GAS ENGINEERING TECHNICIAN TRAINEE

JOB DESCRIPTION

Classification Responsibilities: Under close supervision, progressing to general supervision, learns to perform skilled, technical, and paraprofessional gas engineering work; and performs related work as required.

Distinguishing Features: This is a trainee class in which the employee learns to perform the full scope of duties of a Gas Engineering Technician through an on-the-job training program. An employee of this class is trained in assignments involving the application of gas system engineering knowledge and City of Mesa policies. Training and close supervision is provided by the Senior Gas Engineer or Gas Engineer. As training progresses, the incumbent is expected to exercise semi-independent to independent judgment in selecting work methods. The Gas Engineering Technician Trainee can progress by noncompetitive, criteria-based promotion to Gas Engineering Technician after successfully completing the on-the-job training program, achieving satisfactory performance appraisals, and meeting the minimum qualifications of the Gas Engineering Technician class. 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. Graduation from high school or GED. One year of technician experience (examples: Permit Technician, Engineering Assistant Technician, Auto Computer-Aided Drafting (CAD) Technician, or related field); paraprofessional civil or gas engineering experience (example: civil drafting); design and permit plan review experience; or public contact with municipal customers, contractors, and consultants experience.

Special Requirements. Must possess a valid Class D Arizona Driver's License by hire date.

Substance Abuse Testing. None.

Preferred/Desirable Qualifications. Coursework or formal training in geometry, trigonometry, AutoCAD, civil or gas engineering is preferred. Paraprofessional work experience in gas, survey, and/or global positioning systems (GPS) is highly desirable. Civil engineering experience involving the interpretation of architectural and civil engineering plans is highly desirable.

ESSENTIAL FUNCTIONS

Communication: Communicates with the general public, other City employees, management, contractors, engineers, and architects in order to design natural gas mains and services. Prepares material quantities, cost estimates, letters to customers, and plan review requirements sheets with clearly organized thoughts, using proper sentence structure, punctuation, and grammar.

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Manual/Physical: Evaluates information to determine compliance with minimum federal safety standards for natural gas pipelines. Distinguishes the full range of the color spectrum to verify underground utility lines. Operates a vehicle to complete project reviews to determine job requirements requiring a valid Class D Arizona Driver's License. Operates a variety of standard office equipment such as a copy machine, telephone, and personal computer (PC) to perform daily office tasks. Enters data or information into a PC to maintain records and obtain utility records and customer information. Sorts and files quarter section maps and plans. Works in a variety of weather conditions while performing field verifications. Meets scheduling and attendance requirements.

Mental: Coordinates work activities with other City departments regarding installation of gas lines. Conducts research and analyzes utility records and record drawings to prepare construction plans and drawings. Understands and interprets construction plans, schematic drawings, and layouts to design gas systems or services. Estimates labor and material costs from construction plans. Learns job-related material through on-the-job training regarding safety codes for natural gas pipelines.

Knowledge/Skill/Abilities:

Knowledge of:

basic civil engineering principles and practices; the symbols and terminology used in civil engineering drawings; and PC (windows operating environment).

Ability to:

design and draft natural gas mains and services for major commercial developments, individual business enterprises, major subdivision developments, and individual residences;

design and draft major arterial high-pressure gas lines;

design and draft gas systems in conjunction with the engineering requirements of other ongoing utility projects;

design and draft gas systems using survey generated topographical information and data; review customers' plans to ensure conformity to established gas engineering principles and practices; calculate the size of gas equipment and supplies needed for a project by the use of standardized formulas;

research existing topographical representations of the area involved and existing utility records and take actual on-site, in-field measurements;

liaison with the individual or individuals requesting services either in person or by telephone; compute the materials used and estimate a cost for an entire project by tabulating items and costs on a spread sheet and transferring them to the original plans;

update plats, lists, and other records pertaining to the City of Mesa utility systems;

initiate descriptive maps and diagrams for use by interested parties for presentations or graphic displays; apply the practices and techniques of AutoCAD drafting to produce neat, precise drawings from sketches, verbal descriptions, and specifications;

perform basic engineering calculations; and

establish and maintain effective working relationships with management, coworkers, and the general public.

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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.

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