Dorchester County Public Schools

Comprehensive Maintenance Plan FY23

Every Child a Success

Mission Statement

The Mission of DCPS is to implement immediate and effective measures to close achievement gaps and promote equity. By implementing strategies and removing systemic barriers, all students will develop intellectual curiosity and skills to complete their Program of Study.

Vision Statement

Dorchester County Public Schools will empower students to reach their fullest potential by encouraging them to incorporate ideals and skills through equitable opportunities to become lifelong learners and productive members of society.

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FACILITIES MANAGEMENT TEAM

Christopher J. Hauge; Facilities and School Safety Planner

Patrick Murphy; Maintenance, Custodial and Grounds Manager

Gail Lantz; Maintenance and Operations Administrative Support

Andrew Marshall Energy and Operations Foreman

SUPPORTING EXCELLENCE

GENERAL

The Board of Education of Dorchester County, (the "Board") currently is responsible for a portfolio of 16 facilities with almost one million square feet of facility, approximately three hundred and fifty acres of grounds with replacement value measured in excess of $200 million dollars. The Comprehensive Maintenance Plan was established to provide a strategy for maintaining this real estate portfolio.

The responsibility of executing the Comprehensive Maintenance Plan has been charged to the School Facilities Operations Department. This group is comprised of; Maintenance Services, Custodial Services and School Construction. Each of the three groups work in concert with one another to support the Mission and Vision of the District.

PURPOSE

The primary objective of the maintenance program is the maintenance of buildings, grounds and fixed equipment through corrective and preventive maintenance and/or replacement over the life expectancy of the facility. Specifically, this can be further broken down as follows:

1. Maintain a positive learning environment;
2. Provide continuous use of facilities without disruptions to the education program;
3. Provide buildings that function at top efficiency;
4. Conserve energy;
5. Eliminate or reduce the number and scope of fires, accidents, or safety hazards on school property;
6. Maintain the asset value of the property.

COMPONENTS

The overall responsibility for building maintenance and operations lies with the Maintenance and Operations Manager.. The organizational chart is depicted in Appendix (A), and details specific job responsibilities. The goal of each employee in the School Facilities Operations Department is "to be actively involved in the continuous improvement in the functionality and material condition of the educational facilities."

A. Personnel

1. *Facilities and School Safety Planner*

a. Directs day-to-day operations of the School Construction groups and reports directly to the Director of Operations.
b. Administrative and fiscal responsibility for School Construction budgets.
c. Manages and controls county-wide Safety, Security, and School Construction of the school system.
d. Serves as the principal advisor to the Superintendent and Director of Operations for Administration in all matters related to construction of all school facilities.
e. Reviews school budget requests with the Director of Operations, Maintenance and Custodial Manager and Energy Manager.
f. Prepares or coordinates the preparation of policies and procedures for the safety and security of all facilities.
g. Ensures that all reports, documents, forms, and/or records are accurate and complete.
h. Assists in review of all technical plans and specifications prepared by in-house staff, architects, consulting engineers or other agencies on any construction of buildings for operational matters and constructability.
i. Works with the principals in the operation of each school's physical plant.
j. Ensures that all supervisors and personnel are trained in the proper skills necessary to maintain all buildings owned or leased by the Dorchester County Public Schools system.
k. Performs other duties as assigned.

2. *Maintenance, Custodial and Grounds Manager*

a. Responsible for daily assignments and effectiveness of department personnel and resources and reports directly to the Director of Operations.
b. Establishes criteria for the internal maintenance program and determines the need and extent for outsourced capital equipment maintenance contracts and service.
c. Supervises execution of Comprehensive Maintenance Plan and takes corrective action as needed.
d. Manages the Maintenance of Plant and Operations budget.
e. Develops the most economical and efficient use of time for maintenance and grounds employees.
f. Acts as central procurement office for all cleaning equipment and supplies for district wide needs.
g. Directs, trains, and develops maintenance/craftsman personnel in the proper operation and maintenance of facility systems (HVAC, Electrical, Plumbing, Life Safety systems, etc.).
h. Interviews and recommends for employment maintenance and grounds personnel.
i. Reviews school budget requests with the School Facilities Engineer, and Director of Operations.
j. Conducts inspections/audits to assure the quality of work being performed by maintenance and custodial personnel.
k. Manages the district wide Maintenance Management electronic work order system.
l. Supervises and trains custodial personnel on the proper use and maintenance of custodial equipment and supplies.
m. Establishes and maintains a system for pest management in accordance with IPM plan.

n. Manages and updates the district wide asbestos management plans.
o. Responsible for lead water testing as required by the Maryland Department of Environment
p. Supervises the purchasing of materials and supplies for the maintenance of schools.
q. Provides direct supervision for all maintenance and grounds staff.
r. Conducts required regulatory trainings and the training and evaluation of all maintenance and grounds personnel.
s. Responds or assigns maintenance personnel to afterhours emergencies as needed.
t. Performs other duties as assigned.

4. ***Energy and Operations Foreman***

a. Responsible for overall implementation of District Energy Management program.
b. Assists with scheduling building systems for use for both district and non-district activities.
c. Monitors effectiveness of energy program by reviewing billing data and comparing to historical usages.
d. Assists Maintenance and Operations Manager in identifying systems or equipment that need repairs or replacement.
e. Develops energy savings measures and makes recommendations to the Maintenance Manager and Facilities Planner for upgrades.
f. Conducts after hours energy audit of the district's facilities to determine energy usage.
g. Provides training and support to the custodial staff as needed.
h. Inventory's the district wide operations cleaning equipment and make recommendations for replacement as needed.
i. Performs after hour facilities cleanliness inspection to determine the cleanliness of the building and reports finding to School Administrator.
j. Performs other duties as assigned.

3. ***Administrative Secretary, Maintenance and Operations***

a. Performs the usual office routines and practices associated with a busy, productive maintenance and operation office.
b. Provides clerical and stenographic assistance for the area assigned.
c. Types a variety of materials, such as letters, reports, memos, monthly statements, etc., from rough drafts or corrected copies.
d. Verifies totals on reports forms, requisitions, and provides a final quality control function for all office correspondence.
e. Operates a variety of office machines, including computer, printer, fax, and copiers.
f. Composes letters, memoranda, instruction notices or other such routine transmittals.
g. Maintains and files records.
h. Administers/manages the work order system for the maintenance and operations sections of the department. This system tracks all corrective work order, creates a data base to track status, assignments, time & labor.
i. Receives daily calls for customer support, prioritizes work based on established criteria, directed by the Maintenance and Operations Manager. Prepares computer based Monthly Status Reports of all Maintenance/Custodial activities for Administration.

j. Performs such other tasks and assumes such other responsibilities as assigned.

4. ***Tradesman (HVAC)***

a. Performs journeyman level work installing, modifying, maintaining, trouble shooting, repairing, and overhauling of school refrigeration equipment, heating equipment, environmental boxes,
and air conditioners installed at board facilities.
b. Inspects refrigeration systems to determine preventive maintenance, routine and emergency repairs.
c. Maintains HVAC systems according to established maintenance schedules and appropriate maintenance functions as indicated by manufacturer's specifications, Department guidelines, and good trade practices to minimize breakdown and other interruptions in service.
d. Maintains records of all inspections, tests, and repairs.
e. Reports discrepancies or necessary follow-ups to supervisor.
f. Installs, repairs, adjusts, services, and maintains electric and/or pneumatic control systems for heating, ventilation, air conditioning and humidity equipment, including calibration of related instruments, gauges, and controls.
g. Directs, trains, and develops maintenance/craftsman personnel in the proper operation and maintenance of HVAC systems.
h. Capable of reading and interpreting blueprints and systems diagrams.
i. Knowledgeable of electrical and building codes.
j. Performs set-up and break down functions/activities.
k. Performs Inclement Weather tasks.
l. Responds to afterhours emergencies as needed.
m. Performs such other tasks and assumes such other responsibilities as assigned.

5. ***Tradesman (Carpenter)***

a. Primarily responsible for carpentry, cabinet making and door hardware needs.
b. Constructs, erects, installs, and repairs equipment in school buildings and other facilities operated by the board of education.
c. Responsible for safe condition of flooring, doorframes, window frames, staircases, stair treads, wall paneling, ceiling paneling, roofing, hardware, and similar structural elements in school facilities.
d. Estimates costs of carpentry repair/minor construction projects in terms of labor, materials, and overhead.
e. Assumes responsibilities for the locksmith activities, when qualified.
f. Capable of reading and interpreting blueprints and systems diagrams.
g. Knowledgeable of building codes.
h. Analyzes and organizes assigned job tasks.
i. Responsible for the work of other workers assigned to him.
j. Responsible for securing necessary materials for the job to be completed.
k. Performs set-up and break down functions/activities.
l. Performs Inclement Weather tasks.
m. Responds to afterhours emergencies as needed.
n. Performs such other tasks and assumes such other responsibilities as assigned.

6. ***Tradesman (Electrician)***

a. Primarily responsible for maintenance and repair of electrical and mechanical systems including: Transformers, Electrical Panels, Lighting systems, Wiring systems, Energy Management Systems, HVAC Equipment, Fire alarms and panels and electrical system trouble shooting.
b. Performs scheduled preventive maintenance on other physical plant equipment.
c. Performs building and equipment checks.
d. Directs, trains, and develops maintenance/craftsman personnel in the proper operation and maintenance of electrical systems.
e. Capable of reading and interpreting blueprints and systems diagrams.
f. Knowledgeable of electrical and building codes.
g. Accountable for proper and safe use of and care of hand & power tools.
h. Accountable for proper inventory, and use of electrical supplies.
i. Performs set-up and break down functions/activities.
j. Performs Inclement Weather tasks.
k. Responds to afterhours emergencies as needed.
l. Performs such other tasks and assumes such other responsibilities as assigned.

7. ***Tradesman (General Maintenance)***

a. Primarily responsible for maintenance and repair of all plumbing systems including: Sinks, toilets, urinals, water fountains, drains, traps, piping and other HVAC Mechanical Systems.
b. Performs scheduled preventive maintenance on other physical plant equipment.
c. Performs General Maintenance task to include carpentry and minor electrical when needed.
d. Directs, trains, and develops maintenance/craftsman personnel in the proper operation and maintenance of plumbing systems.
e. Capable of reading and interpreting blueprints and systems diagrams.
f. Knowledgeable of plumbing and building codes.
g. Performs building and equipment checks.
h. Performs equipment operation.
i. Accountable for proper and safe use of and care of hand & power tools.
j. Accountable for proper inventory and use of plumbing supplies.
k. Accountable for workplace and job safety.
l. Performs set-up and break down functions/activities.
m. Performs Inclement Weather tasks.
n. Responds to afterhours emergencies as needed.
o. Performs such other tasks and assumes such other responsibilities as assigned.

8. ***Tradesman (Groundskeeper/General Maintenance)***

a. Maintains and cares for school grounds. Assists in planting seeds, bulbs, tree seedlings and shrubbery, so that resulting growth will present an attractive appearance.
b. Prunes trees and trims hedges to promote growth and improve appearance.
c. Responsible for mowing lawn areas and athletic fields of the school buildings.

d. Maintains Athletic fields.
e. Inspects flowers, shrubs and trees for evidence of insects, fungi and other pests.
f. Responsible for keeping equipment in operating order and reporting needs for repair immediately.
g. Shovels snow from sidewalks and driveways, and spreads ice melt to prevent slipping.
h. Collects and disposes of leaves and refuse around school properties on a daily basis.
i. Responsible, with the assistance of another grounds keeper, for preparing athletic fields for competition.
j. Works during winter on assigned general maintenance projects including carpentry, minor electrical/HVAC/plumbing projects.
k. Applies herbicides, as certified, around school system buildings, grounds and parking lots.
l. Obtains and maintains appropriate State and Federal licenses to complete job functions.
m. Performs such other tasks and assumes such other responsibilities as assigned.

9. *Head Custodian*

a. Serves as a working leader and on-site manager in supervising the work of a crew engaged in custodial and facilities operations tasks and reports to building Principal. Works with school principal/site administrator to ensure operations support instruction. The Energy & Operations Foreman provides material, equipment, training and management support.
b. Responsible for minor maintenance, repairs and systems adjustments as able.
c. Oversees all aspects of maintenance; in house or contracted, at subject facility or campus.
d. Responsible of implementation of Integrated Pest Management procedures at the facility.
e. Monitors the time records of all custodial employees in the school and certifies them for salary payments.
f. Maintains an inventory and recommends purchase of suitable supplies, tools and equipment.
g. Evaluates the performance of custodial staff on an annual basis, with input from the principal.
h. Strives constantly to promote the safety, health and comfort of the students and employees.
i. Makes such minor building repairs as he/she is capable of.
j. Reports major repairs needed promptly to principal, Maintenance and Operations Manager.
k. Reports to principal any damage to school property.
l. Checks daily to ensure that all exit doors are open and all panic bolts are working properly during the hours of building occupancy.
m. Checks heat, ventilation and air conditioning systems on a regular basis and reports any malfunctions to the maintenance department.
n. Sweeps and mops floors, cleans bathrooms, washes walls, windows and light fixtures. Demonstrates and instructs employees in prescribed methods of cleaning classrooms, bathrooms, offices and other building sections.
o. Operates powered equipment to scrub, finish and buff floors, vacuum and clean carpeting.
p. Spot cleans and shampoos carpet floors.
q. Shovels snow, sands or uses ice melt on walkways, steps and landings to provide a safe passageway.

r. Cuts grass and trims shrubbery.
s. Responds to afterhours emergencies as needed.
t. Utilizes the district wide Maintenance Management work order system to enter work request as needed.
u. Performs such other tasks and assumes such other responsibilities as required.

10. ***Custodian***

a. Keeps building and premises, including sidewalks, driveways and play areas neat and clean at all times.
b. Shovels, plows and sands walks, driveways, parking areas and steps as appropriate.
c. Raises the United States flag at or before 9:00 a.m. on each school day and lowers it at or after 3:30 p.m. as appropriate.
d. Sweeps or cleans classrooms daily and dusts furniture.
e. Cleans corridors after school each day and during the day when their condition requires it.
f. Scrubs and disinfects toilet floors daily and cleans all sanitary fixtures and drinking fountains daily.
g. Washes all windows on both the inside and outside at least once a year and more frequently if necessary.
h. Performs such yard keeping chores as grass cutting, tree trimming and the like as necessary to maintain the school grounds in a safe and attractive condition.
i. Keeps all floors in a clean and attractive condition and in a good state of preservation.
j. Cleans all chalkboards at least once a week when necessary.
k. Makes such minor building repairs as is capable of.
l. Reports major repairs needed promptly to the head custodian.
m. Reports immediately to head custodian any damage to school property.
n. Remains on the school premises, as assigned, during school hours and during non-school hours when the use of the building has been authorized and attendance of a custodian is required.
o. Assumes responsibility for the closing of the building each school day and for determining before leaving that all doors and windows are secured and all lights, except those left on for reason, are turned off.
p. Conducts an ongoing program of general maintenance, upkeep and repair.
q. Moves furniture or equipment within the buildings as required for various activities and as directed by supervisor.
r. Responds to afterhours emergencies as needed.
s. Performs such other tasks and assumes such other responsibilities as assigned.

B. Maintenance Categories

Maintenance of Plant shall be defined as those activities which are concerned with keeping the grounds, buildings and fixed equipment excluding moveable equipment at or near their original condition of completeness and efficiency, either through repairs or by replacement during the life expectancy of the building. Maintenance of Plant shall further be subdivided into the following categories and subcategories:

1. Scheduled Maintenance

Scheduled maintenance includes maintenance and repair activities which can be forecasted and for which expenditure of parts and labor are based on a predictable time table/or use schedule. The subcategories of scheduled maintenance are as follows:

a. Preventive Maintenance (Scheduled)

Preventive maintenance is action taken by users, operators, maintenance personnel and/or contractors to prevent expensive repairs and breakdowns before they occur. It is a planned program which includes lubricating, cleaning, adjusting, painting, replacement of expendable parts and other activities designed to maintain the buildings and fixed equipment in a condition as near to original as possible. Items where Scheduled Preventive Maintenance is ongoing includes:

1) *Playground Inspections and Repairs*

Head custodians and custodians police playgrounds and the grounds on a daily basis and keep the grounds free of hazards and report any unsafe conditions. Visual playground inspections are performed monthly and reports are turned into to the Maintenance Manager. Equipment that is in need of repair is placed out of service, reported a repaired as quickly as possible. Protective surfacing material is inspected and evaluated for proper depth and renewed as needed. Yearly inspections are performed once a year by a certified playground inspector.

2) *Heating, Ventilation and Air Conditioning (HVAC)*

A qualified national equipment manufacturer and HVAC Service Company is contracted to assist with routine preventive maintenance, seasonal startup and shut-down of the chiller units and cooling towers. Preventive maintenance is also outsourced for startup and shutdown of all boiler fired heating systems. The objective is to prepare the unit for the subsequent season at the end of its current usage season.

Filter changes, bearing lubrication, cleaning and inspections of remaining HVAC equipment is accomplished by maintenance personnel. HVAC preventive maintenance is dispatched electronically on a quarterly schedule. If issues arise which are beyond our expertise, an outside vendor is called in to assist.

3) *Transformer/Main Switchgear Inspection and Cleaning*

The electrical supply systems main switch gear are inspected every 3 years at all schools. Transformer oil samples are taken and tested to prevent unscheduled power failures and to gauge the remaining equipment life expectancy. The main switchgear in each building is also cleaned and all connections are tightened

on a scheduled basis. Switchgear is composed of electrical disconnect switches, fuses or circuit breakers used to control, protect and isolate electrical equipment.
The servicing includes thermal imaging, cleaning, and arc-flash assessment. This type of service can be important to avoid interruptions to instruction, and becomes increasingly important as our schools' electrical distribution systems age, and parts become increasingly difficult to obtain.

4) *Emergency Generators*

Head custodians at South Dorchester School, Dorchester Career & Technology Center, Cambridge-South Dorchester High School, New Directions Learning Academy, Mace's Lane Middle School, Choptank Elementary School, North Dorchester Middle School, Warwick Elementary School and Hurlock Elementary School test their emergency generators at least monthly. Preventive maintenance for these units is outsourced to a reputable, manufacturer recommended service provider.

b. Preventive Maintenance/Casualty Prevention (Scheduled)

The preventive maintenance program/casualty prevention provides monthly manufacturer recommended maintenance checks and inspections of fire safety and protection equipment such as portable and installed fire extinguishers, sprinkler systems, and fire alarm devices. Examples of Fire Safety checks and inspections are:

- ✓ Fire drills are conducted monthly at each school. Alarm systems are checked for proper operation at that time.
- ✓ Fire extinguishers and kitchen extinguishing hoods are inspected, serviced, hydro tested and replaced on a scheduled basis as required by a certified fire equipment company.
- ✓ Sprinkler systems are inspected monthly and tested annually by a certified Sprinkler System Contractor.
- ✓ Fire safety inspections are performed during National Fire Prevention Week. Previous fire marshal inspections renewed concerns about meeting the ever changing requirements in the life-safety code. Smoke detectors and sprinkler systems will need to be installed wherever an area is renovated. All schools are connected to a 24-hour monitoring service.
- ✓ GFI receptacles are checked monthly by the custodians.

(Appendix C) is a detailed breakout of the Preventive Maintenance Schedules for Selected Equipment.

Energy conservation is achieved by proprietary, remote, site-based building controls linked to the Central Office via the wide area network at some schools. These systems are monitored and manipulated through internet browser applications. With this automated program the Maintenance Manager or his designee is capable of monitoring and influencing energy conservation measure throughout the year.

c. Repairs (Scheduled)

Scheduled repairs are actions which involve a more sizable effort than preventive maintenance to maintain a facility in good condition. They generally occur at or near the end of the specified life of an item or system. Included are:

- ✓ *Roof*

  1) Custodial personnel perform rooftop surveys quarterly. Trash and debris are removed from rooftops, gutters, and drains during this survey. Any potential problems can be identified and corrective action taken immediately. A private roofing contractor will respond to calls for repair or provide proposals for work.
  2) Bi-annual roof inspections are conducted to meet the eligibility requirement for state funding for roof replacement projects. Inspections are completed by in-house staff and a roofing contractor to determine life expectancy and capital budget funding.

- ✓ *Bleachers/Stage Rigging*

  Gymnasium bleachers located at Cambridge-South Dorchester High School, Mace's Lane Middle School, North Dorchester High School, North Dorchester Middle School and South Dorchester School are inspected, serviced/repaired annually by a certified contractor to ensure user and occupant safety.
  Starting 2021 stage rigging inspections are now part of our yearly inspections. The stage at Cambridge South Dorchester High School is older and heavily used and rigging of the lights, cables and winches is necessary to maintain and upgrade as needed.

- ✓ *Boilers*

  Maintenance staff inspects and perform boiler tests annually in addition to mandated inspections related to operational and safety issues. Boilers are cleaned annually by in-house personnel. They are also inspected annually for licensure and certification by the district's insurance carrier. Repairs that are beyond In-house capability is completed by a certified boiler repair company.

- ✓ *Fuel Pump Sets/Burners/Burner Controls*

  Fuel pump sets, burner assemblies and burner controls are monitored and routine maintenance performed by outside contractor. Fuel filters are replaced annually and inspected during the heating season. Major repairs or replacements are outsourced through reputable, certified service providers.

- ✓ *Carpet/Tile*

  As floor coverings reach the end of their useful lives they are replaced with

materials that are easily maintained and have a positive effect on the environment of the school. Hard surfaces are stripped and buffed each summer. Carpet surfaces are vacuumed weekly and extracted as needed. Carpet surfaces are replaced with tile wherever practical.

- ✓ *Curb/Sidewalk and Blacktop*

  Repair or replacement of curbing, sidewalks, and blacktop is ongoing as Funding becomes available. Use of salt products is to be minimized on hard surfaces. Pavements are sealed between overlays to prevent oxidation, cracking and deterioration of pavement.

- ✓ *Furniture*

  Furniture repair is limited to replacing screws or missing parts for student desks and chairs. More extensive repairs to teachers' desks, countertops and cabinets are made on a limited basis. The age and cost of most furniture (versus the time, material and labor cost of repair) make replacement the most viable option.

- ✓ *Painting*

  Our goal is to paint interior areas of each school every five years. Principals request special painting projects during the budget process. These requests, as well as those generated by teachers and approved by the principal, and facilities engineer, are schedules permitting, completed during the summer and winter breaks with seasonal employees.

d. Deferred Maintenance (Scheduled)

Deferred maintenance includes maintenance and repair activities which have been delayed or postponed due to lack of funds or personnel or which have been delayed pending some future decision regarding the building such as major renovation, building replacement, disposal or change of use. It may include any of the above described categories of maintenance. Currently, the long-standing backlog of deferred maintenance items has created a significant amount of unscheduled maintenance tasks.

e. Modernization, Alteration and Minor Construction (Scheduled)

Modernization, alteration and minor construction are actions where labor and material are expended to improve the buildings' original condition or to make alterations in the buildings' configuration or functions. It includes code corrections, renovation and repair work, but does not include construction of new building additions or adapting buildings to major changes in use. Typically, these are projects that are too small for inclusion in the State funded CIP process, yet larger than routine maintenance. Funding is often supplemented by the local Capital Outlay Budget.

2. Unscheduled Maintenance

Unscheduled or corrective maintenance includes repair activities which cannot be programmed or forecast. It includes corrections of day-to-day routine breakdowns or failures and emergency repairs. It is usually based on reports or work requests generated by building administrators, custodians, other building based personnel or the community users. Equipment failures and breakdowns of any sort are reported either by telephone in case of emergencies, or by submitting a work order request (Appendix D). Upon receipt they are given a priority code by the Maintenance Manager. The priority codes used are urgent, routine or deferred (see below). All requests, once prioritized are assigned to a worker. Upon completion of work, the time spent and materials consumed are entered into the data base. Each month reports are generated showing work completed that month and also work still outstanding for each individual school. These reports are passed to the respective school principals so that they can resolve/reconcile any work for their school with the Maintenance Manager.

Vandalism is also a cause of unscheduled maintenance. Normally this involves broken windows, broken equipment/furniture due to student excesses or forced entry onto school property. These incidents are normally reported via telephone. Upon notification, any request for work is flagged and costs and labor expended are noted. If the culprits are caught and restitution is warranted, then the total cost for repairs is forwarded to the appropriate agency/authority.

Regardless of the reason for a work request, if it involves a safety, health or energy conservation problem, it is coded as urgent. In these cases the work order is given top priority in the assigned Maintenance person's work schedule for that day. It remains a top priority until it has been completed. A routine coding means that the maintenance request can be scheduled when time permits, within reason.

Deferred maintenance means the maintenance is not critical, and the item can be included or attended to at a later point in time. For example, the painting program may be deferred for a number of reasons – funding, lack of personnel, other impending priorities, etc. We paint areas within the schools on an exceptional basis and at the request of the principal. Resurfacing of blacktop and sidewalks has been deferred due to costs. In all cases of deferred maintenance selective repairs to the worst areas are done until funding, or other relevant decisions pertaining or related to the matter can be addressed.

C. Maintenance Inspection System

Inspections are the primary generators of maintenance and repair workload. Inspections monitor current programs, identify deficiencies and initiate corrective action to keep facilities at or bring them up to the desired standard. The inspection effort is planned, scheduled and systematically performed on an annual basis by qualified inspectors and operators properly equipped. Our inspection systems consist of three distinct inspection programs (annual control, preventive maintenance and operator).

1 A**nnual Control Inspection**: uses the services of in-house inspectors or other agencies inspections, outside consultants and contracted services to provide reports of findings utilizing acceptable checklists to define discrepancies. Appendix (E) is a typical checklist used to report facilities discrepancies.

2 **Preventive Maintenance Inspections**: during the normally scheduled examinations of the equipment, the maintenance worker will report back to the Maintenance Manager any discrepancies that were found during the performance of the preventive maintenance service. A work order will be issued to address any issues that were found while completing the Preventive Maintenance Inspection.

3 **Operator Inspections**: day-to-day or periodic examination and minor adjustment of equipment and systems. Deficiencies beyond the capacity of the operator will be reported to the Maintenance Manager.

4 **Ground Fault Circuit Interrupter Inspections:** A GFI receptacle is different from conventional receptacles. In the event of a ground fault, a GFI will trip and quickly stop the flow of electricity to prevent serious injury. The head custodians will check GFI receptacles every month and turn in a checklist and the condition of the receptacles to the Maintenance Department. (See Appendix G)

D. <u>Procedures to Request Work:</u>

1. All maintenance work is to be requested by means of an Internet Based Work Order Request System called School dude. Additionally, work order requests can be generated for custodial and school construction needs as well.
2. School based work requests are forwarded to the Principal or designee for review. If the work requested is approved by the Principal or designee, a work order request is completed on the District's website. All Maintenance Work Order Requests are then reviewed centrally by the Maintenance Manager. They are prioritized and assigned to available, in-house maintenance staff. If the scope of the request is beyond in-house capabilities, the Maintenance Manager may contract the work to outside vendors for resolution.
3. If a repair is deemed an emergency, and the head custodian cannot resolve the issue, the principal contacts the Maintenance Office by telephone and one of the maintenance tradespersons will be assigned to respond.
4. The Principal, Director of Operations, and Maintenance Manager is to be kept informed of the status of the work being accomplished and its impact on the educational environment.
5. If work cannot be accomplished according to budgetary or other limitations, the work will be placed on the deferred maintenance list and funding, outside contractor assistance or other resources requested. Currently the work order system does not send work orders to a contractor.

MODERNIZATION, ALTERATIONS AND MINOR CONSTRUCTION

Requests for major renovations/repairs costing over $100,000 are made to the Interagency for Public School Construction (IAC) annually through the submission of a Capital Improvement Plan (CIP) that is approved by the Board of Education and County Council.

A. The major categories considered for state matching funds are new construction, replacement construction, building renovations & additions, systemic renovations (roof replacements, plumbing, structural, mechanical and electrical), limited renovations, temporary classrooms, Aged Schools Program (ASP), and Qualified Zone Academy Bonds (QZAB). Funding from the state is based on authorization by the state legislature.

B. Approval and funding support by both state and local agencies is necessary for a project to be undertaken.

C. Minor Construction is the accomplishment of small construction projects, installation of new systems or components or replacement of entire systems or major components, such as air handlers, chillers and exhaust fans.

CODE COMPLIANCE, ENVIRONMENTAL & INDOOR AIR QUALITY (MANDATES)

Mandated inspections and maintenance (required by Federal, state, county or local governments) include: OSHA, MOSH, ADA regulations, asbestos testing and removal of hazardous materials such as radon gas, carbon monoxide, lead in water, underground storage tanks and indoor air quality issues. These requirements are very seldom funded and they put a heavy financial burden on the school district. If not accomplished in a timely manner, the School Board could be open to fines and/or lawsuits. The Maintenance Manager is the School System contact person for all matters involving these environmental concerns. Upon notification of any suspected problems, the Maintenance Manager will immediately begin to conduct an investigation following the outlines of the Indoor Air Quality Complaint procedures (Appendix G). On an "as needed" basis the manager will have independent testing conducted for radon gas, carbon monoxide and lead in water or any other environmental concern if investigation is warranted. The following are examples of mandated compliance/maintenance:

1. *Asbestos Management and Surveillance*

   A certified Environmental and Engineering Company serves as technical consultant, providing project managers and asbestos inspectors. All staff is instructed on proper cleaning techniques and precautions to take around an asbestos-containing material (ACM). Custodians and maintenance personnel are trained to be observant of problems and to report deficiencies immediately. A certified inspection firm accomplishes the six-month surveillance and three-year re-inspection as required by federal regulations.
   The recent EPA mandate that all supplies used in operations and maintenance activities be certified as being free of asbestos is unfunded and impractical. Further clarification is being sought from the EPA.

2. *Indoor Air Quality*

   When reports of air quality issues are received, an inspection of reported areas of concern is done according to established procedures in the Emergency Procedure and Response plan

and the EPA's Tools for Schools kit. Recommendations are made to the Maintenance & Operations Manager as a result of the inspections. Filters are changed every three months. This practice has resulted in fewer complaints other than minor temperature and humidity issues. Complaints are also reviewed as needed with the Dorchester County Health Department. Subsequent suggestions and recommendations are implemented as soon as possible.

3. *Underground Storage Tanks (UST)*

   The Board has four underground storage tanks for storing heating oil. The tanks are tested every five years as required by the state. The Board has no underground storage for gasoline or waste oil products. Head custodians measure the amount of oil in each tank before and after delivery and weekly for two reasons: 1) to measure oil level, to verify usage; and 2) to check for leaks. Any concerns are reported and investigated. An emergency plan exists that addresses unexpected oil spills (required). The heating oil tanks are "tightness" tested every five years. (See Appendix H for total list of UST's)

4. *Americans with Disabilities Act (ADA)*

   All schools are accessible to individuals with disabilities. Changes continue to be made to buildings to meet individual student needs and public access.

   - ✓ Fire alarms will need to be converted to visual as well as audible systems.
   - ✓ Water fountains will need to be modified.
   - ✓ Potential barriers in classrooms and hallways will need to be modified or removed.
   - ✓ Floor surfaces and doorways will need to meet new requirements.
   - ✓ School signage will need to be upgraded to meet current standards.

   Any renovation to buildings will require ADA compliance. Project plans and specifications include such as a matter of course.

5. *Playground Safety*

   a. Equipment and playing surfaces at elementary school playgrounds are evaluated and are inspected routinely for safety. A portion of the annual capital budget is designated for playground upgrades to include replacing old equipment, changing and/or replacing surfaces and ensuring that equipment is safe and accessible for children with special needs.
   b. Parent groups at each of the elementary schools have been active in fundraising to facilitate upgrading playgrounds to meet current safety and ADA guidelines. Coordination between the Operations Department and these groups will ensure that this safety program continues and will include proper surfacing material, equipment design, installation and signage. A large amount of the playgrounds was updated 2019/20 School year.

6. *Boilers*

Boilers and other pressure vessels are inspected every two years by the boiler inspectors from the Board's insurance carrier. Their inspection is specifically detailed enough to reissue individual State of Maryland Certificates of Boiler or Pressure Vessel Inspection.

Also, as stated in section (B.1.c: Boilers), the Maintenance staff and insurance company experts inspect and perform boiler tests annually. A commercial boiler company performs system-wide Preventive Maintenance on all boilers during the summer in preparation for winter heating. Repairs that are beyond the current in-house maintenance capability are done by a certified boiler repair company.

7. *Vehicles*

   A list of all district vehicles and their condition is maintained and updated annually (Appendix F).

SERVICE CONTRACTS

When repair or maintenance demands exceed the capacity or capability of the district's personnel then vendor assistance is procured. Some of vendor assisted maintenance includes:

1. *Heating, Ventilation and Air Conditioning (HVAC)*

   a. Contractors are used to conduct preventive and corrective maintenance on chillers, cooling towers and boilers and to provide a list of discrepancies. The Maintenance Manager makes decisions on which maintenance items the vendor or maintenance personnel will repair or which items must be deferred to a later date. Contractor services are not tracked through Schooldude.

   b. A computerized facilities monitoring system consists of proprietary controls interfaces (ASI Controls, Johnson, Invensys, Reliable, etc.). The Maintenance Manager and three tradesmen are assigned to remotely monitor these systems and perform scheduling changes. This monitoring facilitates the identification of problems immediately and saves in energy costs.

   c. Maintenance personnel perform in-house routine maintenance on HVAC systems other then chillers and boilers. The current preventive maintenance inventory that is serviced by in-house personnel exceeds 900 pieces of equipment not counting the grounds equipment.

2. *Well Water*

   a. Well water is tested quarterly by a certified laboratory. Results are provided directly to state agencies as well as to the maintenance department. The Maintenance department employees a licensed water operator who pulls water samples daily from wells and sends the required paperwork to the State of MD.

3. *Lawn/Athletic Field Maintenance*

   a. All facilities grounds are maintained in-house by our maintenance and grounds department.

b. An established athletic field maintenance schedule has been developed and is being maintained by the maintenance and grounds department. As part of the Athletic maintenance plan, the grounds department is responsible for aeration, rolling, over seeding, fertilization, weed control and sprinkler maintenance for all athletic fields.
c. DCPS groundskeepers apply herbicide applications for weed and grass control in parking lots, curbs and sidewalks only under the direction of a State of Maryland, Department of Agriculture, licensed applicator. All work is in accordance with Integrated Pest Management policies and procedures.

4. *Pest Control*
   a. An Integrated Pest Management Plan (IPM) is documented and followed. Based on state recommendations, Dorchester County Public Schools' pest control service provider uses baited traps in addition to chemicals to control insect infestation. Pesticide application is used only as a last resort after exhausting all components of the IPM system. When pesticide application is necessary, it is completed after school hours, on weekends or holidays and only with appropriate notification. An annual review of the service contract is conducted along with the release of a RFP and bi-annual bidding of the contract.

5. *Refrigeration Equipment*

   Private refrigeration contractors and maintenance personnel are utilized to repair equipment that utilizes refrigerant. Three maintenance department staff members are certified and have the required recovery equipment.

6. *Safety and Condition Inspections*

   The Maintenance and Operations Manager make routine inspections of building conditions and cleanliness. Results of these inspections are used to develop work order packages and budget requests. These inspections include bleachers, playground equipment, traffic signs and condition of grounds, building structures and installed equipment.

7. *Fire and Intrusion Alarms*

   Fire and Intrusion Alarms are serviced and repaired only by qualified contractors. Some of the districts fire systems are 30+ years old and becoming difficult to get parts for. The systems are currently being evaluated and will be prioritized for capitol funding.

TRAINING

To ensure compliance with current federal and state regulations, training time is set aside annually for the mandatory subjects. The School District currently utilizes Safe Schools web based training as well as in person training. Topics of training include:

1. Lockout/Tag out
2. Blood Borne Pathogens
3. Hazard Communication

4. Asbestos Awareness
5. Personal Protective Equipment
6. Hazardous Materials
7. Confined Space Entry
8. Respiratory Protection
9. Fall Protection

A. **First Week Back To School Activity**

All maintenance and operations personnel undergo a minimum of six hours of safety training.

B. **Monthly Meetings and MOSH Required Training**

Head custodians and maintenance workers meet monthly. Each meeting includes a discussion of a least one safety topic, outstanding maintenance issues and related job training. All Operations and Maintenance personnel attend mandatory safety training that is scheduled annually to coincide with the Professional Development and In-Service calendar.

C. **Shared Expertise**

Maintenance and Grounds workers have identified areas of expertise (use of extractors, vacuum cleaner repair or mower repair, for example). Head custodians also provide training for school based custodians.

D. **Demonstrations**

Suppliers schedule demonstrations for new equipment and products (as well as refresher courses on existing products) upon request. Hands-on experience is an integral part of the demonstration.

E. **Meetings with Staff**

The maintenance tradesmen meet weekly with the Maintenance Manager to discuss job assignments, problems, safety concerns, etc. Custodial staff meets for on-going training to discuss inspections results, job assignments and safety concerns with the Custodial Manager. Head Custodians meet monthly with the Custodial Manager.

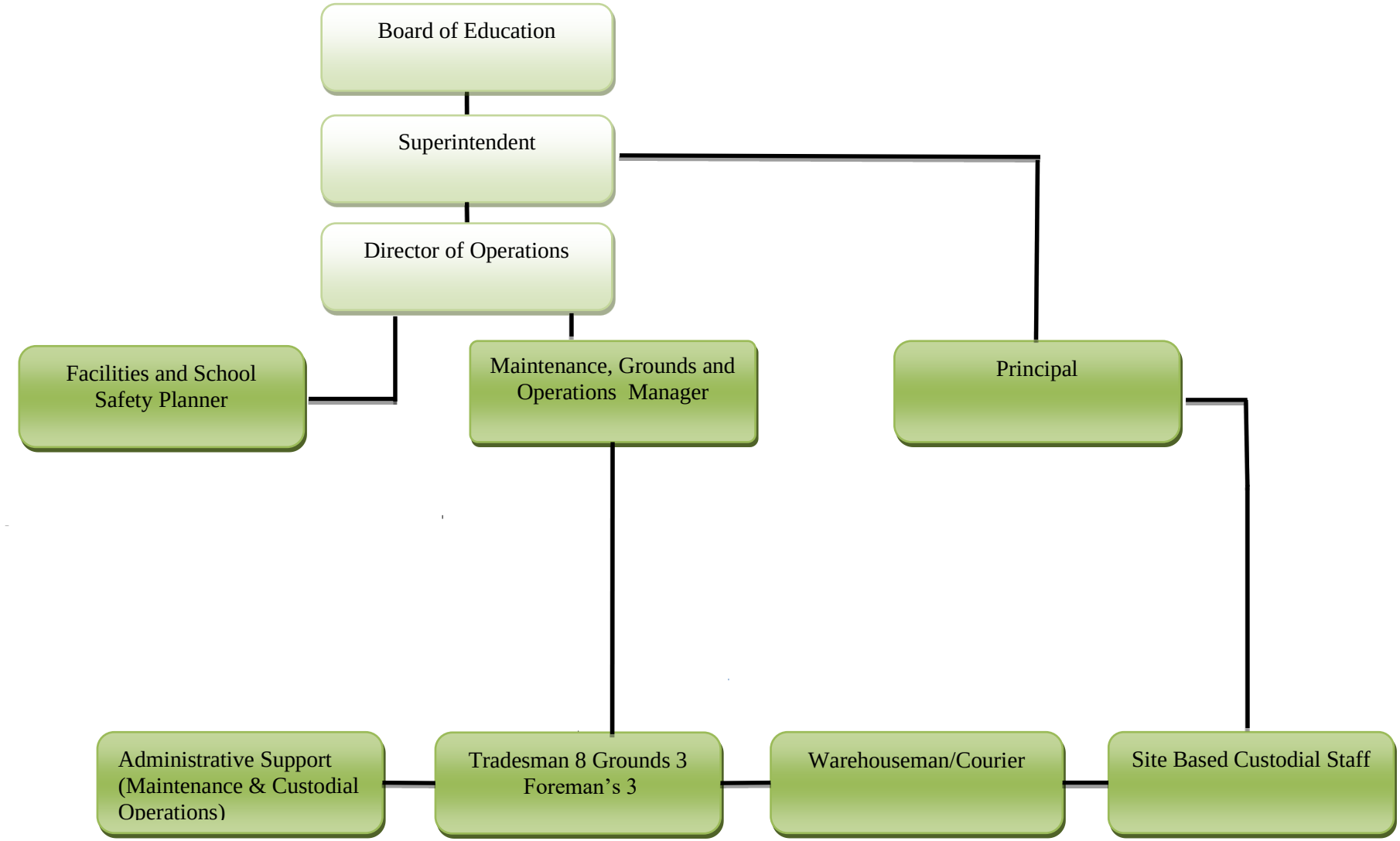
F. On-The-Job Reminders

Whenever unsafe work habits are observed, the person involved is reminded of correct and safe procedures to use. Improper equipment usage or unsafe work habits are a part of a worker's performance evaluation.

SUMMARY

This Comprehensive Maintenance Plan outlines the manner in which the School Facilities (Operations and Safety/Maintenance and Grounds Keeping/Energy and Project Management) Department carries out the objective of insuring that schools have the safest and healthiest environments possible. This plan is continually under review to insure the missions are accomplished in the most cost-effective way. The Maintenance department currently employees 8 highly skilled professional tradesman that possess multiple State licenses. Our grounds department employees 4 highly skilled professionals that also have multiple licenses and years of experience.

ATTACHMENT A
Organizational Chart Operations Department – School Facilities



ATTACHMENT B

SUMMARY/GUIDE OF GENERAL FACILITIES RESPONSIBILITIES

Facility Maintenance/Grounds Keeping-Pat Murphy; Maintenance, and Operations Manager (or Gail Lantz; Maintenance and Operations Administrative Support) 410-901-6947

Adjust temperature setting. Athletic Field Maintenance/Readiness. Check on status of a Repair or Maintenance Request. Comprehensive Maintenance Plan. Asbestos Management Plan. Water Quality and Testing. Cooling Season-When does it start. Emergency Sheltering Setup/Tear Down. Repair Requests. Emergency/After hours Essential Personnel Contacts/Changes. Environmental Quality Concern. Equipment Movement within the System. Facility Damage or Vandalism. Facility Emergencies. Grass Cutting of Fields. Grounds Keeping Quality Control. Hazardous Material Concern. Heating Season-When Does It Start. HVAC System Preventative Maintenance. Life Safety System (Fire Alarm/Sprinkler System/Security System/Other) Concern. Keying Questions. Maintenance Quality Control. Playground Repairs. Playground Safety Concern. Playground replacement. Power Outage. Roof leaks. Sanitary Sewer. Septic System. Snow Removal Driveways/Parking Lots. Utility Related Question or Concern. Water Testing. Schooldude Workorder Management.

Custodial Operations-Patrick Murphy; Maintenance, Custodial and Grounds Manager (or Gail Lantz; Maintenance and Operations Administrative Support) 410-901-6947

Bathroom/Locker Room Cleanliness Concerns. Building Cleanliness Concerns. Custodial Openings. Custodial Quality Control. Custodial Shift Scheduling. Custodial Staff Typical Duties. Custodial Equipment and Supplies. Custodial Training. Emergency Radios. Floor System Finishes. Flower Bed Maintenance. Overtime Authorization for Custodians. Pest Management IPM Program. Trash Service Management. Playground Daily Inspection and Maintenance. Porta Potties for Athletics. Snow Removal Sidewalks. Special Cleaning Projects. Trimming/Grass Cutting Around Building.

Energy/Operations Foreman – Andrew Marshall; 410-221-1111 (or Gail Lantz; Maintenance and Operations Administrative Support), ext. 1010

Building Check Program-Weekends/Holidays. Community Use of Facilities. Community Use Special Requests. Emergency Sheltering Setup/Tear Down. Energy Management. Exterior/Site Lighting System Scheduling. Facility Emergencies. Facility Renovations. Facility Replacements. Furniture/Equipment Requests. General Facilities Troubleshooting. Heating Oil Management. Humidity Concerns. HVAC Scheduling. Special Projects. Systemic Renovations. Temperature Concerns. Utility Billing/Usage. Utilities Management. Weekend Energy Program/Holiday/Summer/Winter Shutdowns. Space Planning.

Facilities Construction and Safety Manager; -Chris Hauge; Facilities and School Safety Planner, 410-221-1111, ext. 1009

Capital Improvement Plan. Capital Projects Management. Educational Facilities Master Plan. Emergency Sheltering Setup/Tear Down. Enrollment Projections. Capitol Related Board of Education Action Items. Government Relations (Facilities Related Local/County/Municipality Planning and

Department of Public Works/Facilities Related Health Department Issues). Long Range Capital Planning/Programming. Portable Classroom Requests. School Safety and Security Management.

ATTACHMENT C

Standard Custodial Shifts

When normal school operations return, the Board of Education will be implementing standard custodial shifts and custodial employee break times district-wide. The purpose of standard shifts to maximize the time spent cleaning schools. This requires the bulk of our staff time to be onsite after the instructional day.

Specifically; they are as follows:

Non-Instructional Day Hours/Single Shift Day (i.e. Summer/Holiday Breaks, PD Days, etc.).

Summer Work Week 6:00 a.m. – 4:30 p.m., all other regular, single shift days 7:00 a.m. – 3:30 p.m.

Instructional/2 Shift Days

Elementary School Day Shift

6:00 a.m. – 2:30 p.m. or 6:30am -3:30pm depending on the site

Middle and High School Day Shift

6:00 a.m. – 2:30 p.m.

Sites Second Shift

2:00 p.m. – 10:30 p.m. Middle and High

1:00 p.m.- 9:30 p.m. Elementary Schools.

Break and Lunch Times

Operations employee breaks shall occur districtwide on the following schedule:

First Shift, 2-15 minute breaks and ½ hour lunch to be taken as duties allow.

Second Shift, First Break: 4:00 p.m. to 4:15 p.m.

Second Shift Lunch 1: 6:00 p.m. to 6:30 p.m.

Second Shift Lunch 2: 6:30 p.m. to 7:00 p.m. (for sites with 2 or more FTE's, ½ of shift will take first lunch, ½ to take second lunch)

Second Shift, Second Break: 8:00 p.m. to 8:15 p.m.

No exceptions to this schedule are to be made without the explicit review and approval of the Operations Manager.

ATTACHMENT D

General Facilities Communications Protocols

School based issues involving any aspect of Facilities Operations (Custodial Services, Maintenance, Energy Management, Project Management, Community Use, etc.); generally, should always be discussed between the building administrator and lead/site based Facilities Leader (head custodian or building/campus engineer) to see if an issue can be addressed at the school level first.
When district level support is needed that cannot be supported through the districtwide work order system, the Administrator, site-based Facilities Leader or Designee should; generally, try to:

1. call and speak to the required manager or
2. leave a message, request a return call as needed
3. contact Gail Lantz
4. and if all else fails, send an email

The Facilities Management Team is dedicated to Supporting Excellence across the district. Professional, effective, efficient and customer service friendly communication is expected on all issues. In the event that an issue is not being properly understood by the Team, please contact the Maintenance & Operations Manager. Prior to any Facilities issue being communicated to Executive Team or Board of Education members, please try to exhaust these general communications protocols.

ATTACHMENT E

Custodial Chain of Command

As of July 1, 2019, all custodial staff is now direct reports to the Principal or Designate at the School site. Typically; Custodians report to shift leaders or head custodians. Shift Leaders or Head custodians report to either a Building Engineer, Campus Engineer or directly to the Custodial Operations and Safety Manager (depending on the specific staffing plan at each site).
In order to support effective and efficient facility operations, all custodial issues should be addressed at the lowest possible level. When an issue has not been satisfactorily resolved, only then should it proceed up the chain of command.

Lunch Duties

Custodial staff shall be responsible for taking out the trash from the cafeteria as needed during school lunches and cleaning the cafeteria at the completion of lunch service. When other custodial priorities allow, custodial staff will assist other school based staff in during the lunch evolutions, but the custodial responsibility is officially only limited to trash removal from the building.

ATTACHMENT F

Athletic Field Maintenance Plan

Staffing – Currently 3 full time grounds keepers are paid for CSDHS and NDHS to perform mowing, painting of fields and field maintenance as time allows.

The DCPS Groundskeeper for North Dorchester would become responsible for all athletic field maintenance at the NDHS complex. DCPS Maintenance has added a full time grounds keeper to their staff. This person is primarily responsible for care and maintenance of the athletic fields at the CSDHS complex however they assist with tasks at NDHS as necessary. This grounds person also has mowing duties on the CSD campus, be responsible for preparing the stadium for events, cleaning after these events and any other duties as assigned by the maintenance manager.

The groundskeeper's duties for North Dorchester will be flexed to ensure the fields are prepped and ready when needed. The current South Dorchester groundskeeper can assist with any tasks at North or South to ensure all the counties needs are met.

Establish Maintenance Schedule – Establish a yearlong plan for the entire county that covers all aspects of maintenance. Utilizing the work order system aeration, rolling, over seeding, top dressing, fertilization and weed control can be scheduled for the entire year based on a mutually agreed upon calendar. These tasks can then be planned for, budgeted and executed in a timely and cost-effective manner. Having these tasks scheduled and budgeted will remove this responsibility from the schools and allow them to focus on education.

Additional Equipment – In order to properly maintain our fields we have invested in 3 pieces of equipment.

- Spreader – Granular fertilizer can be applied by DCPS staff 3 times per year with this. It can also be used to top dress the Bermuda grass fields. Can also be used during winter weather events to apply sand or deicing agent to sidewalks and parking lots.
- Roller – All the athletic fields need to be rolled multiple times per season to flatten lumps and keep a safe playing surface. Can also be used when we make repairs or have to disturb soil at other schools.
- Over seeder – Reseeding of fields is a must in order to maintain safe and healthy playing surfaces. This piece of equipment can be used everywhere in the county not just athletic fields to help us keep a good stand of grass.

Schedule –

- January – Little to nothing to do except monitor conditions to limit winter weather damage. Baseball and softball infields should be maintained weekly.
- February – Fields will need to be lined and prepped for spring sports. Baseball and softball infields should be maintained weekly.
- March – Spring sports officially begin. Fields will need to be lined and maintained. Grass will begin to need to be cut by the end of the month. Baseball and softball infields should be maintained daily.
- April – Maintain fields for spring sports. Continue to mow. Spring application of fertilizer and weed management needs to take place. Irrigation systems brought back on line. Baseball and softball infields should be maintained daily. Aerate Bermuda fields once they have started to grow.
- May - Maintain fields for spring sports. Continue to mow and water. Baseball and softball infields should be maintained daily. Once spring sports ends aeration, over seeding and rolling of all fields must take place. Bermuda fields will need to be top dressed. Any repairs to fields must be done. Any replanting of Bermuda grass fields can be done by collecting the cores from aeration and distributing them in the bare spots. Bermuda fields should be verticut.
- June – Maintain fields, mow and water. Bermuda fields must be cut every 2 days at desired length for play. Others can be allowed to grow to 3-4 inches. Aerate Bermuda fields. Baseball and softball infields should be maintained weekly.
- July – Summer application of fertilizer and weed control. Maintain fields, mow and water. Bermuda fields must be cut every 2 days at desired length for play. Others can be allowed to grow to 3-4 inches. Aerate Bermuda fields. Baseball and softball infields should be maintained weekly.
- August - Maintain fields, mow and water. Bermuda fields must be cut every 2 days at desired length for play. Others can be allowed to grow to 3-4 inches. Aerate Bermuda fields. Prep fields for fall sports. Baseball and softball infields should be maintained weekly.
- September - Maintain fields for fall sports, mow and water. Baseball and softball infields should be maintained weekly. Bermuda can be cut less frequently as is slows growth. Aerate Bermuda fields.
- October - Maintain fields for fall sports, mow and water. Baseball and softball infields should be maintained weekly. Fall fertilizer and weed control application. Aerate, over seed and roll as soon as fall sports are complete. Make repairs to fields as soon as fall sports are finished.
- November - Maintain fields for fall sports and mow. Irrigation can be winterized. Baseball and softball infields should be maintained weekly. All fall sports equipment stored and fields prepped for winter.
- December - Little to nothing to do except monitor conditions to limit winter weather damage. Baseball and softball infields should be maintained weekly.

These are just some guidelines based on input for several professional resources and research done by the facilities department. Any of this can be altered or expanded upon based on input from the schools or professional recommendations.

ATTACHMENT G

CSDHS/NDHS Athletic Field Daily, Weekly and Seasonal Maintenance Duties/Procedures

Spring and Fall Sports:

Viking Stadium – Bermuda grass cut as needed. Fields lined on game days, track vacuumed weekly or as needed, fields trimmed, trash cans emptied, bleachers and benches set up, goals and nets set up.
NDHS Stadium - Grass cut as needed, fields lined on game days, track vacuumed weekly or as needed, fields trimmed, trash cans emptied, bleachers and benches set up, goals and nets set up.
Foxwell Field – Bermuda grass cut as needed. Fields lined on game days, fields trimmed, trash cans emptied, bleachers and benches set up, goals and nets set up.
Cross Country Course – Grass cut as needed and lined on race days, fields trimmed, trash cans emptied, bleachers and benches set up.
Practice Fields – Grass cut and fields lined weekly for the duration of the season. Fields trimmed, trash cans emptied, bleachers and benches set up, goals and nets set up.
Baseball and Softball Fields – Grass cut as needed, fields lined on game days, infields dragged daily, fields trimmed, trash cans emptied, bleachers and benches set up.
Band Practice Field - Grass cut and fields lined weekly for the duration of the Football season.
Responsibilities:

- Trash collection in the Stadiums and cleaning of the track will be the responsibility of the Custodians. Each Athletic team is responsible for ensuring **NO** trash is left on any game or practice field. Trash receptacles will be placed at each field for use by the teams. Failure to properly dispose of trash will result in a disruption of service to that field.
- All practice equipment must be removed from the playing surface each night so that maintenance duties can be performed the following day. Failure to remove practice equipment from the playing surface will result in a disruption in service.
- Goal frames will be moved to fields by Grounds, it is the responsibility of each team to hang nets.
- Safety netting, scorer's table, bleachers, sideline mats and track mats will be the responsibility of all users. Deployment of these items should be a group effort by the School, Custodians and Grounds.
- Training aids, field equipment or other ancillary items must be stored at the conclusion of each season. Failure to properly take care of these items will result in a delay in payment of the coach's stipend.
- All Athletic Field Maintenance requests must be reported to the Athletic Director and submitted in the form of a work order to the Maintenance Dept. Requests by coaches to grounds personnel directly will not be honored.
- Field closures will be communicated by the Athletic Supervisor to the Athletic Directors. Input from all involved parties will be considered before a decision is made however once a decision is rendered it is final.

ATTACHMENT H

Maintenance Workload

The following elements are metrics that help to illuminate key issues that can have an adverse impact upon life, safety, and/or health of facility occupants; upon teaching and learning; and/or upon the longevity of the facility.

programs and services assighned to that facility and that are normally	
delivered in that facility due to maintenance issues.	0
Maintenance Work Orders	
Preventive Maintenance (PM)	
1 The total number of PM WOs opened	3302
2 The percentage of PM WOs closed within 30 days.	47%
3 The total number of in-house staff hours spent on PM work.	2,855
4 The total dollars spent on PM work orders by in-house staff.	$118,373.87
Corrective Maintenance(CM)	
1 The total number of CM WOs opened	4326
2 The percentage of CM WOs closed within 30 days.	76%
3 The percentage of CM WOs marked as Emergency or High Priority Wos.	4
4 The total numbers of in-house staff hours spent on CM work.	7,017.00
5 The total dollars spent on CM work completed by in-house staff.	$308,973
6 The mean time to repair the items for which a CM WO was opened.	4.78
Custodial	
1 The percentage of custodians trained on the LEAs Custodial Scope of Work during	
during the last fiscal years.	100%

Notes

1 The current Maintenance Management Software is Schooldude an electronic work order system that is being used across the State of Maryland at multiple School Districts.
2 Custodial and Maintenance staff utilize Vector Solutions (Safe Schools) for mandatory yearly training as well as hands on training at meetings throughout the year.

Attachment I
Custodial Workload Metrics

Current Staffing Compared Against Industry Standards

APPA was formerly known as the Association of Superintendents of Buildings and Grounds, and later became known as the Association of Physical Plant Administrators, or APPA. In more recent years, the organization changed its name to APPA. APPA is a professional organization serving facilities management for educational facilities at a college, university, K-12 school, library, or museum.

Maintenance Standards

APPA identifies five (5) maintenance standards (listed from lowest to highest, in terms of quality of service): Crisis Management, Reactive Management, Managed Care, Comprehensive Stewardship, and Showpiece Facility. The IAC chooses Level 2 (Comprehensive Stewardship) as the industry standard for LEA comparative purposes. Level 2 (Comprehensive Stewardship) is defined as: a well-developed PM program, in which most required PMs are done at a frequency slightly less than per the defined schedule. Appreciable reactive maintenance required due to systems wearing out prematurely and high number of lamps burning out. Occasional emergencies caused by pump failures, cooling system failures, etc..

Custodial Standards

APPA identifies five (5) cleaning standards (listed from lowest to highest): Unkempt Neglect, Moderate Dinginess, Casual Inattention, Ordinary Tidiness, Orderly Spotlessness. The IAC chooses Level 2 (Ordinary Tidiness) as the industry standard for LEA comparative purposes. GSF of system is 1,037000

Comparative Results and Interpretation

Metric	Industry Standard	Previous FY Budgeted	Previous FY Actual	Current FY Budgeted
Maintenance Staffing (FTEs for total GSF)	APPA Level 2 (Comprehensive Stewardship)	10	10	10
Maintenance Load (GSF per FTE)	APPA Leve 2 (Comprehensive Stewardship) 67,456 GSF per FTE standard	98,600	98,600	98.600
Percent of Maintenance staff delivering building services	N/A	100%	100%	100%
Custodial Staffing (GSF per FTE)	APPA Level 2 (Ordinary Tidiness)	49	10 open positions. Currently 39 positions filled.	49 budgeted 39 Actual

Custodial Load (GSF per FTE)	APPA Level 2 (Ordinary Tidiness) 16,700 GSF per FTE standard	21,163	26,589	26,589 based on 39 with 10 open positions

ATTACHMENT J
Preventative Maintenance and Inspection Schedules

EQUIPMENT	PERIODICITY	MAINTENANCE REQUIRMENT LISTING
Unit Ventilator	Quarterly	Inspect, clean or replace filters
	Annually	Clean coils, squirrel cage fan, housing, drain pan. Inspect all controls for operation and condition
	Annually	Inspect motor and fan assembly for tightness in mount.
	Annually	Check trap, temperature regulator and shut off valve, clean and lubricate dampers, if installed. Inspect water controls to coils, if installed.
Water-tube steam boiler	Daily	Inspect for water and steam leaks, Water level. Check for unusual noises, vibration and pulsation. Inspect automatic flame control and record.
	Daily	Blow-down gauge glass and water level/pump controller.
	Weekly	Inspect entire unit for general condition.
	Monthly	Inspect boiler and flame through complete operation cycle.
	Quarterly	Clean and inspect fire-eye control and contacts. Inspect and lubricate burner and damper control linkage.
	Quarterly	Clean and inspect burner nozzles and electrodes.
	Quarterly	Lift safety valves by hand. Check temperature and pressure controls.
	Quarterly	Inspect mercury switches for cracks, short circuits or clouded condition.
	Annually	Inspect fireside and waterside refractory. Clean, replace, repair as needed.
	Annually	Clean water level control assembly and gauge glass.
	Annually	Inspect waterside, steam drum, mud drum, circulating drum, steam separator, dry pipe, chemical feed line and surface blow-down.
	Annually	Prepare boiler for inspection.
	Annually	Open and inspect magnetrol chamber. Lubricate all motors including blower motor.
	Annually	Disassemble and inspect solenoid valves.
	As Required	Inspect and repair check valve, stop valves and blow-down valves.
	As Required	Inspect and clean fuel oil strainer as required.
High Speed Steamer	Weekly	Inspect unit for steam leaks and condition of door gasket.
	Quarterly	Manually test safety valve. Inspect condition of door gasket. Check for steam leaks.
	Semi-Annual	Inspect and replace electrolytic unit, if installed.

	Annually	Check all electrical connections. Check controls for proper operation and condition by cycling through unit through operation. Note steam trap for function-externally.
GFI's	Monthly	Manually press in the test button. Look for light to come on. If there is no light call maintenance department. When ready to reset the GFI press the reset button.

Inspection Schedules

Typical Building Level Inspections

Daily (Regular Business Day)-Walkthroughs are conducted on a daily basis by building level Operations Staff leaders (campus/building engineers, head custodians). Central office facilities management staff conducts summary inspections whenever they are at any facility. Formal inspections are conducted as time and competing priorities allow. Specific project-based inspections are conducted as a part of any project quality control, payment processing or project closeout. In depth inspections occur as part of project planning, in advance of project implementation as part of the project budgeting and planning process.

Daily (Non-Business Day)-Building inspections are also conducted on every non-business day in a schools system to ensure building security and preparedness for the next instructional day. Examples of items checked includes HVAC function, leaks, freezer/refrigerator operations, space temperatures, energy efficiency (ensuring lights, computers, copiers, etc. are off), building security, etc.

Monthly Fire Extinguishers and Emergency Lighting Systems-required inspections to verify the presence and readiness of these systems.

Annual Bleacher Inspections-Bleacher systems are inspected annually by a certified inspector and appropriate repairs made as recommended maintaining safe use and operation of such systems.

Annual Boiler Inspections-All pressure vessels are inspected each year to ensure code compliance and safe operation to maintain state licensure. These typically include boilers, expansion tanks and water heaters.

Annual Budget (Operating or Local Capital) Inspections-As part of the budget process, school-based requests for facilities items are inspected on site to support budget requests. These typically include flooring, HVAC systems, pavement, sidewalks, curbing, furniture, equipment, etc.

Annual Budget (State Eligible Capital) Inspections-As part of the CIP budget process, facilities items are inspected on site to support budget requests. These typically include systemic inspections (HVAC equipment or controls, roofing, windows/doors, security-life safety systems, paving, athletic facility renovations, building renovations, building replacements, etc.). Often these inspections become the foundations for feasibility studies that explore different solution options or recommendations to support major management and decisions related to keeping facilities functional, enhancing existing facilities or full replacement options.

Annual Fire Alarm and Fire Suppression System Inspections-Conducted annually to verify proper system readiness or to identify code required repairs to ensure same.

Annual Fire Marshall –Typically the local Fire Marshall Authority Having Jurisdiction (AHJ) will inspect our facilities to ensure compliance with life safety codes, standards and regulations.

Annual Major Electrical Switching Equipment Inspections-Major switchgear, breaker panels and other similar electrical equipment is inspected using infrared/FLIR technology to identify hot spots caused by age, corrosion, loose connections, etc. that create the potential for major fire hazards if left untended. These happen on a rotating basis due to the limitations of time and scope/quantity of equipment to be inspected.

Annual Playground Inspections-Playscapes are inspected each year to specifically identify areas for repair or replacement. Playgrounds are also scheduled to be inspected weekly by on site Operations staff relative to safety adjustments, etc.

Annual Risk Management and Safety-Our insurance provider conducts in depth walkthrough inspections of facilities each year with a representative from the Facilities Management Team. Risk management, safety, security, housekeeping, code compliance, judgments of maintenance and facility operational readiness and other comments are made and responded to for the record.

Annual School Maintenance-The State of Maryland's Public School Construction Program conducts inspections of facilities each year. Similar in nature as our Risk Management and Safety inspections, they are a tool by which school maintenance levels can be judged, areas of immediate need identified and suggested for capital funding support, to verify appropriate local care of previous state investments and to support /justify future funding applications for facility improvements.

End of Year Inspections-Building administrators; in cooperation with Campus/Building Engineers or Head Custodians survey building occupants and/or inspect the facility to identify specific areas to requiring attention over instructional break periods.

Winter/Spring Building Inspections-Typically the Facilities Management Team is inspecting facilities to identify or further explore known needs that can be addressed during summer break over the winter and spring. Often the complexities of solutions, procurement regulations or lead time on particular solutions demands that this work be planned far in advance of normal end of year activities.

Special Inspections-Special inspections occur whenever the Facilities Management Team discovers that there is reason to suspect or that there may be a significant issue that affects or compromises the mission of the district, its customers, stakeholders or funding authorities. Due to the limitations of staffing, time and competing priorities, these are the inspection of last resort in order to address a concern.

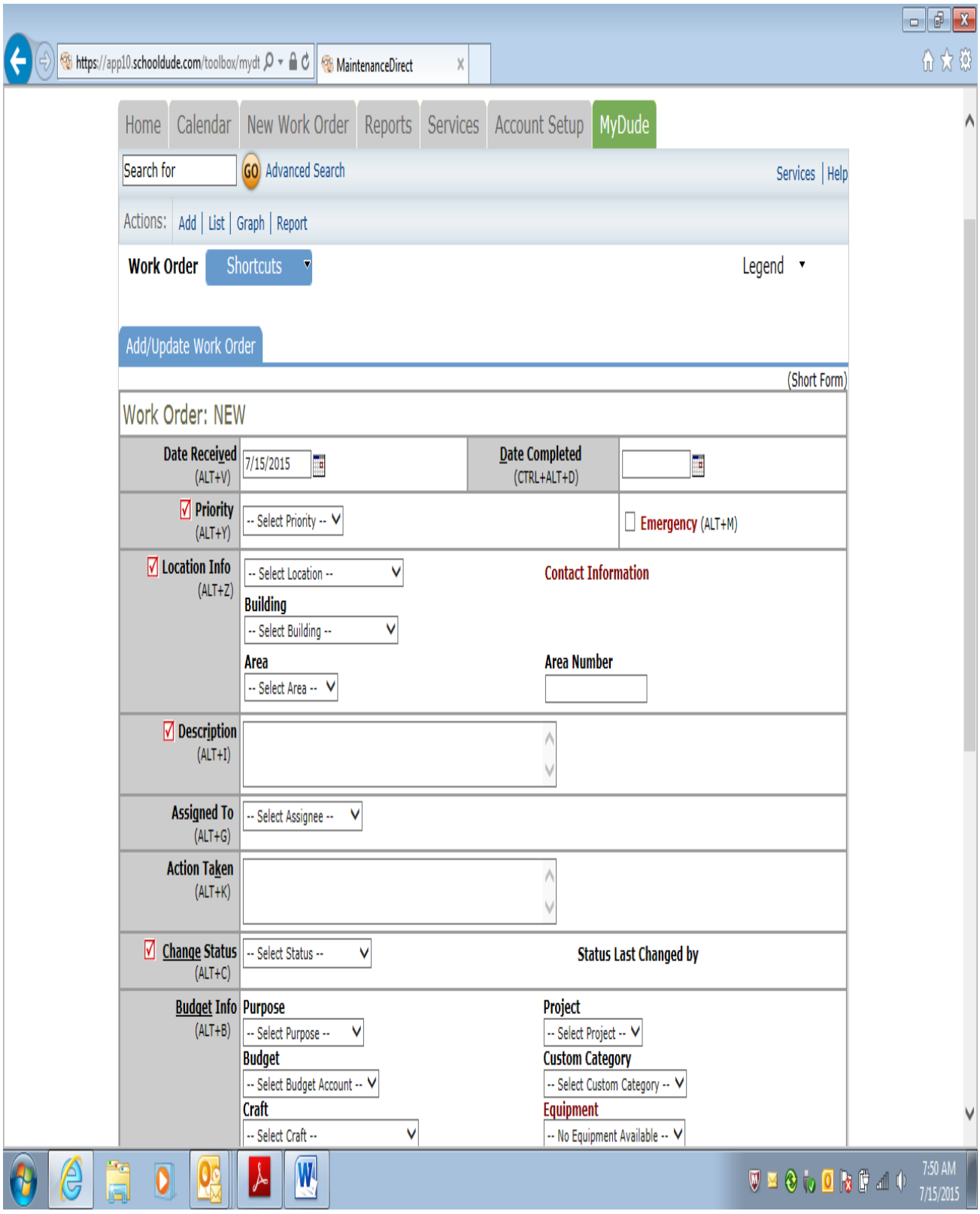
Bi-Annual Roof Inspections-Detailed roof inspections are conducted on a 2 year cycle.

Other Inspections-many other inspections occur outside of these "typical" inspections that are too numerous to list. They include custodial effectiveness and quality control, oil storage tank inspections,

hazardous material inspections; integrate pest management inspections, financial audits, code compliance audits, etc. They are conducted using in house resources, regulatory agency or contracted services.

Attachment K

Maintenance Work Request Form



ATTACHMENT L
Playground Inspection Checklist

Facility: _____ **Page:** _____
Site Name: _____ **Date:** _____
MIS Code: _____ **Inspected by:** _____
Work order issued **Yes or No**

Condition Inspected		Equipment Description/Code					
General Upkeep							
Miscellaneous debris, broken glass, rocks, weeds	Y/N						
Missing or full trash receptacles	Y/N						
Broken or damaged fences, benches, or signs	Y/N						
Broken supports or anchors	Y/N						
Broken or missing protective barriers, rails, steps, rungs	Y/N						
Chipped or peeling paint	Y/N						
Surfacing							
Impact absorbing material exists	Y/N						
Depth of material	Inches						
Free of tripping hazards, exposed footings, rocks and roots	Y/N						
Drainage adequate	Y/N						
Impact absorbing material resilient and non-compacted	Y/N						
Moving Equipment							
Fastening or connecting hardware loose or worn	Y/N						
Wear on swing hangers, chains	Y/N						
Missing, damaged, loose swing	Y/N						
Lubrication of moving parts	S/U						
Bearing wear	S/U						
Pinch, crush and shearing points on moving parts	Y/N						
All Equipment							
Sharp points, corners, edges, protrusions, or projections	Y/N						
Rust, rot, splinters, corrosion, bent or warped equipment	Y/N						
Unstable or loose footings	Y/N						
Missing or broken protective caps to metal or plastic tubing	Y/N						
Obstacles in equipment use zones	Y/N						
Place notes of condition seen, repairs made and parts used in the Comments Section on the back of this form.							

Comments and Notes

Instructions for Playground Inspection

1. In the boxes at the top of the form, insert the appropriate description code for each play piece found on the playground. Refer to the site-specific Playground Map to determine the equipment codes used to identify each play piece.

2. Thoroughly inspect each piece of play equipment for the specific condition listed. Inspect one piece of equipment at a time. Fill out all appropriate boxes on the form before inspecting the next piece of play equipment. If specific items do not apply to a particular piece of play equipment, mark the box N/A (not applicable).

3. Complete details should be written in the Comment Section about the repairs that were made at the time of the inspection. List parts used to make repairs and note any additional information that should be documents.

4. Initiate a corrective work order for any conditions that cannot be repaired at the time of inspection. Attach a copy of the work order to the inspection form and note in the upper right hand corner that a work order has been issued.

Descriptions of Play Piece	Code	Descriptions of Play Piece	Code
Rope Swing	RS	Suspended Walkway	SW
Spring Swing	PS	Monkey Bars	MB
Tire Swing	TS	Balance Beam	BB
Swing Set	SS	Fire Pole	FP
Glide Swing	GS	Tether Ball	TB
Straight Slide	SD	Stationary Climber	SC
Roller Slide	RD	Horizontal Rings	HR
Spiral Slide	PD	Stationary Platform	SP
Chain Ladders	CL	Parallel Bars	PB
Metal Ladders	ML	Uneven Parallel Bars	IB
Horizontal Ladders	HL	See-Saw/Teeter Totter	TT
Rope Ladders	RL	Merry-Go-Round	MG
Tire Ladders	TL	Chin Bar	CB

ATTACHMENT M
Vehicle Listing

August 2023

Motor Vehicles

License	Driver	Year	Make	Model	Mileage	Notes / Condition
LG54381	Back up Van	1999	Chevy	Van	280,461	Maintenance: **Poor (Go to Auction)**
LG89397	Delivery	2005	Ford	Cube	153,748	Operations: Fair
LG76316	Bob Fehsenfeld	2005	Chevy	Van	275,869	Maintenance: **(Needs Replacing)**
LG13913	North Campus	2000	Chevy	Van	183,647	Operations: **Poor (Go to Auction)**
LG41253	General Use	1994	Trailer	CS610	NA	Grounds Equipment: Fair
LG78551	Grounds NDHS	1999	Dodge	Utility	165,572	Grounds: **Poor Used for snow removal**
LG 76669	Grounds	2006	Chevy 4wd	Pickup	201,388	Maintenance: **Poor (Needs Replacing)**
LG77876	Tony Dayton	2007	Chevy	Utility	258,472	Maintenance: **Needs Replacing**
LG80535	Joe Spencer	2007	Chevy 4wd	Pick-Up	148,310	Maintenance: Good
LG81709	Jeff Bell	2007	Chevy	Van	260,981	Maintenance: **Needs Replacing**
LG78550	Grounds	1996	Dodge	Stake Body	153,537	Grounds: Fair
LG98841	Andy Marshal	2006	Honda CRV	SUV	178,460	Energy: Good
LG79587	Richard Short	2000	Dodge	Minivan	142,509	Maintenance **Needs Repacing**
LG91753	CSD Campus	2003	Dodge	Minivan	88,000	Food Service: Fair
LG83940	General Use	2008	Trailer	Utility/Dump	N/A	Maint./Grounds Fair
LG81748	Grounds	2007	Trailer	Utility 18’		Grounds: Good
LG83962	Maintenance	2008	Trailer	Utility 14’		Maint./Lift Good
LG80536	Grounds North	2007	Chevy 4wd	Pick-Up	185,634	Maintenance: Fair
LG96951	Grounds	2004	Ford 4wd	Pick-Up	175,790	Maintenance Fair
LG02003	Reginald Thomas	2015	Ford	Transit Van	131,516	Maintenance Good
LG05810	Wade Willey	2017	Ford	Transit Van	75,249	Maintenance Good
LG12309	Terry Groves	2019	Ford	Transit Van	39,427	Maintenance Good

LG05809	Jimmy Adams	2017 Ford 4wd	Pickup	55,000	Maintenance	Good
LG03668	Chris Hauge	2006 Chevy 4wd	Pickup	62,000	Operations	Good
LG19656	Patrick Murphy	2017 Ford Edge	SUV	38102	Operations	Good

ATTACHMENT N

Ground Fault Circuit Interrupter Checklist

A GFI receptacle is different from conventional receptacles. In the event of a ground fault, a GFI will trip and quickly stop the flow of electricity to prevent serious injury. Instead of following its normal safe path, electricity passes through a person's body to reach the ground. If the GFI should trip determine the cause of the GFI tripping before resetting the GFI. If uncertain of the cause call the Maintenance Department. GFI receptacles need to be checked on a monthly basis. The head custodians will be checking GFI receptacles every month and will turn in a checklist and the condition of the receptacles.

Monthly Rounds for Head Custodians / Responsible Person

School _____

Monthly GFI checklist

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
Date Inspected												
Initials of inspector												

Comments and Notes

_____

_____

_____

_____

Signature of Inspector

Underground Storage Tank Checklist

ATTACHMENT O

FACILITY	NUMBER OF TANKS IN GROUND	COMMENT
Cambridge South Dorchester High	1	Tank used for dual fuel boiler when needed.
Board of Education	1	Estimate cost to remove and replace with above ground tank
Maple Elementary	1	Planned removal 2023 (Plan has been approved by state)
New Directions Learning Academy	1	Estimate cost to remove and replace with above ground tank
Total	4	