



THE METROPOLITAN WATER DISTRICT
OF SOUTHERN CALIFORNIA

LAND SURVEYOR

Group-Section: Engineering Services Group	FLSA Status: Non-Exempt Bargaining Unit: AFSCME	Salary Grade: 53 Job#: YA66
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JOB SUMMARY

This is the specialized advanced journey level position performing Land Surveyor job duties.

DISTINGUISHING CHARACTERISTICS

Positions at this level are recognized as professional specialists in the development and interpretation of guidelines. The work includes varied duties requiring many different and unrelated processes and methods applied to a broad range of activities or substantial depth of analysis. Decisions regarding what needs to be done include major areas of uncertainty in approach, methodology, or interpretation and evaluation processes resulting from such elements as continuing changes in program, technological developments, unknown phenomena, or conflicting requirements. The work requires originating new techniques, establishing criteria, or developing new information. The work involves isolating and defining unknown conditions, resolving critical problems, or developing new theories. The work product or service may affect activities, or the operation of other organizations.

OVERSIGHT

Supervision Received: The supervisor provides administrative direction with assignments in terms of broadly defined missions or functions. The employee has responsibility for planning, designing, and carrying out programs, projects, studies, or other work independently. Results of the work are considered as technically authoritative and are normally accepted without significant change. If the work should be reviewed, the review concerns such matters as fulfillment of program objectives, effect of advice and influence on the overall program, or the contribution to the advancement of technology. Recommendations for new projects and alteration of objectives are usually evaluated for such considerations as availability of funds and other resources, broad program goals, or priorities.

Supervision Given: Acts as a lead. Lead on projects usually includes up to 2 staff members as project requires. Coordinates and reviews work assignments of employees performing the same general work as the lead on a day-to-day basis. Responsibilities may involve solving problems and providing instructions on work procedures.

JOB DUTIES

1. May provide lead direction and oversight to staff to ensure projects, program objectives, and other assignments are accurately completed. Evaluates and reviews analytical data. Interprets survey request requirements. Establishes methodology and techniques for use of electronic field survey equipment and software.
2. May provide lead direction and oversight on survey projects; researches technical information, establishes methodology, develops schedules, and plans work; develops and monitors budget; ensures that specifications and standards are met.
3. As a licensed land surveyor analyzes, prepares, reviews and signs Records of Survey maps, legal descriptions, exhibit maps, topographic mapping, and deformation-monitoring reports according to California Business and Professions Code §§ 8700 - 8805.

4. Analyzes, prepares, reviews, and approves digital terrain modeling, Geographic Information Systems mapping, geospatial analyses, and computer aided design (CAD).
5. May provide lead direction and oversight on the use of robotic total stations, digital electronic levels, and GPS technology to establish horizontal and vertical control networks; analyzes, adjusts, and compiles the results into finished maps; determines the extent of ground control networks; determines the best placement of horizontal and vertical control points for photogrammetric mapping.
6. Participates in the development, negotiation and administration of contracts and agreements; oversees the work of vendors, consultants and contractors.
7. May provide lead direction and oversee, and/or perform, and review survey measurements, calculations, and field notes for mapping, design, and construction projects; resolves complex surveying problems.
8. Develops and recommends new or revised policies and procedures.
9. May provide lead direction, oversee, and/or perform design, installation and maintenance of automated monitoring systems.
10. May provide lead direction, oversee and/or perform special assignments in support of Metropolitan initiatives.
11. May perform site inspections.
12. Maintains records of work performed; prepares various reports; tracks inventory of survey equipment and supplies; and prepares budgets to maintain inventory and supplies.
13. Represents Metropolitan within area of responsibility with external entities; negotiates and resolves issues.
14. Keeps informed of changes and new legislation pertaining to laws, codes, and regulations affecting deformation work, mapping work, and survey work, and ensures appropriate staff is informed and current.
15. Performs other related Land Surveyor job duties as required.

EMPLOYMENT STANDARDS

MINIMUM QUALIFICATIONS

Education and Experience: A high school diploma or general education test (GED) and eight years of progressively increasing responsible work experience in field and/or office survey work, with one year minimum as a licensed surveyor; or Associate's degree and six years of progressively increasing responsible work experience in field and/or office survey work, with one year minimum as a licensed surveyor; or Bachelor's degree and four years of progressively increasing responsible work experience in field and/or office survey work, with one year minimum as a licensed surveyor.

Required Knowledge of: Geodetic/survey engineering principles, practices, and standards; photogrammetry; Geographic Information Systems, Computer-Aided Designs, or other survey related software; applicable federal, state, and local laws, codes and regulations including the Land Surveyors Act and the Subdivision Map Act; project management; work site safety; and current office technology and equipment.

Required Skills and Abilities to: Oversee project work; coordinate and collaborate with external agencies; read and interpret maps, legal descriptions, diagrams, construction drawings, and specifications; use a variety of business, Geographic Information Systems, Computer-Aided Designs and other engineering/survey applications; operate a variety of electronic survey equipment; use independent judgment and exercise discretion; problem solve; prioritize and multi-task; communicate clearly and concisely, both verbally and in writing; establish and maintain effective working relationships with those contacted in the course of work; work independently and in a team environment; lead and train; and operate current office equipment including computers and supporting applications.

Certificates, Licenses, And Registrations Requirements

Employees in this position may be required to obtain and maintain the following certifications, licensing and registrations:

Certificates

- None

Licenses

- Valid California Class C Driver License that allows you to drive in the course of your employment
- License in good standing as a California Professional Land Surveyor

Registrations

- None

PHYSICAL DEMANDS, WORK ENVIRONMENT, AND VISION REQUIREMENTS

The physical demands and work environment characteristics described here are representative of those that must be met or may be encountered by an employee to successfully perform the job duties of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the job duties.

Physical Demands: The work requires some physical exertion such as long periods of standing; walking over rough, uneven, or rocky surfaces; recurring bending, crouching, stooping, stretching, reaching, or similar activities; recurring lifting of moderately heavy items such as personal computers and record boxes. The work may require specific, but common, physical characteristics and abilities such as above-average agility and dexterity.

Work Environment: The work involves moderate risks or discomforts that require special safety precautions, e.g., working around moving parts, carts, or machines, or irritant chemicals; etc. Employees may be required to use protective clothing or gear such as masks, gowns, coats, boots, goggles, gloves, or shields.

Vision Requirements: No special vision requirements