GIS TECHNICIAN III

JOB PURPOSE AND SUMMARY

Analyzes requests for Geographic Information System (GIS) products and creates programs to generate maps and reports. Responsibilities include: interviewing clients to determine elements of requests; writing programs for the creation of mapping products; interpreting and researching legal documents; preparing maps according to specified criteria; training entry level Technicians in programming techniques; assisting other departments and the public with requests for mapping products and other information.

CLASSIFICATION DISTINCTIONS

This is the full journey level in Geographic Information Systems Technician job family. Incumbents perform the full range of GIS data base manipulation including the full responsibility for producing complex mapping products. Incumbents are expected to apply expert knowledge in developing programs for products and in the updating and maintaining mapping layers. Knowledge of ARC/INFO software, and cadastral principles are essential to the work.

The GIS Technician III is distinguished from the second and entry levels in the complexity and variety of tasks. The work at this level involves the creation of detailed and complex programs for the development of mapping products and an advanced understanding of cadastral principles.

The Technician III applies advanced knowledge of the macro programming language and trains lower level Technicians. Digitizing, data entry and data base updating are not routinely assigned to this level.

KEY OR TYPICAL TASKS AND RESPONSIBILITIES:

- Create spatial overlays and compose plots in support of staff projects by combining information from a variety of existing data layers and creating and using programming language.
- Plan and sequence processing steps involved in the development of mapping products.
- Create mechanisms within the system to insure accurate calculation of acreage and square footage.
- Examine requests for mapping products and determine and develop programs and methods of production; consult with individuals requesting products to clarify requests and determine features to include.

- Train lower level Technicians in data base automation and use of the operating system, development of programs and other aspects of GIS; assist employees and the general public with requests for maps.
- May lead other Technicians as needed.

QUALIFICATIONS

Education and Experience:

Education equivalent to a Bachelor's Degree from an accredited college with major course work in geography, planning, computer science, landscape architecture, or related disciplines, and two years of experience in the application of ARC/INFO software.

Any combination of training and experience that would provide the required knowledge, skills and abilities will be considered.

Knowledge of : ARC/INFO software and computer mapping techniques; legal descriptions pertaining to land ownership; research methods to determine right of way and ownership history; Principles of geographic mapping and cartography; mathematics, statistics and spatial data analysis.

Ability to: operate and use ARC/INFO Unix work stations and various other computer aided devices such as PC's, digitizers and plotters; define programming sequencing necessary to produce maps; interpret legal documents and translate legal descriptions into the data base; distinguish gradations of color; understand and respond to mapping requests from the public; read, understand and work with a variety of mapping data; establish and maintain working relationships with employees and the public.

WORK ENVIRONMENT & PHYSICAL DEMANDS:

Incumbents typically work in an office setting. Work involves the use of a variety of computer tools necessitating extended periods of time working at color VDT's and color plotting equipment.

Essential tasks include use of the telephone and considerable face to face interaction with others including staff from other departments and from outside the County, the use of personal and other computer equipment and software and the ability to distinguish gradations of color.

Office use: 6/22/00 Revised: 7/05