



THE METROPOLITAN WATER DISTRICT
OF SOUTHERN CALIFORNIA

DESIGN TECHNOLOGY TEAM MANAGER

Group-Section: Engineering Services Group	FLSA Status: Exempt	Salary Grade: 060
	Bargaining Unit: MAPA	Job #: TM072

JOB SUMMARY

Responsible for managing and supervising the development, implementation, and administration of the Engineering Services' Design Technology and Computer Aided Design System (CAD) Electronic Drafting and Design platforms. Areas of responsibility include ensuring reliability and availability of CAD electronic drafting and design platforms and applications; coordination of Design Technology and design production projects, development of system requirements; modification/customization to meet the Engineering Services Group's requirements; managing design application testing and development of installation procedures; administration of software purchase and maintenance contracts; support of organizational standards, design guidelines and manuals, policies, and procedures; development and presentation of training materials related to CAD software and engineering project data management and use; managing a group of complex projects, directly and through subordinate and matrixed staff; monitoring project progress and budgets; conducting feasibility studies; determining project cost, schedules and scope; and ensuring timely completion of projects that support the business needs. Interfaces with outside entities and makes internal presentations to all levels of the organization on Design Technology related matters.

OVERSIGHT

Oversight Received: Receives direction from the Design Section or Unit Manager.

Oversight Given: Manages and supervises a staff of technicians and provides technical direction to Design Support Teams.

JOB DUTIES

Common job duties for team managers:

1. Supervises staff including selection, assignment and monitoring of work, coaching, mentoring, counseling, and performance assessment; determines priorities and aligns work load; reviews work for thoroughness, adherence to applicable standards, constructability, and accuracy; assesses employees' competencies and develops training plans; trains subordinates in applicable techniques and methodologies; and ensures staff compliance with applicable health and safety standards and requirements.
2. Provides general administration of the organization including establishing and tracking organizational goals and objectives; analyzes organizational activities and prepares reports; develops and monitors the budget; evaluates resource needs and prepares staffing and consulting requests; provides input regarding policy and procedures; and reviews and approves time, reimbursement requests, and purchases.

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3. Leads staff in development of organizational vision, strategies, goals, and objectives for customer support and service; plans, develops, and approves schedules, priorities, and standards for achieving organizational goals; and reviews and reports on status of all organizational activities.
4. Meets with key customers to work on projects and initiatives and supports applicable customer satisfaction feedback mechanisms.
5. Performs other related duties as required.

Duties specific to this position:

1. In collaboration with the Information Technology (IT) Group, manages the development, upgrade, and maintenance of CAD electronic drafting and design platforms; reviews, assigns, and monitors the development, implementation, and maintenance of engineering design platform applications and their databases, and related assets including plotters and their capabilities.
2. Assesses the Engineering Services Group's drafting and design platform needs as they relate to implementation, support and maintenance of each design application platform; identifies critical project management issues, advises appropriate staff, recommends solutions and resolves complex project problems; and develops new processes and procedures to meet new requirements or anticipated changes.
3. Analyzes the Engineering Services Group's Design Technology goals, objectives and priorities; recommends modifications for improving overall efficiency, production improvements, and evolutionary improvements to management staff; incorporates approved modifications; assists in the development and implementation of technical work plans for specific activities.
4. Responsible for the development and maintenance of Metropolitan CAD standards and manuals, software implementation requirements, training materials, and the Engineering Services Group's SharePoint sites as they pertain to CAD operations. Along with Principal Designers and Team Managers within Engineering Services, responsible for improving CAD standards and details, training, productivity and efficiency.
5. Plans, directs, and manages the assessment of user requirements, feasibility, technical direction, cost projections, benefit analysis, schedule, and scope of various CAD on other design platforms. Implements CAD platform user interface configurations and customizations to support efficient compliance with Metropolitan CAD production standard and interoperability of information.
6. Oversees the production and issuance of Requests for Proposals and Requests for Qualifications. Participates in selection of CAD-related contractors and consultants; manages contracts and agreements. Coordinates design application licenses with the IT Group.
7. Evaluates existing and emerging technology to define process standards and introduce new and enhanced technology solutions; analyzes technical information to maintain abreast of current technology advances and potential applicability to District needs.
8. Monitors and evaluates the efficiency and effectiveness of program administration and service delivery methods and procedures; develops reports and makes presentations to management on program progress and findings and related budgetary issues pertaining to the entire program or individual project activities.

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9. In collaboration with the IT Group, evaluates associated hardware and software required to support CAD platforms used by the Engineering Services Group. Provides input to Engineering Services Managers for hardware and software budget.
10. Assists in developing team and unit policies, methods, and procedures; reviews and makes recommendations regarding the development of quality assurance and quality control procedures, project milestones, presentation, and documentation.
11. Performs other related duties as required.

EMPLOYMENT STANDARDS MINIMUM

QUALIFICATIONS

Education and Experience: Bachelor's degree from an accredited college or university in a related field and twelve years of increasingly responsible relevant CAD experience, of which four years must have been in a supervisory, project management, or lead position; or an advanced degree (i.e., master's or doctorate) from an accredited college or university in a related field and ten years of increasingly responsible relevant CAD experience, of which four years must have been in a supervisory, project management, or lead position.

Required Knowledge of: Supervisory methods and techniques; team building; contract administration; project management including planning, scheduling, and costing; report writing; personnel management practices; practices and principles of strategic planning; performance measurement tools; design drawing practices, procedures, and standards in area of responsibility; digital information management, workflows life cycles, information sharing and security concepts; application of mathematic principles including algebra, geometry and trigonometry; facility design and layout; geospatial concepts with CAD technologies; applicable codes and regulations; construction and fabrication practices; estimating; quality assurance and quality control practices; computer aided drafting software; current office technology and equipment; fundamentals of Building Information Management (BIM) practices as they apply to facility design; principles and practices of project and program management; principles of system development life cycle (SDLC); principles of resource management; industry trends and emerging technologies; scheduling, cost/benefit analysis; statistical analysis; risk management; budgetary and accounting concepts and procedures; relevant federal, state and local laws; negotiation techniques; contract administration and management; trends and emerging technologies in CAD techniques and software.

Required Skills and Abilities to: Plan and organize the work of the team; encourage and facilitate cooperation; interpret laws, rules, and regulations relative to the team; determine training needs of staff; perform calculations; conduct research; manage projects; analyze and interpret data; utilize interpersonal skills; use computer aided drafting software; prepare and deliver presentations to all levels of the organization; prepare technical reports and correspondence; use independent judgment and exercise discretion; analyze and solve problems; prioritize and multi-task; communicate clearly and concisely, both verbally and in writing on administrative and technical topics; 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; interface with management and staff across the organization; review work products for quality and adherence to guidelines;; mentor, develop and motivate staff; analyze problems, evaluate total cost and return on investment for

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technology solutions, identify alternatives and implement recommendations; represent the District in negotiations with vendors; represent District to public agencies, regulatory bodies, special interest groups and members of the public; establish and maintain collaborative working relationships with all levels within the organization, other agencies, regulatory agencies, special interest groups and the public; and use business applications.

CERTIFICATES, LICENSES, AND REGISTRATIONS REQUIREMENTS

Certificates

- None

Licenses

- Valid California Class C Driver License that allows you to drive in the course of your employment.

Registrations

- None

DESIRABLE QUALIFICATIONS

Experience with the current CAD software platforms used within the Engineering Services Group. These may include:

- ProjectWise MicroStation configuration and implementation
- InRoads, OpenRoads (new generation of InRoads), AECOSim Building Designer, OpenPlant Process Instrumentation Design (PID) and OpenPlant Modeling
- Experience with using CAD related technologies for animations and rendering
- Experience with programming MicroStation Visual Basic Applications (VBA) and/or Software Development Kit (SDK)

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 essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

Physical Demands: The work is sedentary. Typically, the employee may sit comfortably to do the work. However, there may be some walking; standing; bending; carrying of light items such as paper, books, or small parts; driving an automobile, etc. No special physical demands are required to perform the work.

Work Environment: The work environment involves everyday risks or discomforts that require normal safety precautions typical of such places as offices, meeting and training rooms, libraries, and residences or commercial vehicles, e.g., use of safe work practices with office equipment, avoidance of trips and falls, observance of fire regulations and traffic signals, etc. The work area is adequately lighted, heated, and ventilated. May travel to various sites requiring overnight stay.

Vision Requirements: No special vision requirements.

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