REQUEST FOR EXPRESSIONS OF INTEREST

REPUBLIC OF ARMENIA

IMPROVING PREPAREDNESS FOR COVID-19 OUTBREAK IN THE REPUBLIC OF ARMENIA: DETECTION AND RESPONSE TO CORONAVIRUS THREAT.

Procurement: Development of design documents and author supervision for reconstruction works for Ararat and Armavir regional branches of the National Center for Disease Control and Prevention (NCDCP) in the Republic of Armenia

Number of Contract: EFSD/COVID/QCBS/A-C/001-21

The Republic of Armenia (RA) has received a Grant financing in amount of US$3,000,000.00 (Three million US dollars) from the Eurasian Fund for Stabilization and Development (hereinafter referred to as the "EFSD") toward the cost of the Project "Improving preparedness for COVID-19 outbreak in the Republic of Armenia: detection and response to coronavirus threat" and intends to apply part of the proceeds for the consulting services for the development of design documents and author supervision for reconstruction works for Ararat and Armavir regional branches of the National Center for Disease Control and Prevention (NCDCP) in the Republic of Armenia.

The Consulting services (hereinafter referred to as the "Services") include:

Designing

1. Survey of the technical condition and seismic stability of buildings in accordance with the seismic norms applicable in the Republic of Armenia followed by a conclusion based upon the results of the survey. Engineering and geodesic (if necessary, geological) surveys, geodesic surveying of territories, collection of data on the existing water supply and sewerage networks. Development of preliminary space-planning solutions and functional plans of branches of the NCDCP (preliminary design for obtaining an architectural planning assignment - APA);

2. Preliminary development of the engineering section of design, technological part, environmental protection, landscaping, external lighting system, design of organization of construction activities, local, object and summary estimates, bill of quantities, specifications and explanatory notes for all parts of design), including a preliminary estimate of costs;

3. Development of the final, complete packages of design and estimates for NCDCP in Ararat and Armavir regions. The estimated duration of construction work should be determined in the construction management design package (CMDP).

The total duration of the designing is five months from the date of signing the contract with the Consultant.

Author's supervision

Author's supervision is carried out throughout the entire period of the reconstruction works.

The total duration of the author's supervision is approximately 1 year beginning from the start of the reconstruction works.

The Terms of Reference is attached to this Request for Expressions of Interest.

The "Health Project Implementation Unit" State Agency of the Ministry of Health of the RA, acting as the Project Implementation Group (PIG), now invites eligible consulting firms to indicate their interest in providing the Services. Interested Consultants should provide information demonstrating their compliance to the qualification criteria given below. A Consultant's expression of interest must contain the following:

- General information about the company and a description of the Services provided by the company;
- Data on the projects implemented and under implementation by the company, scope of works, data on the company's clients for the last 5 (five) years;
- Data on the key registered personnel and the composition of the team for the provision of Services under the project;
- Availability of design license, certificates and other documentation relevant to the Selection;
- The company's contact information.

Qualification criteria are:

(i) At least 10 years of experience in design and architecture;
(ii) Experience in the design of medical facilities over the past 8 years with a list of respective designed and/or built facilities with available letters of recommendation from Clients (indicating the scope of works);
(iii) Availability of qualified experts in the required field, with the appropriate higher professional education and experience in the provision of consulting services.

A Consultant will be selected in accordance with the Quality and Cost based Selection method set out in the Procurement Policy for Projects Financed by the EFSD (last update in November 2018) and the Procurement Procedures for Projects Financed by the EFSD Funds (last update in November 2018) posted on the website of the Eurasian Development Bank managing the EFSD resources and on the website of the EFSD.

Consultants may take part independently or associate with other firms, but should indicate clearly the association form (consortium or sub-consultant).

Further information, can be obtained by phone or e-mail on business days from 10:00 to 17:00. Contact information is provided below.

Expressions of interest must be delivered in Adobe PDF and Word formats, in Armenian, or in Russian, or in English and delivered to the email addresses indicated below by **December 2, 2021**. The "subject" line should indicate: *Expressions of Interest – "Development of design documents and author supervision for reconstruction works for Ararat and Armavir regional branches of the National Center for Disease Control and Prevention (NCDCP) in the Republic of Armenia", EFSD/COVID/QCBS/A-C/001-21.*

"Health Project Implementation Unit" SA of the Ministry of Health of RA
Yervand Elibekyan, Director
Kristine Ghambaryan, Procurement Specialist

49/4 Komitas Ave., Yerevan, 0051, RA (5th floor)
Tel. (+374 10) 29 75 36, (+374 10) 29 75 37
E-mail: info@healthpiu.am , kristine.ghambaryan@healthpiu.am
www.healthpiu.am

TERMS OF REFERENCE
For
Development of design documents and author supervision for reconstruction works for Ararat and Armavir regional branches of the National Center for Disease Control and Prevention (NCDCP) in the Republic of Armenia

A. BACKGROUND

The Government of the Republic of Armenia regularly implements reforms aimed at increasing the quality and accessibility of medical services provided to the population.
The Project is of great importance to the Armenian government in terms of strategic preparedness and response to the COVID-19 outbreak through strengthening the healthcare system, including Coronavirus detection and diagnosis, intensive therapy service, procurement of basic medical equipment, supplies and materials for diagnostics and treatment, personal protective equipment, raising public awareness, protection and training of health workers on the guidelines for triage and treatment of virus-infected patients/infection control, etc.

Currently, this Project is proposed taking into consideration the pandemic situation resulting from COVID-19, the growing number of cases in Armenia, as well as worldwide, and the need for urgent response to the threat posed by COVID-19.

This Project is linked with the "Disease Prevention and Control Project" financed by the WB, the EU Grant Program which at this stage are assisting the Government of Armenia in implementing measures for emergency response to the threat posed by COVID-19.

For emergency measures, the Republic of Armenia received a Grant from the EFSD to improve measures for fighting against COVID-19 in the amount of US $ 3.0 million, a part of which, about US$ 1.5 million, will be allocated to finance the reconstruction of the branches of the National Center for Disease Control and Prevention (NCDCP) in Ararat and Armavir regions of Armenia.

Objective of the Project is to ensure the continuity of medical care related to the global pandemic COVID-19, as well as to ensure the possibility for emergency response to the threat of the spreading of the disease (timely testing and treatment of patients with coronavirus).

This objective is planned to be achieved by increasing the efficiency of prevention and control of infection through modernization (reconstruction, furnishing with modern equipment) of the branches of the NCDCP located in:

- Ararat region of the RA, Artashat city, A.Khachatryan 120,
- Armavir region of the RA, Vagharshapat city, Spandaryan 1.

Modernization procedure:

Modernization will be carried out in three stages:
Stage 1: Preparation of design and working documentation; Selection of Consultant to develop design and working documentation for the reconstruction of branches of the NCDC; Development of full package of design and working documentation, including architectural, structural and engineering designs, explanatory notes, specifications, cost estimates and bill of quantities.

Stage 2: Reconstruction; Selection of Contractor for civil works for reconstruction of buildings: The estimated duration of the civil works must be determined in the construction management design

package (CMDP); Implementation of author's supervision of the civil works for the entire period of reconstruction.

Stage 3: Supply of medical equipment and furniture, commissioning, installation, and training of personnel on the operation of the equipment (a preliminary list of the equipment with technical characteristics is attached in Annex 3).

Long-term result: Increasing the effectiveness of disease prevention and control, reducing the cases of infection with COVID-19 and other infectious diseases.

B. OBJECTIVE OF THE ASSIGNMENT

The objective of the assignment is:

- Development of design for the reconstruction of branches of the NCDCP, including development of full package of design and working documentation, architectural, structural and engineering designs, explanatory notes, specifications, cost estimates and bill of quantities.
- Author's supervision of the civil works for the entire period of reconstruction.

C. SCOPE OF THE ASSIGNMENT

The Consultant is responsible for development of the final design and working documentation for the branches of the NCDCP of Ararat and Armavir regions. The branches of the NCDCP will consist of the following services and premises:

Ararat branch (approx. 870.0 sq. m.)

- Reception (premises for: receiving, registering and processing of laboratory samples, storing of laboratory materials, etc.)
- Laboratory unit (consisting of PCR, bacteriological, chemical and parasitological laboratories)
- Administration
- Warehouses

Armavir branch (approx. 895.0 sq. m.)

- Reception (premises for: receiving, registering and processing of laboratory samples, storing of laboratory materials etc.)
- Laboratory unit (consisting of PCR, bacteriological, chemical and parasitological laboratories)
- Administration
- Warehouses

Project documentation must be prepared in accordance with:

- **the national legislation of the Republic of Armenia;**
- **design norms adopted in the Republic of Armenia;**
- **international standards for medical institutions applicable in the territory of the Republic of Armenia;**
- **modern world standards in the field of energy efficiency of buildings, structures and engineering equipment.**

D. SCOPE AND CONTENT OF DESIGN

Design development by the Consultant (Design Company/Organization) is carried out in three STAGES:

1. Survey of the technical condition and seismic stability of buildings in accordance with the seismic norms applicable in the Republic of Armenia followed by a conclusion based upon the results of the survey. Engineering and geodesic (if necessary, geological) surveys, geodesic surveying of territories, collection of data on the existing water supply and sewerage networks. Development of preliminary space-planning solutions and functional plans of branches of the NCDCP (preliminary design for obtaining an architectural planning assignment - APA);

2. Preliminary development of the engineering section of design (general explanatory note and explanatory notes for all developed parts, architectural and structural design, heating and ventilation, water supply and sewerage, electrical power systems and low voltage supply, installation of telephones, internal communications, Internet, fire alarm and fire-fighting system, external networks (water supply, sewerage, electricity, gas supply), technological part, environmental protection, landscaping, external lighting system, design of organization of construction activities, local, object and summary estimates, bill of quantities, specifications and explanatory notes for all parts of design), including a preliminary estimate of costs;

3. The estimated duration of construction work should be determined in the construction management design package (CMDP). Development of the final, complete packages of design and estimates for NCDCP in Ararat and Armavir regions.

The Consultant (design developer) is responsible for the following activities:

Development of all sections of design: general explanatory note and explanatory notes for all developed sections, architectural and planning solutions, structures and structural parts, heating and ventilation, water supply and sewerage, electrical power systems and low voltage supply, installation of telephones, internal communications, external networks (water supply, sewerage, electricity, gas supply), environmental protection, landscaping, external lighting system, CMP, local, facility and summary estimates, bill of quantities for all sections of the project, specifications and explanatory notes for all sections of projects.

The list of the required number, type and sizes of rooms/units in each center is set out in Annex 1.
The appropriate sections of design should be developed for the installation and operation of medical equipment, taking into account the power and voltage indicated in Annex 3.

The Client controls the schedule for the development of the draft estimate documentation.

The detailed scope of services to be provided by the Consultant during development of design is as follows:

- Consultant should develop and agree with the Client all design solutions for the NCDCP branches in Ararat and Armavir regions.
- Design documentation should include all sections of the list in Annex 2, but not limited to this, if necessary.
- Design should include communications in accordance with technical conditions, as well as, if necessary, an electrical substation. All this should be agreed with the relevant authorities.
- Consultant should agree the design with the public authorities and other interested bodies, such as the Urban Development, Technical Standards and Fire Safety Inspectorate of the Republic of Armenia, the Health and Labor Inspection Body of the Republic of Armenia, Municipalities-local self-government bodies of the respective cities, as well as external engineering communications, such as “ENA” CJSC (Electric Networks of Armenia), “Veolia Jur” CJSC, “Gazprom Armenia” CJSC, and “Telecom Armenia” CJSC.

- In accordance with the Armenian Law of 09.04.2014 #110-N on “Environmental Impact Assessment and Expertise”, Consultant should obtain approval from the Ministry of Nature Protection whether the designs are subject to environmental expertise and if this is the case, then the Consultant shall have this expertise carried out according to the national legislation.
- Consultant should provide reports, detailed specifications for all sections and BoQ for the reconstruction of the NCDCP branches in Ararat and Armavir regions as mentioned above.
- The consultants shall receive a positive conclusion of the state comprehensive expertise, the final design and estimate documentation (according to the Decree of the Government of the Republic of Armenia No. 711-N dated May 6, 2010 "On approval of the procedure for the expertise of urban planning documentation", the text of the Decree can be found at this link on www. arlis.am).

E. SCOPE AND CONTENT OF AUTHOR'S SUPERVISION

The detailed scope of the services that should be provided by the Consultant at the reconstruction stage is presented below:

- Provision of Author’s supervision during the reconstruction: Consultant provides the Client with monthly complete reports in writing on Author’s supervision (the number of visits by the specialists to the construction site during the reporting period, detected deviations from the project) in accordance with the order N143 of the Minister of Urban Development dated 28.09.1998 on Author’s supervision agreed with the Client.

During the reconstruction, the Consultant shall:

- Ensure that the reconstruction is in accordance with the agreed designs;
- Ensure that the construction techniques used by the contractors are in accordance with the working drawings, specifications, norms and regulations;
- Be present at the tests of all engineering systems;
- If necessary, make changes to the working documentation with the provision of expert opinion on the changes (in accordance with the current legislation of the Republic of Armenia);
- If necessary, at the request of the Client, provide additional drawings and other materials related to the reconstruction;
- Prepare and provide the acceptance committee with a list of defective or outstanding work at the commissioning stage of the facility.

At the end of the defects liability period, the Consultant shall:

- Ensure the absence of defects and the accomplishment of earlier incomplete works;
- Sign the act of commissioning the facility;
- Prepare the final report on the completion of facilities reconstruction.

Author’s supervision is carried out throughout the entire period of the reconstruction works, the total duration of which is approximately 1 year beginning from the start of the reconstruction works. Start dates for Author’s supervision depend on the signing of the agreement with the Contractor.

F. RESULTS AND DATES

Consultant shall develop and submit the following reports for the Client’s approval:

- Author’s supervision is carried out throughout the entire period of the reconstruction works, the total duration of which is about 1 year;
- Draft design of buildings and structures for the Ararat and Armavir branches of NCDCP – within 30 days from the date of signing the contract. Draft design should take into account the landscape and situational plan of the area, functional requirements;

- A complete package of the working and design documentation (including all calculations) – within two months from the date of signing the contract;
- Final working projects, including specifications and explanatory notes for all sections, working drawings, local, facility, summary estimates, bill of quantities – within four months from the date of signing the contract;
- Documents confirming the approval of the developed design by all relevant bodies, as well as the positive conclusion of the independent comprehensive expertise of the design - within five months from the date of signing the contract;
  All relevant bodies are: Urban Development, Technical Standards and Fire Safety Inspectorate, the Health and Labor Inspection /HLI/ Body, Municipalities - Local government bodies of the relevant cities and external communications of "ENA" CJSC, "Veolia Jur" CJSC, "Gazprom Armenia" CJSC, as well as "Telecom Armenia" CJSC and other interested bodies.

- The developed working design and reports must be submitted in hard copies (architectural and engineering parts in 6 copies, and the remaining parts in 5 copies) and in electronic version (cost estimates and bill of quantities in Excel format, and working drawings in pdf and AUTOCAD on laser disk). The Consultant shall develop and present to the Client's approval 3D color modeling of all parts of the reconstructed branches of the NCDCP in Ararat and Armavir in printed and electronic versions.
- During ***Author's supervision,*** Consultant shall present monthly reports on the implemented work for both buildings (if necessary, reports should include, among other things, the minutes of the site visits). The reports must be submitted in Armenian, in 2 copies, and in electronic form. The stage of supervision will begin simultaneously with the start date of civil works, and the Client is obliged to notify the Consultant about this in writing.

G. QUALIFICATIONS AND PERSONNEL REQUIREMENTS

The team proposed by the Consultant shall meet the following minimum qualifications:

- Chief architect of design – team leader (higher education, specialization – architect, with 10 years of proven professional experience);
- Architect (higher education, specialization - architect, with 5 years of proven professional experience);
- 2 constructors (higher education, specialization – building engineer, with 5 years of proven professional design experience);
- Cost engineer (higher education, specialization - building engineer, with 7 years of proven professional experience);
- Geologist (higher education, specialization - geological engineer, with 10 years of professional experience);
- Land surveyor (higher education, specialization - engineer surveyor, with 5 years of proven professional experience);
- Electrician and specialist in weak currents (for both specialists - higher education, specialization - electrical engineer with 5 years of proven professional experience);
- Heating, ventilation and air conditioning specialist (higher education, specialist in heat and gas supply, and ventilation with 5 years of proven professional experience);
- Specialist in water supply and sewerage (higher education, professional engineer in water supply and sewerage with 5 years of proven professional experience);

Annex 1: Reconstruction of buildings for the branches of NCDCP in Ararat and Armavir regions

General Description

1. Civil works description	Reconstruction of the buildings and improvement of the areas
2. Construction description	Armavir - a three-storied stone building with a basement, masonry of walls made of pure tesca tuff stones, prefabricated reinforced concrete floors, round hollow panels. Ararat- two-storied stone building with a basement, masonry of walls made of pure tesca tuff stones, prefabricated reinforced concrete floors, round hollow panels.
3. Reconstruction area	Ararat – 870.0 sq.m. Armavir – 895 sq.m.
4. Number and type of rooms	See Annex 2

Basic output data of the architectural design

1. Land ownership certificate
2. Technical conditions for connecting water supply, sewage, electricity and gas supply
3. Technical conditions for construction waste management
4. List of rooms set out below

Development of the architectural design – geodesic, geological surveys, if necessary; general layouts, facades, floor plans, sections, window and door assemblies, roof layouts, landscape layouts, construction details, engineering drawings, bill of quantities, specifications, work management plan and implementation schedule.

Branch of the NCDCP in Ararat marz

Modernization of the branch of the NCDC**P** in Ararat marz of the RA (reconstruction, providing the laboratory with modern equipment).

The newly modernized center of Ararat marz is a two-storied building with an area of 870.0 sq.m.

The types, number and sizes of the rooms for the Ararat marz branch are indicated below.

N	***Name***	***Quantity***	***Notes***
First floor ***Reception***			
1.	Waiting room	1	About 25 sq.m.
2.	Office, nurses	1	About 14 sq.m.
3.	Changing room, staff	1	About 20 sqm, with a bathroom
4.	Office, staff	1	About 20 sq.m.
5.	Waste room	1	About 15 sqm, with washbasin and drain in accordance with regulations
6.	Store, clean, general purpose	1	About 4 sq.m.
7.	Storage room	1	About 18 sq.m.
8.	Reagent storage room	1	About 16 sq.m.

9.	Store, dirty linen	1	About 4 sq.m.
10.	Laboratory samples reception room	1	About 15 sq.m.
11.	Room for chemical samples collection and sorting	1	Consists of 2 rooms, about 25 sq.m.
12.	WC for men	1	About 3 sq.m.
13.	WC for women	1	About 3 sq.m.
14.	WC for disabled	1	About 4 sq.m.
Administration			
16.	Reception, Director	1	About 10 sq.m.
17.	Office, Director	1	About 20 sq.m., with a bathroom
18.	Office, Doctors	3	About 50 sq.m.
Second floor **Laboratory**			
Common laboratory premises			
1.	Disinfection room (dirty autoclave)	1	About 15 sq.m.
2.	Washing and sterilization room	1	About 18 sq.m.
3.	Sterilization room (clean autoclave)	1	About 15 sq.m.
4.	Media preparation room	1	Comprises 3 rooms, about 24 sq.m.
5.	Store	1	About 10 sq.m.
6.	Storage room for laboratory materials	1	About 8 sq.m.
7.	Medical waste collection	1	About 4 sq.m.
PCR laboratory			
8.	Tambour	1	About 4 sq.m.
9.	Excretion of DNA/RNA	1	About 14 sq.m.
10.	Tambour	1	About 4 sq.m.
11.	Reactive mixtures preparation zone	1	About 14 sq.m.
12.	Tambour	1	About 4 sq.m.
13.	Amplification of DNA / RNA nucleic acids	1	About 12 sq.m.
Bacteriological laboratory			
14.	Sanitization room (2 showers and 2 locker-rooms)	1	About 20 sq. m. The sanitary checkpoint has 2 locker-rooms - for clean (civilian) and dirty (work) clothes
15.	Bacteriological laboratory (serology testing)	1	About 14 sq.m.
16.	Tambour	1	About 4 sq.m.

17.	Bacteriological laboratory (diagnosis of gastrointestinal infections)	1	About 16 sq.m.
18.	Tambour	1	About 4 sq.m.
19.	Bacteriological laboratory (diagnosis of airborne/droplet infection)	1	About 14 sq.m.
20.	Tambour	1	About 4 sq.m.
21.	Room for sanitary microbiology examination /bacteriology/	1	About 20 sq.m.
Parasitological laboratory			
22.	Sample preparation, examination, preparation of saline and buffer solutions	1	About 10 sq.m.
24.	Room for sanitary parasitology examination	1	About 14 sq.m.
25.	Serological laboratory	1	About 12 sq.m.

Armavir Branch of NCDCP

Modernization of the Armavir branch of the NCDC of Armenia (reconstruction, laboratory equipment).

The modernized Armavir center is a three-storied building, with a surface of 895 sq.m.

The types, quantity and sizes rooms for the Armavir Branch are indicated below:

N	***Name***	***Quantity***	***Notes***
First floor			
Reception			
1.	Waiting room	1	About 25 sq.m.
2.	Office, nurses	1	About 14 sq.m.
3.	Changing room, staff	1	About 20 sqm, with a bathroom
4.	Office, staff	1	About 20 sq.m.
5.	Conference hall	1	About 20 sq.m.
6.	Reagent storage room	1	About 18 sq.m.
7.	Storage room	1	About 20 sq.m.
8.	Waste room	1	About 15 sqm, with washbasin and drain in accordance with regulations
9.	Store, clean, general purpose	1	About 4 sq.m.
10.	Store, dirty linen	1	About 4 sq.m.
11.	Laboratory samples reception room	1	About 15 sq.m.
12.	Room for chemical samples collection and sorting	1	Consists of 2 rooms, about 25 sq.m.
13.	WC for men	1	About 3 sq.m.
14.	WC for women	1	About 3 sq.m.

15.	WC for disabled	1	About 4 sq.m.
16.	Vaccine storage room	1	Includes 3 rooms: refrigerating room 40 sq.m, warehouse and workroom 25sq.m, total about 65 sq.m
Second floor **Administration**			
1.	Reception, Director	1	About 15 sq.m.
2.	Office, Director	1	About 30 sq.m., with a bathroom
3.	WC for men	1	About 6 sq.m.
4.	WC for women	1	About 6 sq.m.
5.	Changing room, staff	1	About 20 sq.m. with a bathroom
6.	Office, staff	1	About 20 sq.m.
7.	Cafeteria	1	About 30 sq.m.
8.	Office, doctors	5-6	About 102 sq.m.
Laboratory			
Third floor **Laboratory**			
Common laboratory premises			
1.	Disinfection room (dirty autoclave)	1	About 15 sq.m.
2.	Washing and sterilization room	1	About 18 sq.m.
3.	Sterilization room (clean autoclave)	1	About 15 sq.m.
4.	Media preparation room		About 24 sq.m.
5.	Store	1	About 10 sq.m.
6.	Storage room for laboratory materials	1	About 8 sq.m.
7.	Medical waste collection	1	About 4 sq.m.
PCR laboratory			
8.	Tambour	1	About 4 sq.m.
9.	Excretion of DNA/RNA	1	About 14 sq.m.
10.	Tambour	1	About 4 sq.m.
11.	Reactive mixtures preparation zone	1	About 14 sq.m.
12.	Tambour	1	About 4 sq.m.
13.	Amplification of DNA / RNA nucleic acids	1	About 16 sq.m.
Bacteriological laboratory			
14.	Sanitization room (2 showers and 2 locker-rooms)	1	About 20 sq. m. the sanitary checkpoint has 2 locker-rooms - for clean (civilian) and dirty (work) clothes
15.	Bacteriological laboratory (serology testing)	1	About 14 sq.m.

16.	Tambour	1	About 4 sq.m.
17.	Bacteriological laboratory (diagnosis of gastrointestinal infections)	2	About 18 sq.m.
18.	Tambour	1	About 4 sq.m.
19.	Bacteriological laboratory (diagnosis of airborne/droplet infection)	1	About 20 sq.m.
20.	Tambour	1	About 4 sq.m.
21.	Room for sanitary microbiology examination /bacteriology/	1	About 20 sq.m.
Parasitological laboratory			
22.	Sample preparation, examination, preparation of saline and buffer solutions	1	About 10 sq.m.
23.	Room for sanitary parasitology examination	1	About 12 sq.m.
24.	Serological laboratory	1	About 12 sq.m.

Annex 2: Project documentation

The number, type and size of rooms in each NCDCP branch are indicated in Annex 1.
CHECKLIST OF WORKS PERFORMED BY CONSULTANT

- Architectural design
- Geodesy
- Geological surveys
- Technological design with technical specifications of engineering parts
- Structural design
- Demand for basic machines and mechanisms
- Low voltage, intercom and fire alarm system Design
- Nurse Alarm System Design
- Design of plumbing: Sanitary, Water and Sewerage
- HVAC system Design
- Water Fire-fighting systems Design
- Lightning conductor systems
- Interior finishing design
- Exterior landscaping
- Exterior engineering systems Design
- Engineering Infrastructure Design
- Implementation of furnishing plans
- Design of organization of construction activities including the environmental and labour safety part in accordance with Urban Development legislation of the RA, particularly in accordance with Urban norms and rules N III-4-80* and EMP which will be developed and added into the civil works contract (labor safety is under the construction work contractor's responsibility)

Development of additional sets of design and (or) working documentation, if necessary.

All drawings must be presented in Autocad and PDF formats.
Consultant shall develop and present to the Client's approval the 3D modeling of Ararat and Armavir branches of NCDCP buildings.

Premises design
NCDCP branches should be designed in accordance with current International Standards and the best practices for the operation of medical centers applicable in the territory of the Republic of Armenia (see Annex 4) and in accordance with the list of rooms set out in Annex 1.

Drawings to be provided
Site Plans
Drawings should include:

- Site surveys showing existing services such as electricity, sewage, drainage and telephone lines
- Geodesic part
- All existing buildings
- Location of the proposed buildings
- Landscape, footpaths, walls etc.
- Location of existing roads and parking areas
- Proposed roads and parking areas, if any
- Proposals for the disposal of medical and other waste
- Functional movement and organization of flows management

Architectural Plans of Floors

Drawings should include:

- Floor layout;
- Detailed layout of the individual rooms, as required
- Furniture arrangement plan
- Doors and windows specification
- Decoration record of premises including broaches
- Decoration broaches of all premises
- Roofs layout
- Ceiling layout

The equipment installation plan should be carried out in accordance with the supplied equipment (Annex 3).

Architectural sections and facades

Drawings should include:

Sufficient long and cross sections of buildings to show levels of all floors, floor heights, roofs, etc and basic construction of the buildings, as well as elevations of all facades of all the buildings showing levels of floors, windows, roofs, etc.

Construction organization project should include:

- Lists of essential equipment
- Organisation of workforce
- List of necessary health and safety measures
- Details of construction techniques and planning
- Set-out of temporary site stores and offices
- Detailed works implementation plan

Design documentation should include:

- The structural system should take into account the findings of the geological survey and take into account the seismic characteristics of the area and seismic norms in the RA.
- Floor plans
- Sections
- Nodes
- Columns and beams;
- Foundations
- Floor slabs
- Roof carcass
- Partition walls
- Other construction elements
- Detailed specifications
- Summary cost of metal

Water supply and sewerage

Drawings should include:

- Storm water networks (if necessary)
- External water supply and sewerage networks
- Internal water supply and sewerage (considering the water hardness according to the standards and the results of laboratory studies carried out by the designer)
- Internal hot water supply pipework
- Installation of internal and external water fire-fighting systems
- All necessary plans, sections
- Axonometric scheme

- Specifications

Low voltage and electrical engineering design

Drawings should include:

- External power supply system (if necessary)
- Outdoor lighting system
- Internal power supply, lighting systems
- Grounding
- Design of an electric substation, if necessary
- Internal communication system, telephones and IT networks (ITN)
- TV
- Fire alarm system
- Lightning protection systems
- All necessary plans, schematic diagrams and specifications

HVAC design

Drawings should include:

- Thermal supply and boiler-house design and installation (by calculation)
- Heating supply - internal networks
- Ventilation and recuperation systems (at a reasonable cost)
- Air conditioning system
- All necessary plans, schematic diagrams and specifications

Note: it is necessary to provide thermal insulation for the entire building and use solutions and materials providing maximal energy efficiency for the buildings (as agreed with the Client).

Exterior Landscape Design

The drawings should include:

- Site layouts showing roads, paths, landscaping, walls and fences, site entrance, storm drainage, etc.
- External landscaping details
- Schedules of materials and finishes

Note: all materials and finishing must be agreed with the Client, as well as correspond to the requirements of the applicable legislation.

Specifications should not specify concrete manufacturers, and the selected specifications should correspond to those of 3-4 manufacturers that will be found in different price ranges.

Any parts or activities that are not mentioned in the design or in separate descriptions, but are required by the Urban Development legislation norms, are binding.

Interior Design

1. False ceilings:

To provide false ceilings of ARMSTRONG type.

Provide ceilings in special premises and in bathrooms, using materials approved for use in medical institutions, in accordance with the requirements of regulatory documents.

2. Floor coverings:

Provide floor coverings for all rooms, in accordance with the requirements of design and sanitary standards applicable in the territory of the Republic of Armenia. The choice of covering for rooms is carried out depending on the purpose and category of the room.

3. Paintwork:

Painting works are carried out in accordance with the requirements of design and sanitary standards applicable in the territory of the Republic of Armenia.

In working rooms, provide for protective strips at the level of chairs, with a height of at least 200mm.
4. Local heating is to be provided in the buildings.
5. Thermal insulation works:
Perform thermal calculation of the building with an indication of the norms according to which the thermal calculation was carried out. The calculation should be made considering local climatic conditions, and, if necessary, perform insulation of the outer walls of the building, cover the basement, attic, hot water pipes for internal networks.
6. Doors and windows:
Provide metal-plastic windows with insect screens. The width of the metal-plastic window profiles must be at least 60 mm, and the number of window sections must be at least 3. Provide locks enabling tilt-and-turn opening of windows on metal-plastic windows in each room. Aluminum doors with a thermal bridge must be used as an external entrance door.
Interior doors must be made of FF (fine fraction), door frame thickness: at least 80 mm. The rest of the doors, such as doors for bathrooms, toilets and doors for special rooms, should be made of white metal-plastic profiles. If necessary, in accordance with sanitary standards, provide blinds on the windows in the rooms.
7. Lighting:
Calculate the illumination of the room. According to the calculations, lighting devices with modern energy-efficient/energy-saving lamps should be provided in accordance with the provisions for the required lighting. Roof: if necessary, to prevent freezing of all gutters and downpipes, install electric heaters with a control panel.
If necessary, provide awnings on the windows from sunlight.
8. Roof
If necessary, install electric heaters with a control panel to prevent all roof pipes and drain pipes from freezing. Provide window blinds, if necessary.
9. Ramp
According to the regulations, for people with reduced mobility, provide a ramp at the front door.
10. Provide a WC for the disabled in the reception area.
According to the regulations, for people with reduced mobility, provide a ramp at the front door.
11. Provide information signs for all rooms (with the names of offices, emergency exits, room numbers etc.).

Annex 3: Preliminary list of equipment

EQUIPMENT						
N	Equipment name	Ararat	Armavir	Total quantity for both MCs	Minimal requirements (power of one device)	
					Volt	Watt
1.	Biosafety box, 2nd class	5	5	10	220	700
2.	Retractable wardrobe	2	2	4	220	1500
3.	PCR-box	1	1	2	220	1000
4.	Clear table	1	1	2		
5.	Real-time PCR analyzer	1	1	2	220	1000
6.	Refrigerator/freezer 400l (+8/5^{0}C)	2	2	4	220	1500
7.	Refrigerator/freezer 250l (+8/5^{0}C)	4	4	8	220	1500
8.	Freezer (-20/-40^{0}C) 120l	4	4	6	220	2500
9.	Hot air sterilizer (160-220^{0}C)	2	2	4	220	10000
10.	Binocular microscope	4	4	8	220	500
11.	PCR extractor /16 places	1	1	2	220	1000
12.	Water bath	1	1	2	220	1000
13.	Thermostat 100l	5	5	10	220	1000
14.	Thermostat 50l	3	3	6	220	1000
15.	Suction pump	2	2	4	220	500
16.	Electric laboratory burner for loop sterilization	5	5	10	220	2000
17.	PH meter with a measuring range from 0 to 14, with a set of standard buffers	1	1	2	220	500
18.	Conductometer	1	1	2	220	500
19.	Medical centrifuge 100-6000 rpm: for test tubes with a volume of 12-15 ml	4	4	8	220	1000
20.	Laboratory microcentrifuge - rotor capacity - 24 tubes with a volume of 1.5 to 2.0 ml, speed up to 15000 rpm	1	1	2	220	1000
21.	Solid state thermostat - temperature control range from 5 ° C above room temperature to 120 ° C; (thermo-block - at least 24 cells)	1	1	2	220	
22.	Vortex centrifuge	2	2	4	220	
23.	Autoclave	4	4	8	380	12000

24.	Laboratory sink (for glass)	1	1	2		
25.	Washer	1	1	2	220	1000
26.	Bactericidal recirculator	8	8	16	220	200
27.	Water distillation device	2	2	4	380	9000
28.	Automatic micropipette sets	5	5	10		
29.	Air sampling device "Typhoon P-40"	1	1	2	220	500
30.	Computer	5	5	10	220	500
31.	USB flash drives	2	2	4		
32.	Uninterrupted power supply unit	5	5	10	220	1000
33.	Electricity generator	1	1	2		
34.	Electronic laboratory scales, 2 classes of accuracy with discreteness up to 0.01g	2	2	4	220	500
35.	McFarland Turbidity Densitometer		1	1	220	100

Annex 4: List of guidelines, norms and rules to be followed during the design of the premises for Ararat and Armavir CDCPs

During the process of the project design, the following recommendations, reports and publications must be followed:

- Manual for Design and Construction of Hospital and Health Care Facilities (2010 edition),
- Analysis of Departmental Area in Contemporary Hospitals: Calculation Methodologies & Design Factors in Major Patient Care Departments,
- SNiP 2.1.3.2630-10 "Sanitary and Epidemiological Requirements for organizations carrying out medical activities",
- SP 118.13330.2012 "Public buildings and facilities",
- SP 158.13330.2014 "Buildings and premises of medical organizations. design rules",
- "Manual for the design of healthcare facilities (SNiP 2.08.02-89). Section III - specialized, auxiliary units and service and amenity premises" (approved by the USSR Ministry of Health from 05.25.90),
- SP 60.13330.2012 (41-01-2003) "Heating, ventilation and air conditioning",
- SNiP 2.08.02-89 Public buildings and structures.
- SP 131.13330.2012 "Building climatology",
- SP 6.13130.2013 "Fire protection systems, electrical equipment, fire safety requirements",
- SP 2.13130.2009 "Fire protection systems, ensuring fire resistance of protected objects",
- Technical regulations on fire safety requirements,
- Technical regulations on the safety of buildings and structures,
- SP 1.13130.2009 "Fire protection systems, evacuation routes and exits",
- SP 5.13130.2009 "Fire protection systems, fire alarm and fire extinguishing units automatic",
- HHSN II-8.04.02-2005 "Fire safety of buildings and structures",
- SP 30.13330.2012 (2.04.01-85 *) "Internal water pies and sewerage of buildings,
- SP 7.13130.2013 "Heating, ventilation and air conditioning, fire safety requirements",
- SNiP II-69-78 "Treatment and prophylactic institutions",
- SNiP 2.08.08-89, "Public buildings and facilities",
- SP 59.13330.2016 "Accessibility of buildings and structures for persons with reduced mobility",
- SP 52.13330.2016 "Daylighting and artificial lighting",
- SPiN 5179-90 "Sanitary regulations for the device, equipment and operation of hospitals, maternity hosts and other medical hospitals",
- SP 31-110-2003 "Design and installation of electrical installations for residential and public buildings",
- "Civil works climatic conditions" norms and regulations of the RA.

Construction norms developed in the Republic of Armenia

- HHSH 20.04- "Earthquake-resistant construction,design norms",
- HHSN II-7.01-2011 "Construction climatology",
- HHSHN IV-11.03.03-2002 (MSN 2.02.05-2000) "Parking lots",
- HHSHN IV-12.02.01-2004 "Heating, ventilation and air conditioning",
- HHSHN 20-06-2014 "Reconstruction, restoration and strengthening of buildings and structures, basic provisions",
- HSHN 21-01-2014 "Fire safety of buildings and constructions",
- HHSHN 22-03-2017 "Artificial and natural lighting",
- HSHN 22-04-2014 "On protection from noise",
- HSHN 24-01-2016 "Thermal protection of buildings",
- HHSHN 40-01.01-2014 "Internal water supply and drainage of buildings",
- GOST R ISO 14644-1-2017 "Cleanrooms and associated controlled environments. Part 1. Classification of air cleanliness",

- GOST 30494-2011 “Residential and public buildings. Indoor microclimate parameters”,
- HHSN I-2.01-99 “Engineering surveys for construction. Key provisions”,
- HHSHN II-8.04.02.-2005 “Fire automation of buildings and constructions”,
- HHSHN IV-11.03.02-04 (MSN 3.02.02.02.) “Spare buildings" construction norms,
- SNiP 2.01.15-90 “Engineering protection of areas, buildings և structures from geologically dangerous phenomena. Basic design provisions”,
- SNIP 2.04.02-84 * “Water supply. External networks and structures”,
- SNIP 2.04.03-85 “Sewerage. External networks and structures”,
- SNIP 2.04.0 7-86 “Heat networks”,
- SNIP 2.08.02-89 “Public buildings and structures”,
- SNIP 3.05.06-85 “Electrical devices”,
- VSN 62-91*. “Designing a living environment according to the needs of people with disabilities and people with disabilities”
- GOST 20444-85 Noise. Traffic flows. Methods of noise characteristic measurement,
- N 2-III-11.3 Sanitary norms "Noise in workplaces, residential-public buildings, residential construction areas" approved by the RA Minister of Health on 06.03.2002 By order N 138,
- N 2.1.7.002-09 Sanitary rules և norms “Sanitary protection of residential areas, collection, storage, transportation, processing, recycling, use, neutralization և burial, sanitary maintenance of residential areas, use of waste in the field of consumption waste. Hygienic requirements ", approved by the RA Minister of Health 22.12.2009 By order N 25-N,
- HHSHN 52-01- Concrete and reinforced concrete structures.

Urban norms and rules should be clarified at the time of the contract signing.