



Charles D. Baker, Governor
Karyn E. Polito, Lieutenant Governor
Stephanie Pollack, MassDOT Secretary & CEO



Internal/External Job Posting

Requisition #: 180000KQ
Posting Date: 3/9/2018
Closing Date: Open Until Filled
Official Title: Civil Engineer VI
Functional Title: Civil Engineer VI - Ratings/Overload Engineer
Location: Boston-10 Park Plaza – Headquarters
Highway – Bridges And Structures
Vacancies: 1
Salary: \$80,149.42 - \$112,700.38
Schedule: Full-Time
Shift: Day
Bargaining Unit: E
HR Generalist: Candida Bouchard
Diversity Officer: Derrick Mann – 857-368-8541
ADA Coordinator: John Lozada – 857-368-8744

Duties & Responsibilities:

Ratings/Overload Engineer

Incumbents of this position perform the function of the MassDOT Ratings/Overload Engineer in the Ratings/Overload Unit of the Bridge Section and are responsible for the following duties:

1. Supervises and manages the operations of the Bridge Section's Ratings/Overload Unit related to the preparation and/or review of bridge load ratings for MassDOT and municipal bridges and the structural analysis for overload permit applications by assigning work to staff and coordinating the Unit's operations with other MassDOT Units, Districts, municipalities and other state and federal agencies.
2. Oversees the preparation of and/or the review of live load capacity calculations for determining the safe load carrying capacity of bridges and provides written

- recommendations to the State Bridge Engineer for the posting of MassDOT and municipal bridges.
3. Oversees the evaluation of and recommendations for alternative methods for improving the live load carrying capacity of existing bridges through the review of available data, live load capacity calculations, and application of sound engineering principles.
 4. Oversees the preparation and/or the review of bridge overload capacity calculations for overload permit requests and makes written recommendations for issuing these permits.
 5. Performs Quality Assurance review of all work of the unit and ensures that applicable AASHTO specifications and the MassDOT standards were properly applied.
 6. Provides training, guidance and mentoring to engineers of lower grades in the practice of live load and overload capacity analysis and the use of AASHTO specifications and MassDOT standards.
 7. Reviews the performance of subordinates in immediate reporting relationships by adhering to the guidelines of the Employee Performance Review system (EPRS) in order to ensure increased communications and successful implementation of the system.

Preferred Qualifications at Hire for this position:

Shall be a Professional Engineer registered in Massachusetts (this is a federal qualification at hire for this position as found in 23 CFR Part 650, Subpart C, National Bridge Inspection Standards, § 650.309 (c))

Knowledge of the principles and practices of structural engineering

Knowledge of the terminology and standard abbreviations used in bridge design and rating

Knowledge of the structural analysis methods and mathematical computations used in solving structural engineering problems as they relate to bridge design and rating

Knowledge of the mechanical properties and characteristics of steel and concrete as used in bridge construction

Working knowledge of the AASHTO LRFD Bridge Design Specifications

Working knowledge of the MassDOT Bridge Manual

Working knowledge of the AASHTOWare Bridge Rating (VIRTIS) software

If you have any questions regarding this position, please contact the Human Resource Generalist, Candida Bouchard at 857-368-8504.

This requisition will remain open until filled; however, first consideration will be given to those applicants that apply within the first 14 days.

Minimum Entrance Requirements:

Applicants must have at least (A) six years of full-time, or equivalent part-time, technical or professional experience in civil engineering work in such areas as construction, survey, design, transportation, hydraulics, structural, sanitary, drafting, environmental, highway, architectural, airport, soils and materials, of which (B) at least four years must have been in a professional capacity, and (C) of which at least three years must have been in a

supervisory capacity, or (D) any equivalent combination of the required experience, and the substitutions below.

Substitutions:

I. An Associate's degree with a major in civil engineering** or civil engineering technology** may be substituted for a maximum of one year of the required (A) experience.*

II. A Bachelor's degree with a major in civil engineering** or civil engineering technology** may be substituted for a maximum of two years of the required (A) experience.*

III. A Graduate degree with a major in civil engineering** may be substituted for a maximum of three years of the required (A) experience and one year of the required (B) experience.*

**NOTE: The terms civil engineering and civil engineering technology include related engineering disciplines, such as construction, survey, hydraulics, design, transportation, structural, soils, sanitary, environmental, drafting, highway, architectural, mining, airport and materials.

*Education toward such a degree will be prorated on the basis of the proportion of the requirements actually completed.

NOTE: Educational substitutions will only be permitted for a maximum of one year of the required (B) experience. No substitutions will be permitted for the required (C) experience.

SPECIAL REQUIREMENT: Based on assignment, possession of a current and valid Massachusetts Class D Motor Vehicle Operator's License may be required.

FOR NON-MassDOT APPLICANTS:

Applicants for this position must possess a Bachelor's Degree in an appropriate engineering discipline and E.I.T. certification or P.E. registration for appointment to this position.

FOR MassDOT EMPLOYEES:

Applicants for this position must possess a Bachelor's Degree in an appropriate engineering discipline and E.I.T. certification or P.E. registration for appointment to this position, or hold a position in the Department in one of the next two lower titles than the position applied for, in the same or similar career ladder.

An Equal Opportunity / Affirmative Action Employer. Females, minorities, veterans, and persons with disabilities are strongly encouraged to apply.

For purposes of bargaining unit designation, Unit 9 is equivalent to MassDOT Unit E.