

## DEFINITION

This is supervisory and complex drafting work, but may also include non-supervisory complex technical design work.

Employees of this class direct and participate in the work of a small to medium or specialized drafting units engaged in manual board or computerized drafting work. Work involves receiving, assigning and reviewing projects, as well as ensuring section records, files and plans are maintained. Some employees may assist a professional supervisor in moderately complex technical design work where the incumbent designs specific components or phase of major public works, utility construction or computerized drafting projects. Incumbents are normally required to perform related duties such as checking final drawings, answering internal and external inquiries concerning their functions and assisting in obtaining permits.

Supervision is typically exercised by employees in this class over a small to moderate size drafting unit (5-10 Drafting Technicians). Employees receive general directions and instructions normally from a professional or technical superior but are expected to exercise initiative and judgement in meeting deadlines and achieving desired results. The work is subject to review through feedback, periodic checks, reports and the extent to which objectives are achieved.

The work of this class is distinguished from that of the Drafting Technician I by the broader scope and impact of the project, the independent responsibility allowed and/or the supervision exercised.

### TYPICAL DUTIES\*

Supervises small to moderate sized unit of drafting technicians in plotting, computing, tracing and plan checking engineering or survey plans, drawings and planimetric maps.

Interprets and clarifies field notes, search data, design criteria and engineering specifications; outlines or compiles reference material.

Assigns duties and specifies requirements; supplies technical guidance to subordinates; makes a detailed check of completed work.

Consults with field and office technical and engineering staff on technical matters.

Provides technical assistance to public works or utility sections by assisting an engineer or more senior technician in the design of new equipment and the remodelling of used equipment by supervising a small to moderate size drafting unit.

Provides the necessary and related administrative services by directing the maintenance of microfilm retention files or computerized inventories.

Designs elements of complex bridge structures, retaining walls, bearings, feed mains or beams; carries out stress analysis; calculates the forces acting on structural components, bending moments, shear and moments of inertia.

Designs a variety of systems or the upgrading of existing systems by use of the traditional manual drafting board or computerized graphics application.

Reviews proposed construction and related schedules; checks final working plans; prepares drawings and draft specifications for new or expansion projects; analyzes existing systems to assist in plan and design activities; estimates quantities and appropriate costs of materials.

Compiles maintenance manuals, procedures, schedules and construction standards.



Performs related duties as required.

# KNOWLEDGE, ABILITIES AND SKILLS

Considerable knowledge of drafting terminology, practices and techniques as related to both manual drafting board and interactive graphics drafting operations technology.

Considerable knowledge of technical mathematics.

Knowledge of construction engineering and survey practices.

Knowledge of data and computer processing.

Knowledge of civic and departmental policies and regulations.

Some knowledge of principles of supervision, organization and administration.

Ability to understand and execute oral and written instructions and to understand detailed plans and specifications.

Ability to express ideas and concepts effectively, orally and in writing.

Ability to establish and maintain effective-working relations as necessitated by work assignments.

Considerable skill in the manipulation of drafting instruments and/or computerized drafting equipment.

# TRAINING AND EXPERIENCE REQUIREMENTS

#### <u>Job Level</u>

Completion of a two (2) year diploma in civil or drafting technology at a recognized institute of technology and five (5) years' progressively responsible drafting experience.

\* This is a class specification and not an individualized job description. A class specification represents and defines the general character, scope of duties and responsibilities of all positions within a specific job classification. It is not intended to describe nor does it necessarily list the essential job functions for a specific position in a classification. Positions may perform some of the duties listed above but this does not necessarily qualify for placement into this classification.

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