### THE CITY OF LOS ANGELES



#### **CIVIL SERVICE COMMISSION**

# **CLASS SPECIFICATION**

### 4/7/89 SENIOR ARCHITECTURAL DRAFTING TECHNICIAN, 7208

<u>Summary of Duties:</u> Supervises and checks the work of drafting technicians engaged in the preparation of architectural and structural drawings and plans; performs drafting work on the more difficult projects; and does related work.

<u>Distinguishing Features:</u> Employees of this class perform subprofessional engineering work in the architectural field and may supervise a small group of drafting technicians. Finished work is checked against structural drawings and instructions for accuracy and conformance to good architectural design principles and practices. The ability to instruct drafting technicians and coordinate the work for the best utilization of skills and time is essential for an employee of this class working in a supervisory capacity. Senior Architectural Drafting Technician is distinguished from the class of Senior Civil Engineering Drafting Technician in that Senior Architectural Drafting Technician positions require knowledge of techniques, principles and nomenclature used in architectural and structural drafting.

# **Example of Duties:**

- Assigns, coordinates, reviews and evaluates the work of a small group of drafting technicians who prepare architectural and other engineering plans using Computer Aided Drafting (CAD) equipment or manual drafting tools;
- Analyzes and explains to subordinates, architectural and engineering instructions, field notes, sketches, documents, building codes, functions of structures, field conditions, environment, and drafting principles and techniques;
- Instructs drafting technicians in drafting techniques, standards, and procedures;
- Reviews subordinates mathematical computations for accuracy;
- Reviews drawings for correctness, completes, and neatness;
- Checks City, State, and National codes and manufacturers catalogs to determine that electrical, mechanical, structural and architectural drawings are correctly represented and conform to good design principles and practices;
- Compares and checks finished drawings with sketches, instructions, requirements, and standards:
- Confers with architects/engineers to secure data interpretation and clarification of facts, decisions on views, finish schedules, elevations, and employment of applicable scale;
- Reports unworkable circumstances and suggests corrections where necessary;
- Occasionally checks finished working drawings;
- Assists in the preparation of drafting standards and procedures for simplification of drafting methods and processes;
- Confers with manufactures representatives regarding construction or drafting materials;
- Develops and prepares difficult and complex drawings including determining the proper

scales for isometric and orthographic projections, cross section and elevation drawings, and materials and parts lists;

- Calculates, or supervises the calculation of, lengths and weights of structural steel members for buildings, transmission towers and electrical equipment racks;
- May calculate requirements for structural steel, reinforced concrete or masonry construction;
- Makes field trips to observe conditions pertaining to particular assignments;
- Assists in the preparation of reports on individual and unit productivity, workload and backlog;
- May occasionally be assigned to other duties for training purposes or to meet technological changes or emergencies.

# **Qualifications**

### Knowledge of:

### A good knowledge of:

- Principles, techniques, equipment, materials, and nomenclature used in architectural and structural drafting;
- Sources of architectural information:
- Safety principles and practices;
- Potential problem areas in construction as they relate to details that appear in elevations, sections, details and plans.

# A working knowledge of:

- Characteristics of various reproduction processes, equipment and materials;
- Principles and practices of architecture;
- Principles of supervision.

## A general knowledge of:

- Laws and regulations related to equal opportunity and Affirmative Action;
- City Personnel rules, policies and procedures;
- Memoranda of Understanding as they relate to subordinate personnel.

#### Ability to:

- Direct and coordinate the work of small groups of drafting technicians;
- Estimate time, personnel and materials required for completing structural/architectural drafting projects;
- Interpret specifications relating to the construction of office buildings, warehouses, generating stations, receiving stations and other general power facilities;
- Interpret City Building Codes, CAL/OSHA Guide, National Building Codes, Architectural Barriers Laws and Interpretive Manual, and related resource materials;
- Deal tactfully, persuasively and effectively with other employees, and to give clear and concise oral and written instructions relating to drafting and engineering work;
- Use logarithmic, trigonometric, curve data and Smoley's tables;

- Use drafting instruments, planimeters, slide rules, computers, and calculating machines efficiently;
- Draw and interpret construction drawings;
- Assemble, prepare and interpret charts, graphs, calculations and tables;
- Do machine and free hand lettering;
- Prepare clear and accurate reports utilizing proper grammar and punctuation.

**Requirements:** Three years of full-time paid experience in architectural or structural drafting as an Architectural Drafting Technician or as a Civil Engineering Drafting Technician is required.

**<u>License:</u>** A valid California driver's license and good driving record may be required.

<u>Physical Requirements:</u> Strength to perform average lifting of less than 5 pounds and occasionally over 15 pounds; good speaking and hearing ability; and good eyesight.

Persons with disabilities may be able to perform the essential duties of this class with reasonable accommodation. Reasonable accommodation will be evaluated on an individual basis and depend, in part, on the specific requirements for the job, the limitations related to the disability, and the ability of the hiring department to reasonably accommodate the limitations.

As provided in Civil Service Commission Rule 2.5 and Section 4.55 of the Administrative Code, this specification is descriptive, explanatory and not restrictive. It is not intended to declare what all of the duties, responsibilities, and required qualifications of any position shall be.