

SURVEY INSTRUMENTMAN

DEFINITION

Under general supervision, to perform specialized field survey work in operating field instruments; to provide technical instruction to lower-classified personnel; and to do other work as required.

CLASS CHARACTERISTICS

Positions are characterized by assignments requiring considerable experience and knowledge and where duties are performed with considerable independence. Incumbents in this class are responsible for coordinating the activities of the other survey party members, reading survey instruments and taking notes, and acting as Survey Party Chief in the Chief's absence.

EXAMPLES OF DUTIES

Field

1. Sets up and operates electronic instruments, transits, levels and other precision instruments for measuring horizontal and vertical angles, measuring elevations and distances and plotting contour and topographic field maps.
2. Records field notes and makes computations of distances, elevations, angles, areas and traverses; makes other field and office calculations in connection with surveying activities; act for Survey Party Chief in Chief's absence.
3. Instructs survey party members in the use and application of various survey instruments and assist the Survey Party Chiefs in coordinating their activities.
4. Reads and interprets right-of-way maps, construction plans, survey notes, design plans and other relevant technical information.
5. As a temporary assignment, may perform office land surveying work.

MINIMUM QUALIFICATIONS

General Knowledge of

Principles of algebra, geometry and trigonometry as used in office and field survey analysis.

Field surveying practices and techniques.

Uses and capabilities of survey instruments.

Civil engineering plans, maps and specifications related to surveying.

Some Knowledge of

Principles of supervision.

Ability to

Perform difficult mathematical calculations and precise engineering measurements.

Read and interpret civil engineering drawings, maps, specifications, legal descriptions, survey field data and survey records.

Operate and maintain complex precision instruments used in surveying.

Read, check, evaluate, interpret and correct survey data.

Establish and maintain cooperative working relationships with engineers, developers, contractors

and the general public.

Use a County-approved means of transportation to travel to and from field locations.

Education/Experience

One year experience as a Rodman and Chainman.

OR

Three years of subprofessional surveying or civil engineering experience including at least two years in a field or office survey assignment. A maximum of one year of survey-related experience as an EMA Professional Services Assistant II may be applied to the general experience.

Education or training that can be directly related to the required knowledges and abilities may be substituted for up to one year of the required experience at the rate of three college semester units for one month of experience or one hour of training for one hour of experience; or possession of a valid certificate as a Land Surveyor in Training or Engineering in Training issued by the California State Board of Registration for Professional Engineers may be substituted for one year of experience.

RS:mm

4-28-99