



NATIONAL DRAINAGE AND IRRIGATION AUTHORITY

JOB DESCRIPTION

POSITION: GEOTECHNICAL ENGINEER

REPORTING TO: DEPUTY CHIEF EXECUTIVE OFFICER

SUPERVISES: CIVIL ENGINEER

SALARY SCALE: BAND 6

The incumbent will be required to use his/her's expertise to study the geology of an area using mathematical and scientific concepts to analyze data and conduct research to help make recommendation and plans for proposed structures.

Main Responsibilities

- Develops a strategic investigation plan for the site.
- Performs the geotechnical investigation as per the plan.
- Collects samples such as rock, sand, and similar substances from the site.
- Analyzes the ground stress which includes capacity and stress levels.
- Executing tests on the samples and noting down the contamination values.
- Designs the projects based on the investigation performed.
- Creates 2D and 3D models using computer applications.
- Resolves care of geological hazards while planning the project.
- Sets up budget and time constraints on ground investigations.
- Suggests necessary changes in the project as and when required.
- Preserves nature and protecting the environment.
- Performs basic administrative tasks if required.

Requirements

Master's Degree in Geotechnical Engineering from a recognized institution along with the minimum of three (3) years post graduate experience

Or

First Degree in Civil Engineering from a recognized University along with the minimum of five (5) years post graduate experience, especially in the execution of design.

Supervisory Responsibility

This job holder will be responsible for supervising the Minimum of three junior Engineers

Principal organizational relationships

The Geotechnical Engineer interfaces regularly with the Chief Executive Officer and senior personnel from other agencies, local and international, government ministries on matters.

Other skills

- **Computer skills** – using various software applications to run lab tests and summarize field tests is important for geotechnical engineers
- **Physical endurance** – geotechnical engineers must have the ability to walk, stand, stoop, and kneel for long periods of time, and to endure various climates when surveying jobsites
- **Project management** – the ability to budget, create project schedules, meet deadlines, and produce estimates.
- **Analytical thinking** – analyzes soil, water, and rock samples
- **Communication skills** – ability to explain test findings and generating reports call for strong verbal and written communication skills
- **Work independently** – must be able to spend a great deal of time in the field and should be able to make observations and collect data with little to no supervision
- **Problem-solving skills** – makes suggestions and recommendations to resolve any issues and drive projects toward successful completion

Work Environment

While performing the duties of this job, the employee regularly works in the field setting

Physical Demands

The physical demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this job.

Position Type/Expected Hours of Work

This is a full-time position. Monday to Friday but may be required to work weekends and beyond the call of duty as the need arises.

*Prepared by: Ms. Janel Blackman
Human Resource Manager
2021-07-07*

*Checked by: Mr. Fredrick Flatts
Chief Executive Officer
2021-07-14*