

NATIONAL DRAINAGE AND IRRIGATION AUTHORITY

JOB DESCRIPTION

POSITION: STRUCTURAL ENGINEER

REPORTING TO: DEPUTY CHIEF EXECUTIVE OFFICER

SUPERVISES: CIVIL ENGINEER

SALARY SCALE: BAND 6

The incumbent will be required to oversee the completion of construction projects and ensure structures are durable and safe. He/ She designs buildings, bridges, culverts and pump stations and other types of structures and measures loads and seeks to ensure structural soundness.

Main Responsibilities

- Designs structures, such as buildings, bridges, culverts, and pump station
- creates structural models by using computer-aided design software
- Measures loads and pressures caused by environmental or human influence
- Follows construction safety guidelines
- Chooses appropriate materials based on structural specifications
- Monitors on-site construction processes and supervise construction workers where appropriates
- Prepares bill of quantities and estimates of cost of works
- Tracks and reports on project progress
- Prepares reports, designs, and drawings.
- Makes calculations about pressures, loads, and stresses.
- Considers the strength of construction materials and selects appropriately.
- Provides technical advice on safe designs and construction.
- Obtains planning and/or building regulations approval.
- Analyzes configurations of the basic components of a structure.
- Liaises with professional staff such as architects and engineers.
- Monitors and inspects all work undertaken by contractors to ensure structural soundness.
- Administers contracts and manages projects.

- Inspects properties to evaluate the conditions and foundations.
- Uses computer-aided design technology for simulation purposes.
- Collaborates with contractors and project managers
- Works along with a team of other engineering specialist in the execution of design

Requirement

Master's Degree in Structural 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 Structural Engineer interfaces regularly with the Chief Executive Officer and senior personnel from other agencies, local and international and government ministries on various matters.

Other skills

- Knowledge of Engineering Science, Mathematics and Technology
- Knowledge of building and construction
- Design skills and knowledge
- Excellent verbal communication skills
- Thinking and reasoning skills
- Able to use a computer and the main software packages competently

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