

**CLASS SPECIFICATION**  
**SAN DIEGO CITY CIVIL SERVICE COMMISSION**  
**PRINCIPAL ENGINEERING AIDE - 1727**

**DEFINITION:**

Under general supervision, to perform routine engineering design and construction inspection or materials testing; to supervise the processing of a variety of building applications and permits; to supervise the preparation of a variety of engineering maps and records; and to perform related work.

**\* EXAMPLES OF DUTIES:**

- Performs subprofessional engineering work regarding the enforcement, investigation, construction, design, inspection, and maintenance of engineering records and projects in an office, laboratory, or field setting;
- Performs routine civil engineering design by calculating distances, ties, angles, traverses, and closures;
- Performs Geographic Information Systems (GIS) mapping and data maintenance associated with facilities, utilities, land use, environmental, and transportation records;
- Plots cross sections, profiles, and earth work, establishing tentative street grades, curb returns, and less difficult sewer and water main installations;
- Performs less difficult electrical engineering design by laying out street lighting, traffic signals, and public building electrical circuits;
- Performs backflow prevention/cross-connection control;
- Prepares specifications;
- Inspects street, sidewalk, curb, water, and sewer construction;
- Performs field and laboratory tests of construction materials;
- Supervises the issuance of building, plumbing, electrical, and other permits;
- Supervises the preparation of a wide variety of complex drafting work;
- Checks and processes private development plans, maps, and agreements;
- Coordinates construction activities with other agencies and citizen groups.

**MINIMUM QUALIFICATIONS:**

Please note: the minimum qualifications stated below are a guide for determining the education, training, experience, special skills, and/or license which may be required for employment in the class. These are re-evaluated each time the position is opened for recruitment. Please refer to the most recent Job Description for updated minimum qualifications: <https://www.governmentjobs.com/careers/sandiego/classspecs>.

A Bachelor's Degree in Architecture, Civil or Structural Engineering, or a closely related field; **OR** Engineer-in-Training (EIT) Certificate issued from a state licensing board; **OR** Land Surveyor-in-Training (LSIT) Certificate issued from a state licensing board; **OR** two years of

- \* EXAMPLES OF DUTIES performed by employees in this class. The list may not include all required duties, nor are all listed tasks necessarily performed by everyone in this class.**

full-time experience as a Senior Engineering Aide or Senior Drafting Aide with the City of San Diego; **OR** four years of full-time subprofessional engineering, drafting, or Geographic Information Systems (GIS) map preparation experience. Possession of a valid California Class C Driver's License.