JUNIOR ENGINEER

DISTINGUISHING FEATURES OF THE CLASS:

This is professional engineering work involving carrying out complex technical duties and applying the principles of civil engineering to a variety of engineering problems. This work is performed under general supervision. Supervision may be exercised over a small number of sub-professional or laboring employees.

TYPICAL WORK ACTIVITIES:

- 1. Drafts and designs plans and profiles for the construction of civil engineering projects;
- 2. Uses and supervises the use of instruments in making observations and in gathering and recording engineering data;
- 3. Conducts surveys to establish or re-establish property lines, to map developed areas, and to run location lines for roads etc.;
- 4. Supervises the activities of field parties engaged in road or other topographic surveys, collection of data for computation of quantities and payment to contractors, and traffic control surveys;
- 5. Supervises and inspects minor construction and maintenance work on highway and bridges;
- 6. Inspects construction materials to see that they conform to specifications;
- 7. Prepares progress reports, keeps records of work done and changes in plans and specifications;
- 8. Performs and checks design computations and plans of other engineers for routine errors;
- 9. May oversee the work of laborers and sub-professional engineers and assist with their training;
- 10. Does related work as required.

FULL PERFORMANCE KNOWLEDGE, SKILLS AND ABILITIES:

Good knowledge of the principles of engineering, physics, and mathematics as related to civil engineering; working knowledge of construction and engineering practices; ability to make moderately difficult and technical computations and to compile engineering data; skill in the use of engineering field and office instruments; ability to get along well with others; mental alertness; ability to read and interpret engineering drawings and specifications; physical condition commensurate with the demands of the position.

MINIMUM QUALIFICATIONS:

- EITHER: (A) Graduation from a regionally accredited or New York State recognized college or university with a bachelor's degree in civil engineering or a related field;
- OR: (B) Graduation from a regionally accredited or New York State recognized college or university with an associate's degree in civil engineering or a related field and three years of technical civil engineering or related engineering work including construction, surveying, design, inspection, or estimating;
- OR: (C) Graduation from high school or possession of an equivalency diploma and six years of technical civil engineering work including construction, surveying, design, inspection, or estimating;
- OR: (D) An equivalent combination of training and experience as indicated in (A), (B) and (C) above.

SPECIAL REQUIREMENT:

A department head may require the possession of a valid New York State Operator's license at time of appointment.

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REVISED: 11/24/78 09/27/83