

Jurisdiction: City of Ithaca
Jurisdictional Class: Competitive
Adopted: 02/11/87
Revised: 10/15/91, 05/19/97, 09/07/22

CIVIL ENGINEER

DISTINGUISHING FEATURES OF THE CLASS: This is a full performance engineering position requiring knowledge and experience in a wide range of professional engineering duties. The work is performed in accordance with established engineering principles with flexibility allowed for choosing methods and materials. The incumbent is given general directions in projects including design, specification writing, inspections, surveys and project coordination. The position differs from that of Assistant Civil Engineer in that assignments are more complex with relative independence allowed in deciding work methodology and materials. The position may involve supervision of Engineering Aides, Technicians and Assistant Civil Engineers. Does related work as required.

TYPICAL WORK ACTIVITIES:

Develops engineering design for roads, bridges, buildings, electronic and heating facilities;
Writes job specifications for projects of moderate difficulty;
Develops plans, cost estimates and contract documentation for projects of moderate difficulty;
Evaluates contract proposals, negotiates revisions and participates in getting final agreement;
Inspects construction for conformance with contract provisions;
Interprets for contractor and field staff contract specifications and construction standards and resolves differences in interpretation;
Monitors consultants work by reviewing plans and reports, evaluating compliance with policy, standards, procedures, schedules and contracts, coordinating the consultants work with the agency programs and preparing periodic reports;
Prepares estimates of material quantities and work progress for contractors payments;
Prepares and maintains project progress reports and data;
Coordinates projects including liaison with contractors and vendors, scheduling and gathering general project information for reports;
Prepares drawings of bridges, building and other facilities from computations or rough drafts;
Develops plans and profiles for roads, bridges, buildings, electrical and heating specifications;
Conducts surveys to establish or re-establish property lines, to map developed areas and to run location lines for roads, bridges and other facilities;
Researches engineering procedures and materials to determine the best methods and materials to use in an assigned project;
Drafts and traces property and acquisition maps;
May participate in establishment of Right of Way by developing Right of Way maps and conducting negotiations;
May investigate traffic conditions and prepare informational reports and recommendations;
May train and supervise subordinate staff.

FULL PERFORMANCE KNOWLEDGE, SKILLS, ABILITIES, PERSONAL CHARACTERISTICS:

Good knowledge of the principles and practices of engineering theory; good knowledge of construction procedures including design, specification writing, inspections and surveys; good knowledge of the tools, terminology and materials used in the construction of roads, bridges and buildings; good knowledge of the codes, laws, rules, regulations and procedures governing engineering design and construction; ability to conduct studies pertaining to the best methods and materials to use in an engineering project; ability to prepare plans, specifications and narrative and tabular reports; ability to coordinate engineering projects of moderate difficulty; ability to train and supervise a small number of subordinate staff; ability to establish cooperative relationships with contractors, vendors, co-workers and other staff; ability to successfully work with and serve a diverse local community; mechanical aptitude; accuracy; physical condition commensurate with the demands of the position.

MINIMUM QUALIFICATIONS:

- A. Possession of a Bachelor's Degree in Engineering Technology or a related field and one year of full-time paid experience performing engineering design, specification writing, inspections or surveys; or
- B. Graduation from high school or possession of a high school equivalency diploma and five years of full-time paid experience performing engineering design, specification writing, inspections or surveys; or
- C. An equivalent combination of training and experience as defined by the limits of (A) and (B) above.

Note: College degrees must have been awarded by a college or university accredited by a regional, national, or specialized agency recognized as an accrediting agency by the U.S. Department of Education and/or U.S. Secretary of Education. If an applicant's degree was awarded by an educational institution outside the United States and its territories, the applicant must provide independent verification of equivalency. A list of acceptable companies who provide this service can be found at <https://www.cs.ny.gov/jobseeker/degrees.cfm>. Applicants are responsible for payment of the required evaluation fee.