## WASHINGTON STATE DEPARTMENT OF PERSONNEL

Class Code: 60190

Specification for Class of

## MECHANICAL ENGINEER 3 Abolished Initially Effective January 13, 2006 Abolished Final Effective February 10, 2006

<u>Definition</u>: Serves as a senior-level Mechanical Engineering Specialist who may direct other professional engineers.

Typical Work

Reviews and checks mechanical plans and specifications for new construction, additions and remodeling of State facilities;

Prepares cost estimates for capital outlay requests and for repair projects where material and equipment are procured by requisition;

Checks and approves or rejects all contractor's vouchers for payment against progress of engineering projects;

Coordinates engineering activities with other State agencies;

Investigates requests from other agencies or from parent agency where engineering or construction is involved;

Provides mechanical engineering services and advice to other professional engineering or architectural personnel within the work unit; designs or reviews the design of other professional mechanical engineers for HVAC systems, refrigeration, plumbing, power houses and other mechanical appurtenances to State facilities;

Performs other work as required.

## Knowledge and Abilities

Knowledge of: theory, principles and practices of engineering, particularly as related to building construction; engineering drafting procedures and equipment; fundamentals of electrical, mechanical and civil engineering; effectiveness and efficiency of various air conditioning and heating systems, water and waste disposal systems, and other appurtenances adding to convenience, comfort, efficiency and safety of complex buildings; mathematics and engineering formulas; fire, boiler and building codes; requirements of users and occupants of State facilities. Ability to: use sound judgment on difficult engineering problems; write engineering specifications; understand and interpret written and oral directions, specifications, plans and drawings; deal tactfully with architects, engineers, inspectors and State officials; serve as resident engineer on a number of mechanical engineering jobs simultaneously; act as consulting engineer to physical plant directors and other technical personnel; determine economy and efficiency of conversion from oil or gas to solid fuel; solve water-use increase and sewage disposal problems, coordinating these solutions with other State departments; travel frequently to all parts of State.

## Minimum Qualifications

Registration as a professional engineer in the branch of mechanical engineering in the State of Washington or another state based on registration requirements equivalent to those in Washington.

NOTE: Requirements for professional registration as an engineer in the State of Washington are eight years of professional experience (which may include up to four years of college-level engineering education) and successful completion of sixteen hours of professional licensing exams. Applicants qualifying through the licensing equivalency option must achieve professional registration as an engineer in the branch of mechanical engineering in the State of Washington within six months of appointment to this class.

Revised definition: 12-12-80 Revised minimum qualifications: 5-9-86 Revised minimum qualifications: 11-15-91 Revised minimum qualifications: 7-9-99