

**MERCED IRRIGATION DISTRICT
GIS SPECIALIST (ENERGY RESOURCES)**

FLSA Status – Non Exempt

DEFINITION:

Under general direction, position will exercise decision making regarding the manipulation of data, and will guide the department policy making regarding GIS matters. Use and determine uses for GIS software, AutoCAD software, hardware, network and database organizations and recommend changes to maximize efficiencies for better service to our departmental GIS users. Position requires the exercise of judgment and requires specialized professional knowledge of computers, databases, GIS and AutoCAD systems and will support the department strategic plan, goals, and management decisions.

ESSENTIAL FUNCTIONS OF THE POSITION:

- Responsible for the creation, programming and management of multiple electric-asset databases, revising and maintaining detailed substation plans, sketching various department designs and field installations, and performs other work related to electrical operations.
- Responsible for the creation, programming, maintenance, and monitoring of Geographic Information Systems (GIS) used to support the District's electric department.
- Operate and maintain various types of geographic information system workstations and equipment, including menu tablets, plotters and microcomputers.
- Develop and/or modify geographic information or forecast modeling applications software and related sub-system application software. Interpret recorded plans to enter graphics and attribute data into the GIS.
- Assists Supervisor in the management of database consultants and GIS technical staff.
- Develop, implement, coordinate and maintain internal technical standards in conjunction with the needs of other Department personnel, including database administrators and Information Technology, in the development of data models, data standards and most appropriate GIS related technology for use by the Energy Resources Department.
- Oversee GIS applications development, contract development, or software acquisition.
- Provide technical expertise and user training and support for department GIS plan.
- Will facilitate GIS training, coordinates GIS activities of the department other facets of the organization.
- Reference/Utilize detailed drawings, maps, files and records through the use of computers, CAD programs and other associated equipment.
- Must have knowledge of electrical drawings and symbols.
- Produce detailed specifications, reports and standards for electrical construction.
- Work with customers and outside agencies in locating MID facilities.
- Prepare circuit and other drawings, maps, specifications, files and reports to support the operation and maintenance of the District's electric system.
- Prepare maps, and perform varied calculations for the District's electrical system.
- Coordinate project information (studies, sketches, computations, other complex data) for the engineering and construction of electric facilities including equipment relocations and replacements, capacity additions, reliability and automation improvements.
- Regular interfacing with other disciplines (such as civil and architectural engineers), clients and District personnel.

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- Provide engineering technical support to other District departments; insure compliance through, specifications, operating bulletins and directives with District Safety Rules, District policies and rules and regulations of other agencies that apply to District operations.
- May be required to procure equipment and materials for use in the field.
- Help establish specifications for use as standards.
- Assist in evaluating estimating and mapping software packages.
- Coordinate job scheduling with marketing, customer service and general construction.
- Perform other duties as requested, directed or assigned.

QUALIFICATIONS:

Any combination of experience and education that would prepare the candidate for the duties and responsibilities of the position is acceptable.

Education:

- Two (2) years of college with substantial course work in engineering to include drafting computer aided design, basic electrical theory and mathematics at the trigonometry level or three (3) years responsible experience in related field.

Experience:

- Three (3) years of responsible experience utilizing GIS systems, programming databases, establishing and maintain multiple GIS systems and applying associated software.
- Three (3) years Designer/Drafting experience with demonstrated history of completing projects of increasing complexity.
- Proven system development/integration and project management skills.

Ability to:

- Ability to read and interpret one-line and three-line complex drawings.
- Think logically and follow detailed instructions.
- Obtain information thorough interview; handle multiple assignments; work with interruptions. Analyze situations quickly and objectively and determine proper course of action.
- Efficiently produce plans and profile drawings including: grading, grounding, foundations, structures, conduit plans, and ensures drawings are clear, concise, and can be easily read and interpreted by construction personnel in the field. Prepare, maintain and revise detailed drawings, schematics, sketches and maps both manually and using computer aided design software (AutoCAD v.2008+ preferred) including various types of geographic information system software.
- Work effectively with other departments, agencies, contractors, customers and developers.
- Advanced problem solving skills.
- Multi-task with several complex and demanding concurrent projects.
- Communicate clearly and concisely, orally and in writing.
- Analyze system problems; identify and locate equipment.
- Interpret work requests.
- Explain computer operations to others.
- May be required to take the lead on a number of department projects.

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Knowledge of:

- Knowledge of the principles, practices, terminology and trends in the geographic information systems usage and modern land based mapping application theory
- Knowledge of applications of and ability to use computer operating systems, and various software programs including network software, current trends and developments in the field of GIS and computer technology.
- Familiarity with modern office procedures, methods and computer equipment, Global positioning system (GPS) data collection utilities.

Necessary Special Requirement:

- A valid California Class C Driver License and the ability to maintain insurability under the District's vehicle insurance program.
- High proficiency with ARCGIS and related software
- Abide by all District policies, guidelines and rules.

ENVIRONMENTAL FACTORS:

- Exposure to the sun: 10% or less work time spent outside a building and exposed to the sun.
- Irregular or extended work hours: Occasionally required to change working hours or work overtime.
- Work performed in an office and field environment

ESSENTIAL MENTAL ABILITIES:

- Exercise independent judgment.
- Self-directing and organized.
- Reason objectively.
- Assess, project and plan work activities on a daily and weekly basis.
- Interpret state/ federal/agency regulations.
- Document concisely, accurately and timely.
- Handle a variety of duties which may be interrupted or changed by immediate circumstances.

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TYPICAL PHYSICAL DEMANDS:

The physical demands described here are representative of those that must be met 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:

- Communicate orally and in writing with District management, co-workers, outside auditors, customers, and the public in face-to-face and one-on-one settings.
- Transport, set-up and removal of promotional equipment and materials at various public functions.
- Use of office equipment such as computer, copiers, scanners, and fax machines.
- Capable of negotiating stairways and uneven ground from time to time.

Sitting: Remains in a seated position for up to eight (8) hours per day

Hands/Arms: Operates computer for up to eight (8) hours per day

Lifting: Raises and lowers boxes and supplies up to twenty-five (25) pounds.

Stooping: Bends body downward and forward by bending at the knees or waist

Talking: Expresses ideas and shares information by means of spoken work in person and by telephone.

Hearing: Hears well enough to receive communications in person and by telephone.

Vision: Reads written and video messages for up to eight (8) hours per day. Operate vehicles and office equipment.

SUPERVISION:

The position receives general supervision from the Manager of Engineering & Operations, Energy Resources.

I have reviewed this Job Description with my Supervisor and agree with its contents.

Employee Signature/Date

Supervisor Signature/Date

The specific statements shown in each section of this job description are not intended to be all-inclusive. They represent typical elements and criteria necessary to successfully perform the job.