GENESEE COUNTY

ENGINEERING TECHNICIAN

<u>DISTINGUISHING FEATURES OF THE CLASS</u>: This is routine technical work involving responsibility for performing field survey work and for drafting plans and making elementary engineering computations. In addition, an employee in this class inspects work in progress to determine conformity with plans and specifications. The work is performed under direct supervision of a higher level Engineering Technician, in accordance with established procedures. Technical supervision may occasionally be exercised over construction employees. Does related work, as required.

TYPICAL WORK ACTIVITIES:

- Inspects, inventories and collects data of existing infrastructure to include, but not limited to, highways, pavement markings, bridges, culverts, guiderail, traffic control devices and obstructions via visual observation, survey or global positioning system location;
- Prepares surveys, elevations, grades and layouts for culvert, bridge, guiderail, drainage courses and other highway construction as required. Performs routine drafting work from rough sketches, computations, grade lines and base mapping;
- Inputs and maintains asset management information through the use of spreadsheets, databases and geographic information systems;
- Reviews engineering specifications and drawings for accuracy, detail and adherence to federal, state and local codes and regulations. Ensures conformity to plans and specifications including the use of specified materials and quantities. Performs a variety of computations involving the quantity of materials and costs;

Reviews and files permit applications and performs various routine clerical work; Maintains as-built drawing files and reviews tax maps for accuracy;

Coordinates and collects data and ensures contract performance for vendor placed products such as pavement markings, chipseal and other surface treatments.

The above examples of duties are intended only as illustrations of the various types of work performed. The omission of specific statements of duties does not exclude them from the position if the work is similar, related or a logical assignment to the position.

<u>CHARACTERISTICS</u>: Good knowledge of field survey techniques and methods, including global positioning systems; good knowledge of drafting and mechanical drawing by rough sketch and through the use of a Computer Aided Drafting program (i.e. AutoCad); good knowledge of computers including word processing, spreadsheets, databases, internet applications, email and geographical information systems; ability to read maps, drawings and interpret specifications; ability to use mathematical, trigonometric, and logarithmic calculations; ability to carry out written and oral instructions; ability to communicate and get along with the public; good mechanical aptitude, thoroughness and dependability.

The physical demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

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While performing the duties of this job, the employee is occasionally required to reach with hands and arms. The employee constantly is required to stand; walk; and use hands to finger, handle, feel or operate objects, tools, or controls. The employee is occasionally required to sit; climb or balance; stoop, kneel, crouch, or crawl; and talk or hear.

The employee must occasionally lift and/or move up to 50 pounds. Specific vision abilities required by this job include close vision, distance vision, and the ability to adjust focus.

The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

While performing the duties of this job, the employee regularly works in outside weather conditions. The employee is frequently exposed to wet and/or humid conditions. The employee is occasionally exposed to risk of electrical shock.

The noise level in the work environment is usually moderate.

MINIMUM QUALIFICATIONS: EITHER:

A. Possession of an Associate Degree or higher in Construction Management, Engineering or Engineering Technology;

OR:

B. Possession of a high school diploma or an equivalency diploma recognized by the New York State Department of Education AND two years of full time paid experience involving engineering field survey work, engineering drafting or related work in an engineering office or field force; project management; geographical information systems;

OR:

C. Any equivalent combination of training and experience as indicated in A or B above.

Possession and maintenance of an appropriate valid license(s), as required.

NOTE: Your degree must have been awarded by a college or university accredited by a regional, national, or specialized agency recognized as an accrediting agency by the U.S. Department of Education/U.S. Secretary of Education. If your degree was awarded by an educational institution outside the United States and its territories, you must provide independent verification of equivalency. A list of acceptable companies who provide this service can be found on the internet at http://www.cs.ny.gov/jobseeker/degrees.cfm. You must pay the required evaluation fee.

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All qualified applicants will be afforded equal employment opportunities without discrimination because of race, creed, color, national origin, sex, age, disability or marital status.

Competitive Class Revised 2/18/77, 1/1/81, 9/20/85, 4/9/99, 4/30/10, 11/5/24