

Class Code: E37  
CITY OF ANAHEIM  
Class Specification

Classification:  
PRINCIPAL WATER ENGINEERING AIDE

Definition:

Under minimal supervision, to perform the most responsible and more complex sub-professional civil engineering work, including responsible design work.

Typical Duties:

Performs design of water main wells, pump station, meter under the technical direction of professional engineering personnel.

Researches existing records of utilities, structures, grades, and related information and conducts project field review.

Makes computations involving alignment and closure.

Prepares and revises maps to indicate proposed layouts.

Makes technical and mathematical checks as to the accuracy of plans submitted by others.

Designs and prepares orders for materials and minor equipment.

Provides information as to the location of existing and proposed public works and utilities facilities.

Supervises the recording and filing of plans, plat sheets, and maps.

Orders and receives blueprints and supplies, as assigned.

May train and supervise lower-level drafting personnel.

Performs technical plan checks of City plans, architectural designs, subdivision plats and improvement drawings, annexations and related proposals to ensure compliance with City imposed development conditions and municipal code provisions.

Performs right-of-way, street, sewer and storm drain design.

Performs plan checks, calculations and other work related to annexations and property splits.

Prepares plans and specifications for the construction of water facilities and public works projects; implements project design requirements; performs design and calculations; and prepares estimates of quantity and material costs; performs construction cost studies and bid analysis.

Prepares, maintains, revises, and closes-out work order package including data input on computer terminal.

Typical Duties:

Verifies the accuracy of cost estimates and easements.

May make field checks of project sites or survey area to verify survey results or features.

Prepares a variety of special engineering related reports and studies.

Inks, pencils, traces and letters charts, graphs, maps, plans and other drawings manually and through computer aided software applications; prepares miscellaneous illustrative materials such as charts and graphs and illustrative art work.

Responds to inquiries from developers, contractors, architects, and the general public regarding City requirements related to the construction, alteration, and maintenance of civil engineering facilities.

Performs other job related duties as required.

Minimum Requirements:

Experience:

Equivalent to extensive experience comparable to a Senior Water Engineering Aide.

Knowledge of:

Elementary hydraulics and hydrology.

Principles and practices of hydraulic and civil engineering design.

Methods and materials in the construction of public works and methods and standards in the design of water utilities facilities.

Policies and regulations governing the construction, extension and maintenance of systems and facilities associated with the area of assignment.

Drafting principles and techniques, CAD, personal computers and related software applications.

Methods and techniques of engineering, mapping and estimating.

Ability to:

Perform technical research and provide reliable advice on engineering problems. Interpret and prepare detailed design of water facilities.

Communicate effectively, orally and in writing.

Perform engineering calculations with speed and accuracy.

Prepare complete plans and estimates of routine public works and utility projects.

Use and care for engineering and drafting instruments and related equipment.

Perform computer aided drafting and design work including maps, plats, sketches, plans, graphs, charts, and other related materials.

Note:

Possession of or ability to obtain a valid California Driver's License.

Supervision Received:

Works under technical and administrative supervision. Work in progress and completed work is reviewed periodically by Associate Engineer - A or Principal Water Engineer.

Supervision Exercised:

May provide training and lead supervision to Engineering Aides but does not hire, evaluate, or dismiss employees.

Career Ladder Information:

Experience in this class supplemented by additional training may serve to meet minimum requirements for promotion to Water Engineering Representative or Assistant Engineer - A.

NOTE: The above statements are intended to describe the general nature and level of work being performed by persons assigned to this job. They are not intended to be an exhaustive list of all duties, responsibilities and skills required of personnel so classified. All requirements are subject to possible modification to reasonably accommodate individuals with disabilities.

Former Job Class - Principal Engineering Aide-Assigned to Water  
10/1/85 - New - R. Andersen & Assoc.  
9/90 - Revised - C. Harris  
Class Concept - Advance Journey Level  
Unit of Representation - AMEA  
Doc: CS1049