

CLASS SPECIFICATION
Senior Engineer

FLSA Status: Exempt
Union Representation: Nonrepresented

GENERAL PURPOSE

Under general supervision, supervises and participates in the conduct of complex engineering projects and analyses; researches, plans and designs for a variety of waterworks, civil, transportation and sanitary capital construction, planning and maintenance programs; performs as project engineer-of-record and/or project manager on public works design and construction projects; plans and directs the work of professional and technical staff, consultants and contractors; and performs related duties as assigned.

DISTINGUISHING CHARACTERISTICS

The responsibilities of incumbents in this class include the supervision of professional and technical staff in various bureaus within the City. Assignments are general and of a continuing nature, requiring the exercise of independent judgment and initiative in scheduling, assigning and coordinating the work with other units and external consulting engineers or contractors. Incumbents are also expected to perform and administer the most complex professional engineering work requiring a substantial level of professional training and experience. Senior Engineers are distinguished from Supervising Engineers by being first-level supervisors over smaller work groups and by having more direct involvement in the technical or operational work and less administrative responsibilities.

ESSENTIAL DUTIES AND RESPONSIBILITIES

Any one position in this class may not perform all the duties listed below, nor do the listed examples of duties include all similar and related duties that may be assigned to this class.

1. Plans, directs and evaluates the work of engineering professional and technical staff and consultants in developing, implementing and evaluating engineering plans, work processes, systems and procedures to achieve annual goals, objectives and work standards.
2. Supervises staff or consultants in the design of streets and transportation system infrastructure, street lighting and controls, structures, water distribution facilities or wastewater collection and treatment facilities, and the preparation of related capital projects; supervises staff in the review of engineering plans for commercial, industrial and residential structures; supervises staff in the review, inspection and enforcement of geotechnical, site development and erosion-control issues; prepares cost estimates, reviews drawings and specifications for compliance with City standards, interprets specifications and City engineering policies; initiates or reviews change orders and periodic project status reports; seals final plans.
3. Assists in the development and implementation of engineering standards and priorities and the preparation of operating budget recommendations; monitors performance against the biannual bureau and division budgets; authorizes materials purchases and monitors work activities and expenditures to control costs.

4. Performs project management on engineering design and construction projects, supervising or performing project planning and design, developing and administering project terms and conditions, evaluating contract compliance and adherence to technical policies; prepares RFPs, hires consultants, manages and directs their work, reviews work products, and approves payment requests.
5. Conducts engineering studies to evaluate the feasibility of proposed or ongoing projects or methods or to determine solutions to existing field problems; assembles and evaluates technical data; provides technical guidance or proposes solutions to an interdisciplinary design or research group.
6. May review reports, plans, structural calculations and specifications prepared by subordinates for adherence to City standards and accepted engineering practices, including commercial buildings, residences and other structures requiring design evaluation to ensure compliance with specific provisions of the City building codes.
7. May analyze and prepare reports of the effects on infrastructure caused by proposed annexations, zone changes, new construction, traffic facilities and mass transit matters, developing mitigating measures and coordinating this work with other divisions, bureaus, governmental agencies and public commissions.
8. May analyze and resolve water or sanitary collection system problems, such as low pressure complaints, distribution system outages associated with developer and public works projects, including those discovered during development review processes; may analyze, resolve problems and manage implementation of environmental compliance requirements for bureau facilities and field operations.
9. May analyze, resolve problems and manage implementation of environmental compliance requirements for bureau facilities and field operations.
10. May supervise an engineering inspection program to review designs and plans for commercial buildings, residences and other structures to ensure compliance with accepted engineering practices and the provisions of City building codes and other pertinent laws and regulations.
11. Plans and schedules work, estimates staffing needs and assigns projects, reviews progress and establishes priorities for completion, resolving priority conflicts and ensuring work is accomplished in a timely and fiscally responsible manner.
12. Establishes performance requirements and personal development targets with assigned staff, evaluates performance and provides performance improvement and development guidance; recommends disciplinary action to address performance deficiencies in accordance with City Charter, Code, human resources policies and labor contract agreements, subject to director and City management concurrence.
13. Provides leadership and works with staff to create a high-performance, service-oriented work environment that supports the City's and bureau's missions, objectives and service expectations.
14. Provides leadership and participates in programs and activities that promote workplace diversity and a positive employee relations environment.
15. Coordinates project elements with local and regional agencies.

16. Prepares and makes presentations to Council, Planning and Design Commission, other agencies and citizens groups.

MINIMUM QUALIFICATIONS

Knowledge of:

1. Engineering theory, principles, practices, materials, costs, construction techniques, current trends, regulations, standards and equipment applicable to the area of specialization.
2. Engineering contract administration, planning, organization principles, program planning and project management principles and techniques.
3. Budget, personnel, cost control and administrative practices and policies.
4. Information technology and computer capabilities applicable to functional responsibilities.

Ability to:

1. Plan, assign, supervise and coordinate the work of field, professional and technical subordinates.
2. Apply federal, state and city laws, codes, standards and specifications applicable to the area of specialization.
3. Prepare, review, approve and interpret engineering plans and specifications.
4. Develop, monitor and report on budgets.
5. Communicate scientific and technical matters to non-technical individuals, including policy makers and the public.
6. Interact effectively, engage in problem solving, represent the City and partner with citizens, community groups and contractors.
7. Establish and maintain effective working relationships with a diverse workforce and community.

Training and Experience:

A typical way of obtaining the knowledge, skills and abilities outlined above is graduation from a recognized four-year college or university with a major in civil, structural, sanitary or mechanical engineering, or a closely related field; and four years of progressively responsible professional engineering experience; or an equivalent combination of training and experience. Experience in a public agency is desirable.

Licenses; Certificates; Special Requirements:

A valid state driver's license.

A certificate to practice as a registered Professional Engineer, and an Oregon Professional Engineer Certificate within six months after appointment.

PHYSICAL AND MENTAL DEMANDS

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 depends, in part, on the specific requirements for the job, the limitations related to disability and the ability of the hiring bureau to accommodate the limitation.

Class History:

Adopted: 07-01-02

Revised:

Class created as a result of Nonrepresented Classification & Compensation Study, 2000-2002. This class is composed of positions from the following class(es):

3166 SENIOR ENGINEER. Adopted: 07-01-92; Revised: 11-26-93; 02-28-94

3359 PUBLIC WORKS MANAGER. Adopted: 07-01-92.

June 2009 - Change Job Class number from 7650 to 30000680, due to system change.