

SAN BERNARDINO MUNICIPAL WATER DEPARTMENT CLASSIFICATION SPECIFICATION

TITLE: GEOGRAPHIC INFORMATION SYSTEMS (GIS) COORDINATOR

DATE: 11/6/2012

JOB CODE: 51751

FLSA STATUS: EXEMPT

UNIT REPRESENTATION: MID-MGMT

Class specifications are intended to present a descriptive list of the range of duties performed by employees in the class. Specifications are not intended to reflect all duties performed within the job.

DUTIES SUMMARY

Under general direction of the Engineering Manager, provide coordination and oversight for the implementation of Geographic Information Systems, databases, and related technology within the Water Department. Perform a variety of activities, operations, and analysis associated with the support and implementation of Geographic Information Systems (GIS), Computer Aided Drafting (CAD), , and Information Technology (IT) development and support within the Water Utility and Water Reclamation Divisions. Compile and administer database applications for various Department projects and programs.

DISTINGUISHING CHARACTERISTICS

The class of GIS Coordinator is a lead/supervisory advanced professional level position in the Engineering technical/professional series. Work involves responsibility for the application of highly technical, complex, and professional knowledge and skills in various areas of GIS and Information Technology. This position provides technical expertise in an advisory role to employees, supervisors, and management staff; performs difficult and complex work involving research, analysis, and the preparation of sound recommendations at a policy level; and provides technical and/or functional supervision of technical staff. The incumbent in this class is expected to use independent judgment and frequently and independently carry out general administrative assignments. Supervision is received from the Engineering Manager; supervision may be exercised over subordinate and other Department employees as designated by the Director.

EXAMPLES OF DUTIES

The following duties are typical essential duties for positions in this classification. Any single position may not perform all of these duties and/or may perform similar related duties not listed here:

- Provides courteous and expeditious customer service to the general public and City Department staff;
- Routinely adheres to and maintains a positive attitude towards City and department goals;
- Establish enterprise standards and procedures for GIS data capture, formatting, integration, retrieval, updating, mapping, analysis, and documentation;
- Perform complex spatial analysis and solves complex technical GIS-related issues;

- Coordinate and perform analysis of critical data using the Department's GIS, CAD, modeling, and other information technology tools, including the preparation, entry, analysis, and plotting of data, production of high quality maps, drawings, exhibits, tabular, and statistical reports;
- Create, implement, and/or maintain databases for storage, manipulation, and retrieval of information; evaluate and revise database structures; define database information, access, and file structure elements through discussions with users; validate input sources of data into GIS layers and tables;
- Serve as project manager on GIS, database, GPS, or related projects; analyze information system needs; recommend solutions and appropriate technology to meet needs; evaluate proposed system hardware and software to ensure compatibility with existing systems; oversee the installation and evaluation of software and hardware; control, monitor, and report budget expenditures; order materials as needed; direct members of the project team; select and monitor contractors for outside services when required for a project; provide written reports and presentations on project status;
- Assist in the update and maintenance of the Master Plan including data acquisition, delivery, and tracking; maintain the Water System Hydraulic Model;
- Attend and participate in professional group meetings; serve as Department representative on various information technology related committees; stay abreast of new trends and innovations in the field of information technology; research possible technological tools to improve efficiency;
- Compose correspondence and interoffice memoranda; compile information from daily reports for monthly and annual report preparation;
- Serve as link to Information Technology Section staff; manage and coordinate all reports of hardware/software problems; assist with hardware/software upgrades and/or maintenance; provide technical support to staff as required;
- Coordinate acquisition, maintenance, and updates of County Assessor's Parcel Data, including parcels, subdivisions, tax areas, streets, and other physical attributes; coordinate acquisition and update of aerial imagery and survey data for use with GIS applications;
- Perform other related work as required.

QUALIFICATIONS

Any combination of education, training, and experience that would likely provide the knowledge, skills, and abilities to successfully perform in the position is qualifying. A typical combination includes:

Knowledge of:

- Geographic Information Systems (GIS) and ESRI software including Arc View, ArcEditor, Arc GIS Server, ArcInfo, ArcSDE, and GIS products including project files (.apr), map files (.mxd), and geodatabases; software: AutoCAD, Microsoft Windows, Word, Excel, Access, Power Point, Outlook, Internet Explorer, and Adobe Acrobat;
- Global Positioning System (GOS) data collection utilities;
- AutoCAD engineering symbology in AutoCAD drawings;
- Cartographic techniques, principles, and procedures;
- Basic principles of Civil, Water Utility, and Water Reclamation engineering;

- Basic terminology used in networking and desktop computer support;
- Principles and techniques of database design and programming;
- Problem solving/troubleshooting skills;
- Basic principles of supervision;

Ability to:

- Operate a variety of computer hardware and software including, but not limited to, desktops, laptops, tablets or other mobile computers, GPS devices, printers, scanners, and copiers;
- Interpret and analyze technical information;
- Write clear and concise technical reports;
- Supervise and/or lead employees to accomplish set goals;
- Coordinate, design, implement, maintain, and utilize a GIS system;
- Manage GIS mapping and analysis needs for multiple concurrent projects; design and produce high quality maps for reports and presentations;
- Participate in the budgeting process for GIS/CAD and Technological needs;
- Understand and edit complex engineering plans and drawings utilizing AutoCAD;
- Understand and carry out oral, written, and intuitive instructions;
- Establish and maintain effective relationships with those contacted in the course of work;
- Establish and maintain a positive attitude toward City and Department goals;
- Work under moderate stress conditions;
- Operate a vehicle observing legal and defensive driving practices;
- Maintain a driving record that meets vehicle code standards and is acceptable to the Department and its insurance carrier;
- Perform related work as required.

MINIMUM QUALIFICATIONS

An employee within this classification may be designated as a “key responder” and as such shall be required to respond to non-normal working hour emergency operational conditions.

Education: Equivalent to a Bachelor’s degree from an accredited college or university (120 semester or 180 quarter units) in computer science, environmental science, geography, and/or information systems, and

Experience: Three years of professional experience involving the design, implementation, and use of GIS, AutoCAD, and database applications as well as Microsoft Access, Outlook, Excel, and Word. General knowledge of and experience with network system design and operation.

NECESSARY SPECIAL REQUIREMENTS

Possession of a valid Class "C" California Motor Vehicle Operator's License. For out of state applicants, a valid Driver's License is required and a valid Class "C" California Motor Vehicle Operator's License must be obtained within ten (10) days of appointment (CA Vehicle Code 12505c).

PHYSICAL TASKS AND ENVIRONMENTAL CONDITIONS

There is frequent need to stand, sit, stoop, walk, and perform other similar actions during the course of the workday. Incumbents may be required to perform occasional moderately heavy physical labor. Incumbents require sufficient mobility to work in an office setting and operate office equipment, transport materials and supplies weighing up to 25 pounds, and to travel to various locations. Must be able to see in the normal visual range with or without correction with vision sufficient to read small print, computer screens and other printed documents. Must be able to hear in the normal audio range with or without correction. Employee accommodations for physical or mental disabilities will be considered on a case-by-case basis.

CAREER LADDER

From: GIS Coordinator

To: Sr. Business Systems Analyst

Job Description:

BOWC Approved: 6/24/2003
Rev: 3/22/2005
11/6/2012

Testing Standards: Open/Dept Promo/Suppl Appl:

CSB Approved 04/12/2005