

SENIOR GAS ENGINEERING TECHNICIAN

JOB DESCRIPTION

Classification Responsibilities: Under general supervision, a Senior Gas Engineering Technician leads and performs skilled, technical, paraprofessional gas engineering work; performs related duties as required.

Distinguishing Features: An employee of this class performs skilled, technical gas engineering and computer-aided drafting work. In addition, the Senior Gas Engineering Technician may act as lead over lower level technicians. Assignments involve the application of gas system engineering knowledge and City of Mesa policies; however, an employee of this class is expected to exercise independent judgment in selecting work methods. This class is distinguished from the Engineering Designer (Gas) class by the latter's full supervisory responsibilities. This class is distinguished from the Gas Engineering Technician class by its lead supervisory responsibilities over the technicians. Supervision is received from the Senior Gas Engineer or Engineering Designer (Gas) who reviews work for conformance to sound gas system engineering practices. This class is FLSA nonexempt.

QUALIFICATIONS

Minimum Qualification(s) Required. Any combination of training, education, and experience equivalent to two years of college coursework in civil engineering, gas engineering, computer-aided drafting, or related field. Considerable (3 - 5 years) technician- or paraprofessional-level civil engineering or gas engineering experience (example: civil drafting, technical gas engineering work, technical research, utility coordination, etcetera). One year recent drafting experience using AutoCad.

Special Qualification(s). None.

Substance Abuse Testing. None.

Preferred/Desirable Qualification(s). Lead or supervisory experience is preferred. Project management experience preferred. One year gas engineering experience desired.

ESSENTIAL FUNCTIONS

Communication: Communicates with the general public, other City employees, developers, consultants, architects, and contractors in order to engineer and design natural gas services and mains. Prepares letters and memos with clearly organized thoughts and using the proper sentence structure, punctuation, and grammar to communicate technical issues.

Manual/Physical: Prepares work products that are used and reviewed by others. Evaluates work-related information to determine compliance with minimum federal safety standards for natural gas. Operates a variety of standard office equipment. Enters data or information into a personal computer (PC) in order to perform calculations and prepare drawings using AutoCad. Prepares bundles of plans for distribution and/or mailing to City departments. Works in a variety of weather conditions while performing field verifications. Meets scheduling and attendance requirements.

Mental: Under general supervision, prepares and prioritizes own work. Provides lead supervision over other staff members. Coordinates work activities with other City departments, developers and consultants. Conducts research, prepares designs using AutoCad, and analyzes regulations in order to perform assigned duties. Performs mathematical calculations. Understands and/or interprets construction blueprints, schematic drawings, layouts, and other visual aids to perform design work. Learns job-related material through on-the-job training and in a classroom setting regarding safety codes for natural gas lines.

Knowledge/Skill/Abilities:

Knowledge of:

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

Skill in the use of AutoCad software and the use of drafting tools and equipment and PCs.

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 large gas main/service replacement projects;
design gas systems in conjunction with the engineering requirements of other ongoing utility projects;
design and draft gas systems using survey/GIS-generated topographical information and data that has been imported into AutoCad;
lead other technicians in performing technical gas engineering, drafting, and design work;
research existing topographical representations of the area involved and existing utility records and take actual on-site, in-field measurements;
calculate the size of gas equipment and supplies needed for a project by use of standardized formulae;
compute the materials used and estimate a cost for an entire project;
maintain a liaison, either in person or by telephone, with the individual or individuals requesting services;
initiate descriptive maps and diagrams for use by interested parties for presentations or graphic displays;
fill in for the Engineering Designer (Gas) during his/her absence;
apply the practices and techniques of computer aided or manual drafting to produce neat, precise drawings from sketches, verbal descriptions, and specifications;
perform basic engineering calculations;
investigate violations of federal and state safety codes and recommend corrective actions;
determine gas meter and service location 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

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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 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 8/15

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PAY GRADE: 49

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