

CIVIL ENGINEERING TECHNICIAN

DISTINGUISHING FEATURES OF THE CLASS:

The Civil Engineering Technician (CET) is responsible for the implementation and administration of Best Management Practices (BMPs) assigned by the Technical Coordinator. The CET is primarily responsible for the survey, design, layout and construction oversight of the more complex Best Management Practices (BMPs) following United States Department of Agriculture / Natural Resource Conservation Service (USDA/NRCS) Standards and Specifications and the BMP Procurement Procedure. Work shall be performed independently and professionally in coordination with inter-agency team members, farmers/landowners and contractors. The Civil Engineering Technician shall report directly to and receive direction from the SWCD Technical Coordinator. Does related work as required.

TYPICAL WORK ACTIVITIES: (Illustrative Only)

Applies good judgment in the selection of appropriate BMPs; Complies with all provisions of the BMP Procurement Procedure; Performs BMP design checking for other technical staff; Develops, explains and obtains farmer/landowner signature on design packages and Operation and Maintenance Agreements prior to contract awards; Assists farmers/landowners and contractors with compliance and interpretation of the BMP Procurement Procedure; Assists technicians in preparing accurate design calculations and drawings and provides training to them as required; Ability to Plan, survey, design, estimate and oversee construction of the following BMPs: Diversions; Waterways; Roof Gutters; Sub-surface Drains; Livestock Crossings; Spring Developments; Tile-outlet Diversions; Manure Storage; Filter Strips and complex Barnyard Runoff Management Systems following and adhering to USDA/NRCS standards and specifications; Maintains accurate as-built designs and written design documentation for constructed BMPs; Explains design packages, design requirements and project limits to farmers/landowners and contractors; Assists Planners with technical information in the development of Whole Farm Plans; Develops a winter work plan for completing designs; Completes surveys for winter designs prior to January 1 of each year; Assists team and co-workers with planning goals and scheduling; Performs monthly vehicle maintenance checks as required; Operates and maintains work vehicle as assigned.

FULL PERFORMANCE KNOWLEDGE, SKILLS, ABILITIES, AND PERSONAL CHARACTERISTICS:

Thorough knowledge of agriculture and soil and water conservation principles. Thorough knowledge of BMP Procurement Procedures. Thorough knowledge of USDA/NRCS Standards and Specifications. Thorough knowledge of surveying, design, layout and construction techniques. Thorough knowledge of the principles and methodologies of agricultural systems and non-point source pollution management. Thorough knowledge in the use of CAD based software (i.e., Land Development Desktop, Civil 3D). Thorough knowledge of survey techniques including use of levels and total stations. Thorough knowledge of USDA/NRCS Engineering Field Manual. Good knowledge of Regulatory Permit procedures. Ability to work with others with cooperative problem solving and training. Maintain a professional and cooperative working relationship with all agency and inter-agency staff. Ability to work independently, manage workload efficiently and accurately with integrity, confidentiality and professional judgment. Physical condition commensurate with the demands of the position.

MINIMUM QUALIFICATIONS: Either:

- A. Graduation from a regionally accredited or New York State registered college or university with a Bachelors Degree in Civil Engineering, Agricultural Engineering, Environmental Engineering, Natural Resource Conservation, or closely related field and 5 years experience in Civil and/or Agricultural Engineering which includes survey and design work; OR
- B. Graduation from a regionally accredited or New York State registered college or university with an Associates Degree in Civil Engineering, Drafting, Surveying, Agricultural Engineering, Natural Resource Conservation, or related field and 10 years experience in Civil and/or Agricultural Engineering which includes survey and design work; OR
- C. An equivalent combination of training and experience as defined in A and B above.

NOTE: A valid New York State driver's license is required at time of appointment and maintained during employment.

Approved 12/16/02

Revised 9/12/07; 12/20/10