

GAS ENGINEERING TECHNICIAN

JOB DESCRIPTION

Classification Responsibilities: Under general supervision, performs skilled, technical, paraprofessional gas engineering work; performs related work as required.

Distinguishing Features: Employees of this class perform skilled technical gas engineering or computer and/or manual drafting work. Assignments involve the application of gas system engineering knowledge and City of Mesa policies; however, employees of this class are expected to exercise independent judgment in selecting work methods. This class is distinguished from the Senior Gas Engineering Technician class by the lead supervisory responsibilities of the latter. This class is distinguished from the Gas Engineering Technician Trainee class by its responsibility for full-performance, paraprofessional gas engineering work. Supervision is received from the Senior Gas Engineer, or Engineering Designer (Gas) who reviews work for conformance to sound gas system engineering practices. Employees may progress to this class by noncompetitive promotion upon meeting the specific criteria-based promotion requirements. 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) technician or paraprofessional-level civil engineering or gas engineering experience (example: civil drafting) OR one year full-time employment with the City of Mesa as a Gas Engineering Technician Trainee and completion of the criteria as outlined in the formal training program.

Special Requirement. None.

Substance Abuse Testing. None.

Preferred/Desirable Qualifications. Supplemental coursework in Civil Engineering, Engineering Technology, or related courses is highly desirable.

ESSENTIAL FUNCTIONS

Communication: Communicates with the general public, other City employees, contractors, engineers, architects, and developers in order to engineer and design natural gas services and mains. Prepares material quantities, cost estimates, and letters to customers with clearly-organized thoughts, using the proper sentence construction, punctuation, and grammar.

Manual/Physical: Evaluates information to determine compliance with minimum federal safety standards for natural gas. Distinguishes the full color spectrum in order to field-verify underground utility lines. Operates a variety of standard office equipment, such as drafting, blueprint, and copy

machines. Enters data into a personal computer (PC) to obtain utility record systems. Prepares and/or bundles blueprint plans or quarter section maps for distribution to other City departments. Works with cleaning fluids and chemicals using normal, routine, protective equipment. 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 of utility records to determine utility lines or rights-of-way. Performs mathematical calculations and cost analysis to estimate costs of projects. Understands and interprets construction blueprints and schematic drawings to design gas systems or service. Estimates labor and material costs from construction plans. Learns job-related material through on-the-job training and in a classroom setting regarding safety codes for natural gas lines.

Knowledge/Skills/Abilities:

Knowledge of:

gas engineering principles and practices;
the symbols and terminology used in engineering drawings;
gas design practices and gas distribution systems;
code of Federal Regulation Part 192 - Transportation of Natural and Other Gas by Pipeline: Minimum Federal Safety Standards;
Arizona Corporation Commission Pipeline Safety Codes; and
City of Mesa Operations Maintenance, Emergency Response, and Construction Practices Manual.

Skills in:

the use of drafting tools and equipment; and
the use of a PC.

Ability to:

design and draft natural gas services for major commercial developments, individual business enterprises, major subdivision developments, and individual residences;
design major arterial high pressure gas lines;
design gas systems in conjunction with the engineering requirements of other ongoing utility projects;
perform basic engineering calculations;
calculate the size of gas equipment and supplies needed for a project by the use of standardized formulae;
research existing topographical representations of the area involved and existing utility records and take actual on-site, in-field measurements;
maintain a liaison, either in person or by telephone, with the individual or individuals requesting services;
compute the materials used and estimate a cost for an entire project;
initiate descriptive maps and diagrams for use by interested parties for presentations or graphic displays;
apply the practices and techniques of computer-aided or manual drafting to produce neat, precise drawings from sketches, verbal descriptions, and specifications;

investigate violations of federal and state safety codes and recommended corrective actions;
determine gas meter and service locations for existing commercial and residential customers;
prepare cost estimates for gas main and service extensions;
conduct revenue studies of existing gas customers;
determine gas installation fees for gas main and service extensions; and
establish and maintain effective working relationships with management, coworkers, and the general public.

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 do 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 to Update Distinguishing Features 11/15

GL/jh/pg

CS4024.DOCX

PAY GRADE: 46

EEO-Tech

NDOT SAFETY-No

SECURITY-No

NDOT RANDOM-No

DOT SAFETY-No

CDL-No

RESP-No

IND-9410

JOB FCTN-ENG

SWORN-No

INCREMENTS 55-200