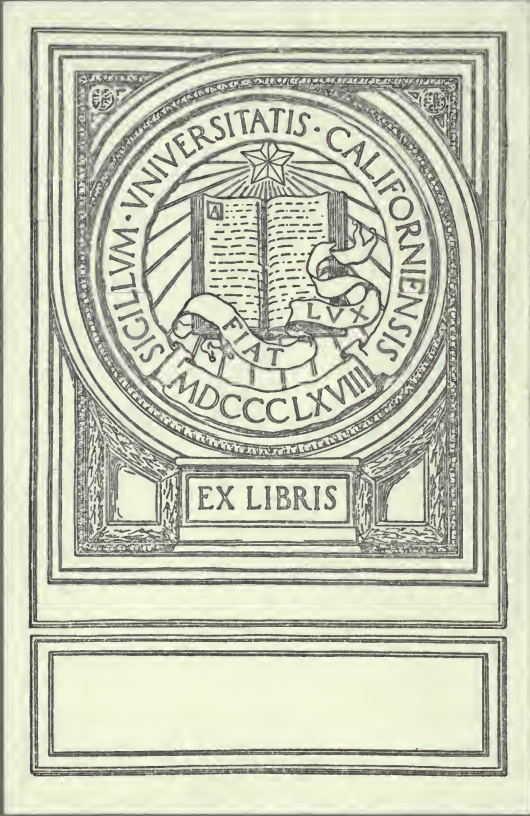


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PERSONNEL SPECIFICATIONS
(Commissioned)

CONSTRUCTION DIVISION
OF THE ARMY

UNIV. OF
CALIFORNIA

WAR DEPARTMENT
THE ADJUTANT GENERAL'S OFFICE
CLASSIFICATION DIVISION
WASHINGTON

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**PERSONNEL SPECIFICATIONS
(Commissioned)**

**CONSTRUCTION DIVISION
OF THE ARMY**

Occupational names and symbols used herein refer to the system employed by the Adjutant General of the Army, Classification Division, in the "Occupational Index," C. C. P. 4, and "Trade Specifications," C. C. P. 504.

U. S. WAR DEPARTMENT
THE ADJUTANT GENERAL'S OFFICE
CLASSIFICATION DIVISION
WASHINGTON

TECHNICAL SPECIFICATIONS
(Continued)

CONSTRUCTION DIVISION
OF THE ARMY

Approved for issue by the Chief of Engineers, U.S. Army, on 10/10/17.
Approved for issue by the Chief of Construction, U.S. Army, on 10/10/17.

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Approved for issue by the Chief of Engineers, U.S. Army, on 10/10/17.
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1919

A. G. 062.1. Personnel Specifications

CLASSIFICATION DIVISION
JG: EF: 528

**WAR DEPARTMENT,
THE ADJUTANT GENERAL'S OFFICE,
WASHINGTON.**

March 24, 1919.

FROM: The Adjutant General of the Army.
TO: The Chief of the Construction Division of the Army.
SUBJECT: Personnel Specifications.

1. Personnel Specifications for commissioned officers of the Construction Division, United States Army, are forwarded herewith for the information of all concerned.

2. These specifications were prepared, primarily, to serve as a guide for the procurement of civilians for official positions in the Construction Division of the Army.

3. It is, however, believed that the use of these specifications does not alone depend upon the procurement of civilians, but may point the way for the assignment of those who are already officers of the Army.

BY ORDER OF THE SECRETARY OF WAR:

JAMES GREGG,
Adjutant General.

PERSONNEL SPECIFICATIONS (Commissioned)

Construction Division of the Army

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Administrative Division

SECTION SUPERVISOR; MAJOR

Qualifications

Age limits: Best, 38-43; possible, 35-45.

Physical requirements: Limited service; must be free from disabilities that might interfere with performance of duties of this position.

Minimum schooling: No arbitrary requirements.

Civilian occupations in order of preference:

1. Staff or Headquarters experience.
2. Attorney, with military experience, five years.
3. Employment manager, five years.
4. Secretary and treasurer for a general contracting company, five years.
5. Business manager for a contracting or industrial company, five years.

Special or technical qualifications:

Required: Military experience as Commanding Officer or Adjutant.

Desired: Experience as Adjutant General; law training.

Leadership:

Essential, average minimum.

Special Army Training

None.

Duties

Is attached to the office of the officer in charge and in conjunction with the Officers' Branch is the representative of the Construction Division on the sub-committee of the General Staff on Selection of Candidates for Commissions which authorizes all specifications for commissioned personnel of the Construction Division. Handles all matters connected with procurement of officers, such as correspondence connected with applications for commissions, and records of officers and enlisted men; has charge of appointment, promotion, and leave of absence of civilians on duty under the direction of the Construction Division; controls direction of travel, changes of station, assignments to duty and expense accounts and separations from the service of such officers, soldiers and civilian employees; maintains liaison with the Adjutant General's Office and the Personnel Division of the General Staff.

SECTION SUPERVISOR; MAJOR

Qualifications

Age limits: Best, 35-40; possible, 32-45.

Physical requirements: Limited service only; must be free from disabilities that might interfere with performance of duties of this position.

Minimum schooling: No arbitrary requirements.

Civilian occupations in order of preference:

1. Business manager for engineering or contracting company, three years.
2. Secretary or Treasurer for general contracting company, three years.
3. Constructing engineer with large experience in organization, five years.
4. Office manager and statistician, five years.

Special or technical qualifications:

Knowledge of best methods of business organization and ability to apply them.

Leadership:

Desired; average.

Special Army Training

None.

Duties

Advises on all matters relating to the organization or methods employed in the Division. Prepares general reports for other bureaus and the General Staff, and maintains a general record of construction projects undertaken by the Division. Has charge of the following units which comprise this section: Project Unit, Statistical Unit, Forms Unit, and Bulletin Unit.

SECTION SUPERVISOR; MAJOR

Qualifications

Age limits: Best, 35-40; possible, 32-45.

Physical requirements: Limited service only; must be free from disabilities that would interfere with performance of duties of this position.

Minimum schooling: No arbitrary requirements.

Civilian occupations in order of preference:

1. Business manager, three years.
2. Secretary to manager of contracting or industrial company, three years.
3. Chief clerk for office with large volume of business, three years.
4. Office manager, three years.

Special or technical qualifications:

Required: Knowledge of office management; ability to organize and direct activities of a large office force.

Leadership:

Desired, average maximum.

Special Army Training

None.

Duties

Has direct charge of the following units comprising general office necessities: File and Record Unit, Mail Unit, Mimeograph and Multigraph Unit, Telegraph Unit, Messenger Unit, Information Unit, Supervision of Property and Supplies Unit.

SECTION SUPERVISOR; MAJOR

Qualifications

Age limits: Best, 38-43; possible, 35-50.

Physical requirements: Limited service only; must be free from disabilities that might interfere with performance of duties of this position.

Minimum schooling: No arbitrary requirements.

Civilian occupations in order of preference:

1. Managing officer of an employers' association, three years.
2. General contractor specially qualified in labor negotiations, five years.
3. Attorney, labor adjuster for employers, three years.
4. Engineer or architect with broad labor experience, five years.

Special or technical qualifications:

Experience in employing labor; familiarity with labor schedules, hours and conditions of employment; ability to deal fairly in negotiations.

Leadership:

Desired, average maximum.

Special Army Training

None.

Duties

Handles all matters relative to labor arising out of the construction work of the division. Establishes all schedules of labor rates, and prepares same for approval of the War Department representatives on the War Labor Policies Board in accordance with War Department General Orders No. 58, 1918. Supervises all labor matters pertaining to wages, hours, and conditions at all construction projects. Receives and deals with labor delegations. Adjusts wages in co-operation with the War Labor Policies Board and Emergency Construction Wage Commission and the General Wage Conference. Compiles and records all labor rates, conditions, and agreements.

SECTION SUPERVISOR; MAJOR

Qualifications

Age limits: Best, 38-48; possible, 35-55.

Physical requirements: Limited service only; must be free from disabilities that might interfere with performance of duties of this position.

Minimum schooling: No arbitrary requirements.

Civilian occupations in order of preference:

1. Contractor, 10 years.
2. Employer of labor in any sort of operation.

Special or technical qualifications:

Required: Familiarity with labor sources, and with arrangement incident to procurement and distribution; resourcefulness, necessary force and tact to carry on such operations successfully.

Leadership:

Desired, average.

Special Army Training

None.

Duties

Co-operates with the U. S. Employment Service in obtaining a supply of labor for the projects of the division. Establishes, in conjunction with the Building Division, the priority of labor demand at various projects. Is charged with the importation of labor from foreign countries and the island possessions. Has supervision over the following units which are a part of this section: Distribution Unit, Importation Unit and Field Service Unit.

SECTION SUPERVISOR; MAJOR
(Temporary position; not standard.)

Qualifications

Age limits: Best, 38-43; possible, 35-50.

Physical requirements: Limited service only; must be free from disabilities that might interfere with performance of duties of this position.

Minimum schooling: No arbitrary requirements.

Civilian occupations in order of preference:

1. Attorney, five years.
2. Public speaker, five years.
3. Writer on labor or economic questions.

Special or technical qualifications:

Required: Thorough information regarding the general economy of this country and the interests of labor. Ability to present facts in a convincing way. Talent and experience in direction of educational campaigns.

Leadership:

Essential, average maximum.

Special Army Training

None.

Duties

Combats all tendencies to discouragement in the workmen from enemy or socialistic propaganda. Directs the dissemination of correct information through mass meetings, pictures, and other forms of publicity.

SECTION SUPERVISOR; MAJOR

Qualifications

Age limits: Best, 38-43; possible, 35-50.

Physical requirements: Limited service only; must be free from disabilities that might interfere with performance of duties of this position.

Minimum schooling: No arbitrary requirements.

Civilian occupations in order of preference:

1. Attorney, five years.
2. Executive representative of a director of works, five years.
3. Business manager, with military experience, five years.

Special or technical qualifications:

Required: Ability to present the facts of a report in a logical and clear manner, such as would be gained by an attorney in writing briefs or in handling the legal affairs of business. General knowledge of business methods. Must be diplomatic and tactful.

Leadership:

Desired, nominal.

Special Army Training

None.

Duties

Gathers statistical and descriptive matter from Constructing Quartermaster and prepares all general field reports which go to make up the final permanent records on each project constructed by the Division. Co-operates with the Military Intelligence Section of the General Staff in maintaining proper protection on all operations. Handles all confidential investigations.

Engineering Division

EXPEDITING OFFICER; LIEUTENANT COLONEL

Qualifications

Age limits: Best, 40-50; possible, 40-55.

Physical requirements: Limited service only; must be free from disabilities that would interfere with performance of duties and must be physically very active.

Minimum schooling: Graduate of professional or technical school, or equivalent.

Civilian occupations in order of preference:

1. Civil engineer, 15 years.
2. Structural engineer, 15 years.
3. Architect, 15 years.

Special or technical qualifications:

Required: Wide experience in construction work, and at least 10 years' experience in administration of a large engineering or architectural office, or on the force of a general contractor. Ability quickly to understand the workings of a large enterprise, to select men to fill definite positions, and so to dispose of the activities of any set of men as to make a well-balanced organization. Proof of successful handling of large affairs.

Leadership:

Essential, average maximum.

Special Army Training

None.

Duties

Has general charge of operations of the Engineering Division under the direction of the chief of the division. Carries out policies established for operation of the division. Collects data covering design of projects, and distributes it to the various sections of the division; correlates the work of the various designing sections. Advises in the determination of construction materials to be used. Is responsible for securing the delivery of plans and schedules of materials to the Building Division in ample time to meet the needs of the building program.

EXPEDITING ENGINEER; MAJOR

Qualifications

Age limits: Best, 35-45; possible, 35-50.

Physical requirements: Limited service only; must be free from disabilities that would interfere with performance of duties of this position.

Minimum schooling: Graduate of professional or technical school, or equivalent.

Civilian occupations in order of preference:

1. Structural engineer, 10 years.
2. Architect, 10 years.

Special or technical qualifications:

Required: Operative and administrative experience (extending to time of entering the service) in building operations, preferably of industrial plants, as designer and as superintendent of construction. Knowledge of the building utilities, both inside and outside, commonly required in connection with industrial plants or large building operations. He must be naturally diplomatic and tactful in dealing with a large number of people without having authority over them. Ability to apply himself to routine work, as well as to give particular study to problems. Proof of five years successful administrative work in responsible charge of construction or designing operations in a large organization.

Leadership:

Essential, average.
Desired, average maximum.

Special Army Training

None.

Duties

Has charge of expediting the work handled by a section of the Building Division; collects data governing design of projects and distributes it to officers in charge of designing sections, to be correlated with the work of the advisory engineers (plans designed are furnished to building section) in ample time to meet needs of building program. Is responsible for reviewing all plans made for his section to assure their correctness, completeness, and correlation between the parts done by the several advisory engineers. He serves as the point of contact between the Building Section and the Engineering Division. He co-operates with the officers of the Building Section in every way that will forward building operations.

ADVISORY ARCHITECT; LIEUTENANT COLONEL.

Qualifications

Age limits: Best, 40-50; possible, 40-55.

Physical requirements: Limited service only; must be free from disabilities that would interfere with performance of duties of this position.

Minimum schooling: Graduate of professional or technical school, or equivalent.

Civilian occupations in order of preference:

1. Architect, in general practice, 15 years.
2. Structural engineer, in general practice, 15 years.
3. Drafting room superintendent, 15 years.
4. Architectural draftsman, 15 years.

Special or technical qualifications:

Required: General experience in the practice of architecture, preferably gained in his own office on work of varied character following a technical education on this subject, or an equivalent apprenticeship. Ability to plan simple structures, and to handle the administrative work involved in a large volume of business is necessary. Artistic ability is relatively of small importance. Proof of work on a large scale successfully handled.

Leadership:

Essential, average maximum.

Special Army Training

None.

Duties

Determines size, character and arrangements of buildings to suit needs of various military units to be housed. Makes recommendations regarding the necessity for proposed additional construction, and regarding location of additional structures in camps, cantonments and Army posts. Has charge of the development of standard plans and changes in standard plans.

ADVISORY ENGINEER ON CAMP PLANNING; MAJOR

Qualifications

Age limits: Best, 40-50; possible, 40-55.

Physical requirements: Limited service only; must be free from disabilities that would interfere with performance of the duties of this position.

Minimum schooling: Graduate of professional or technical school, or equivalent.

Civilian occupations in order of preference:

1. Landscape architect or engineer, 10 years.
2. Town planner, 10 years.
3. Architect in general practice, 10 years.
4. Civil engineer, experienced in sub-division work, 10 years.

Special or technical qualifications:

Required: Experience (extending to the time of entering the service) in town planning, which will enable him properly to lay out a cantonment, taking into account topography, disposal of sewage, water distribution and transportation facilities. Although not required to plan these utilities, he must have knowledge and ability so to arrange buildings as not to make their design unnecessarily difficult, and to interpret military housing requirements of various Army organizations, utilizing the standards prepared by the advisory architects. Preliminary experience in surveying is essential. Proof of responsible connection with the development of successful civilian housing enterprises.

Desired: General knowledge of architectural methods.

Leadership:

Essential, average maximum.

Special Army Training

None.

Duties

Prepares typical layout plans and lists of buildings required for the accommodation of Army personnel in camps, cantonments and hospitals. Develops final layout plans for the individual projects, showing location of buildings and other structures, adapting them to the actual topography and to the existing roads, railroads, drainage and other local conditions. Prepares record plans of projects of this character as actually built, and keeps a record of the structures and capacity thereof. Furnishes consulting service on plans for housing and other military projects.

**ADVISORY ENGINEER ON WATER SUPPLY; LIEUTENANT
COLONEL**

Qualifications

Age limits: Best, 40-50; possible, 40-55.

Physical requirements: Limited service only; must be free from disabilities that would interfere with performance of the duties of this position.

Minimum schooling: Graduate of professional or technical school, or equivalent.

Civilian occupations in order of preference:

1. Water works engineer.

Special or technical qualifications:

Required: Experience (extending to the time of entering the service) as a consulting engineer on the design, construction and operation of a large number of different water works systems, covering a wide range of conditions. Sufficient physical and mental endurance to enable him to handle a large number of projects of great importance at one time.

Leadership:

Essential, average maximum.

Special Army Training

None.

Duties

Prepares standard plans and specifications for water supply and water works construction. Secures data relating to quality and quantity of available water supply, whether from underground or surface sources. Reports on extensions to existing privately or municipally owned water plants with a view to providing additional supply for Government activities from these systems. Prepares general layout plans of water distribution systems, including all necessary mains, valves, hydrants and connections, with special reference to fire protection. Prepares detail plans for piping and connections at important points, such as in the vicinity of pumping stations, wells, and reservoirs. Prepares lists of water supply materials for the engineer in charge of schedules. Furnishes consulting service to constructing officers, to the municipal water departments, to private water companies, and to other departments and bureaus of the Government on all matters relating to water supply, purification and distribution.

**ADVISORY ENGINEER ON SEWERS AND SEWAGE DISPOSAL;
MAJOR**

Qualifications

Age limits: Best, 35-45; possible, 35-50.

Physical requirements: Limited service only; must be free from disabilities that would interfere with performance of the duties of this position.

Minimum schooling: Graduate of professional or technical school, or equivalent.

Civilian occupations in order of preference:

1. Sanitary engineer in general practice, 10 years.
2. Municipal engineer, 10 years.
3. Civil engineer, 10 years.

Special or technical qualifications:

Required: Ten years' experience (immediately preceding this service) in responsible charge of work covering all phases of sewerage and sewage disposal. Ability to design plants to meet a large variety of conditions. Thorough knowledge of the fundamentals involved to enable him to determine the basis of design for individual cases, the problems of which, due to the necessity of handling large quantities of raw sewage carrying high percentage of grease in some cases, or carrying unusual quantities of alkalis or acids, differ greatly from the ordinary domestic sewage disposal problems, and require successful treatment from the start.

Leadership:

Essential, average.
Desired, average maximum.

Special Army Training

None.

Duties

Determines the fundamentals governing the design of sewer systems for all War Department projects. Designs sewerage systems in all of their features, including sewers, man-holes, grease traps, compensations, septic tanks, filter beds and outfalls. Designs surface and subsoil drainage systems. Determines methods and designs plants for the disposal of waste materials, including garbage disposal, can-washing plants, incinerators and dumps. Furnishes advisory services to other departments and bureaus and especially handles or assists in handling joint projects. Assist in negotiations with existing plants for joint service and in planning extensions and enlargements of such plants in connection therewith. Advises in reference to the operation of sewage disposal plants, and makes observations and tests of their operation.

ADVISORY ENGINEER ON PLUMBING; MAJOR

Qualifications

Age limits: Best, 35-45; possible, 35-50.

Physical requirements: Limited service only; must be free from disabilities that would interfere with performance of duties of this position.

Minimum schooling: Graduate of professional or technical school, or equivalent.

Civilian occupations in order of preference:

1. Sanitary engineer, 10 years.
2. Mechanical engineer, experienced in plumbing work, 10 years.
3. Architect or structural engineer, experienced in plumbing work, 10 years.
4. Plumbing contractor, 10 years.

Special or technical qualifications:

Required: Experience in modern methods of house-plumbing, and in the designing, laying out and installation of plumbing, either as designer for an engineer or architect, or as the designing engineer for a plumbing contractor, covering a wide variety of work in order to adapt him for problems of varied character.

Leadership:

Essential, average.

Desired, average maximum.

Special Army Training

None.

Duties

Prepares standard and special plans for all plumbing work inside buildings, including hot and cold water supply, filtration and sterilizing plants. Determines the requirements for laundries, kitchens, bakeries and portable refrigerators. Furnishes consulting services for other departments of the Government on plumbing work.

ADVISORY ENGINEER ON REFRIGERATION; MAJOR

Qualifications

Age limits: Best, 35-45; possible, 35-55.

Physical requirements: Limited service only; must be free from disabilities that would interfere with performance of the duties of this position.

Minimum schooling: Graduate of professional or technical school, or equivalent.

Civilian occupations in order of preference:

1. Refrigeration engineer, 10 years.
2. Mechanical engineer, experienced in refrigeration, 10 years.

Special or technical qualifications:

Required: Ten years' experience directly in connection with refrigeration, the last three years of which were in responsible charge of the design, installation or operation of important work. Knowledge of the principles involved in refrigeration; ability successfully to adapt new materials and new apparatus to ordinary problems of refrigeration and to use ordinary means of refrigeration in the solution of new refrigeration problems, such as occur in the manufacture of gases.

Leadership:

Essential, average.
Desired, average maximum.

Special Army Training

None.

Duties

Designs all cold storage and ice-making plants for the Army, both in the United States and France. Advises as to refrigeration and freezer requirements to be provided in other ways than by new construction. Advises in the selection of machinery equipment, and insulating materials. Furnishes consultation to other bureaus and departments interested in refrigeration.

MECHANICAL ENGINEER; MAJOR

Qualifications

Age limits: Best, 35-45; possible, 35-55.

Physical requirements: Limited service only; must be free from disabilities that would interfere with performance of the duties of this position.

Minimum schooling: Graduate of professional or technical school, or equivalent.

Civilian occupations in order of preference:

1. Mechanical engineer, in general practice, 10 years.

Special or technical qualifications:

Required: Varied practice in mechanical engineering, particularly in the mechanical engineering work required in connection with buildings. Competence to pass accurate judgment on the relative merits of mechanical devices submitted in competition. Knowledge of the most recent developments in the design of mechanical appliances, particularly those used in handling materials in warehouses and industrial plants. Breadth of view and experience acquired from successful commercial work.

Leadership:

Essential, average.

Desired, average maximum.

Special Army Training

None.

Duties

Has charge of all mechanical engineering designing aside from special items of mechanical engineering assigned to others. Makes the necessary designs pertaining to the operating equipment of warehouses, steam power plants, industrial plants, coal and ash handling machinery, stokers' conveyors, cranes, freight handling and weighing machinery, and advises in the selection of equipment to meet the requirements of his designs. Furnishes advisory service as required to other bureaus and departments.

ADVISORY ENGINEER ON ELECTRIC POWER AND ILLUMINATION; MAJOR

Qualifications

Age limits: Best, 40-50; possible, 40-55.

Physical requirements: Limited service only; must be free from disabilities that would interfere with performance of the duties of this position.

Minimum schooling: Graduate of professional or technical school, or equivalent.

Civilian occupations in order of preference:

1. Electrical engineer, 15 years.

Special or technical qualifications:

Required: Five years' experience (next preceding this service) in responsible charge of either the construction or operation of electrical plants. Experience in the design of power plants for generating electricity, transmission lines and distribution systems for lighting and power purposes. Ability to direct laying out an economical and efficient system for both inside and outside lighting.

Desired: Experience with both steam and water power stations, including designing of the steam and water machinery, as well as of the electrical machinery.

Leadership:

Essential, average maximum.

Special Army Training

None.

Duties

Designs lighting and power installations for all projects, including, if needed, power houses and sub-stations; lists for the scheduling officer all electrical materials; selects equipment, such as storage battery charging outfits and motor-operated cargo winches; advises regarding designs of electrical work furnished by others; assists in selection of motor-operated equipment. Furnishes consulting service in connection with the purchase of electrical energy or the rental of equipment from central station companies.

ADVISORY ENGINEER ON HEATING; MAJOR

Qualifications

Age limits: Best, 35-45; possible, 35-50.

Physical requirements: Limited service only; must be free from disabilities that would interfere with performance of the duties of this position.

Minimum schooling: Graduate of professional or technical school, or equivalent.

Civilian occupations in order of preference:

1. Heating and ventilating engineer, 10 years.
2. Mechanical engineer, experienced in heating, 10 years.
3. Architect, experienced in heating, 10 years.

Special or technical qualifications:

Required: Wide experience in heating problems and thorough knowledge of the principles of heating. Several years' experience (immediately preceding this service) in responsible charge as designing engineer for heating or as contractor's representative in the installation of heating.

Leadership:

Essential, average.
Desired, average maximum.

Special Army Training

None.

Duties

Has charge of all work relating to the heating and ventilation of all projects, ranging from stoves to central heating plants and including steam-generating plants, steam requirements for general utilities, heating and ventilating systems. Determines the type of heating apparatus to be used, whether heating stoves, hot air or other furnace, kitchen ranges, steam radiators, and special equipment. Furnishes consulting service in connection with the purchase of apparatus for the above purposes. Assists in the negotiations of contracts when heat in any form is purchased from outside sources.

ADVISORY ENGINEER ON FIRE PROTECTION; MAJOR**Qualifications**

Age limits: Best, 35-45; possible, 35-50.

Physical requirements: Limited service only; must be free from disabilities that would interfere with performance of duties of this position.

Minimum schooling: Graduate of professional or technical school, or equivalent.

Civilian occupations in order of preference:

1. Fire prevention engineer, 10 years.
2. Water works engineer, 10 years.
3. Structural engineer or architect, 10 years.
4. Fire department superintendent, 10 years.

Special or technical qualifications:

Required: Ability to arrange the distribution system of the water supply from a point of view of fire protection, and to pass judgment on on all structural features of buildings with a view to getting the greatest safety against fire compatible with the type of construction used. Thorough familiarity with the principles involved in fire protective work, and in their application, so that he can apply them properly to the special situations that arise, rather than to copy established practices of underwriting organizations and of municipalities. Experience in this line of work as responsible officer for at least five years immediately preceding this service.

Desired: Experience in connection with fire insurance companies as fire prevention engineer.

Leadership:

Essential, average.

Desired, average maximum.

Special Army Training

None.

Duties

Co-operates with advisory architect and with various advisory engineers in controlling those features of plans and designs which should be determined by the quality and degree of fire hazard incident to the materials composing the structures, the purposes for which the structures are used, the dimensions of the structures, their relative location and their environment. Co-operates in spacing buildings, location of fire breaks, construction of fire stops in walls and partitions, location of fire hydrants and selection of materials with reference to fire resistance. Specifies fire-fighting appliances, fire stations and personnel of corps. Designs or approves sprinkler and fire-alarm systems. Advises as to the type and installation of heating and lighting apparatus, gasoline tanks and other utilities to which special fire risk is incident.

ADVISORY ENGINEER ON RAILWAYS; MAJOR

Qualifications

Age limits: Best, 35-45; possible, 35-50.

Physical requirements: Limited service only; must be free from disabilities that would interfere with performance of the duties of this position.

Minimum schooling: Graduate of professional or technical school, or equivalent.

Civilian occupations in order of preference:

1. Railway civil engineer, 10 years.

Special or technical qualifications:

Required: Experience (immediately preceding this service) corresponding to that of a division engineer, assistant chief engineer of an important railroad system, or of a division or general superintendent who has previously served as a division engineer, covering location, construction, design of tracks and yards, design of auxiliary structures, and operation of freight terminal.

Leadership:

Essential, average.

Desired, average maximum.

Special Army Training

None.

Duties

Prepares standard plans and specifications for railroad structures. Determines the probable traffic conditions for the various projects. Designs the railroad layout for individual projects, including connections with existing railroads, and arrangements of service tracks and yards. Designs appurtenances, such as coal stations, water stations, engine houses, etc. Advises with the proper persons as to operating questions involved, including selection of equipment. Assists in negotiations with existing railroads. Advises with the proper persons on the maintenance and repair of railroad property.

ADVISORY ENGINEER ON ROADS; MAJOR

Qualifications

Age limits: Best, 35-45; possible, 35-50.

Physical requirements: Limited service only; must be free from disabilities that would interfere with performance of the duties of this position.

Minimum schooling: Graduate of professional or technical school, or equivalent.

Civilian occupations in order of preference:

1. Highway engineer, 10 years.
2. Municipal engineer, 10 years.
3. Civil engineer, 10 years.

Special or technical qualifications:

Required: Five years' service (immediately preceding this service) as principal engineer on road designing and construction for some state or large municipality. Knowledge of the merits of various kinds of roads and thorough information as to the latest developments and experience in road construction. Ability to design all appurtenances, such as trestles, culverts, bridges, retaining walls, embankments and drainage.

Leadership:

Essential, average.

Desired, average maximum.

Special Army Training

None.

Duties

Prepares standard plans and specifications for the different kinds of road construction required. Studies traffic conditions for the various projects. Locates roads and determines the kind of construction to be used for the several parts of the road system of each project, including connections to existing public roads. Advises with local authorities on the improvements of existing roads and the construction of new roads. Assists in the negotiations with local authorities where work is done on joint account. Prepares traffic regulations if needed.

ADVISORY ENGINEER ON SURVEYS; CAPTAIN

Qualifications

Age limits: Best, 30-40; possible, 30-40.

Physical requirements: Limited service only; must be free from disabilities that would interfere with performance of the duties of this position.

Minimum schooling: Graduate of professional or technical school, or equivalent.

Civilian occupations in order of preference:

1. Surveyor, in general practice, 10 years.
2. Railroad surveyor, 10 years.
3. Civil engineer, 10 years.
4. Landscape engineer, 10 years.

Special or technical qualifications:

Required: Ten years' experience in survey work covering the character of work described in his duties. Must be actively engaged in this work at the time of entering the service, and must have at his call a considerable number of men competent to act as his assistants and take charge of parties in the field. Ability to organize his work on an efficient basis, to select competent men, and to direct their operations.

Leadership:

Essential, average.
Desired, average maximum.

Special Army Training

None.

Duties

Preparatory to the design of a project makes boundary and topographical surveys of property to be occupied. Makes maps of these surveys for use of other advisory engineers and for construction use. Makes surveys of existing projects and maps of same. Gathers information for other advisory engineers, which in addition to the usual data given on topographical maps, includes the description of the physical condition of roads, railways and structures, geological characteristics, availability of electric power, water supply, drainage information regarding roads, railroads, etc., lying beyond the limits of the survey, and general information regarding the surrounding country and land values. He advises with engineers as to water supply, sewers, roads, railroads, and camp planning in reference to their work.

**OFFICER IN CHARGE OF ARCHITECTURAL DRAFTING ROOM;
CAPTAIN**

Qualifications

Age limits: Best, 30-40; possible, 30-40.

Physical requirements: Limited service only; must be free from disabilities that would interfere with performance of the duties of this position.

Minimum schooling: Graduate of professional or technical school, or equivalent.

Civilian occupations in order of preference:

1. Architect, five years.
2. Structural engineer, five years.

Special or technical qualifications:

Required: Thorough training by education, apprenticeship, or practice, in the designing of buildings; five years' experience as the superintendent of a drafting room employing 50 or more draftsmen; proof that the plans produced in this drafting room have been prepared at a reasonable cost, and that they conform to the best practice in building structures. Ability to adapt available materials to the problem in hand, and to have plans prepared rapidly, eliminating the time usually spent in studies and omitting non-essential details.

Leadership:

Essential, average.

Special Army Training

None.

Duties

Acts as superintendent of the architectural drafting room, where are prepared plans of all building work except warehouses and grain elevators, covering drawings that may be required, ranging from preliminary sketches to finished detail drawings. The work in general includes all classes of buildings and all types of construction.

**OFFICER IN CHARGE OF CIVIL ENGINEERING DRAFTING
ROOM; CAPTAIN**

Qualifications

Age limits: Best, 30-40; possible, 30-40.

Physical requirements: Limited service only; must be free from disabilities that would interfere with performance of the duties of this position.

Minimum schooling: Graduate of professional or technical school, or equivalent.

Civilian occupations in order of preference:

1. Civil engineer, 10 years.
2. Structural engineer, 10 years.

Special or technical qualifications:

Required: Thorough training, by education, apprenticeship, or experience, in general engineering designing. Three years' experience (next preceding this service) as superintendent of a drafting room over at least 50 draftsmen. Proof that his administration of the drafting room has been successful in producing plans at reasonable cost, and that the plans so produced represented the best current practice.

Leadership:

Essential, average.

Special Army Training

None.

Duties

Serves as superintendent of the civil engineering drafting room, where are prepared all maps required by the division, and all design drawings of railroads, roads, sewers, water supply, docks, wharves, piers, bridges, grain-elevators, warehouses, and like structures.

OFFICER IN CHARGE OF ESTIMATES; MAJOR

Qualifications

Age limits: Best, 35-45; possible, 35-50.

Physical requirements: Limited service only; must be free from disabilities that would interfere with performance of the duties of this position.

Minimum schooling: Graduate of professional or technical school, or equivalent.

Civilian occupations in order of preference:

1. Estimator for general contractor, 10 years.

Special or technical qualifications:

Required: 'Ten years' experience with general contractor on construction work, the last five years of which must have been in responsible charge of cost estimating and cost accounting. He must be engaged in this work at time of entering the service. Proof that his estimates have been so reliable as to bring commercial success to the concern with which he has been connected.

Leadership:

Essential, average.

Desired, average maximum.

Special Army Training

None.

Duties

Prepares estimates of cost of projects covering the widest possible range in types, materials, locations, and conditions, used as a basis for securing appropriations or for securing authority from the Secretary of War for proceeding with the project. He also prepares estimates to be used for checking lump sum figures submitted by contractors for specific jobs.

OFFICER IN CHARGE OF BILLS OF MATERIALS; CAPTAIN

Qualifications

Age limits: Best, 30-40; possible, 30-40.

Physical requirements: Limited service only; must be free from disabilities that would interfere with performance of the duties of this position.

Minimum schooling: Graduate of professional or technical school, or equivalent.

Civilian occupations in order of preference:

1. Contractor or builder, five years.
2. Architect, five years.

Special or technical qualifications:

Required: Five years' experience immediately preceding his entering this service in charge of ordering materials for a general contractor on large building enterprises. Proof that his work has been handled successfully, both as to accuracy and foresight. Ability to direct a considerable force occupied in the detail work of listing materials.

Leadership:

Essential, average.

Special Army Training

None.

Duties

Prepares bills of the materials required for the construction of the various projects, either through the force immediately under his charge, or through the advisory engineers. Makes lists of materials in order to mobilize same in advance of completion of plans, and before the construction force is on the ground.

Contracts Division

FIRST ASSISTANT TO OFFICER IN CHARGE; MAJOR

Qualifications

Age limits: Best, 40-45; possible, 40-60.

Physical requirements: Limited service only; must be free from disabilities or physical weakness which would prevent consistent and sustained work.

Minimum schooling: Graduate of professional school.

Civilian occupations in order of preference:

1. Lawyer, 15 years.
2. General manager of business organization, 10 years.
3. Contractor, 10 years.
4. Legislator, two years.

Special or technical qualifications:

Required: General knowledge of commercial law and statutes affecting the War Department, with ability accurately to analyze contract or statutory provisions.

Desired: Commercial training, including knowledge of accounting and technical details of contracts for construction and maintenance of large enterprises; thorough training in methods prescribed by the Manual for the Quartermaster Corps, and decisions of the Comptroller of the Treasury and the Judge Advocate General.

Leadership:

Essential, average.

Desired, average maximum.

Special Army Training

None.

Duties

Is associated in charge of preparation and review of all contracts for projects of the Construction Division; interprets their meaning; adjusts differences between contractors and supervising officers; advises officers of the division on statutes, Army Regulations and kindred orders and rulings, and on legality and regularity of contracts, purchase orders and methods of procurement. Prepares requests and reports to the General Staff for requisitions. Directs acquisition of land and closing title thereof. Defends the Government from excessive claims before various military boards and acts as informal liaison officer with the office of the Judge Advocate General. Prepares and reviews state and municipal ordinances for privileges and licenses and for rights of way on railroad and other property owners.

ASSISTANT TO OFFICER IN CHARGE; MAJOR

Qualifications

Age limits: Best, 37-50; possible, 35-55.

Physical requirements: Limited service only; must be free from disabilities that might interfere with performance of the duties of this position.

Minimum schooling: Graduate of professional school, or equivalent.

Civilian occupations in order of preference:

1. Lawyer, 10 years.

Special or technical qualifications:

Required: General knowledge of commercial law and experience in court practice. Familiarity with the laws and regulations relating to public contracts and with decisions of the Comptroller of the Treasury and the Judge Advocate General.

Desired: Successful experience in negotiations, adjustments, arbitration and legislation.

Leadership:

Essential, average.

Desired, average maximum.

Special Army Training

None.

Duties

Is charged with administrative interpretation of all contracts for construction, the examination and approval of bonds, and liaison duty between Construction Division and Judge Advocate General's Office.

REAL ESTATE REPRESENTATIVE; CAPTAIN

Qualifications

Age limits: Best, 32-45; possible, 30-50.

Physical requirements: Limited service only; must be free from disabilities that might interfere with performance of the duties of this position.

Minimum schooling: Graduate of professional school.

Civilian occupations in order of preference:

1. Lawyer, five years.

Special or technical qualifications:

Required: Thorough knowledge of land laws, land surveys, land valuations, abstracts of title and condemnation proceedings.

Desired: In addition to legal training and experience, a considerable commercial experience and familiarity with accounting.

Leadership:

Essential, average.

Desired, average maximum.

Special Army Training

None.

Duties

Has charge of procedure incident to acquisition of lands for Construction Division projects; passes on titles; approves payments on perfected titles. Investigates title of the United States Government to recent acquisitions; reports on status of titles, values of land under lease, values of improvements and prospective damages caused by occupation of leased lands. Organizes the personnel required by the work of the real estate branch; initiates the plan of the operations, and supervises service secured from local civilian firms or organizations.

ADMINISTRATIVE ASSISTANT; CAPTAIN**Qualifications**

Age limits: Best, 30-35; possible, 30-40.

Physical requirements: Limited service only; must be free from defective eyesight or any constitutional defects making confining works indoors impossible.

Minimum schooling: Graduate of professional school.

Civilian occupations in order of preference:

1. Lawyer, five years.

Special or technical qualifications:

Required: Familiarity with all statutes, regulations and laws governing the preparation and execution of public contracts, with all general orders and bulletins of the War Department relating thereto, and with all decisions of the Comptroller of the Treasury and the Judge Advocate General of the Army. Familiarity with the preparation and execution of deeds and leases of real estate, and ability to negotiate the purchase of and close the title to all real estate acquired for use in connection with projects of the Construction Division. Ability to interpret and apply rules of law and Army Regulations and to correlate same.

Leadership:

Essential, average.

Desired, average maximum.

Special Army Training

None.

Duties

Examines contracts entered into by representatives of the War Department for construction, maintenance and repair, electric lighting, gas and water supply, railroad sidetracks and spurs; also all agreements for rights of way and easements in land in connection with military reservations. Prepares contracts for construction work, engineering services and for supply of electric current, gas and water, entered into by the Construction Division. Examines all contracts for like work or services entered into by Department Quartermasters and Zone Supply Officers throughout the United States. Required to interpret and advise on the provisions of law and regulations with regard to public contracts, and bonds for the faithful performance of the same and to prepare questions of special import for submission to the Judge Advocate General of the Army and the Comptroller of the Treasury. Prepares requests for authority and allotment of funds for projects by the Chief of Staff and Director of Operations.

Procurement Division



OFFICER IN CHARGE; MAJOR or LIEUTENANT COLONEL

Qualifications

Age limits: Best, 38-55; possible, 35-65.

Physical requirements: Limited service only; must be free from disabilities that might interfere with performance of the duties of this position.

Minimum schooling: No arbitrary requirements.

Civilian occupations in order of preference:

1. General manager of large building or building material manufacturing industry, 10 years.
2. Inspecting engineer, 10 years.
3. General contractor, 10 years.
4. Sales manager, 10 years.

Special or technical qualifications:

Required: Practical knowledge of manufacture of building material and equipment and ability to handle a large force of men. Good judgment, force and initiative.

Leadership:

Essential, average maximum.

Special Army Training

None.

Duties

Has general charge of expediting production and inspection of all classes of building material and equipment. Carries out the general policies established by the chief of the Material Section and formulates policies of the Production Department. Receives copies of all requisitions; responsible that production is accomplished in shortest possible time and that the material furnished is in accord with specifications. Correlates the work of the various section heads and of the various district offices.

ASSISTANT TO OFFICER IN CHARGE; CAPTAIN or MAJOR

Qualifications

Age limits: Best, 33-55; possible, 33-65.

Physical requirements: Limited service only; must be free from disabilities that might interfere with performance of duties.

Minimum schooling: No arbitrary requirements.

Civilian occupations in order of preference:

1. General manager of large building or building material manufacturing industry, five years.
2. Inspecting engineer, five years.
3. General contractor, five years.
4. Sales manager, five years.

Special or technical qualifications:

Required: Practical knowledge of manufacture of building material and equipment, and ability to handle a large force of men.

Desired: Good judgment, force and initiative.

Leadership:

Essential, average.

Special Army Training

None.

Duties

Assists the officer in charge whose duties he may at any time be called upon to perform.

EXECUTIVE OFFICER; CAPTAIN

Qualifications

Age limits: Best, 35-50; possible, 30-65.

Physical requirements. Limited service only; must be free from disabilities that might interfere with performance of duties.

Minimum schooling: Graduate, high or secondary school.

Civilian occupations in order of preference:

1. Office manager, 10 years.
2. Assistant office manager, 10 years.
3. Sales manager, 10 years.

Special or technical qualifications:

Required: Experience in practical office management and the handling of files, records and office correspondence, as well as in selecting and handling a large force of employees.

Desired: Knowledge of accounting, methods of army correspondence, Army Regulations governing the employment of civilians.

Leadership:

Essential, average.

Special Army Training

None.

Duties

In charge of the office administration and the field and office personnel of this division. Has especial supervision of all office files and records and the employment of both field and office force. Responsible for the proper administration of the office, and for utilizing the field force in the most efficient and economical manner.

SECTION HEAD; CAPTAIN or MAJOR

Qualifications

Age limits: Best, 30-50; possible, 30-65.

Physical requirements: Limited service only; must be free from disabilities that might interfere with performance of the duties of this position.

Minimum schooling: Graduate of professional or technical school, or equivalent.

Civilian occupations in order of preference:

1. Sales manager, five years.
2. Dealer, five years.
3. Manufacturer, five years.
4. Purchaser, five years.

Special or technical qualifications:

Required: Thorough practical knowledge of building material.

Leadership:

Essential, average.

Special Army Training

None.

Duties

Responsible for production and inspection of all building material, handling same through district offices or through inspectors reporting direct to section head. Is responsible for the thoroughness of actual inspection work in the field.

SECTION HEAD; CAPTAIN

Qualifications

Age limits: Best, 35-55; possible, 30-65.

Physical requirements: Limited service only; must be free from disabilities that might interfere with performance of the duties of this position.

Minimum schooling: Graduate, high or secondary school.

Civilian occupations in order of preference:

1. Steel plant superintendent or assistant, five years.
2. Salesman, buyer or dealer in steel products, five years.
3. Office executive, steel industry, five years.
4. Civil engineer, five years.

Special or technical qualifications:

Required: Steel manufacturing experience, civil engineering experience, with a thorough practical knowledge of methods of steel manufacture.

Leadership:

Essential, average.

Special Army Training

None.

Duties

Responsible for production and inspection of all structural steel and steel products, handling same through district offices or through inspectors reporting direct to section head. Is responsible for the thoroughness of actual inspection work in the field.

SECTION HEAD; CAPTAIN

Qualifications

Age limits: Best, 30-50; possible, 30-65.

Physical requirements: Limited service only; must be free from disabilities that might interfere with performance of the duties of this position.

Minimum schooling: Graduate of professional or technical school, or equivalent.

Civilian occupations in order of preference:

1. Superintendent of company manufacturing general machinery, 10 years
2. Salesman or buyer of mechanical equipment, 10 years.
3. Practicing engineer, 10 years.

Special or technical qualifications:

Required: Thorough practical knowledge of mechanical or electrical engineering.

Leadership:

Essential, average.

Special Army Training

None.

Duties

Responsible for production and inspection of all mechanical and electrical equipment, handling same through district offices or through inspectors reporting to the section head. Is responsible for the thoroughness of actual inspection work in the field.

DISTRICT INSPECTOR; CAPTAIN

Qualifications

Age limits: Best, 30-50; possible, 28-55.

Physical requirements: Limited service only; must be free from disabilities that might interfere with performance of the duties of this position.

Minimum schooling: Graduate, high or secondary school.

Civilian occupations in order of preference:

1. Sales manager, building material or equipment, five years.
2. Purchasing agent, building material, five years.
3. Contractor, five years.
4. Civil engineer, five years.

Special or technical qualifications:

Required: General knowledge of building materials and ability to handle men in field and office.

Leadership:

Essential, average.

Special Army Training

None.

Duties

Responsible for expediting the production and inspection of material produced within a specified territory, with office and field force. Receives copies of requisitions from various section heads and assigns the work to inspectors under his control. His force ranges in number from five to fifty men. Directs movements of inspectors and personally handles cases on which sub-inspector is unable to obtain satisfactory results.

Building Division

SECTION CHIEF; LIEUTENANT COLONEL

Qualifications

Age limits: Best, 40-45; possible, 35-50.

Physical requirements: Limited service only; must be free from disabilities that might interfere with performance of the duties of this position.

Minimum schooling: Graduate of high or secondary school.

Civilian occupations in order of preference:

1. Engineer and practical builder, with executive experience, 15 years.
2. Contractor, 15 years.
3. Business manager of a construction firm, 15 years.
4. Business manager of a large and progressive manufacturing company, 10 years.

Special or technical qualifications:

Required: Not less than five years recent practical business experience in responsible charge of a contracting or construction company.

Desired: Graduate of a technical college or school.

Leadership:

Essential, average.

Desired, average maximum.

Special Army Training

None.

Duties

Passes on the advisability of all projects proposed by the Department or Camp Commanders and Constructing Quartermasters, sending the history and recommendation of these projects to Chief of the Construction Division for transmittal to the General Staff. Directs construction work on such projects as may be assigned to his section, organizing office forces, selecting Supervising Constructing Quartermasters and assistants for such projects. Selects all Constructing Quartermasters for the field with the approval of the Chief of the Construction Division. Negotiates contracts for construction and engineering services. Investigates and reports on sites for work. Makes occasional inspection trips and reconciles conflicting points of view of officers representing different corps on the work. Keeps a check on assistants to see that materials, plans, finances, progress, personnel and reports are being handled **expeditiously**.

SECTION ENGINEER; MAJOR

Qualifications

Age limits: Best, 35-45; possible, 30-50.

Physical requirements: Limited service only; must be free from disabilities that might interfere with performance of duties of this position.

Minimum schooling: Graduate of professional or technical school, or equivalent.

Civilian occupations in order of preference:

1. Civil engineer, 10 years.
2. Engineer with construction experience, 10 years.

Special or technical qualifications:

Required: Must be competent to design and supervise construction work.

Desired: Graduate of technical school.

Leadership:

Essential, average.
Desired, average maximum.

Special Army Training

None.

Duties

Passes on all general plans and details for contemplated construction, checks all estimates prepared for the General Staff or for the field forces, and assists the Section Chief and Constructing Quartermasters in the selection of suitable Supervising Engineers. Acts as assistant to the Section Chief and assumes his duties in his absence.

SECTION COST AND LABOR OFFICER; CAPTAIN

Qualifications

Age limits: Best, 30-40; possible, 30-45.

Physical requirements: Limited service only; must be free from disabilities that might interfere with performance of duties of this position.

Minimum schooling: Graduate, high or secondary school.

Civilian occupations in order of preference:

1. Cost engineer, five years.
2. Engineer or architect with construction and executive experience, five years.

Special or technical qualifications:

Required: Knowledge of engineering and construction and experience in cost accounting.

Desired: Experience in general accounting.

Leadership:

Essential, nominal.

Desired, average.

Special Army Training

None.

Duties

Receives and compiles all reports on costs from the field officers. Instructs officers in methods to be employed in cost accounting and reporting.

SECTION ADMINISTRATIVE OFFICER; CAPTAIN

Qualifications

Age limits: Best, 30-40; possible, 30-45.

Physical requirements: Limited service only; must be free from disabilities that might interfere with performance of duties of this position.

Minimum schooling: Graduate, high or secondary school.

Civilian occupations in order of preference:

1. Office manager for contractor or construction company, five years.
2. Office manager for manufacturer of construction materials, five years.
3. Superintendent for architect, five years.

Special or technical qualifications:

Required: Knowledge and experience in correspondence and keeping records and reports.

Desired: Knowledge of engineering and building construction. Familiarity with Army paper work.

Leadership:

Essential, average.

Desired, average maximum.

Special Army Training

None.

Duties

Handles correspondence, compiles reports, arranges for necessary clerical assistance, makes requests for assignments and changes of station of all officers, both for headquarters and for field forces of his section. Has charge of personnel records of his section.

SUPERVISING CONSTRUCTING QUARTERMASTER; MAJOR

Qualifications

Age limits: Best, 40-45; possible, 35-50.

Physical requirements: Limited service only; must be free from disabilities that might interfere with performance of duties of this position.

Minimum schooling: Graduate, high or secondary school.

Civilian occupations in order of preference:

1. Engineer with experience in practical construction, 10 years.
2. Business manager for a contractor or construction company, 10 years.
3. Architect with experience in large structures, ten years.

Special or technical qualifications:

Required: Executive experience sufficient to organize and administer a small technical and office force, thorough knowledge of plans, specifications, practical construction and laws of contracts. Strong personality, force and ability to get results in spite of obstacles of every character.

Desired: A general knowledge of buildings, railroads, electrical installation, water supply, plumbing, heating, sewers and machinery.

Leadership:

Essential, average.

Desired, average maximum.

Special Army Training

None.

Duties

Acts as Liaison Officer and general representative for the Constructing Quartermaster at Washington or Department Headquarters, securing from Headquarters the necessary plans, specifications and contract forms required by the Constructing Quartermaster, arranging for the expeditious filling of all orders for materials made through the Procurement Division for the field forces in his unit. Handles all correspondence to and from the Constructing Quartermasters in his unit.

CONSTRUCTING QUARTERMASTER; MAJOR*

Qualifications

Age limits: Best, 40-45; possible, 35-50.

Physical requirements: Limited service only; must be free from disabilities that might interfere with performance of duties of this position.

Minimum schooling: Graduate, high or secondary school.

Civilian occupations in order of preference:

1. Contracting engineer, 15 years.
2. Contractor or manager of a construction company, 15 years.
3. General manager for large manufacturing company, 15 years.
4. Architectural superintendent of experience in construction of large buildings.

Special or technical qualifications:

Required: Must be a practical builder with large executive experience, with not less than five years' recent business experience in responsible charge of a contracting or construction company.

Desired: Graduate of recognized technical school or equivalent.

Leadership:

Essential, average maximum.

Special Army Training

None.

Duties

Is responsible representative of the United States Government at the site of a construction project, the scope of which may include all the buildings, roads, sewers, water supply and miscellaneous structures, the operating machinery, apparatus, and equipment required in the operation of the project, and all the plant and appliances for furnishing heat, light, power, refrigeration, sanitation and any other service required. Is authorized to direct and control all the expenditures, forces, materials and equipment incident to its construction.

Organizes field and office forces sufficient to direct and supervise the work; lets contracts; organizes his force for purchase and hire in case contractors are not employed on the work; approves the contractor's and subcontractor's organizations; confers with federal, state, county and municipal authorities when necessary; approves all details of design and interprets the plans and specifications; makes a program of progress as a basis for coordinating the activities in all branches of the work; records the progress of work and costs; estimates the date and cost of completion for the several sections of the work; has both property and money accountability and responsibility except as these may be specifically assigned to other officers; is responsible for the maintenance of equipment, direction of police and fire protection and the inspection of all work.

In general, is the director of the work and responsible for its satisfactory prosecution to completion in accord with requirements as to cost, time, quality and purpose.

*Rank of Major is normal for the position of Constructing Quartermaster, but the scope and nature of the project, with its attendant organization, may require the assignment of an officer of higher rank, or, on the other hand, may permit the assignment of a Captain.

C. Q. M.'S ASSISTANT; CAPTAIN

Qualifications

Age limits: Best, 30-40; possible, 30-45.

Physical requirements: Limited service only; must be free from disabilities that might interfere with performance of duties of this position.

Minimum schooling: Graduate, high or secondary school.

Civilian occupations in order of preference:

1. Contracting engineer, three years.
2. General contractor, three years.
3. General contractor's superintendent, three years.
4. Civil engineer in general practice, three years.

Special or technical qualifications:

Required: Varied experience in construction of all types of buildings.

Desired: Technical training and experience in both design and construction of buildings.

Leadership:

Essential, average.

Desired, average maximum.

Special Army Training

None.

Duties

Under the direction of the Constructing Quartermaster, supervises and directs the construction of buildings except power, light and heating stations. Secures information regarding the contractor's requirements for material and the arrangements being made to meet those requirements, and co-operates with the contractor to secure expeditious and economical results.

C. Q. M.'S ASSISTANT; CAPTAIN

Qualifications

Age limits: Best, 30-40; possible, 30-45.

Physical requirements: Limited service only; must be free from disabilities that might interfere with performance of duties of this position.

Minimum schooling: Graduate, high or secondary school.

Civilian occupations in order of preference:

1. Superintendent of city water works, two years.
2. Assistant superintendent of city water works, two years.
3. Engineer of railway maintenance, two years.
4. Mechanical engineer, two years.

Special or technical qualifications:

Required: Five years' experience in water works construction.

Desired: Technical training and experience in water works operation.

Leadership:

Essential, average.

Desired, average maximum.

Special Army Training

None.

Duties

Under the direction of the Constructing Quartermaster, supervises and directs construction work connected with water supply, purification and distribution, including wells, pumping stations, reservoirs, distributing systems and connections with existing municipal or privately owned systems.

C. Q. M.'S ASSISTANT; CAPTAIN

Qualifications

Age limits: Best, 30-40; possible, 30-45.

Physical requirements: Limited service only; must be free from disabilities that might interfere with performance of duties of this position.

Minimum schooling: Graduate, high or secondary school.

Civilian occupations in order of preference:

1. Sanitary engineer, three years.
2. Municipal engineer, three years.
3. Engineer of railway maintenance.
4. Contractor in sewerage construction.

Special or technical qualifications:

Required: Five years' experience in construction of sewers and sewage-disposal plants.

Desired: Technical training and experience in the operation and maintenance of sewerage and sewage-disposal plants.

Leadership:

Essential, average.

Desired, average maximum.

Special Army Training

None.

Duties

Under the direction of the Constructing Quartermaster, supervises and directs the construction work connected with sewerage, sewage treatment and sewage disposal, including sewers, septic tanks, filter beds, and garbage incinerators.

C. Q. M.'S ASSISTANT; CAPTAIN

Qualifications

Age limits: Best, 30-40; possible, 30-45.

Physical requirements: Limited service only; must be free from disabilities that might interfere with performance of duties of this position.

Minimum schooling: Graduate, high or secondary school.

Civilian occupations in order of preference:

1. Railway maintenance engineer, three years.
2. State highway engineer, three years.
3. Contractor, highway or railway construction, three years.

Special or technical qualifications:

Required: Five years' experience in construction and maintenance of railways and highways.

Desired: Technical knowledge of fundamentals in highway and railway design, with experience in their repairs and operation.

Leadership:

Essential, average.

Desired, average maximum.

Special Army Training

None.

Duties

Under the direction of the Constructing Quartermaster, supervises and directs work connected with the construction of highways, railway tracks and railway facilities, including pavements, all kinds of highway construction, railroad yards, bridges, water and coaling stations, and engine houses.

C. Q. M.'S ASSISTANT; CAPTAIN

Qualifications

Age limits: Best, 30-40; possible, 30-45.

Physical requirements: Limited service only; must be free from disabilities that might interfere with performance of duties of this position.

Minimum schooling: Graduate, high or secondary school.

Civilian occupations in order of preference:

1. Electrical engineer, three years.
2. Mechanical engineer, three years.
3. Contractor for power and electrical installation, three years.

Special or technical qualifications:

Required: Five years' experience in power and lighting design, construction and installation.

Desired: Technical knowledge of the essential features in mechanical and electrical design, and experience in the maintenance and operation of power and electrical plants.

Leadership:

Essential, average.

Desired, average maximum.

Special Army Training

None.

Duties

Under the direction of the Constructing Quartermaster, supervises and directs the construction of plant and the installation of appliances for furnishing light and power, including power houses, sub-stations, distributing systems and the installation of power and electrical apparatus.

C. Q. M.'S ASSISTANT; CAPTAIN

Qualifications

Age limits: Best, 30-40; possible, 30-45.

Physical requirements: Limited service only; must be free from disabilities that might interfere with performance of duties of this position.

Minimum schooling: Graduate, high or secondary school.

Civilian occupations in order of preference:

1. Mechanical engineer, three years.
2. Contractor, three years.

Special or technical qualifications:

Required: Five years' experience in the design, construction and operation of heating and refrigerating plants.

Desired: Technical knowledge of the essential elements in the design and layout of heating and refrigerating plants.

Leadership:

Essential, average.

Desired, average maximum.

Special Army Training

None.

Duties

Under the direction of the Constructing Quartermaster, supervises and directs the installation of heating, ventilating and refrigerating apparatus and appliances, supervising the construction of central plants, if required.

Maintenance and Repair Division

OFFICER IN CHARGE; CAPTAIN or MAJOR

Qualifications

Age limits: Best, 30-38; possible, 28-45.

Physical requirements: Limited service only; must be free from disabilities that might interfere with performance of duties of this position.

Minimum schooling: Two years professional or technical school.

Civilian occupations in order of preference:

1. Assistant to public utility manager, five years.
2. Assistant to city manager, five years.
3. Civil engineer, five years.
4. Mechanical engineer, five years.
5. Electrical engineer, five years.

Special or technical qualifications:

Required: Executive experience in directing construction and engineering operations.

Desired: Special knowledge of operation and maintenance of utilities.

Leadership:

Essential, average.

Desired, average maximum.

Special Army Training

None.

Duties

In charge of the operation and maintenance of all utilities, such as water supply, sewerage, light, power, and refrigeration, and the organization required to perform the work. Other executive duties and responsibilities are assigned to him by the officer in charge of the Maintenance and Repair Division.

OFFICER IN CHARGE; MAJOR

Qualifications

Age limits: Best, 38-45; possible, 35-55.

Physical requirements: Limited service only; must be free from disabilities that might interfere with performance of duties of this position.

Minimum schooling: Graduate of professional or technical school, or equivalent.

Civilian occupations in order of preference:

1. Contracting engineer, five years.
2. General building contractor, five years.
3. Architect with contracting experience, five years.
4. Railway chief engineer, five years.

Required: Experience in the design and construction of both frame and fire-proof buildings for varied purposes, preferably railway, industrial and housing. Ability in laying out and designing buildings and groups of buildings, particularly adapted to specific purposes.

Leadership:

Essential, average maximum.

Special Army Training

None.

Duties

Supervises the preparation of plans, specifications, policies and standards required for the reconstruction, maintenance and repair of all buildings and shops and for the construction of all additions; has general supervision of the provision of material and field operations; advises the utilities officers regarding all questions of building construction and furnishes estimates of cost and preliminary designs for buildings best adapted to meet requirements.

OFFICER IN CHARGE; MAJOR

Qualifications

Age limits: Best, 38-42; possible, 35-50.

Physical requirements: Limited service only; must be free from disabilities that might interfere with performance of duties of this position.

Minimum schooling: Graduate of professional or technical school, or equivalent.

Civilian occupations in order of preference:

1. Civil Engineer, eight years.
2. City engineer, five years.
3. Superintendent of water works, five years.

Special or technical qualifications:

Required: Knowledge of hydraulics, water purification and sewage treatment.

Desired: Knowledge of chemistry and bacteriology.

Leadership:

Essential, average.

Desired, average maximum.

Special Army Training

None.

Duties

Has active charge and direction of the design, maintenance and operation of water purification works and pumping equipment; maintenance of pipe lines, including loss of water by leakage or wastage, inspection and repair of plumbing fixtures and care of grease traps, sewers and sewage disposal works.

OFFICER IN CHARGE; MAJOR

Qualifications

Age limits: Best, 32-38; possible, 30-45.

Physical requirements: Limited service only; must be free from disabilities that might interfere with performance of duties of this position.

Minimum schooling: Graduate of professional or technical school, or equivalent.

Civilian occupations in order of preference:

1. Electrical engineer, five years.
2. Electrical operating engineer, 10 years.
3. Electrical constructing engineer, 10 years.
4. Electrical designing engineer, 10 years.

Special or technical qualifications:

Required: Ability to design, construct and operate light and power stations, with all the facilities for distribution. Proof of responsible charge of operation and maintenance of such a plant for at least five years.

Leadership:

Essential, average.
Desired, average maximum.

Special Army Training

None.

Duties

Supervises the design, installation, operation and maintenance of electrical generating equipment, sub-stations, distribution, transformer equipment, and interior and exterior wiring for light and power purposes; establishes standards and policies; directs the operation and maintenance work in this branch for all stations.

OFFICER IN CHARGE; CAPTAIN

Qualifications

Age limits: Best, 32-38; possible, 30-45.

Physical requirements: Limited service only; must be free from disabilities that might interfere with performance of duties of this position.

Minimum schooling: No arbitrary requirements.

Civilian occupations in order of preference:

1. Heating engineer, both design and operation, eight years.
2. Steam operating engineer, eight years.
3. Steam constructing engineer, eight years.
4. Steam designing engineer, eight years.

Special or technical qualifications:

Required: Competence to design and install complete heating plants and systems of various types; experience in efficient operation and maintenance of same.

Leadership:

Essential, average.
Desired, average maximum.

Special Army Training

None.

Duties

Supervises the design, installation and operation of complete heating plants and systems, including boiler plants, with all auxiliaries and distribution systems; establishes standards and policies; directs the operation and maintenance work in this branch for all stations.

OFFICER IN CHARGE; CAPTAIN

Qualifications

Age limits: Best, 32-38; possible, 30-45.

Physical requirements: Limited service only; must be free from disabilities that might interfere with performance of duties of this position.

Minimum schooling: Graduate of professional or technical school, or equivalent.

Civilian occupations in order of preference:

1. Refrigeration engineer, eight years.
2. Refrigeration operating engineer, eight years.
3. Refrigeration constructing engineer, eight years.

Special or technical qualifications:

Required: Eight years' experience in the designing, construction, operation and maintenance of refrigerating plants; proof of responsibility for direction, cost and efficiency of same during a considerable portion of that period.

Leadership:

Essential, average.
Desired, average maximum.

Special Army Training

None.

Duties

Is responsible for the design and installation of refrigerating and ice-making equipment to meet the demands for ice consumption and sufficient refrigerating space to care for all perishable food stuffs. Has supervision over maintenance and operation of all such plants.

OFFICER IN CHARGE; CAPTAIN

Qualifications

Age limits: Best, 32-40; possible, 30-45.

Physical requirements: Limited service only; must be free from disabilities that might interfere with performance of duties of this position.

Minimum schooling: Two years, professional or technical school.

Civilian occupations in order of preference:

1. Fire prevention engineer, eight years.
2. Chief of city fire department, five years.

Special or technical qualifications:

Required: Knowledge of automobile and steam fire engines, fire alarm systems and fire protection features of water works practice; technical knowledge of hydraulics and mechanics.

Leadership:

Essential, average.
Desired, average maximum.

Special Army Training

None.

Duties

Supervises the fire protection and fire prevention service; supervises the design and layout of pipe lines for such service; establishes standards and policies controlling the selection and maintenance of fire equipment; supervises the organization and training of forces connected with this service; investigates fire risks and devises means for prevention.

OFFICER IN CHARGE; CAPTAIN

Qualifications

Age limits: Best, 32-38; possible, 30-45.

Physical requirements: Limited service only; must be free from disabilities that might interfere with performance of the duties of this position.

Minimum schooling: Graduate of professional or technical school, or equivalent.

Civilian occupations in order of preference:

1. Highway engineer, eight years.
2. Civil engineer, 10 years.
3. Superintendent road construction, 15 years.
4. Assistant city engineer, eight years.

Special or technical qualifications:

Required: Knowledge of best practice in road construction, and of the cost and efficiency of various materials and designs, and ability to apply same. Proof of service as a successful highway engineer and builder for heavy traffic.

Leadership:

Essential, average.
Desired, average maximum.

Special Army Training

None.

Duties

Supervises the design, construction and maintenance of roads for all stations.

OFFICER IN CHARGE OF UTILITIES; MAJOR

Qualifications

Age limits: Best, 35-45; possible, 35-60.

Physical requirements: Limited service only; must be free from disabilities which would prevent him from being very active physically.

Minimum schooling: Graduate of professional or technical school, or equivalent.

Civilian occupations in order of preference:

1. Public utilities manager, five years.
2. City manager, five years.
3. Engineer of water supply, with executive ability, five years.
4. Engineer of sewerage and roads, with executive ability, five years.
5. Electrical engineer, five years.

Special or technical qualifications:

Required: Proof of service as a successful business manager and engineer. Combination of qualities of practical business executive, with mechanical and technical knowledge.

Leadership:

Essential, average maximum.

Special Army Training

None.

Duties

Is a member of the staff of the Commanding Officer of a post, camp, or cantonment. Supervises and directs the maintenance and operation of all utilities, such as water supply, sewerage, roads, lighting and power, refrigeration, railways, building and shops (carpentry), plumbing, steamfitting, painting and electric fitting. Has control of large organization, which may consist of officers, foremen, inspectors and about seven hundred (700) enlisted men.

ASSISTANT IN CHARGE OF SECTION; CAPTAIN

Qualifications

Age limits: Best, 32-40; possible, 30-48.

Physical requirements: Limited service only; must be free from disabilities that might interfere with performance of the duties of this position.

Minimum schooling: No arbitrary requirement.

Civilian occupations in order of preference:

1. General contractor, two years.
2. Superintendent for building contractor, five years.
3. Superintendent, bridges and building for railroad company, five years.

Special or technical qualifications:

Required: Eight years' experience in the design, construction and maintenance of both frame and fire-proof buildings and appurtenances; proof of responsibility for direction and cost of such work during a considerable portion of that time.

Leadership:

Essential, average.
Desired, average maximum.

Special Army Training

None.

Duties

Under the Utilities Officer, directs the maintenance and current repairs of all buildings, together with their fixtures and appliances, such as window and door screens, shades, passenger and freight elevators.

ASSISTANT IN CHARGE OF SECTION; CAPTAIN

Qualifications

Age limits: Best, 32-40; possible, 30-48.

Physical requirements: Limited service only; must be free from disabilities that might interfere with his personal observation of all operations under his direction.

Minimum schooling: Two years of professional or technical school.

Civilian occupations in order of preference:

1. Civil engineer, five years.
2. City engineer, five years.
3. Superintendent of water works, five years.

Special or technical qualifications:

Required: Knowledge of hydraulics, some knowledge of water purification and sewage treatment.

Desired: Knowledge of chemistry and bacteriology.

Leadership:

Essential, average maximum.

Special Army Training

None.

Duties

Under the Utilities Officer, has charge of the water works and sewerage system, including operation of water purification works, pumping equipment, maintenance of pipe lines (loss of water by leakage or wastage, inspection and repair of plumbing fixtures), care of grease traps and sewers and operations, and submits monthly and special reports to Utilities Officer. Directs personnel of water and sewer section, including 30 plumbers, several pipe foremen and inspectors, and about 40 enlisted men.

ASSISTANT; SECOND LIEUTENANT

Qualifications

Age limits: Best, 25-32; possible, 23-38.

Physical requirements: Limited service only; must be free from disabilities that might interfere with his personal observation of all operations under his direction.

Minimum schooling: One year, professional or technical school.

Civilian occupations in order of preference:

1. Civil engineer, two years.
2. Assistant to city engineer, two years.
3. Assistant superintendent of water works, two years.

Special or technical qualifications:

Required: Knowledge of hydraulics, some knowledge of water purification and bacteriology; experience in construction.

Desired: Knowledge of chemistry.

Leadership:

Essential, average.

Special Army Training

None.

Duties

Assistant to officer in charge of water and sewers. Has charge of pumping section. Responsible for the operation and care of pumping machinery and other equipment. May be called upon to supervise operation of water filtration plant or sewage treatment work. Is generally in charge of repairs and additions to water distribution and sewerage systems.

ASSISTANT IN CHARGE OF SECTION; FIRST LIEUTENANT

Qualifications

Age limits: Best, 30-35; possible, 28-45.

Physical requirements: Limited service only; must be free from bad hearing bad eyesight, and inability to walk considerable distances.

Minimum schooling: Graduate of professional or technical school, or equivalent.

Civilian occupations in order of preference:

1. Combination of operating superintendent and construction superintendent, five years.
2. Electrical operating engineer, five years.
3. Electrical constructing engineer, five years.
4. Electrical designing engineer, five years.

Special or technical qualifications:

Required: Experience in the design and installation of large power and lighting plants.

Leadership:

Essential, average.
Desired, average maximum.

Special Army Training

None.

Duties

Under Utilities Officer, has responsibility of designing and installing electrical generating units and sub-stations, distribution transformer equipment, and interior wiring for light and power purposes; superintends the maintenance and operation of same.

ASSISTANT IN CHARGE OF SECTION; CAPTAIN or FIRST
LIEUTENANT

Qualifications

Age limits: Best, 30-45; possible, 28-45.

Physical requirements: Limited service only; must be free from bad hearing, bad eyesight, inability to walk considerable distances.

Minimum schooling: No arbitrary requirements.

Civilian occupations in order of preference:

1. Designing and operating heating engineer, five years.
2. Steam operating engineer, five years.
3. Steam constructing engineer, five years.
4. Steam designing engineer, five years.

Special or technical qualifications:

Required: Experience in the design and installation of large heating plants.

Leadership:

Essential, average.

Desired, average maximum.

Special Army Training

None.

Duties

Under Utilities Officer, has responsibility of designing and installing complete heating plants and systems, including boiler plant, with all auxiliaries and distribution systems; superintends and is responsible for the efficient maintenance and operation of same.

ASSISTANT IN CHARGE OF SECTION; FIRST LIEUTENANT

Qualifications

Age limits: Best, 30-35; possible, 28-45.

Physical requirements: Limited service only; must be free from bad hearing, bad eyesight, inability to walk considerable distances.

Minimum schooling: Graduate of professional or technical school, or equivalent.

Civilian occupations in order of preference:

1. Refrigeration construction engineer, five years.
2. Refrigeration operating engineer, five years.

Special or technical qualifications:

Required: Experience in the design and installation of large refrigerating plants.

Leadership:

- Essential, average.
- Desired, average maximum.

Special Army Training

None.

Duties

Under Utilities Officer, has responsibility of designing and installing refrigeration and ice-making equipment to meet the demands for ice consumption and to furnish sufficient refrigerating space to care for all perishable food stuffs under variable conditions of receipt; superintends the maintenance and operation of same.

ASSISTANT IN CHARGE OF SECTION; FIRST LIEUTENANT

Qualifications

Age limits: Best, 30-35; possible, 27-45.

Physical requirements: Limited service only; must be free from disabilities that might interfere with performance of duties of this position.

Minimum schooling: Graduate, high or secondary school.

Civilian occupations in order of preference:

1. Highway engineer, five years.
2. Civil engineer, eight years.
3. Superintendent road construction, 10 years.
4. Assistant city engineer, five years.

Special or technical qualifications:

Required: Proof of service as a successful highway engineer or builder.

Leadership:

Essential, average maximum.

Special Army Training

None.

Duties

Performs necessary engineering operations in connection with the construction and maintenance of roads and drainage; supervises and directs the organization performing the work.

ASSISTANT IN CHARGE OF SECTION; FIRST LIEUTENANT

Qualifications

Age limits: Best, 25-45; possible, 25-50.

Physical requirements: Limited service only; must be free from heart or lung trouble.

Minimum schooling: Graduate, high or secondary school.

Civilian occupations in order of preference:

1. Officer in a city fire department, one year, with total of five years' service.
2. Member city fire department, five years.
3. Fire prevention engineer, two years.
4. Machinist, four years.

Special or technical qualifications:

Required: Knowledge of automobile or steam fire engines, fire alarm systems and fire protection features of water works practice.

Leadership:

Essential, average.
Desired, average maximum.

Special Army Training

None.

Duties

Under Utilities Officer, has responsibility of executive and administrative supervision of the fire protection and fire prevention service, including the care and maintenance of fire department apparatus, the organization, instruction and training of the force under his direction, and the direction of activities at fires.

ASSISTANT; SECOND LIEUTENANT

Qualifications

Age limits: Best, 25-45; possible, 21-50.

Physical requirements: Limited service only; must be free from heart or lung trouble.

Minimum schooling: Graduate, high or secondary school.

Civilian occupations in order of preference:

1. Fire prevention engineer, with insurance organization or with municipality, two years.
2. Officer in city fire department, five years.
3. Civil engineer, two years.
4. Mechanical engineer, two years.

Special or technical qualifications:

Required: Acquaintance with fire hazards and their prevention, and with fire department practice.

Leadership:

Essential, average.
Desired, average maximum.

Special Army Training

None.

Duties

Inspects work for the elimination of fire hazard, and directs remedies for the elimination of the hazard; instructs others in inspection work; assumes command at fires and carries out the orders of his superior officer in extinguishing same.

Accounting Division

EXECUTIVE OFFICER OF CHIEF OF DIVISION; LIEUTENANT COLONEL

Qualifications

Age limits: Best, 35-50; possible, 30-60.

Physical requirements: Limited service only; must be free from disabilities that might interfere with performance of duties of this position.

Minimum schooling: Graduate of high or secondary school, or equivalent.

Civilian occupations in order of preference:

1. Public accountant in own or associate practice, five years.
2. Financial manager of business, with supervision over 100 employees, five years.
3. Public accountant in senior capacity, with supervision over several assignments at one time, five years.
4. Comptroller, auditor or office manager, with supervision over 25 employees, five years.

Special or technical qualifications:

Required: Broad knowledge of accounts, commerce and finance.

Desired: Knowledge of governmental accounting procedure.

Leadership:

Essential, average maximum.

Special Army Training

None.

Duties

Principal assistant to officer in charge of Accounting Division. Executes policy of the division and the plan of organization as approved by officer in charge. Supervises activities of division, comprising a personnel of 250 to 400 officers and civilians; also supervises indirectly (through the Building Division) the outlining of the accounting organization and accounting procedure for the field auditing forces, which includes 10,000 to 15,000 accountants and clerks. Organizes and co-ordinates departments of the Accounting Division. Under the direction of the officer in charge, co-ordinates finance and accounting matters of Construction Division with other governmental departments. Acts for officer in charge of the Accounting Division in his absence or under delegated authority.

SUPERVISOR; MAJOR

Qualifications

Age limits: Best, 35-50; possible, 30-60.

Physical requirements: Limited service only; must be free from disabilities that might interfere with the performance of the duties of this position.

Minimum schooling: Graduate of high or secondary school, or equivalent.*

Civilian occupations in order of preference:

1. Secretary of a business, with supervision over 50 employees, three years.
2. Office manager or chief clerk, with supervision over 50 employees, three years.
3. Manager of office department, with supervision over 25 employees, three years.
4. Executive, with duties of a secretarial nature, three years.

Special or technical qualifications:

Required: Thorough knowledge of general office methods and experience in employing office employees.

Desired: Knowledge of governmental administrative procedure.

Leadership:

Essential, average maximum.

Special Army Training

None.

Duties

In charge of administrative department. Obtains applicants for employment and commissions, passes on their qualifications and upon approval of Chief of Accounting Division, engages their services; assists Constructing Quartermasters in the field to secure necessary accounting personnel. Supervises and records all matters pertaining to commissioned and civilian personnel, including records of employees on the field auditing forces. Responsible for all property assigned to division, such as furniture, fixtures, etc., including its proper care. Supervises and controls handling of mail, telegrams, reports, messengers and files for the Accounting Division. Obtains equipment and supplies required by the division and controls and supervises the issuing of supplies to the several departments. Supervises the distribution of standard accounting forms, circulars, bulletins and manuals to the field auditing forces through the Building Division. Performs other general office functions of administrative nature.

* *Schooling.*—In lieu of graduation from high school or equivalent education, requirements as to education will be met by substituting for each year lacking of such high school or equivalent education at least two years' experience in an office in which ten persons or more were employed.

SUPERVISOR; MAJOR

Qualifications

Age limits: Best, 35-45; possible, 30-55.

Physical requirements: Limited service only; must be free from disabilities that might interfere with the performance of the duties of this position.

Minimum schooling: Graduate of high or secondary school, or equivalent.*

Civilian occupations in order of preference:

1. Public accountant in own or associate practice, three years.
2. Public accountant in senior capacity, with supervision over five or more assignments at one time, three years.
3. Comptroller, auditor or office manager, with supervision over 25 employees, three years.
4. Public accountant in senior capacity, with supervision over more than one assignment, three years.

Special or technical qualifications:

Required: Thorough knowledge of construction cost accounting.

Desired: Knowledge of governmental accounting procedure.

Leadership:

Essential, average maximum.

Special Army Training

None.

Duties

In charge of Cost Department, with supervision over a number of cost accountants (captains, lieutenants, or civilians having equivalent responsibility). Responsible for organization and personnel of Cost Department and for all records, reports and correspondence; selects, directs, and trains employees; organizes and systematizes work of this department, devising proper records and reports; compiles statistics. Co-ordinates work of this with other departments of the Accounting Division.

* *Schooling.*—In lieu of graduation from high school or equivalent education, requirements as to education will be met by substituting for each year lacking of such high school or equivalent education at least two years' experience in an office in which ten persons or more were employed.

SUPERVISING CONSTRUCTION COST ACCOUNTANT; CAPTAIN

Qualifications

Age limits: 30-45; possible, 27-55.

Physical requirements: Limited service only; must be free from disabilities that might interfere with the performance of the duties of this position.

Minimum schooling: Graduate of high or secondary school, or equivalent.*

Civilian occupations in order of preference:

1. Public accountant in senior capacity, with supervision over several assignments at one time, two years.
2. Comptroller, auditor or office manager, with supervision over 25 employees, two years.
3. Public accountant in senior capacity, with supervision over assistants, two years.
4. Executive accountant, with supervision over 10 employees, two years.

Special or technical qualifications:

Required: Thorough knowledge of construction cost accounting.

Desired: Knowledge of governmental accounting procedure.

Leadership:

Essential, average.

Desired, average maximum.

Special Army Training

None.

Duties

Has charge of section of Cost Department, with supervision over several accounting assistants; responsible, under direction of supervisor of Cost Department, for work of section, including records, reports and correspondence; has the supervision of systematizing, criticising and improving cost accounting detail, compiling statistics, and similar accounting practices.

* *Schooling.*—In lieu of graduation from high school or equivalent education, requirements as to education will be met by substituting for each year lacking of such high school or equivalent education at least two years' experience in an office in which ten persons or more were employed.

DEPARTMENT SUPERVISOR; MAJOR†

Qualifications

Age limits: Best, 35-50; possible, 30-60.

Physical requirements: Limited service only; must be free from disabilities that might interfere with the performance of the duties of this position.

Minimum schooling: Graduate of high or secondary school, or equivalent.‡

Civilian occupations in order of preference:

1. Public accountant in own or associate practice, three years.
2. Public accountant in senior capacity, with supervision over five or more assignments at one time, three years.
3. Comptroller, auditor or office manager, with supervision over 25 employees, three years.
4. Public accountant in senior capacity, with supervision over more than one assignment, two years.

Special or technical qualifications:

Required: Thorough knowledge of accounts, commerce and finance.

Desired: Knowledge of governmental accounting procedure.

Leadership:

Essential, average maximum.

Special Army Training

None.

Duties

Is in charge of an accounting department employing a number of supervising accountants who rank as captains, lieutenants, or civilians in equivalent positions, with assistant accountants and clerks; or is in charge of a number of traveling accountants (majors, captains, lieutenants or civilians in equivalent positions). Is responsible for organization and personnel of department and all records, reports, and correspondence. Selects, directs, and trains employees. Organizes and systematizes work of the department, devises proper records and reports, and compiles statistics. Co-ordinates work of this with other departments of the Accounting Division.

* Among the accounting departments provided with supervisors are: Settlements, Money, Funds, Property, and Traveling Accountants. The specifications for this officer will apply to all departments of the Accounting Division except the Administrative and Cost Departments; for the specifications of which see pages 86 and 87.

† Supervisors of accounting departments will be Majors or Captains, according to the volume and importance of the department's transactions.

‡ *Schooling.*—In lieu of graduation from high school or equivalent education, requirements as to education will be met by substituting for each year lacking of such high school or equivalent education at least two years' experience in an office in which ten persons or more were employed.

DEPARTMENT SUPERVISOR; CAPTAIN †

Qualifications

Age limits: Best, 30-45; possible, 27-55.

Physical requirements: Limited service only; must be free from disabilities that might interfere with the performance of the duties of this position.

Minimum schooling: Graduate of high or secondary school, or equivalent. §

Civilian occupations in order of preference:

1. Public accountant in senior capacity, with supervision over several assignments at one time, two years.
2. Comptroller, auditor or office manager, with supervision over 25 employees, two years.
3. Public accountant in senior capacity, with supervision over assistants, two years.
4. Executive accountant, with supervision over 10 employees, two years.

Special or technical qualifications:

Required: Thorough knowledge of accounts, commerce and finance.

Desired: Knowledge of governmental accounting procedure.

Leadership:

Essential, average.

Desired, average maximum.

Special Army Training

None.

Duties

Is in charge of an accounting department, with supervision over a number of supervising accountants (captains, lieutenants or civilians), or is in charge of several traveling accountants. Is responsible for organization and personnel of department and all records, reports and correspondence. Selects, directs and trains employees. Organizes and systematizes work, devises proper records and reports, and compiles statistics. Co-ordinates work of this with other departments of the Accounting Division.

* Among the accounting departments provided with supervisors are: Settlements, Money, Funds, Property, and Traveling Accountants. The specifications for this officer will apply to all departments of the Accounting Division except the Administrative and Cost Departments; for the specifications of which see pages 86 and 87.

† Supervisors of accounting departments will be Majors or Captains, according to the volume and importance of the department's transactions.

§ *Schooling.*—In lieu of graduation from high school or equivalent education, requirements as to education will be met by substituting for each year lacking of such high school or equivalent education at least two years' experience in an office in which ten persons or more were employed.

SUPERVISING ACCOUNTANT; CAPTAIN

Qualifications

Age limits: Best, 30-45; possible, 27-55.

Physical requirements: Limited service only; must be free from disabilities that might interfere with the performance of the duties of this position.

Minimum schooling: Graduate of high or secondary school, or equivalent.*

Civilian occupations in order of preference:

1. Public accountant in senior capacity, with supervision over several assignments at one time, two years.
2. Comptroller, auditor or office manager, with supervision over 25 employees, two years.
3. Public accountant in senior capacity, with supervision over assistants, two years.
4. Executive accountant, with supervision over 10 employees, two years.

Special or technical qualifications:

Required: Thorough knowledge of accounts, commerce and finance.

Desired: Knowledge of governmental accounting procedure.

Leadership:

Essential, average.

Special Army Training

None.

Duties

Under a department supervisor, has charge of section of a department, with supervision over a number of accounting assistants. Responsible, under the direction of the department supervisor, for work of section, including records, reports, and correspondence; has supervision of systematizing, criticising and improving accounting, compiling statistics and similar accounting practices.

* *Schooling.*—In lieu of graduation from high school or equivalent education, requirements as to education will be met by substituting for each year lacking of such high school or equivalent education at least two years' experience in an office in which ten or more persons were employed.

† These specifications apply to the supervising accountants of all departments of the Accounting Division except the Cost Department; for the specifications of supervising construction cost accountant, see page 88.

SUPERVISING ACCOUNTANT; FIRST LIEUTENANT

Qualifications

Age limits: Best, 27-40; possible, 25-50.

Physical requirements: Limited service only; must be free from disabilities that might interfere with the performance of the duties of this position.

Minimum schooling: Graduate of high or secondary school, or equivalent.*

Civilian occupations in order of preference:

1. Public accountant in senior capacity, two years.
2. Executive accountant, with supervision over 10 employees, two years.
3. Accountant, with supervision over five employees, two years.
4. Public accountant in junior capacity, two years.

Special or technical qualifications:

Required: Working knowledge of accounts, commerce and finance.

Desired: Knowledge of governmental accounting procedure.

Leadership:

Essential, nominal.

Desired, average.

Special Army Training

None.

Duties

Under a department supervisor, has charge of section of a department. Responsible, under the direction of the department supervisor, for work of section, including records, reports and correspondence; has supervision of systematizing, criticising and improving accounting, compiling statistics and similar accounting practices.

* *Schooling.*—In lieu of graduation from high school or equivalent education, requirements as to education will be met by substituting for each year lacking of such high school or equivalent education at least two years' experience in an office in which ten persons or more were employed.

† These specifications apply to the supervising accountants of all departments of the Accounting Division except the Cost Department; for the specifications of supervising construction cost accountant, see page 88.

SUPERVISING ACCOUNTANT; SECOND LIEUTENANT

Qualifications

Age limits: Best, 25-35; possible, 23-50.

Physical requirements: Limited service only; must be free from disabilities that might interfere with the performance of the duties of this position.

Minimum schooling: Graduate of high or secondary school, or equivalent.*

Civilian occupations in order of preference:

1. Public accountant in junior capacity, two years.
2. Accountant, with supervision over assistants, two years.
3. Bookkeeper in charge of double entry system, two years.
4. Business school graduate, with bookkeeping experience, two years.

Special or technical qualifications:

Required: Working knowledge of accounts, commerce and finance.

Desired: Knowledge of governmental accounting procedure.

Leadership:

Essential, nominal

Desired, average.

Special Army Training

None.

Duties

Under a department supervisor, has charge of the functions of a department which may include supervising, systematizing, criticising and improving accounting, compilation of statistics and similar accounting practice.

* *Schooling.*—In lieu of graduation from high school or equivalent education, requirements as to education will be met by substituting for each year lacking of such high school or equivalent education at least two years' experience in an office in which ten persons or more were employed.

† These specifications apply to the supervising accountants of all departments of the Accounting Division except the Cost Department; for the specifications of supervising construction cost accountant, see page 88.

TRAVELING ACCOUNTANT; MAJOR* .

Qualifications

Age limits: Best, 35-50; possible, 30-60.

Physical requirements: Limited service only; must be free from disabilities that might interfere with the performance of the duties of this position. Must be able to travel continuously.

Minimum schooling: Graduate of high or secondary school, or equivalent.†

Civilian occupations in order of preference:

1. Public accountant in own or associate practice, three years.
2. Public accountant in senior capacity, with supervision over five or more assignments at one time, three years
3. Comptroller, auditor or office manager, with supervision over 25 employees, three years.
4. Public accountant in senior capacity, with supervision over more than one assignment, three years.

Special or technical qualifications:

Required: Thorough knowledge of accounts, commerce and finance.

Desired: Knowledge of governmental accounting procedure.

Leadership:

Essential, average.

Desired, average maximum.

Special Army Training

None.

Duties

Under supervision of traveling accountant department supervisor, organizes and systematizes accounting at construction projects, inspects accounts, criticises and improves field practices and methods, reporting generally and in detail relative to field conditions and personnel. If occasion requires, will assume charge of field organization and direct all operations thereof.

*Traveling accountants will be majors or captains, according to the volume and importance of the work in the various sections.

†*Schooling.*—In lieu of graduation from high school or equivalent education, requirements as to education will be met by substituting for each year lacking of such high school or equivalent education at least two years' experience in an office in which ten persons or more were employed.

TRAVELING ACCOUNTANT; CAPTAIN*

Qualifications

Age limits: Best, 30-45; possible, 27-50.

Physical requirements: Limited service only; must be free from disabilities that might interfere with the performance of the duties of this position. Must be able to travel continuously.

Minimum schooling: Graduate of high or secondary school, or equivalent.†

Civilian occupations in order of preference:

1. Public accountant in senior capacity, with supervision over several assignments at one time, two years.
2. Comptroller, auditor or office manager, with supervision over 25 employees, two years.
3. Public accountant in senior capacity, with supervision over assistants, two years.
4. Executive accountant, with supervision over 10 employees, two years.

Special or Technical Qualifications

Required: Thorough knowledge of accounts, commerce and finance.

Desired: Knowledge of governmental accounting procedure.

Leadership:

Essential, average.

Special Army Training

None.

Duties

Under the traveling accountant department supervisor, organizes and systematizes accounting at construction projects; inspects accounts, criticises and improves field practices and methods, reporting generally and in detail relative to field conditions and personnel. If occasion requires, will assume charge of field organization and direct all operations thereof.

* Traveling accountants will be majors or captains, according to the volume and importance of the work in the various sections.

† *Schooling.*—In lieu of graduation from high school or equivalent education, requirements as to education will be met by substituting for each year lacking of such high school or equivalent education at least two years' experience in an office in which ten persons or more were employed.

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