## JUNIOR ENGINEER (CONSTRUCTION)

DISTINGUISHING FEATURES OF THE CLASS: Under supervision, incumbents perform entry-level construction engineering and complex technical work. Incumbents conduct inspections, prepare simple designs, calculate data, prepare cost estimates, project updates and daily work records. Incumbents may be assigned regularly to any type of engineering work, i.e. buildings, roads, parks, sewers, structures, etc., for regular assignment or training. The incumbent may work independently on less complex and routine projects and under direct supervision on more difficult tasks. As the incumbents skill and knowledge increases, less direction is received. Each level engineer, in this title series, takes part in the production of details, plans, specifications, etc. The difference between the Junior Engineer and Assistant Engineer is in the length of experience, judgment and independent action required. Advancement depends on the attainment of higher level skills and on the regular assignment to jobs requiring those skills. Supervision is not a responsibility, however guidance and direction may be given to a small number of non-professional employees. Does related work as required.

EXAMPLES OF WORK: (Illustrative Only)

Takes measurements and obtains cost data;

Obtains data for computation of quantities;

Makes surveys for determining payments to contractors;

Inspects construction work in buildings, roads, parks, highways, bridges and sewers;

Inspects construction materials to see that they conform to specifications;

Prepares daily progress reports;

Computes and checks estimates;

Reviews and approves contractors monthly requisitions.

Uses computer applications or other automated systems such as spreadsheets, word processing, calendar, e-mail and database software in performing work assignments.

<u>REQUIRED KNOWLEDGE, SKILLS, ABILITIES AND ATTRIBUTES</u>: Good knowledge of surveying; good knowledge of the principles of highway engineering and soil mechanics; good knowledge of the methods and equipment used in construction; good knowledge of computer assisted design, CAD; familiarity with the design and analysis of structures; skill in surveying, topographical mapping, and drafting; ability to use computer applications such as spreadsheets, word processing, e-mail and database software; ability to prepare and interpret specifications and contract estimates; ability to perform mathematical computations applied to engineering problems; ability to get along well with others; accuracy; reliability; resourcefulness; good judgment; physical condition commensurate with the demands of the position.

<u>MINIMUM ACCEPTABLE TRAINING AND EXPERIENCE</u>: Either (a) a Bachelor's Degree\* in Civil, Electrical, or Mechanical Engineering; or (b) a Bachelors Degree\* in Civil Technology, Electrical Technology, or Mechanical Technology and one year of engineering experience.

<u>\*SPECIAL NOTE</u>: Education beyond the secondary must be from an institution recognized or accredited by the Board of Regents of the New York State Education Department as a post-secondary, degree-granting institution.

West. Co. J. C.: Competitive MML5 1 Job Class Code: C0576 Job Group: IX