TRAFFIC ENGINEER

DISTINGUISHING FEATURES OF THE CLASS: This is a professional engineering position involving the analysis of traffic operations and the evaluation of traffic patterns for existing and proposed roads, streets and highways. The incumbent conducts traffic studies to determine traffic control needs and prepares detailed statistical and narrative reports on current and future traffic conditions. The position differs from other Engineer positions because of the concentration on traffic. The work is performed under the general supervision of the Director of Transportation Planning. Supervision is exercised over seasonal employees engaged in collecting traffic data. Does related work as required.

TYPICAL WORK ACTIVITIES:

Conducts short range traffic studies involving the review of traffic capacity, highway geometrics, safety measures and legal constraints;
Reviews highway construction plans in order to determine the appropriate traffic patterns;
Assures that traffic control devices, including signals, signs and pavement markings, adhere to warranted specifications;
Analyzes accident statistics and recommends remedial measures;
Conducts long range transportation planning studies involving computer modeling, traffic forecasting and alternatives analysis;
Collects data describing the highway network in the Broome County urban area which includes traffic counts, intersection geometrics, pavement inventories and other related factors;
Participates in meetings of local traffic boards, Metropolitan Planning Organizations and Committees, and legislative bodies, advising public officials on matters of traffic engineering;
Interprets and explains policies of the agency to the public;
Serves as liaison to advisory committees, the New York State Department of Transportation and the County Department of Pubic Works to identify specific problems while developing and implementing solutions;
Records data, prepares records and maintains necessary files;
Performs a variety of traffic engineering studies involving the use of computer programs and models;
Participates in the selection of outside consulting firms;
Monitors consultants work by reviewing plans and reports, evaluating compliance with policy, standards, procedures, schedules;
Reviews work of consultants and staff for compliance with specifications, local law, codes and regulations;
Reviews project proposals, design reports, and plan sets for federally funded projects located within the BMTS Planning Area boundary.

FULL PERFORMANCE KNOWLEDGES, SKILLS, ABILITIES AND PERSONAL CHARACTERISTICS:

Good knowledge of the purposes, principles, practices, methods and terminology used in civil and transportation engineering;

Good knowledge of the principles of transportation safety including accident surveillance, regulation and techniques of risk and hazard reduction, traffic flow, accident analysis and design of safety studies;
Good knowledge of the terminology, tools and materials used in the construction of roads and bridges;
Good knowledge of the characteristics of freight movement as well as infrastructure design and operation requirements of large trucks;
Good knowledge of traffic laws and regulations pertaining to traffic control;
Working knowledge of applicable codes, laws, rules, regulations and procedures governing engineering design and construction;
Skill in conducting traffic engineering research;
Ability to prepare plans and narrative reports;
Ability to organize and supervise the conduct of transportation studies;
Ability to conduct and analyze traffic studies;
Ability to communicate effectively both orally and in writing;
Ability to lead, direct and review the work of others;
Ability to train, supervise and mentor subordinate staff and/or interns/seasonal employees;
Ability to understand complex oral and written directions;
Ability to establish effective working relationships with civic leaders, public officials, consultants and the general public;
Ability to analyze and evaluate complex data, write comprehensive reports and make practical recommendations;
Ability to analyze factual data and to prepare graphs, diagrams and reports;
Physical condition commensurate with the demands of the position.

MINIMUM QUALIFICATIONS

A) Graduation from a regionally accredited or New York State registered college or university with a Master's Degree in civil engineering, traffic engineering, transportation engineering or closely related field; OR

B) Graduation from a regionally accredited or New York State registered college or university with a Bachelor's Degree in civil engineering, traffic engineering, transportation engineering or closely related field and one year of engineering experience which included conducting traffic studies, road/street/highway design or transportation planning; OR

C) Graduation from a regionally accredited or New York State registered college or university with an Associate's Degree in civil technology or engineering science or closely related field and three years of experience as described above; OR

D) Possession of a license issued by the State of New York as a Professional Engineer or as a Professional Transportation Operations Engineer or Professional Transportation Planner as issued by the ITE Transportation Professional Certification Board ; OR

E) An equivalent combination of training and experience as defined by the limits of A), B),C) and D) above.

SPECIAL REQUIREMENT AT TIME OF APPOINTMENT: Possession of the appropriate level Motor Vehicle Operator's License.

R397 09/23/16 COMPETITIVE