



## CONTINUOUS RECRUITMENT EXAMINATION OPEN TO THE PUBLIC TRANSPORTATION ENGINEER 3 (CONSTRUCTION ENGINEERING)

<b>ANNUAL SALARY: \$79,156</b>	<b>SALARY GROUP: FS 27a</b>	<b>APPLICATION CLOSING DATE: SEE BELOW</b>	<b>EXAM NO: 081700CRMC</b>
--------------------------------	-----------------------------	--	----------------------------

### SPECIAL APPLICATION AND EXAMINATION INSTRUCTIONS APPEAR BELOW (REISSUED WITH DATES FOR 2015)

**PURPOSE OF CLASS:** In the Department of Transportation this class is accountable for acting as a working lead who assists a supervisor in supervising a designated group of employees and/or for performing the most complex engineering or related tasks in one or more aspects of transportation construction engineering projects or studies in the areas of construction, administration, rehabilitation, surveying, testing, materials testing, maintenance or operations.

#### MINIMUM QUALIFICATIONS REQUIRED

IN ORDER TO BE CONSIDERED FOR THIS EXAMINATION, YOU MUST INDICATE ON YOUR APPLICATION THAT YOU HAVE THE FOLLOWING EXPERIENCE AND TRAINING BY THE CLOSING DATE:

**GENERAL EXPERIENCE:** A Bachelor's degree in Engineering or Construction Management and three years of experience in transportation construction engineering.

**SPECIAL EXPERIENCE:** One year of the General Experience must have been at the working level in a professional transportation construction engineering capacity. For state employees this is interpreted at the level of Transportation Engineer 2 (Construction Engineering).

**SUBSTITUTIONS ALLOWED:** (1) Possession of Land Surveyor (LS) licensure or Professional Engineer (PE) licensure from the Department of Consumer Protection State Board of Examiners for Professional Engineers and Land Surveyors consistent with C.G.S. §20-302 may be substituted for the Bachelor's degree requirement. (2) Possession of Land Surveyor-In-Training (LSIT) licensure or Engineer-In-Training (EIT) licensure from the Department of Consumer Protection State Board of Examiners for Professional Engineers and Land Surveyors consistent with C.G.S. §20-302 may be substituted for the Bachelor's degree requirement. (3) Possession of at least Level III certification in the Civil Engineering Technology-Transportation Program, Highway Construction Inspection or Highway Surveys from the National Institute for Certification in Engineering Technologies (NICET) may be substituted for the Bachelor's degree requirement. (4) A Master's degree in engineering may be substituted for one year of the General Experience. (5) Current incumbents in the class of Transportation Engineer 2 (Construction Engineering) who do not possess the degree or certification/licensure qualifications as detailed on this class specification may be considered for promotion to Transportation Engineer 3 (Construction Engineering) upon having three years experience in transportation construction engineering. One of the three years must have been as a Transportation Engineer 2 (Construction Engineering).

**SPECIAL REQUIREMENT:** (1) Incumbents may be required to possess appropriate certification from the New England Transportation Technician Program (NTTCP). (2) Incumbents may be required to travel.

**WORKING CONDITIONS:** Incumbents in this class may be exposed to some danger of injury or physical harm from highway or construction environments and a moderate degree of discomfort from exposure to year round weather conditions.

**KNOWLEDGE, SKILLS AND ABILITIES:** Considerable knowledge of principles and practices involved in transportation construction engineering such as construction, surveys, geodetic surveys and materials testing; considerable knowledge of highway construction methods and materials; knowledge of administrative and financial controls with respect to transportation construction engineering plans, contracts, projects and reports; considerable knowledge of operational methodologies and established policies; considerable analytical, problem solving and technical report development skills; considerable interpersonal skills; considerable oral and written communication skills; considerable ability to interpret and apply principles of information systems and technologies; ability to analyze plans and estimates; some supervisory ability.

#### THE EXAMINATION WILL BE COMPOSED OF:

<b>PART</b>	<b>WEIGHT</b>
<b>EXPERIENCE AND TRAINING</b>	<b>100%</b>

#### APPLICATION/EXAMINATION PROCEDURE

**APPLICANTS MUST SUBMIT:**

- (1) **Completed Application Form (CT-HR-12)**
- (2) **Supplemental Examination Material (see instructions below)**

In order to be considered for admittance into this examination, you must complete all parts of the examination application (CT-HR-12) detailing how you meet the minimum experience and training requirements stated above AND complete the required supplemental examination materials as detailed below. Applicants who do not submit the required application and examination materials by the closing date will not be admitted into the examination and will not have the right to appeal this decision. Resumes and/or vitas will not substitute for the required application form or for the required examination materials.

**EXAMINATION INSTRUCTIONS: Section 1.** For each job (maximum of three) which you feel has best prepared you for the job Transportation Engineer 3 (Construction Engineering) include a 1-2 page (typed or printed) description detailing your duties and responsibilities. (Applicants serving provisionally or temporarily in the title of Transportation Engineer 3 (Construction Engineering) cannot include this as one of the three jobs.) Each job description should begin on a separate page and begin with your job title, company name and location, dates of employment, and number of hours worked per week. This should be followed by a description of your duties and responsibilities organized and formatted around the numbered items that follow. (1) **Experience in Transportation Construction Engineering.** Describe your best or highest level of experience in one or more of the following areas: (a) Monitoring and providing guidance for transportation construction activities. Describe your experience providing on-site inspection and/or technical guidance relative to highway construction projects and/or other transportation construction projects, including review of rehabilitation and construction methods and materials employed in the field. Describe briefly the size and scope of the projects on which you worked, and your specific activities and responsibilities on these projects. Describe your experience analyzing constructionability problems and recommending solutions, including the impact that your input had on the projects. (b) Implementing administrative and financial controls relative to transportation construction projects. Describe your experience providing technical oversight for construction contracts, including reviewing contractor cost submittals, verification and approval of payments to contractors, recording project construction cost data in a computerized records system, and/or processing of project records for project closeout. Describe your experience providing technical oversight for utility agreements, including coordinating the relocation of utilities and ensuring related work and costs/reimbursements are appropriate. Describe briefly the size and scope of the construction projects on which you worked, and your specific activities and responsibilities related to administrative and financial oversight. (c) Conducting land surveys for planning, design or construction of highways. Describe your experience with land surveying, including location surveys, boundary surveys, and construction surveys. Describe briefly the size and scope of the projects on which you worked, and your specific activities and responsibilities in conducting surveys for these projects. Describe your experience with computer aided design and drafting (CADD) applications related to these activities. (d) Monitoring and providing guidance in testing and analysis of construction and maintenance materials. Describe your experience overseeing the physical testing and analysis of materials used in construction and maintenance of highways and bridges, or other transportation construction projects, including your role in analyzing test results and making recommendations on the suitability of such materials. Describe briefly the types of materials tested, the nature of the tests and measurements performed, your role in determining appropriate testing methods, and those testing activities you performed yourself (if any). (2) **Lead/Supervisory Experience.** Describe your experience directing and overseeing the work of engineers and lower level staff, or individuals on contract, in transportation construction projects or other related transportation construction engineering functions. Indicate whether your duties were lead in nature or whether you had full supervisory responsibility. Include the number and job titles of staff you have led or supervised, and your specific lead/supervisory responsibilities (scheduling, assigning and reviewing work, conducting performance appraisals, etc.). Describe your experience in leading/supervising team projects, including the nature of the project and your role in the coordination, supervision and monitoring of team activities. (3) **Oral/interpersonal and Written Communications Experience.** Describe the contact you had with other state agencies, contractors, consultants, local officials and/or the general public related to transportation construction projects. Include your experience working with others to solve transportation construction problems, or to resolve complaints from contractors, property owners, or others concerning construction activities. Be specific in detailing the purpose and nature of these contacts/meetings, the persons with whom you met and the outcome. Describe your experience in preparing written correspondence, reports, feasibility studies, recommendations, etc. Describe the nature and purpose of the written materials you prepared, and for whom they were prepared. **Section 2** On a separate page, include a list of degrees, certifications, licenses and courses that you have completed which have prepared you for the job. **Important Notes:** (1) Make certain both your application form and your examination materials are complete and separate documents not referencing the other, as your application form and supplemental examination materials may be separated during the scoring process. (2) Examination materials should be clearly marked as such and each page should contain the examination title, exam number and your social security number (do not include your name). (3) Do not include materials other than those requested above. (4) Your examination will only be scored if you meet the minimum experience and training requirements outlined above and your CT-HR-12 and examination materials are completed correctly and submitted together as a package. (5) Mail application/examination materials to DAS/Human Resources, Room 404, 165 Capitol Avenue, Hartford, CT. 06106-1658 (**Secure Fax #860-622-2840**). If faxing materials, keep a copy of your completed application/examination and the fax transmittal receipt for your records. Make certain that your application form and examination materials are complete and transmitted correctly and without error. Incomplete faxes or faxes received blank because pages were faxed upside down will not be accepted. (6) Due to the large number of applications received, we cannot confirm receipt of applications. (7) A separate application/examination package must be submitted for each examination you are applying for. (8) Application/examination packages must be date stamped by DAS/Human Resources or postmarked by **MAY 15, 2015 for the JUNE 29, 2015 grading date; and by NOVEMBER 13, 2015 for the DECEMBER 30, 2015 grading date.** Applicants must meet the experience and training requirements by the closing date for the exam administration they are applying for.

**FORMS:** Application forms (CT-HR-12) and exam announcements are available from the Department of Administrative Services (<http://das.ct.gov/employment>) or at the Office of the Connecticut State Job Centers.

(reissued December 12, 2014)

### AN AFFIRMATIVE ACTION/EQUAL OPPORTUNITY EMPLOYER

The State of Connecticut is an equal opportunity/affirmative action employer and strongly encourages the applications of women, minorities, persons with disabilities and military, veterans.