



MARIN MUNICIPAL WATER DISTRICT

Land Surveyor

DEFINITION

Under direction, performs a variety of difficult and complex professional field and office survey work related to District facility installations and property transactions; organizes and coordinates survey work; may exercise technical and functional supervision over lower level personnel as appropriate.

EXAMPLES OF DUTIES

Typical duties may include but are not limited to the following:

- Review and check various survey maps and descriptions for accuracy and conformance with established surveying principles and practices and applicable surveying laws, rules, and regulations and make various recommendations for improvement.
- Prepare and sign legal record maps, plats, and deed descriptions.
- Perform a variety of survey office work such as research existing records and compile data required for current survey projects, compute data to be shown on maps, prepare easement drawings and descriptions, perform coordinate geometry and traverse calculations using office computer and/or programmable calculator, prepare boundary and topographic maps using computer aided drafting software and plotter.
- Participate in the work of and direct a survey party in performing a variety of engineering and land surveys including property boundary locations, surveys of easements and rights of way, topographic surveys, construction surveys, vertical control surveys using precise leveling techniques, and horizontal control surveys utilizing Global Positioning System (GPS) technology.
- Operate, calibrate, and maintain survey instruments and instruct other party members in their operation and field adjustment; train others in the proper practices, equipment use, and techniques of field survey work.
- Create and maintain accurate field notes showing lines, angles, distances, benchmarks, calculations and other data pertinent to the field survey; utilize electronic data collection systems supplemented by hand notes and sketches.
- Review contractor's work for conformance to established engineering grades, reference points, property lines, alignments, and other District standards; assist in the preparation and evaluation of proposals and specifications to secure consultant survey work.
- Review and provide input for property descriptions required on private development water facility installations.
- Assist with the coordination of survey-related activities with other District divisions and departments and with outside agencies.
- Maintain adequate stock of field survey materials.
- Perform related duties as assigned.

QUALIFICATIONS FOR EMPLOYMENT

Knowledge of:

- Principles, practices, equipment, and techniques used in traditional and electronic surveying and drafting work.
- Surveying equipment and instruments and their maintenance, proper uses and applications.
- Mathematics as it applies to surveying and engineering calculations, including algebra, geometry, linear algebra and trigonometry.
- Grant deeds, easements, and legal descriptions of property.
- Federal, state, and local laws, rules and regulations relating to surveying practices, including the State of California Subdivision Map Act and State of California Land Surveyor's Act; professional standards utilized by American Land Title Association.
- Use of computers for survey and drafting applications.
- Safety hazards and appropriate precautions applicable to work assignments.

Ability to:

- Perform complex field and office surveying work, including operating and maintaining a variety of survey instruments and using a computer with COGO, GPS, and CADD software;
- make and interpret difficult survey calculations and computations related to survey work, the preparation of plats and plans, and design of horizontal and vertical alignment of piping;
- conduct a variety of property-related research and analysis, write and check legal descriptions, and prepare cost estimates;
- analyze survey data, identify and resolve discrepancies and maintain mapping and survey quality standards;
- review maps, plans, and documents for conformance to appropriate codes, regulations, and District standards;
- plan, organize, and perform a variety of field and office survey work; train and provide oversight to field survey party members and lower level personnel as appropriate;
- coordinate and schedule District survey work and assist in the coordination of consultant survey work;
- establish and maintain effective working relationships with co-workers, other District employees and the public using principles of good customer service;
- communicate clearly and concisely, both orally and in writing;
- learn and observe all appropriate safety precautions as required by the District including, but not limited to Cal/OSHA General Industry Safety Orders and District Safety Program;
- drive a vehicle.

Training and Experience: Any combination equivalent to experience and education that could likely provide the required knowledge and abilities would be qualifying. A typical way to obtain the knowledge and abilities would be:

- Completion of the twelfth grade or its equivalent, and six years of increasingly responsible surveying, survey drafting and other closely related engineering experience;
OR
- Two years of college level courses in engineering technology, land surveying, plane and analytic geometry, trigonometry, algebra or other related courses which would result in the acquisition of the knowledge and abilities listed above, and four years of increasingly responsible surveying, survey drafting or other related engineering experience.

OTHER REQUIREMENTS

- Per California Government Code, Title 1, Division 4, Chapter 8, Section 3100 “all public employees are hereby declared to be disaster service workers subject to such disaster service activities as may be assigned to them by their superiors or by law.”

LICENSES AND/OR CERTIFICATIONS

- Registration as a Professional Land Surveyor as granted by the State of California Board for Professional Engineers and Land Surveyors;
- Possession of an appropriate California driver’s license issued by the State Department of Motor Vehicles and satisfactory driving record.

PHYSICAL DEMANDS AND WORKING CONDITIONS

During the course of performing job duties the employee will need the mobility to work in a standard office setting, operate equipment, which may include office and/or field equipment, or specialized instruments or tools requiring repetitive arm/hand movement and/or the coordinated movement of more than one limb simultaneously; enter and retrieve data from personal computers and terminals via keyboards which is often performed while sitting for extended periods of time. The employee frequently stands, walks, bends at neck and waists, twists at neck and waist, uses simple and power grasping with both hands, uses fine manipulation of both hands and fingers, and may require use of the arms above the shoulder, climb or balance; stoop, kneel or crouch. While working in the field the employee may walk on uneven or un-level ground surfaces such as hills, slopes, ditches or trenches, on or in tanks, and may work at heights up to ten to twelve feet climbing ladders or stairs. The employee is occasionally required to lift and carry short distances objects such as reams of copier paper, office supplies, files, books, printed materials and other packages or equipment weighing up to 10 to 25 pounds. This position requires that the employee demonstrate adequate hearing and speech to converse in person and over the telephone, and vision to read printed materials and use a computer screen.

The noise level in the work environment is quiet to moderate noise. The employee is exposed to outdoor temperature, humidity, wetness and dust. The position may require the ability to work overtime and weekends as needed.

Employees who drive on District business to carry out job-related duties must possess a California driver’s license for the class of vehicle driven and meet automobile insurability requirements of the District including review of a recent DMV history. In order to drive, individuals must be physically capable of operating the vehicles and equipment safely.

To be successful in this job, an individual must be able to satisfactorily perform each of the listed duties. These duties are representative of the knowledge, skill and/or ability required for the position. Reasonable accommodations may be made to enable individuals with disabilities to perform the duties and functions of the position. Requests for reasonable accommodation should be directed to the Human Resources Manager.

Established: February 1994
Revised: October 2008
Approved by: Human Resources Manager