SENIOR ENGINEER

DISTINGUISHING FEATURES OF THE CLASS: This is professional engineering work involving responsibility for the design, maintenance and repair of county highways, roads, bridges, and highway structures. The work is performed under the general direction of the Commissioner of Public Works with wide leeway allowed for the exercise of independent professional judgment in the planning and execution of the work. Direct supervision is exercised over the work of personnel engaged in survey, design, inspection, and construction work. Does related work as required.

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.

Supervises a survey crew engaged in determining exact field measurements for road and bridge maintenance, repair and construction projects;

Designs highways, bridges, culverts, retaining walls and related structures;

Performs on site inspections of work in progress and completed projects;

Prepares cost estimates for work to be done by the department or contracted out;

Manages capital projects including, but not limited to, consultant procurement, design and environmental review, construction bidding and construction oversight;

Manages Locally Administered Federal Aid Projects in accordance with the NYSDOT Local Projects Manual;

Assists the Commissioner of Public Works in the selection of construction equipment, and reviews manufacturers equipment specifications before purchase;

Supervises the collection of data, the search of public records and survey work in order to determine land holdings and property lines for right of way negotiations;

Reviews and assists in the preparation of applications for Federal and State aid for county and town highway and bridge projects;

Prepares topographic maps and cross sections from field notes;

Prepares final plans for construction contracts of roads and bridges;

Compiles data for department reports and supervises the filing and indexing of engineering and survey records.

FULL PERFORMANCE KNOWLEDGES, SKILLS, ABILITIES AND PERSONAL CHARACTERISTICS: Thorough knowledge of the modern methods, materials and techniques

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of highway and bridge design and construction; thorough knowledge of the techniques and practices of engineering and land surveying; skill in the operation of surveying and drafting equipment; ability to perform complex engineering and surveying calculations; ability to prepare and interpret sketches, maps and construction plans; ability to establish and maintain an effective working relationship with the public; ability to plan and supervise the work of others; ability to prepare complex reports and maintain records; ability to follow technical oral and written instructions; initiative; resourcefulness; good judgment; accuracy; good physical condition.

MINIMUM QUALIFICATIONS: Either:

- A. Possession of a Bachelor's Degree in Engineering and four (4) years of progressively responsible engineering experience including bridge and highway design and construction; OR
- B. Possession of an Associate's Degree in Engineering and six (6) years of progressively responsible engineering experience including bridge and highway design and construction; OR
- C. Graduation from high school or possession of a high school equivalency diploma and eight
 (8) years of progressively responsible construction engineering experience including bridge and highway design; OR
- D. An equivalent combination of training and experience as described in A, B and C above.

Note: Your degree or college credits must have been awarded or earned 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 was awarded by an educational institution outside 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 <u>http://www.cs.ny.gov/jobseeker/degrees.cfm</u>. You must pay the required evaluation fee.

SPECIAL REQUIREMENT: At time of employment and throughout the duration of employment in this title, the incumbent must possess and continuously maintain a license, and current registration issued by the New York State Education Department to practice professional engineering.

ULSTER COUNTY 6160 SR ENG Classification: Competitive Grade: 23 Union: CSEA Adopted: February 20, 1979 Grade Reallocated: January 1, 2022 Revised: July 7, 2023