



## City of Irving Job Description

### Senior Leak Detection Technician

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<b>FLSA Status:</b>	Non-Exempt	<b>Job Department:</b>	Water Utilities
<b>Job Code:</b>	36522	<b>Reports To (Job Title):</b>	Water Programs Manager

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#### PURPOSE

To plan, coordinate, implement and maintain a comprehensive leak detection program to minimize water loss as required by state and federal regulations and to provide technical supervision to other staff assigned to the leak detection function.

#### ESSENTIAL DUTIES AND RESPONSIBILITIES

To perform this job successfully, an individual must be able to perform each essential duty satisfactorily.\*

- Plan, coordinate, implement and maintain a comprehensive leak detection program to minimize water loss in the distribution system by performing a continuous leak detection survey using specialized logger devices to assess 100% of city water lines over four to five years.
- Monitor and work with logger and listening devices/equipment used to find and locate system breaches resulting in water loss; notify water operations staff of leaks that are discovered in the city's water distribution system; prepare notifications for customers regarding residential and commercial private leaks.
- Plan and ensure that logger patrols are completed on a regular basis by leak detection staff; provide direction in placement and movement of loggers to ensure assessment of the entire city water system in a defined time period; download and review data collected by the loggers.
- Provide support to water repair crews in locating and pinpointing leaks using specialized equipment.
- Plan and arrange for the maintenance and purchase of specialized leak detection equipment; schedule demonstrations and test equipment for potential purchase; assist in completing purchases.
- Work with Utility Service Technicians to expand understanding of leak detection methods and to train on the use of specialized leak detection equipment.
- Prepare reports that document the full scope of the city's leak detection program; track assigned program data and KPIs.
- Conduct residential water audits to identify potential water loss issues for water customers; schedule appointments and meet with water customers regarding water concerns on their personal property.
- Support the city's drought contingency plan by patrolling the city to identify violations, writing Notices of Violation (NOVs) and citations, gathering backup information used in the prosecution of offenses, ensuring that all offenses are documented appropriately, and coordinating with water conservation, dispatch, SCADA and reception staff to maintain up-to-date records.
- Respond to a variety of water leaks and irrigation complaints to investigate and report findings.
- Report the location and source of water leaks to immediate supervisor and repair supervisors.
- Respond to public concerns and complaints.
- Analyze water samples to test system for leaks.
- Respond to service calls concerning leaks on a stand-by basis.
- Perform related duties as assigned.

## **OTHER DUTIES AND RESPONSIBILITIES**

- Prepare reports on work activities and operations.
- Support the IISD partnership program through the delivery of technical expertise to students that are pursuing water/wastewater licenses.
- Assist the water repair crews while repairs are in progress.
- Attend and assist with public events such as Community Fest, Earth Day, and Town Hall meetings.

## **SUPERVISORY RESPONSIBILITIES**

Functional and Technical Supervision - Regular responsibility for giving direction and guidance to employees as a lead worker, project manager or internal advisor. As an ongoing part of the position, the employee can expect to supervise approximately 2 employees.

## **FINANCIAL / BUDGETARY RESPONSIBILITY**

Responsible for making purchases of equipment and supplies using a P-card.

## **QUALIFICATIONS:**

The requirements listed below are representative of the knowledge, skill, and/or ability required.\*

### **EDUCATION**

- High School diploma or GED to meet basic requirements established by the Texas Commission on Environmental Quality, plus additional technical training.

### **EXPERIENCE**

- At least three (3) years of progressively responsible work in a water utility with one (1) year of continuous leak detection training and experience.

### **CERTIFICATES, LICENSES, REGISTRATIONS**

- Valid Class C Texas driver's license
- A class C water distribution license and level I wastewater collections license from the Texas Commission on Environmental Quality.

### **KNOWLEDGE OF**

- Environmental Laws and Regulations: Federal, state, and local environmental laws and the ability to apply current information to given situations.
- Regulations: Federal, state and municipal restrictions, laws and ordinances.
- Methods and materials required for detecting leaks and determining their underground locations.
- Customer Service: Principles and processes for providing customer and personal services including a desire to help customers regardless of their circumstance.

- English Language: The structure and content of the English language, including the meaning of words and grammar.
- Maintenance Principles: Processes involved in upkeep of property and equipment to optimum state of cleanliness, repair and efficiency.
- Utilities Construction: Engineering and other materials, methods, laws and tools to safely and accurately complete utilities construction projects.
- Water Conservation: A wide variety of water conservation principles and practices that can be applied to minimize water loss.
- Water Ordinance Enforcement: The city's drought contingency plan and the restrictions that must be enforced, as well as how to prepare an NOV or citation that can be supported within the municipal courts in Irving.
- Office software: Current word processing presentation, spreadsheet and database programs used by the city.

## **SKILLS AND ABILITIES IN**

- Cooperation: Establishing and maintaining positive working relationships with those contacted in the course of work.
- Active Learning: Working with new material or information to grasp its implications.
- Active Listening: Listening to what others are saying and asking questions as appropriate.
- Complex Problem Solving: Identifying complex problems and reviewing related information to develop and evaluate options and implement solutions.
- Goal-oriented Crisis Communication: Effectively structuring questioning, answering and listening interactions with clients to determine their needs in urgent situations.
- Mechanical/Technical: Safely operating diverse equipment, including especially a variety of sophisticated equipment for the detection and location of leaks on the city's water system, including S30s, correlators, loggers and various listening devices that require sensitive listening skills.
- Self-management: Working well independently and without supervision.
- Technical Reasoning: Interpreting an extensive variety of technical instructions in mathematical or diagram form.
- Inductive reasoning: Combining separate pieces of information or specific answers to problems to form general rules or conclusions. This includes coming up with a logical explanation for why a series of seemingly unrelated events occur together.
- Written and Oral Expression: Communicating information and ideas in writing, as well as through speech, so others will understand.
- Oral comprehension: Listening to and understanding information and ideas presented through spoken words and sentences.
- Reading Comprehension: Reading and interpreting documents.
- Leak Identification: Identifying visual signs of leaks, which may or may not include surfacing water.
- Data Collection and Interpretation: Recording and formatting data and information in such a way as to explain the results achieved from a variety of water conservation, drought contingency and water loss programs and/or reports.

## **GUIDANCE RECEIVED**

### **Periodic Supervision and Range of Guidelines/Procedures**

Follows periodic direct instructions and guidelines, policies and procedures that require some interpretation. Problems that cannot be addressed through an existing guideline, policy or procedure are referred to supervisor or more senior position. Position incumbent must exercise judgment about when to escalate issues.

## **CONTACTS**

Persons contacted in the performance of duties include a wide variety of city employees from support staff through department manager level as well as external customers for problem solving and explanatory purposes.

## **EQUIPMENT AND PROPERTY**

Use of a city vehicle for travel to and from work sites is required. Work assigned to this classification requires use of specialized leak detection equipment including S30, correlator, line tracer, loggers, patroller, microphone, generator, pump or others as well as the full scope of general office equipment including computers, printers, copiers, fax machines and telephone systems.

## **PHYSICAL DEMANDS**

The physical demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this job.\*

The employee is constantly required to carry, drive a vehicle, kneel, lift up to 50 pounds, listen, see, sit, smell, stand, stoop, talk and/or walk. Frequently, s/he is required to crawl, grasp, handle, feel, lift up to 100 pounds and/or reach. S/he is occasionally required to climb, lift more than 100 pounds, pull and /or push; additionally, s/he is rarely required to run.

## **WORK ENVIRONMENT**

The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this job.\*

The employee regularly is exposed to extreme vibration, confined work space, dirty environment, electrical hazards, extreme temperatures, or weather conditions, air contamination, high and precarious work places, improper illumination, moving mechanical parts, noise and/or toxic or caustic materials. This job requires the employee to make decisions directly affecting the safety of others. The noise level in the work environment is usually moderate.

\* Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

**Note:** A class specification is a general listing of duties, responsibilities, knowledge, skills, and abilities required of an incumbent assigned to a particular class of work. There may be one or multiple positions assigned to a single classification; therefore, the class specification lists those work attributes that are common to every incumbent in the class.