



SURVEY TECHNICIAN II JOB DESCRIPTION

Job Title: **Survey Technician II**

Job Class: **TBD**

Pay Range: **Grade 119**

Effective Date: **April 2024**

FLSA: **Non-Exempt**

Revision Date: **April 2024**

NATURE OF WORK

Under general supervision, performs a variety of technical surveying tasks including right-of-way surveying, boundary surveying, cadastral surveying, geodetic surveying, topographic surveying, and construction surveying, involving the use of conventional and electronic survey measuring instruments including GPS, total stations, and differential levels. The Survey Technician II performs work within the scope of authority and training in assigned area of responsibility.

ESSENTIAL FUNCTIONS:

*The following duties **ARE NOT** intended to serve as a comprehensive list of all duties in this classification, but only a representative summary of the primary duties and responsibilities. Incumbent(s) may not be required to perform all duties listed and may be required to perform additional, position-specific duties.*

- Performs a variety of Survey Technician work for Public Works Department (PWD) engineering programs including survey and technical administrative work for infrastructure projects; performs work within scope of authority; duties may vary according to job assignment.
- Under general supervision, performs work in the accomplishment of control surveys, calculations, and related mapping and digital data entry into GIS to establish and maintain County property lines, boundaries and corners.
- Performs survey calculations and preparation of maps and plats.
- Researches legal records, survey records, and land titles to obtain information about property boundaries in areas to be surveyed.
- Conduct surveys to establish legal boundaries for properties, based on legal deeds and titles.
- Assists in performing computation and platting of survey data and preparation of legal descriptions, related thereto.
- Participates in the preparation of legal descriptions and plat maps for right-of-way and maintenance of section and grid control; resets section corners as needed to preserve section control.
- Participates in the preparation of data, charts, plots, maps, records and documents related to surveys.
- Computes geodetic measurements and interpret survey data to determine positions, shapes and elevations of geomorphic and topographic features.
- Perform and follow tasks in accordance with WAC 18.43.020(9) & 332-130-100(2) and Washington state land survey standards, techniques, methodologies.
- Operate and assist in inventory survey instrument and all assigned gear, tools, and vehicle.

- Assist in the operation, maintenance, and calibration a variety of instruments such as: levels, total stations, global position systems, and all related data collectors, as well as their associated accessories.
- Maintain field notes of survey work performed; process survey information and generate drawings for various engineering and planning projects.
- Manages technical engineering/surveying databases; compiles technical data from a variety of sources; edits and verifies data and updates database; performs quality control checks to ensure data integrity.
- Coordinates projects, activities, and information with other PWD staff, County Departments, contractors, and outside agencies.
- Assist in the condition inspection of County roads, bridges, and infrastructure as needed.
- Develops construction staking layout plans from approved engineering drawings.
- Inspects construction projects to verify compliance to safety and quality standards; observes safety and security procedures and reports potentially unsafe conditions to Supervisor.
- Works with the public and is a positive representative of the County.
- Performs other related work as required.

SUPERVISORY RESPONSIBILITIES

This position does not have direct reports. This position does not indirectly lead and/or supervise employees in the Public Works department.

WORKING ENVIRONMENT/PHSICAL DEMANDS:

The physical demands described herein 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.

While performing the duties of this job, the employee is regularly required to sit, talk, and hear. Must have the ability to efficiently, write in a neat and legible fashion, at times quickly while being dictated. The employee is often required to stand, walk, use hands to operate, handle, and feel, and to reach with hands and arms. The duties of this position require walking over uneven and/or steep terrain at times for multiple miles, sitting, stooping, climbing, pulling bending, reaching, twisting, and the ability to lift up to 75 lbs, with possible exposure to safety hazards and the use of dangerous tools and equipment occasionally for extended periods of time (i.e. chain saws, weed eaters, machetes, sledgehammers, etc.). Requires finger dexterity, sense of touch, gripping with fingers and hands; ability to see, hear voice conversation, and to speak. Specific vision abilities required by this job include close vision and extended exposure to computer monitors and office lighting.

Work is performed both in an office environment and outdoors with exposure to inclement weather. The employees will occasionally be exposed to outside conditions including; weather; traffic; construction sites; moving mechanical parts; high, precarious places; fumes or airborne particles; toxic or caustic chemicals; and risk of electrical shock. The noise level in the work environment is usually moderate. This position also requires field work along rivers and streams that require specialized clothing, equipment and safety precautions.

On occasion the incumbent may be required to travel to meetings or remote work settings outdoors for short periods of time.

DISTINGUISHING CHARACTERISTICS:

This is a journey-level Survey Technician position. Incumbents have a minimum one year of survey work experience, and work under general supervision while improving their job skills. Must complete all required coursework for multiple technical certifications to qualify for Survey Technician III.

EMPLOYMENT STANDARDS:

- Associate's Degree in Engineering, Computer Science, or related field; AND one (1) year experience as a Survey Technician I or equivalent.
- A valid Washington State Driver's License is required.

KNOWLEDGE AND SKILLS:

Knowledge of:

- County policy and procedures.
- Land surveying and mapping principles, procedures and practices.
- Principles and techniques of drafting and construction inspection.
- Field surveying practices and techniques, including electronic total station, data collector, network control stations, and GPS/GNSS measuring equipment.
- Computer skills and applications including, but not limited to: Autodesk Civil3D, Trimble Access, Microsoft Office, etc.
- Advanced mathematics including geometry and trigonometry.
- Geodesy and state plane coordinates.
- OSHA safety rules and regulations and safety standards applicable to hazardous environments.
- Reviewing designs, details, plans, and specifications of engineering projects.

Skills in:

- Interpreting and applying engineering standards and procedures, Federal and State rules and regulations, and County policies and procedures.
- Microsoft Office, Word, Excel, Publisher, Explorer, and PowerPoint
- Collecting, calculating, and adjusting mathematical computations such as distances, traverses, and elevations.
- Reading and understanding plans, specifications, and schematics.
- Safe and efficient operation and maintenance of trucks and equipment according to standard operating and safety procedures.
- Reading survey instruments, meters and gauges and accurately recording findings.
- Maintaining records and files.
- Working effectively with others to develop solutions for public works issues.
- Operating a personal computer utilizing standard and specialized software.
- Establishing and maintain effective working relationship with other County employees, public officials, and representatives from other local, State, and Federal agencies.
- Communicating effectively verbally and in writing.