Minimum Qualification Specifications
for the Class:

PUBLIC WORKS MANAGER

Basic Education/Experience Requirements

All applicants must meet one of the requirements specified in A, B, C, D or E below:

A. Graduation with a bachelor's degree from a school of engineering in an accredited college or university.

Note: For some positions, graduation from an accredited college or university with a degree in physics, mathematics, or chemistry may be accepted as qualifying, provided the applicant has had at least fifteen (15) credits in engineering sciences, common to all engineering disciplines; e.g., thermodynamics, statics, electrical science, applied mechanics, engineering drawing, strength of materials, etc.

B. Administrative, professional or technical experience involving the application and knowledge of the fundamental physical and mathematical sciences underlying professional engineering including physics, chemistry, mathematics through integral calculus and engineering sciences such as statics, dynamics, strength of material, thermodynamics, fluid mechanics and engineering drawing and other specialized courses to one of the branches of engineering. Such experience must be substantially equivalent to the knowledge and understanding gained by completion of a college training leading to a bachelor's degree in engineering; or

C. A combination of college training in engineering and experience mentioned in B above substantially equivalent to completion of a college training leading to a bachelor's degree in engineering; or

D. Graduation with a bachelor's degree from an accredited school or college of architecture or engineering, with a degree in architecture or architectural engineering; or

E. Four (4) years of successful and progressive experience in architecture which will enable the applicant to perform successfully at the professional level provided this experience demonstrates a thorough knowledge of the

fundamental principles and theories of professional architecture and an understanding of the field of architecture comparable to that which would be acquired through successful completion of a full four-year course leading to a bachelor's degree in an accredited college or university with a major study in architecture.

Experience Requirements

Applicants must have had progressively responsible experience of the kind, quality and quantity described below, or any equivalent combination of training and experience.

Specialized Experience: Four (4) years of either Engineering or Architectural Experience as described below:

Engineering Experience: Progressively responsible professional engineering experience which required the knowledge and application of the basic physical and mathematical sciences and the engineering sciences to the solution of theoretical or practical engineering problems.

Examples of qualifying professional engineering experience are as follows:

A. The development and design of machines, equipment, structures, or power, water, communication, or transportation systems and facilities, or the preparation of development, design, or construction specifications for such materials or systems, involving the use of theoretical and applied mechanics, a knowledge of the properties of materials and other appropriate engineering and scientific knowledge and skills.

B. Original research in one or more branches of engineering, developing engineering applications of physical and other scientific principles.

C. Administration of engineering programs and projects, involving analysis of requirements for equipment and materials, study of technical feasibility and cost, selection of approach, and direction of problem solution.

D. Interpretation of systems operational requirements in terms of physical facilities, and the design and development of standard procedures for efficient operational use or maintenance of such facilities.

E. Evaluation, investigation, or survey of engineering projects, structures, devices or services.

F. Such activities as production, construction, regulation, and testing, when they involve engineering considerations and decisions as important and controlling elements.

Note: In some situations, experience which is not of itself clearly professional engineering experience may be accepted in lieu of "professional" engineering experience. In such case, the experience must have been preceded by prior "professional" engineering experience and must contribute directly and significantly to the candidate's professional engineering competence. For example, an engineer may be assigned to a management or a computer systems analysis position in preparation for assumption of higher level responsibilities in engineering administration.

Architectural Experience: Professional architectural work experience in developing and preparing complete designs, drawings, specifications, estimates of buildings, structures and installations.

Professional experience is comprised of the performance of the recognized architectural functions based on and requiring a through knowledge and application of the basic physical, mathematical and architectural sciences to the solution of theoretical or practical architectural problems.

Supervisory or Staff Advisory Experience: Two (2) years of Supervisory and/or Staff Advisory Experience as described below:

Supervisory Experience: Professional engineering or architectural experience which included: 1) planning, organizing, scheduling, and directing the work of others; 2) assigning and reviewing their work; 3) advising them on difficult work problems; 4) training and developing subordinates; and 5) evaluating their work performance.

Staff Advisory Experience: Professional engineering or architectural experience as a technical expert in a specialized area or program function performing staff advisory, consultative work and/or reviewing the work of a staff of specialists assigned to activities such as long-range planning, research and/or development of specific projects, programs, etc.

Managerial Aptitude: Managerial aptitude will be considered to have been met through successful performance of, or substantial participation in, organizing, scheduling, and coordinating a group of activities in order to attain program objectives within time, resource and budgetary limitations; interest in management demonstrated by the performance of work assignments in a manner which clearly indicates awareness of problems and the ability to solve them; completion of educational or training courses in the areas of management accompanied by the application of

principles, which were learned, to work assignments; management's observation and evaluation of the applicant's leadership and managerial capabilities; success in trial assignments to managerial and/or administrative tasks.

Substitutions Allowed

1. A master's degree in engineering or architecture from an accredited college or university may be substituted for one (1) year of Specialized Experience.

2. Excess Supervisory and/or Staff Advisory Experience of the type and quality described above may be substituted for Specialized Experience on a year-for-year-basis.

Quality of Experience

Possession of the required number of years of experience will not in itself be accepted as proof of qualification for a position. The applicant's overall experience must have been of such scope and level of responsibility as to conclusively demonstrate that he/she has the ability to perform the duties of the position for which he/she is being considered.

License Required

Applicants must possess a valid license as a professional engineer or architect in the State of Hawaii.

Tests

Applicants may be required to qualify on an appropriate examination.

Physical and Medical Requirements

Applicants must be able to perform the essential functions of the position effectively and safely, with or without reasonable accommodation.

This is an amendment to the minimum qualification specifications for the class PUBLIC WORKS MANAGER, which were approved on January 30, 2004.

DATE APPROVED: 3/14/2012

for BARBARA A. KRIEG, Interim Director
Department of Human Resources Development