

## Terms of Reference

### 1. Introduction

**Post:** Engineer (Water and Sewerage Systems Design)

**Type:** Contract (1 Year)

Note: The company may decide to extend the contract after 1 year based on performance.

**Department:** Water, Sewerage and Environment Department

### 2. Position Overview

The Water and Sewerage Systems Design Engineer will specialize in the planning, design, and development of both water supply and sewerage systems in Fenaka. This position involves creating efficient and sustainable solutions for the delivery of clean water and the treatment and disposal of sewerage, ensuring compliance with regulatory standards and environmental guidelines.

### 3. Reporting Relationship and Communication

Water and Sewerage Systems Design Engineer will report to Lead Engineer daily and regular progress meetings will be scheduled to ensure effective communication and collaboration throughout the duration of the contract unless advised otherwise.

### 4. Key Responsibilities

**System Design and Planning:**

- Design and develop water distribution systems in branches, including pipelines, storage tanks, and pumping stations.

- Design sewerage systems, including sewage pipelines, pumping stations, and water treatment facilities.
- Conduct feasibility studies and site investigations to determine the best solutions for water and sewerage infrastructure.

□ **Technical Analysis and Modelling:**

- Utilize engineering software (e.g., AutoCAD, GIS, EPANET) for designing and modeling water and sewerage systems.
- Perform hydraulic modeling and analysis to ensure systems are efficient and effective.
- Analyze data and predict the future needs of the water and sewerage infrastructure of Fenaka.

□ **Project Development and Management:**

- Develop detailed engineering plans, specifications, and cost estimates for the services.
- Oversee the preparation of project proposals, tender documents, and contracts.
- Manage project timelines, budgets, and resources to ensure water and sewerage projects are completed on schedule and within budget.

□ **Regulatory Compliance and Standards:**

- Ensure designs comply with local, state, and federal regulations and standards.
- Prepare documentation and reports for regulatory approvals and permits.
- Stay updated with advancements in engineering standards and environmental regulations of Maldives.

□ **Sustainability and Environmental Impact:**

- Assess and mitigate the environmental impact of water and sewerage projects.
- Promote sustainable practices in water conservation and wastewater treatment.
- Implement green infrastructure solutions where applicable.

□ **Stakeholder Coordination and Communication:**

- Collaborate with other engineers, contractors, and government agencies.
- Communicate technical information to non-technical stakeholders.
- Facilitate public consultations and address community concerns.

□ **Quality Control and Assurance:**

- Ensure the quality and accuracy of engineering designs and plans.
- Conduct site inspections and provide technical support during construction.
- Review and approve material and equipment specifications.

## 5. Education and Experience

- A Bachelors' Degree or equivalent professional certification (MNQF level 7) in Civil Engineering, Environmental Engineering or related field with 5 years of professional work experience designing water and sewerage systems. Experience with large-scale infrastructure projects is highly valued.

## 6. Skills and Competencies

- **Technical Skills:** Proficiency in engineering software (like AutoCAD, GIS), hydraulic modeling, and project management tools. Knowledge of water treatment processes and environmental regulations.
- **Analytical Skills:** Ability to analyze data, solve complex problems, and make informed decisions.
- **Communication Skills:** Strong verbal and written communication skills for reporting and interacting with various stakeholders.
- **Leadership and Management:** Proven ability to lead teams, manage projects, and work collaboratively in a multidisciplinary environment.