

Iowa Department of Administrative Services – Human Resources Enterprise  
Job Classification Description

## Assistant Survey Party Chief

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### Definition

Performs technical engineering survey work and assists the Survey Party Chief in the direction of a preliminary or cornerstone survey party; performs related work as required.

*The work examples and competencies listed below are for illustrative purposes only and not intended to be the primary basis for position classification decisions.*

### Work Examples

Operates survey instruments such as, levels, total stations, GPS, and data collectors.

Records data gathered by survey party (field survey notes) such as topography (transit notes), cross section (elevation notes), benchmark (level notes), etc.

Inspects courthouse records to determine the ownership of lands intersected by the survey.

Contacts landowners to gather needed information such as high water levels and location of tile lines and section corners, and to obtain permission for the survey party to enter their property.

Contacts utility companies to solicit information regarding the location of water, phone, and power lines.

Adjusts survey levels according to the peg method.

Prepares detailed profiles and plats of areas surveyed.

Performs trigonometric, geometric, and algebraic calculations to check survey configurations and prove physical work.

### Competencies Required

Knowledge:

- Mathematics – Arithmetic, algebra, geometry, calculus, statistics, and their applications.
- Engineering and Technology – The practical application of engineering science and technology. This includes applying principles, techniques, procedures, and equipment to the design and production of various goods and services.
- Geography – Principles and methods for describing the features of land, sea, and air masses, including their physical characteristics, locations, interrelationships, and distribution of plant, animal, and human life.
- English Language – The structure and content of the English language, including the meaning and spelling of words, rules of composition, and grammar.

Abilities:

- Number Facility – Add, subtract, multiply, or divide quickly and correctly.

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- Deductive Reasoning – Apply general rules to specific problems to produce answers that make sense.
  - Mathematical Reasoning – Choose the right mathematical methods or formulas to solve a problem.
  - Oral Comprehension – Listen to and understand information and ideas presented through spoken words and sentences.
  - Oral Expression – Communicate information and ideas in speaking so others will understand.
  - Near Vision – See details at close range (within a few feet of the observer).
  - Finger Dexterity – Make precisely coordinated movements of the fingers of one or both hands to grasp, manipulate, or assemble very small objects.
  - Written Comprehension – Read and understand information and ideas presented in writing.

**Skills:**

- Mathematics – Using mathematics to solve problems.
- Critical Thinking – Using logic and reasoning to identify the strengths and weaknesses of alternative solutions, conclusions or approaches to problems.
- Reading Comprehension – Understanding written sentences and paragraphs in work related documents.
- Active Listening – Giving full attention to what other people are saying, taking time to understand the points being made, asking questions as appropriate, and not interrupting at inappropriate times.
- Judgment and Decision Making – Considering the relative costs and benefits of potential actions to choose the most appropriate one.
- Operation Monitoring – Watching gauges, dials, or other indicators to make sure a machine is working properly.

**Minimum Qualification Requirements**

Applicants must meet at least one of the following minimum requirements to qualify for positions in this job classification:

- 1) Three years of full-time work experience in engineering survey, which included the operation of survey instruments.
- 2) A total of three years of education and/or full-time experience (as described in number one), where thirty semester hours of accredited college or university course work in civil engineering, construction engineering, or photogrammetry equals one year of full-time experience.
- 3) Current, continuous experience in the state executive branch that includes one year of full-time work in survey, construction, maintenance, or design as a Highway Technician Associate, Highway Technician, Highway Technician Senior, Construction Technician Assistant, Construction Technician, or Construction Technician Senior.

**Notes**

Positions in this class require possession of a valid driver's license.

Prior to starting employment, all persons are required to have a post offer, pre-employment physical verifying the physical ability to perform the duties described.

Travel, including overnight travel, may be required for positions in this class. Employees must arrange transportation to and from assigned work areas.

*Effective date: 01/20 SA*