

## HIGHWAY ENGINEER

DISTINGUISHING FEATURES OF THE CLASS: The work involves planning improvements to existing County roads and designing new roads and bridges. Duties are performed under the general direction with wide latitude allowed for the use of independent judgement in carrying out the details of the work. General supervision is exercised over the work of Engineering Aides and Laborers. A Highway Engineer does related work as required.

### TYPICAL WORK ACTIVITIES:

- Plans grades, alignments, drainage structures for roads and bridges;
- Designs and drafts plans for bridges, determining size of opening, width of span, and whether stringer beam or girder construction;
- Calculates needed rights-of-way and prepares property descriptions necessary for road construction;
- Directs a field survey party;
- Calculates costs of construction projects;
- Prepares preliminary drawings from field notes;
- Supplies construction drawings to work parties;
- Checks work in progress for adherence to plans;
- Arranges for the removal of utilities from work sites;
- Computes bearings, alignments, and curves;
- Serves as a consultants to Town Highway Superintendents;
- Conducts correspondence regarding projects with the public and regulatory agencies;
- Updates County road maps;
- Prepares traffic count and bridge work records for inclusion in annual report.

FULL PERFORMANCE KNOWLEDGES, SKILLS, ABILITIES, AND PERSONAL CHARACTERISTICS: Good knowledge of civil engineering practices and procedures; skill in the use of surveying and drafting instruments; ability to make engineering computations using engineering tables and formulas; ability to interpret engineering plans, charts, and drawings; ability to understand and carry out oral and written instructions; ability to lay out, plan, and supervise the work of others; ability to compile data and prepare written reports; attention to detail; ability to maintain office engineering files; physical condition equal to the demands of the position.

MINIMUM QUALIFICATIONS:

- A.) Graduation from a regionally accredited or New York State registered college or university with at least a Bachelor's degree in civil engineering;

OR

- B.) Graduation from a regionally accredited or New York State registered college or university with an Associate's degree in construction, civil or engineering technology and two years of experience participating in engineering projects including the operation of survey instruments and making of survey computations using engineering tables and formulas;

OR

- C.) Graduation from a regionally accredited or New York State registered college or institute with a diploma in basic engineering science, building estimating and construction science, or civil engineering science and three years of experience as described in (B);

OR

- D.) Four years of experience as described in (B);

OR

- E.) An equivalent combination of training and experience as defined by the limits of (A), (B), (C), and (D).

*SPECIAL REQUIREMENT:* Possession of a New York State driver's license at time of appointment.

CATTARAUGUS COUNTY CIVIL SERVICE COMMISSION

Adopted: 5/16/85

Revised: 7/14/92