

Jurisdiction: Oneida County
Jurisdictional Class: Competitive
Revised: 8/15/01

ASSISTANT CIVIL ENGINEER

DISTINGUISHING FEATURES OF THE CLASS: This position exists in the engineering division of the Oneida County Department of Public Works and involves engineering work of a moderately difficult caliber; involving the exercise of engineering judgement based on knowledge in both theory and practice of engineering principles. The work involves supervision of engineering and technical employees by giving instructions and checking completed work. Major technical problems are discussed with Senior Civil Engineers or Deputy Commissioners. Employees in this class exercise independent judgement in planning work details and technical decisions. Does related work as required.

TYPICAL WORK ACTIVITIES: (Illustrative Only)

Prepares plans and specifications for engineering projects including highways, bridges, airports, buildings, structures and flow systems;
Makes field investigations regarding construction projects, site selection and survey projects;
Assists in preparation of specifications for maintenance and construction equipment;
Prepares time schedules, cost estimates, daily reports, material approvals, and other tasks associated with the supervision of construction projects.
Designs roads, bridges, parts of building, structural, architectural, heating ventilating, air conditioning, plumbing and electrical systems for buildings and related facilities;
Inspects construction work for conformance with plans and specifications, inspects physical and operational condition of existing roads, bridges and buildings;
Writes job specifications for projects of limited difficulty with guidelines from standard specifications, codes, and regulations;
Develops plans and cost estimates and contract documents for projects of limited difficulty;
Prepares estimates of quantities of materials and work progress for contractor payments;
Prepares and maintains records, project data, and may utilize computer systems;
Prepares drawings of bridges, buildings and other structures from computations or rough drafts;
Develops plans and profiles of roads and bridges;
Develops plans, sections, elevations and schematics for architectural, structural, electrical, heating, ventilating, air conditioning and plumbing systems for buildings and related facilities;
Coordinates projects, including liaison with contractors and vendors schedule projects, determines space needs, equipment layout, traffic flow patterns and material options;
Conducts quality tests of materials used in construction;
Conducts surveys to establish or re-establish property lines, to map developed areas and to run location lines for roads, bridges, and other facilities;
Records data, prepares records and maintains files necessary for the functioning of the Engineering Division;

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TYPICAL WORK ACTIVITIES CONT.

Processes necessary paperwork for construction contracts such as: minority business requirements, insurance coverage, wage rate documents, claims, releases, payment records;

May participate in establishment of Right-of Way by developing property maps and conducting negotiations;

May investigate traffic conditions and prepare informational reports and recommendations.

FULL PERFORMANCE KNOWLEDGE, SKILLS, ABILITIES AND PERSONAL

CHARACTERISTICS: Good knowledge of engineering principles and practices, including major civil engineering categories of environmental, structural, surveying and flow systems; good knowledge of the principles of engineering theory; good knowledge of the procedures and practice of engineering including design and specification writing, drafting, inspections and surveys; good knowledge of the terminology, tools and materials used in the construction of roads, bridges and buildings; working knowledge of applicable codes, laws, rules, regulations and procedures governing engineering design and construction; ability to express directions through plans and specifications for engineering projects; ability to prepare plans, designs, specifications, right-of-way maps and narrative reports; ability to establish cooperative relationships with contractors, consultants, vendors, co-workers and other staff; mechanical aptitude; accuracy.

MINIMUM QUALIFICATIONS: Either:

- (A) Graduation from a regionally accredited or New York State registered college or university with a Bachelor's Degree in civil or environmental engineering or civil engineering technology **AND** one (1) year of experience involving civil or environmental engineering; **OR**
- (B) Graduation from a regionally accredited or New York State registered college or university with an Associate's Degree in engineering technology or a closely-related field **AND** three (3) years of experience, as describe in (A) above.