

Jurisdiction: Oneida County
& Water Board
Jurisdictional Class: Competitive
Revised: 5/28/97

SENIOR ENGINEERING AIDE

DISTINGUISHING FEATURES OF THE CLASS: This position exists at the Upper Mohawk Valley Regional Water Board and the Oneida County Department of Public Works, and is responsible for the more difficult sub-professional assignments in civil engineering work, including supervision of field survey parties, and the inspection of construction work and materials. Assignments, received orally or in writing, are of a general nature thus allowing opportunity for the use of independent judgement in choosing methods for accomplishing a particular task. Supervision is usually exercised over subordinate engineering aides and other lower ranking personnel. Work is subject to review in process, and upon completion, by professional engineering personnel. This class is distinguished from that of Engineering Aide by reason of the greater degree of independence with which an employee works, the higher technical skills required and the increased supervisory responsibilities. Does related work as required.

TYPICAL WORK ACTIVITIES: (Illustrative Only)

Serves as chief of field party, or second-in-command to party chief, on survey projects;
Supervises survey work, takes notes and makes sketches;
Uses transits, levels and automatic distance measuring equipment and instructs others in their operation;
Solves survey problems requiring proficiency in trigonometry;
Performs engineering tests on construction materials when properly instructed and supervised by higher ranking personnel, including tasks of an Engineering Aide;
Assumes responsibility for work results in progress of field party;
Assists engineers by inspecting portion of construction projects;
Makes and checks engineering drawings on minor projects;
Computes earthwork quantities;
Makes estimates of quantity of construction materials and other items;
Receives records, charts and statistical information from the field;
Prepares detailed reports from professional engineering superiors.

FULL PERFORMANCE KNOWLEDGE, SKILLS, ABILITIES AND PERSONAL

CHARACTERISTICS: Good knowledge of the principles and techniques of surveying and drafting; good knowledge of mathematics, including geometry and trigonometry and their application to field surveying and engineering computations; working knowledge of micro-computer assisted drafting and design; skill in the use of engineering instruments and equipment; ability to understand construction specifications when given oral or written instructions from superiors; ability to perform more difficult technical computations; ability to use a micro-computer in drafting and design.

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MINIMUM QUALIFICATIONS: Either:

- (A) Graduation from a regionally accredited or New York State registered college or university with an Associate's Degree in civil engineering technology, engineering science, or a closely related field; **OR**
- (B) Graduation from high school or possession of a high school equivalency diploma, supplemented by a course or courses in surveying, drafting or mathematics **AND** two (2) years of experience involving surveying, drafting or related work, which shall have involved use of a micro-computer; **OR**
- (C) An equivalent combination of training and experience, as defined by the limits of (A) and (B) above.

NOTE: Verifiable part-time and/or volunteer experience will be pro-rated toward meeting full-time experience requirements.