

BROOME COUNTY DEPARTMENT OF PERSONNEL
THIRD FLOOR, COUNTY OFFICE BUILDING, GOVERNMENTAL PLAZA
60 HAWLEY STREET, PO BOX 1766
BINGHAMTON, NEW YORK 13902
AN EQUAL OPPORTUNITY EMPLOYER

OPEN COMPETITIVE EXAMINATION FOR ENGINEER I

Exam Number: 68-505

EXAMINATION DATE: June 27, 2020

LAST DATE TO FILE APPLICATION WITH PROCESSING FEE OR WAIVER*: May 6, 2020

***Processing Fee:** Twenty dollar (\$20.00) non-refundable payment is required for each separately numbered examination for which you apply. The required processing fee must accompany your examination application. **Credit cards, checks, or money orders payable to the Broome County Office of Management and Budget will be accepted.** Please be sure to include applicant's name and examination number on your check or money order. A check returned for insufficient funds may disqualify your application and result in further action and/or service charges.

If your application is disapproved, the fee will not be refunded. Compare your qualifications carefully with the requirements specified on this announcement and file only for those examinations for which you are clearly qualified. Be specific when completing the application; include all pertinent information including credit hours if applicable. Work experience must be paid unless otherwise specified. Part-time experience will be prorated. ***Only applications which are post-marked on or before the last date to file will be accepted. ALL INTER-DEPARTMENTAL MAIL MUST BE RECEIVED BY THE CLOSE OF BUSINESS ON THE LAST DATE TO FILE, NO EXCEPTIONS.** FAXED APPLICATIONS WILL NOT BE ACCEPTED.

ADMISSION NOTICES WILL BE MAILED TO ALL APPROVED CANDIDATES APPROXIMATELY **8 DAYS** BEFORE THE EXAMINATION. IF YOU DO NOT RECEIVE YOUR NOTICE BY THE TUESDAY BEFORE THE EXAMINATION, PLEASE CALL 778-2222 or 778-2276.

It is the responsibility of the candidate to notify the Broome County Department of Personnel of any change in name or address. No attempt will be made to locate candidates who have moved. The candidate change of information form is available at www.gobroomecounty.com/personnel/forms.

APPLICATION FEE WAIVER: A waiver of application fee will be allowed if you are unemployed and primarily responsible for the support of a household. In addition, a waiver of application fee will be allowed if you are determined eligible for Medicaid, or receiving Supplemental Security Income payments, or Public Assistance (Temporary Assistance for Needy Families/Family Assistance or Safety Net Assistance) or are certified Job Training Partnership Act/Workforce Investment Act eligible through a State or local social service agency. **All claims for application fee waiver are subject to verification. If you can verify eligibility for application fee waiver, complete a "Request for Application Fee Waiver and Certification" form and submit it with your application. Fee waiver forms are available at the Broome County Department of Personnel, the Department of Social Services or on line at www.gobroomecounty.com.**

MINIMUM SALARY

\$25.0932/hour

VACANCIES**

Anticipated

LOCATION OF WORK

Broome County Department of Public Works/Engineering

Eligible list: The eligible list established as a result of this examination will be used to fill vacancies, as they occur, in all Broome County departments, towns, villages, school districts, and special districts under the jurisdiction of the Broome County Personnel Officer.

****Vacancies** – Positions may be filled temporarily at this time; however, the resulting eligible list must be used to permanently fill the position.

Residency: There are no residency requirements for this examination. However, preference in appointment may be given to successful candidates who, at the time of examination, are legal residents of the locality in which appointment is to be made. For appointment within Broome County departments, preference **will** be given to candidates who are residents of Broome County at the time of examination except as stated in Resolution 07-84.

DUTIES: 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, codes and regulations, with flexibility allowed for choosing methods and materials. General directions are received from a higher level engineer for projects including the design, specification writing, field inspections, surveys, project coordination and land acquisition functions, and AutoCAD design/drafting. The position differs from that of Engineer II in that fewer and less complex projects are assigned with less supervisory and administrative responsibilities involved. The position differs from that of Assistant Engineer in that assignments are more complex with relative independence allowed in deciding work methodology and materials. Does related work as required.

MINIMUM QUALIFICATIONS:

- A) Graduation from a New York State registered or regionally ABET accredited college or university with a Master's Degree in engineering or engineering technology (*specialties as described below); OR
- B) Graduation from a New York State registered or regionally ABET accredited college or university with a Bachelor's Degree in engineering or engineering technology (*specialties as described below), AND a current Engineer In Training designation, AND one (1) year experience performing either:
 - 1) engineering design and drafting of highways, bridges, culverts, and/or facilities, using AutoCAD software; or
 - 2) Field inspection of highways, culverts, bridges and/or facilities;
 - 3) Technical writing of engineering reports and project bid documents / technical specifications; OR

- C) Graduation from a New York State registered or regionally ABET accredited college or university with a Bachelor's Degree in engineering or engineering technology (*specialties as described below), AND two (2) years experience as defined above; OR
- D) Graduation from a New York State registered or regionally ABET accredited college or university with an Associate's Degree in engineering or engineering technology (*specialties as described below), AND four (4) years experience as defined above. OR
- E) An equivalent combination of training and experience as defined by the limits of A), B) C) and D) above.

* Acceptable areas of engineering education include Civil Engineering, Structural Engineering, Environmental Engineering, Mechanical Engineering, Architectural Engineering, or a closely related field. Degrees in the following fields are not acceptable: Chemical Engineering, Industrial Engineering, Public Health Engineering or Computer Technology

SPECIAL REQUIREMENTS AT TIME OF APPOINTMENT:

- 1) Possession of the appropriate level of Motor Vehicle Operator's License.

Anticipated eligibility: If you expect to complete the educational requirement by December 31, 2020, you can be admitted to this examination. If successful on the examination, you will not be certified for appointment until you have submitted proof of completion of the requirements to the Broome County Department of Personnel. Proof must be submitted by March 1, 2021; failure to do so will result in removal of your name from the eligible list. You must meet the experience requirement, if any, before the examination date.

SUBJECT OF EXAMINATION:

Preparing written material

These questions test for the ability to present information clearly and accurately, and to organize paragraphs logically and comprehensibly. For some questions, you will be given information in two or three sentences followed by four restatements of the information. You must then choose the best version. For other questions, you will be given paragraphs with their sentences out of order. You must then choose, from four suggestions, the best order for the sentences.

Principles and practices of civil engineering

These questions test for knowledge of engineering concepts and their practical applications to the construction, operation and maintenance of public works projects, including roadways, bridges, buildings, water and sewage systems and similar types of infrastructure.

Engineering plans, specifications and estimates

These questions test for knowledge of and the ability to read and interpret construction drawings and technical specifications, and for the ability to calculate cost and quantity estimates from technical presentations and/or engineering and construction drawings. Knowledge of estimating techniques and the proper method of construction for specified projects will be required.

Methods and materials of construction

These questions test for knowledge of the proper procedures and materials used in the construction, maintenance and repair of various types of public works projects, including such typical construction work as excavations, roadways, embankments, and building and related structural improvements.

Surveying principles and practices, including map interpretation

These questions test for knowledge of the concepts, computations and proper procedures involved in performing surveys for construction projects and land areas, including the use of theodolites, total stations, automatic levels and other contemporary field survey equipment; and for the ability to read, analyze and perform technical computations based on site plans and topographic and survey maps.

Construction and maintenance of highways, bridges, drainage systems and other related structures

These questions test for knowledge of the engineering concepts, practices, testing procedures, materials and computations used in the installation, repair and upkeep of roadways, overpasses, abutments, retaining walls, embankments, drainage structures and related appurtenances.

The New York State Department of Civil Service has not prepared a test guide for this examination. However, candidates may find information in the publication "How to take a written test" helpful in preparing for this test. This publication is available on line at: <https://www.cs.ny.gov/testing/testguides.cfm>

Candidates must bring their picture ID and two sharpened #2 pencils to the examination. **USE OF CALCULATOR IS RECOMMENDED FOR THIS EXAMINATION.** Devices with typewriter keyboards, spell checkers, personal digital assistants, address books, language translators, dictionaries, or any similar devices are prohibited.

Rating: This written examination is being prepared and rated by the New York State Department of Civil Service, in accordance with Section 23-2 of the Civil Service Law. The provisions of the New York State Civil Service Rules and Regulations dealing with the rating of examinations will apply to this written test.

Applying for civil service examinations in multiple jurisdictions when examinations are scheduled on same date:

If you have applied for both a Broome County examination and an examination for another jurisdiction, both of which are scheduled for the same date, you must submit a Broome County Cross-filing Form indicating the site at which you intend to take your examination. The cross-filing form is available in our Department or online at <http://gobroomecounty.com/files/personnel/pdfs/Crossfiling.pdf> and should be submitted at least two weeks prior to the examinations. Failure to submit the cross-filing form in a timely manner may result in our not being able to accommodate your request to sit at your choice of exam sites. When taking both a State and Broome County examination, you will be required to take all your examinations at a State examination center. You will be advised by the State when and where to report for your examinations.

Religious accommodation/handicapped candidates/military personnel: If special arrangements for testing are required, indicate this on your application form.

Military Law provides special rights for members of the armed forces whose military service conflicts with scheduled civil service testing. Section 243-b (2) of Military Law states that "any member of the organized militia or reserves, who, because of active military duty other than for training purposes, missed the application filing period for an examination and as a result is deprived of the opportunity to

compete in an examination, shall be given a special military make-up exam". Please contact the Department of Personnel for more information.

Special Requirement for Appointment in School Districts and BOCES:

Per Regulations of the Commissioner of Education, to be employed in a position designated by a school district or BOCES as involving direct contact with students, a clearance for employment from the State Education Department is required.

Background Investigation: Applicants may be required to undergo a State and national criminal history background investigation, which will include a fingerprint check, to determine suitability for appointment. Failure to meet the standards for the background investigation may result in disqualification.

Children of Firefighters and Police Officers killed in the line of duty: "In conformance with section 85-A of the Civil Service Law, children of firefighters and police officers killed in the line of duty shall be entitled to receive an additional ten points in a competitive examination for original appointment in the same municipality in which his or her parent has served. If you are qualified to participate in this examination and are a child of a firefighter or police officer killed in the line of duty in this municipality, please inform the Department of Personnel of this matter when you submit your application for examination. A candidate claiming such credit has a minimum of two months from the application deadline to provide the necessary documentation to verify additional credit eligibility. However, no credit may be added after the eligible list has been established."

General Information/Instructions: A copy of the general instructions, announcement and applications may be obtained upon request to the Broome County Department of Personnel or from our website at www.gobroomecounty.com.

OC Exam Form 2020

Date of Issue: 4/20/20

Engineer I-OC