City of Fort Worth, Texas Job Description

Classification Title	Survey Technician		
Job Code:	TC5550	Job Family:	Technical/Para- Professional
Pay Grade	506	Date Reviewed:	06/06/15
FLSA Status	Nonexempt	Date Revised:	02/03/25

GENERAL SUMMARY

Performs a variety of technical tasks in collecting, recording, analyzing, preparing and presenting construction and land survey data for property, boundary, and rights-of-way. Acts as instrument technician on survey teams and 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. Acts as instrument technician on field survey team; operates automated field equipment including transit, level, theodolite and distance meters to measure and record survey data for use in a variety of projects including the design, planning or analysis of land boundaries, the preparation of construction plans and documents, and geodetic control.
- 2. 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.
- 3. Inspects, operates and performs maintenance on sound, lighting and supportive electrical equipment.
- 4. 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.
- 5. Checks survey field notes and data collector files for accuracy, content and format; ensure that missing or incorrect data is obtained; adjust data as necessary.
- 6. Performs drafting assignments preparing maps, boundary surveys, plats, cross sections, utilizing CADD based software and electronic graphics plotting equipment.
- 7. Performs calculations for use in preparation of construction plans, boundaries, easements and other related surveying projects.
- 8. Prepares project documents pertaining to survey field notes, legal descriptions, maps of surveys, plats, cut-sheets, cross sections, profiles and related documents.
- 9. Prepares supplies and equipment for daily assignments; ensure field equipment is cleaned and maintained as required.

- 10. Performs related duties as required.
- 11. 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 survey techniques including land, boundary, geodetic, preliminary, and construction surveying.
- ➤ Equipment and materials used in surveying including theodolite, transit, level, distance meters and related equipment.
- 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 design and construction.
- Drafting instruments, tools and techniques.
- Methods and techniques of data collection and analysis.
- Principles and practices 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:

- Making observations.
- Communicating with others.
- Operating equipment.

Ability to:

- ➤ Perform a wide variety of surveying tasks and functions including collecting, recording, analyzing, preparing and present surveying and recording property, boundary and right-of-way 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.
- Perform arithmetic calculations and algebraic computations with speed and accuracy.
- Maintain and care for survey equipment and assigned vehicle.
- > Understand oral and written instructions.
- > Prepare clear and concise reports.
- Communicate clearly and concisely, both orally and in writing.
- > Read maps, plats and construction plans.
- Operate office equipment including computers and supporting word processing and spreadsheet applications.

MINIMUM JOB REQUIREMENTS

High school diploma/GED supplemented by specialized training in surveying or a related field one year of responsible surveying experience.

OTHER REQUIREMENTS

Valid Texas Driver's License.

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

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.

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.

Heavy Work - Depending on assignment, positions in this class typically exerting up to 100 pounds of force occasionally, up to 50 pounds of force frequently, and/or up to 20 pounds of force constantly having to move objects.