

## UTILITY LOCATOR

### JOB DESCRIPTION

**Classification Responsibilities:** A Utility Locator identifies, locates, and marks the location of City of Mesa subsurface utilities in order to minimize accidental damage or disruption of service due to construction excavation activities. An employee in this class performs a variety of skilled and semiskilled activities to facilitate safe excavation. These activities include locating and marking existing City-owned underground infrastructure including: natural gas (including high-pressure gas and regulator stations and vaults), electric primary and secondary lines (including J-boxes and vaults), water lines, gas and water valves (including electronic markers), wastewater lines, and e-Streets fiber (including J-boxes and vaults), reclaim water system, chilled water/district cooling system, storm water collection system, streetlights, and traffic signals (including fiber optic, telephone and loop components). This class also performs “checks and wraps” gas line inspections and gas pipeline repairs as necessary in association with contractor gas line repair activities. An employee in this class has responsibility for identifying short circuits in a gas cathodic protection system, and for performing repairs to tracer wire shorts in the gas system. As the Utility Locator usually works alone, an employee in this class is expected to exercise considerable initiative in moving efficiently through the day's work assignments. Also, considerable independent judgment must be used, as the accuracy of the locate depends heavily upon how well the readings from the equipment are interpreted. An employee in this class must also be able to read and interpret electronic quarter section and plat maps to facilitate locating utility lines. Employees in this class perform assignments in hazardous traffic environments and are required to use appropriate safety equipment and procedures. An employee in this class uses computers and a variety of specialized, sensitive electronic equipment to locate utility lines and valves in the right-of-way and utility easement. The position performs related duties as required.

**Distinguishing Features:** The Utility Locator class is distinguished by its full-time responsibility for locating underground utilities, where accuracy of the marks is crucial. This class is subject to emergency call-out and stand-by, and must be willing to work overtime as required. This class is supervised by the Utility Locator Supervisor through meetings, conferences, reports concerning volume and timeliness of locates, problems encountered, and overall 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 two years' full-time employment in underground or utility construction-related work involving some responsibility for reading and interpreting project plans, blueprints, electronic quarter section and plat maps, or related materials; OR two years' full-time employment using electronic locating devices.

**Special Requirement.** Must possess a valid Arizona Driver's License by hire date.

**Substance Abuse Testing.** This class is subject to DOT Pipeline and Hazardous Materials Safety Administration (PHMSA) drug and alcohol testing as outlined in 49 Code of Federal Regulations (CFR) Part 199.

**Preferred/Desirable Qualification.** Personal computer (PC) experience and experience using electronic locating devices is desirable.

## **ESSENTIAL FUNCTIONS**

**Communication:** Prepares written documents verifying marked utilities after damages to City facilities and expedites claims for utility repairs. Prepares various clear and concise written reports and forms including vehicle mileage reports, daily time sheets, work completed documents, etc. Interacts with contractors, coworkers, and the general public to establish and maintain effective working relationships.

**Manual/Physical:** Operates a motor vehicle (example: pickup truck) requiring a standard Arizona Driver's License to complete locating assignments and to respond to emergencies. Inspects ("checks") gas lines and verifies the integrity of the line at each contractor work site. Performs repairs ("wraps") to damaged gas line by applying primer coating or mastic directly to the line and wraps coating with a protective tape. Identifies short circuits in the gas cathodic protection system by utilizing specialized low voltage locating equipment to pinpoint the location of a gas line tracer wire and test the integrity of the source for electrical continuity. Performs repairs to damaged tracer wires when the integrity of the wire has been compromised due to excavating activities. Operates a PC in order to obtain information regarding excavation locations and to input status of work performed. Operates various electronic devices designed to assist in the locating of subsurface utilities including electric primary and secondary lines (including J-boxes and vaults), gas and water lines, gas and water valves, wastewater lines, e- Streets fiber (including J-boxes and vaults), reclaim water system, chilled water/district cooling system, storm water collection system, streetlights and traffic signals (including the associated fiber optic, telephone J-box, and loop components). Distinguishes colors to mark utilities with the designated color for the corresponding utility. Senses and detects natural gas leaks when locating gas mains and services. Uses common hand tools such as a hammer or screwdriver to open various utility appurtenances enabling direct attachment of locating equipment. Prepares or updates maps to make corrections for specific plats. Works with paints using normal protective equipment to mark utility lines. Sets up or removes traffic cones to facilitate the marking of utilities located in the road. Works in a variety of hazardous environments such as construction sites and traffic rights-of-way while performing locate assignments.

**Mental:** Organizes daily locate assignments into a route designed to minimize backtracking and increase efficiency in covering an assigned area of the City. Identifies damages to gas line while conducting gas line inspections, and determines if repairs are needed to restore the integrity of a gas line following excavation activities. Inspects gas line cathodic protection systems for tracer wire short circuits by interpreting readings taken from a specialized low voltage electronic meter to determine if repairs are needed. Reads and interprets quarter section and plat maps to locate City utilities so that they can be marked to help prevent and/or minimize accidental damage by contractors or other digging near the City's utility lines (Blue Stake Program). Conducts research or analyzes data regarding excavation locations, construction prints, plat pages, and plans to determine actual running line of requested utilities. Completes log to document work completed using computerized data entry. Learns job-related

material through on-the-job training regarding Blue Staking or marking of utility. Maintains vehicle maintenance records. Interprets signals and output from electronic detection equipment to locate underground utility lines.

**Knowledge and Abilities:**

Knowledge of:

electromagnetic induction detection equipment and operating procedures;  
methods and procedures (“checks and wraps”) used during gas line inspections to determine if repairs are needed to restore the integrity of gas lines;  
methods and procedures used to check for tracer wire short circuits in gas cathodic protection systems;  
basic markings and symbols used on quarter section and plat maps, project plans, and blueprints;  
basic computer and software applications;  
basic computer use and applications;  
Arizona Underground Facility Law (ARS 40-360.21);  
Common Ground Alliance (CGA) Best Practices (standards for locating and marking);  
marking procedures and practices used in the Blue Stake Utility Locating Program; and  
the general layout of the City's utility system including electric, gas, water, wastewater, street lights, traffic signals, storm water, chilled water, and e-streets fiber.

Ability to:

establish and maintain effective communications and working relationships with supervisors, coworkers, contractors, and the general public;  
perform “checks and wraps” gas line repair methods and procedures;  
operate and interpret readings taking from specialized low voltage locating equipment used to locate and test the electrical integrity of tracer wire cathodic protection systems;  
maintain a high volume of work output with minimal supervision;  
manually access utility appurtenances such as valve boxes, water meters, and wastewater manhole lids;  
work in heavy and hazardous traffic conditions utilizing safety devices;  
communicate vital information via telephone or two-way radio; and  
maintain safe operation of motor vehicle and safety related equipment.

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.

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PAY GRADE: 46

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