

SENIOR BRIDGE ENGINEER

DISTINGUISHING FEATURES OF THE CLASS: This is important technical engineering work involving responsibility for program management, design, bidding documents, construction, contract management, and repair of bridges. Work is performed under the general direction of the Commissioner of Public Works with leeway for use of independent judgment. Supervision will be exercised over the work of several assistants.

TYPICAL WORK ACTIVITIES: *The typical work activities listed below, while providing representative examples of the variety of work assignments in the title, do not describe any individual position. Incumbents in this title may perform some or all of the following, as well as other related activities not described.*

Recommends multi-year construction program for bridge replacement and rehabilitation;

Manages bridge inspection program;

Manages information and data filing systems for assessment of bridge condition and revision of construction program;

Provides effective interaction with NYS Department of Transportation and other agencies as required;

Supervises and performs structural load rating analysis and design calculations and certifies same;

Supervises and performs preparation of contract specifications and drawings for contract and in-house construction, and certifies same;

Provides consultant management;

Provides project and contract construction management;

Provides technical assistance to in-house construction forces;

Supervises and provides design of steel, reinforced concrete and timber highway bridges;

Recommends suitable sites and types of structure for bridges;

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Supervises and provides analysis of soil and water conditions for bridge foundation/design;

Supervises and provides hydrologic and hydraulic analysis for bridge design;

Certifies the posting of maximum load for bridges;

Supervises design of minor structures, retaining walls and culverts;

Estimates costs of bridge construction and repair;

Performs other civil engineering duties as required.

FULL PERFORMANCE KNOWLEDGES, SKILLS, ABILITIES, AND PERSONAL CHARAC-

TERISTICS: Thorough knowledge of the principles of engineering as related to highway and bridge design and construction; a high degree of skill in the application of the principles of engineering to highway bridge engineering problems; ability to certify engineering drawings, specifications, and documents through use of Professional Engineers License; good written and oral communication skills; ability to gain the cooperation of others; initiative; resourcefulness; accuracy; and keen observation.

MINIMUM QUALIFICATIONS: Possession of a Professional Engineers License issued by the New York State Education Department, **and** either:

(A) Graduation from a regionally accredited or New York State registered four year college or university with a Bachelor's Degree in Civil Engineering or related field and four (4) years of engineering experience in the design and construction of bridges, including at least two (2) years in a supervisory position; or

(B) An Associate's Degree in Civil Engineering or related field and six (6) years of experience as indicted above; or

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(C) An equivalent combination of training and experience as described above.

NOTE: Your degree or credits 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/U.S. Secretary of Education. If your degree or credits were awarded by an educational institution outside of the United States and its territories, you must provide independent verification of equivalency. A list of acceptable companies who provide this service can be found on the Internet at: <https://www.cs.ny.gov/jobseeker/degrees.cfm>. You must pay the required evaluation fee.

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Last Reviewed: July 10, 1991
Jurisdictional Class: Competitive
Public Hearing: N/A
NYS Civil Service Commission Approval: N/A

Retyped into Microsoft Word on 6/1/04
Revised and Replaced in Classplan: 3/10/2023
Revised and Replaced in Classplan: 5/14/2025 (Edu)