Facilities Maintenance.	1,500 SF	40	\$121,000

LCF 'B & C' Housing	Pavement/Driveway/Perimeter Road, Bituminous, Mill & Resurface. Courtyard area of building.	Due to age of system. To fix deteriorated, damaged, failure area. To improve appearance. Long-term/high maintenance issue. To extend life. Courtyard is beginning to deteriorate with cracking and settling and is causing trip hazards.	4 Units	41	\$96,800
LCF site.	Install gravel service road on west side of E and F buildings.	Area is very wet and many times impassable. Allow access for maintenance staff all year long.	1	42	\$77,000
LCF Maintenance Storage	Replace/new fire protection system.	None presently installed.	2,400 SF	43	\$52,030
Grounds	Replace existing window system - w/ insulated system.	Worn out. To Cover up Water Damage.	840 SF	44	\$60,500
CDW Site	Replace Pavement/Curb & Gutter, South, east, west sides of Maintenance Building, Grounds Building, Power Plant and Warehouse.	Due to age of system. To prevent failure. To fix deteriorated, damaged, failure area. To improve appearance. Long-term/high maintenance issue. To extend life.	25,195 SF	45	\$52,514
Power Plant	Site Improvements III, new, above ground tank	Upgrade above ground generator fuel tank to include overflow protection.	2 Units	46	\$19,360
Site	Salt storage building for grounds maintenance	Allow facility to store salt on site and purchase cheaper	1 Units	47	\$150,000
				TOTAL	\$18,183,452

MICHIGAN DEPARTMENT OF CORRECTIONS

“Committed to Protect, Dedicated to Success”

MEMORANDUM

DATE: August 28, 2018

TO: Patrick Warren, Warden
Macomb Correctional Facility

FROM: James McDonald, Physical Plant Supervisor

SUBJECT: Annual Physical Inspection 2018 - MRF

Administration Building

Deficiencies noted:

Sliding security gates and external doors are showing signs of wear and age. PA system is in continuous need of repair. Brick work is needed on the wall around the visiting room yard, the faces of the vertical laid bricks are popping off.

Findings/Observations:

The building is very sound structural wise. The elevator, windows, and interior doors are in good working order. All areas of this building are well illuminated, securable, and well maintained. Electrical, mechanical, and plumbing systems are operable and properly maintained. The building is in good shape and very clean. Sliding security gates are scheduled to be replaced October 2018.

Housing Units 1 – 7

Deficiencies noted:

Roofs on units 1– 6 have been replaced but are still in need of punch list repairs. The roof on HU#7 had several leaks but these leaks were addressed during the roofing project. The shower stalls in most of the units need tile work/replacement. All lockers and desks are in dire need of being replaced. Mechanical room doors located in the housing unit bathrooms need to be replaced. The top locks in HU's #1,2,3, and 6 are not working properly and maintenance staff are looking for a supplier of repair parts. Door control panels in HU#4 and HU#5 are beginning to fail more frequently and maintenance staff is finding some repair parts are becoming obsolete.

Finding/Observations:

Housing units are in good condition. Floors, walls, ceiling are clean and look good. Mechanical, electrical, water and sewage systems are working well. Handicap elevators in all housing units were replaced this year. These buildings are very clean, well maintained, and staff submits work requests in a very timely manner.

Unit 6 – Satellite Food Service Unit

Deficiencies noted:

Serving line is in poor condition and will need to be replaced

Findings/Observations:

Kitchen equipment for the most part is in good working order; the serving line unit needs replacement. The “stainless steel skins” that line the warming bins are paper thin and have been repaired on numerous occasions.

Food Service

Deficiencies noted:

Many of the ovens and pass thru coolers and warmers are dated and will need to be replaced. The Hobart mixer is becoming aged and is requiring frequent maintenance.

Findings/Observations:

Acoustical ceiling and diffusers are in good order. Floor tiles and grout are intact and appear to be water-tight in the dining area. Windows and doors to food service are operable; weather tight, and in good condition.

Building 300 School

Deficiencies noted:

Entrance doors are in poor condition and will be replaced when funding is available.

Findings/Observations:

Mechanical, plumbing, and electrical systems are in good working order. Building is very clean.

Health Care

Deficiencies noted:

Findings/Observations:

The interior is in good condition, well illuminated and maintained. There were no problems to note with the building structure itself or utilities.

Segregation

Deficiencies noted:

Findings/Observations:

Area is clean and well illuminated.

Intake Area/Sallyport

Deficiencies noted:

Findings/Observations:

Area is clean and well illuminated. Sallyport shack was replaced this year, pit is in very good condition.

Building 500 Warehouse, Commissary Store, Maintenance

Deficiencies noted:

8” backflow preventer on main water line has been leaking at times and will eventually need to be replaced

Findings/Observations:

The mechanical, refrigeration, sewage grinder (muffin Monster), and electrical systems are in good working order. Areas are clean, well-organized, and safeties and machine lockouts are in place.

Building 800 (Modular Unit)

Deficiencies noted:

None

Gun Towers

Deficiencies noted:

Findings/Observations:

Plumbing, heating, and electrical have been well maintained.

Fences, Zones, Fire Protection Systems, and Grounds

Deficiencies noted:

Some of the zones require replacement shaker wire as this is an ongoing maintenance issue. Fence fabric is tight, well adhered to the structural support network, posts are solid, and the razor ribbon is in good condition. Security/Detection/Cameras/Fire Protection systems are functional; however, the facility currently has 20 cameras that were damaged due to a lightning strike. Replacements cameras have been ordered by regional maintenance. Replacement and repairs on all related components are addressed as they arise. Landscape is well maintained. Light poles, lighting elements, and stanchions are sound and water tight.

Secondary Energy Plants, Generators and Propane Converter

Secondary Energy Plants are tested monthly, well maintained and are in working order.

Water Tower

Water Tower is clean and in good condition. The 8” backflow preventer has been leaking at times and will eventually need to be replaced.

Summary:

Several projects are in process or have been scheduled. The roof project is still in ongoing with great deal of punch list work to be completed. The asphalt project is currently underway and is expected to be completed prior to the project deadline. The sliding gate project is currently scheduled to begin in October. This facility is clean, organized, well maintained and there are no visible signs of abuse or neglect to facility buildings or adjacent structures.

MACOMB CORRECTIONAL FACILITY
5-Year Plan FY2020

Building	Project Description	Reason Description	Quantity & Units	Facility Priority	Cost Estimate
Site	Pavement Areas/Driveways/Roadway, Maintenance, Warehouse Parking and Loading Dock area. Main entrance from 26 Mile Road to Sally Port and parking lots.	To fix deteriorated, damaged, and failed areas, extend life, improve appearance. Safety and security of road integrity	41575 sf	1	\$360,000
Site	Replace Asphalt sidewalks on all inside perimeter areas to and from buildings including housing units, programs, food service. Etc.	To fix deteriorated, damaged, and failed areas, extend life, improve appearance, prevent prisoner injuries. Safety	37500 sf	2	\$160,000
Housing Units 1-6	Replace all inmate lockers and desks	To fix deteriorated and damaged furnishings. Prevent prisoner injuries. Safety	710 units	3	\$400,000
Site	Shaker Wire	Frequent system failures.	4000ft	4	\$40,000
Housing Unit 2	PK Heating Boiler	Age of system; parts availability; eliminate high maintenance costs and system failures; increase efficiency;	1 unit	5	\$25,000
Housing Unit 4	PK Heating Boiler	Age of system; parts availability; eliminate high maintenance costs and system failures; increase efficiency;	1 unit	6	\$25,000
Housing Unit 5	PK Heating Boiler	Age of system; parts availability; eliminate high maintenance costs and system failures; increase efficiency;	1 unit	7	\$25,000
Housing Unit 6	PK Heating Boiler	Age of system; parts availability; eliminate high maintenance costs and system failures; increase efficiency;	1 unit	8	\$25,000
Housing Unit 1	Replace Hot Water Heater - Housing Unit 1	Age of system(24yrs), eliminate high maintenance costs and system failures, increased efficiency. Provide for centralized laundry.	1 unit	9	\$30,370
Housing Unit 2	Replace Hot Water Heater - Housing Unit 2	Age of system(24yrs), eliminate high maintenance costs and system failures, increased efficiency. Provide for centralized laundry.	1 unit	10	\$30,370
Housing Unit 4	Replace Hot Water Heater - Housing Unit 4	Age of system(24yrs), eliminate high maintenance costs and system failures, increased efficiency. Provide for centralized laundry.	1 unit	11	\$30,370
Housing Unit 5	Replace Hot Water Heater - Housing Unit 5	Age of system(24yrs), eliminate high maintenance costs and system failures, increased efficiency. Provide for centralized laundry.	1 unit	12	\$30,370

Housing Units 1,2,	Replace Top Lock System	Age of system(24yrs), replacement parts are not available, failure to operate has increased.	420 units	13	\$600,000
Building 500	Replace Backflow Preventer	Age of system; parts availability; eliminate high maintenance costs and system failures;	1 unit	14	\$10,000
Water Tower	Replace Backflow Preventer	Age of system; parts availability; eliminate high maintenance costs and system failures;	1 unit	15	\$10,000
Building 200	Replace Steamer in Religious Kitchen	Age of equipment. Frequent failures	1 unit	16	\$6,000
Building 300	Replace Washing Machines	Age of equipment. Frequent failures	2 units	17	\$18,000
Housing Unit 6	Replace hot and cold serving line	Age of equipment. Frequent failures	2 units	18	\$8,000
Facility	Replace Exterior Doors	Age of equipment. Damaged and deteriorated. Improve appearance	15 units	19	\$200,000
Housing Unit 1,2,3	Officer Station Renovations	Increase efficiency, safety and security, and improve appearance	4 units	20	\$40,000
Facility	Security Camera Upgrade	Increase security and safety.	25 units	21	\$150,000
Housing Units 1-6	Replace Tile in Showers	Age of system(25yrs). Eliminate high maintenance cost; increase safety; improve appearance	44 units	22	\$100,000
Housing Units 1-6	Replace Interior Mechanical Room Doors in Restrooms	Age of system(25yrs). Eliminate high maintenance cost; increase safety; improve appearance	14 units	23	\$15,000
Facility	Replace PA System	Age of system(25yrs); eliminate high maintenance cost; frequent system failures	1 unit	24	\$350,000
Building 200	Replace Oven in Religious Kitchen	Age of equipment. Frequent failures	1 unit	25	\$3,500
Building 200	Replace Hot and Cold Pass Throughs on Serving lines	Age of equipment. Frequent failures	2 units	26	\$20,000

Building 200	Replace Hobart Mixer	Age of equipment; Frequent failures; parts availability	1 unit	27	\$20,000
Building 200	Replace Portable Hot Boxes	Age of equipment. Frequent failures	8 units	28	\$40,000
Building 200	Replace Ovens	Age of equipment. Frequent failures	3 units	29	\$35,000
Building 100	Renovation of Control Center	Age of system; Eliminate high maintenance cost; increased efficiency; improved appearance	1 unit	30	\$30,000
Facility	Repair Brick Work	To fix deteriorated and damaged brick; Improve appearance	1 unit	31	\$20,000
Building 200	Replace Kettles	Age of equipment. Frequent failures	3 units	32	\$65,000
Housing Units 4 & 5	Replace Door Controls - Units 4 & 5	Age of system(24yrs), replacement parts are not available, failure to operate has increased.	2 units	33	\$120,000
Housing Unit 5	Modify Doors to allow key to open, close, and top lock	Modify doors to be used as a level 2 unit	96 units	34	\$100,000
Facility	Build Shooting range for Pistols and Shotguns	Decrease training costs; Increase training availability and access	1 unit	35	\$100,000
Building 200	Add addition to kitchen area	Improving efficiency; Increased safety; Increase kitchen space being utilized for religious diets.	1 unit	36	\$900,000
				Total	\$4,141,980

MICHIGAN DEPARTMENT OF CORRECTIONS

“Committed to Protect, Dedicated to Success”

MEMORANDUM

DATE: 7/10/18

TO: Erica Huss, Warden Marquette Branch Prison

FROM: Sean Sundholm, Physical Plant Supervisor MBP

SUBJECT: Annual Facility Inspection Report for Marquette Branch Prison (MBP)

An Annual Facility Inspection was conducted per Item N of PD 04.03.100, Preventive and Emergency Maintenance for Correctional Facilities, and per Chapter 5 of the MDOC Physical Plant Operation Plan. The purpose of the inspection is to assess the need for future maintenance and to identify budgetary needs and establish spending plans. This year's annual inspection results are noted by building as follows:

MARQUETTE BRANCH PRISON

Recent Accomplishments

1. Turned the MSI garment factory into a building trades program building.
2. Built a 20x24 car port for housing and protecting alert response vehicle.
3. Upgraded fire suppression system in level 1 and 5 kitchens.
4. Upgraded the hot water recirculation system for entire prison.
5. Doubled the number of cameras at the prison.
6. Installed new generator and switch gear in power plant.
7. Installed full drapery concertina wire around entire perimeter.
8. Upgraded to all new LED interior yard lighting.
9. All new LED perimeter lighting.

Administration (Building 1)

- Renovation to include elevator, ADA chairlift for visitors, barrier-free restrooms for staff and visitors; upgrade plumbing, electrical (new transformer), heating, and air conditioning systems; and tuckpoint stone on backside exterior of building.
- Renovation of 2nd and 3rd floor of former warden's residence to include required floor-to-floor separation. Interior finish to meet "Class C" requirements.
- Repair/replace rear exit steps on main floor in the lunch room.
- Replace primary high voltage transformers with NEC approved distribution equipment.

Rotunda (Building 2)

- Replace existing window system - w/ insulated system. Replace windows at crows' nest on top of rotunda with aluminum framed units.
- Interior finish to meet "Class C" requirements (Partial Completion).
- Tuck point all sand stone on exterior walls.
- New trim/fascia on post 9.

Brooks Center (Building 3)

- Extend water line replacement from the main line to the various areas.
- Concrete walks need repair.

- Replace several steam coils in the air handling units.

B Block (Building 4)

- Tuck point all sand stone on exterior walls.
- Replace all exterior fans.

C Block (Building 5)

- Relocate existing electrical distribution panels to a non-resident accessible area.
- Replace West and North wall baseboard heating.
- Tuck point all sand stone on exterior walls.

D Block (Building 6)

- Relocate existing electrical distribution panels to a non-resident accessible area.
- Tuck point all sand stone on exterior walls.
- Need to replace the circuit breaker disconnect panels with a new panel board.

E Block (Building 7)

- Relocate existing electrical distribution panels to a non-resident accessible area.
- Tuck point all sand stone on exterior walls.

F Block (Building 8)

- Replace some of the shingles on this section of roof as several have blown off.
- Tuck point all sand stone on exterior walls.

Service Building – Central Kitchen/Gymnasium (Building 9)

- Concrete walks need repair.
- Repair two of the stair cases
- Replace primary high voltage transformers with NEC approved distribution equipment.
- Replace both kitchens make up air units and associated duct work
- Ceiling dry wall needs replacement.

ERT Building (Building 12)

- Repair eve.
- Exterior requires painting.

Trustee Kitchen (Building 14)

- Replace existing inefficient window system with an insulated system which will also reduce the number of windows.
- Replace the dishwasher because it has reached its serviceable life expectancy.
- Kitchen roof needs replacement. EPDM mechanically attached type system.
- Replace primary high voltage transformers with NEC approved distribution equipment.

Chapel – Level V (Building 15)

- Replace existing window system with insulated system. Replace frames and glazing of all casement units.
- Replace double exterior doors/frame/hardware.
- The chapel roof has become a high maintenance issue and should be replaced.

Property Room – Level I (Building 21)

- Concrete walks need repair.
- Needs to have the roof repaired (shingled building)
- Exterior metal siding needs to be replaced.

Transportation/Road stand (Building 24)

- Replace single pane windows to thermo pane and reduce quantity.
- Drop ceiling and replace doors for energy efficiency.
- Roof needs replacement with new shingles.

Post 12 (Gate House) (Building 25)

- Minor repairs needed to plaster walls.
- Caulking of windows needed.
- Roofing is in satisfactory condition; however, it contains asbestos.

O Dorm (Building 28)

- Remove and replace 4" thick concrete walk between dorm O (bldg. #28) and existing concrete wall on southeast corner of building.
- Replace shower ventilation.
- The roof needs to have new shingles installed.

G Block (Building 34)

- Replace existing electrical distribution panelboard and circuit breaker disconnect panels with a new panel board.

Guard Post – Orchard (Building 36)

- Concrete walks need repair.
- Masonry in poor condition.
- Painting needed.

Water Tank (Building 39)

- Install 10' fence with 30" razor wire around Water Tank to provide additional security.

Power Plant (Building 40)

- Replace main water line.
- Install 16' fence with 30" razor wire around Power Plant to provide additional security.
- Remove and replace concrete with 4" thick concrete at the door on east side of Power Plant.
- Replace condensate line in main tunnel to Power Plant; existing line, covered with asbestos, continues to leak and requires patching.
- Replace the insulation in the generator room. The old insulation is falling off in large pieces and is in danger of falling into the running diesel generators.
- We need to upgrade the NOVAR building control system as current one is no longer supported by software and repair parts.

Hog Barn/Engineering Storage (Building 43)

- Building in poor condition—roof, flooring, and windows need replacement; masonry needs repairs. Demolition request submitted 2/14/05

Creamery (Building 44)

- Replace roof. Contains asbestos. Dairy operations closed 8/1/2010 Future use to be determined.

Dairy Barn (Building 45)

- Dairy operations closed 8/1/2010 Future use to be determined.
- Replace roof.
- Masonry needs repair.
- Complete changeover to new transformer; isolate old transformer.

- Extend water lines to remaining areas—creamery, bathrooms, faucets, and showers.
- Exterior trim requires painting.

Bull Barn (Building 46)

- Roof and windows need replacement. Future use to be determined.

Sallyport/Check station (Building 48)

- Concrete walks need repair.
- Electric gates and bars need repainting, lead based paint currently.
- Needs new shingled roof and trim.

Sawmill(Building 64)

- Trim needs painting.

A-B lock (Building 65)

- Remodel the shower/bathroom area including tiles, flooring, ventilation and some plumbing as this is a high maintenance issue.
- Several air handlers needs replacement.
- The roof is in fair condition but will need replacement within a few years.

Sewage Screening Plant (Building 66)

- Exterior Doors are rusted and require replacement.
- The concrete stairs need to be replaced.

Hog Barn – Boiler Room (Building 82)

- Building in poor condition—roof and windows need replacement; masonry needs repair. Demolition form submitted 2/14/05.

N Dorm (Building 94)

- Replace damaged insulated glazing - 2 X 4 casements.
- Remodel shower/bathroom areas. The tiles, flooring, ventilation and some of the plumbing are high maintenance areas and need a complete remodel.
- N dorm roof has about 2 years of life expectancy left.

Programs/School/Library/Property Room-Level V (Building 96)

- Replace existing window system on 2nd and 3rd floors for energy efficiency.
- Replace primary high voltage transformers with NEC approved distribution equipment.
- Extensive concrete repair on exterior of this building are needed.

Warehouse (Building 97)

- Replace single exterior door/frame/hardware.
- Install 60x120 feet of blacktop.

P Dorm (Building 98)

- Replace shower ventilation.
- Remodel shower/bathroom areas. The tiles, flooring, ventilation and some of the plumbing are high maintenance areas and need a complete remodel.

Cylinder Storage Shed (Building 100)

- Rusting doors may need replacement depending on future utilization of building.

Gun Posts 1, 2, and 3

- Replace roofs.
- Exterior needs painting.

Site

- Parking Lots north and west of cell block B - Seal cracks and place 1.5" bituminous pavement overlay over existing bituminous pavement on parking lots.
- Drive between lot north of cell block B and lot west of cell block C down to Post 4 - Remove and replace full depth of bituminous pavement. Enlarge radius around curves and widen drive.
- State vehicle parking lot - Seal existing cracks and overlay with 1 1/2" bituminous pavement northeast of the Brooks Center. Add gravel shoulder to the northeast edge of the pavement.
- Replace broken and cracked sidewalks and handball court in Level V. Sidewalks are heaving and are a safety and security concern.
- Replace full depth bituminous drive from sally port entrance to A dorm.

MANGUM FARM

Dairy operations closed 8/1/2010 Future use to be determined. Includes buildings numbered, 52,53,54,55,58,69 and Weiger Farm.

Service Building (Building 52)

- Windows need replacement.
- Exterior needs painting.
- Concrete walks need repair.

Cattle Barn (Building 53)

- Exterior needs painting.

Farm Storage – Tools/Ouonset (Building 54)

- Exterior needs painting.

Horse Barn (Building 55)

- Exterior needs painting.

Feed Storage Barn (Building 58)

- Exterior needs painting.

Cc: Robin McCarthy, Acting/Administrative Officer
Daniel Smith
Jeff Niemi

**Marquette Branch Prison
5-Year Plan FY2020**

Building	Project Description	Reason Description	Quantity & Units	Facility Priority	Cost Estimate
site	Replace the PPD system at MBP	The existing PPD system at MBP is obsolete and parts are hard to come by.	1 system	1	\$1,600,000
Warehouse	Construct Warehouse Building outside secure perimeter	Reduce vehicle traffic within the secure perimeter.	18,000 SF	2	\$2,100,000
Level 5 kitchen	Replace existing make-up air units in the level 5 kitchen	The two existing make-up air units in the level 5 kitchen have reached their useful life expectancy. They have become a high maintenance issue and are leaking water into the ceiling of the kitchen causing insulation and drywall to become saturated and fall	2 Units	3	\$110,000
O dorm	O dorm roof is in need of replacement.	The existing roof has reached its life expectancy and is a constant high maintenance issue.	1 unit	4	\$125,000
Site	Transformer room upgrade	There are several transformer rooms on site with outdated transformers and isolation switches not meeting current codes and present a safety concern.	4 units	5	\$1,258,000
N, P & A dorm	N, P&A dorm are in need of a complete shower / bathroom remodel	The tiles, flooring, ventilation and some plumbing need to be remodeled as these are high maintenance area and the poor ventilation is causing the concrete and tiles to be constantly wet and damaged. Would also like to install I-Con water saving systems for the sinks, toilets and showers.	55340 SF	6	\$99,500
N and P dorms	Replace the existing shower ventilation	Dorms N and P are priorities to replace existing ventilation.	6 units	7	\$35,000
Administration	Remodel to include elevator, ADA chairlift for visitors, barrier-free restrooms for staff and visitors; upgrade plumbing, electrical (new transformer), heating, and air conditioning systems. Tuckpoint stone on exterior of building. Renovation	Needed to comply with ADA guidelines.	22,500 SF	8	\$985,300
Kitchen (Trusty)	Replace existing high-maintenance window system with energy-efficient insulated system.	ENERGY SAVINGS	1,000 SF	9	\$61,000
Site	Replace road from level 1 entrance up to the warehouse	The existing pavement is damaged from heavy use and freeze thaw cycles and is need of replacement.	16000 SF	10	\$259,000
Site	Pavement/Driveway/Perimeter Road, Bituminous, New Full Depth. Install full depth pavement for new security road around entire outside of perimeter fence.	To fix deteriorated, damaged, failure areas. To improve vehicle traffic flow. Long-term/high maintenance issue. Dirt road that is existing is extremely rough and would be impossible to get any speed on perimeter road in case of emergency. Perimeter road does not extend around entire facility.	44,400 SF	11	\$298,400
Level 1 and 5 kitchens	Dishwasher replacement	The dishwashers in the trusty kitchen and level 5 kitchen have reached their life expectancy and are in need of a replacement as they are constantly breaking down and parts are getting hard to use.	1 Unit	12	\$185,000

Cell Block C, D, and E	ELECTRICAL DISTRIBUTION SYSTEM-Remove existing distribution equipment. Relocate existing distribution panels to a non-resident accessible area.	Existing equipment has become a security problem. NEC compliance. Personal safety. Panels are located on an interior cellblock wall and 20 ft. above finished floor. A platform must be extended just to reach the panels. Location is unsafe and a NEC violation.	9 Units total	13	\$115,000
level 5 programs	Complete window replacement in the level 5 school/ programs building	Install new windows in the level 5 programs/school building as the old single pane system requires constant maintenance.	All Units	14	\$115,000
site	Facility wide AHU upgrade (NOVAR Controls)	This is an energy savings issue as MBP is having to switch to pneumatic controllers as the electronic controls break down. Parts are no longer available.	All units 20	15	\$210,000
site	MBP condensate line replacement	Replace the condensate line from the power plant through the tunnel as the current lines are at least 45 years old with corroded fitting and joints and the existing lines continually leak and are a high maintenance issue.	all lines	16	\$45,000
Rotunda	Rotunda window replacement	Replace the existing window system in the rotunda. The existing metal framed windows are a low energy type and should be replaced with a high efficiency type replacement.	All units	17	\$50,000
Chapel (Level V)	Replace existing window system - w/ insulated system. Replace frames and glazing of all casement units.	Damaged. To Eliminate High Maintenance Condition. Units are fogging, hardware is breaking.	324 SF	18	\$35,400
Cell Block "G"	ELECTRICAL DISTRIBUTION SYSTEM-Replace switchboard. Replace existing kinney switchboard and circuit breaker disconnect panels with a new switchboard.	Existing equipment is old and has reached the end of its useful life. Replacement parts are either hard to find or no longer available. Service reliability. Preventative maintenance.	1 Unit	19	\$91,900
Kitchen (Trusty)	The trustee kitchen roof is in need of replacement it is an EPDM mechanically attached system and is beyond its life expectancy.	The trustee kitchen roof is in need of replacement it is an EPDM mechanically attached system and is beyond its life expectancy.	1 Unit	20	\$150,000
Site	Parking Lot, Bituminous, Overlay Existing with Bituminous. Seal cracks and place 2.0" bituminous pavement overlay over existing bituminous pavement on parking lots north and west of cell block B.	Due to age of system. To prevent failure. Long-term/high maintenance issue. Due to freeze-thaw cycles. Parking lots north and west of the administration building need pavement overlay and crack seal. Lots have some cracking pavement overlap along with seal cracking would extend life.	72,440 SF	21	\$364,800
Hog Barn	Hog Barn Demolition	The Hog Barn is no longer utilized and is in poor condition and needs to be demoed	4,600 SQ FT	22	\$750,000
Hog Barn boiler room	Hog Barn boiler room Demolition	The Hog Barn boiler room is no longer utilized and is in poor condition and needs to be demoed	360 sq. ft	23	\$15,000
				Total	\$9,058,300

MICHIGAN DEPARTMENT OF CORRECTIONS

“Committed to Protect, Dedicated to Success”

MEMORANDUM

DATE: August 15, 2018

TO: Gregory Skipper, Warden
Bryan Griswold, Facility Manager

FROM: Paul Tefft, Physical Plant Supervisor

SUBJECT: 2018 Annual Physical Plant Report: Michigan Reformatory (RMI)

G-BLOCK / C-WARD BUILDING #1 (24,900 Sq. Ft.)

G-Block was closed in January of 2017. This building was built in 1887 and is generally in good structural condition. The structure consists of two floors. The first floor is an 83-bed inmate cell block. The second floor houses the Deputy Wardens and support staff offices.

Exterior is brick and is in good physical condition, but the brick could use some tuck point repair to the masonry joints, cosmetic only. The roof was reroofed in 2003 and is in good shape with remaining life to be estimated lasting until 2024. The foundation is stone and has no defects.

Interior, first floor:

G-Block is a two-level cell block constructed of concrete with plaster ceilings and walls and has very few cracks and is structurally sound. The concrete floor has area drains for cell flooding and is in very good shape. Electrical and plumbing was completely remodeled in 2000 and is working perfectly. Windows are aluminum frame and in good working condition however “R” value is a concern. The locking system is old and still in working condition however it needs to be replaced since repair parts are no longer available. Doors and frames have no rust and are in good working order. The heating system is low pressure steam and is in good working condition. There is not air conditioning in this cell block. The cells on base floor have had the lockers mounted on the walls and expanded metal welded to the bars for a dog program.

Interior, second floor:

C-Ward has plaster ceilings and masonry or glazed tile walls and is in good structural shape. The floor is Terrazzo and in good condition however there is some wear in areas. Doors are wood construction and functioning. Windows are aluminum frame and functioning well; however, “R” value is a concern. Electrical is in satisfactory working condition. Plumbing is in good working condition. Heating is low pressure steam and controls are being upgraded on an as needed basis. Air-conditioning is supplied with window mounted units, and the air-conditioners are in need of replacement due to age and low efficiency.

**OLD DETENTION BUILDING #2
(3,900 Sq. Ft.)**

According to the 1981 Consent Decree, this area is prohibited for use as a housing unit. It contains cells, but the cell doors have been removed. The lavatories and toilets have also been removed and the sanitary drain lines are plugged. The building is structurally sound, but the hall leading to the main structure and the main structure itself needs a new roof. The interior of this space was painted with lead-based paint and during the closure of the prison this area went unheated causing major deterioration to the paint. This was cleaned up but remains unusable until further notice. This building has been requested for demolition as part of the department's removal of unusable building.

**H-WARD / D-WARD BUILDING #3
(17,200 Sq. Ft.)**

This building was built in 1887 and is in very good structural condition. The structure consists of two floors. The first floor, H-Ward houses the prisoner's educational classrooms. The second floor was designed to be an Educational Extension Center and Computer Lab.

Exterior is brick and in very good condition and does not need any attention currently. The roof was replaced in 2003 and is in fair condition with roof life to be estimated lasting until 2021.

Interior first floor H-Ward:

This ward was remodeled in 2000 and is in good condition. Ceilings are drop in type with good insulating factors of R-23. Walls are of steel stud construction with fire rated plaster board. Windows are aluminum frame and "R" factor is a concern. Flooring is construction grade tile in halls and bathrooms and commercial grade carpet squares in rooms. Electrical and plumbing is new and meets current codes. During the 2000 remodel the HVAC system was installed by contractors, the system consists of Trane AHU's with cooling. Heating is low pressure steam with Honeywell controls and is in very good condition.

Interior second floor D-Ward:

This ward has also been completely remodeled and an occupancy permit was received in October 2007 finalizing this project.

**E-WARD / A-WARD BUILDING #4
(21,800 Sq. Ft.)**

This building was built in 1887 and is in good structural condition. The structure consists of two floors. The first floor, E-Ward houses Quartermaster Services. The second floor, A-Ward is an open bay housing unit.

Exterior is brick and is in need of minor repair. The roof on this building was replaced in 2000 and is in fair condition with roof life to be estimated lasting until 2021.

Interior first floor, E-ward (Quartermaster):

The walls are plaster and structurally sound with some repair being needed below the A ward bathroom. The ceiling was replaced in 2000 with drop in tiles and has a good "R" rating of 23. The doors and frames were replaced in 2000/2014 and are in good working condition. A new employee bathroom with a shower was installed in 2000. New electrical was installed in 2000. The heating is low pressure steam and is working very well. Central laundry was added in 2014 including a pipe

chase being added to connect the building to the tunnel system. Steam, electrical, plumbing and mechanical all passed inspection, and laundry went on line in August of 2014. Laundry equipment lease has been bought out in September 2018, all equipment is now facility owned.

Interior second floor A-Ward;

This Ward was converted to an open bay housing unit in 2008. It houses 120 Level 2 Prisoners. A unit has plaster ceilings with ceiling fans for air flow control. The unit has a new electrical service, a new bathroom, plumbing service and a large day room all in 2008. The heating system is new with low pressure steam converted to forced air circulation with digital thermostatic control. Windows are aluminum frame and fully functional. There is no air conditioning.

F-WARD / B-WARD BUILDING #5 (20,600 Sq. Ft.)

This building was built in 1887 and is in good structural condition. The structure consists of two floors. The first floor F-ward houses Medical Services. The second floor is used for level II recreation services.

Exterior is brick and in good structural condition. The roof was replaced in 1993 and has been rated for zero years remaining in its life expectancy.

Interior first floor F-Ward:

The walls are plaster and in very good condition. The ceiling is drop in type and was replaced in offices in 2002. The electrical is in good condition and serving the needs of this area. A new water distribution system was installed in 2002 and supplies soft water to the ward. The heating is low pressure steam and is in good condition. In 2009 three new air handlers for air conditioning were installed.

Interior B-Ward:

This is an open ward with plaster walls and ceiling. The floor is cement. Doors and windows are in good function order. Electrical is sufficient for the current needs and plumbing was replaced in 1999 and is in good working order. Heating is low pressure steam and in good working order.

I-BLOCK BUILDING #6 (97,500 Sq. Ft.)

This building is constructed of masonry and reinforced poured concrete and is structurally sound. I-Block is a five-story housing unit with two hundred and fifty double bunk cells and two hundred and fifty single bunk cells. It employs group showers on each floor and individual toilet and hand sink in each cell.

Exterior: The roof was replaced in 2001 and is in fair condition with roof life to be estimated lasting till 2021/2024. The exterior walls are a mix of steel framed windows in good working order and brick that is in good condition. The foundation is concrete and solid.

Interior: The walls, floors and ceilings of this building are made of steel re-enforced concrete and are in good condition. This building has an all new sanitary drainage system and all new copper cold water and copper hot water distribution system and a new copper hot water recirculation system. This building also has a newer sprinkler system, fire alarm system and ventilation system. The windows in this unit are single pane and are in good repair however energy efficient windows would

help with energy consumption and prisoner comfort. Electrical panels for cell power in the I-block pipe chase need replacing because of the high moisture levels. The locking systems are old and antiquated both electrical and mechanical type systems and need up dating although it is still operational. The heating system is low pressure steam and in very good condition.

J-BLOCK BUILDING #7 (92,500 Sq. Ft.)

This building is constructed of masonry and reinforced poured concrete and is structurally sound. J - Block is a five-story housing unit with two hundred and fifty double bunk cells and two hundred and fifty single bunk cells. It employs group showers on each floor and individual toilet and hand sink in each cell.

Exterior: The roof was replaced in 2000 and is in fair condition with roof life to be estimated lasting till 2019. The exterior walls are a mix of steel framed windows in good working order and brick that is in good condition. The foundation is concrete and solid.

Interior: The walls, floors and ceilings of this building are made of steel re-enforced concrete and are in good condition. The locking system is old and needs to be up dated although it is still operational. This building has an all new sanitary drainage system and all new copper cold water and copper hot water distribution system and a new copper hot water recirculation system. This building also has a newer sprinkler system, fire alarm system and ventilation system.

The windows in this unit are single pane and are in good repair however energy efficient windows would help with energy consumption and prisoner comfort. Electrical panels for cell power in the J-block catwalk pipe chase need replacing because of the high moisture levels.

The lighting system in the catwalk pipe chase needs to be up dated and not all floors have switches to be able to turn out the lights when not in use. The heating system is low pressure steam and in very good condition. Roof lighting was upgraded to LED fixtures in June of 2014.

CUSTODIAL MAINTENANCE / LIBRARY BUILDING #8 (22,930 Sq. Ft.)

This building was built in 1887 of masonry and reinforced concrete and is structurally sound. The structure consists of two floors. The first floor previously housed (CMT) Custodial Maintenance Training. The second floor houses the Prisoner Library.

Exterior:

The exterior is brick and it is fair condition. The roof is in poor condition with roof life to be estimated lasting till 2018, and the foundation is sound.

Interior first floor CMT:

This area is an open educational setting with plaster walls and ceilings and tile floor. The electrical and plumbing systems were replaced in 2000 and an electrical sub-station for institutional electrical upgrade was also installed in this area. The heating is low pressure steam and in good condition.

Interior second floor Library:

This has a large open area and offices. The floor is carpeted. The ceiling is drop in type and has a

good “R” value. The plumbing is old and in need of replacing but is currently in working order. The electrical has had some updating in 2013 with addition for electric law library including LAN drops and extra receptacles for future use. The heat is low pressure steam and in good condition.

CHAPEL BUILDING #17
(6,400 Sq. Ft.)

This building is made of poured concrete, was built in 1970 and is in good condition. A new roof was installed in 1994. This roof system is in fair condition with roof life to be estimated lasting until 2019. The floor is commercial tile. The windows are aluminum framed and in good working condition. The main sanitary sewer servicing this building was replaced in 2001. The bathroom facilities and electrical systems are in good condition. The heat is low pressure steam exchanged to hot water and in very good condition.

CANNERY / GROUNDS MAINTENANCE #18
(10,954 Sq. Ft.)

This building is of masonry and wood construction and was built in 1932. This building is in fair condition and could use some repairs to the brick mortar joints. The wood-bow string trusses have shown signs of cracking and have been supported with steel columns. A new roof was installed over the old roof system in 2000 by maintenance staff. The electrical was updated in the early 1990’s.

KITCHEN/RECREATION BUILDING #24
(68,370 Sq. Ft.)

This building is constructed of masonry and reinforced concrete. This is a two-story building. The first floor houses the dining hall and food preparation area. The second floor provides a recreation area.

Exterior: The sloped shingled roof over the gym was replaced in the fall of 2014 by Mihm Ent. This project installed an insulated nailer base and high reflective asphalt base shingle with the landing area a white EPDM 60 mil material. Prior replacement was done in 1998 by RMI maintenance. The exterior brick needs repair with replacement of brick and mortar and cement work.

Interior, first floor: The ceilings in the food prep areas were replaced in 2000. The floor in the food prep area, commissary, bakery and serving line is structural mortar joint and tile. We routinely repair broken tile and re-fill mortar joints. The floor in the dining area is terrazzo and shows wear in a few areas though, overall it is in good condition. Entry doors to main dining area need to be replaced. The ceiling in the dining area is plaster and in good condition. The plumbing for this area is in good condition. The heat is low pressure steam and in good condition.

Interior, second floor: The Recreation area was remodeled in 1992. This included new bathroom and electrical up grade. The walls are plaster and need some repair; the floor is carpeted with hard wood flooring on ends and is in good condition. The heat is low pressure steam and in good condition. With the roofing replacement in 2014 the mechanical system was overhauled for the makeup air system and the roof ventilation. The controls for both systems have been upgraded to work on temperature and humidity.

COMMISSARY BUILDING #25
(7,176 Sq. Ft.)

This area is constructed of masonry and steel construction. It is in good condition and had a new single ply roof installed in 1994 with roof life to be estimated lasting till 2021. The plumbing and electrical are in good condition.

ADMINISTRATION BUILDING #26
(18,558 Sq. Ft.)

This building is a three-story structure and is in good structural condition. The first floor serves as the main entrance to the prison and has a visitor waiting area and restroom facilities. The second floor houses the warden offices, business offices, training room, staff bathrooms, and a conference room. The basement houses the arsenal, and employee break room.

Exterior:

The roof was replaced in 1992. Some areas of the roofing are again in need of repair with roof life to be estimated lasting till 2014/2019/21 depending on the area. A stair tower exists for emergency egress, but an elevator is needed to meet barrier free code. The barrier free ramp leading to the lobby could use some patching. The windows are a mix of aluminum, wood frame and steel frame. All are single pane and not energy efficient.

Interior first floor:

The front stair entrance is concrete and in good condition. There is a double glass double door entrance with double lighted panes. The floor in the entrance way is Terrazzo and is in good condition although shows some wear. Just inside the doors is the staircase that leads to the second floor which is terrazzo and in fair to moderate condition. From the entrance a second glass door to the front desk/waiting area. The waiting area and hall floor is commercial tile and in good condition. The walls are plaster and trimmed in stained wood. The visitor bathroom facilities are in fair condition and functioning properly.

Interior second floor:

The ceilings are cement, covered with insulating tile or simply painted. The walls are wood stud and steel stud covered with commercial grade drywall. The doors are steel framed and are in good condition. The electrical is old but functional. The bathrooms and plumbing are old but in working condition. The windows are wood with single pane glass and are not in good functioning order.

GUARD POSTS BUILDING #32 (1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11)
(826 Sq. Ft.)

Guard Post 2, 4, 8, and 11 are the only posts being utilized at this time. These posts are in good working order. The remaining posts are in varying condition; however, all are winterized.

TRAINING BUILDING #63
(2,100 Sq. Ft.)

This building is a wood constructed building which was built originally as a Deputy Warden's

residence. It is one story with a full basement. The building is in good condition and has a newer electrical service, the plumbing was replaced in 2002 and the roof was installed in 2000 with roof life to be estimated lasting till 2024.

WAGON STORAGE BUILDING #75-A
(3,960 Sq. Ft.)

This building is open front with steel roof. It has no utilities and is used as a tool shed for equipment storage. The trusses on this structure are in need of some attention. Some paint is needed on trusses and roofing components.

TRUCK GARAGE BUILDING # 75-B
(4,480 Sq. Ft.)

The east end of this building is of wood construction and is in fair condition. The flat roof on the west end was replaced in 1993 and is in good condition. The sloped roof was re-roofed in 2005. In 2009 and 2010 the electrical service was upgraded in the basement and at the north east end of the main floor. The wood overhead doors need to be replaced.

AUTO SHOP BUILDING #75-C
(2,304 Sq. Ft.)

This building is of wood and masonry construction and is in good condition. The roof was replaced in 1993 and is in good condition. The electrical system was upgraded in 2009. The east end of the building houses the area's ERT vehicle.

HORSE BARN BUILDING #76
(8,832 Sq. Ft.)

This building is of masonry and wood construction. The roof is made of asbestos shingles and is in need of replacement. Structurally, this building is 75% unusable do to the upper level floor collapsing. The second level was used for an indoor shooting range for several years and is contaminated by lead and pigeon droppings. The electrical service was upgraded in 2010.

MAINTENANCE BUILDING #87
(15,984 Sq. Ft.)

This southern portion of this building is masonry and the newer north portion is a prefabricated steel structure. The electrical and plumbing systems are adequate. The ceiling in the old part of this building is cork insulation and continues to deteriorate and fail. This should be removed when time allows. An 80'X90' addition was added to the northeast corner of this building. The new building is steel construction and is in excellent condition.

**POWER PLANT #81
(18,168 Sq. Ft.)**

Building constructed in 1970. This building is constructed of brick and concrete. The Power Plant houses three boilers, number 1 and 3 replaced in 2017. Five water softeners replaced in 2015. Three water heaters replaced in 2017. Interior salt storage silo installed in 2015. Two Caterpillar generators, with above ground fuel storage tank installed in 2016.

**WAREHOUSE #44
(34,800 Sq. Ft.)**

Building constructed in 1966. This building is constructed of brick and concrete. The warehouse has two loading docks, two freezers, one cooler and one dry storage room. All other area is open area for warehouse racking and storage.

INFRASTRUCTURE

New security camera system was installed at the beginning of 2016.

Most of the drives and parking lots are in fair condition. Much of the interior drives were replaced when sewer and storm separation was completed in 2013.

The steam and condensate system are in need of repairs near Food Service and heading toward the south wall. The electrical primary system is in excellent condition with a few of the secondary feeds needing to be upgraded. Telephone, security systems and fire detection systems are in working condition, but the fire alarm panel stays in trouble most of the time.

The sanitary sewer was separated in 2013 with separation being made throughout the facility and a new drain for the majority of the facility.

The perimeter security systems were upgraded in 2016 during the Sally port renovation. Fence security system was upgraded to a shaker system. Razor ribbon and fencing enhancements were made 2008 and once again during the sally port renovation.

The perimeter wall is constructed of Ionia brick on a stone foundation. The brick is very soft and not glazed and therefore retains moisture. The moisture content and winter freezing leads to a high level of deterioration. In 2003 the wall was capped and sealed, however the moisture and subsequent freezing continues to deteriorate the wall.

Security camera system was upgraded in 2018 with all equipment being replaced.

Fire alarm system was upgraded in 2018 with all equipment being replaced.

Energy performance Project covering water controls, building automation, boiler replacement, lighting upgrades interior and exterior were completed in 2017 and 2018.

New fiber optic cable was installed throughout the institution in 2017 and 2018.

Phone system complete upgrade was made in 2017.

State of Michigan server and all network switches were replaced in August of 2018.

Security fence detection server replaced and upgraded to the Starnet 2 system in August of 2018.

RIVERSIDE CORRECTIONAL FACILITY

Responsibility for Riverside has been transferred from Regional operations to Michigan Reformatory. Currently two buildings are occupied, Administration houses Parole and Probation, OMNI lab located on the 2nd floor and State Police located on the ground floor. The Maintenance building located by the sally port is utilized by maintenance staff.

DEERFIELD CORRECTIONAL FACILITY

Responsibility for Riverside has been transferred from Regional operations to Michigan Reformatory. All buildings at this location are closed with utilities shut off.

Paul Tefft, Physical Plant Supervisor

MICHIGAN REFORMATORY CORRECTIONAL FACILITY
5-Year Plan FY2020

Building	Project Description	Reason Description	Quantity & Units	Facility Priority	Cost Estimate
Administration	Replace existing window system-w/insulated system. Replace all single glazed, wood framed windows.	Worn out. Damaged. To eliminate high maintenance conditions. To provide consistent comfortable temperature for visitors and staff.	Numerous	21	\$65,000
Site	Steam distribution Repairs for underground tunnel and direct barried piping.	To repair and replace failing system due to age.	450 lf	14	\$476,300
Site	East Parking Lot & Driveway, Bituminous Remove & Replace Full Depth.	Due to age of system. To prevent failure. To fix deteriorated damaged, failure areas. To prevent personal injury. To improve appearance. To improve traffic flow. Long-term/high maintenance issue. Service reliability. Prevent winter freezing.	22,000 sq.ft.	17	\$400,000
Site	Payment/Driveway/Perimeter Road, Bituminous. Overlay Exiting with Bituminous Driveway located between Wall Street and Sally port and driveway down to power plant. Overlay existing with new 3" new bituminous payment.	Due to age of system. To prevent failure. To fix deteriorated damaged, failure areas. To prevent personal injury. To improve appearance. Service reliability.	80,000sq.ft.	16	\$185,000
Site	Replace steam and condensate line from the interior of the prison to the south exterior, due to failure.	Current lines are buried in a clay tile with no support or insulation, the lines have many leaks causing high cost of makeup water chemicals in the boiler system.	300lf	4	\$125,000
Dairy Barn	Due to the condition of the roof, the structure is no longer sound and needs removal.	Facility Recommends removal of barn. The status of the structural is unknown and needs to be evaluated. The roof leaks badly risking damage to timbers. This project includes the abatement of the existing roofing materials. McDonald Roofing Company (2014) rated the roof condition as very poor. Estimated cost to repair.\$135,000.	1	13	\$300,000
Building #2	Due to the condition of the roof, the structure is no longer sound and needs removal.	The roof on this building is over twenty years old causing deterioration of building and contents. Due to correctional standards the building is not feasible for housing inmates. There is no plan to use this building. McDonald Roofing Company estimated the cost of this building roof to be \$122,000. (2104)	1	12	\$300,000
Perimeter Wall	Repair/Reseal the interior and exterior of RMI's Perimeter Wall	Wall was painted and sealed several years ago. The paint/sealer is peeling away. The top of the wall needs capping to stop water damage.	6,000 sq.ft.	18	\$225,000
Lift station/Grinder	Replace existing machine	Due to the age and condition of the sewage grinder, this unit is past its expectant life cycle and is need of replacement.	1	6	\$60,000
Library	Re-plumbing Library restroom and drains.	The library currently has one prisoner and no staff restrooms. The plumbing needs to be brought up to code and restrooms added and replaced.	2	15	\$30,000
F-Ward/B-Ward Bldg	Repair/Replace Roof and Insulation	Survey from McDonald Roofing Company gives this roof a zero life expectancy.	10,300 sq. ft.	3	\$250,000
Maintenance Bldg.	Repair/Replace Roof and Insulation	Survey from McDonald Roofing Company gives this roof a zero life expectancy.	5400 sq.ft.	9	\$250,000

Library Roof	Repair/Replace Roof and Insulation	This roofing system has experienced failure during storms and insulation has been damaged causing separation of EPDM.	7500 sq. ft.	5	\$250,000
Administration	Repair/Replace Roof and Insulation	Survey from McDonald Roofing Company gives part of this roof a zero life expectancy and the rest a one-year life expectancy.	7000 sq.ft	2	\$250,000
Rotunda Roof	Repair/Replace Roof and Insulation	Survey from McDonald Roofing Company gives this roof a zero life expectancy.	5000 sq.ft.	7	\$250,000
A/E Ward	Repair/Replace Roof and Insulation	Survey from McDonald Roofing Company gives this roof a zero life expectancy.	10,300 sq. ft	8	\$250,000
Food Service	Replace Dining Room floor.	Current floors are beyond their useful life and have created poor sanitary conditions for occupants. This project calls for the installation of an epoxy floor system.	8000 sq. ft.	20	\$85,000
Food Service	Replace ovens	age of ovens is causing continuous failures, replacement of units is needed	4	19	\$125,000
Food Service	Steamers/veggie Steamer	these units are obsolete and require replacement for continued use	2	11	\$60,000
Power Plant	Replace make up water preheater	the shell and tube heater have failed.	1	10	\$45,000
Power Plant	Replace #2 Boiler	Boiler #2 is a backup boiler for the automated power plant that cannot be operated without 24/7 coverage. Downsizing the boiler for summer time use would increase the sites ability to lower utility costs	1	22	\$350,000
Administration	Gate Controls and operator replacement	security and functioning needs	3	1	\$200,000
				Total	\$4,531,300

MICHIGAN DEPARTMENT OF CORRECTIONS

“Committed to Protect, Dedicated to Success”

MEMORANDUM

Date: September 10, 2018

To: S. L. Burt, Warden - MCF

From: Warren Herring, Physical Plant Superintendent – Muskegon Facility (MCF)

Subject: **Annual Physical Plant Report - MCF**

As required by PD-04.03.100 Preventive and Emergency Maintenance for Correctional Facilities, the annual physical plant inspection for MCF was completed for the year 2018. This inspection provides an overview of the general condition of the building's envelope and grounds. MCF was built in four stages starting in 1973 until Unit 6 was completed in 1986. The facility and building envelopes are still in good condition after 43 years of service.

Repairs to the MCF Parking Lot, pathways and roads continue due to reoccurring potholes and deterioration from age. All MCF paved surfaces need to be replaced, and where practical, such as walkways, I will recommend concrete.

All building roofs, apart from Food Service which was replaced in 2008, leak and need to be repaired and or replaced. Flat roofs such as the LTA/school building need to be replaced entirely.

Trees hanging over and shading buildings continues to contribute to this facilities roof problems, especially the LTA/School building. Many trees were removed previously, but I will recommend that any tree within 30 feet of a structure be removed level with the ground, preferably having the stump ground out.

Apart from Housing Unit 6, Windows in the facility are single paned allow much heat loss and air infiltration. Parts such as hinges on these windows are failing and need to be replaced. Adding to this problem is the lack of original manufacturer name and or model, making finding replacement parts difficult. Substitute parts have been found, but now they are being discontinued by that manufacturer. Doors are also coming apart at seams. Excluding 6 Unit, all exterior windows and many doors throughout the facility need to be replaced.

Fences are sound but showing age. The enhancement project is underway. There are some locations that posts have been bent that were reported and anticipated to be corrected as part of the enhancement project. We will report this to the contractor for follow up.

Overview of Physical Plant accomplishments - MCF

Energy efficient LED bulbs continue to be installed in many locations in the Administration Building, Food Service Dining Room, and yard, but some locations are remaining and continue to be upgraded as time and resources allow.

New water saving valves have been and continue to be installed in several locations.

The control center continues to be adapted to accommodate the new camera and PALS/PPD system. Further refinements still need to be made.

Installed and replaced floor tile in food service.

Completed the new boilers installation.

Substantial completion of the new chiller system and controls in HC, LTA, FS has been reached. Work on integration of the controls with Siemens network is still in process.

The new PELS/PPD system testing was completed, but full implementation is still pending better storage and accountability,

Completed further necessary modifications to the video surveillance and lighting systems.

Completed further tree removal.

Finished implementation of new boiler water conditioning system.

Carpet replacement and painting was finished in the Account Tech's office, Business Managers office, and the Wardens office.

A new vegan/Kosher oven was installed.

Numerous plumbing repairs throughout the facility.

Main entrance gates relocated.

Welding booths added in welding classroom.

Security Zone wiring continues to be replaced due to both incorrect wiring and damage by staff.

Annual review of Physical Plant - MCF

Housing Units

The housing units are structurally sound. Painting is ongoing. Most of the housing units have roof and plumbing leaks due to the age of the roofs, pipes and inherent abuse. Windows are single pane and not energy efficient. A few doors need to be replaced. We have been replacing doors each year as funds allow. Plumbing pipes are showing signs of deterioration and are being replaced when applicable.

Warehouse/ Maintenance Building

The Warehouse/ Maintenance Building are structurally sound but do have several roof leaks. The exterior is in good condition, some minor repairs to the Dryvit/stucco could be done.

Administration

The building is in good condition. The roof leaks and paint applied to the pitched portion is peeling and needs to be stripped and recoated, for which quotes are being obtained. The main entry door needs to be replaced. The flooring in the main concourse is approaching the end of its useful life and needs to be replaced. The parking lot and roadway has new energy efficient lights, but the asphalt is in need of repairs.

Power Plant

The Power Plant is structurally in good condition. Routine maintenance and improvements are ongoing. The two Erie city boilers have been removed and are replaced with two new Johnston boilers. The chillier system and control system were upgraded. However, the controls are still being integrated and much further upgrades and work will be required to steam controls throughout the facility to tie that to the Building Management System.

Pole Barn

The Pole barn is in good condition. Upkeep, maintenance and cleaning are ongoing.

Portable Office Trailers

We have one trailer that is in good condition but needs work on siding, and windows. The ceiling was repaired. We need to have this trailer tested and possibly treated for mold and or mildew.

Food Service

The Food Service Building structurally sound. Routine maintenance is ongoing with the equipment. The freezers and cooler have been operating well with some repairs. The two roof top exhaust fans have been replaced. The tile flooring has many bad spots that need to be replaced, this process has been started. The tile on the walls is being redone in some areas. The steam to domestic hot water heat exchanger (bundle-head) needs to be replaced due to leaking and bids are being requested. The bakery cooler needs a new compressor and bids are being requested.

Grounds

All drives and roads need patching and crack repair. Both Administration and facility parking lots need asphalt replaced and cracks repaired. All pavement in the facility is in need of replacement, including yard walkways. Perimeter road need to be replaced, and some crushed aggregate added. Security zone sensor wiring has been replaced on the perimeter fence. The buffer fence is still old but is working sufficiently. Fence is in good condition; some areas showing a fair amount of rust and may need to be replaced in the future.

School Building/ LTA

The School Building is in good condition. The roof has leaks and is on the list to be replaced. Air handling equipment has been updated with energy efficient controls, but one AHU coil is plugged, and is in plans to be replaced as a part of the chiller project. The front entry doors have been replaced. The welding program modifications have been completed and the program is operational. The program requested, and additional booths were completed. The welding booth project made it necessary to relocate one surveillance camera and add one due to the booths blocking full visibility.

Health Care

Health Care is in good condition. The roof has some leaks. This area has been updated/repared with the chiller system to include duct work, air handler and controls. Further refinements to the chiller controls is ongoing.

Segregation

A request to modify some of the beds was made to allow better prisoner restraint attachments. The bed in cell 8 was modified and reinstalled on the same attachments. Another request has been made to relocate beds to the center of the room in cells 13 and 14, which are larger cells. This will allow for CO's to access both sides of the bed in a rush situation. A PPCR is being drafted for this.

Perimeter Fence

The Fence Enhancement project is underway with Nationwide Construction, adding one roll of detainer wire to the top of the inner fence and three rolls of razor-wire to the inside base of the outer fence. The contractors will attempt to straighten two or three fence posts as they complete the project. This was also brought up at pre-project meetings, but we are uncertain as to status.

/dk

cc: Gene Page
Don Spaulding

Ed Vallad
Jeff Niemi

MUSKEGON CORRECTIONAL FACILITY
5-Year Plan FY2020

Building	Project Description	Reason Description	Quantity & Units	Facility Priority	Cost Estimate
All Buildings	Repair or replace roofs	Roofs are leaking and beyond useful life.	284.525SF	1	\$2,845,250
Site	Perimeter road pavement	Pave the perimeter road. Asphalt is 2" to 3" higher than gravel. Pot holes need to be filled.	6500 LF	2	\$270,000
Site	Replace windows in housing units for safety and energy efficient. Windows are single pane and in poor repair.	To replace windows with better energy efficiency window. Parts are no longer available.	7 units	3	\$200,000
Site	Road and lot surface are in poor condition and we are frequently patching. Redesign and add new parking lot to help alleviate congestion.	Due to age of system pot holes are becoming a safety hazard. Vehicle traffic flow needs improvement to help with snow removal.	65,000 SF	4	\$380,000
site	Miscellaneous. Replace pneumatic controls with DDC controls. Upgrade energy savings control system.	Due to age of system. To prevent failure and eliminate high maintenance repair cost and decrease utility usage.	9 units	5	\$130,000
Food service	We currently have 4&6-man steel tables with plastic seats and laminate tops that are high maintenance and difficult to clean. We would like to replace these with 4-man stainless steel tables that are lower maintenance and improved our	Sanitary reasons, tables are worn and difficult to clean. Chairs are starting to break, and we are unable to find replacements.	72 Tables	6	\$86,400
				Total	\$3,911,650

MICHIGAN DEPARTMENT OF CORRECTIONS

“Committed to Protect, Dedicated to Success”

MEMORANDUM

Date: August 9, 2018
To: Warden Jack Kowalski, NCF
From: Craig Carruthers; Physical Plant Superintendent, Newberry (NCF)
Subject: **Annual Physical Plant Report**

This Annual Report has been prepared in accordance with P.D.04.03.100 “Preventive and Emergency Maintenance for Correctional Facilities”. Specifically, section “N” requires CFA Physical Plant Superintendents conduct an annual inspection of their respective facility to assess the need for future maintenance. The results of the inspection are to be submitted it in writing to the facility Warden.

Overview of Physical Plant accomplishments

The welding classroom is remodeled and ready for classes. New electrical service and cement pad for the welding trailer is complete.

Sally port pit has been filled in and will be cemented before winter.

Demolition of old PPD system is in progress.

New camera and perimeter lighting project completed.

Razor ribbon enhancements completed we will be replacing gates and adding fence around the welding trailer

Mailroom relocation has been started.

Warehouse freezer project started.

Several areas had new carpet installed and walls painted.

An attempt to resurface a shower unit with epoxy did not go well. We need to find a way to repair the showers that will look decent and stand up to the usage.

All preventive maintenance on air handlers completed.

Annual CSD1 and inspections will be completed in August on boiler 1 and 4.

Replaced multiple T8000 controllers and thermostats in facility heat systems for better control. All air handling systems need to be replaced throughout the facility.

Both myself and Joe Pleiman have completed all requirements and have our S3 D3 water licenses. This gives the facility the option of not renewing the contract with Mead and Hunt for water testing.

The sinkhole caused by roof drain line collapse by unit 11 has been repaired and replaced.

We have started to replace some of the windows that are beyond repair throughout the facility.

Annual review of Physical Plant

Housing Units; Buildings # 61, 62, 64, 65, 67, 68, 72

The housing units are in structurally good condition. Roofing seems to be in good condition. Painting is ongoing. Shower areas have been problematic and have been torn down and repaired as time and budget allows. Brickwork needs tuck pointing. Several areas in various housing units had new carpet installed but the remaining carpet is in poor condition. HVAC units and controls are showing their age and need to be updated to more energy efficient units. Windows, doors, and frames are reaching the end of their service lives and should be updated to more energy efficient units. Most of the units need dedicated electrical appliance circuits added to day rooms.

Warehouse / Administration; Building # 21

The Warehouse Building is structurally in good condition. The roofing seems to be in good condition. All windows need to be replaced with energy efficient units. The brickwork is in need of tuck pointing. The elevator has been problematic and needs to be replaced. HVAC equipment and controls are in poor condition should be upgraded with energy efficient units. Inside brick walls show signs of wear and damage from the warehouse equipment. Refrigeration equipment needs upgrading to modern energy efficient types. Two freezer ceilings have collapsed and are not usable. A project has started to replace these units with new one on the main floor. Cameras should be added in this area for monitoring store goods. The new admin building area is in good shape and repairs have been minimal. We should replace the windows with ones that will open and close. All doors should be updated to energy efficient units.

Old Administration Building; Building # 32

The Administration Building has been closed and all staff have been relocated to either the deputy suite or training center. The building has been winterized. Water service to the building has been cut off and removed. This structure still provides power to some exterior facility lighting. This lighting should be added to the rest of the facility perimeter lighting and then electrical service to this structure should be abandoned and removed. Condition of the building is deteriorating rapidly due to it not being heated.

Maintenance; Building # 33

Maintenance Building #33 is in good structural condition. Air handling and heating units should be replaced with more energy efficient units. Single pane windows should be replaced with energy efficient units... There are some roof leaks near the east end of building that need to be repaired.

Power Plant; Building #42

The Power Plant is structurally in good structural condition. The roof seems to be in good condition. Routine maintenance and improvements are ongoing. Painting is needed

throughout including the floors. Lighting has been upgraded to energy efficient lighting. Windows and doors should be upgraded with energy efficient units. The old boiler stacks need to be removed as they are funneling water through roof. There are many feet of unused piping that should be abated and removed. The 3 old steam turbines and generators should be abated and removed. The high voltage switch gear needs to be updated to modern types. The old smokestack to the North of the power house should be demolished and removed. A new domestic hot water heater should be installed as the existing one can no longer supply enough hot water due to increased hot water usage. Powerhouse sewage lift station is in very poor condition and needs to be replaced. Some areas of the facility tunnels are deteriorating and should be replaced. All piping in the tunnels should be abated and re insulated.

Machine Shop; Building # 41

The Machine Shop is in good structural condition. The roofing seems to be in good condition. Upkeep, maintenance and painting is ongoing. Windows and doors need to be replaced with energy efficient units. HVAC equipment is in poor condition and should be updated to energy efficient units. All the old water softener tanks and piping should be abated and removed. The structure housing the old water softener tanks is in poor condition and is beginning to collapse. The facility backup domestic water heater needs to be replaced with a larger unit as the current unit will not supply enough hot water.

Grounds Shop; Building # 44

The Grounds Shop is in fair condition. The roof needs replacing. Three new overhead doors and trim are needed. Windows should be replaced with energy efficient units or bricked up and insulated. The air handler/heating unit should be upgraded to energy efficient types.

Potato Building; Building #47

The potato barn is in poor condition. It needs the roof replaced, but the potato operation has been terminated. This building probably should be demolished.

Fire Hall Building; Building # 56The Fire Hall Building is in fair condition. Roofing is in poor condition and should be replaced. The old entrance doors need to be replaced with an insulated roll up door. The windows need to be replaced. Exterior trim needs painting. Existing steam unit heater needs to be upgraded to energy efficient types.

Garage Building #48

This building is in poor condition. Roof is in poor condition. The exterior doors and trim need painting. This building is strictly used for facility storage and should be demolished and replaced.

Truck Garage #49

This building is in poor condition. Rusted metal doors and siding need repair. Windows need repair. Building at present is used for equipment storage and should be demolished and replaced.

Storage Buildings #59 & 61

These storage buildings are in fair condition and are strictly used for storage.

Food Service; Building # 70

The Food Service Building is in good structural condition. Roof is in fair condition and should be replaced in the near future. Painting and routine maintenance is ongoing. The central laundry floor has been very problematic and needs an epoxy floor covering. Air handling equipment needs to be upgraded to energy efficient types. Building needs new air conditioning equipment installed as the old has failed and is obsolete. Loading dock concrete wall and deck is deteriorating very badly and needs to be replaced.

Grounds / Abandoned Buildings

All drives and roads need patching, crack repair, or replacement. Both Administration and facility parking lots need asphalt replaced and cracks repaired. Old mental health buildings including houses need to be abated and demolished. The old abandon buildings on the property are in very bad shape. Many windows are broken and falling out. Many areas are not safe to enter. All windows should be boarded up. \ Old unused fire hydrants need to be dug up and removed. Many trees are reaching the end of their lives and need to be cut down and removed.

School Building; Building # 73

The School Building is in good structural condition. The roof seems to be in good condition. Air handling equipment should be updated with energy efficient units. Windows and doors should be replaced with energy efficient units. Piping in basement and other areas needs to be abated and reinsulated.

Health Care; Building # 72

Health Care is in good structural condition. The roofing seems to be in good condition. Carpeting is in poor condition and should be replaced in the offices. HVAC equipment should be upgraded to energy efficient types. Doors and windows should be upgraded to energy efficient types.

Deputy Suite, Entry Control, Info desk; Building # 72

The Deputy Suite is in good structural condition. The roofing seems to be in good condition. Some areas need to be re-carpeted. HVAC system should be updated to energy efficient types. Doors and windows should be updated to energy efficient types. Ac unit in muster room needs replaced. A split AC unit should be installed in the captain's office and gate area.

Inside Yard and Weight Pits

Inside yard is in good condition. There are areas of pavement and sidewalks that should be replaced or have cracks sealed. The weight pits are in good structural condition.

Wells and Well-houses; Buildings # 52, 57, 58, 59, and 63

All 3 well houses in service are in poor condition and should be replaced. Well houses 52 and 57 should be abated and demolished. Well #4 is in good condition and has a new motor and updated electrical service. Well #5 is in poor condition and needs a new motor and updated electrical service this well is currently not operational. Well #6 motor is in good condition but needs electrical service updated. Proper water sample taps need to be installed at each well per DEQ.

Utilities and Infrastructure

Domestic water supply system is in fair condition. Ongoing lead issues have been

addressed by Phosphate injection and Chlorination at the wells. Water tower is in good condition. Fire hydrants should be updated to new ones as many are over a hundred years old with no parts available. Electrical distribution system is in good condition except for the overhead supply to the wells. It should be replaced with a new underground system. The facility sewer system is in fair condition except for the main line that runs from the facility to the Village of Newberry. This section is in poor condition and should be replaced.

Security Systems

Most of the facility security systems are functioning adequately. The perimeter fencing had some problematic areas that needed to be tightened and refastened. The inside shaker wire is in poor condition and needs to be replaced.

CC.

George Sevarns

Ed Vallad

Jeff Niemi

**NEWBERRY CORRECTIONAL FACILITY
5-Year Plan FY2020**

Building	Project Description	Reason Description	Quantity & Units	Facility Priority	Cost Estimate
Perimeter Fence	Replace the rest of the motion sensing shaker wire on the inside and outside perimeter fences.	Current wiring is damaged and in poor condition causing numerous fence alarms.	5,715 ft	2	\$26,450
Site	Miscellaneous Site Improvement Project, Remove & Replace. Existing raised concrete platform containing handrails and concrete floor and supporting wall adjacent to the Food Service loading dock. Totally remove and replace. Place	Due to age of system. To prevent failure. To fix deteriorated, damaged, failure area. To prevent personal injury. To improve appearance. Long-term/high maintenance issue. Service reliability. Due to frequent use by heavy/large trucks. To extend life.	1 unit	1	\$100,000
Kitchen	Misc. projects. Increase size of loading dock and install flip ramp.	Damaged. Damage Due to Facility Growth.	1 unit		\$38,650
Site	Replace sewage lift station southeast of power house	Existing lift station is damaged and has reached the end of its useful life.	1 unit		\$40,250
Service Building	Equipment - New and Replacement. Replace freight elevator and conveyor.	Damaged. To Eliminate High Maintenance Condition. Damage Due to Facility Growth.	1 unit		\$126,500
Service Building	Replace existing window system - w/ insulated system.	Worn out. To Eliminate High Maintenance Condition. Damage Due to Facility Growth.	1000 sq. ft	8	\$70,000
Service Building	ELECTRICAL DISTRIBUTION SYSTEM-Remove existing distribution equipment. Install new distribution panels and padmount transformer.	Existing equipment is old and has reached the end of its useful life. Existing equipment is obsolete. Service reliability. Provides for future growth.	10 units		\$172,500
Service Building	HVAC retrofit. Including replacement of airhandling units, exhaust fans, perimeter heat and any damaged piping, valves and insulation. Replace existing refrigeration equipment.	Beyond useful life. Not functioning or broken. Worn out. Doesn't provide adequate cooling. Doesn't meet current ventilation standards. Provide better temperature control. Personal comfort.	25,000 sq. ft	7	\$640,500
Service Building	Couple the existing pneumatic control system with DDC (new panel + some points). Provide monitoring of space, heating and domestic water temperatures, airhandling unit and exhaust fan operation.	None presently installed. Provide better temperature control and energy savings.	25,000		\$64,000
Service Building	Misc. projects. Rebuild freight dock and canopy, (3) overhead doors and flip ramps and provide 600 LF wall bumpers to protect tile walls.	Worn out. Damaged. To Eliminate High Maintenance Condition. Damage Due to Facility Growth.	3 units		\$124,000
Programs	Replace existing window system - w/ insulated system.	Worn out. To Eliminate High Maintenance Condition. Damage Due to Facility Growth.	1200 sq. ft		\$88,000
Power House	ELECTRICAL DISTRIBUTION SYSTEM-Miscellaneous. Replace existing disconnect switches. Four total. Switch gear	Existing equipment is old and has reached the end of its useful life. Service reliability. Preventative maintenance.	4 units	5	\$140,000

Health Care, Dep	HVAC retrofit. Including replacement of airhandling units, exhaust fans, perimeter heat, and any damaged piping, valves and insulation. Also provide air-conditioning to computer rooms.	Beyond useful life. Not functioning or broken. Worn out. Doesn't provide adequate cooling. Doesn't meet current ventilation standards. Provide better temperature control. Personal comfort.	40,000 sq. ft		\$1,275,000
Site	Pavement Areas/Driveways/Roadways, Bituminous, Remove & Reseed. Existing bituminous driveways around Buildings 34, 95, 96 and along front of the old hospital, including tennis courts and basketball courts.	Due to age of system. To prevent failure. To fix deteriorated, damaged, failure area. To improve appearance. Long-term/high maintenance issue. Service reliability. Due to demolition of existing buildings in multiple areas around the facility.	40,000		\$68,000
Site	Miscellaneous piped utilities project, New. Add necessary piping and valves to all three Pump Houses so EPA can sample water per there standards.	Due to facility growth. Due to facility request. To prevent personal injury. Life safety issue. To extend life. EPA request.	1 unit	3	\$62,000
Service Building	INTERIOR LIGHTING-Replace interior light fixture(s), Industrial. Basement light fixtures.	Existing equipment is old and has reached the end of its useful life. Increase equipment efficiency. Increase lighting levels. Appearance. Provides a cost and energy savings.	15,000 sq. ft		\$93,000
Housing Unit 9	HVAC retrofit. Including replacement of airhandling units, exhaust fans, perimeter heat and any damaged piping, valves and insulation. Also provide air-conditioning to computer rooms.	Beyond useful life. Not functioning or broken. Worn out. Doesn't provide adequate cooling. Doesn't meet current ventilation standards. Provide better temperature control. Personal comfort.	7000 sq. ft		\$223,000
Health Care and D	Tuckpoint brick.	Leading to More Serious Problems. Cosmetically Necessary or Aesthetically Poor. To Eliminate High Maintenance Condition. To Cover up Water Damage.	10,000		\$96,500
Site	Recreation Field/Court, Resurface/Renovate, Basketball. Located north of Q Unit and the Health Service Building, include re-striping the court.	Due to age of system. To prevent failure. To improve appearance. Long-term/high maintenance issue. Service reliability. To extend life.	16,000 sq. ft		\$62,000
Site	Distribution Pipe, Water, New. Provide 1050 LF of 6" ductile iron water main pipe as a dedicated supply line from Pump House No. 5 and 6. Begin pipe at existing 6" line coming from Buildings 75 - 79 area, under the RR tracks, southeast of	Due to facility growth. Existing is undersized. To prevent failure. To improve fire water flow. To improve domestic water flow. Long-term/high maintenance issue. Service reliability. Prevent winter freezing hazard. To extend life. Existing supply	1,100 lin ft		\$60,000
Site	Steam Distribution System, Tunnel, Demo/Remove. 350 LF of 4' x 4' tunnel from Building 14, northeast to Campbell Avenue. 100 LF of 4' x 4' tunnel from under Campbell Avenue to Building 34. Concrete seal tunnel at both ends under	Due to age of system. To prevent failure. Long-term/high maintenance issue. Service reliability. To improve security. Due to existing buildings being demolished.	1,300 lin ft		\$101,000
Site	Steam Distribution System, Tunnel, Update/Repair. 300 LF of 7' x 6' walking tunnel from Sally Port to Power House needs to be re-furbished.	Due to facility request. To prevent failure. To prevent personal injury. Long-term/high maintenance issue. Service reliability. To extend life. Existing tunnel roof severely leaking and deteriorated.	300 lin ft	4	\$140,000
Site	Pipe, Sanitary, Remove & Backfill. Located along north face of the old demolished hospital, along the west side of the hospital and leading into and past Buildings 95, 96 and 34. At miscellaneous areas between buildings to be demolished on	Due to age of system. To prevent failure. Long-term/high maintenance issue. Service reliability. To improve security. Due to existing buildings being demolished.	4800 lin ft		\$208,500
Site	Pavement Areas/Driveways/Roadways, Bituminous, Overlay Existing with Bituminous. Interior roadway from Athletic Fields, west and then south to Food Service Building. Overlay existing with 2" of new bituminous pavement and deep patch	Due to age of system. To prevent failure. To fix deteriorated, damaged, failure area. To improve appearance. Service reliability. Due to frequent use by heavy/large trucks. To extend life.	23,000 SF		\$80,000
Site	Pavement Areas/Driveways/Roadways, Bituminous, Mill & Resurface. Mill 2" off existing bituminous pavement and replace with 3" of new bituminous pavement. Areas include main access road off Campbell Avenue to the prison parking	Due to age of system. To prevent failure. To fix deteriorated, damaged, failure area. To improve appearance. To improve vehicle traffic flow. Long-term/high maintenance issue. Service reliability. Due to frequent use by heavy/large trucks.	60,000 SF		\$74,500
Site	Distribution Pipe, Water, New. Provide 1650 LF of 8" ductile iron water main pipe from new water tower to the "community" water lines located north of Building 32 across Campbell Avenue. Begin at new water tower and pipe it along the west	Due to facility growth. Existing is undersized. To prevent failure. To improve fire water flow. To improve domestic water flow. Long-term/high maintenance issue. Service reliability. Prevent winter freezing hazard. To extend life. Must maintain w	1,700 LF		\$92,000

Site	Distribution Pipe, Water, Remove & Backfill. Existing water service lines serving the old hospital and surrounding Service Buildings and Houses need removed. Coordinate with other water projects.	Due to facility growth. To prevent failure. To improve fire water flow. To improve domestic water flow. Long-term/high maintenance issue. Service reliability. Due to facility construction. Existing hospital and multiple surrounding buildings and ho	10,000 LF		\$310,500
Site	Sanitary Pre-Treatment Mechanism, Bar Screen, Remove & Replace. Add new automatic bar screen unit adjacent to existing unit, ensuring that the new mechanism treats the main sanitary sewer line from the southeast direction.	Due to age of system. Due to facility growth. To prevent failure. To fix deteriorated, damaged, failure area. Service reliability. Existing bar screen was never maintained. It broke, was never fixed, and is rotting away in an enclosed building. City	1 Unit		\$1,100,000
Site	Pavement Areas/Driveways/Roadways, Concrete, Remove & Replace Full Depth. Interior paved courtyard is severely deteriorated. Remove all existing bituminous and concrete pavement from wall to wall, including door stoops, basketball	Due to age of system. Due to facility growth. Due to facility request. To improve drainage. To prevent failure. To fix deteriorated, damaged, failure area. To improve appearance. To improve pedestrian traffic flow. Soil erosion issue. Long-term/h	40,000 SF	6	\$502,000
Site	Miscellaneous Pavement Surfaces Remove & Replace. Remove existing circular driveway with planted island and do not replace. Replant vegetation and bushes. Re-seed area when complete.	Long-term/high maintenance issue. Service reliability. Due to facility construction. Due to demolition of existing buildings at multiple areas around the site.	50,000 sq. ft		\$93,000
Ferguson Hospital	Building demolition. Demolish entire structure.	Request of Facilities Maintenance. Building no longer used or usable.	68,800 SF		\$1,725,000
Truck Garage	Provide pre-engineered building. Replace existing building with new.	Request of Facilities Maintenance.	6,000 SF		\$373,000
Truck Garage	Building demolition. Demolish entire structure.	Request of Facilities Maintenance. Building is no longer usable.	6,000 SF		\$65,000
Cottage O	Building demolition. Demolish entire structure.	Request of Facilities Maintenance. Building is no longer used or usable.	23,160 SF		\$378,000
Cottage P	Building demolition. Demolish entire structure.	Request of Facilities Maintenance. Building no longer used or usable.	12,280 SF		\$20,215
Cottage Q	Building demolition. Demolish entire structure.	Request of Facilities Maintenance. Building is no longer used or usable.	10,480 SF		\$170,000
Cottage R	Building demolition. Demolish entire structure.	Request of Facilities Maintenance. Building is no longer used or usable.	10,480 SF		\$170,000
Cottage S	Building demolition. Demolish entire structure.	Request of Facilities Maintenance. Building is no longer used or usable.	10,480 SF		\$170,000
Cottage B	Building demolition. Demolish and remove entire structure.	Request of Facilities Maintenance. Building is no longer used or usable.	10,480 SF		\$170,000
Maintenance shop	HVAC retrofit. Including replacement of airhandling units, exhaust fans, perimeter heat and any damaged piping, valves and insulation.	Beyond useful life. Not functioning or broken. Worn out. Doesn't provide adequate cooling. Doesn't meet current ventilation standards. Provide better temperature control. Personal comfort.	2,500 SF		\$65,000

Maintenance shop	Replace/new fire protection system. Provide to entire building. Tie in existing system.	Life safety issue. Currently, only storage rooms are sprinklered.	10,500 SF		\$145,500
Power House	Couple the existing pneumatic control system with DDC (new panel + some points). Provide monitoring of space, heating and domestic water temperatures, exhaust fan operation, pump operation, steam flow and pressure.	None presently installed. Provide better temperature control.	20,000 SF		\$61,000
Power House	Miscellaneous. Provide roof exhausters, wall louvers, associated motor operated dampers and controls (reverse acting thermostat).	None presently installed. Provide better temperature control. Exhaust excess heat in building.	1 unit		\$77,500
Power House	Miscellaneous. Remove abandoned turbines.	Not functioning or broken.	3 units		\$171,000
Power House	New controls for boilers, cooling towers, chillers etc. Provide on two existing boilers.	Beyond useful life. Better equipment available. Requirement for other improvements.	2 Units		\$93,000
Store House	Building demolition.	Damaged. Leading to More Serious Problems. Dangerous or Potentially Life Threatening. Cosmetically Necessary or Aesthetically Poor. To Eliminate High Maintenance Condition.	13,154 SF		\$214,500
Cottage D - Female	Building demolition. Demolish entire structure.	Request of Facilities Maintenance. Building no longer used or usable.	17,800 SF		\$290,000
Cottage E - Female	Building demolition. Demolish entire structure.	Request of Facilities Maintenance. Building no longer used or usable.	16,980 SF		\$276,500
Housing Unit 10	Repair/Replace wood soffit/siding. Encompassing all the Wards 1 - 8 With aluminum fascia and soffit.	Worn out. Cosmetically Necessary or Aesthetically Poor. To Eliminate High Maintenance Condition. To Cover up Water Damage.	8,000 SF		\$247,000
Housing Unit 10	HVAC retrofit. Including replacement of airhandling units, exhaust fans, perimeter heat and any damaged piping, valves, and insulation. Also provide air-conditioning to computer rooms.	Beyond useful life. Not functioning or broken. Worn out. Doesn't provide adequate cooling. Doesn't meet current ventilation standards. Provide better temperature control. Personal comfort.	7,000 SF		\$223,000
Housing Units 3,4,5	Couple the existing pneumatic control system with DDC (new panel + some points). Provide monitoring of space, heating and domestic water temperatures, airhandling unit and exhaust fan operation.	None presently installed. Provide better temperature control.	21,000 SF		\$67,000
Cottage F - Female	Building demolition. Demolish entire structure.	Request of Facilities Maintenance. Building is no longer used or usable.	12,240 SF		\$200,000
Kitchen	Replace quarry tile. With monolithic polymer floor, all kitchens and dining areas.	Damaged. Leading to More Serious Problems. To Eliminate High Maintenance Condition. To Cover up Water Damage.	9,000 SF		\$174,000
Kitchen	Misc. projects. Remove/cut concrete cornices, replace with vertical metal fascia and rebuild entrance to hall.	Damaged. Leading to More Serious Problems. Cosmetically Necessary or Aesthetically Poor. To Eliminate High Maintenance Condition. To Cover up Water Damage.	1 unit		\$232,000

Kitchen	ELECTRICAL DISTRIBUTION SYSTEM-Remove existing distribution equipment. Replace existing 400A disconnect switches located in the Kitchen, School and Infirmary basements. Six total.	Existing equipment has become a safety problem. Personal safety. Owner request. Existing disconnect switches are not dead-front.	6 Units		\$58,000
Health Care, Deputy suite, Unit 11	Air handling unit heating only. To provide ventilation to tunnel/basement areas. Provide relief to space. Include heating, piping, ductwork and accessories.	None presently installed. Doesn't meet current ventilation standards. Code compliance.	15,000 SF		\$207,000
Health Care, Deputy suite, Unit 11	Couple the existing pneumatic control system with DDC (new panel + some points). Provide monitoring of space, heating and domestic water temperatures, airhandling unit and exhaust fan operation.	None presently installed. Provide better temperature control.	36,000 SF		\$115,000
Storage	Provide pre-engineered building. Replace existing building with new structure.	Request of Facilities Maintenance.	3,000 SF		\$186,000
Lumber & Maintenance Storage	Building demolition.	Worn out. Cosmetically Necessary or Aesthetically Poor. To Eliminate High Maintenance Condition.	5,335 SF		\$58,000
Site	INTERIOR LIGHTING-Replace interior light fixture(s), Industrial. Provide new lighting in existing Pump House No. 4, 5, and 6.	Existing equipment is old and has reached the end of its useful life. Increase lighting levels. Owner request.	500 SF		\$3,105
Kitchen	Equipment - New and Replacement. Replace ovens.	Worn out. To Eliminate High Maintenance Condition.	4 units		\$69,000
Site	INTERIOR LIGHTING-Replace interior light fixture(s), Industrial. Install new light fixtures, switches and wiring in existing tunnels.	Existing equipment is old and has reached the end of its useful life. Existing equipment is obsolete. Increase lighting levels. Security light. Service reliability. Owner request.	2,500 SF		\$19,000
Kitchen	Miscellaneous. To provide ventilation to tunnel/basement areas. Provide relief to space, include heating, piping, ductwork and accessories.	None presently installed. Doesn't meet current ventilation standards. Code compliance.	1 unit		\$10,250
Site	EXTERIOR LIGHTING-Install Pole with Fixture. Provide additional roadway lighting from Power House Building to Administration Building.	Increase lighting levels. Owner request.	15 Units		\$42,000
Site	EXTERIOR LIGHTING-Miscellaneous. Relocate fusing in existing exterior light pole fixtures to pole base.	Existing equipment has become a high maintenance problem. Existing equipment has become a security problem. Service reliability. Owner request. Existing light poles have not strain relief for interior wiring, causing fusing in fixture head to ground-o	55 units		\$30,000
Site	Pavement Areas/Driveways/Roadways, Concrete, New Full Depth. Add 6' x 6' concrete splash pad at the fire sprinkler, drain-down outlet for all buildings in the secure area.	To prevent failure. Soil erosion issue. Long-term/high maintenance issue. Service reliability.	550 SF		\$5,300
Site	EXTERIOR LIGHTING-Miscellaneous. Rewire existing exterior wall-pak fixtures and security fixtures together. Provide one central control station with timeclock, photo cell and contactor controlled panel(s).	Increase equipment efficiency. Security light. Service reliability. Owner request.	48 units		\$20,000
Site	Fire Hydrant & Valve Box, Remove & Backfill. Existing hydrants and post indicator valves are to be removed and parts to be used to rebuild existing hydrants and maintain an inventory.	To prevent failure. To improve fire water flow. To improve domestic water flow. Long-term/high maintenance issue. Service reliability. Due to mass demolition of old hospital and water service lines.	17 Units	replaced as needed	\$53,000

Site	Distribution Pipe, Water, New. Extend existing 6" water supply line from Well 4 to the new water tower. Begin just west of 100 Building and pipe it directly north to the tower and avoid any service taps off this dedicated supply line. Include	Due to facility growth. Existing is undersized. To prevent failure. To improve fire water flow. To improve domestic water flow. Long-term/high maintenance issue. Service reliability. Prevent winter freezing hazard. To extend life. Existing 6" sup	225 LF		\$12,000
Site	Distribution Pipe, Water, New. Located along the east side of Building 72. Begin at 8" coming into the prison on the north side and tie into the water line that serves Buildings 67, 68 and 72 from the south main prison feed. Include necessary	To prevent failure. To improve fire water flow. To improve domestic water flow. Long-term/high maintenance issue. Service reliability. This installation will complete a water line loop around the east portion of the secure prison area. Better control	400 LF		\$27,000
Site	Structures I, Manhole, Remove & Backfill. Located at various locations around the property. Coordinate with sanitary pipe removal project.	Due to age of system. To prevent failure. Long-term/high maintenance issue. Service reliability. To improve security. Due to existing building being demolished.	25 Units		\$39,000
Site	Pipe, Sanitary, New. Add 700 LF of storm pipe from existing sanitary manhole located on the north side of Campbell Avenue, across from the Administration Building, to the existing sanitary manhole on the north side of Building 34.	Due to age of system. Due to facility request. To prevent failure. Long-term/high maintenance issue. Service reliability. Will help allow sanitary flows from the prison to be diverted to a bar screen mechanism before it passes any city residential la	700 LF		\$43,500
Site	Storm Drainage System, Parking Lot, New. Install storm catch basin in low spot located south of Building 21 in gutter line of curb and pipe it approximately 100 LF west into existing storm system.	To improve drainage. To prevent failure. To fix deteriorated, damaged, failure area. To improve appearance. Long-term/high maintenance issue. Service reliability. Existing signs of standing water.	1 Unit		\$23,500
Site	Pavement Areas/Driveways/Roadways, Concrete, Remove & Reseed. Existing concrete paved area at the southeast corner of First Street and State Avenue.	Due to age of system. To prevent failure. To fix deteriorated, damaged, failure area. To improve appearance. Long-term/high maintenance issue. Service reliability.	10,000 SF		\$30,000
Site	Pavement Areas/Driveways/Roadways, Gravel, Add Gravel. Dirt road/path from Building 100 near the southwest corner of the power plant to Building 98.	To prevent failure. To fix deteriorated, damaged, failure area. To improve appearance. To improve vehicle traffic flow. Long-term/high maintenance issue. Service reliability. Due to frequent use by heavy/large trucks. To extend life. Existing road	5,000 SF		\$11,500
Site	Pavement Areas/Driveways/Roadways, Bituminous, New Full Depth. Small driveway leading from old Well #2, past the existing brine tanks and down to the lower level. Also pave the perimeter road along the perimeter fence at the southwest	To prevent failure. To fix deteriorated, damaged, failure area. To improve appearance. To improve vehicle traffic flow. Long-term/high maintenance issue. Service reliability. Due to frequent use by heavy/large trucks. To extend life. Existing is e	8,000 SF		\$28,000
Maintenance shop	Couple the existing pneumatic control system with DDC (new panel + some points). Provide monitoring of space, heating and domestic water temperatures, airhandling unit and exhaust fan operation.	None presently installed. Provide better temperature control.	7,500 SF		\$19,000
Maintenance shop	Main control panel and front-end direct digital controls (DDC) equipment.	None presently installed. Provide monitoring of each building.	1 Unit		\$53,000
Nurses Residence	Building demolition. Demolish entire structure.	Request of Facilities Maintenance. Building is no longer used or usable.	1,800 SF		\$19,500
Paint Shop	Building demolition. Demolish entire structure.	Request of Facilities Maintenance. Building is no longer used or usable.	1,630 SF		\$17,500
Power House	ELECTRICAL DISTRIBUTION SYSTEM-Replace distribution panel.	Existing equipment is old and has reached the end of its useful life. Replacement parts are either hard to find or no longer available. Increase equipment efficiency. Service reliability. Provides for future growth.	2 Units		\$37,000
Storm Windows Storage	Building demolition. Demolish entire structure.	Request of Facilities Maintenance. Building is no longer used or usable.	1,560 SF		\$17,000

Maintenance Storage	Building demolition. Demolish entire structure.	Request of Facilities Maintenance. Building is no longer used or usable.	420 SF		\$4,600
Pump House #2	Building demolition. Demolish entire structure.	Request of Facilities Maintenance. Building is no longer used or usable.	290 SF		\$3,105
Fire Station	Building demolition.	Worn out. Damaged. Dangerous or Potentially Life Threatening. Cosmetically Necessary or Aesthetically Poor. To Eliminate High Maintenance Condition.	770 SF		\$12,500
Housing Unit 10	Replace ceramic tile. With monolithic polymer floor. Typical as with all 10 Wards.	Damaged. Leading to More Serious Problems. Cosmetically Necessary or Aesthetically Poor. To Eliminate High Maintenance Condition. Damage Due to Facility Growth. To Cover up Water Damage.	600 SF		\$16,250
Housing Unit 10	ELECTRICAL DISTRIBUTION SYSTEM-Miscellaneous. Replace existing branch panelboard circuit breakers with new ones.	Existing equipment is no longer functioning. Existing equipment has become a high maintenance problem. Existing equipment is old and has reached the end of its useful life. Service reliability. Owner request.	1 unit		\$9,500
Housing Unit 10	Couple the existing pneumatic control system with DDC (new panel + some points). Provide monitoring of space, heating and domestic water temperatures, airhandling unit and exhaust fan operation.	None presently installed. Provide better temperature control.	6,000 SF		\$19,000
Housing Unit 9	ELECTRICAL DISTRIBUTION SYSTEM-Miscellaneous. Replace existing branch panelboard circuit breakers with new ones.	Existing equipment is no longer functioning. Existing equipment has become a high maintenance problem. Existing equipment is old and has reached the end of its useful life. Service reliability. Owner request.	1 unit		\$9,650
Housing Unit 9	Couple the existing pneumatic control system with DDC (new panel + some points). Provide monitoring of space, heating and domestic water temperatures, airhandling unit and exhaust fan operation.	None presently installed. Provide better temperature control.	6,000 SF		\$19,000
Housing Unit 6,7,8	ELECTRICAL DISTRIBUTION SYSTEM-Miscellaneous. Replace existing branch panelboard circuit breakers with new ones.	Existing equipment is no longer functioning. Existing equipment has become a high maintenance problem. Existing equipment is old and has reached the end of its useful life. Service reliability. Owner request.	3 units		\$19,000
Housing Unit 3,4,5	Replace ceramic tile. Typical Wards 3, 4, 5, and 6 with monolithic polymer floor.	Worn out. To Eliminate High Maintenance Condition.	1,600 SF		\$43,000
Housing Unit 3,4,5	ELECTRICAL DISTRIBUTION SYSTEM-Miscellaneous. Replace existing branch panelboard circuit breakers with new ones.	Existing equipment is no longer functioning. Existing equipment has become a high maintenance problem. Existing equipment is old and has reached the end of its useful life. Service reliability. Owner request.	3 units		\$19,000
Housing Unit 2	Replace ceramic tile. With monolithic polymer floor. Typical as with all 10 Wards.	Damaged. Leading to More Serious Problems. Cosmetically Necessary or Aesthetically Poor. To Eliminate High Maintenance Condition. Damage Due to Facility Growth. To Cover up Water Damage.	600 SF		\$16,000
Housing Unit 2	ELECTRICAL DISTRIBUTION SYSTEM-Miscellaneous. Replace existing branch panelboard circuit breakers with new ones.	Existing equipment is no longer functioning. Existing equipment has become a high maintenance problem. Existing equipment is old and has reached the end of its useful life. Service reliability. Owner request.	1 unit		\$9,500
Housing Unit 2	Couple the existing pneumatic control system with DDC (new panel + some points). Provide monitoring of space, heating and domestic water temperatures, airhandling unit and exhaust fan operation.	None presently installed. Provide better temperature control.	6,000 SF		\$19,000

Housing Unit 1	Replace ceramic tile. With monolithic polymer floor. Typical as with all 10 Wards.	Damaged. Leading to More Serious Problems. Cosmetically Necessary or Aesthetically Poor. To Eliminate High Maintenance Condition. Damage Due to Facility Growth. To Cover up Water Damage.	600 SF		\$16,000
Housing Unit 1	Misc. projects. Provide and remodel all entrances to the housing units with double doors.	Dangerous or Potentially Life Threatening. Damage Due to Facility Growth. Safety and security.	1 unit		\$48,000
Housing Unit 1	ELECTRICAL DISTRIBUTION SYSTEM-Miscellaneous. Replace existing branch panelboard circuit breakers with new ones.	Existing equipment is no longer functioning. Existing equipment has become a high maintenance problem. Existing equipment is old and has reached the end of its useful life. Service reliability. Owner request.	1 unit		\$9,500
Housing Unit 1	Couple the existing pneumatic control system with DDC (new panel + some points). Provide monitoring of space, heating and domestic water temperatures, airhandling unit and exhaust fan operation.	None presently installed. Provide better temperature control.	6,000 SF		\$19,000
Kitchen	Couple the existing pneumatic control system with DDC (new panel + some points). Provide monitoring of space, heating and domestic water temperatures, airhandling unit and exhaust fan operation.	None presently installed. Provide better temperature control.	14,000 SF		\$44,500
Health Care, Deputy suite, Unit 11	Replace ceramic tile. With monolithic polymer floors in all toilet and shower rooms.	Worn out. To Eliminate High Maintenance Condition. To Cover up Water Damage.	2,000 SF		\$54,000
Health Care, Deputy suite, Unit 11	ELECTRICAL DISTRIBUTION SYSTEM-Miscellaneous. Replace existing branch panelboard circuit breakers with new ones.	Existing equipment is no longer functioning. Existing equipment has become a high maintenance problem. Existing equipment is old and has reached the end of its useful life. Service reliability. Owner request.	3 units		\$29,000
School, Shop & Recreation	Replace double exterior doors/frame/hardware.	Damaged. Leading to More Serious Problems. Cosmetically Necessary or Aesthetically Poor. To Eliminate High Maintenance Condition.	1 Unit		\$5,500
Medical Superintendent Residence	Building demolition. Demolish entire structure.	Request of Facilities Maintenance. Building is no longer used or usable.	4,400 SF		\$48,000
Administrative Office Residence	Building demolition. Demolish entire structure.	Request of Facilities Maintenance. Building is no longer used.	3,300 SF		\$36,000
Storage	Building demolition. Demolish entire structure.	Request of Facilities Maintenance. Building is no longer usable.	2,880 SF		\$31,000
Service Building	Replace/new fire protection system. Provide to entire building.	Life safety issue. Currently, only storage rooms are sprinklered.	64,000 sq. ft		\$875,000
NA	Install gates to access unit 11 yard with welding trailer	More secure location	1		\$115,000
Site	Add window bars to all units	Improve security	11		\$236,250

Warehouse	Install 2 new freezers	Improve storage options	2		\$131,250
				Total	\$15,220,325

MICHIGAN DEPARTMENT OF CORRECTIONS

“Committed to Protect, Dedicated to Success”

MEMORANDUM

To: Warden Lester Parish

From: Jeff Zenner, Physical Plant Supervisor
Oaks Correctional Facility, ECF

Date: 6/20/18

Subject: Annual Physical Plant Report

Facility Overview:

Asphalt driveways and parking lots are in fair condition. Cracks needed to be filled and sealed and several areas cut out and repairs made. I have submitted a Physical Plant change request for repairs. Sidewalks are generally in fair to good condition except for the areas surrounding 6 and 7 blocks, plan to make repairs before winter. New sidewalks need to be added due to changes in prisoner and staff duties. Plan to review with you when completing our 5-year plan. The housing unit roofs have been replaced in 2017 and no leaks have been reported. The Administration building roof had white night sealer installed in 2011 and came with a 10-year warranty. We currently have a leak above HR and working with contractor to resolve. Buildings 200, 300 and 500 roofs are in poor condition with several leaks. I have scheduled a roof contractor to make repairs in July.

Entrance doors and frames throughout the facility are in fair condition and in need of lower frame repair. The 100-building boiler room doors to roof need to be replaced along with the 300-building back entrance. These doors are in poor condition and are very hard to secure. Several doors in the 200 building need to be replaced also. I'm currently working on a PPCR for the replacement of these doors.

Porosity of the brick used to construct the facility has been a problem since the beginning. Heavy rains cause many building leaks. All buildings should be water-sealed with a commercial brick sealant. Housing unit 6 and 7 had leaks due to porosity. We had them resealed during the roof project and seems to have stopped the issue with these buildings.

The Fire Alarm System is in good working condition.

The Duress System (PPD) is in fair condition. We are in the design phase on having this upgraded.

Security fencing is in good condition. Parts are no longer available for the stun fence. We are in the process of getting it replaced along with some upgrades to the system. We have just been approved for upgrade changes based off the PPCR.

Building 100: Administration

The roof had a new coating applied in 2011 and is currently leaking in HR. The HVAC system was replaced in 2017. Temperature controls in some areas can be problematic but are being addressed. Plumbing is in good condition. The electrical system is in good condition. The security system is in good condition. The security gates need replacement, gate one by the bubble has issues with securing from time to time. I have submitted a PPCR for this but was denied because it was not on our 5-year plan. Several entry doors are showing signs of deterioration.

Building 200: Support Services

The roof needs to be replaced. The HVAC system was replaced in 2017. Plumbing is generally in good condition. The electrical system is in good condition. Food Service is generally in good condition; however, it is running at higher than designed capacity which translates into a shorter life cycle for equipment and increased maintenance demands. Health Care area is in good condition.

Building 300: Education

The roof needs to be replaced. The HVAC system was replaced in 2017. The plumbing system is in good condition. The electrical system is in good condition. Several entry doors are showing signs of deterioration.

Building: 500: Maintenance, Warehouse and Electrical Generator Room

The HVAC system is generally in good condition. The plumbing system is generally in good condition. The electrical system is in good condition. The building is in a general good state.

Units 1-7

The roofs were all replaced 2016 and 2017. The HVAC systems are generally in good condition. The plumbing systems are generally in good condition; Icon water regulating systems are functioning well. The electrical systems are in good condition. Several entry doors are showing signs of deterioration. Units 6 and 7 all cell doors are showing signs of wear, repairs and welding are constantly needed.

Water Tower:

Water tower is in good condition. Interior and exterior was painted in 2015. Booster pump and motor was replaced in 2016

Pole Building:

Pole building is in good condition.

Generator and switchgear:

The generator is in good condition, Switchgear was serviced in 2018

Fuel storage tank may need to be replaced. The cathodic protection was tested and won't pass. Evaluation from the testers recommend adding 6 new anodes due to dry sandy conditions.

**OAKS CORRECTIONAL FACILITY
5-Year Plan FY2020**

Building	Project Description	Reason Description	Quantity & Units	Facility Priority	Cost Estimate
100	Replace Security Controls and Gates	Beyond life expectancy	12	1	\$465,000
500	Replace Underground Diesel Storage Tank	Beyond life expectancy- Replace with above ground	1	2	\$80,000
Housing Unit 1	Replace wheelchair lift	Current lift beyond life expectancy	3	3	\$56,000
500	Replace condenser units	One freezer and cooler are past useful life	2	4	\$45,000
200	Replace roof membrane	Current membrane is past life expectancy	1	5	\$228,691
300	Replace roof membrane	Current membrane is past life expectancy	2	6	\$252,110
500	Replace roof membrane	Current membrane is past life expectancy	1	7	\$151,662
Housing Units	Exterior doors/frames/hardware replacement	Current doors/frames/hardware past life expectancy	14	8	\$140,000
100, 200, 300	Exterior doors/frames/hardware replacement	Current doors/frames/hardware past life expectancy	6	9	\$60,000
200	Wall repair	Encapsulate current chipped wall with stainless steel panels	5	10	\$35,000
200	Walk-in cooler Installation	Convert storage area to walk-in cooler for foodservice	1	11	\$80,000
200	Dock Modification	Does not allow for proper transfer of supplies from vehicle to building due to height restrictions.	1	12	\$80,000

300	Install Quarter master mezzanine installation	Additional storage needed.	1	13	\$45,000
100	replace roof membrane	Current membrane is past life expectancy	1	14	\$264,071
Housing Units	Stainless shower enclosures	Current tile and grout beyond life expectancy	56	15	\$392,000
Grounds	Interior fencing repairs and modification	Due to changes in programing and upgrades to gates	8	16	\$25,000
Perimeter fence	Upgrade Stun Fence	Stun fence control parts are becoming obsolete. Existing unit beyond life expectancy	32	17	\$262,500
Grounds	Drive Way repairs and seal	Extend life of pavement	1	18	\$45,000
Housing Units 4 &	Replace wheelchair lift	Current lifts beyond life expectancy	3	19	\$112,000
100	Replace A/C units	Units in Bubble and Control center beyond life expectancy	2	20	\$10,000
				Total	\$2,829,034

MICHIGAN DEPARTMENT OF CORRECTIONS

“Committed to Protect, Dedicated to Success”

MEMORANDUM

DATE: 8/8/18

TO: Marilyn Ruben, Facility Manager
Parnall Correctional Facility

FROM: Brad Zimmerman, Physical Plant Superintendent-13
Parnall Correctional Facility (SMT)

SUBJECT: Annual Physical Plant Report 2018

Below is the Annual Physical Plant Report per Policy Directive 04.03.100.

92-Administration Building – Observations: This building is in good condition. Arsenal construction has been completed. Heating boiler needs to be replaced

Accomplishments: Arsenal and a new staff breakroom has been constructed and operational. The razor ribbon has been updated to perimeter of building.

57-Warden Suite and Physical Training Center – Observations: This building is in good condition. Heating Boiler needs replacement. The mailroom has been moved to this building and is operational.

80-Healthcare, Creamery, Q-Master, Property, Intake – Observations: The Creamery has been closed. Laundry move to the old Creamery area is about to start design and construction (2018), Physical Plant Change has been approved. Property, Quartermaster and intake areas are in good condition the exterior of the building is fair condition some exterior doors could use replacement. Walk-in freezer new equipment installed.

61-Old Traffic Building - This building structurally is in sound shape, but it has not been maintained. Paint peeling, no ceilings, windows need replacement, and demo needs to be done in various areas. This building could be added to the demo list.

91-Levin School – This building is in good condition. Carpet needs replacing, and minor cosmetic repairs are needed.

200- Modular Annex – This building is in good condition considering its age. The heat system is outdated and is no longer efficient and needs replacement.

201- Modular School Offices This building is in good condition considering its structure. New carpet is needed. Roof and soffit need to be replaced.

219-Gym This building is in good condition and well maintained. Concrete areas in front (east) of building need replacing. M.A.U. is about to reach life expectancy (20years)

Accomplishments: Gym floor replaced with tile, painting completed.

198-Programs This building is in very good condition.

Accomplishments: Barbershop was moved to a better location. Electronic Law Library installed. 3 New program rooms have constructed

74-Maintenance This building is in good condition.

213-Maintenance Storage This Pole barn structure building is in very good condition.

79-Food Services This building is in good shape for its age. Roof has been replaced Floors need resurfacing. Windows need energy efficient upgrade.

Accomplishments: Dish Room upgraded. Secure metal can recycling program enacted. Walk in cooler was rebuilt. Many epoxy floor repairs and upgrades were made.

56-Storage Room This building is in fair shape and now houses the facilities ready-to-use caustic area and storage.

8-Block-Housing This building is in good shape considering its age. This Unit is currently used as a mechanical room, supplying water and heat to 9/10 block housing units

9-Block-Housing This building is in good shape considering its age. New locking system will be needed in the near future. The shower area's in this Housing Unit needs complete replacements, and commercial grade epoxy. New roof is also needed.

10-Block-Housing This building is in good shape considering its age. New locking system will be needed in the near future. The shower area's in this Housing Unit needs complete replacements, and commercial grade epoxy. New roof is also needed.

16-Block-Housing This building is in good shape. Showers need commercial grade epoxy.

196-A-Unit-Housing This building is in good shape considering its age. The drywall coverings are constantly being repaired.

197-B-Unit-Housing This building is in good shape considering its age. The drywall coverings are constantly being repaired

32-Factory This building is in good shape considering its age. Painting of walls and floor

coverings are needed. Windows need replacing throughout. Building is not in use and should be added to the demo list

31-Vocational Village This building is in good condition. Windows need replacing throughout. Second floor east 2/3rds (future space is awaiting to be built out)

Accomplishments: This building 1st/2nd floor have been built out to house the vocational village and trade programs, new roof, new camera's, new P.P.D. system. New fire alarm system

124-204-Horticulture These buildings have been demo'd

53-Chapel This building is in good condition considering its age.

Sallyport This area is in good condition. Could use windows and roof replacement.

74-Maintenance Grounds This building is in good condition. Radiant Heating system is in need of replacement.

In conclusion the facility is in good condition considering the temporary units are well over twenty-five years old. The grounds are well maintained. The stun fence that currently surrounds building 81,31,32 is about to be demo' d and a new a/b fence installed. A new fire alarm system install is also about to kickoff which also includes a new security interface. A new centralized laundry is in design and construction to be constructed within the perimeter of the facility. A new camera system has been installed. Perimeter lighting has updated. A new PPD system installed.

Areas of concern include:

- 1. Asphalt/Concrete Repair/Replacements throughout complex.**
- 2. Roofs throughout are in need of replacing 8/9/10 Block (housing units)**

PARNALL CORRECTIONAL FACILITY
5-Year Plan FY2020

Building	Project Description	Reason Description	Quantity & Units	Facility Priority	Cost Estimate
FACILITY WIDE	LAUNDRY MOVE - CENTRALIZE LAUNDRY FROM OUTSIDE PERIMETER AND HOUSING UNITS.	OUR CURRENT CENTRAL LAUNDRY IS OUTSIDE THE PERIMETER. WE WOULD LIKE TO MOVE IT INSIDE FOR SECURITY PURPOSES AND TO REDUCE INMATE MOVEMENT. ALSO, TO CENTRALIZE HOUSING UNIT LAUNDRY INTO ONE CENTRAL LAUNDRY AREA.	N/A	1	\$1,000,000
Site	INSIDE PAVEMENT/ WALKS FROM SALLYPORT TO THE SOUTHGATE	CRUMBLING/BITMUS DRIVE PRESENTS UNSAFE WALKING/TRAVERSING CONDITIONS (HEALTH AND Safety)	N/A	2	\$200,000
9 & 10 BLOCK	COLD WATER SUPPLY TO BE REPLACED FROM MAIN TO BASE. SEWER LINES TO BE REPLACED FROM MAIN TO FIXTURES.	HEALTH AND SAFETY ISSUE	N/A	3	\$200,000
9 & 10 BLOCK	ROOF REPLACEMENT	ROOF IS LEAKING AND CAUSING CEILING DAMAGE. SAFETY CONCERN.	N/A	4	\$500,000
9 & 10 HOUSING UNITS	HOUSING UNIT 9/10/16 block PRISONER SHOWERS - REPLACE UNSANITARY showers (epoxy) INCLUDING SHOWER CHAIRS AND HANDICAP ACCESS.	WORN OUT. LEAKING. UNSANITARY, CRACKED FLOORS. LEAKING SEWAGE. HEALTH AND SAFETY ISSUE.	12 SHOWER AREAS	5	\$150,000
SITE	PERIMETER SHAKER SYSTEM REPLACEMENT SENSTAR/FLEX ZONE	INSTALL NEW SHAKERS AND WIRING THROUGHOUT FACILITY. Improvement to current security system. SAFETY AND SECURITY ISSUES TO STAFF, PRISONERS, AND THE GENERAL PUBLIC.	5,000 FT	6	\$125,000
FACILITY WIDE	EXPAND PUBLIC AND STAFF PARKING LOTS; PAVEMENT, DRIVEWAY, PERIMETER ROAD - Expand public and staff parking lot and replace sidewalks	PARKING LOT NEVER EXPANDED AFTER PRISONER POPULATION WAS INCREASED 25% AND MORE STAFF WERE HIRED. THERE ARE NOW 25% MORE VISITORS PER PRISONERS WHO WERE DOUBLE BUNKED IN A&B UNITS, 16 BLOCK.	15,050 SQ FT	7	\$250,000
BLDG 219	REDO CONCRETE IN FRONT OF GYM	DANGEROUS / UNSAFE	N/A	8	\$25,000
FOOD SERVICE	FOOD SERVICE WINDOW REPLACEMENTS - REPLACE NON-ENERGY EFFICIENT WINDOWS WITH ENERGY EFFICIENT WINDOWS AND BLOCK UP SOME WINDOWS.	ENERGY CONSERVATION MEASURE TO ELIMINATE NON-ENERGY EFFICIENT WINDOWS AND REPLACE WITH ENERGY EFFICIENT WINDOWS FOR BETTER VENTILATION AND CIRCULATION. BLOCK IN SOME WINDOWS.	20 WINDOWS	9	\$150,000
BLDG 31 EXT	INSTALL NEW WINDOWS (BLOCK IN TO STANDARD SIZE)	OUR CURRENT WINDOWS ARE OUTDATED, LEAK AIR AND WATER, AND THEY POSE A THREAT TO SECURITY FOR STAFF AND INMATES.	N/A	10	\$500,000
SITE	YARD LIGHTING UPGRADE-CONVERT FROM HIGH PRESSURE SODIUM TO A WHITE TYPE OF LIGHT FOR BETTER VISIBILITY AND RECORDING. SAFETY AND SECURITY.	INCREASE LIGHTING LEVELS. SECURITY LIGHT. PERSONAL SAFETY	200 FIXTURES	11	\$120,000
BLDG 92	new heating boiler	NOT SERVICEABLE, PAST ITS LIFE EXPECTENCY	1 boiler	12	\$10,000

BLDG 57	new heating boiler	NOT SERVICEABLE, PAST ITS LIFE EXPECTENCY	1 boiler	13	\$10,000
SITE	DOOR REPLACEMENT	MULTIPLE DOORS ARE CORRODED, RUSTED THROUGH AND DAMAGED, POSING A CONCERN TO THE SECURITY OF STAFF AND INMATES.	20	14	\$25,000
BLDG 31	VOCATIONAL VILLAGE FUTURE SPACE	NEEDED TO EXPAND ON EDUCATIONAL AND SKILL TRADE PROGRAMMING.	N/A	15	\$150,000
BLDG 91	LEVIN SCHOOL CARPET	CARPET IS OUTDATED, TORN AND NEEDS REPLACING.	N/A	16	\$10,000
				Total	\$2,225,000

MICHIGAN DEPARTMENT OF CORRECTIONS

“Committed to Protect, Dedicated to Success”

MEMORANDUM

DATE: 8/31/18

TO: Daniel Smith

FROM: Ed LaPlant, Physical Plant Superintendent
Saginaw Correctional Facility

SUBJECT: Annual Physical Plant Report 2018

Facility Overview:

This year again the Saginaw Correctional Facility has again received many much-needed improvements regarding our Physical Plant. While the investments are a very welcome improvement, there are still issues that will need further attention.

Entrance doors and frames throughout the facility are in poor condition and in need of replacement. The facility has funded a MOP and a professional review of this project has begun. Although this project is proceeding slowly, we believe that it will be complete by the end of the current fiscal year.

Porosity of the brick used to construct the facility has been a problem since the beginning. Heavy rains cause many building leaks. All buildings should be water-sealed with a commercial brick sealant.

Water proofing on the lower levels of the medium security housing unit walls has failed. Heavy rains cause leaks into the lower level cells in certain areas.

The perimeter detection system, while still functional, has exceeded its expected life cycle. Water intrusion has become more frequent and repairs are needed more often. The facility has funded replacement of sensors and our staff have replaced all sensors with new equipment. A project has also begun to replace our security monitoring system.

Our housing unit wheel chair lifts have become very problematic and need replacement.

The Public-Address system has been recently problematic. Amplifiers, speakers, horns and microphones have failed throughout the facility. While repairs have been made, an upgrade of the entire system is needed.

While we have had very few issues with our heating boilers, it should be noted that they are all original equipment and are reaching the end of their expected life cycle.

The above items have been included in our 5-Year Plan. It should be noted that this facility is running at over double its design capacity. This translates into a shorter life cycle for equipment and increase maintenance demands.

Building 100: Administration

The entry doors and porous brick problems were covered in the overview. The HVAC system is generally in good condition. Precise temperature control in some areas can be problematic. The sliding security gates have become more of an issue this year. These are now going to be included in our door project and should be replaced by the end of the fiscal year. Plumbing is in good condition. The boilers are original equipment. The electrical system is in good condition. The security system is in functional condition. Brick is in need of tuck pointing and windows should be caulked.

Building 200: Support Services

The entry doors and porous brick problems were covered in the overview. The HVAC system is generally in good condition. Precise temperature control in some areas can be problematic. The boilers are original equipment. Plumbing is generally in good condition. The electrical system is in good condition. Food Service is generally in good condition; however, it is running at over double design capacity which translates into a shorter life cycle for equipment and increase maintenance demands. Health Care is in good condition. Precise temperature control in this area of the facility is also problematic. Segregation is generally in good condition. The brick is in need of tuck pointing and windows should be caulked.

Building 300: Education

The entry doors and porous brick problems were covered in the overview. The HVAC system is generally in good condition. Precise temperature control can be difficult in some areas. The boilers are original equipment. The plumbing system is in good condition. The electrical system is in good condition. The brick is in need of tuck pointing and the windows should be caulked.

Building: 400 Level I Housing

The entry doors and brick problems were covered in the overview. The HVAC system is generally in good condition. The boilers are original equipment. The plumbing system is generally in good condition; however, it is running at double design capacity which translates into a shorter life cycle for equipment and increase maintenance demands. The electrical system is in good condition. The brick is in need of tuck pointing and the windows should be caulked.

Buildings: 700, 800, 900 Level II Housing

The entry doors and brick problems were covered in the overview. The HVAC systems are generally in good condition with exception heating boilers which are original equipment. The plumbing systems are generally in good condition; however, they are running at double their design capacity which translates into a shorter life cycle for equipment and increase maintenance demands. The electrical systems are in good condition. The brick is in need of tuck pointing and the windows should be caulked.

Buildings: 500, 1200 Level IV Housing

The entry doors and brick problems were covered in the overview. The HVAC systems are generally in good condition with exception on the air compressors which are in need of replacement and the boilers which are original equipment. The plumbing systems are generally in good condition; however, they are running at double their design capacity which translates into a shorter life cycle for equipment and increased maintenance demands. The electrical systems are in good condition. The sliding cell door systems are generally in good condition with worn track assemblies replaced on an as needed basis. The controllers for these doors are no longer available and will eventually need to be replaced. These are on our five-year plan. The brick needs tuck pointing and the windows should be caulked.

Building: 600 Level IV Housing

This housing unit was built in 2001 and is in generally good condition. The plumbing system is in good condition. The electrical system is in good condition. The HVAC systems are in good condition. The entry doors in this unit are showing signs of wear and tear.

Building 1100: Maintenance, Warehouse and Electrical Substation

The entry doors were covered in the overview. The HVAC systems are in good condition. The plumbing system is in good condition. The electrical system is in good condition. The substation switch gear and backup generator are in good condition. The propane system has developed some leaks and is in need of repairs which are being scheduled at this time. Warehouse freezer doors are in poor condition and need replacement.

Building 1600: Grounds, Wood Shop and Transportation

This building is of post frame construction and in good condition apart from the shingles which will need to be replaced within the next couple of years. The overhead doors are functional but show excessive wear. HVAC system is in good condition. Plumbing is in good condition. Electrical system is in good condition.

SAGINAW CORRECTIONAL FACILITY
5-Year Plan FY2020

Building	Project Description	Reason Description	Quantity & Units	Facility Priority	Cost Estimate
Site	Replace Sally port gates	Beyond useful life. Repeated damage and repair have weakened gates.	2	1	\$250,000
unit 400	Replace wheel chair lift	beyond useful life. More cost effective to replace soon. To eliminate high maintenance condition.	1	2	\$120,000
unit 500	Replace wheel chair lift	beyond useful life. More cost effective to replace soon. To eliminate high maintenance condition.	1	2	\$120,000
unit 600	Replace wheel chair lift	beyond useful life. More cost effective to replace soon. To eliminate high maintenance condition.	1	2	\$120,000
unit 800	Replace wheel chair lift	beyond useful life. More cost effective to replace soon. To eliminate high maintenance condition.	1	2	\$120,000
unit 500	Replace cell door controls	beyond useful life. Parts and controllers are obsolete.	1	3	\$125,000
unit 1200	Replace cell door controls	beyond useful life. Parts and controllers are obsolete.	1	3	\$125,000
Site	Removal of underground storage tanks	High maintenance, permitting cost as well as potential environmental issues.	2	4	\$100,000
Standish	Removal of underground storage tanks	High maintenance, permitting cost as well as potential environmental issues. Install above ground tank for generator and grounds equipment.	3	4	\$150,000
Site	Replace Public Address System	Beyond useful life, many components of the system fail often.	11	5	\$150,000
Site	Recreation Field/Court Resurface/Renovate, Basketball. Basketball court located westerly of Building 10.	Due to age of system. To prevent failure. To fix deteriorated, damaged, failure area.	3,000 SF		\$10,100
Site	Recreation Field/Court Resurface/Renovate, Basketball. Basketball court located westerly of Building 11.	Due to age of system. To prevent failure. To fix deteriorated, damaged, failure area.	3,000 SF		\$10,100

SAGINAW CORRECTIONAL FACILITY

5-Year Plan FY2020

Building	Project Description	Reason Description	Quantity & Units	Facility Priority	Cost Estimate
Site	Recreation Field/Court Resurface/Renovate, Basketball. Basketball court located westerly of Building 12.	Due to age of system. To prevent failure. To fix deteriorated, damaged, failure area.	3,000 SF		\$10,100
Site	Recreation Field/Court Resurface/Renovate, Basketball. Basketball courts located at north end of the Activity Yard.	Due to age of system. Due to facility request. To prevent failure. To improve appearance. Due to site/soil characteristics. To extend life.	12,000 SF		\$40,300
Site	Recreation Field/Court Remove & Replace, Running Track. Running track within the Activity Yard located at the northwest corner.	Due to age of system. Due to facility growth. To prevent failure. To fix deteriorated, damaged, failure area. To prevent personal injury. To improve appearance. To improve pedestrian traffic flow. Due to facility construction. To extend life. Uti	150 SF		\$880
Site	Recreation Field/Court Resurface/Renovate, Running Track. Running track within the Activity Yard.	Due to age of system. Due to facility request. To prevent failure. To fix deteriorated, damaged, failure area. To prevent personal injury. To improve appearance. To improve pedestrian traffic flow. Due to site/soil characteristics. To extend life.	14,200 SF		\$59,600
Site	Site Improvements III, Remodel/Repair, Ball Field Backstop. Backstop at ball field within Activity Yard.	Due to age of system. To prevent failure. To fix deteriorated, damaged, failure area. To prevent personal injury. To improve appearance. To extend life.	1 Unit		\$2,700
Site	Soil Stabilization/Grading, Add/Regrade Drainage Swale/Lawn Area. Ditch outside of perimeter fence running southeast from the northeast corner of the site.	Due to age of system. Due to facility request. To fix deteriorated, damaged, failure area. To improve appearance. Due to site/soil characteristics. Property below to facility, ditch does not drain, and cattails are growing. Forces water back to Perime	7,500 SF		\$50,400
Site	Storm Detention Pond, Re-grade & Increase Size. Detention pond located easterly of site.	Due to age of system. Due to facility request. To improve drainage. To fix deteriorated, damaged, failure area. Service reliability. Due to site/soil characteristics. To extend life. Cattails growing.	Lump Sum		\$32,400
Administration 100	Misc. projects. Seal exterior brick with commercial sealant.	Worn out. Damaged. Leading to More Serious Problems. To Cover up Water Damage.	Lump Sum		\$25,200
Administration 100	INTERIOR LIGHTING-Relamp/reballast interior light fixture(s), Troffer. Remove T12 lamps and magnetic ballasts and replace with T8 lamps and electronic ballasts.	Provides a cost and energy savings.	27,315 SF		\$73,800
Administration 100	Modular boilers. Replace (2) PK-1200 heating boilers.	Worn out. Future major expense.	2 Units		\$200,000
Administration 100	Replace/new water heater - 250 gallon.	Worn out. Future major expense.	2 Units		\$22,700
Administration 100	Replace monitoring system.	Beyond useful life. More cost effective to replace soon. To eliminate high maintenance condition. For officer safety.	Lump Sum		\$100,000

SAGINAW CORRECTIONAL FACILITY

5-Year Plan FY2020

Building	Project Description	Reason Description	Quantity & Units	Facility Priority	Cost Estimate
Administration 100	Replace condensing units	existing system has reached it maximum life expectancy	MOP		\$75,000
Support Services 200	Equipment - New and Replacement. Replace (3) dental chair control arms.	Damaged. Request of Facilities Maintenance.	Lump Sum		\$4,200
Support Services 200	Equipment - New and Replacement. Replace dental x-ray processor.	Worn out. Damaged. Request of Facilities Maintenance.	Lump Sum		\$5,000
Support Services 200	Misc. projects. Seal exterior brick with commercial sealant.	Worn out. Damaged. Leading to More Serious Problems. To Cover up Water Damage.	Lump Sum		\$25,200
Support Services 200	Modular boilers.	Worn out. Future major expense.	2 Units		\$200,000
Support Services 200	Replace pneumatic with direct digital controls (DDC).	Not functioning or broken.	29,740 SF		\$12,500
Support Services 200	Miscellaneous. Replace faucets with motion sensor type faucets.	Code compliance. Personal comfort.	Lump Sum		\$8,100
Support Services 200	Add new equipment. Replace door control panel.	Obsolete, no longer manufactured, parts unavailable. To eliminate potential for future damage. To eliminate high maintenance condition. Not functioning properly, components failing. For officer safety.	Lump Sum		\$13,600
Support Services 200	Replace condensing units	existing system has reached it maximum life expectancy	MOP		\$75,000
Education 300	Equipment - New and Replacement. Replace convection oven/range.	Worn out. Damaged. To Eliminate High Maintenance Condition.	Lump Sum		\$13,400
Education 300	Replace/new water heater - 250 gallon.	Worn out. Future major expense.	2 Units		\$22,700
Education 300	Replace condensing units	existing system has reached it maximum life expectancy	MOP		\$75,000

SAGINAW CORRECTIONAL FACILITY
5-Year Plan FY2020

Building	Project Description	Reason Description	Quantity & Units	Facility Priority	Cost Estimate
Warehouse 1100	Equipment - New and Replacement. Add extra sound absorptive blankets around compressors 30 LF.	Request of Facilities Maintenance.	Lump Sum		\$4,000
Warehouse 1100	Misc. projects. Addition of 500 sf for extra storage.	Dangerous or Potentially Life Threatening. Remove storage above freezer/coolers.	Lump Sum		\$168,000
Warehouse 1100	Miscellaneous. Move condensing units for freezers to outside.	Impairs building operation.	Lump Sum		\$4,000
Housing Unit 700-L2	Recaulk/Reseal window system.	Worn out. Leading to More Serious Problems.	1,500 SF		\$12,600
Housing Unit 700-L2	Misc. projects. Seal exterior brick with commercial sealant.	Worn out. Damaged. Leading to More Serious Problems. To Cover up Water Damage.	Lump Sum		\$25,200
Housing Unit 800-L2	Recaulk/Reseal window system.	Worn out. Leading to More Serious Problems.	1,500 SF		\$12,600
Housing Unit 800-L2	Misc. projects. Seal exterior brick with commercial sealant.	Worn out. Damaged. Leading to More Serious Problems. To Cover up Water Damage.	Lump Sum		\$25,200
Housing Unit 800-L2	Modular boilers.	Worn out. Future major expense.	1 Unit		\$100,000
Housing Unit 900-L2	Recaulk/Reseal window system.	Worn out. Leading to More Serious Problems.	1,500 SF		\$12,600
Housing Unit 900-L2	Misc. projects. Seal exterior brick with commercial sealant.	Worn out. Damaged. Leading to More Serious Problems. To Cover up Water Damage.	Lump Sum		\$25,200
Housing Unit 900-L2	Modular boilers.	Worn out. Future major expense.	1 Unit		\$100,000
Housing Unit 900-L2	Miscellaneous. Replace faucets in cells.	Not functioning or broken. Code compliance.	Lump Sum		\$30,200

SAGINAW CORRECTIONAL FACILITY
5-Year Plan FY2020

Building	Project Description	Reason Description	Quantity & Units	Facility Priority	Cost Estimate
Housing Unit 900-L2	Miscellaneous. Replace expansion joints.	Worn out.	Lump Sum		\$2,700
Housing Unit 500-L4	Replace existing window system - w/ insulated system.	Damaged.	120 SF		\$7,700
Housing Unit 500-L4	Recaulk/Reseal window system.	Worn out. Leading to More Serious Problems.	1,200 SF		\$10,100
Housing Unit 500-L4	Equipment - New and Replacement. Replace 192 faucets.	Leading to More Serious Problems. Not to Present Code. To Eliminate High Maintenance Condition. The faucets are no longer manufactured. This will become a health and sanitation problem.	Lump Sum		\$43,700
Housing Unit 500-L4	Misc. projects. Replace 96 automatic door tracks.	Worn out. Damaged. To Eliminate High Maintenance Condition. Damage Due to Facility Growth. Request of Facilities Maintenance.	Lump Sum		\$40,300
Housing Unit 500-L4	Modular boilers.	Worn out. Future major expense.	1 Unit		\$100,000
Housing Unit 500-L4	Miscellaneous. Replace faucets in cells.	Not functioning or broken. Code compliance.	Lump Sum		\$30,200
Housing Unit 500-L4	Miscellaneous. Replace expansion joints.	Worn out.	Lump Sum		\$2,700
Housing Unit 1200-L4	Replace existing window system - w/ insulated system.	Damaged.	120 SF		\$7,700
Housing Unit 1200-L4	Recaulk/Reseal window system.	Worn out. Leading to More Serious Problems.	1,200 SF		\$10,100
Housing Unit 1200-L4	Equipment - New and Replacement. Replace 192 faucets.	Leading to More Serious Problems. Not to Present Code. To Eliminate High Maintenance Condition. The faucets are no longer manufactured. This will become a health and sanitation problem.	Lump Sum		\$43,700
Housing Unit 1200-L4	Misc. projects. Replace 96 automatic door tracks.	Worn out. Damaged. To Eliminate High Maintenance Condition. Damage Due to Facility Growth. Request of Facilities Maintenance.	Lump Sum		\$40,300

**SAGINAW CORRECTIONAL FACILITY
5-Year Plan FY2020**

Building	Project Description	Reason Description	Quantity & Units	Facility Priority	Cost Estimate
Housing Unit 1200 - L4	Modular boilers.	Worn out. Future major expense.	1 Unit		\$100,000
Housing Unit 1200 - L4	Miscellaneous. Replace (92) faucets.	Not functioning or broken. Code compliance.	Lump Sum		\$30,200
Housing Unit 1200 - L4	Miscellaneous. Replace expansion joints.	Worn out.	Lump Sum		\$2,700
Housing Unit 400- L1	Equipment - New and Replacement. Replace cooler/freezer.	Worn out. Damaged. Request of Facilities Maintenance.	Lump Sum		\$26,900
Housing Unit 400- L1	Modular boilers.	Worn out. Future major expense.	1 Unit		\$100,000
Weight Pit Building	Replace gutter system.	Leading to More Serious Problems. To Eliminate High Maintenance Condition. To Cover up Water Damage.	200 LF		\$2,000
Food Service	Replace Mista-Fire hood suppression system	Current system controls have become obsolete. Need exists to replace controller and water system with a chemical type system	1 system		\$25,000
Facility	Replace foot lockers and desks	Current cell lockers and desks have been destroyed to make weapons. Need to install heavy duty steel foot lockers and writing surfaces.	1,100 of each		\$1,000,000
Site	Repair or remove Propane System	Existing system has leaks that will require entire tank to be emptied	1		\$25,000
300	Building 300 Expansion	Additional space needed for increased programing. 50' x 80'	4,000 sq. Ft		\$820,000
				Total	\$5,538,580

MICHIGAN DEPARTMENT OF CORRECTIONS

“Committed to Protect, Dedicated to Success”

MEMORANDUM

DATE: July 27, 2018

TO: Mark McCullick, A/Warden
St. Louis Correctional Facility/SLF

FROM: Vic Fisher, Physical Plant Supervisor
St. Louis Correctional Facility/SLF

SUBJECT: Annual Physical Plant Report 2018

Overview of Physical Plant Accomplishments

Fire alarm system in the facility has been completed.

Arc flash reductions are complete.

PPD system is almost complete.

Generator {CAT} switch gear upgrade is complete. PBF projects, pull-up bars are complete.

Icon system has been completed in housing unit 7.

Replaced carpet in some of the needed areas of the facility.

LED bulbs are being used as needed in the interior of the Housing Units, Food Service, and Administration Building.

Maintained a high level of morale among maintenance staff with the need to escort multiple outside contractors.

Annual Review of Physical Plant

Exterior and some interior doors throughout the facility are in poor condition and need replacement.

Razor wire upgrade has an MOP and is waiting for start date from contractors.

A/C unit for 300 bld. has MOP and waiting on DTMB for replacement.

Areas that have original carpet are worn and need replaced.

Shower project has MOP and is waiting on DTMB.

Windows glass throughout the facility has become cloudy because of bad seals.

Hot water boilers need to be replaced do to age and showing signs of future maintenance issues.

All buildings should be water-sealed with a commercial brick sealant.

Guard Towers B, D, and E are unserviceable and need demolition.

Building 100 – Administration

The HVAC system is generally in good condition. Plumbing is in good condition. The electrical system is in good condition. The security system is in good condition. Some window glass needs replaced and re-caulked. Building entrance/exit doors are rusted and need to be replaced.

Building 200 – Food Service / Health Care

The HVAC system is generally in good condition. Plumbing is generally in good condition. The electrical system is in good condition. Food Service is generally in good condition; however, it is running at over double design capacity which translates into a shorter life cycle for equipment and increase maintenance demands. Health Care is in good condition. Building exterior/interior doors are rusted and need to be replaced. Window glass needs replaced and re-caulked.

Building 300 – Education/Programs

The HVAC system needs to be replaced; however, an additional unit needs to be installed to handle air conditioning to the Library Offices and Quartermaster areas. The plumbing system is in good condition. The electrical system is in good condition. The window glass needs replaced and re-caulked. Classrooms need carpet replaced. Building entrance/exit doors are rusted and need to be replaced.

Housing Units 1 - 7

The HVAC systems are in generally in good condition. The plumbing systems are generally in good condition; however, they are running at double their design capacity which translates into a shorter life cycle for equipment and increase maintenance demands. The electrical systems are in good condition. Seals on some windows are bad causing them to become cloudy. The Buildings have exit/entrance doors are rusted and need to be replaced.

Building 500 – Maintenance, Warehouse and Electrical Substation

The HVAC systems are in good condition. The plumbing system is in good condition. The electrical system is in good condition. The substation switch gear, back-up generator is in good condition. Building entrance/exit doors are rusted and need to be replaced.

cc: Ed Vallad, Administrator, Physical Plant Division
Daniel Smith, Department Analyst, Physical Plant Division
Jeff Niemi, Northern Region Physical Plant Supervisor
Andrea Stinson, Building Construction Specialist
Dave Downs, Administrative Officer

**St. Louis Correctional Facility
5 Year Plan FY2020**

Building	Project Description	Reason Description	Quantity & Units	Facility Priority	Cost Estimate
Programs	Program Building Air Conditioning	Currently we have no A/C for the Quarter Master and one class room used VPP,	1	1	\$150,000
Site	Facility Doors	Door frames are rusting out and pulling loose from the block walls. This puts extra stress on the hinges causing them to need to be replaced often.	25	2	\$400,000
Site	Towers	Demolition requested.	2	3	\$50,000
Units 1 & 7	Wheelchair Lifts	Current lifts are 20 years old but in good working order.	2	4	\$262,500
Site	PVI Atmospheric Gas Water Heaters	Domestic hot water heaters have deteriorated.	7	5	\$210,000
Site	ICON Water Valves	ICON Valves are a timed flushing system that would save on water use.	588	6	\$480,000
Site	Housing Unit Windows	Housing unit windows have lost their internal seal causing them to be cloudy.	672	7	\$400,000
Site	Blacktop reseal	Parking lot needs to be resealed and cracks filled	all areas	8	\$60,000
Site	Dish washing machine	Current dish machine is worn and needs to be replaced	1	9	\$160,000
				Total	\$2,172,500

MICHIGAN DEPARTMENT OF CORRECTIONS

“Committed to Protect, Dedicated to Success”

MEMORANDUM

DATE: August 8, 2018
TO: Willis Chapman, Warden
FROM: Steve Zubek, Facility Manager
SUBJECT: **Annual Physical Plant Report**

Policy directives require an annual maintenance assessment of our facility. A key to ensuring the proper maintenance of any site is the resources (human and financial) that are provided toward that effort.

Detailed below is the annual assessment of our physical plant as required by PD 04.03.100. We have detailed each building's condition and any repairs/improvements that are recommended or have recently been completed. Many of the items have been previously identified and included on our five (5) year plan.

Most building at the Thumb Correctional Facility are in good condition with wear and tear typically found in building of this age. This report will detail only the work that is not considered “routine”, it will be items that directly affect the safety and security of the facility.

Overview of Physical Plant Accomplishments

The Solaris roof top defense system has had pull chains with plates added to the system to achieve zone checks. This system is working well for the facility.

Our razor ribbon will be enhanced. The project is expected to begin in September 2018.

The facility is installing LED lighting throughout the facility as funds are available. The Business Office, Lobby and Wardens suite have been changed to LED. We have started the change to LED in food service.

The facility housing units have been painted, cells, bowtie areas, hand rails, etc. We are going to remove the paint off from the inside of the cell doors and leave the steel exposed due to constant graffiti by the prisoners.

The maintenance department has started resurfacing the showers in the units, this will be a slow process as funds are made available.

Auburn Unit/Burn Unit (Bldg. 700)

There continues to be the need for new Boilers in this housing unit. The old boilers are still in good working condition, and the continuous preventative maintenance on them will continue to extend their lives.

The handicapped elevator in Auburn has been giving the facility issues, but we have had OTIS here several times to work on it. The mechanical lift will be on the facility five-year plan for replacement.

The overall appearance and structure of building 700 is excellent the staff both Maintenance and Custody do an excellent job of keeping this housing unit in great shape.

The Front entrances are still working well, but they need replacement within the next few years.

The showers in Auburn Unit need to be resurfaced and we have located a product that would make a significant improvement and Auburn unit has been put on the schedule to have their shower addressed.

The showers in Burns is in the process of resurfacing.

The facility has been approved for the installation of the I-CON system on the showers in all of building 700. This will be a significant savings to the facility as it pertains to our water and sewer bills.

Cord Unit/Durant Unit (Bldg. 400)

Not unlike all the other housing units building 400 needs new metal insulated doors, hardware and frames. The entrance doors on the front and back of this housing unit get considerable wear and tear over the years and have just come to the end of their usefulness.

The roof of building 400 is scheduled for replacement, the project is expected to start in early September 2018.

Both Cord and Durant must have their showers resurfaced and Maintenance will be working on these areas over the remainder of this fiscal year and next.

Essex Unit/Franklin Unit (Building 500 and Building 1000)

As with the other units Essex unit too needs new entry doors, hardware and continuous hinges. The doors are not worn due to misuse but because of age and use.

Building 1000 roof is in poor condition, maintenance will be addressing the leaks until we can replace the entire roof.

The elevator in Franklin B unit needs to be replaced, the physical plant change request has been submitted.

Franklin unit has one of two domestic hot waters scheduled for replacement in September 2018.

A project request has went forward requesting to repurpose Essex A, this would add 24 usable beds and address PREA compliance.

Food Service/Health Care/Segregation/Maintenance/Warehouse (Bldg.200)

Building 200 has one of two domestic hot waters scheduled for replacement in September 2018.

The elevator in this building has been operating without mechanical issues this year.

There are some doors and door frames throughout this building that are still in the need of replacing. We will replace these as funding becomes available.

Maintenance has repainted all the cells in upper and lower segregation which allows the custody staff to better police the wear and tear of these cells.

Health Care is in the process of installing a new X-Ray machine.

Programs (Building 300)

The entrance doors need replacement in building 300, but for the most part this building is in good shape.

Administration (Building 100)

We need to replace the sliding doors (Doors 1, 2 and 3) at the Bubble and Control Center to maintain the safety and security of the facility when employees, visitors, and prisoners enter and exit this area. We have seemed to get the work on these doors under control, although there are still times we need to work on these doors for the most part they have been running well. This is in our five-year plan but do to the expense of this item it is still on hold.

The elevator in Building 100 is in good condition, there have been some minor issues with this elevation but nothing that hasn't been able to be fixed quickly and for the most part inexpensively.

We need to replace the entrance doors to the Building 100 to a power assisted door which will make us fully compliant with ADA guidelines an improve building accessibility.

The lobby lights area most of the business office have been converted to LED lighting, by doing so we have been able to remove twenty fixtures which will be significant saving to our facility.

MSI (Building 600)

This building is in good shape for the most part. The steal roof has several leaks which maintenance can patch until we can replace the roof.

Site Needs

We need to repair our parking lots and perimeter roads, even though they do not see the traffic that they once did they still need to be maintained or even upgraded. This is in our five-year plan, but for now we continue to patch as needed.

The Generator is in good working condition. It recently had its yearly full load test completed with an entire tune up. It would be a great advantage to this facility if the Generator was upgraded; this would allow us to be able to run the entire facility during a power outage. As of right now, we can only run certain area of the facility.

The roof to building 800 that houses the generator is scheduled for replacement in early September 2018.

The facility has replaced its entire zone defense, the A and B zone defense is an all new

Gun Range

The gun range is up and running at this time and seems to be holding up better due to some slight changes made over the past year. The building of the second range is complete except for the berm, the facility had been working hard to clean up this area and get the second half of the range in full use.

In conclusion, our major needs fall in several key areas:

1. Boiler for heat and domestic hot water.
2. Door replacements.
3. Roof replacement on building 400 & 800 are scheduled for September 2018, however buildings 600, and 1000 need to be addressed.
4. Replacement of the perimeter road and parking lots.
5. Installation of I-CON system- This project has started and will be completed by 12/01/18.

As indicated above, many of the items reported herein have been identified through previous assessment documents. We will continue to review the facilities needs and update all concerned as our reassessment project is completed.

cc:

Ed Vallad
Andrea Stinson
Dave Albrecht
Gene Page
Richard White
Rick Cleveland

**THUMB CORRECTIONAL FACILITY
5-Year Plan FY2020**

Building	Project Description	Reason Description	Quantity & Units	Facility Priority	Cost Estimate
600/700/1000	Replace existing roofs on Auburn and Burns unit (1), Franklin unit (1), and MSI laundry (1)	Damaged, leading to more serious problems	3 units	1	\$1,660,000
100/200/300	Replace single exterior/interior door, door frames, and hardware, main entrance, bubble, control center, food service, and education	Water damage, freezing conditions are adding to the damage of the parking lots	6 units	2	\$600,000
Site	Replace all 5 mechanical wheel chair lifts in bldg. 700 A and B, 400 A and B, 500 and 1000	Continuous need for repairs	5 units	3	\$600,000
Site	Replace existing perimeter road, parking lots, and sidewalks throughout the facility	Water damage, freezing conditions are adding to the damage of the sidewalks	8 units	4	\$1,500,000
Site	Replace existing fire alarm system	Operational, in need of system upgrade	6 units	5	\$800,000
Bldg. 200	Replace three existing food storage walk-in refrigeration units and the serving line in food service	Floors are in need of replacement. They are original units, several years of use.	4 units	6	\$300,000
Site	Replace facility paging system	Obsolete, repair parts unavailable	18 units	7	\$400,000
Bldg. 100/300	Replace controls on air conditioning units	Obsolete, repair parts unavailable	2 units	8	\$125,000
				Total	\$5,985,000

MICHIGAN DEPARTMENT OF CORRECTIONS

“Committed to Protect, Dedicated to Success”

MEMORANDUM

DATE: August 7, 2018
TO: Warden Shawn Brewer, WHV
FROM: Richard Bullard, Physical Plant Superintendent - WHV
SUBJECT: Annual Physical Plant Report

This Annual Report has been prepared in accordance with PD 04.03.100 “Preventive and Emergency Maintenance for Correctional Facilities”. Specifically, section “N” required CFA Physical Plant Superintendents conduct an annual inspection of their respective facility to assess the need for future maintenance. The result of the inspection is to be submitted in writing to the facility Warden.

Executive Summary

These are DTMB/Facility projects completed in FY2017 and at this writing in FY2018:

- **Roofs** – Installed a 5-year temporary roof repair on the MSI building as well as replacing the roof over the break area in the East Administration Building.
- **East Sallyport Gate** - Replacing the outer Sallyport gate and the installation of microwave cones in and around the both the East and West Sallyports as well as at the East and West entrances to the outer perimeter road.
- **West Perimeter Fence** – Installing an inner fence with anti-climb mesh and stun designat the top.
- **Youthful Offender Area Upgrade** – Consists of installing 5 wet cells with one being a handicapped hard walled cell that can be used for a handicapped prisoner or serve as a segregation/OBS cell.
- **HVAC Controls Upgrade** – Units 4, 5, Programs/Unit 6, Fieldhouse, RCG- Installation of DDC controls new field devices and integration into the BASS controls system.
- **Razor Wire Replacement Project** – Add additional rows of razor wire on the inner and outer perimeter fences.
-

These are DTMB projects currently in progress in FY2018 at this writing:

- **Roofs** – Jennings
- **Chiller Replacement** - Installation of three 400-ton air cooled chillers and associated appurtenances for facility air conditioning. 1 chiller will be put into operation in July. The other two chillers will be installed over the winter in time for the 2019 cooling season.
- **Vocational Village**- Create a vocational programs area for prisoners to be located in the former Unit 6 area of the Programs Building.
- **Tennis & Basketball Replacement** – Replacing the large tennis court in the West big yard and the large basketball court in the East big yard.
- **Food Service Floor Sealing** – Clean and seal all exposed high traffic concrete floors in this building.
- **Video Management & Perimeter Surveillance Upgrade** – Replacement/addition of new surveillance cameras including a new video recording/storage system and perimeter lighting.

- **HVAC Controls Upgrade** – Units 4, 5, Programs/Unit 6, Fieldhouse, RCG- Installation of DDC controls new field devices and integration into the BASS controls system.
- **Fieldhouse Gymnasium Floor Replacement**
- **Fieldhouse Infrastructure Enhancements** – Replacement of a door in room 110, new window in room 112, new ceiling and lighting fixtures in room 111, replacement of a fin tube heat exchanger in room 112 including balancing valves in rooms 111 and 112, replacement of a cabinet heater in room 110.
- **Hydronic Heat Exchangers and pumps-** Replace the two main hot water heating heat exchangers and pumps located in the tunnel/basement of Kent. These supply hot water for heating to all the East Side buildings except Calhoun, Dickinson and MSI.

Needed future facility-wide issues:

- **PA System** – This system is old and obsolete. The amplifiers are failing frequently. This system should be replaced.
- **Exterior Lighting** – The parking lot and interior lighting fixtures and poles need to be replaced. The fixtures are a combination of high-pressure sodium, metal halide and mercury vapor. All of which require frequent replacement and costlier to operate when compared with LED fixtures. Most of the poles are deteriorated from rusting and the underground conduit carrying the wiring is deteriorated and prone to failure.
- **Perimeter Road** - This asphalt drive is starting to deteriorate, and plans should be in place to replace it.
- **Primary (4800 volt) Electrical Substations** – Electrical substations in the West Administration Building, Jennings and Prisoner Services Building are obsolete and prone to erratic operation. New parts are no longer available. These substations need to be replaced.
- **Motor Control Centers (480 volt)** – The motor control centers in all buildings except Food Service, MSI and the emergency generator room need to be replaced primarily due to obsolescence and damage due to excessive atmospheric moisture over the years due to past steam leaks and poor ventilation.

Staffing

We currently have staffing openings for 1 Physical Plant Supervisor 12, 4 Maintenance Mechanics, 2 Plumbers, 2 Electricians, 1 Equipment Technician 11 and 1 Refrigeration Mechanic 10.

Powerplant and Utilities

This summer we will be installing three 400-ton air-cooled York water chillers to replace the existing two 600-ton Trane lithium bromide absorption chillers. Two of the chillers will be installed and put into operation immediately and the third made operational after the cooling season.

The existing cooling tower and one existing 600-ton lithium bromide absorption chiller and all related cooling water and chilled water pumps will be demolished after this cooling season.

The three main Powerplant steam boilers are severely scaled on the waterside heating surfaces which are both increasing fuel consumption but also limit their steam generating capacity to about 66% of design capacity. The combustion controls on the 3 Cleaver Brooks water tube boilers need to be replaced to achieve improved control, improved efficiency and improved operational reliability.

The main Federal Pacific motor control center (MCC) for the Powerplant has been obsolete for years and replacement breakers, buckets and starters are no longer available. This MCC needs to be replaced.

(Author's Note: Once the lithium bromide absorption chillers are replaced with centrifugal chillers, the Powerhouse steam boilers will be severely oversized for what will then be the existing steam load and should be replaced with fire tube boilers of significantly less steam generating capacity).

West Side

Administration Building

The building is overall in good structural shape. The roof was replaced in 2016. The domestic hot water system was also replaced in 2016.

The Health Care area is in overall good condition.

A double split air conditioning system will be installed in the medication storage and dispensing rooms to maintain the quality of medications in 2018. The countertops in the medication room have been modified due to ergonomic concerns. Three examination rooms have been remodeled to better serve their purposes.

The heating coils and chilled water coils were replaced in AHU-1 but the HVAC systems are as old as the building and most of its equipment and accessories are obsolete and not readily replaceable.

Air handlers need to be replaced as well as hot and cold decks. The typical life expectancy of an industrial/commercial HVAC system is 20 – 25 years with proper maintenance. This system is 43 years old. Essentially, the entire HVAC system needs to be replaced. Exterior doors need to be replaced.

Rubber seated butterfly isolation valves on the chilled water system are original and not holding 100% when closed. They need to be replaced.

The 3 entrance gates (bubble gates) need to be replaced. They are way past their expected useful life.

Programs Building & Unit 6 (Soon to be Vocational Village)

The building structure overall is in good shape. This roof was replaced during the summer of 2016. The auditorium lighting needs to be upgraded to LED fixtures. Installation of direct digital controls for the HVAC system including new field devices and integration into the BASS controls system will be completed this summer.

Air handlers need to be replaced as well as hot and cold decks. The typical life expectancy of an industrial/commercial HVAC system is 20 – 25 years with proper maintenance. This system is 43 years old. Essentially, the entire HVAC system needs to be replaced. Exterior doors need to be replaced.

Rubber seated butterfly isolation valves on the chilled water system are original and not holding 100% when closed. They need to be replaced.

The windows need to be replaced.

Food Service Building

The concrete floor needs to be stripped, etched and sealed as this was never done during construction. The tile grouting in several areas needs to be replaced due to excessive deterioration.

Housing Unit 1

The building structure overall is in good shape.

All coils on the reheat system were replaced this past year.

Air handlers need to be replaced as well as hot and cold decks. The typical life expectancy of an industrial/commercial HVAC system is 20 – 25 years with proper maintenance. This system is 43 years old. Essentially, the entire HVAC system needs to be replaced.

Rubber seated butterfly isolation valves on the chilled water system are original and not holding 100% when closed. They need to be replaced.

The windows need to be replaced. The exterior doors to the lower mechanical room are rusted beyond any further repairs and need to be replaced.

The limited use elevator lift needs to be completely rebuilt or replaced.

All Level IV doors need to be replaced due to worn locking devices and hinges. 15 have been replaced so far. All Level IV locks need to be re-cored with Best 7 pin cores.

Housing Unit 2

Air handlers need to be replaced as well as hot and cold decks. The typical life expectancy of an industrial/commercial HVAC system is 20 – 25 years with proper maintenance. This system is 43 years old. Essentially the entire HVAC system needs to be replaced.

Rubber seated butterfly isolation valves on the chilled water system are original and not holding 100% when closed. They need to be replaced.

The windows need to be replaced. The exterior doors to the lower mechanical room are rusted beyond any further repairs and need to be replaced.

Housing Unit 3

This summer we replaced two chilled water coils in AHU-1.

Air handlers need to be replaced as well as hot and cold decks. The typical life expectancy of an industrial/commercial HVAC system is 20 – 25 years with proper maintenance. This system is 43 years old. Essentially, the entire HVAC system needs to be replaced.

Rubber seated butterfly isolation valves on the chilled water system are original and not holding 100% when closed. They need to be replaced.

The windows need to be replaced. The exterior doors to the lower mechanical room are rusted beyond any further repairs and need to be replaced.

The limited use elevator lift needs to be completely rebuilt or replaced.

Housing Unit 4

The steam supply and condensate return, chilled water supply and chilled water return lines were replaced in 2016.

We recently replaced one of the two main Taco hot water circulating pumps.

Installation of direct digital controls for the HVAC system including new field devices and integration into the BASS controls system will be completed this summer.

Air handlers need to be replaced as well as hot and cold decks. The typical life expectancy of an industrial/commercial HVAC system is 20 – 25 years with proper maintenance. This system is 43 years old. Essentially, the entire HVAC system needs to be replaced.

Rubber seated butterfly isolation valves on the chilled water system are original and not holding 100% when closed. They need to be replaced.

The windows need to be replaced. The exterior doors to the lower mechanical room are rusted beyond any further repairs and need to be replaced.

Housing Unit 5

The steam supply and condensate return, chilled water supply and chilled water return lines were replaced in 2016.

We recently replaced one of the two main Taco hot water circulating pumps.
The hydronic hot water heating piping will be replaced this summer.

Installation of direct digital controls for the HVAC system including new field devices and integration into

the BASS controls system will be completed this summer.

Air handlers need to be replaced as well as hot and cold decks. The typical life expectancy of an industrial/commercial HVAC system is 20 – 25 years with proper maintenance. This system is 43 years old. Essentially, the entire HVAC system needs to be replaced.

Rubber seated butterfly isolation valves on the chilled water system are original and not holding 100% when closed. They need to be replaced.

The windows need to be replaced. The exterior doors to the lower mechanical room are rusted beyond any further repairs and need to be replaced.

Field House

The roof was replaced during the summer of 2016.

The lights in the gymnasium need to be replaced with LED fixtures.

Installation of direct digital controls for the HVAC system including new field devices and integration into the BASS controls system will be completed this summer.

The following work to enhance heating and ventilation in this building is planned for completion this summer:

Replacement of a door in room 110, new window in room 112, new ceiling and lighting fixtures in room 111, replacement of a fin tube heat exchanger in room 112 including balancing valves in rooms 111 and 112, replacement of a cabinet heater in room 110.

All exterior doors are in poor condition and need to be replaced.

Installation of direct digital controls for the HVAC system including new field devices and integration into the BASS controls system will be completed this summer.

Air handlers need to be replaced as well as hot and cold decks. The typical life expectancy of an industrial/commercial HVAC system is 20 – 25 years with proper maintenance. This system is 43 years old. Essentially the entire HVAC system needs to be replaced.

Rubber seated butterfly isolation valves on the chilled water system are original and not holding 100% when closed. They need to be replaced.

The windows need to be replaced. The exterior doors to the lower mechanical room are rusted beyond any further repairs and need to be replaced.

Prisoner Services Building

This building is in very good overall condition as it was recently renovated in 2016. Air handlers need to be replaced as well as hot and cold decks. The typical life expectancy of an industrial/commercial HVAC system is 20 – 25 years with proper maintenance. This system is 43 years old. Essentially, the entire HVAC system needs to be replaced.

Maintenance Building

The maintenance building is overcrowded, has insufficient office space and insufficient office and storage space to meet the needs of the Maintenance Department. This building should be primarily used for shop and parts warehouse space. The Maintenance staff should have additional space for offices, a conference room and break area.

East Side

Calhoun Unit

The roof needs to be replaced. The T12 lamps and ballasts need to be replaced with T8 to improve lighting and energy savings. The domestic hot water boiler was replaced in April of 2017. The new Acorn flush system installed on the Acute wing is working very well.

Dickinson Unit

Several leaks in the roof were repaired in the spring of this year. The roof needs to be replaced. Replaced 1 air conditioning compressor in 2017 and another was replaced this summer. Restroom and shower exhaust systems need to be upgraded to accommodate their use in this building.

Emmett Unit

The roof was replaced in 2014. The T12 lamps and ballasts need to be replaced with T8 or LED fixtures to improve lighting and energy savings. Air handlers need to be replaced as well as hot and cold decks. The typical life expectancy of an industrial/commercial HVAC system is 20 – 25 years with proper maintenance. Restroom and shower exhaust systems need to be upgraded to accommodate their use in this building.

Filmore Unit

The roof was replaced in 2014. The T12 lamps and ballasts need to be replaced with T8 to improve lighting and energy savings. The chilled water air handling unit needs to be replaced as it is beyond its useful life. Air handlers need to be replaced as well as hot and cold decks. The typical life expectancy of an industrial/commercial HVAC system is 20 – 25 years with proper maintenance. Restroom and shower exhaust systems need to be upgraded to accommodate their use in this building.

Gladwin Unit

The roof was replaced in 2014. The T12 lamps and ballasts need to be replaced with T8 or LED fixtures to improve lighting and energy savings. Air handlers need to be replaced as well as hot and cold decks. The typical life expectancy of an industrial/commercial HVAC system is 20 – 25 years with proper maintenance. Restroom and shower exhaust systems need to be upgraded to accommodate their use in this building.

Harrison Unit

The roof was replaced in 2014. The T12 lamps and ballasts need to be replaced with T8 or LED fixtures to improve lighting and energy savings. Air handlers need to be replaced as well as hot and cold decks. The typical life expectancy of an industrial/commercial HVAC system is 20 – 25 years with proper maintenance. Restroom and shower exhaust systems need to be upgraded to accommodate their use in this building.

Jennings Building/School/Lenawee Temporary Housing Unit

The roof needs to be replaced. A temporary patching layer was installed on this roof this past spring. The entire roof is slated to be replaced in FY2019. The loading dock is in poor condition and has poor grade for proper drainage. The T12 lamps and ballasts need to be replaced with T8 or LED fixtures to improve lighting and energy savings. Air handlers need to be replaced as well as hot and cold decks. The typical life expectancy of an industrial/commercial HVAC system is 20 – 25 years with proper maintenance. Restroom and shower exhaust systems need to be upgraded to accommodate their use in this building.

Kent Building

The roof for the piping trestle between Kent and Jennings was replaced in 2018. Air handlers need to be replaced as well as hot and cold decks. The typical life expectancy of an industrial/commercial HVAC system is 20 – 25 years with proper maintenance. The two primary hydronic heating pumps in the basement will be replaced this summer. Restroom and shower exhaust systems need to be upgraded to accommodate their use in this building.

L Administration Building

The carpeting project was completed during the winter (2017). The small flat roof over the staff break area was replaced in the fall of 2017.

The roof needs to be replaced.

The two entrance gates (bubble gates) need to be replaced. They are way past their useful life.

MSI Building

The roof needs to be replaced and a 5-year temporary repair is scheduled for the summer of 2017.

RGC/ Unit 9/Adjacent Pole Barn

To be compliant with the PREA standards for housing under 18-year-old felons away from those over 18, Some years back Unit 9 of RGC was remodeled to become a totally separate Unit with separate toilet and shower areas, dayroom and grooming room, as well as an isolated yard but this design is not current with PREA standards. The Youthful Offender Area Upgrade project which was completed in 2018 brings this

area into compliance.

The pole barn and the RCG trailers are in need of new roofs.

Installation of direct digital controls for the HVAC system including new field devices and integration into the BASS controls system will be completed this summer. The 25-ton air conditioning unit and associated evaporator coils will also be replaced this year.

Warehouse

This area has inadequate space to suit our current needs and needs to be expanded. Breakers for the dock levelers need to be switched out with ones with disconnects because of moisture seeping into the system and tripping the GFI receptacles.

CC: Dan Smith

**WHV - Womens Huron Valley Correctional Facility
5-Year Plan FY2020**

Building	Project Description	Reason Description	Quantity & Units	Facility Priority	Cost Estimate
Powerplant	Replace the 3 Cleaver Brooks watertube steam boilers with 3 firetube boiler with economizers, and low NOX burners. Boilers to be sized for new, lower steam load due to replacement of steam absorbers with electric chillers.	Combustion controls are not capable of needed turndown and controls are nearing obsolescence. More cost effective to replace the watertube boilers with firetube boilers having low Nox burners that it would to install conversion burners on the existing boilers. Boilers cycle continuously during the summer months due to lack of steam	3 Units	1	\$2,428,125
D, E, F, G, H	Restroom exhaust fan enhancement.	Increase exhaust velocity of the restroom vent fans and reduce maintenance costs.	29 units	2	\$512,379
Emmet	Conversion of 6 dry cells to wet cells.	Needed for additional observation cells when Calhoun Acute is full.	6 units	3	\$137,812
Roof Replacements	Replace the roofs on Dickinson, Calhoun, East Administration Building, Pole Barn Near RGC, RGC, RGC trailers	Roofs are beyond their expected useful life and all show evidence of damage and leaks.	118,600 sq. ft.	4	\$754,867
Exterior Lighting Upgrade	Replace exterior lighting fixtures with LED fixtures.	The high-pressure sodium, metal halide and mercury vapor lighting are costly to maintain and operate when compared to LED fixtures.	195 units	5	\$509,315
Unit 1	Convert all Level IV cells over to the Best lock system.	Standardize with the rest of the facility and be able to eliminate stocking parts for the Corbin systems that is used only in this Unit.	80 Units		\$42,000
PA System	Replace the facility-wide public address system.	Existing equipment is old and has reached the end of its useful life. Parts are obsolete.	1 Unit		\$100,000
West Admin, Jennings & Prisoner Services Building	Replace the 4,800-volt primary electrical substations.	Existing equipment is obsolete, unreliable and replacement parts not available.	3 Units		\$2,636,100
All buildings except Food Service and MSI	Replace the 480V and 208V motor control centers.	Existing equipment is in generally poor condition, obsolete, unreliable and replacement parts not available.	21 Units		\$2,500,000
Perimeter Road	Replace the asphalt perimeter road.	The existing asphalt road is in poor condition and needs to be replaced.	1 Unit		\$300,000
Prisoner Services Building	Replace pneumatic controls with DDC.	Energy savings. Improved performance, control and reliability.	21,968 sq. ft		80, 000
Maintenance	Replace pneumatic controls with DDC; Connect to BASS	Energy savings. Improved performance, control and reliability.	23,624 sq. ft		\$125,000

MSI	Replace pneumatic controls with DDC; Connect to BASS	Energy savings. Improved performance, control and reliability.	25,490 sq. ft		\$70,000
Unit 1	Replace pneumatic controls with DDC; Connect to BASS	Energy savings. Improved performance, control and reliability.	24,114 sq. ft		\$100,000
Unit 2	Replace pneumatic controls with DDC; Connect to BASS	Energy savings. Improved performance, control and reliability.	24,114 sq. ft		\$100,000
Unit 3	Replace pneumatic controls with DDC; Connect to BASS	Energy savings. Improved performance, control and reliability.	24,114 sq. ft		\$100,000
Field House	Replace/new piping. Replace steam and condensate piping.	Replacement is more cost effective than the cost of anticipated long-term repairs.	3,000 SF		\$25,000
Prisoner Services Building	Replace/new piping. Replace steam and condensate piping.	Replacement is more cost effective than the cost of anticipated long-term repairs.	4,000 SF		\$28,000
Kent Hall	Replace/new piping. Replace steam and condensate piping.	Replacement is more cost effective than the cost of anticipated long-term repairs.	270,000 SF		\$925,000
Administration/Medical	Replace/new piping. Replace steam and condensate piping.	Replacement is more cost effective than the cost of anticipated long-term repairs.	3,000 SF		\$22,500
Prisoner Services Building	Replace/new piping. Replace steam and condensate piping.	Replacement is more cost effective than the cost of anticipated long-term repairs.	2,000 SF		\$25,500
Academic/Voc. School	Replace/new piping. Replace steam and condensate piping.	Replacement is more cost effective than the cost of anticipated long-term repairs.	3,000 SF		\$25,500
Housing Unit 5	Replace/new piping. Replace steam and condensate piping.	Replacement is more cost effective than the cost of anticipated long-term repairs.	3,000 SF		\$25,500
Housing Unit 4	Replace/new piping. Replace steam and condensate piping.	Replacement is more cost effective than the cost of anticipated long-term repairs.	3,000 SF		\$25,500
Housing Unit 3	Replace/new piping. Replace steam and condensate piping.	Replacement is more cost effective than the cost of anticipated long-term repairs.	3,000 SF		\$25,500
Housing Unit 2	Replace/new piping. Replace steam and condensate piping.	Replacement is more cost effective than the cost of anticipated long-term repairs.	3,000 SF		\$25,500

Housing Unit 1	Replace/new piping. Replace steam and condensate piping.	Replacement is more cost effective than the cost of anticipated long-term repairs.	3,000 SF		\$25,500
Drop Ship	Warehouse addition to the facility.	To provide additional space to accommodate the increased direct shipping that will occur due to changes in fleet transportation; to provide heated storage for items such as caustics, paints, mattresses and other items requiring warehousing in a facility as large as WHV.	15,000 sq. ft.		\$2,340,000
Housing Unit 1	Replace existing window system - w/ insulated system. Windows should include integral bars. Combine all bldgs. 1 submittal	Energy savings.	94 units		\$102,100
Housing Unit 2	Replace existing window system - w/ insulated system. Windows should include integral bars. Combine all bldgs. 1 submittal	Energy savings.	94 units		\$102,100
Housing Unit 3	Replace existing window system - w/ insulated system. Windows should include integral bars. Combine all bldgs. 1 submittal	Energy savings.	94 units		\$102,100
Housing Unit 4	Replace existing window system - w/ insulated system. Windows should include integral bars. Combine all bldgs. 1 submittal	Energy savings.	94 units		\$102,100
Housing Unit 5	Replace existing window system - w/ insulated system. Windows should include integral bars. Combine all bldgs. 1 submittal	Energy savings.	94 units		\$102,000
Housing Unit 6	Replace existing window system - w/ insulated system. Windows should include integral bars. Combine all bldgs. 1 submittal	Energy savings.	14 Units		\$17,500
Programs	Replace existing window system - w/ insulated system. Windows should include integral bars. Combine all bldgs. 1 submittal	Energy savings.	14 Units		\$17,500
Kent Hall	Replace existing window system - w/ insulated system. Windows should include integral bars. Combine all bldgs. 1 submittal	Energy savings.	130 units		\$160,000
Dickinson Hall	Replace existing window system - w/ insulated system. Windows should include integral bars. Combine all bldgs. 1 submittal	Energy savings.	128 units		\$160,000
Jennings Hall	INTERIOR LIGHTING-Replace interior light fixture(s) Replace with LED fixtures.	Increased lighting levels and energy savings.	750 SF		\$4,400
Calhoun Hall	INTERIOR LIGHTING-Replace interior light fixture(s), Replace with LED fixtures.	Increased lighting levels and energy savings.	30,285 SF		\$101,800
Dickenson	INTERIOR LIGHTING-Replace interior light fixture(s) Replace with LED fixtures.	Increased lighting levels and energy savings.	61,763 SF		\$207,500

Emmet Hall	INTERIOR LIGHTING-Replace interior light fixture(s). Replace with LED fixtures.	Increased lighting levels and energy savings.	38,055 SF		\$127,900
Fillmore Hall	INTERIOR LIGHTING-Replace interior light fixture(s). Replace with LED fixtures.	Increased lighting levels and energy savings.	38,055 SF		\$127,900
Gladwin Hall	INTERIOR LIGHTING-Replace interior light fixture(s). Replace with LED fixtures.	Increased lighting levels and energy savings.	39,220 SF		\$131,800
Harrison Hall	INTERIOR LIGHTING-Replace interior light fixture(s). Replace with LED fixtures.	Increased lighting levels and energy savings.	39,451 SF		\$132,600
L Building	INTERIOR LIGHTING-Replace interior light fixture(s). Replace with LED fixtures.	Increased lighting levels and energy savings.	34,584 SF		\$116,200
Warehouse	INTERIOR LIGHTING-Replace interior light fixture(s). Replace with LED fixtures.	Increased lighting levels and energy savings.	20,365 SF		\$68,400
Field House	INTERIOR LIGHTING-Replace interior light fixture(s). Replace with LED fixtures.	Increased lighting levels and energy savings.	16,799 SF		\$45,400
Jennings Hall	Replace roof and insulation.	Approaching its useful lifespan.	26,529 SF		\$289,700
Site	Soil Stabilization/Grading, Add/Regrade Drainage Swale/Lawn Area. Area between perimeter fence and bldg.'s. #7 and #8 does not drain well.	To improve drainage.	80,000 SF		\$572,000
Site	Soil Stabilization/Grading, Add/Regrade Drainage Swale/Lawn Area. Existing berms within lawn area in front of bldg. H.	Long-term/high maintenance issue. Prevent water from infiltrating building exterior. Lawn area was constructed with 3' high berms which causes drainage to flow toward bldg. - recommend removal of berms.	7,600 SF		\$63,800
Site	Soil Stabilization/Grading, Add/Regrade Drainage Swale/Lawn Area. Located within the main activity area between bldg. C and D at NE corner south of pathway.	To improve drainage. To prevent personal injury. To improve appearance. Due to site/soil characteristics. Low area approx. 100'x60'. Area continues to settle, has been filled before. Water prevents mowing and is hazard to inmates. Recommend overfill	6,000 SF		\$50,400
Site	Soil Stabilization/Grading, Add/Regrade Drainage Swale/Lawn Area. Lawn area located between bldg. #6 and interior walk/drive.	To improve drainage.	600 SF		\$5,000
Site	Soil Stabilization/Grading, Add/Regrade Drainage Swale/Lawn Area. Existing berms within lawn area in front of bldg. H.	Long-term/high maintenance issue. Prevent water from infiltrating building exterior. Lawn area was constructed with 3' high berms which causes drainage to flow toward bldg. - recommend removal of berms.	7,600 SF		\$63,800
Site	Soil Stabilization/Grading, Add/Regrade Drainage Swale/Lawn Area. Catch basin located in lawn area westerly of north doorway of building K.	To improve drainage. Area at catch basin remains wet due to soil conditions. Recommend 4 - 10 ft. lengths of underdrain. re-grade area to provide positive drainage to adjusted cover.	40 SF		\$340

Site	Soil Stabilization/Grading, Add/Regrade Drainage Swale/Lawn Area. Located in corner between bldg. K and L adjacent to connector.	To improve drainage. Prevent water from infiltrating building exterior. Area was not correctly graded, or addition stone has been added preventing water from flowing out of enclosed area. Water sometimes has entered bldg. K. Area needs to be re-graded	2,400 SF		\$24,200
Site	Soil Stabilization/Grading, Add/Regrade Drainage Swale/Lawn Area. Located at SE interior corner of site east of bldg. K.	To improve drainage. To fix deteriorated, damaged, failure area. To prevent personal injury. To improve appearance. Long-term/high maintenance issue. Area from circulation drive to security fencing is low and holding water.	1,200 SF		\$10,100
Site	Soil Stabilization/Grading, Add/Regrade Drainage Swale/Lawn Area. Located between loading dock drives to bldg. C and F along south circulation drive.	To fix deteriorated, damaged, failure area. To improve appearance. Soil erosion issue. Vehicles have been driving off drive. Provide topsoil and seeding.	400 SF		\$3,400
Site	Soil Stabilization/Grading, Add/Regrade Drainage Swale/Lawn Area. Located just off north end of the west wing of bldg. K.	To improve drainage. To improve appearance. Long-term/high maintenance issue. Area between pathway and patio area is low with standing water. Recommend filling with topsoil, grading for positive drainage and re-seeding.	1,500 SF		\$12,600
Site	Soil Stabilization/Grading, Add/Regrade Drainage Swale/Lawn Area. Outlet of storm sewer from parking lot between bldg. #10 (admin. bldg.) and bldg. #2 (maint. bldg.).	To improve drainage.	300 SF		\$1,600
Site	Soil Stabilization/Grading, Add/Regrade Drainage Swale/Lawn Area. Area is located at sidewalk "Y" in walk just north of bldg. #10.	To prevent personal injury.	300 SF		\$2,500
Site	Soil Stabilization/Grading, Add/Regrade Drainage Swale/Lawn Area. Existing swale within pond area on west side of entrance drive off Bemis Rd.	To improve drainage.	1,000 SF		\$5,400
Site	Soil Stabilization/Grading, Add/Regrade Drainage Swale/Lawn Area. Second detention pond located on east side of the site entrance off Bemis Rd. Pipe discharge along west edge.	To improve drainage.	1,000 SF		\$6,800
Site	Soil Stabilization/Grading, Add/Regrade Drainage Swale/Lawn Area. Swales within center lawn area between secured bldg.'s.	To improve drainage.	2,000 SF		\$16,800
Power House	Preplace pneumatic controls on steam station with solid state controls	Worn out, not reliable. 2 PRV station	1 Units		\$37,000
Kent Hall	Replace/new steam to hot water converter system - 800 GPM.	Beyond useful life. Not functioning or broken. Leaking. Impairs building operation. Existing steam to hot water converters is old and defective. More than 50% of tubes are plugged.	1 Unit		\$117,600
Tasers now	Install smoke purge system	Segregation Unit	24,114 sq. ft		\$120,000
Dickenson	Replace gutter system. Install industrial gutter/collector/downspout system.	Leading to More Serious Problems. To Cover up Water Damage. Request of Facilities Maintenance.	1,260 LF		\$25,400
Emmet Hall	Replace gutter system. Install industrial gutter/collector/downspout system.	Leading to More Serious Problems. To Cover up Water Damage. Request of Facilities Maintenance.	900 LF		\$18,100

Fillmore Hall	Replace gutter system. Install industrial gutter/collector/downspout system.	Leading to More Serious Problems. To Cover up Water Damage. Request of Facilities Maintenance.	900 LF		\$18,100
Gladwin Hall	Replace gutter system. Install industrial gutter/collector/downspout system.	Leading to More Serious Problems. To Cover up Water Damage. Request of Facilities Maintenance.	900 LF		\$18,100
Harrison Hall	Replace gutter system. Install industrial gutter/collector/downspout system.	Leading to More Serious Problems. To Cover up Water Damage. Request of Facilities Maintenance.	900 LF		\$18,100
Jennings Hall	Replace gutter system. Install industrial gutter/collector/downspout system.	Leading to More Serious Problems. To Cover up Water Damage. Request of Facilities Maintenance.	950 LF		\$19,200
Kent Hall	Replace gutter system. Install industrial gutter/collector/downspout system.	Leading to More Serious Problems. To Cover up Water Damage. Request of Facilities Maintenance.	1,150 LF		\$23,200
L Building	Replace gutter system. Install industrial gutter/collector/downspout system.	Leading to More Serious Problems. To Cover up Water Damage. Request of Facilities Maintenance.	1,025 LF		\$20,700
Maintenance/Warehouse	Replace gutter system. Install new.	To Cover up Water Damage.	600 LF		\$5,800
Administration/Medical	Replace E.J. material. Reseal/reflash E.J. material.	Damaged.	500 LF		\$21,500
6 Guard Towers	Replace or add roof drains. Guard tower in SE corner near sallyport.	Damaged.	1 Unit		\$840
6 Guard Towers	Replace damaged steel. Metal decking has rusted through. Concrete is spalling. Cover decking with form deck and tack weld on 4 sides. All 5 guard towers. (500 SF needed).	Damaged.	6 Units		\$25,200
Housing Unit 5	Replace lintels.	Damaged.	12 LF		\$710
Administration/Medical	Replace lintels.	Worn out. Damaged.	120 LF		\$7,100
Housing Unit 5	Repair brick - selective areas.	Damaged.	40 SF		\$1,000
Calhoun Hall	Tuckpoint brick.	To Cover up Water Damage. Building settlement.	100 SF		\$840

Calhoun Hall	Tuckpoint brick. Re-caulk CMU.	Building settlement. Prisoners hiding things in cracks.	300 SF		\$1,300
Dickinson Hall	Tuckpoint brick.	To Cover up Water Damage.	100 SF		\$840
Dickinson Hall	Tuckpoint brick. Re-caulk CMU.	Building settlement.	200 SF		\$840
Gladwin Hall	Tuckpoint brick.	Leading to More Serious Problems. To Cover up Water Damage.	45 SF		\$380
Kent Hall	Tuckpoint brick.	Leading to More Serious Problems. To Cover up Water Damage.	300 SF		\$2,500
Administration/Medical	Tuckpoint brick. Interior CMU to be tuckpointed below joist seats for structural integrity as well as exterior.	Damaged. Dangerous	22 SF		\$190
Field House	Tuckpoint brick.	To Cover up Water Damage.	40 SF		\$340
Power Plant	Tuckpoint brick. Tuckpoint cmu.	Damaged.	160 SF		\$1,100
Calhoun Hall	Rebuild masonry wall.	To Cover up Water Damage.	10 SF		\$130
Emmet Hall	Rebuild masonry wall.	To Cover up Water Damage.	140 SF		\$1,900
Fillmore Hall	Rebuild masonry wall.	To Cover up Water Damage.	150 SF		\$2,000
Gladwin Hall	Rebuild masonry wall.	To Cover up Water Damage.	80 SF		\$1,100
Harrison Hall	Rebuild masonry wall.	To Cover up Water Damage.	10 SF		\$130
Jennings Hall	Rebuild masonry wall.	Damaged. To Cover up Water Damage.	100 SF		\$1,300

Kent Hall	Rebuild masonry wall.	Damaged. To Cover up Water Damage.	10 SF		\$130
Powerhouse	Rebuild masonry wall.	To Cover up Water Damage.	100 SF		\$1,100
Prisoner Services Building	Rebuild masonry wall.	To Cover up Water Damage.	100 SF		\$1,300
Housing Unit 5	Rebuild masonry wall. Saturated gypsum drywall elec. room to be replaced with CMU.	Damaged.	100 SF		\$1,300
Housing Unit 4	Rebuild masonry wall. Saturated gypsum drywall elec. room to be replaced with CMU.	Damaged. To Cover up Water Damage.	100 SF		\$1,300
Housing Unit 3	Rebuild masonry wall. Saturated gypsum drywall elec. room to be replaced with CMU.	Water Damage.	100 SF		\$1,300
Housing Unit 2	Rebuild masonry wall. Saturated gypsum drywall elec. room to be replaced with CMU.	Damaged	100 SF		\$1,300
Housing Unit 1	Rebuild masonry wall. Saturated gypsum drywall elec. room to be replaced with CMU.	Damaged. To Cover up Water Damage.	100 SF		\$1,300
Housing Unit 2	Rebuild masonry wall.	Damaged.	120 SF		\$1,600
Harrison Hall	Repair/Replace plaster. Rebuild gypsum drywall wall.	To Cover up Water Damage.	20 SF		\$540
Jennings Hall	Repair/Replace plaster. Rebuild gypsum drywall wall.	To Cover up Water Damage.	20 SF		\$540
Jennings Hall	Replace metal panels.	Damaged. To Cover up Water Damage.	50 SF		\$2,300
Maintenance/Warehouse	Replace metal panels.	Damaged. Water Damage.	80 SF		\$2,900
Power Plant	Replace metal panels.	Worn out. Damaged.	280 SF		\$10,200

Kent Hall	Replace flashing.	Leading to More Serious Problems. To Cover up Water Damage.	20 LF		\$660
Gladwin Hall	Recaulk/Reseal building joints. Sealant has dried out.	Damaged. Leading to More Serious Problems.	50 LF		\$150
Administration/Medical	Recaulk/Reseal building joints.	Worn out.	20 LF		\$60
Housing Unit 1	Recaulk/Reseal building joints.	Worn out.	20 LF		\$60
Academic/Voc. School	Recaulk/Reseal building joints.	Worn out.	50 LF		\$150
Housing Unit 2	Recaulk/Reseal building joints. Door stoop settled. Replace backer rod and reseal.	Building settlement.	40 LF		\$150
Maintenance/Warehouse	Recoat stucco. Concrete patching selective areas as well.	Damaged. Water Damage.	2,000 SF		\$5,100
Academic/Voc. School	Replace existing window system - w/ insulated system.	Damaged.	20 SF		\$1,300
5 Guard Towers	Replace existing window system - w/ insulated system. Windows leak and seals broken, hardware worn out. All 5 guard towers.	Worn out. Damaged.	600 SF		\$46,000
Emmet Hall	Recaulk/Reseal window system.	Worn out. To Cover up Water Damage.	1,000 SF		\$8,400
Fillmore Hall	Recaulk/Reseal window system.	Worn out. To Cover up Water Damage.	800 SF		\$8,400
Gladwin Hall	Recaulk/Reseal window system.	Worn out. To Cover up Water Damage.	1,000 SF		\$8,400
Harrison Hall	Recaulk/Reseal window system.	Worn out. To Cover up Water Damage.	1,000 SF		\$8,400
Jennings Hall	Recaulk/Reseal window system.	Worn out. To Cover up Water Damage.	500 SF		\$4,200

Kent Hall	Recaulk/Reseal window system.	Worn out. Leading to More Serious Problems.	1,500 SF		\$12,600
Administration/Medical	Recaulk/Reseal window system.	Worn out.	150 SF		\$1,300
Field House	Recaulk/Reseal window system.	Worn out.	340 SF		\$2,900
Emmet Hall	Replace insulated glazing.	Damaged.	420 SF		\$17,600
Fillmore Hall	Replace insulated glazing. Moisture in window.	Damaged.	400 SF		\$16,800
Gladwin Hall	Replace insulated glazing.	Damaged.	140 SF		\$5,900
Harrison Hall	Replace insulated glazing.	Damaged.	180 SF		\$7,600
Academic/Voc. School	Replace insulated glazing.	Damaged.	100 SF		\$4,200
Emmet Hall	Replace interior doors/frame/hardware.	Damaged.	2 Units		\$5,000
Kent Hall	Replace interior doors/frame/hardware.	Worn out. Damaged.	8 Units		\$20,200
Administration/Medical	Replace interior doors/frame/hardware. Admin/medical	Worn out. Damaged.	5 Units		\$12,600
Field House	Replace interior doors/frame/hardware.	Damaged.	5 Units		\$12,600
Academic/Voc. School	Replace interior doors/frame/hardware.	Worn out. Damaged.	13 Units		\$32,800
Housing Unit 5	Replace interior doors/frame/hardware.	Worn out. Damaged.	23 Units		\$58,000

Housing Unit 4	Replace interior doors/frame/hardware.	Worn out. Damaged.	25 Units		\$63,000
Housing Unit 1	Replace interior doors/frame/hardware.	Worn out. Damaged.	25 Units		\$63,000
Powerhouse	Replace overhead doors.	Damaged.	300 SF		\$12,200
Maintenance/Warehouse	Replace overhead doors.	Damaged.	400 SF		\$16,200
Calhoun Hall	Replace plaster ceilings.	Damaged. Building settlement.	200 SF		\$3,400
Dickinson Hall	Replace plaster ceilings.	Building settlement.	90 SF		\$1,500
Housing Unit 4	Replace plaster ceilings. Gypsum drywall.	Water Damage.	40 SF		\$540
Field House	Replace plaster ceilings. Gypsum drywall.	Damaged.	300 SF		\$5,000
Administration/Medical	Replace acoustic ceiling system.	Worn out. Damaged.	15,775 SF		\$106,000
Warehouse	Replace acoustic ceiling system.	Worn out. To Cover up Water Damage.	1,100 SF		\$5,900
L Building	Replace acoustic ceiling system.	Worn out. Damaged. To Cover up Water Damage.	320 SF		\$2,200
Housing Unit 5	Replace acoustic ceiling system.	Worn out.	60 SF		\$400
Powerhouse	Replace acoustic ceiling system.	Damaged.	220 SF		\$1,200
Maintenance/Warehouse	Replace acoustic ceiling system.	Worn out. Water Damage.	240 SF		\$1,300

Housing Unit 1	Replace acoustic ceiling system.	Worn out.	210 SF		\$1,400
Field House	Replace acoustic ceiling system.	Worn out. Damaged.	3,290 SF		\$22,100
Dickinson Hall	Replace metal ceiling.	Damaged. To Cover up Water Damage.	20 SF		\$340
Fillmore Hall	Replace metal ceiling. Rusted.	To Cover up Water Damage.	880 SF		\$14,800
Calhoun Hall	Replace carpet.	Worn out. Damaged. To Cover up Water Damage.	400 SF		\$2,700
Dickinson Hall	Replace carpet.	Damaged.	50 SF		\$340
Academic/Voc. School	Replace carpet.	Worn out. Damaged.	8,300 SF		\$55,800
Administration/Medical	Replace ceramic tile.	Damaged.	850 SF		\$20,000
Field House	Replace ceramic tile.	Damaged.	1,480 SF		\$34,800
Kent Hall	Clean and patch terrazzo. Exterior concrete stairs spalling off and creating a dangerous situation.	Worn out. Damaged. Dangerous or Potentially Life Threatening. To Cover up Water Damage.	40 SF		\$1,000
Calhoun Hall	Replace VCT.	Worn out. Damaged.	150 SF		\$1,000
Field House	Replace VCT.	Worn out. Damaged.	2,880 SF		\$19,400
Administration/Medical	Replace VCT.	Worn out. Damaged.	3,960 SF		\$26,600
Housing Unit 3	Replace VCT.	Worn out. Damaged.	4,000 SF		\$26,900

Housing Unit 1	Replace VCT.	Worn out. Damaged.	4,000 SF		\$26,900
Housing Unit 4	Replace VCT.	Worn out. Damaged.	4,100 SF		\$27,600
Housing Unit 2	Replace VCT.	Worn out. Damaged.	4,100 SF		\$27,600
Emmet Hall	Misc. projects. Replace 280 SF of exterior pipe enclosure.	Damaged.	280 SF		\$1,500
Fillmore Hall	Misc. projects. Replace 280 SF of exterior pipe enclosure.	Damaged.	280 SF		\$1,500
Gladwin Hall	Misc. projects. Replace 280 SF of exterior pipe enclosure.	Damaged.	280 SF		\$1,500
Jennings Hall	Misc. projects. Replace 280 SF of exterior pipe enclosure.	Damaged.	280 SF		\$1,500
Kent Hall	Misc. projects. Replace 650 SF fabric wall covering. Acoustical wall covering in the x-ray area.	Damaged.	280 SF		\$1,700
	Demolish Farmhouse	Public Safety	2,000 SF		\$10,000
Site	Fire Hydrant & Valve Box, Provide Hydrant Extension. Located in front of bldg. #6.	non-code compliant	1 Unit		\$920
Site	Fire Hydrant & Valve Box, Provide Hydrant Extension. Hydrant locate 100't NW of bldg. #11 within center lawn area adjacent to walk between bldg. #11 and #6.	Non-code compliant	1 Unit		\$920
Site	Valve Box, Water, Adjust to Grade. Located west of bldg. H on east side of circulation drive and south of loading dock drive. Lower valve box to match grade.	To prevent personal injury. Long-term/high maintenance issue. Valve box sticks above grade - lower match grade as it's a mowing hazard.	1 Unit		\$500
Site	Pipe, Storm, New. Area between bldg. G and H.	To improve drainage. To prevent personal injury. To improve appearance. Soil erosion issue. Long-term/high maintenance issue. Prevent winter freezing hazard. Prevent water from infiltrating building exterior. Bldg. G is higher than bldg. H. Add gutter and downspout to roof area that drains onto the sidewalk to the unit entrance.	1		\$4,500
Site	Pipe, Storm, New. Catch basin located in lawn area westerly of north doorway of building K - recommend 4 - 10-foot lengths of underdrain and re-grading of area to provide positive drainage to adjusted cover.	To improve drainage. Area at catch basin remains wet due to soil conditions.	40 LF		\$2,000

Site	Pipe, Storm, New. Area of standing water located within outside activity area at NW corner of bldg. #4.	To improve drainage.	180 LF		\$12,700
Site	Structures I, End Section, Remove & Reset. Detention pond located on the east side of the site entrance off Bemis Rd. Storm sewer end section at east side.	To improve drainage.	1 Unit		\$680
Site	Structures I, End Section, Remove & Reset. Storm sewer outlet of east side of entrance drive off Bemis Rd.	To improve drainage.	1 Unit		\$680
Site	Structures I, End Section, Remove & Reset. Existing storm end section from site to north side of detention pond at corner of Bemis Rd. and Platt Rd.	To improve drainage.	1 Unit		\$680
Site	Frame & Cover/Grate, Catch Basin, Adjust Existing to Grade & Re-grout. Catch basin located adjacent to N wall of newer addition on bldg. H.	To improve drainage. Prevent water from infiltrating building exterior. Area is high and doesn't drain well. In heavy rains, water ponds on walks - recommend lowering catch basin cover and re-grading adjacent area to provide positive drainage.	1 Unit		\$500
Site	Frame & Cover/Grate, Catch Basin, Adjust Existing to Grade & Re-grout. Located between perimeter site fencing and circulation road at drive to loading dock at bldg. H.	To improve drainage. To improve appearance. Long-term/high maintenance issue. Service reliability. Prevent winter freezing hazard. Catch basin rim is too high causing standing water - will cause pavement to deteriorate. Recommend lowering it.	1 Unit		\$500
Site	Frame & Cover/Grate, Catch Basin, Remove & Replace. Catch basin located in front of west wing of bldg. E.	To improve drainage. Catch basin casing is broken with piece missing. Sharp edges remain - remove and replace.	1 Unit		\$840
Site	Frame & Cover/Grate, Catch Basin, Remove & Replace. Catch basin located in lawn area westerly of north doorway of building K.	To improve drainage. To fix deteriorated, damaged, failure area. Catch basin is broken and elevation wise too high. Lower frame and cover while replacing.	1 Unit		\$840
Site	Frame & Cover/Grate, Manhole, Adjust Existing to Grade & Re-grout. Sanitary manhole located in front walk to bldg. #9.	To prevent personal injury.	1 Unit		\$810
Site	Concrete Stairway Cast-in-Place Remove & Replace. Loading dock area at building E.	Due to age of system. To fix deteriorated, damaged, failure area. To prevent personal injury. To improve appearance. Long-term/high maintenance issue. Remove and replace stairs and railing. They are in very bad shape.	24 LF Nose		\$2,100
Site	Concrete Stairway Cast-in-Place Remove & Replace. Loading dock at bldg. H.	Due to age of system. To fix deteriorated, damaged, failure area. To prevent personal injury. To improve appearance. Long-term/high maintenance issue. Remove and replace stairs and railing. They are in very bad shape.	24 LF Nose		\$2,100
Site	Soil Stabilization/Grading, Add Erosion Control Blanket. Located at West face to bldg. #3.	To improve drainage.	5,000 SF		\$8,400
Site	Soil Stabilization/Grading, Add Rip Rap & Geotextile. Walk area between bldg. G and F.	To improve drainage. To prevent failure. To fix deteriorated, damaged, failure area. To prevent personal injury. To improve appearance. Soil erosion issue. Long-term/high maintenance issue. Prevent water from infiltrating building exterior.	1,230 SF		\$23,800
Site	Soil Stabilization/Grading, Add Rip Rap & Geotextile. SW corner of new addition to bldg. F.	To improve drainage. To fix deteriorated, damaged, failure area. To prevent personal injury. To improve appearance. Soil erosion issue. Roof drainage has caused bad erosion between bldg. and sidewalk. Recommend grouted rip rap to stabilize.	200 SF		\$3,900

Site	Soil Stabilization/Grading, Add Rip Rap & Geotextile. At loading area for bldg. J.	To fix deteriorated, damaged, failure area. To prevent personal injury. To improve appearance. Soil erosion issue. Long-term/high maintenance issue. Due to facility construction. At both sides of loading dock erosion has occurred from roof drainage	1,500 SF		\$34,800
Site	Soil Stabilization/Grading, Add Rip Rap & Geotextile. Located at north end of north wing of bldg. E.	To improve drainage. To fix deteriorated, damaged, failure area. To prevent personal injury. Soil erosion issue. Area along fence is badly eroding due to roof drainage and slope. Recommend grouted rip rap forming minor swale to direct run off.	75 SF		\$1,400
Site	Soil Stabilization/Grading, Add Rip Rap & Geotextile. Area located between bldg. E and circulation drive.	To prevent failure. To prevent personal injury. To improve appearance. Soil erosion issue. Area is badly eroding, mostly from roof drainage and shaded area with side slope. Recommend grout rip rap along north face of wing and up 10' l alongside of building	1,200 SF		\$27,800
Site	Soil Stabilization/Grading, Add Rip Rap & Geotextile. Located adjacent to east wall of loading dock ramp to bldg. D.	To improve drainage. To fix deteriorated, damaged, failure area. To prevent personal injury. To improve appearance. Soil erosion issue. Due to grading water follows retaining to south end - bad erosion. Recommend providing grouted rip rap to halt erosion	100 SF		\$1,900
Site	Soil Stabilization/Grading, Add Rip Rap & Geotextile. Located at SE corner of loading dock ramp to bldg. C.	To improve drainage. To fix deteriorated, damaged, failure area. To prevent personal injury. To improve appearance. Soil erosion issue. Erosion adjacent to north ret. wall of loading dock. Can be corrected with rip-rap adjacent to wall and ramp.	120 SF		\$2,300
Site	Soil Stabilization/Grading, Add Rip Rap & Geotextile. At loading area for bldg. F.	To fix deteriorated, damaged, failure area. To prevent personal injury. To improve appearance. Soil erosion issue. Long-term/high maintenance issue. Due to facility construction. At both sides of loading dock erosion has occurred from roof drainage	600 SF		\$13,900
Site	Soil Stabilization/Grading, Add Rip Rap & Geotextile. At loading area for bldg. G.	To fix deteriorated, damaged, failure area. To prevent personal injury. To improve appearance. Soil erosion issue. Long-term/high maintenance issue. Due to facility construction. At both sides of loading dock erosion has occurred from roof drainage	600 SF		\$13,900
Site	Soil Stabilization/Grading, Add Rip Rap & Geotextile. At loading area for bldg. K.	To fix deteriorated, damaged, failure area. To prevent personal injury. To improve appearance. Soil erosion issue. Long-term/high maintenance issue. Due to facility construction. At both sides of loading dock erosion has occurred from roof drainage	600 SF		\$13,900
Site	Soil Stabilization/Grading, Add Rip Rap & Geotextile. At loading area for bldg. H.	To fix deteriorated, damaged, failure area. To prevent personal injury. To improve appearance. Soil erosion issue. Long-term/high maintenance issue. Due to facility construction. At both sides of loading dock erosion has occurred from roof drainage	600 SF		\$11,600
Site	Soil Stabilization/Grading, Add Rip Rap & Geotextile. Storm outlet located outside of exterior security fence along north fence line (mid - center).	To prevent failure.	600 SF		\$9,300
Site	Soil Stabilization/Grading, Add Rip Rap & Geotextile. Existing pipe outlet located at east side of pond between bldg. #3 and outside security road.	To prevent failure.	600 SF		\$13,900
Site	Recreation Field/Court Remove & Replace, Basketball. Located within outside activity area north side of site.	To prevent personal injury.	3,600 SF		\$14,500
Site	Site Improvements II, New, Concrete Slab/Pad. At existing dumpster area of north end of bldg. #2 (maintenance bldg.).	Due to age of system.	1,040 SF		\$7,700
Jennings Hall	INTERIOR LIGHTING-Replace interior light fixture(s), High Bay. Remove and replace high bay H.I.D. fixtures.	Existing equipment is old and has reached the end of its useful life. They are old, and the efficiency is low.	4,000 SF		\$37,000

Calhoun Hall	Replace/new tempering valve.	Not functioning or broken.	10 Units		\$13,400
Emmet Hall	Replace/new tempering valve.	Not functioning or broken.	14 Units		\$18,800
Fillmore Hall	Replace/new tempering valve.	Not functioning or broken. □	14 Units		\$18,800
Gladwin Hall	Replace/new tempering valve.	Not functioning or broken.	14 Units		\$18,800
Harrison Hall	Replace/new tempering valve.	Not functioning or broken.	14 Units		\$18,800
Housing Unit 4	Fintube radiation.	Worn out.	24,114 SF		\$91,200
Housing Unit 3	Fintube radiation.	Worn out.	24,114 SF		\$91,200
Housing Unit 2	Fintube radiation.	Worn out.	24,114 SF		\$91,200
Housing Unit 1	Fintube radiation.	Worn out.	24,114 SF		\$91,200
Powerhouse	Main control panel and front-end direct digital controls (DDC) equipment.	Not functioning or broken. Provide open platform to monitor, alarm, record history, etc., of plant systems	1 Unit		\$40,500
Administration/Medical	Miscellaneous. Insulate ductwork/piping in basement. Admin	None presently installed.	20 Units		\$6,800
Field House	Miscellaneous. Replace/Repair unit ventilators. Fieldhouse	Worn out.	8 Units		\$8,400
				Total	\$19,222,708

MICHIGAN DEPARTMENT OF CORRECTIONS

“Committed to Protect, Dedicated to Success”

MEMORANDUM

DATE: September 18, 2018

TO: Daniel Smith, Physical Plant Division

FROM: Toad Lavacs, Facility Manager

SUBJECT: Annual Facility Report 2018 Woodland Correctional Facility

This annual report has been prepared in accordance with PD. 04.03.100 Preventative and Emergency Maintenance for Correctional Facilities specifically, inspection of their respective facility to assess the need for future maintenance.

Facility MOP Accomplishments:

- Stun fence expansion completed
- Building demolition of Sequoyah, Olympic and Summit and Training Building
- Microwaves added to both sally ports
- New shaker wire installed
- New flex zone installed
- New head end Star Net Security System
- HVAC upgrades-Ongoing
- Razor Wire additions- Ongoing
- New **PPD** system

Internal Facility Project Accomplishments:

- Centralized Caustics
- Moved training class to old records room
- Relocated camera monitor room
- Surveyed property
- Installed no trespassing signs on property line
- Fabricated and installed therapeutic modules to all pods
- Updated sally port interlocking system
- Repaired the fire alarm system Installed
- food slots in all pod cell doors
- Fabricated and installed hang proof vents in all pod cells

Installed new water softeners in Huron and Food Service
Renovated control center monitor station
Constructed furniture for the control center monitor station and staff work station
Added safety mats on roof top of building for staff safety.
Upgraded all exterior lights to LED

Current Infrastructure Observations:

Huron:

Building in overall good condition but in need of fresh paint in certain areas

Pods 1-10:

Pod floors are deteriorating and in need of replacement. Added to the 5-year plan for MOP consideration.

Infirmery and Med Clinic:

Areas in overall good condition.

Woodland Building:

Areas in overall good condition

Power Plant:

Lighting upgraded to LED.
Annual CSD completed
Annual boiler inspections completed
Area in overall good condition

Lift Station:

Replacement pumps causing issues having to rebuild them.

Well house:

New well installed in 2018.
Building in overall good condition

Huron Administration Building:

Building in overall fair condition. New carpet installed in several areas of the building including human resources and Wardens suite

Maintenance Building:

Building in overall good condition

Parking Lot/Perimeter Road:

The parking lot is in overall fair condition however needs to be expanded to allow for adequate parking. The perimeter road is in poor condition and in need of resurfacing.

Food Service/Warehouse

Overall the area is in fair condition. The existing lighting is in need of upgrading as electrical internally is very brittle and causing issues. Lighting to be upgraded as funding is available.

**WOODLAND CORRECTIONAL FACILITY
5-Year Plan FY2020**

Building	Project Description	Reason Description	Quantity & Units	Facility Priority	Cost Estimate
All Buildings	Replace/Upgrade Fire Alarm System	Existing system is out dated and in need of constant maintenance	1	1	\$1,500,000
Perimeter Road	Perimeter road paving and parking lot expansion/repair	The perimeter road is new and is gravel. Paving will ensure longevity of the road. Warehouse/ Food Service parking areas are in need of repair. Main parking area needs to be reconfigured to accommodate additional staff.	1	2	\$1,344,103
Sallyport	Replace main sallyport gates	The main sallyport gates should be upgraded to meet the specifications of the MDOC.	1	3	\$500,000
Sallyport	Install razor wire to sally ports	Both sally ports are in need of two rows of razor wire.	1	4	\$30,000
Pods	Add one fluid management/water control cell to each pod	This will provide the ability to control water use for one cell in each pod for fluid management with the mentally ill prison population.	1	5	\$40,000
Sallyport	Replace sallyport guard shack	Current guard shack is too small to accommodate storage of items needed to properly operate sallyport.	1	6	\$12,000
Food Service	Move food service operations inside the facility	Food service is currently located outside the facility. Moving the operation inside will improve efficiencies and make staffing easier to meet the needs of the facility.	1	7	\$3,000,000
Warehouse/Food Service	Replace roof membrane	Roof membrane has exceeded its expected life. Replacement will prevent further damage to roofing structure and leaks into the building.	1	8	\$150,000
Maintenance	Build Pole Barn for Equipment Storage	A lot of equipment is left outside exposed to weather elements. A inside storage area for maintenance equipment will extend the life of the equipment	1	9	\$75,000
Inside Perimeter	Asphalt inner perimeter walk for rounding/snow removal	staff safety enhancement	1	10	\$575,000
Outside Perimeter	Install Gun Range	Provide onsite gun range for WCC staff use as well as other local agencies and facilities.	1	11	\$500,000
All Pods	Replace existing flooring in all day rooms	Existing flooring is original rubber flooring and several sections are cracked and peeling.	10	12	\$1,000,000

Pod 3	Convert rubber room into a regular cell.	There is no need for a rubber room. Converting to a regular cell would add one usable cell to our current prisoner count.	1	13	\$40,000
				Total	\$8,766,103