

### Class Concept

This is managerial and advanced professional work in assisting a department manager or director in directing an engineering oriented, multi-functional department. Positions directly control and administer a significant part or function of the department on a statewide basis or in a large geographical area.

Positions assist in planning, evaluating, and establishing department programs, goals, and priorities, and perform or review the more complex, controversial, or advanced work of their department. Specific areas of responsibility include occasionally assuming full responsibility for the entire department and overseeing and directing a number of ongoing functions. Positions may supervise bridge inspections and structural analysis operations; direct investigations to upgrade bridges; and coordinate and administer contract work done by private consulting firms. Work may include determining the scope of design work required and assigning design projects based on available manpower, project schedules and type of work; monitoring and reviewing projects to ensure they are on schedule and appropriate design concepts are used; preparing special reports; researching and evaluating new design methods, techniques, and materials; and validating design project schedules and costs and maintaining categorical funding balances for the annual budget. Incumbents may oversee and monitor the implementation and field construction of design plans and contracts for roadways and structures; review and approve hydrological and hydraulic plans, estimates, specifications and provisions; interpret contract plans and specifications; approve final estimates for payment and conduct the initial review in contract disputes; research and investigate contractor claims for additional time or money; and conduct final inspections and accept or reject resurfacing projects. Work may include administering construction contracts for roadways and bridges; reviewing and approving or rejecting contract time extensions, extra work on contracts, and approval of payment for extra work. Work may include negotiating with a contractor on acceptable payment amounts for controversial issues; evaluating, approving, or rejecting any proposed modifications to contract plans or specifications; determining the acceptability of sub-standard work and establishing the amount of price reduction; and evaluating and making the final decision to resolve construction problems.

### Recruitment Standards

#### Knowledge, Skills, and Abilities

- Thorough knowledge of the principles and practices of civil engineering, construction and maintenance methods, and materials & equipment.
- Ability to understand, explain and administer contracts;
- Ability to interpret plans, provisions, and specifications;
- Ability to develop and/or interpret policies, procedures, regulations, and laws;
- Ability to prepare documents that are legally sound;
- Ability to plan, coordinate, manage and supervise the work of positions; and
- Ability to communicate effectively both orally and in writing.

#### Minimum Education and Experience

Bachelor's degree in engineering from an appropriately accredited institution and a minimum of six years progressive engineering experience including four years of supervisory experience; or an equivalent combination of education and experience.

#### Necessary Special Qualifications

May require registration as a professional engineer by the North Carolina Board of Examiners for Engineers and Surveyors.