## **GEOGRAPHIC INFORMATION SYSTEMS ANALYST**

Code No: 4-14-165 Competitive

<u>DISTINGUISHING FEATURES OF THE CLASS</u>: This is a technical position responsible for developing and assimilating Geographic Information Systems (GIS) in a municipality. Duties include performing field work, and working in various weather conditions and on uneven terrain. The employee reports directly to, and works under the general supervision of a Manager of Operations – GIS or other higher level staff member. General supervision is exercised over a subordinate staff. Does related work as required.

**TYPICAL WORK ACTIVITIES:** (All need not be performed in a given position. Other activities may be performed although not listed.)

Assimilates projects related to the County-wide or department/jurisdictional-specific GIS computer system with other departments, local governments, public utilities and/or private businesses;

Collects and analyzes data by different geographic areas;

Coordinates the department/jurisdiction's information services function as it relates to mapping and technical data including network, personal computer, and peripheral systems administration and maintenance, license management and software/hardware acquisition;

Collects and maintains information and develops customized reports on municipal utility infrastructure such as sewers, fiber optics and highways, facility infrastructure relating to heating, ventilating, air conditioning (HVAC), electrical and mechanical equipment, and population, housing, economic indicators, land use and other data, or technical data related to environmental projects:

Performs raster analysis utilizing remote sensing information;

Communicates with written and graphical reports, public presentations, electronic and print media distribution, and speaking in small and large group settings;

Operates the County or department/jurisdictional-specific GIS including programming in custom scripting, data base management, base map creation and maintenance, map production and application development and maintaining other computer peripherals:

Manages projects and supervises staff;

Identifies data sources and establishes methods for collecting and updating information;

Creates, maintains and updates computer data files as needed.

FULL PERFORMANCE KNOWLEDGE, SKILLS, ABILITIES AND PERSONNEL CHARACTERISTICS: Good knowledge of municipal GIS applications; good knowledge of current GIS software products; good knowledge of statistical analysis techniques and methods; good knowledge of data base management utilizing various software programs; good knowledge of programming in various languages; working knowledge of the manner in which municipal governments conduct business; ability to schedule and coordinate work flow; ability to establish and maintain effective working relationships; ability to communicate effectively orally and in writing; ability to sort, arrange and file material; ability to perform work accurately; good judgment; physical condition commensurate with the demands of the position.

**MINIMUM QUALIFICATIONS:** Graduation from high school or possession of an equivalency diploma plus EITHER:

- (A) Graduation from a regionally accredited or New York State registered college or university with a Bachelor's or Master's degree in Geographic Information Systems, Geography, Planning, Civil Technology, Engineering, Environmental Science, Environmental Management, or one of the natural sciences (physical and biological such as Biology, Botany, Chemistry, Earth Science, Physics and Zoology and their sub-fields), or a computer science/information technology field, plus one (1) year paid full-time or its part-time equivalent experience working with data and information analysis in either: planning, physical services or an engineering field, which must have involved the utilization of a Geographic Information System for data development and spatial analysis; OR,
- (B) Graduation from a regionally accredited or New York State registered college or university with a Certificate in Geographic Information Systems or an Associate's degree in one of the fields mentioned in (A) above, plus three (3) years paid full-time or its part-time equivalent experience working with data and information analysis in either: planning, physical services or an engineering field, and at least one (1) year of which must have involved the utilization of a Geographic Information System for data development and spatial analysis; OR
- (C) Graduation from a regionally accredited or New York State registered college or university with an Associate's, Bachelor's, or Master's degree plus four (4) years paid full-time or its part-time equivalent experience working with data and information analysis in either: planning, physical services, or an engineering field, at least one (1) year of which must have involved the utilization of a Geographic Information System for data development and spatial analysis; OR,
- (D) An equivalent combination of education and experience as defined by the limits of (A), (B), and (C) above.

**SPECIAL REQUIREMENTS**: If you are appointed, you will be required to possess a valid New York State license to operate a motor vehicle or otherwise demonstrate your capacity to meet the transportation needs of the position.

ADOPTED: February 9, 1995 REVISED: February 6, 1997 REVISED: May 8, 1997 REVISED: July 10, 1997

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