

COUNTY OF SOLANO

CIVIL ENGINEER - PLAN CHECK

DEFINITION

Performs complex professional engineering work in checking plans, calculations and specifications for legal and technical compliance with ordinances, codes and building laws which requires the application of construction and civil engineering principles, practices and theories.

CLASS CHARACTERISTICS

This is the fully qualified professional structural engineer in the County Building and Safety Services Division of the Environmental Management Department and reports to the Building. This class is characterized by the responsibility for performing a complete range of professional structural engineering design review including the most complex technical, interpretative and enforcement activities in compliance with applicable codes, laws and regulations.

SUPERVISION RECEIVED AND EXERCISED

Receives direction from the Building Official.

May provide technical oversight of technical or clerical level staff.

EXAMPLES OF DUTIES –*Duties may include but are not limited to the following:*

Checks building plans, including specifications and calculations, and otherwise provides customer service to architects, engineers, contractors and property owners in gaining compliance with structural design, grading, soils reports, energy standards and general conformity to applicable ordinances, laws and state building codes.

Checks plans to determine loading on roofs, walls and floors, checks size and spacing of beams, rafters and joists, amount and size of reinforcement in concrete members, type of structural connections and adequacy of design to meet earthquake, wind load, material stress and Title 24 requirements.

Makes independent analysis when required to verify the adequacy and safety of questionable designs; makes field inspections as appropriate; advises Building Inspectors on structural and other building related problems arising in the field during construction.

Prepares reports and correspondence pertaining to structural engineering problems and building code enforcement; keeps informed regarding new building construction methods, materials and requirement; trains and provides functional supervision of assigned employees.

Issues permits after plan review approval.

Interacts with public and professional organizations in matters of engineering, structural design and construction.

Maintains professional knowledge in applicable areas and keeps abreast of changes in job-related rules, statutes, laws and new business trends; makes recommendations for the implementation of changes; reads and interprets professional literature; attends training programs, workshops and seminars as appropriate.

JOB RELATED AND ESSENTIAL QUALIFICATIONS

Knowledge of:

Considerable knowledge of modern structural principles and practices.

Principles and practices of engineering, building construction, criteria relative to soils, pertinent codes, laws and regulations governing building construction.

Building construction practices and procedures.

Skill to:

Operate office equipment including a personal computer, copy and fax machines and printers.

Ability to:

Read and interpret building plans, specifications quickly and accurately and codes calculations.

Make structural calculations.

Complete assigned work and follow through in a timely manner.

Express ideas clearly and concisely.

Determine the adherence of structural plans to code requirements.

Coordinate work and projects.

Maintain accurate records and reports.

Develop and implement operational procedures.

Establish and maintain cooperative working relationships.

Collect and analyze data to draw logical conclusions and make appropriate recommendations.

Research regulations, procedures and/or technical reference materials.

Depending on assignment, effectively delegate responsibility and authority to others.

EXPERIENCE AND EDUCATION/TRAINING

Experience:

Three years of professional engineering experience in plan checking and building design in a public or private setting.

Education/Training:

A Bachelor of Science degree from an accredited college or university in civil or architectural engineering is required.

SPECIAL REQUIREMENTS

Possession of a valid registration as a Civil Engineer or a Professional Engineer (Civil) of the State is required.

Possession of or ability to obtain a valid California Class C driver's license may be required.

SUPPLEMENTAL INFORMATION

Independent travel is required.

Incumbents must be able to perform basically sedentary work.

Incumbents may be required to work outside normal business hours.

ADA COMPLIANCE

Physical Ability: Tasks involve the ability to exert light physical effort in sedentary to light work, but which may involve some lifting, carrying, pushing and/or pulling of objects and materials of light weight (5-10 pounds). Tasks may involve extended periods of time at a keyboard or workstation. May involve prolonged standing.

Sensory Requirements: Requires the ability to recognize and identify similarities and differences between shade, degree or value of colors, shapes, sounds, forms, textures or physical appearance associated with job-related objects, materials, tasks or people.

Environmental Factors: Requires the ability to work under conditions where exposure to

environmental factors is minimal and poses a very limited risk of minor injury or illness.

Director of Human Resources

Established Date: February 2001

Revised Date: November 2002

BOS Date: June 30, 2003

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