



## Office of Human Resources

### Surveying Technician II

#### General Statement of Duties

Performs intermediate-level surveying technician work in support of surveying and/or engineering projects or programs including office and field surveys and site analyses and review.

#### Distinguishing Characteristics

This is the second of a three-level series. This class performs standard level surveying work. This class is distinguished from the Surveying Technician I which performs entry level surveying work. This class is distinguished from the Surveying Technician III which performs full performance surveying work.

#### Guidelines, Difficulty and Decision-Making Level

Guidelines are generally numerous, well established and directly applicable to the work assignment. Work assignment and desired results are explained by general oral or written instructions.

Duties assigned are generally repetitive and restricted in scope but may be of substantial intricacy. Employee primarily applies standardized practices.

Decisions or recommendations on non-standardized situations are limited to relating organizational policies to specific cases. Problems that are not covered by guidelines or are without precedent are taken up with the supervisor.

#### Level of Supervision Received & Quality Review

Under normal supervision, within a standardized work situation, the employee performs duties common to the line of work without close supervision or detailed instruction. Work product is subject to continual review.

#### Interpersonal Communication & Purpose

Contacts with the public or employees where explanatory or interpretive information is exchanged, gathered or presented and some degree of discretion and judgement are required within the parameters of the job function.

#### Level of Supervision Exercised

By position, performs lead work.

#### Essential Duties

Performs standard surveying technician work assisting with office and field surveys and investigations to ensure compliance with governmental and environmental regulations, engineering, surveying, and/or construction specifications.

Maintains, operates and makes use of theodolites, total station instruments, data controllers, global positioning systems (GPS), automatic levels, and/or measuring tapes while performing control traverses, data collection, benchmark leveling, construction layouts, slopes, cuts, and fills, and area mapping. and determines what type of information is needed for data collection and/or measurement.

Executes a variety of mathematical computations to perform control traverses, data collection, benchmark leveling, construction layouts, slopes, cuts and fills, and area computations, and other calculations with a hand-held calculator, a hand-held data controller, or a computer software program.

Reads and interprets drawings, maps, plats, exhibits, images, land descriptions, and drawing specifications applying appropriate guidelines and standardized practices to a range of survey functions.

Prepares reports, field notes, and recordation files, and ordinances, performs research of land use documents, and enters and retrieves information in a computer as needed.

Trains and provides assistance to Surveying Technicians on processes, methods, and procedures.

Performs other related duties as assigned or requested.

Any one position may not include all of the duties listed. However, the allocation of positions will be determined by the amount of time spent in performing the essential duties listed above.

### Competencies

Technical Competence - Uses knowledge that is acquired through formal training or extensive on-the-job experience to perform one's job; works with, understands, and evaluates technical information related to the job; advises others on technical issues.

### Knowledge & Skills

Knowledge of basic surveying applications, principles, theories, standards, and practices sufficient to be able to perform a variety of duties related to the work assignment including mapping, construction layouts, and boundary locations.

Knowledge of algebra, geometry, and trigonometry sufficient to be able to calculate traverse closures and adjustments, resections, curves, gradients, volumes, areas, and ratios.

Knowledge of rules, regulations, and requirements for processing subdivisions, planned unit developments (PUD), and planned building groups (PBG).

Knowledge of the process and requirements for revocable permits, right-of-way dedications, street and alley vacations, easement relinquishments, and addressing approvals.

Knowledge of land use databases such as benchmarks, range lines, land survey plats (LSP), subdivisions, tie books, and land corners.

Skill in using a computer with computer assisted drafting software, GIS software, database software, coordinate geometry software, and personal computer applications.

Skill in performing a variety of mathematical calculations and computations.

Skill in reading and interpreting legal exhibits, land descriptions, and photo images.

### Education Requirement

Graduation from high school or the possession of a GED, HiSET or TASC Certificate.

### Experience Requirement

Two (2) years of experience of the type and level of Surveying Technician.

**Education & Experience Equivalency**

A combination of appropriate education and experience may be substituted for the minimum education and experience requirements.

**Licensure & Certification**

By position, may require a Colorado Class "R" Driver's License by the completion of probation.

Licenses and certifications must be kept current as a condition of employment.

**Working Environment**

Exposed to extreme temperature changes.

Noise: sufficient noise to cause distraction or possible hearing loss.

Exposed to hazardous conditions where there is danger to life, body, and/or health.

Atmospheric Conditions: conditions that affect the skin, eyes or respiratory system.

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Exposed to dust.

Exposed to cold temperatures, cold enough to cause bodily discomfort.

Exposed to heat temperatures, hot enough to cause bodily discomfort.

Exposed to hazards from electrical/mechanical/power equipment.

Exposed to housekeeping/cleaning agents/chemicals.

Exposure due to soil, plants, and insects

Occasional pressure due to multiple calls and inquiries.

Personal Safety: aware of surroundings, people, and events.

Subject to burns and cuts

Subject to injury from moving parts of equipment or vehicles

Subject to long, irregular hours

Temperature Changes: Variations in temperature from hot to cold when works in the field.

Works in confined, uncomfortable or awkward locations.

Works in precarious or high locations.

**Level of Physical Demand**

3-Medium (20-50 lbs.)

**Physical Demands**

(Physical Demands are a general guide and specific positions will vary based on working conditions, locations, and agency/department needs.):

Standing: remaining on one's feet in an upright position

Walking: moving about on foot on uneven surfaces.

Carrying: transporting an object, usually by hand, arm, or shoulder.

Pushing: exerting force upon an object so that the object is away.

Pulling: exerting force on an object so that it is moving to the person.

Climbing: ascending or descending objects usually with hands/feet.

Balancing: maintaining body equilibrium to prevent falling.

Stooping: bending the body by bending spine at the waist.

Kneeling: bending legs to come to rest on one or both knees.

Crouching: bending body downward and forward by bending legs.

Reaching: extending the hand(s) and arm(s) in any direction.

Handling: seizing, holding, grasping, or otherwise working with hand(s).

Fingering: picking, pinching, or otherwise working with fingers.

Talking: expressing or exchanging ideas by means of spoken words.

Hearing: perceiving the nature of sounds by the ear.

Repetitive motions: making frequent movements with a part of the body.

Eye/hand/foot coordination: performing work through using two or more

Sitting: remaining in the normal seated position.

Neck Flexion: Moving neck upward/downward.

Mental Demands: mathematical reasoning, memorization, oral comprehension, spatial orientation, and written comprehension.

Lifting: raising or lowering objects weighing no more than 50 pounds, from one level to another.

Hearing/Talking: Hear and determine direction of sound.

Hazards: conditions where there is danger to life, body and/or health.

Field of Vision: ability to see peripherally.

Field of Vision: ability to adjust vision to bring objects into focus

Depth Perception: ability to judge distances and space relationships

Vision Far acuity: ability to see clearly at 20 feet or more.

Vision Near acuity: ability to see clearly at 20 inches or less.

### Background Check Requirement

Criminal Check

Employment Verification

By position, Motor Vehicle Record

### Assessment Requirement

None

### Probation Period

Six (6) months.

### Class Detail

**FLSA Code: N**

**Management Level: 10**

**Established Date: 8/1/2018**

**Established By: Lori Schumann**

**Revised Date:**

**Revised By:**

**Class History:**