

### Assistant Engineer – Rail Systems – Limited Tenure

#### Purpose

The purpose of the Assistant Engineer, Rail Systems, is to perform field or office engineering work of moderate difficulty and will do related work as required in support of the District's Train Control Systems. The Assistant Engineer is a limited-term position whose duration may vary depending on the needs of the SMART's project.

#### Description

Under general supervision, the Assistant Engineer will perform field or office engineering work of moderate difficulty; to direct subordinate engineers and engineering technicians in connection with the performance of a wide variety of SMART's projects; and to do related work as required. This is a journey level position within the Engineering positions and work assignments are usually portions of a major project, are received in general terms and the incumbent is expected to use judgment and initiative in developing and completing work assignments.

### Duties and Responsibilities include, but are not limited to, the following:

This is a descriptive list of the range of duties performed by, and minimum requirements required of, employees in the class. Specifications are not intended to reflect all duties performed within the job. SMART reserves the right to determine and amend job responsibilities.

- Acts as an assistant to the Manager of Train Control Systems on projects
- Performs field inspections and witnessing of field testing.
- Participates and assists in the design, construction and implementation of a variety of systems engineering projects of moderate difficulty such as train control, grade crossing warning systems, and networking.
- Calculates the quantity, quality, and cost of materials used in various projects.
- Reviews engineering calculations of other engineers or technicians.
- Prepares engineering specifications.
- Retrieves data logs from a variety of microprocessor and networking equipment.
- Performs analysis of data logs, and prepares detailed reports regarding equipment operation and performance.
- Assists field staff in performing troubleshooting of microprocessor and networking equipment.
- Coordinates with equipment vendors during troubleshooting and warranty administration.
- Prepares and reviews drawings, procedures and reports.
- Reviews and checks circuit plans for the project to assure compliance with the specifications and follows sound engineering practices.
- Prepares engineering estimates and prepares change orders.
- Participates in communications with consultants and contractors on contract disputes and changes.
- Participates as staff in public hearings and public meetings as needed.
- Responds to inquiries from the public.
- Prepares technical correspondence and reports.
- May direct the work of subordinate engineers and technical staff.

# Qualifications, Skills, Knowledge, and Abilities

### **Minimum Qualifications**

- Bachelor's degree in electrical engineering or related field from an accredited college or university; and
- Two years of full-time professional engineering experience providing the knowledge and skill requirements.
- Professional engineering/rail systems related experience may be substituted on a year-for-year basis for the educational requirement.

## **Other Qualifications**

- Experience in rail design and/or construction desirable.
- Proficiency with AutoCAD, Microsoft Office for design and construction is essential.
- Possession of a valid California Engineer-In-Training Certificate.

### Skill in:

- Analyzing test data and reports to determine if systems meet functional and performance specifications.
- Documenting systems performance and developing preliminary engineering designs, specifications and standards for modifications to train control systems as needed.

## Knowledge of:

- General knowledge of the principles, practices and techniques of electrical engineering.
- Correct methods of using engineering equipment including computers, computer programs in the engineering field, calculators, drafting.
- Principles of supervision as they relate to training, directing and reviewing the work of subordinates.

## Ability to:

- Organize, establish priorities, and set goals and objectives.
- Identify and define technical problems.
- Apply principles of logic and scientific reasoning to develop and evaluate alternative courses of action and determine appropriate solutions.
- Read, understand and interpret complex technical and legal documents, maps, technical drawings and plans.
- Retain and recall factual, technical data and legal provisions.
- Effectively communicate verbally to convey technical information and give instructions.
- Listen attentively and participate in negotiations by providing required data and information.
- Write clearly and concisely with technical accuracy reports, correspondence and records.
- Adjust to workload changes and work under stress to meet deadlines.
- Maintain effective working relationships with all levels of representatives from governmental and private agencies, construction and consultant contractors, co-workers and the public.

#### **Physical Working Environment**

Work is usually performed in a typical office setting with moderate noise levels, controlled temperature conditions, and no direct exposure to hazardous physical substances. The incumbent may travel outside of the office to attend meetings or conduct business at SMART Operations sites. Some work is outdoors and may experience inclement weather and uneven terrain. This position may be exposed to moving equipment and machinery while performing outside field work. May be exposed to loud sounds near machinery.

#### **Physical Requirements**

During the performance of the daily, weekly and monthly activities, this position may require prolonged periods in a stationary position, movement about the inside of an office, positioning self in various stances or postures in the performance of daily activities; This position may require repetitive operation using a computer keyboard or calculator involving repetitive motion of the wrists, hands or fingers; This position may require both near and far visual acuity to perform activities such as preparing and analyzing data and figures, transcribing, viewing a computer terminal, and/or extensive reading; This position may require expressing or exchanging information by means of the spoken word when dealing with clients, customers, or other employees; This position may require perceiving the nature of sounds at normal speaking levels with or without correction and ability to receive detailed information through oral communication. The need to lift, drag, and push files, boxes, equipment, paper and documents weighing up to 25 pounds is also required. May be required to walk on uneven ground and may be exposed to extreme weather conditions and moving machinery while performing field work or inspections. The physical demands and work environment described here are representative of those that must be met by an employee to successfully perform the essential functions of this job. Some of these requirements may be accommodated for otherwise qualified individuals requiring and requesting such accommodations.

### **Position Details**

- Salary Range: \$42.50 \$51.66 per hour
- There is a 12-month probationary period for this position.
- FLSA Status: Non-Exempt.
- A thorough background check will be required including, but not limited to: current and past employers, personal contacts, education verification. A credit report will be required for positions covered under Labor Code 1024.5. (A complete list of background check documents will be provided upon request).
- A pre-employment physical, including a urinalysis drug screen, will be required.
- SMART is a drug-free workplace. All employees will be expected to behave in accordance with this policy.

The Sonoma-Marin Area Rail Transit is an Equal Opportunity Employer.

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