**Request for Expressions of Interest**

**(Consultancy – firm selection)**

**REPUBLIC OF ARMENIA**

**Project name:** Disease Prevention and Control, 5222-AM

**Name of Assignment:** Technical Supervision of Civil Works for Construction of Martuni Medical Center CJSC of Gegharkunik Marz of RA

**Package number (as per the procurement plan) -** CR4/CQS/B-C/047-19

1. The Republic of Armenia has recevied financing from the World Bank toward the costs of the Disease Prevention and Control Project, (credit No. 5222-AM) and intends to apply part of the proceeds for consultancy services for **Technical Supervision of Civil Works for Construction of Martuni Medical Center of Gegharkunik Marz of RA- CR4/CQS/B-C/047-19** .
2. The Consulting Services include:

the Consultant shall supervise all aspects of works implementation to the full and final completion, approval and taking over of the Project by the Client. All executed works shall conform to the architectural and engineering designs and specifications. National construction laws, building codes and standards shall be met, rules and regulations governing environmental safeguards shall be observed during the implementation process. Services and other terms are described in more detail in the attached Terms of Reference (ToR).

3. The Technical Supervision Contract is planned to be signed in February 2020. Within 5 days after receiving the Letter to Proceed the Consultant will have to mobilize on site. The project implementation is anticipated to take twenty-four (24) months.

4. The Health Project Implementation Unit State Agency of the Ministry of Health of RA (hereinafter referred to as ‘the Client’) invites eligible consulting firms (hereinafter referred to as ‘Consultants’) to express their interest in providing the services above. Interested Consultants are requested to provide information on qualification and relevant experience requirements, specified for service delivery (company details, experience in providing similar services, description of similar services, ability to provide services, brochures, etc.). CVs of the staff do not need to be submitted at the current stage.

**5. Shortlisting criteria include:**

* **Consultant’s general experience in technical supervision of quality of civil works in the last 7 years;**
* **Execution of similar contracts during the last 5 years, in the frame of which the consultant provided technical supervision of reconstruction or construction of public and residential facilities (successfully completed) with a combined area of at least 4,700 square meters (under a maximum of 2 contracts).**

6. The attention of interested Consultants is drawn to paragraph 1.9 of the World Bank’s Guidelines: *Selection and Employment of Consultants under IBRD loans and IDA credits and Grants by Borrowers of the World Bank* (Consultant Guidelines, January 2011, as revised in July 2014), setting forth the World Bank’s policy on the conflict of interest.

7. A Consultant will be selected in accordance with the Consultants’ Qualifications (CQS) method specified in paragraph 3.7 of the Consultant Guidelines (January 2011, as revised in July 2014).

8. Eligible consultants may associate with other firms in the form of Joint **Venture (JV) or Sub-consultant,** to enhance their qualification *(if applicable, indicate the form of cooperation, e.g. JV or sub-consultant, as well as select the first partner).*

9. Further information can be obtained at the address below between 9.00 am and 6.00 pm on business days.

10. The expression of interest must be delivered in **Armenian,** in electronic copy (**Adobe PDF format**) to the address indicated below no later than **by 29 January, 2020.** The expression of interest application shall clearly indicate: ***Technical supervision of civil works for construction of Martuni Medical Center CJSC of Gegharkunik Marz of RA******CR4/CQS/B-C/047-19***.

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**TERMS OF REFERENCE**

# Technical Supervision of Civil Works for Construction of Martuni Medical Center CJSC of Gegharkunik Marz of RA CR4/CQS/B-C/047-19

# 1. Introduction

1.1 The *Republic of Armenia (RA), through the Ministry of Health (MOH) Health Project Implementation Unit State Agency (SA), is implementing the Disease Prevention and Control Project 5222-AM. The Project is funded under a credit from the World Bank (WB) of which the RA intents* to use part of the proceeds to build a new prototype medical facility for Martuni Medical Center CJSC in Gegharkunik Marz (Martuni MC). The New Martuni MC will be a one-story MC facility with basement, consisting of six sub-buildings, accommodating different types of health services. The six new sub-buildings will have different interior lay out, corresponding to functional requirements by the activities accommodated. In addition, a boiler house and a helipad (helicopter platform) will be constructed.

1.2 Further, the project includes plans to upgrade and reconstruct the current power substation for the MC, to construct outdoor and indoor engineering networks and infrastructure, and to carry out general area improvement works.

1.3 In support of the project implementation, the Health Project Implementation Unit SA will select a Consultant to perform technical supervision of all works related to the implementation of all physical structures of the new MC.

1.4 The Consultant will be selected in accordance with the Selection based on the Consultants’ Qualifications (CQS) method specified in paragraph 3.7 of the World Bank’s Consultant Guidelines (January 2011, as revised in July 2014).

1.5 A time-based payment contract will be signed with the Consultant.

 **2. Objectives of the Assignment**

2.1 The technical supervision shall be carried out in accordance with the Instruction on Technical Supervision of Construction Quality issued by the RA Ministry of Urban Development, No. 44 of April 28, 1998.

2.2 Objectives of the Technical Supervision are to ensure that:

- the performed civil works conform to the architectural and engineering designs and technical specifications and that conformity is documented,

- all works are executed in accordance with national building laws, environmental safeguards, and legislation governing work place labor safety.

 **3. SCOPE OF WORK**

3.1 General

3.1.1 After the signing of the technical supervision contract and within 5 days after receiving the Letter to Proceed the successful Consultant will have to mobilize on site, at which time technical supervision begins. Project implementation is anticipated to take twenty-four (24) months. However, the contractual obligations of the Consultant will persist until the validation of the acceptance and documentation certificate on completed civil works, identified defects have been rectified, final accounts have been prepared and the Construction Contract has been closed.

3.1.2 The Consultant shall establish a permanent presence on the construction site, staffed during working hours with the Technical Site Supervisor (TSS) of the consultant’s team, identified and assigned with the responsibility of uninterrupted technical supervision of all ongoing activities on the construction site. As required, the TSS shall call on specialist members of the consultant’s team to check and advise on technical issues related to the individual team member’s professional expertise. The TSS shall record all activities on site, including decisions made on technical, legislative and safety issues.

3.1.3 TSS shall organize and chair a regular Site Meetings with the participation of authorized representatives of the Client, Consultant, Contractor, Designer (Author Supervisor) and Sub- Contractors (if applicable). The TSS shall prepare an agenda (if required) for the proceedings at the Meeting. The TSS shall take minutes (if required) from the Site Meetings and keep these on record. The Consultant shall prepare and submit to the Client monthly summary reports, highlighting any issues identified during the past month and the solutions agreed for their solution. Minutes from Site Meetings held since last monthly reporting shall be attached to the monthly summary report. Based on the consultant’s monthly summary report the Client shall make payments according to progress.

3.1.4 The Consultant shall ensure that the quality of works performed, materials, structures and items procured, as well as technological requirements for performing the works are in accordance with the architectural and engineering design specifications and cost estimate, current codes and Government standards as well as samples of building materials approved by the Client.

3.1.5 The technical supervision shall be performed through continued inspections and shall be documented in writing, supported by test results, technical documentation and certificates of procured goods, measurements of quantities, and photos. In consultation with the Client, the Consultant shall inspect and accept building materials and other procured items. The Consultant shall be satisfied that all activities on site are performed within applicable building laws, environmental safeguards, and legislation governing work place labor safety.

3.2 Specific

3.2.1 In specific terms the responsibilities of the Consultant will include (**but not necessarily be limited to**) the following:

3.2.2 Ensure that the TSS (senior specialist) is present daily on the construction site throughout the duration of performance of civil works,

3.2.3 Participate in setting out of the building structures and inspect and check correct location of survey marks during the construction.

3.2.4 Regularly check the quality and technological sequence of all construction and installation works, their conformity with the design and specifications, building codes and rules, and technical conditions for special works.

3.2.5 Check the availability and validity of certificates documenting quality of materials used in the construction of structures and facilities, and engineering equipment employed on site; document results of laboratory tests and analyses, and where these do not conform to the design and specifications, reject the use of the materials concerned.

3.2.6 Keep a record of comments and remarks, detected defects and define respective deadlines for their rectification in the general Construction Log Book maintained by the Contractor.

3.2.7 Take part in the construction quality inspections performed by the Author’s Supervision, the State Urban Development Supervision and other competent authorities, and ensure that defects identified are appropriately and timely rectified.

3.2.8 On a monthly basis prepare an update of progress of works and detected defects.

3.2.9 Take part in the acceptance of construction facilities (preserved) or stopped, as well as participate in their handover process to the implementing entity (IE) specifying the technical conditions of such facilities.

3.2.10 Participate in testing of engineering utility connections and structures, pipelines and electrical equipment, and ensure conformity with design specifications, adopted codes and standards, and collect, keep and sign test reports.

3.2.11 Record regularly the progress of work performed, the quantity and quality of structures, items and materials installed at the construction site.

3.2.12 In coordination with the IE and the Contractor, prepare and validate the acceptance certificates of covered works, and present them to the Client as documentation for validation of related performance.

3.2.13 Validate the performance certificates, prepared by the Contractor and submitted for payment, supported by documented, verify/check in advance and carry out detailed measurement of all the quantities reported by the contractor; the Consultant shall be fully responsible for the accuracy and the quality of quantities of the works reported in the performance certificate.

3.2.14 Record and submit to the Client the quantities of works needed to be performed in excess of or beyond the contractual quantities providing professional opinion/conclusion in writing

3.2.15 Monitor performance of civil works throughout their duration in accordance with the prepared Environmental and Social Management Plan and complete the relevant tables to be provided by the Client.

3.2.16 Check out daily records and their compliance with the technical safety Log Book completed/maintained by the Contractor.

3.2.17 If the results of laboratory tests are negative, on a sampling basis the Consultant is required to double-check them using own resources as specified in **Annex 1.**

3.2.18Sign Completion Certificates of construction. If the certificates are not validated, provide the reasons in writing within three days.

3.2.19 On a monthly basis submit a report to the Client (refer to the section on Reporting Requirements for details).

3.2.20 Inform the Client immediately if defects threatening the stability and reliability of buildings and structures are detected.

3.2.21 Reject construction and installation works performed in violation of approved designs, technical specifications, building codes, and rules, and if low-quality of materials have been used.

3.2.22 Ensure that a water supply and sanitation specialist, electrical technician, heating and ventilation, gas supply, communication and data network specialists (technical supervisors #1,2,3,4,5) as well as environmental specialists visit the construction site; and ensure that they carry out supervisory measurements, check the conformity of installed materials with the design and regulatory standard requirements existing in RA, participate in testing, prepare the performance certificates of their respective parts, and check the certificates of hidden works.

 **4. CONSULTANT REPORTING REQUIREMENTS**

**4.1 Project Inception Report**

Immediately upon mobilization on site, the Consultant shall prepare and submit to the Client a Project Inception Report (PIR). The PIR shall include an assessment of the complete design package i.e. architectural and engineering designs and specifications, and other aspects of relevance to project implementation, i.e site conditions and project completion time frame. The PIR shall highlight any issues identified by the Consultant which might present challenges during project implementation, and propose ways of resolving those proactively.

The PIR shall be submitted to the Client for comments and/or approval not later than two (2) weeks from the date of the consultant’s mobilization on site. The PIR shall be submitted in electronic and in two hard copies in Armenian.

**4.2 Monthly Summary Report**

The Consultant shall submit a Monthly Summary Report (MSR) to the Client covering all civil works and other activities performed in the reported month.

The MSR shall provide summarized information on construction work progress, expenditures, detected issues and their rectifications, hidden works, tests records and an assessment of the Contractor’s performance. MSR shall contain deviations recorded during the author’s supervision and their rectification, variations from design and cost estimate (DCE) documents, if such exist, modifications made in DCEs, certificates of conformance for goods, a table on performed lab tests and their results as well as expert opinion on the results of the lab tests, photos, etc. In addition, all technical supervisors who are responsible for the works in the relevant area of construction, i.e. residential, public and industrial, hydro-technical, energy, gas supply and communication shall validate the related sections of the report. A table of visits ensuring permanent presence of technical supervisors, their rates and remuneration have to be attached to the report. Entries in the Construction Log Book and the Minutes of Site Meetings shall be annexed to the Report. The report shall include a professional assessment of the progress of civil works and adherence to work plans and contractual timelines. All the information and data reflected in the Reports shall be verified by the Client

4.2.1 The Construction Log Book

The Construction Log Book is the day-to-day record of all activities on the construction site, prepared and maintained by the Contractor and supervised by the TSS. In addition, entries shall also be made by the Technical Supervisors, visiting the site to inspect specific construction activities within their technical specialty.

4.2.2 Site Meetings

Throughout the project implementation process, regular meetings shall take place on site. The Site Meetings shall be chaired by the TSS, who is responsible for the preparation of a meeting agenda (if required). Attendees in the Site Meetings shall be the authorized representatives of the Client, Consultant, Designer (Author Supervisor), Contractor and sub-contractors (if applicable) that have been working on the project during the past, or will be working on the project in the coming. In addition, the Site Meetings shall be attended by Technical Supervisors, relevant to work ongoing.

 Agenda of Site Meetings (if required)

The agenda to be covered at each site meeting shall include **(but not necessarily be limited to)**:

- list of attendees,

- adoption of Minutes from previous Site Meeting,

- actions taken on issues identified and discussed on previous Site Meeting,

- issues identified and discussed on current Site Meeting,

- progress of work,

- any other issues․

 Proceedings at Site Meetings

Items to be discussed at each site meeting shall include **(but not necessarily be limited to)**:

- Adoption of Minutes (if applicable) from last meetings,

- Works ongoing and progress in relation to work plan,

- Labor force on site, number and composition,

- Supplied building materials, certificates and status of approval,

- Tests performed in laboratory and on site, documented results and status of approval,

- Inspections of works undertaken by specialists, reported results, status of approval,

- Payments for works performed, documentation, status of approval,

- Work activities, issues and actions required,

- Environmental safeguards, issues and actions required,

- Work environment labor safety, issues and actions required,

- Any other issues․

The TSS shall prepare Minutes of the Meetings (if required) and distribute to each participant for comments and/or approval.

Throughout the entire period of rendering the services, the Consultant shall submit Monthly Summary Reports to the Client by the first week of the following months in electronic and in two hard copies in Armenian for comments and/or approval.

**4․3 Project Completion Report**

Upon the completion of civil works under the Contract, the Consultant shall assist in taking over the project from the Contractor; the Consultant shall further assist the Client in the preparation of final accounts and closure of Contract. The PCR shall include **(but not necessarily be limited to)**, a list of variations, changes and amendments made to the architectural and engineering designs, specifications and cost estimate package, and a summary description of the entire project implementation process. A List of Defects shall be attached to the PCR, identifying measures for their rectification and a time line for completion. The PCR shall be signed by the Team Leader of the Consultant Team, the TSS and all relevant technical experts who have been involved in the project implementation process.

The Consultant will prepare a draft of the Project Completion Report in 10 days after the end of the assignment and deliver it to the Client for comments and/or approval. The Final Project Completion Report shall be in electronic and in two hard copies in Armenian.

 **5. COMPOSITION OF THE CONSULTANT TEAM**

5.1 It shall be the responsibility of the Consultant at all times to provide technical expertise required for a fully professional technical supervision of all aspects of project implementation. All specialists included in the Consultant Team shall possess a professional license, granted by the licensing authority under the State Urban Development Committee of the RA Government, in accordance with the established procedure. The key staff of the Consultant shall be comprised of:

1. Team leader (engineer) (1 person)
2. Lead specialist (engineer-constructor) (1 person)
3. Technical Site Supervisor (senior specialist) (1person)
4. Water supply and sanitation specialist (technical supervisor #1) (1 person)
5. Electrical technician (technical supervisor#2) (1 person)
6. Heating and ventilation specialist (technical supervisor #3) (1 person)
7. Gas supply specialist (technical supervisor #4) (1 person)
8. Communication and data network specialist (technical expert#5) (1 person)
9. Environmental specialist (1 person)

**5.1.1 Team leader** is required have higher education in the field of construction, and at least 7 years of work experience (during recent years) in technical supervision of construction. The team leader is required to coordinate all the activities of team specialists, and provide report follow-up, give assignment to its team and maintain a regular contact with the Client.

**5.1.2 Lead specialist (engineer-constructor)** is required to have higher education in industrial civil construction and at least 7 years of work experience (in last years), of which at least 2 years of experience in technical supervision of constuction of health facilities, have relevant qualifications for technical supervision of construction in residential, public and industrial sectors issued by the licensing authority under the State Urban Development Committee under the RA Government, in accordance with the established procedure.

**5.1.3 Technical Site Supervisor** isrequired to have higher education in the field of construction and at least 3 years of work experience (in last years) in technical supervision of residential, public and industrial buildings.

**5.1.4 Technical supervisors (# 1,2,3,4,5)**

Water supply and sanitation specialists, electrical technician, heating and ventilation, gas supply ,communication and data network specialists are required to have 3 years of relevant work experience (in last years) as well as higher education in their respective professions in the construction sector.

**5.1.5 Environmental specialist**

Environmental specialist is required to have 3 years of relevant work experience (in last years) as well as higher education in respective field.

**ANNEX 1**

List of required lab tests shall include (but not necessarily be limited to):

1. Check the bearing capacity of underlying layers of buildings and roads;
2. Under lab conditions determine proportions of materials used before the concrete works;
3. Test various categories of concrete by cube tests, pullout-tests or concrete hammer tests using different equipment, with quantities and frequencies as per established procedures;
4. Test reinforcements during bending and stretching works – quantities and frequency as per established procedures;
5. Check welding nodes using the ultrasound method – quantities and frequencies as per established procedures
6. Test granular composition of minerals used quantities and frequency as per established procedures;
7. Lab test of ray absorption of barite before shielding the walls x-ray room with barite.

The tests above are required to be performed based on all rules and standards applicable in RA (Building codes and rules and RA Building Codes) for checking all the works subject to laboratory testing under the civil works contract.