

**City of San José**  
**CLASS SPECIFICATION**

**TITLE: CADD Technician (3716)**

<b>DEPARTMENT</b>	<b>ACCOUNTABLE TO</b>	<b>FLSA STATUS</b>
Associate CADD Designer	Engineer	Non-exempt

**CLASS SUMMARY**

Under general supervision, performs difficult technical engineering work in the preparation of civil (including structural and/or transportation), electrical, or mechanical engineering drawings and other graphic material using computer-aided drafting (specifically AutoCAD and/or Micro-Station) and manual drafting methods and working accurately and in compliance with drafting standards. May supervise lower-level technicians.

**DISTINGUISHING CHARACTERISTICS**

This is a journey-level classification with specific expertise and responsibility in preparation of engineering drawings. It is distinguished from the Engineering Technical series in that the latter perform a variety of general sub-professional engineering, architectural and landscape architectural support work not limited to preparation of engineering drawings.

**QUALIFICATIONS**

**(These qualifications are typically required. An equivalent combination of education, experience, knowledge, skills, and abilities sufficient to satisfactorily perform the duties of the job may be substituted.)**

**Minimum Qualifications**

Education: Successful completion of high school, or possession of a General Educational Development (G.E.D.) Certificate, or California Proficiency Certificate.

Experience: Four (4) years of increasingly responsible sub-professional engineering/technical support experience working with AutoCAD and/or Micro-Station.

Acceptable Substitutions: Successful completion of two (2) academic years or sixty (60) semester units of college level engineering technology courses or related field may be substituted for up to two (2) years of sub-professional engineering/technical support experience.

Certification or License: Certification from recognized training facility in the use of AutoCAD and/or Micro-Station. Current, valid driver’s license authorizing the operation of a motor vehicle.

**Other Qualifications**

**(Incumbents may be required to have different combinations of the listed qualifications, or more specific job-related qualifications depending on the position.)**

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**Basic Knowledge, Skills and Abilities**

(Needed at entry into the job in order to perform the essential duties.)

Knowledge of:

- Principles of mathematics, algebra, geometry and trigonometry and their application to drafting work.
- Nomenclature, symbols, methods, practices, techniques and instruments used performing assessment and/or engineering related drafting work.
- Drafting techniques and design formats using manual and/or automated tools (AutoCAD and/or MicroStation).
- Research techniques and methodologies.

Skill in:

- Preparing clear, concise, and accurate drafting designs either manually or using an automated system.

Ability to:

- Apply technical engineering principles and practices;
- Read and interpret plans and blueprints;
- Perform computations involving engineering formulas, trigonometry, and geometry;
- Perform drafting using AutoCAD and/or Micro-Station and manual tools;
- Express factual and conceptual information verbally and in writing;
- Develop and maintain effective working relationships with individuals from a variety of cultural and socio-economic backgrounds.

**Desirable Qualifications**

(Knowledge, skills and abilities; licenses, certificates, education, experience that is more position specific and/or likely to contribute to more successful job performance.)

Knowledge of CADD Standards use and enforcement.

Ability to:

- Prepare cost estimates, contracts and specifications;
- Research and understand title reports, deed, and other official documents;
- Work on a range of CADD design-engineering solutions.
- Assess and understand user needs and to develop the necessary plans and drawings to meeting those needs.
- Develop realistic work schedules and identify schedule impacts for changed conditions.
- Solve practical problems and interpret a variety of instructions furnished in written oral diagram or schedule form.
- Maintain technical & engineering drawings using 2-D/3-D CADD software as necessary.
- Coordinate/delegate CADD work tasks
- Provide Quality Assurance of CADD work assignments
- Supervise and train subordinates.

DUTY NO.	<b>TYPICAL CLASS ESSENTIAL DUTIES:</b> (These duties and estimated frequency are a representative sample; position assignments may vary depending on the business needs of the department.) Duties may include, but are not limited to, the following:	FRE-QUENCY*
1.	Prepares civil (including structural and/or transportation), electrical, or mechanical e	Continuous

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2.	Checks and may evaluate the technical drawings of other staff.	Continuous
3.	Conducts engineering investigations and collects and calculates field/departmental data for the preparation of designs and drawings.	Continuous
4.	Makes preliminary checks and reviews engineering documents and drawings for accuracy, engineering sufficiency, and conformance to specifications and standards.	Continuous
5.	Assists in the preparation of cost and quantity estimates for engineering projects, project specifications and written reports, and site investigations.	Frequent
6.	Participates in the development of agreements with other agencies and private firms relating to CADD information.	Frequent
7.	Participates in the development and operation of City-wide management in the planning, operating and maintenance of the built environment (sewers, pavement, municipal buildings, traffic control, parks maintenance and other infrastructure elements).	Occasional
8.	Indexes, reproduces and maintains engineering documents stored in databases or spreadsheets in hard copy form.	Occasional
9.	Prepares written reports, minutes, correspondence, field reports and specifications in the course of performing work.	Frequent
10.	Explains and enforces drafting procedures and standards and contributes to the development of computer-aided drafting and design (CADD) standards.	Frequent
11.	May supervise a team of lower level technicians and schedule jobs according to priority.	As Required
12.	Performs other duties of a similar nature or level.	As Required

\*Frequency defined as %, (totaling 100%) *or* “Continuous” (daily or approximately 20%+), “Frequent”(weekly or approximately 15%+), “Occasional”(monthly or approximately 10%+), “As Required”(Intermittent or 5% or less)

<b>CLASSIFICATION HISTORY</b> <i>Created 10/12; s000</i>
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