



**NEPAL HEALTH SECTOR SUPPORT PROGRAMME - III (NHSSP-III)
TERMS OF REFERENCE: STRUCTURAL ENGINEER**

| | |
|---------------------------|--|
| Job title | Structural Engineer (Embedded Team at DUDBC) |
| Work stream | Nepal Health Support Sector Programme – III Health Infrastructure work stream (Retrofitting & Rehabilitation) |
| Location | Kathmandu, Nepal |
| Reporting to | Senior Earthquake Resilience Engineer |
| Responsible for | Not applicable |
| Liaison with | LHSSP Health Infrastructure Team counterparts, Government of Nepal counterparts in Ministry of Health (MOH) and Department of Urban Development & Building Construction (DUDBC) |
| Contracting Agency | Miyamoto International |
| Type of contract | Fixed term contract until 31 December 2020. |
| Background | <p>The Nepal Health Sector Support Programme Phase 3 (NHSSP-3) is an initiative of the Nepal Ministry of Health (MOH) financed by the UK Department for International Development (DFID). The NHSSP-3 is intended to support the goals of Nepal’s National Health Sector Strategy (NHSS), and assist the MoH in building a resilient health system to provide good quality health services for all. From March 2017 to December 2020, the NHSSP-3 will be implemented by a consortium led by Options, with HERD, OPM, and Miyamoto, through the General Health and Infrastructure Technical Assistance (GHITA) Programme. The programme has five work streams: health policy and planning, procurement and public financial management, service delivery, evidence and accountability, and health infrastructure. Each work stream will be integrated and managed by a team based in Kathmandu and “embedded” with the GoN. Staff members from each consortium partner are located across four technical work streams to avoid a siloed approach to programme delivery.</p> <p>The NHSSP-3 Health Infrastructure work stream is implemented by the Infrastructure Team. The Infrastructure Team works with senior officials in the MoH, and with its technical counterparts in the Department of Urban Development & Building Construction (DUDBC).</p> <p>The Health Infrastructure work stream has three Key Performance Areas (KPA):</p> <ul style="list-style-type: none">• KPA 1: Policy and Standards Development involves building a strong policy environment, to ensure that the MoH and DUDBC adopt and implement relevant codes, standards and guidelines for construction and maintenance of health facilities and infrastructure |

- **KPA 2: Capacity Enhancement** seeks to augment the capacity of MOH, DUDBC and the private sector (including contractors and construction professionals) to be efficient, technically competent and capable of implementing resilient design, construction and maintenance
- **KPA 3: Retrofitting and Rehabilitation of Health Infrastructure** aims to ensure that health infrastructure is retrofitted, rehabilitated, maintained and monitored in earthquake affected and vulnerable affected districts, and that facilities are resilient to future seismic shocks, environmental impacts and other natural disasters.

Under KPA 3, at least two hospitals will be retrofitted and rehabilitated, and be treated as demonstration models to inform roll-out of the retrofitting and rehabilitation programme and design work in future. The two hospitals offer an opportunity to document and record development in real-time case studies, providing a solid foundation and precedents for the design of remaining hospitals. They also will be used for on-site skills transfer and learning by MoH and DUDBC technical staff, as well as private sector construction contractors and professionals.

PURPOSE AND OBJECTIVES

NHSSP is undertaking Retrofitting and Rehabilitation of two hospitals as per KPA3 of the NHSP3. For this activity, Western Regional Hospital, Pokhara and Bhaktapur Hospital has been selected. Preliminary assessment of the buildings has been carried out to find out the type of intervention that has to be executed under this activity. Besides structural and non-structural retrofitting, functional retrofitting is one of the important activities. For this, NHSSP envisages to hire Structural Engineer (Embedded Team). The Structural Engineer (Embedded Team) supports the production of codes, guidelines and standards on building earthquake resilience, as well as supporting the design and implementation of the priority hospitals construction programme within the Department of Urban Development & Building Construction (DUDBC).

This post is located in the Embedded Team within the Retrofitting & Rehabilitation Team, located within the DUDBC and work closely with Health Infrastructure Team. The Retrofitting & Rehabilitation Team comprises three units – Design Team, Construction Team and Embedded Team, and is drawn from Options specialist technical partner, Miyamoto International. The Retrofitting & Rehabilitation Team includes senior specialists drawn from Miyamoto international offices, as well as local staff. The Embedded Team is situated in the DUDBC.

The Structural Engineer (Embedded Team) is also required support activities for skills transfer and capacity enhancement of DUDBC-based engineers in these workstreams.

The Structural Engineer (Embedded Team) reports to the Senior Earthquake Resilience Advisor, and the activities associated with this post are linked to deliverables across Key Performance Areas 1, 2 and 3 in the RHITA activity plan. The KPA targets are included as part of this job description.

Main duties

The position will provide technical assistance as agreed with Chief of Health section (CHS), DUDBC and the Infrastructure Lead Advisor (LA) and Senior Earthquake Resilience Advisor (SERA) from NHSSP. The position will also work closely with SERA, CHS and LA. This position is responsible for supporting the DUDBC and NHSSP Retrofitting Team with the following tasks with SERA.

Specific responsibilities:

- Support DUDBC counterparts in the production and adoption of codes, guidelines and standards on building earthquake resilience into MoH and DUDBC health infrastructure practice and programmes.
- Support DUDBC counterparts in understanding and adopting the earthquake resilience measures as part of the RHITA Capacity Building and Policy Development programmes, and participate in training events and capacity enhancement activities as required
- Provide technical assistance to DUDBC in the retrofitting of two priority hospitals, including
 - Condition assessment of the prioritised hospitals
 - Investigations (including damage assessments, geo-technical and structural elements tests) and results evaluation
 - On-site mapping and drawings of hospital buildings
 - Selection of appropriate retrofit solutions
 - Production of detailed designs, consultation with and presentations to GON counterparts, hospital staff and other relevant stakeholders
 - Inputs into tender processes (including tender documents and bid evaluations)
 - Support implementation and construction works
 - Participate in regular progress and site meetings with clients, contractors, construction managers, and site engineers
 - Provide inputs and material as necessary to support project close-out and recording
- Support DUDBC counterparts in adopting technical improvements to in-house practices and procedures on earthquake resilient design and implementation for health infrastructure
- Support DUDBC counterparts to strengthen quality assurance practices and procedures in design, tendering and construction
- Support DUDBC counterparts in adopting technical improvements to in-house practices and procedures on earthquake resilient design and implementation for health infrastructure
- Ensure that materials, designs and deliverables produced are very high quality, technically sound and incorporate the new standards and codes for earthquake, environmental and disaster resilience that are being developed under RHITA
- Ensure that retrofit designs take account of good practice in patient-centred construction, including efficient planning and sequencing to minimise disruption, strong infection control measures, and close consultation with health management and staff
- Participate in networks and activities to ensure that RHITA products and processes are informed by and relevant to the private construction industry (contractors and professionals), higher education institutions and training organisations

Other duties and requirements

- Maintain high standards of professional practice, ensuring that deliverables and products are technically sound and comply with government requirements, relevant international parameters and National Reconstruction Authority guidance
- Participate as an active member of the NHSSP Health Infrastructure Team, contributing to operational planning, programming and budgeting processes as required
- Produce reports, materials and inputs for NHSSP deliverables as required for the effective performance of the programme
- Attend meetings, seminars, consultative events and workshops as a representative of the NHSSP programme as required
- Be familiar with and observe NHSSP requirements on staff behaviour and performance, grievance and disciplinary procedures, anti-corruption action and other relevant personnel conditions of employment

Relevant experiences and Requirements

- Master Degree in Structural Engineering along with experiences in buildings design, registered professional
- Minimum 5 years professional experience in seismic assessment and retrofitting design of buildings especially hospital retrofitting with significant exposure in programmes / large projects, preferably in the health sector.
- Experience & Knowledge of materials specification, tender documents, contract management and retrofitting construction with decanting plan.
- Good working knowledge of relevant national and international design codes and standards
- Substantial experience of standard structural & CAD software and office programmes
- Effective report writing and excellent communication skills in English and Nepali with strong inter-personal skills and ability to work with people from diverse backgrounds
- Strong organisational skills, with the ability to handle multiple tasks and activities with competing deadlines

Other Requirements

- Right to work in Nepal