

ASSISTANT CIVIL ENGINEER
(WESTCHESTER JOINT WATER WORKS)

DISTINGUISHING FEATURES OF THE CLASS: Under the general supervision of the Manager (Westchester Joint Water Works) or a higher level engineer, the incumbent performs professional engineering work related to the technical and operational aspects of a water utility, such as water works planning, design, construction and operations, including efficiency and economic studies. An engineer at this level is responsible for various projects on an independent basis and has direct, regular supervision over one or more technical employees, and over other non-technical employees when working on special projects as needed. Does related work as required.

EXAMPLES OF WORK: (Illustrative Only)

Plans for future requirements of water works;

Prepares annual list of capital budget items;

Prepares specifications for materials, construction and maintenance projects;

Designs system improvements, including main extensions for developers, and supervises the preparation of plans;

Issues, receives and analyzes all bids for purchase of material and equipment;

Supervises the maintenance of all distribution system records, including maps and plans;

Supervises inspection of routine construction projects such as main extensions and directly inspects major construction and maintenance projects;

Supervises technical personnel, including draftsmen, engineering aides and water maintenance men who are detailed to inspection work as required;

Reviews contractor's claims for payment;

Conducts or supervises special field studies, including leak surveys, cross-connection programs, fire flow tests, coefficient tests, pump efficiency tests, large meter tests, and hydraulic studies;

Conducts efficiency studies of operating departments' procedures and policies and recommends changes where indicated;

Makes economic comparisons and studies;

Prepares written reports on work assignments, including progress reports;

Reports directly to Manager (Westchester Joint Water Works) and confers with him/her on various engineering and technical problems.

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Page 2

REQUIRED KNOWLEDGE, SKILLS, ABILITIES AND ATTRIBUTES: Thorough knowledge of the principles of civil or sanitary engineering, including hydraulics; understanding of the principles of engineering design as they relate to water supply and distribution systems; thorough knowledge of the practices of specification writing; good knowledge of cost estimating; good knowledge of construction procedures and techniques; good knowledge of legal principles and practice of contract preparation; thorough knowledge of drafting procedures; ability to lay out and supervise the work of subordinates; ability to assemble field data, analyze and interpret it, and make recommendations based upon it; ability to write engineering reports and letters in clear, grammatically correct language; thorough understanding of engineering economics; familiarity with accounting and budgeting procedures; accuracy, reliability, sound professional judgment; physical condition commensurate with the duties of the position.

MINIMUM ACCEPTABLE TRAINING AND EXPERIENCE: Either: (a) a Bachelor's Degree* in Civil, Environmental or Sanitary Engineering and either (a) three (3) years of work experience in one of the fields of engineering specified above, at least one (1) year of which must have been in either water supply systems design, supervision of construction projects, or as an engineer for a water utility; or (b) a Master's Degree* in Civil, Environmental, Industrial or Sanitary Engineering and two (2) years of work experience in one of the fields of engineering specified above, including the specialized experience described in (a); or (c) seven (7) years of work experience in one of the fields of engineering specified above, including the specialized experience described in (a).

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