

City of Fort Worth, Texas Job Description

Classification Title	Senior Survey Technician		
Job Code:	TC5530	Job Family:	Technical/Para-Professional
Pay Grade	509	Date Reviewed:	07/09/15
FLSA Status	Nonexempt	Date Revised:	11/02/2022

GENERAL SUMMARY

Leads, oversees and participates in the more complex work of staff responsible for collecting, recording, analyzing and presenting construction and land survey data. Acts as instrument technician on surveys. Performs a variety of technical tasks relative to assigned areas of responsibility.

ESSENTIAL DUTIES & RESPONSIBILITIES

The intent of this job description is to provide a representative summary of the major duties and responsibilities performed by incumbents of this job. Incumbents may be requested to perform job-related tasks other than those specifically presented in this description.

1. Leads, plans, trains and reviews the work of staff responsible collecting, recording, analyzing, preparing and presenting construction and land survey data.
2. Verifies the work of assigned employees for accuracy, proper work methods, techniques, and compliance with applicable standards and specifications, including the Texas Coordinate System.
3. Serves as field team leader in assigning daily work to be performed by individual team members.
4. Trains assigned employees in their area of work, which includes methods, techniques, set up of equipment and survey technical standards.
5. Acts as instrument technician on field survey team. Operate automated field equipment.
6. Acts as instrument technician on field survey performing construction layout surveys for the installation of infrastructure including streets, roads, drainage facilities and water and sewer facilities.
7. Collects, researches and prepares data for use by field survey teams including project numbers, location data, horizontal and vertical control data, grade, map plans, specifications, deeds, plats, working sketches and related information.
8. Checks survey field notes and data collector files for accuracy, content and format. Ensures missing or incorrect data is obtained. Adjusts data as necessary.
9. Performs drafting assignments preparing maps, boundary surveys, plats, cross sections, utilizing CADD based software and electronic graphics plotting equipment.
10. Performs calculations for use in preparation of construction plans, boundaries, easements and other related surveying projects.

11. Prepares project documents pertaining to survey field notes, legal descriptions, maps of surveys, plats, cutsheets, cross sections, profiles and related documents.
12. Performs other related duties as required.
13. Adheres to assigned work schedule as outlined in the Department and City attendance policies and procedures; ensures all behaviors comply with the City's Personnel Rules and Regulations.

KNOWLEDGE, SKILLS & ABILITIES

- **Knowledge of:**
 - Principles and practices of surveying including land, boundary, geodetic, preliminary, and construction surveying.
 - Principles of lead supervision and training.
 - Equipment and materials used in surveying including theodolite, transit, level, distance meters and related materials.
 - Operational characteristics of a variety of automated survey equipment including electronic total stations, electronic calculation data, geographic information systems and global positioning systems.
 - Basic principles of water, sewer, streets and drainage system design and construction.
 - Drafting instruments, tools and techniques.
 - Methods and techniques of data collection and analysis.
 - Principles, practices, methods and techniques of record keeping and report preparation.
 - Principles and practices of mathematics including algebra and geometry.
 - Office equipment including computers and supporting word processing and spreadsheet applications.
 - Principles and practices of the Texas Coordinate System.
 - Pertinent Federal, State and local laws, codes and safety regulations.
- **Skill in:**
 - Planning and prioritizing.
 - Observation and decision-making.
 - Organization and time management.
- **Ability to:**
 - Communicate clearly and effectively, both orally and in writing.
 - Lead, plan and review the work of lower level survey staff.
 - Conduct training activities for lower level survey staff.
 - Perform a wide variety of surveying tasks and functions including collecting, recording, analyzing, preparing and presenting survey data.
 - Apply principles and practices of surveying including land, boundary, geodetic, construction and preliminary surveying.
 - Operate equipment and materials used in surveying including theodolite, transit, level, distance meters and related materials.
 - Operate a variety of automated survey equipment including electronic total stations, electronic calculation data, geographic information systems and global positioning systems.

- Perform arithmetic calculations and algebraic computations with speed and accuracy.
- Read complex maps, plats and construction plans.
- Prepare clear and concise reports.
- Read complex maps, plats and construction plans.
- Operate office equipment including computers and supporting word processing and spreadsheet applications.
- Establish and maintain effective working relationships.

MINIMUM JOB REQUIREMENTS

HS diploma/GED supplemented by specialized training in surveying or a related field and three years of increasingly responsible surveying experience.

OTHER REQUIREMENTS

Valid Texas driver's license.

Possession of, or ability to obtain the Survey Technician Certification Level 1 and 2.

WORKING CONDITIONS

The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

Depending on assignment, positions in this class typically require touching, talking, hearing, seeing, grasping, standing, stooping, kneeling, crouching, reaching, walking, repetitive motions, climbing, balancing, pushing, pulling and lifting; depending on assignment. Incumbents may be exposed to moving mechanical parts, odors, dusts, poor ventilation, chemicals, oils, extreme temperatures, inadequate lighting, intense noises, gases, vibrations, chemicals, oils and workspace restrictions.

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

Medium work – Depending on assignment, positions in this class typically exert up to 50 pounds of force occasionally, up to 20 pounds of force frequently, and/or up to 20 pounds of force constantly having to move objects.