

COMMUNICATION SYSTEMS PLANNER

NATURE OF WORK

This is professional and administrative engineering work in a wide variety of electrical and communications engineering projects.

An employee in a position allocated to this class will be responsible for planning, coordinating, and approving the work of professional and technical staff, preparing reports and presentations, preparation and implementation of designs and/or project specifications; reviewing electrical schematics, engineering designs, reviewing technical responses to RFPs and bids, reviewing technical procurement documents, implementation and support of computer engineering applications and systems related to radio propagation studies and analyses. Responsible for the overall technical planning, design, engineering, evaluation of the County's electronic equipment with an emphasis on radio, video, audio, paging, and microwave systems. Work is complex and requires considerable contact with individuals as well as public and private organizations. A high level of independent professional judgement and decision making is essential. Work is performed with considerable independence and reviewed through conferences and reports.

EXAMPLES OF WORK

Assists in planning and administering the technical engineering activities of the division.

Assists in the development of integrated county communications systems and networks standards, policies and procedures.

Performs communications engineering designs, analyses, and oversees implementation of special projects.

Serves as a professional consultant in matters pertaining to the specific project assigned.

Conducts or coordinates special engineering studies involving radio signal propagations, antenna orientation, tower analyses, audio dispersions, infrared systems and system frequency licensing.

Utilizes electronic radio, audio, and video engineering software for planning, design, recommendation and decision making purposes.

Prepares reports and recommendations for the consideration of administrative superiors and committees.

Assists in the development of RFPs, bids and engineering specifications for the procurement and implementation of related equipment and services.

Develops and implements appropriate monitoring, tracking and statistical analyses of related systems.

Performs related work as required.

REQUIRED KNOWLEDGE, SKILLS, AND ABILITIES

Considerable knowledge of the various radio, audio, and video communication transmission protocols, mediums, equipment and services.

Considerable knowledge of cost effective and efficient communications network designs, equipment and services.

Extensive knowledge of communication and electronic system technologies, protocols, standards, practices and procedures.

Extensive knowledge of various trunking and queuing theories, such as Erland and Poisson, radio propagation theory.

Thorough knowledge of the principles and practices of electronics engineering.

Thorough knowledge of modern developments, current literature and trends in the electronics engineering field.

COMMUNICATION SYSTEMS PLANNER - CONT'D**REQUIRED KNOWLEDGE, SKILLS AND ABILITIES - CONT'D**

Knowledge of various communications engineering software packages.
Ability to apply engineering knowledge of specific administrative and technical problems.
Ability to provide professional and technical review to a wide variety of electronic engineering plans, specifications ore related documents.
Ability to establish and maintain effective working relationships with county users and equipment and service providers.
Ability to effectively express oneself orally and in writing.
Ability to review the work of others.

MINIMUM ENTRANCE REQUIREMENTS

Bachelor's degree in Electrical Engineering, or closely related highly technical field and five (5) years experience in electrical engineering with an emphasis on large scale governmental radio, audio, video communications systems; or any equivalent combination of related education, training and/or experience.

Rev. 6/2003