MENDOCINO COUNTY GOVERNMENT CLASS SPECIFICATION

CLASS TITLE: GEOGRAPHIC INFORMATION SYSTEMS TECHNICIAN

DEPARTMENT: GENERAL SERVICES

REPORTS TO: GEOGRAPHIC INFORMATION SYSTEMS COORDINATOR

CIVIL SERVICE: YES BARGAINING UNIT: SEIU

CLASS CODE: 0156

FLSA STATUS: N

DATE: 7/07

JOB SUMMARY:

Under general supervision, performs specialized information technology work pertaining to the technical development, maintenance and support of County geographic information systems and programs; compiles, stores and analyzes data; assembles and develops cartographic maps; provides customer service support regarding technical system issues; and provides technical user training pertaining to assigned systems and equipment.

DISTINGUISHING CHARACTERISTICS:

This is a full working level specialized technician class. Positions in this class are allocated to the Information Services Division within the General Services Department. Incumbents preponderantly perform work of a technical nature, utilizing skills that require a thorough understanding of technical geographic information systems (GIS) procedures and processes. Duties are performed under general supervision, and incumbents work alone on routine or regular work assignments, checking with a supervisor only on non-routine assignments or when in doubt as to the correct procedures to follow. Assignments include the full range of technical duties pertaining to the GIS functional area, including user and system support for specialized GIS applications, systems and/or equipment.

SUPERVISION EXERCISED:

Incumbents in this class do not directly lead or supervise other employees.

EXAMPLES OF DUTIES: Duties may include but are not limited to the following:

- Provides technical GIS-related support within the General Services Agency; provides technical support pertaining to GIS planning, design, development, implementation, and system operations.
- Researches and compiles data from County records or other sources including legal descriptions, surveys and land/right-of-way/topography maps, roads, development plans and related geographical instruments; interprets various documents including surveys and plats and makes parcel boundary line determinations using accepted principles and practices.
- Prepares and maintains GIS datasets using specialized mapping applications and hardware; creates, edits, and manipulates vector data and their associated attribute data; completes data conversions and performs technical quality analysis.
- Enters data into base layers; ensures the integrity, quality and accuracy of information and data; conducts on-site inspections to identify and verify locations, markers and monuments.
- Uses geographical positioning system (GPS) receivers to collect geographic data and complete post-processing to increase the accuracy of the data.
- Utilizes mapping applications to design, develop and assemble cartographic quality maps for use by County departments or sale to the public; scans existing maps, archives and aerial photographs; edits digital photos for visual clarity; creates, revises and manipulates maps and mapping-related records.
- Provides GIS and GPS technical support for County employee system users; troubleshoots and resolves equipment and software problems, including data conversion and analysis issues; provides a timely, accurate and prompt response to customer service requests.
- Researches and recommends new tools, equipment and methodologies to expedite and/or improve processes.
- Participates on GIS development projects; communicates with vendors and contractors regarding products and services; provides technical support pertaining to hardware/software installation, testing, and other areas.
- Develops and provides user training.
- Continuously communicates with the supervisor regarding the status of assigned projects, issues, goals and objectives.
- Performs other related duties as assigned.

MATERIAL AND EQUIPMENT USED:

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- General office equipment
- Personal computer
- PC servers

MINIMUM QUALIFICATIONS REQUIRED:

Education and Experience:

Completion of 60 semester (or equivalent quarter) units from an accredited college or university, with major coursework in geography, engineering, drafting, cartography, architecture, computer science, information systems or a related field, AND two years of progressively responsible GIS technical support experience that included system development, maintenance, troubleshooting and customer service. An equivalent combination of education, training and/or experience <u>may</u> also be qualifying.

Licenses and Certifications:

A valid California driver's license is required.

KNOWLEDGE, SKILLS, AND ABILITIES:

Knowledge of:

- Basic methods and techniques of providing GIS technology support, maintenance and administration including areas such as software/hardware installation, troubleshooting and testing.
- Basic principles geography and mapping.
- Principles and practices of information technology customer service.
- Routine technical programming and scripting techniques.
- Basic data organization and access methods in GIS applications.
- Standard business software tools such as database management, word processing, spreadsheet, e-mail, Internet browser programs.
- Methods and techniques of performing technical research, statistical compilation and report development.
- Basic principles and practices of technology project management.
- State, federal and local ordinances, laws, rules and regulations pertaining to public sector technology and telecommunications management.
- Standard business arithmetic, including percentages and decimals.

Skill in:

- Using tact, discretion, initiative and moderately independent judgment within established guidelines.
- Identifying technology related problems.
- Responding to customer requests.
- Researching, compiling and summarizing information, including statistical data.
- Organizing work, setting priorities, meeting critical deadlines and following up on assignments with a minimum of direction.
- Preparing cost estimates.
- Applying technical knowledge to solve problems or accomplish tasks.
- Communicating clearly and effectively, both orally and in writing.
- Preparing clear and concise reports, correspondence and other written materials.
- Establishing and maintaining effective working relationships within a customer service-oriented environment and with outside agencies.

Mental and Physical Abilities:

- Read, analyze and interpret moderately complex technical information including technical procedures and government regulations.
- Understand and carry out written and oral instructions with close attention to detail and accuracy.

Geographic Information Systems Technician

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- Adapt to and plan for changes in assignment and in the work environment.
- Work cooperatively and effectively with staff, customers, vendors and the public.
- Coordinate and perform multiple tasks simultaneously in a consistent and accurate manner.
- Investigate and evaluate information quickly and accurately and recommend an appropriate course of action.
- Communicate technical information systems concepts in a timely and understandable fashion to non-technical personnel.
- Work effectively with subordinates and superiors.
- Interpret information that includes both abstract and concrete variables.
- While performing the essential functions of this job, the incumbent is regularly required to walk, stand, bend and sit; use
 hands to operate a keyboard, grasp, handle, or feel objects; reach with hands and arms, above the shoulders and below
 the waist; speak and hear normal speech in person and on the telephone; and lift, carry, push and pull objects up to 20
 pounds.

Working Conditions:

- Most work is performed in a normal office environment with little exposure to outdoor temperatures, dirt and dust.
- Some work may be performed in an outdoor or other environment where exposure to weather and/or dust can occur.
- The incumbent's typical working conditions are moderately quiet, but may include frequent exposure to computer noise.
- Duties may require some evening, weekend, holiday and/or on call work.

This class specification should not be interpreted as all-inclusive. It is intended to identify the essential functions and requirements of this job. Incumbents may be requested to perform job-related responsibilities and tasks other than those stated in this specification. Any essential function or requirement of this class will be evaluated as necessary should an incumbent/applicant be unable to perform the function or requirement due to a disability as defined by the Americans with Disabilities Act (ADA). Reasonable accommodation for the specific disability will be made for the incumbent/applicant when possible.