

CLASSIFICATION NO. 299

Established: 11/90 Revised: 6/93

FLSA: Exempt EEO: 2

CIVIL ENGINEER, ASSOCIATE

CLASS CHARACTERISTICS

Under general supervision, to perform professional engineering work in the planning, design, construction and maintenance of public works or related projects; and to do other work as required.

DISTINGUISHING CHARACTERISTICS

The Civil Engineer series provides professional engineering support within the Department of Transportation and Development or the Department of Utilities. Positions may be assigned to road design and construction, traffic design, sanitary sewer design and construction, surface water management, wastewater operations or a related function.

The Civil Engineer, Associate is a registered Engineer in Training (E.I.T.) within the State of Oregon. Incumbents perform moderately difficult professional engineering work under the general program or project supervision of a licensed professional engineer.

The Civil Engineer, Associate differs from the Civil Engineer which performs comprehensive duties as a licensed professional engineer. It also differs from the Engineering Technician 4 which performs complex technical or limited professional engineering duties under the direction of a professional engineer.

TYPICAL TASKS

Duties may include but are not limited to the following:

- 1. Participates in the design and preparation of plans and specifications for public works projects including sanitary or storm sewer collection systems, water distribution systems, road improvements and traffic controls.
- 2. Reviews and comments on site specific development and subdivision proposals with respect to public infrastructure needs; consults with design professionals, realtors, and property owners on design standards, drainage control and erosion mitigation.
- Administers the design, dedication and acceptance of road pavements, traffic controls and infrastructure improvements; reviews and approves subdivision plats and engineering plans for street and storm sewer improvements; assigns inspection fees; coordinates performance bonding process and inspection staff activities.
- 4. Conducts and coordinates traffic engineering studies; collects and analyzes field data; develops conclusions based on statistical and field evidence; designs traffic intersections, channelization, signs, signal and related structures.

- 5. Serves as project leader on minor engineering projects; leads the work of engineering technicians and other staff assigned to projects.
- 6. Assists in the preparing reports and project cost estimates for federal, county, and city agencies, including those for environmental impact studies and environmental assessments; coordinates reimbursement billings, County matching payments and other financial matters related to grant funded transportation and improvement projects.
- 7. Confers with the public and County staff on issues related to the County road system; communicates information via the phones, in writing, or in person.

REQUIRED KNOWLEDGE, SKILLS AND ABILITIES

<u>Working knowledge of.</u> Principles and practices of civil, sanitary and traffic engineering; English grammar; algebra, geometry, trigonometry, and calculus; geology as applied to road construction; hydrology and hydraulics as applied to the capacity of water distribution and sewage treatment equipment and facilities; overflow and inlet design; engineering computer software applications; drafting principles and practices; structural materials, their strengths and methods for testing; route surveying processes and techniques; basic principles of project management; pavement design; and pavement management systems.

<u>Skill to:</u> Communicate effectively, both orally and in writing; apply engineering principles and practices to the design, construction and maintenance works or related projects; utilize hydrological microcomputer programs; read typographic maps and gauge station data; lead the work of subordinate personnel; establish and maintain effective working relationships with County staff and the public.

WORKING CONDITIONS

Occasional duties in the field require walking, twisting, balancing, and involve exposure to inclement weather, noise, and slippery and/or uneven terrain.

MINIMUM QUALIFICATIONS

Minimum qualifications are used as a guide for establishing the minimum experience, education, licensure, and/or certifications required for employment in the classification. The following minimum qualifications are established for this classification. Additional minimum qualifications and special conditions may apply to a specific position within this classification and will be stated on the job announcement.

Experience: None required.

Licenses/Certifications: None required.

PRE-EMPLOYMENT REQUIREMENTS

Driving may be necessary for County business. For position(s) with occasional/incidental driving, incumbents must possess a valid driver's license. Accommodation requests for an acceptable alternative method of transportation will be reviewed on an individual basis in compliance with State and Federal legislation. For position(s) with regular driving, incumbent(s) must also possess and maintain an acceptable driving record throughout the course of employment.

POST-EMPLOYMENT REQUIREMENTS

Within one year of hire, possession of an E.I.T. certificate from the State of Oregon

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