



Office of Human Resources  
Land Surveyor Staff - CE2175  
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### General Statement of Duties

Performs entry level surveying work by assisting with land surveying which requires the application of the fundamentals of land surveying while gaining practical experience under the direction of a licensed surveyor in responsible charge.

### Distinguishing Characteristics

There are three classes in the professional surveying series and this is the first class in the series (Land Surveyor and Senior Land Surveyor). This class describes the entry level non-licensed surveyor work assisting a Land Surveyor in their professional duties and may lead a survey crew or perform surveying work individually within a range of specified, acceptable standards, alternatives, and technical practices. This class is distinguished from a Land Surveyor that performs full performance professional land surveying work requiring independent application of the principles and practices of land surveying. The Staff Land Surveyor is also distinguished from the Senior Land Surveyor that performs supervisory duties over professional land surveyors.

### Level of Supervision Exercised

By position, performs lead work over para-professional staff.

### Essential Duties

Assists with performing land surveys including subdivision checks, laying out of property line, deformation studies, monument maintenance, and geographic information systems (GIS) and ties to the state plane coordinate system.

Assists with preparing and checking legal descriptions for properties, plans, ordinances, easements, and agreements.

Assists with electronic and manual review of maps, plats, development projects, legal descriptions, and other land title documents.

Makes recommendations to the land surveyor in responsible charge for project compliance, approval, or denial.

Assists with the acquisition of field data to authoritatively position fixed works or cadastral data relative to geodetic control.

Leads survey personnel in obtaining and adjusting of horizontal and vertical measurements taken in the field; used for designing infrastructure, preparation of topographical maps, and in the establishment of survey control points and positions.

Establishes line and grade control staking for various field projects, calculates survey closures and earth quantities, and maintains detailed field and office notes for design and construction purposes.

Researches recorded data from such sources as property descriptions, plats, utility maps, and land corner records including Internet resources.

Assists with the analysis of maps, deeds, or other land title documents to support the resolution of conflicting data elements.

Leads staff in the establishment and retracing of property boundaries and lines taken from an analysis and interpretation of legal descriptions, plat, and notes under the direction of the land surveyor in responsible charge.

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**

Attention to Detail - Is thorough when performing work and conscientious about attending to detail.

Interpersonal Skills - Shows understanding, friendliness, courtesy, tact, empathy, cooperation, concern, and politeness to others and relates well to different people from varied backgrounds and different situations.

Oral Communication - Expresses information to individuals or groups effectively; taking into account the audience and nature of the information; makes clear and convincing oral presentations; listens to others, attends to nonverbal cues and responds appropriately

Problem Solving - Identifies problems; determines accuracy and relevance of information; uses sound judgment to generate and evaluate alternatives, and to make recommendations.

Reading - Understands and interprets written material, including technical material, rules, regulations, instructions, reports, charts, graphs, or tables; applies what is learned from written material to specific situations.

Reasoning - Identifies rules, principles, or relationships that explain facts, data, or other information; analyzes information and makes correct inferences or draws accurate conclusions.

### **Knowledge & Skills**

Knowledge of the concepts, principles, theories, and methods related to the research, design, development, or revision of maps, charts, and related cartographic products, and photogrammetric and cartographic processing.

Knowledge of land geographic information systems, surveying computations, and boundary law sufficient to be able to perform land surveys and define property lines.

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 and Easement Relinquishments.

Knowledge of research of City ownership, right-of-way and other property issues.

Skill in using land geographic information systems and knowledge of standard legal practices and interpretations.

### **Education Requirement**

Bachelor's Degree in Surveying, Engineering, Science or a related field.

### **Experience Requirement**

None

**Education & Experience Equivalency**

One (1) year of the appropriate type and level of experience may be substituted for each required year of post-high school education.

Additional appropriate education may be substituted for the minimum experience requirements.

**Licensure & Certification**

By position, requires a valid Driver's License at the time of application.

Enrollment as a Land Surveyor Intern (LSI) issued by the Colorado State Board of Licensure for Professional Engineers and professional Land Surveyors at the time of application. Enrollment as a Land Surveyor Intern (LSI) by another state will be accepted in lieu of this requirement providing the applicant is enrolled by the State of Colorado by the completion of the probationary period.

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

**Working Environment**

Potential exposure to extremes of heat and cold.

Potential exposure to sufficient noise to cause distraction.

Potential exposure to conditions where there is danger to life and body (automobile traffic).

Potential exposure to atmospheric conditions that affect the skin or respiratory system.

**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.):

Balancing: maintaining body equilibrium to prevent falling.

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

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

Crouching: bending body downward and forward by bending legs.

Depth Perception: ability to judge distances and space relationships.

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

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

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

Hearing: perceiving the nature of sounds by the ear.

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

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

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

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

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

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

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

Sitting: remaining in the normal seated position.

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

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

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

Vision Far acuity: ability to see clearly at 20 feet or more.  
Vision Near acuity: ability to see clearly at 20 inches or less.  
Walking: moving about on foot.

**Background Check Requirement**

Criminal Check  
Education Check  
By position, Motor Vehicle Record  
Licenses/Certifications

**Assessment Requirement**

None

**Probation Period**

Six (6) months.

**Class Detail**

**Pay Grade: E-811**  
**FLSA Code: Y**  
**Established Date: 9/21/2018**  
**Established By: LS**  
**Revised Date:**  
**Revised By:**  
**Class History:**