

TERMS OF REFERENCE FOR STRUCTURAL DESIGN SPECIALIST, SPMU, JAL JEEVAN MISSION, GOVT. OF ASSAM (UNICEF SUPPORTED).

1.0 Background

Ministry of Jal Shakti was formed in June 2019 with two Departments: Department of Water Resources, River Development and Ganga Rejuvenation and Department of Drinking Water and Sanitation (DDWS). Jal Jeevan Mission (JJM) has been launched by Ministry of Jal Shakti, Government of India. JJM the flagship scheme of the Government seeks not only to provide functional household tap connections for all but also to promote the holistic management of local water resources. Under JJM water conservation, reuse measures are made mandatory to the scheme design. As per DDWS as on 31st March 2019, only 18.33 percent of rural households in the country, have Piped Water Supply (PWS). It has been planned to provide around 14.60 crore rural households with functional household tap connection (FHTC) through Jal Jeevan Mission (JJM) by 2024. In Assam, 34 percent of habitations are fully covered with piped water supply and only around 2.3 percent of total households have individual household pipe water supply connection. The goal is that every home gets drinking water in adequate quantity i.e. 55 liter per capita per day (lpcd) on a regular and long-term basis.

Various schemes and sub-missions under NRDWP viz. Rural Water Supply and Sanitation Project for low income states (RWSSP-LIS), National Water Quality Sub-Mission (NWQSM), Japanese Encephalitis – Acute Encephalitis Syndrome (JE-AES), Swajal, Water Quality Monitoring and Surveillance (WQM&S) and all support activities under NRDWP has been subsumed into JJM. The JJM emphasises on community participation and making it as a movement- a Jan Andolon. As per JJM guideline at grassroot level local communities especially women are to be encouraged to participate and take ownership of water resource management, water supply and grey water management and its reuse. The Implementation Support Agencies (ISA) like NGO, SHGs, CBOs, Voluntary Organisations, Trusts, Foundations will play critical role as partner of Government in mobilising and engaging the communities to plan, design, implement, manage, operate and maintain in village water supply infrastructure.

To achieve the objective of providing improved and sustainable drinking water services in rural communities through JJM, it is important to focus on water distribution networks, water quality management, source sustainability, sustainable service delivery (including operation and maintenance), building professional capacity and strengthening decentralized governance.

2.0 Objective of the position;

The objective of this position is to support the SPMU, Mission Directorate JJM by guiding, consulting and assisting the Design Cell of PHED in preparation of model structural design for water supply schemes and vetting of design.

3.0 Reporting;

The Design and Structure Specialist will report to the Mission Director and the Chief Engineer (PHE), Water / Additional Mission Director, SPMU, Jal Jeevan Mission, Assam.

4.0 Scope of work

The Structural Design Specialist shall;

- a. The Structural Design Specialist will be responsible for Structural Designs of various components/ Units related to the construction of Water Supply Schemes.
- b. Performing structural analysis and design using Staad Pro, Excel, spreadsheets.etc
- c. Design documentation
- d. Lead team to produce Auto Cad generated drawings.
- e. Responsible for ensuring that all designs executed are in accordance with the requirements for completeness, accuracy, constructability, and compliance to seismic requirements of Assam and in conformity with relevant BIS codes and up to date amendments thereupon on liquid retaining structures and NBC code.
- f. Any other duties that may be assigned by the client from time to time in furtherance of the above responsibilities.
- g. Evaluate geotechnical reports, and carry out structural design accordingly.
- h. Coordinate schedule of drawings for contract documents.
- i. Assist in vetting of drawings and design submitted by DPR consultant.
- j. Engage with the Department and assist in the capacity building of engineers of PHE Department.

5.0. Qualifications

- a. Masters in Structural Engineering with a good understanding of Water Treatment related structural design, Soil Investigation, Engineering Drawing, Latest Structural Designing Software Tools.
- b. At least 5 years' experience in design of Structures preferably Structures required for Water / Sewage / Effluent Treatment Plants and Elevated Service reservoirs.
- c. Must have good knowledge on BIS codes with up to date amendments related to water retaining structures and design thereof, AutoCAD, Staad Pro etc proficiency is preferred.
- d. Must have good knowledge in design of pile foundations
- e. Project Management knowledge and experience is a major plus.
- f. Good oral and written communication skills. Should be fluent in English. Knowledge of Assamese is an advantage
- g. High level of interpersonal and management skills and ability to work with teams in the organisation at all levels
- h. Must be able to work under pressure and tight deadlines
- i. Computer knowledge and skills in MS Office (Powerpoint, MS Word, MS Excel)

6.0 Duty Station.

The Design and Structure Specialist will be stationed at the SPMU under the Mission Directorate JJM, Assam in Guwahati

7.0 Time Frame

Initially for one year which will be renewed based on performance and requirement of the project

8. Remuneration

The proposed remuneration will be in the range of Rs. 60000 to Rs. 80000 per Month (Inclusive of all incentives & perks). Salary is no bar for deserving candidates and will be commensurate with experience and previous salary.