MAJOR MAINTENANCE PROJECT MANAGER

DEFINITION OF CLASS:

Incumbents in this class manage major and routine maintenance, renovation, repair and replacement projects, including multi-trade projects, covering the County's 400+ owned and leased buildings and serve as a subject matter expert in one of four primary trade domains: (1) electrical, (2) HVAC-R, (3) building envelope/structural/interior (multiple building components and trades in combination such as roof and window systems and the carpentry, masonry, drywall, flooring and painting trades), and (4) plumbing-piping.

DISTINGUISHING CHARACTERISTICS:

Major Maintenance Project Manager is the full performance level of work.

MAJOR DUTIES:

Serves as a project manager and a subject matter expert in a recognized trade domain. Responsible for performing all maintenance, renovation, repair and replacement project manager functions from project scoping to project close-out for County-owned and County-leased buildings/facilities; in each project, serves as owner's representative and, as assigned, manages multiple projects concurrently. Also responsible for performing such trade subject matter expert functions as reviewing manufacturer specifications and performance histories of key building systems and materials to forecast need for, estimate cost of, and ensure compatibility of, replacements. In both roles, helps ensure contractors comply with regulatory guidelines including jobsite safety and environmental requirements and building envelope or electro-mechanical codes (as assigned), and that project quality is controlled including consistency with manufacturer specifications and generally-accepted practices in the trades(s) involved.

EXAMPLES OF DUTIES: (Illustrative Only)

- Serves as project manager for maintenance, renovation, repair and replacement projects; serves as owner's representative and, as assigned, manages multiple projects concurrently: inspects building envelope-system-subsystem-component problems/needs, specifies scope of work, estimates time/cost of work, plans, schedules, manages and coordinates the work, tracks and reports progress and costs, controls quality and assesses workmanship/materials, certifies invoices for payment and closes out project.
- Serves as subject matter expert in a specified trade: HVAC-R, electrical, piping-plumbing or building envelope/structural (foundation, walls, roofing, fenestration, interior and finishes). Reviews manufacturer guidelines. Advises on trade issues of projects/assignments and evaluates and makes technical judgments about workmanship, materials, equipment, phasing, staging, time and other trade-related matters based on expertise in the trade(s). Stays abreast of and assesses pros and cons of new technologies (materials/equipment/processes) and trade-offs.
- Solicits estimates or proposals from vendors for work not covered by contracts or shops.
- Maintains work assignment contract files, recommends/initiates encumbrance of funds.

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- Coordinates and communicates with business contacts concerning projects and other assignments to obtain/verify facts, discuss courses of action and exchange other routine and non-routine information. Organizes and conducts project coordination meetings when required. Keeps supervisor and stakeholders informed.
- Reviews or prepares work orders, maintains a log of all projects and time and material contract files, records observations and findings, and prepares recurring and special status reports of all projects and assignments.
- Provides guidance to contractors as needed on assigned projects and solves a range of field problems.
- Performs facility maintenance inspections, prepares written inspection reports and initiates work orders for maintenance to be performed by County employees and/or time and material contractors.
- Reviews contract documents with time and material contractors to ensure all parties agree to terms, conditions, scope of work, specifications; makes recommendations to improve future contracts.
- Prepares working sketches and drawings to accurately depict project requirements, if needed, reviews contractor drawings for errors, omissions and/or trouble areas before work begins, and refers to the agreed-upon drawings as work proceeds.
- Uses a computer and various electronic devices/systems to plan, schedule, communicate, research (the Internet), create, exchange, record and use information, make/check calculations, etc. Uses generic and trade-specific tools.
- Drives to and from work and vendor-supplier sites.
- Performs related duties as required.

SUPERVISORY CONTROLS:

Performs project management and subject matter expert assignments independently and in accordance with guidelines. Major maintenance, renovation-rehabilitation-replacement projects may be short- or long-term, taking several months to plan, manage and close out. Plans and carries out the successive steps involved in management of projects; solves most problems on own as they arise (consistent with guidelines), uses subject matter expertise (as a senior worker in a specified trade domain) and has full technical/project manager responsibility for the work. Completed work is reviewed mainly in terms of effectiveness and efficiency in meeting requirements; work is expected to be practical and conform to guidelines including building/electro-mechanical codes, workmanship/materials quality standards and compatibility with related projects or building systems/equipment.

SUPERVISION EXERCISED: Positions in this class are non-supervisory.

GUIDELINES:

Guidelines include, but are not limited to, requirements and standards governing the construction and maintenance of buildings/facilities, the principles and generally-accepted practices of one or more trade domains including applicable codes, industry standards and manufacturer specifications, such overarching guidelines as OSHA regulations, US EPA and State environmental regulations and requirements, NFPA standards, and such State/County/departmental programs, policies, procedures and practices as contracting processes, terms and conditions of time and materials contracts, and budget. Uses sound subject matter expertise and full performance level project manager judgment in selecting and applying/adapting guidelines to specific projects and situations to troubleshoot technical problems,

identify viable alternatives, specify project scope or equipment acquisition, manage the contractor(s) involved, approve workmanship/materials or intervene, as needed, and certify invoices for payment.

COMPLEXITY:

Complexity includes discovering and analyzing a host of variables to identify what needs to be done and alternatives in resources or approaches for doing it, selecting and applying/adapting effective methods and techniques to identify and address all pertinent issues (to include inspecting for code compliance and quality assuring the work) and solving a wide, multi-faceted range of technical and administrative problems across the project management continuum. Assesses multiple, disparate factors using mature, well-experienced project manager (or subject matter expert) judgment from initial project scoping (or assignment planning) to project close-out (or assignment completion).

SCOPE AND EFFECT:

Service as a project manager and as a subject matter expert in a trade includes solution of project management and system/equipment problems as they arise from initial scoping to close-out and responsibility as 'owner's representative' to help ensure the County's best interests are met in each project/assignment. Work directly affects project/assignment in terms of effectiveness (such as utility/usability of buildings, building systems and work spaces, and safety of construction crews-tenants-users and usability by tenants during projects) and efficiency (such as project cost and operation-maintenance-repair costs across building system/component lifecycle).

CONTACTS:

Contacts include, but are not limited to, trade, support-service, administrative, professional and managerial personnel within County Government (including facility occupants), suppliers and contractors, regulators (such as permitting and environmental personnel), and staff of utility companies. Contacts include exchange of routine and non-routine information about maintenance-construction matters including facts, courses of action and advice concerning project scope and progress/problems, pertinent contracts, utility rights-of-way/service, quality control, invoicing and project close-out. These interactions concern significant matters and require highly-developed communication skills.

PUBLIC SERVICE /ASSISTANCE:

May entail some public service/assistance, but it is incidental to the primary focus of the work performed.

HAZARDS:

Work that is performed at maintenance-construction work sites requires use of a hard hat, steel-toed safety shoes, safety vest, eye protection, hearing protection or other types of personal protective equipment (PPE), depending on the specific conditions; situational awareness and caution are always required at project sites. Hazards of these types are present less than 50 percent of the time.

MINIMUM QUALIFICATIONS:

Education: High school diploma or equivalent (GED or High School Proficiency Examination) **Experience:** Seven (7) years of experience in the Heating, Ventilation, Air Conditioning and Refrigeration (HVAC-R) trade, the electrical trade, the building envelope/structural/interior trades in combination (such as carpentry, masonry, roofing, drywall, flooring and painting), <u>or</u> the plumbingpiping trade depending on the specialty area of the position of assignment. Three (3) years of this

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experience must have been at the full performance (journey) level or higher. Experience must include substantial trade work at the journey level or higher in major maintenance, renovation, rehabilitation, remodeling and repair projects involving commercial or industrial buildings/facilities such as office buildings, warehouses, commercial-industrial boilers/chillers, commercial-industrial electrical systems and commercial-industrial piping systems.

Licenses, Registrations, Certifications, or Special Requirements:

Possession and maintenance of:

- A valid Class "C" (or equivalent) driver's license from the applicant's state of residence; and
 - Heating, Ventilation, and Air Conditioning trade area:
 - A journey level (or higher) HVAC license issued by the State of Maryland; and
 - Environmental Protection Agency Universal Certification for refrigerant recovery and recycling; or
- <u>Electrical trade area</u>
 - Possession of a journey level (or higher) Electrician license issued by the State of Maryland ; or
- Plumbing trade area
 - Possession of a journey level (or higher) Plumber or Pipefitter license issued by the State of Maryland.

Knowledge, Skills, and Abilities:

Thorough Knowledge of:

- Key aspects of overarching guidelines governing the work, as assigned, such as OSHA regulations, US EPA and State environmental regulations and requirements, NFPA standards, and State/County/departmental programs, policies, procedures and practices including County contracting processes, time and materials contracts and budget; knowledge of some guidelines must or may be acquired on the job.
- The requirements and standards governing the construction and maintenance of buildings/facilities and skill in managing associated major maintenance, renovation, rehabilitation, remodeling and repair projects involving multiple trades. This includes technical expertise (at the journey level or higher) in one or more of the following trade domains to identify, specify scope of, estimate cost/time of, inspect, quality assure and control (QA/QC) materials and workmanship in projects and to perform related functions:

Structural/Interior.

• The principles and practices of the structural and interior trades in combination, such as carpentry, masonry, roofing, drywall, flooring and painting along with applicable codes, industry standards and manufacturer specifications, to identify project requirements, prepare project specifications and monitor the work of contractors in installation, maintenance and repair of structural systems, subsystems and equipment. This includes knowledge of layout of footers and masonry walls, framing of main structural members, replacement of roofs, installation of siding, flooring, carpets, ceilings, doors, windows and wall treatments, and performance of finish work.

Heating, Ventilation, Air Conditioning and Refrigeration (HVAC-R).

• the principles and generally-accepted practices of the HVAC-R trade, including applicable codes, industry standards and manufacturer specifications, to identify project requirements, prepare project specifications and monitor the work of contractors in installation, maintenance and repair of HVAC-R systems, subsystems and equipment. This includes

knowledge of commercial building-size gas, oil, electric and hot water heating systems, compression air conditioning systems, HVAC-R controls, air handling systems, etc.

Electrical.

• The principles and generally-accepted practices of the electrical trade, including the National Electrical Code, industry standards and manufacturer specifications, to identify project requirements, prepare project specifications and monitor the work of contractors in installation, maintenance and repair of electrical systems, subsystems and equipment. This includes knowledge of power generation and distribution systems, transformers, motors, lighting equipment, wiring, etc.

Plumbing-Piping.

• The principles and generally-accepted practices of the plumbing trade, including applicable codes, industry standards and manufacturer specifications, to identify project requirements, prepare project specifications and monitor the work of contractors in installation, maintenance and repair of piping systems, subsystems and equipment. This includes knowledge of commercial, building-size sanitary lines, gas lines and sprinkler systems.

Skill in:

- Problem solving to select, organize and logically process relevant information (verbal, numerical and technical) to solve a problem.
- Written communication to understand written information (including instructions, descriptions and ideas) and to express such information in writing so that others will understand, agree or comply.
- Verbal communication to understand verbal information (including instructions, descriptions and ideas) and to express such information verbally so that others will understand, agree or comply.
- Interacting effectively with business contacts in a businesslike, customer service-oriented manner.
- Using a computer, modern office suite software (such as MS Office), enterprise systems/software and specialty systems/software.

Ability to:

- Obtain and maintain required license(s).
- Work other than regular working hours during time-sensitive projects and emergencies.

Work Environment:

Work is performed in offices, meeting rooms and other places that are adequately heated, lighted and ventilated, and at project sites in machine rooms, other unfinished indoor spaces, on rooftops and outdoors. On-site work that is in presence of dirt, mud, grease, excessive noise and exposure to adverse weather accounts for less than 50 percent of the time.

Physical Demands:

Ability to work in a sedentary-active mix that consists of sitting-reading-writing-calculatingkeyboarding-etc. at a work station in an office and walking-standing-carrying-climbing-bendingkneeling-reaching-driving-etc. in the field. Field work involves exerting forces up to 50 pounds to liftcarry-push-pull-position objects, standing for long periods, using generic and trade-specific tools such as wrenches, measures and testing instruments, ladders or scaffolding, and positioning oneself and reaching to access and examine hard-to-reach or hard-to-see spaces, electro-mechanical systems and the like.

PROBATIONARY PERIOD:

Individuals appointed or promoted to a position in this class will be required to serve a probationary period of twelve (12) months, during which time performance will be carefully evaluated.

MEDICAL PROTOCOL: Core Exam

PROMOTION POTENTIAL: None

CLASS SPECIFICATION HISTORY:

Class Established: July 2018

Notes: Formerly, Maintenance, Renovation and Inspection Specialist, Grade 21