

WATER METER TECHNICIAN II

JOB DESCRIPTION

Classification Responsibilities: A Water Meter Technician II works in the field and the shop, calibrating, installing, maintaining, repairing, testing, and cleaning commercial and residential water meters and Advanced Meter Infrastructure (AMI) devices; setting and removing construction fire hydrant meters for contractor and/or customer use; testing, repairing, and certifying fire hydrant meter mounted backflow preventers; closing fire hydrant meter service orders in mobile dispatch/customer information system (CIS); closing large meter work orders in computer maintenance management system (CMMS); fabricating parts for, and assembling, fire hydrant meter and backflow assemblies; and performing meter exchanges while maintaining an established exchange standard. Incumbents in this class may respond to emergency situations if there are shutdowns where a contractor breaks the hydrant meter and repair work needs to be completed. Incumbents assist other staff in assessing costs to charge to the contractors, if they are responsible for damages to City property and/or equipment. Employees in this class must follow all safety procedures and use appropriate safety equipment. This class is responsible for performing related duties as required.

Distinguishing Features: This class is distinguished from other classifications performing water meter work by setting large commercial meters and having responsibility for performing work on construction fire hydrant meters and backflow preventers. Staff is monitored through on-site visits and verbal and written review of regulatory requirements to ensure compliance with the appropriate City, state, and federal regulations. Employees in this class are expected to exercise independent judgment in decisions related to their duties, both technical and contractor/customer related. Employees may progress to this class by noncompetitive criteria-based promotion upon meeting the specific requirements after successful completion of required coursework and certifications, on-the-job training, achievement of successful performance appraisals, and completion of initial City probation. This class is supervised by the Field Supervisor – Customer Service Operations who reviews work through conferences, meetings, spot check observation, and results achieved. This class is FLSA nonexempt.

QUALIFICATIONS

Employee Values: All employees of the City of Mesa are expected to uphold and exhibit the City's shared employee values of Knowledge, Respect, and Integrity.

Minimum Qualifications Required. Any combination of training, education, and experience equivalent to graduation from high school or GED. Considerable (3 - 5 years) full-time employment repairing, testing, and installing Advanced Meter Infrastructure (AMI) devices; calibrating water meters and/or experience with large commercial water meters; or setting and removing construction fire hydrant meters and testing, repairing, and certifying fire hydrant meter mounted backflow preventers.

Special Requirements. Must possess a valid Class D Arizona Driver's License by hire or promotion date. Must possess a Grade I (or higher) Water Distribution System Operator certification from the Arizona Department of Environmental Quality (ADEQ) or equivalent certification from another state through reciprocity with Arizona by application date. Certification through reciprocity must be obtained within three (3) months of hire or promotion date. Must hold a valid Backflow Prevention Assembly

General Tester Certification by application date. Must maintain City of Mesa Forklift Operator Certification. Must meet the qualifications to wear a tight-fitting respirator by passing a medical evaluation in accordance with CFR 1910.134 by hire or promotion date and must maintain certification.

Substance Abuse Testing. Due to the safety and/or security sensitive nature of this classification, individuals shall be subject to pre-employment or pre-placement alcohol, drug and/or controlled substance testing as outlined in City policy and procedures.

Preferred/Desirable Qualification. Experience operating a personal computer (PC).

ESSENTIAL FUNCTIONS

Communication: Schedules accuracy tests and water supply shut offs with customers. Explains clearly to the customer the purpose of accuracy test, duration, and procedures of the interruption. Answers questions pertaining to calibration techniques, accuracy tests, and meter function. Prepares and/or maintains written records on customer contacts, work orders, meter history, vault maintenance, repairs, and test results. Prepares work orders and repair orders through mobile dispatch and CMMS systems using clear and concise descriptions of work performed or damage charges to be assessed directly onto the customer's bill. Communicates with customers and contractors regarding location and proper placement of fire hydrant meters on construction and industrial sites and explains meter and hydrant operation and backflow preventer regulations. Communicates clearly with the City's fire hydrant maintenance supervisor and staff regarding fire hydrant leaks and problems. Prepares written backflow preventer repair and test reports for entry into water quality's database.

Manual/Physical: Uses various hand tools to perform plumbing and pipefitting tasks in repairing mainline valves, vault lids, doors of up to three inches, and larger water meters. Operates compressors, generators, pumps, blowers, jackhammers, tapping machines, etc. Operates a one-ton pickup truck with electric hoists requiring a valid Class D Arizona Driver's License in order to drive to and from job sites and to load and unload meters. Operates a forklift to move pallets of meters, and to load and unload materials into vehicles. Tests and calibrates 5/8 inch - 12-inch water meters. Disassembles meters and valves. Installs reduced pressure devices, new valves, and backflow preventers. Removes and rebuilds existing vault meter sets. Installs two plus inch copper bypasses. Welds, cuts, and assembles lids, locking devices, meter supports, and valve supports. Cleans and repairs mainline strainers and shallow vaults. Replaces worn and rusted hardware on piping. Builds concrete forms and structures. Fabricates, assembles, maintains, and calibrates field testing equipment. Performs meter accuracy tests. Prepares drawings of meter sets and piping to record type, size, and make of large meter sets. Performs physical inventories. Measures distances using a tape measure or calipers to record pipe size, chamber thickness, and wear on moving parts. Prepares boxed meter parts to return to the manufacturer. Cleans work and shop areas and tools. Moves or carries heavy (75+ pounds) equipment and materials up to 20 feet or more with the assistance of a hand cart or power equipment while testing meters. Works in confined spaces, sometimes up to 12 feet deep, under various working conditions such as heat, mud, dust, and standing water. Cleans meters with acid bath, solvents, and sandblaster. Conducts in-test and out-test on meters and calibrates to accepted accuracy range. Performs physical inventories of meter parts. Prepares meter parts, registers, and chambers for shipping to appropriate meter company. Perceives gear colors. Prior to entering, performs safety inspections of vaults for hazards including checking toxic and/or explosive gases, and low oxygen levels in the confined space using and reading a Personal

Hazard Detector atmospheric condition monitor. May use a respirator and/or specialized equipment when entering confined spaces. Detects audible backup warning devices and traffic sounds when working near moving equipment and in moving traffic. Installs, removes, and tests hydrant meters with backflow devices on fire hydrants which requires constant lifting and kneeling. Meets scheduling and attendance requirements.

Mental: Diagnoses problems with commercial water meters and backflow preventers and determines the most cost-effective and efficient means of repair. Comprehends and makes inferences from written material. Locates water mains on blueprints and quarter section plat maps. Interprets quarter sections and valve number books. Analyzes meter and vault details. Estimates costs of retrofitting meter sets. Learns job-related material on testing and repair by on-the-job training and in a classroom setting. Works with engineering inspectors on new vault and vault meter installation by contractor. Inspects and investigates contractor use of construction site water systems for cross connection violations which could contaminate the public water system.

Knowledge/Skills/Abilities:

Knowledge of:

AMI installations;
computer programs used by the Water Resources Department;
plumbing and pipefitting procedures;
the basic principles of hydraulics and mechanics;
the safety practices and procedures associated with working with water mains and in underground confined spaces;
the techniques and procedures for repairing residential water meters;
the techniques and procedures for calibrating and testing commercial water meters;
water meter repair and calibration procedures and techniques;
procedures for setup of a computer assisted 24-station shop test bench;
basic arithmetic principles;
hand tools and equipment used in the calibration and repair of water meters;
City of Mesa water meter vault and meter locations;
fire hydrant design, operating principals, and repair methods;
federal, state, and local cross connection control practices and procedures; and
design, operating principals, repair methods, and testing procedures for all backflow preventer types.

Skill in:

the use of hot air gun, propane torch, drill press, band saw, metal grinder, paint sprayer, and other equipment necessary to perform assigned tasks;
the use and care of hand tools necessary to perform various mechanical installation, maintenance, and repair tasks;
operating a vehicle;
map reading;
use of a laptop computer; and
use of computer programs and phone apps.

Ability to:

work independently under limited supervision;
maintain shop equipment, and keep work and storage areas clean and organized to minimize safety hazards;
weld vault lids, frames, and locking devices, and solder pipe;
establish and maintain effective working relationships with customers, management, and coworkers; and
effectively express ideas to others, both orally and in writing.

The duties listed above are intended only as general illustrations of the various types of work that may be performed. Specific statements of duties not included does not exclude them from the position if the work is similar, related, or a logical assignment to the position. Job descriptions are subject to change by the City as the needs of the City and requirements of the job change.

Revised 06/26

MZ/js/ah

CS4083.DOCX

EEO-SCW

JOB FCTN-TEC

Non-DOT Safety and Security-Y

CDL-N

RESP-Y

PAY GRADE: 49

IND-7520

SWORN-N

Non-DOT Random-N

DOT-N

INCREMENTS 34-200