

GEOGRAPHIC INFORMATION SYSTEMS TECHNICIAN III

Department: Planning and Development

Classification: Competitive

Specification Number: 3350

Approved: 8/18/23

Revised: By JG

MINIMUM QUALIFICATIONS

OPEN COMPETITIVE

Graduation from a college with federally-authorized accreditation or registration by NY State with a Bachelor's degree in geography, planning, cartography, the natural or environmental sciences, or a related field plus (2) years of experience in computer-aided drafting, design, map drafting, or with a Geographic Information System.

NOTE: Additional experience in computer-aided drafting, computer-aided design, computer-aided map drafting, or with a Geographic Information System may be substituted for education on a year-for-year basis up to a maximum of four (4) years. Candidates must have graduated from a standard high school or possess a high school equivalency diploma.

PROMOTIONAL

Two (2) years of permanent competitive status as a Geographic Information Systems Technician II.

DISTINGUISHING FEATURES OF THE CLASS

An employee in this title performs complex technical and administrative Geographic Information Systems (GIS) work, including the oversight of a GIS network and systems operation, and may provide technical guidance and training to GIS Technicians I and II. Supervision may be exercised over technical and support staff. The employee will prepare complex map layouts, architectural renderings and site plans. Responsibility will include development of complex technical evaluations, maintenance of GIS data and equipment, and the selection of equipment and software to meet those needs. Work is performed under general technical or administrative supervision. Duties require independent judgment and initiative. Does related work as required.

TYPICAL WORK ACTIVITIES

- Works with GIS staff, other departments, consultants, and vendors to enhance GIS operations;
- Trains personnel in the use of GIS software and applications;
- May supervise the work of Geographic Information Systems Technicians I and II and other support staff;
- Performs high level GIS programming, analysis, design, testing, and implementation tasks in a team environment;
- Prepares site plans, architectural renderings, and/or complex map layouts using various Geographic Information Systems or other graphics software package;
- Prepares organization workflows, statistical reports and analyses utilizing GIS computer software;
- Designs and customizes computer programs to develop GIS applications for departmental workflows and public internet access;
- Utilizes advanced GIS software to produce 2D and 3D models;
- Researches new technology to enhance GIS and makes recommendations for new computers, peripheral equipment and software;
- Develops modernization plan including software and hardware recommendations;
- Analyzes distributive GIS processing and sharing methods;
- Develops modernization plan including software and hardware recommendations.

KNOWLEDGE, SKILLS, ABILITIES AND PERSONAL CHARACTERISTICS

Thorough knowledge of the principles and techniques of map drafting including GIS theory, spatial analysis, the use of map projections and geoprocessing tools; good knowledge of data file management; ability to read and interpret maps, charts, plans and survey notes; ability to express oneself and present highly technical information clearly and concisely both orally and in writing; ability to provide training and technical guidance to lower level personnel; ability to supervise personnel in a manner conducive to full performance and high morale; physical condition commensurate with the physical demands of the position.