Country: REPUBLIC OF ARMENIA

Project Name: YEREVAN ENERGY EFFECIENCY II PROJECT
Funding source: European Investment Bank (EIB) and Neighbourhood Investment
Platform, a financing instrument of the European Union
EIB Loan No.: 90.016

CONSULTING SERVICES – FIRMS SELECTION

REQUEST FOR EXPRESSIONS OF INTEREST

Assignment Title: "Preparation of detailed technical design and cost estimation documents, along with and implementation of conducting author's supervision for the seismic upgrades, energy efficiency improvements and reconstruction of kindergartens No. 3, 73, 120"

Reference No.: YEEP-II/LCS/CS-25/001

This Request for Expressions of Interest (REOI) follows the General Procurement Notice for this project which was published on May 5, 2023.

1. The Republic of Armenia has received a financing from European Investment Bank (EIB) and Neighbourhood Investment Platform (a financing instrument of the European Union) toward the cost of the «Yerevan Energy Effeciency II Project» (YEEP-II), and intends to use part of the funds there of for payments under the following consulting services: "Preparation of detailed technical design and cost estimation documents, along with and implementation of conducting author's supervision for the seismic upgrades, energy efficiency improvements and reconstruction of kindergartens No. 3, 73, 120".

This contract will be jointly financed by the European Investment Bank (EIB) and Government of the Republic of Armenia. Bidding process will be governed by the European Investment Bank (EIB) according to Bank's rules and procedures («Guide to Procurement for projects financed by the EIB», March 2024).

The overall objectives of the Consultants' Services ("Services"): development/preparation of designs for the reconstruction of Kindergartens No.3 (Kentron Administrative District of Yerevan), No. 73 (Erebuni Administrative District of Yerevan) and No. 120 (Nor-Nork Administrative District of Yerevan) and implementation of Author's Supervision during the reconstruction of kindergartens.

The selected Consultant will carry out the assignment in 3 (three) phases:

- **Phase I.** Geological investigations of the areas of kindergartens No. 3, No. 73, and No. 120, study of documents related to the ToR, development of the Environmental and Social Management Plan (ESMP) or separate ESMP and development of two (2) versions of preliminary design (2 sketchces). **The duration of Phase I is 30 (thirty) calendar days**.
- Phase II. Development of working (final) designs for kindergarten No. 3, No. 73, and No. 120 based on the approved preliminary design, including all required all local expertize examinations. Phase II will start after successful completion of Phase I. The duration of Phase II is 180 (one hundred eighty) calendar days.
- Phase III. Author's Supervision (designer's supervision) during reconstruction.

¹ The "Guide to Procurement" is available online on EIB's website: https://www.eib.org/en/publications/20240132-guide-to-procurement-for-projects-financed-by-the-eib

It is expected that consultancy services (Phase I and Phase II) will start in **February of 2026.** The duration of the assignment (Phase I and Phase II) is **210 (two hundred ten) calendar days**. The Form of Contract to be used for the design activities (Phase I and Phase II) is Lump-Sum contract.

Phase III will start together with corresponding Civil Works. The tentative launch of Phase III is **March 2027**, and approximate duration of civil works is **24 (twenty-four) months**. The Form of Contract to be used for the Phase III is Time-Based contract.

(*)More details on the Services are provided in the Terms of Reference attached to this Invitation/REOI.

2. The Yerevan Municipality (the "Client") through "Investing Projects Implementation Unit Building up of Yerevan" Community Non-Commercial Organization Community Non-Commercial Organization of Yerevan Municipality ("IPIU Building up of Yerevan" CNCO, the Procuring/Executing Agency of the "Client") hereby invites eligible Applicants (the "Consultants") to show their interest in delivering the Services described above. This Request for Expressions of Interest is open to all Consulting firms from all countries, eligible to tender for services contracts, except Consultants included in EIB's list of debarred firms. In addition, please refer to paragraph 1.5 setting forth the Bank's policy on conflict of interest.

Interested Applicants should provide information demonstrating that they have the required qualifications and relevant experience to perform the services (brochures, descriptions of similar assignments, experience in similar conditions, availability of technical resources to do the work, general qualifications and number of the key staff (at the EOI stage the CVs are not required), etc.).

The following shortlisting criteria/maximum points will be taken into account for the evaluation of the applications:

#	Criteria	Points
(i)	Firm's general experience (core business and years in business)	20
(ii)	Firm's experience in the field of the assignment (experience in designing of residential/public/educational/industrial buildings over the past 10 years and the number of similar assignments performed)	50
(iii)	General qualifications and number of the key staff (at this stage the CVs are not required)	20
(iv)	Technical and managerial capacities of the firm (managerial and organizational structure, office equipment, etc.)	10

Note: The Client has the right to request from the Consultant/Applicant documents confirming the authenticity of the qualifications and experience provided by Consultant, such as copies of implemented contracts, certificates, extracts etc.

3. The Consultants may associate with other firms in the form of a **Joint Venture (JV)** or a **Subconsultancy** to enhance their qualifications (please clearly state the status of association, e.g. JV or Sub-consultancy). **Maximum number of members in the JV shall be: 3 (three).** In case of contract award, each member will be jointly and severally liable to the Client for all the Consultant's obligations under this Contract.

If an Applicant (including any JV member) submits or participates in more than one application (expression of interest), those applications shall be all rejected. However, the same Subconsultant may participate in several applications.

If the Applicant is a JV, the expression of interest shall include:

- a power of attorney for the representative of the lead member to represent all JV members
- a copy of an existing JV agreement, or
- a "Letter of Intent" to execute a JV Agreement.

In the absence of the document(s), the other members will be considered as **Subconsultants**.

Experiences and qualifications of Subconsultants are not taken into account in the evaluation of the Applications (Expressions of interest).

Among the submitted applications, the Client will establish the shortlist **a maximum of 6 (six) Applicants**, to whom the Request for Proposals (RFP) to carry out the Services shall be sent.

The Applicant/Consultant will be selected in accordance with the Least Cost Selection (LCS) method.

- 4. Interested Applicants may obtain further information at the address below during office hours: from 10.00 to 17.00 (Yerevan time), Monday to Friday, excluding public holidays (contact person: Mrs. Meri Hayrapetyan "IPIU Building up of Yerevan" CNCO, Public Buildings Program Lead; email: meri.hayrapetyan@yerevan.am).
- 5. Expressions of interest must be delivered in a written form in English OR in Armenian (one (1) validated hard copy + 1 (one) digital copy (CD or flashdisk)) in person (or by courier services) or by e-mail in the Adobe PDF format to the address below not later than August 20, 2025 and should be clearly marked: «Expressions of Interest for "Preparation of detailed technical design and cost estimation documents, along with and implementation of conducting author's supervision for the seismic upgrades, energy efficiency improvements and reconstruction of kindergartens No. 3, 73, 120", Ref#YEEP-II/LCS/CS-25/001».
- 6. The Applicant shall bear all costs associated with the preparation and submission of its Application (EOI), and the Client shall in no case be responsible or liable for those costs, regardless of the conduct or outcome of the Bidding process.

7. The address referred to above is:

Client: "Investing Projects Implementation Unit Building up of Yerevan" Community Non-Commercial Organization ("IPIU Building up of Yerevan" CNCO)

Attn.: Mr. Martin Charyan, Procurement Specialist

Tel: (+374 11) 51-50-07 (reception) Street address: 1/3 Buzand Street

Floor/Room number: 6th floor: room#618

City: Yerevan ZIP Code: 0010

Country: Republic of Armenia

E-mail: martin.charyan@yerevan.am; copy to: meri.hayrapetyan@yerevan.am;

narek.melkumyan@yerevan.am

The Application/Expression of Interest should comprise the following:

- Application Letter («Letter of Interest») addressed to the "IPIU Building up of Yerevan" CNCO Director²;
- Authorization Letter for the person signing the Expression of Interest;
- Information about overall experience of the firm;
- Information about the assignment related contracts performed during the past ten (10) years (to be provided in a form «Form EXP: Specific Experience»)²;
- Information about general qualifications and number of the Key Staff (at the EOI stage CVs are not required) and the firm's regional experience;
- A copy of the JV Agreement entered into by all members, or a letter of intent to execute a JV Agreement, signed by all members together with a copy of the Agreement proposal (in the absence of this document, the other members will be considered as Subconsultants).

² These documents are attached to this REOI (see next pages below)

Note: all italicized text in [..] is for use in preparing this form and shall be deleted from the final product.

Letter of Interest

•	Date [insert the EOI submission date]
To: "Investing Projects Implementation Unit B Commercial Organization (Procuring/Executing Ag	~ ·
Attn: Mrs. Aneta BABAYAN, Interim Director	
Address: 1/3 Buzand Street, Yerevan 0010, Armenia	a
Dear Sir/Madam:	
In response to the Request for Expressions of Interest of publication] for the assignment relevant Ref#	to «»,
I, as an authorized representative of	undertake the above-mentioned assignment as
I am enclosing the information and documents requeste and records.	ed, in the format requested, for your information
I declare that the information provided is complete contracting authority has the right to request, for the pur any available supporting documents.	
We understand you are not bound to accept any application	ation you receive.
We remain,	
Yours sincerely,	
Authorized Signature [in full and initials]:	
Name and Title of Signatory:	

Note: to be signed by the authorized representative of the organization \ company or the lead

organization \ company (in case of Joint venture)

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Note: all italicized text in [..] is for use in preparing this form and shall be deleted from the final product.

Form EXP: Specific Experience

[The following table shall be filled in for contracts performed by the Applicant and each member of a Joint Venture. A separate table shall be filled for each contract]

[insert full name]	Applicant's Name:
[insert day, month, year]	Date:
[insert full name]	Joint Venture Member Name:
[insert REOI number and title]	REOI No. and title:
of [insert total number] pages	Page <i>[insert page number]</i>

Similar Contract No. [insert number] of [insert number of similar contracts required]	Information				
Contract Identification	[insert contract name and number, if applicable]				
Award date	[insert day, month, year e.g., June 15, 2018]				
Completion date	[insert day, month, year, e.g., October 20, 2021]				
Original contractual completion period					
If there was any delay in completion, provide the period of delay due to consultants default Cause of delay	Force Majeure	Contractually justified extension of time	Consultants default	Others	
Period corresponding to cause of delay (months)					
Role in Contract	Prime Consulta		Management	Sub-consultant	
[check the appropriate box]		JV	Consultant		
Total Contract Amount	EURO or US\$ or local currency (AMD)]		[insert exchange rate and tota contract amount in EURO/US equivalent, if contract signed local currency (AMD)]		
If member in a JV or sub-consultant, specify share in value in total Contract amount and roles and responsibilities	[insert a percentage amount] [insert total contract amount in EURO or contract amount uS\$ or local equivalent, if con currency (AMD)] [local currency (AMD)]		e rate and total t in EURO/US\$ ontract signed in		
	[insert roles and	l responsibilities]			
Description of the similarity in accordance with Technical Qualifications					
Complexity	[insert description of complexity]				
Methods/Technology	[insert specific aspects of the methods/technology involved in the contract]				

Similar Contract No. [insert number] of [insert number of similar contracts required]	Information
Other Characteristics	[insert other characteristics as described in Section VII, Scope of Purchaser's Requirements]
Client's Name:	[insert full name]
Address:	[indicate street / number / town or city / country]
Telephone number:	[insert telephone numbers, including country and city area codes]
E-mail:	[insert e-mail address, if available]

Note: The contracts in the field of assignment specified in the Form must be completed successfully. The Client has the right to request from the Consultant/Applicant documents confirming the authenticity of the qualifications and experience provided by Consultant, such as copies of implemented contracts, certificates, extracts etc.

TERMS OF REFERENCE FOR CONSULTANCY SERVICES

(SELECTION OF FIRMS)

Preparation of detailed technical design and cost estimation documents, along with and implementation of conducting author's supervision for the Seismic Upgrades, Energy Efficiency Improvements and Reconstruction of kindergartens No. 3, 73, 120

1. GENERAL BACKGROUND

Yerevan, the capital of Armenia and home to over a third of the national population, has made strategic and institutional commitments toward sustainable energy development, energy efficiency (EE), and climate resilience. As the country's largest urban center and economic hub, Yerevan plays a critical role in Armenia's broader energy and environmental policy landscape.

1.1. Strategic framework and policy commitments

Yerevan has adopted several strategic plans that frame its energy and climate priorities:

- Yerevan Green City Action Plan (GCAP) (2020): Developed with support from the European Bank for Reconstruction and Development (EBRD), the GCAP identifies priority sectors—including energy, buildings, waste, and transport—with targeted measures to improve environmental performance and reduce emissions. The plan emphasizes retrofitting public buildings, advancing renewable energy use, improving public transport, and implementing energy-saving regulations.
- Yerevan City Sustainable Energy Action Plan (SEAP) (2010): In alignment with the EU's Covenant of Mayors initiative, this plan outlined a roadmap to achieve a 20% reduction in greenhouse gas (GHG) emissions. It identified EE improvements in buildings, street lighting, and municipal services as key strategies, with implementation support from local and international partners.
- Sustainable Energy and Climate Action Plan (SEDCAP) (updated 2025): Following Yerevan's renewed commitment under the Covenant of Mayors for Climate and Energy, the city set a more ambitious goal of 30% GHG reduction by 2030, along with climate adaptation measures. The SEDCAP reflects an integrated approach that addresses both mitigation and resilience, incorporating updated baseline emission inventories and sectoral analyses.

These documents were developed through participatory processes involving stakeholders, expert reviews, and public consultations, ensuring alignment with both local realities and international climate and energy frameworks.

Yerevan has benefited from substantial technical and financial support from the European Investment Bank (EIB), UNDP, European Bank for Reconstruction and Development (EBRD), EU Neighborhood Investment Platform, and the Eastern Europe Energy Efficiency and Environment Partnership (E5P).

1.2. Key Energy Efficiency Projects

Energy efficiency in public buildings remains one of the highest-impact areas of intervention in Yerevan:

- Yerevan Energy Efficiency Project (2017–ongoing): Focused on rehabilitating kindergartens through building envelope insulation, heating system upgrades, and energy-efficient lighting.
- Yerevan Energy Efficiency II Project (2024–ongoing): Supported by a €25 million loan from the EIB, a €10.1 million grant from the EU Neighbourhood Investment Platform, and €2 million co-financing from the Yerevan Municipality, this project scales up earlier efforts to cover additional public buildings, including kindergartens and polyclinics. It is expected to significantly reduce energy consumption and GHG emissions, while improving indoor comfort and health standards.

Yerevan stands out in the region for its structured, multi-tiered approach to energy efficiency and climate action. The city's integration of long-term planning (SEDCAP, GCAP), institutional commitments, and access to international financing mechanisms positions it as a model for sustainable urban energy transformation in Eastern Europe and the Caucasus. Continued focus on implementation, public-private cooperation, and monitoring will be essential for achieving its 2030 climate and energy goals.

1.3. Consultant Selection for Preparation of detailed technical design and cost estimation documents, along with and implementation of conducting author's supervision

Yerevan Energy Efficiency II Project

Within the framework of the Yerevan Energy Efficiency II Project, it is planned to implement energy efficiency renovation (or improvements) and seismic upgrades of 32 kindergartens and 6 polyclinics in Yerevan, aligning their technical condition with the following standards and requirements:

- RA Construction Norms RA CN 20.04 "Seismic-Resistant Construction: Design Norms"
- RA CN 24-02-2022 "Ensuring Building Energy Efficiency: Energy Efficiency Evaluation Indicators"
- To the requirements stipulated in the RA Government Decision No. 1504 of December
 25, 2014 "On the Implementation of Energy Saving and Energy Efficiency Measures in Facilities Constructed (Reconstructed, Renovated) at the Expense of State Funds"
- and international best practices in improving building energy efficiency.
- The designs of the kindergartens must undergo local expert examination (in accordance with RA legislation) and receive the approval of international experts funded by the program.

A portion of the funds allocated to this Program is designated for procuring services related to the preparation of detailed technical design (hereafter referred to as design) and cost estimation documentation, as well as for author's supervision during the construction phase.

A specialized consulting firm (hereinafter referred to as the "Consultant") will be selected to prepare design documents and conduct Author's Supervision during the reconstruction of the aforementioned kindergartens and polyclinics.

In order to ensure the proper design and supervision of the constructed/reconstructed buildings, financial resources will be allocated for the preparation of design and cost estimation documents, as well as to conduct Author's Supervision for supervising during the construction works.

Two separate contracts will be signed with the selected Consultant:

- For design works (Phase I and Phase II) under a Lump-Sum Contract.
- For Author's Supervision (Phase III) under a Time-Based Contract.

The design services must be completed within two hundred and ten (210) calendar days, whereas the author's control will be conducted alongside the construction works until their completion.

The selection of the specialized Consultant will be conducted through a competitive process in accordance with the rules and procedures of the EIB ("Guide to Procurement for projects financed by the EIB,"). The Yerevan Municipality (hereinafter referred to as the "Client") through "Investing Projects Implementation Unit Building up of Yerevan" Community Non-Commercial Organization ("IPIU Building up of Yerevan" CNCO) will announce a tender invitation (REOI) to select a Consultant to carry out this assignment. The tender will follow the Least Cost Selection (LCS) procedure.

2. OBJECTIVES OF THE TERMS OF REFERENCE

This Terms of Reference (ToR) outline the provision of consultancy services under the contract signed between the Client and the Consultant. The objective of this ToR is to prepare design and cost estimation documents for the Energy efficiency improvements along with seismic upgrades of kindergartens No. 3 in Kentron administrative district, No. 73 in Erebuni administrative district, and kindergarten No. 120 in Nor Nork administrative district. Additionally, the Consultant is expected to prepare Environmental and Social Management Plans (ESMP), Environmental Impact Assessment (EIA) reports, and Monitoring Plans (MP) or site-specific ESMPs with MPs, as well as conduct Author's Supervision during the construction phase. The design should be based on on-site surveys and on the basis of a completed energy audit, which will be provided by the Client, geological surveys, building's technical condition and seismic vulnerability assessment, environmental and social impact assessment, while ensuring application of international and national best practices and construction norms on improving building energy efficiency, and seismic reinforcement. Cost effectiveness of proposed solutions are a must. The Client will provide the Consultant with the Environmental and Social Management Framework (ESMF) and electronic versions of relevant documents as guiding materials for preparing the EIA reports or site-specific ESMPs.

3. SCOPE OF SERVICES, TASKS, AND EXPECTED OUTPUTS

3.1. Description

The seismic vulnerability assessment report of the kindergarten and other necessary documents will be provided.

The addresses of the kindergartens, along with the necessary information, are provided below.

#	Kindergarten	Location	Establis hed Date	Current groups/children	Land Area (ha)
1.	3	Kentron a/d 80 Vracakan St.	1988	7/183	0.246996
2.	73	Erebuni a/d	1980	11/330	0.875851

¹ «The latest Procurement Guide» is available on the EIB website Guide to procurement for projects financed by the EIB

		1 Khaghagh Doni St.			
3.	120	Nor Nork a/d 27/1 Vilnius St.	1989	9/247	0.75658

3.2. Scope of ToR

This ToR aims to outline the scope of work and tasks as detailed as possible. However, the Consultant should note that the list of tasks defined in this ToR should not considered final and exhaustive, therefore, it is the Consultant's responsibility to critically verify the scope of work and services, and accordingly extend, reduce, or modify them in consultation with the Client, wherever deemed necessary, coming from the professional judgment and knowledge. It is expected from the Consultant to perform all required tasks to achieve the project's objectives.

The consultant should take into consideration the following constraints and assumptions where applicable:

A. Planned capacity per nursery-kindergarten

#	Kindergarten	Anticipated groups groups/children
1	3	9/270
2	73	11/330
3	120	12/360

Note: each group in a nursery-kindergarten should accommodate up to 30 children.

- B. The design area of the buildings: This should be defined based on the Order No. 50-N of the Minister of Health of the Republic of Armenia dated February 12, 2024 "Sanitary Rules and Hygiene Norms for Preschool Educational Institutions" 2.1.2.001-24, RA Construction Norms RACN 31-03.04-2022 "Design Standards for Preschool Institution Buildings" and Construction Norms RACN 31-03 "Public Buildings and Structures".
- C. The designs and drawings of the kindergartens should be developed in accordance with the conceptual design presented by the author (and approved by the Client) within its technical proposal.
- D. Kindergartens must be designed in full compliance with the all requirements stipulated by the legislation of the Republic of Armenia.
- E. The number of floors, rooms, and other adjacent facilities should be planned in-line with the required capacity (groups/children) defined in point a of this section. The area allocated per child should comply with the national technical requirements, taking into consideration the unique characteristics of the site.
- F. Measures improving energy efficiency and ensuring efficient use of water should be incorporated into the technical solutions proposed, including but not limitted to thermal insulation of the building envelope, application of energy efficient HVAC and lighting systems, equipped with appropriate control systems. The energy efficiency measures must either strictly follow the recommendations outlined in the Energy Audit Reports (EARs), or any deviations must be clearly justified with supporting technical and economic rationale. The proposed solutions should take into account the interoperability of the newly introduced systems with the existing ones (if any). All

- proposed measures should meet the requirements defined by Technical Specifications available as annexes to this ToR.
- G. Construction materials with low embodied carbon must be prioritized to minimize the environmental impact of the building's lifecycle. Construction materials must have minimum impact on health and safety of the beneficiaries, and in the meantime ensure comfort in buildings.
- H. The kindergartens should be equipped with solar water heating system(s).
- I. The kindergartens should be equipped with rooftop solar photovoltaic (PV) system; the capacity of the solar PV system should be defined based on the annual electrical energy consumption (which should be modified taking into consideration the savings in electricity consumption due to the energy efficiency measures introduced), and grid integration capacity defined by the Electric networks of Armenia (ENA) CJSC. The designer should also simulate the monthly and annual energy performance and provide energy yield data using a licensed simulation software.
- J. The load-bearing structures, inter-floor slabs, and roof slabs of the kindergartens are made of monolithic reinforced concrete, while the roof supporting elements can be either metal or wooden.
- K. Typical design solutions can be replicated and used for preparation of design documents and drawings for other kindergartens as well.
- L. A Lighting study should be conducted, using appropriate digital tools and in compliance with relevant lighting standards such as EN 12464, as specified in the Technical Specifications.

3.3. National and Local Legislation and Permits Required for Design and Cost Estimate Documentation

The following laws of the Republic of Armenia establish the legal framework applicable to the project's activities:

- Land Code (2001, last amended in 2022)

The Land Code defines the main directives for the management and use of lands under state ownership, including those allocated for various purposes such as agriculture, urban development, industry and mining, energy production, communication lines, transport, and other purposes. The Code stipulates specially protected areas, as well as forested, water-covered, and conserved lands. It also sets forth measures for the land protection and specifies the rights of state bodies, local self-governing bodies, and citizens concerning land. Any type of temporary or permanent land plot that may be required for the implementation of the Project will be acquired in accordance with the Land Code.

- Labour Code (2004, last amended in 2023)

The Labour Code regulates collective and individual labour relations, establishes the principles for the formation, modification, and termination of these relations, and identifies the procedures for their implementation. It also defines the rights, duties, and responsibilities of the parties involved in labour relations, as well as the conditions for ensuring the safety and health of workers. All provisions of the Labour Code will apply to the Project staff, as well as to the personnel of contractors, subcontractors, and consultants involved at various stages of the Project.

Law on Atmospheric Air Protection (1994, last amended in 2022)

The purpose of this law is to ensure favourable air quality for human health and the environment by protecting it from pollution (both natural and anthropogenic), eliminating and preventing negative impacts on atmospheric air, climate, and biodiversity. The law also regulates public relations in the sphere of air protection, prevent and reduce harmful chemical and biological impacts on the atmosphere, eliminate the irreversible consequences of air pollution, and ensure the completeness and accessibility of information on air pollution. This law also regulates emission licenses and sets maximum permissible concentrations for atmospheric air pollution, among other provisions.

- Law on Waste (2004, last amendment in 2015)

The law regulates legal-economic relations related to the collection, transfer, storage, development, volume reduction, and prevention of negative impacts on human health and the environment. The law defines the objects of waste usage, the main principles and directions of state policy, the principles of state standardization, inventory of statistical data and their implementation, requirements and mechanisms for their enforcement, principles of waste processing, requirements for waste presentation, measures aimed at reducing the quantity of waste for state monitoring, including natural resource usage fees, as well as the compensation for damages caused to human health and the environment by legal and physical entities due to waste usage, along with the requirements, state monitoring, and legal violations. The law defines the rights and obligations of state administration and local self-government bodies as legal and physical entities.

Law on Environmental Impact Assessment and Expert Examination (2014, last amendment in 2023) and EIB environmental and social requirements.

The "Law on Environmental Impact Assessment and Expert Examination" (EIAEE) provides the legal basis for conducting and applying state expertise of planned activities and concepts, as well as presents the standard steps of the Environmental Impact Assessment (EIA) process for various projects and activities in Armenia. The planned activities are classified into two categories, reflecting different levels of environmental impact assessment according to the severity of potential environmental impacts. The law includes provisions directly related to the field of recreation and tourism. In particular, Chapter 3, "Activities Subject to Expertise," lists the types of planned activities subject to EIA. The requirements for the composition of the preliminary assessment application are presented in Appendix 1 of these Terms of Reference.

3.4. Scope of the Consultant's Activities

- Preparation of detailed technical design documents and bill of quantity for kindergartens within the scope of this assignment.
- Ensuring the compliance of proposed solutions projects with the current construction norms and technical requirements of the Republic of Armenia, the Client's requirements, the European Investment Bank's protection policy, including the framework for environmental and social risk management, the resettlement policy framework, and special environmental management plans.
- Conducting geodetic, geological, topographic, and cadastral surveys of the area, processing the relevant documentation.

- Conducting site visit to verify the data presented in the EAR and update any outdated information, such as historical energy bills or interventions implemented after the completion of the EAR.
- Obtaining 'no objection' on the developed technical designs from respective stakeholders.
- If necessary, submitting a written inquiry to the "Center of Expertise for Environmental Impact Assessment" SNCO of the Ministry of Environment of the Republic of Armenia regarding the EIA. Submitting the written inquiry/response to the Client. If required, making the state payment /15,000 AMD/. Conducting the EIA (if necessary) falls within the Consultant's obligations.
- Assisting the client in obtaining and submitting technical conditions, baseline data, and other documents necessary for design and construction as defined by the laws of the Republic of Armenia.
- Performing author's supervision during the construction.

The Consultant is obliged to:

a. During the design phase

Based on the Technical Specification provided by the Client, fulfill all requirements, including:

- Assist the Client in the development of the design assignment and providing necessary information regarding the normative requirements for the intended structure.
- Participate in training and capacity building sessions organized by the Client.
- Assist the Client in the preparations for and participate in public hearings of the project as required by Armenian legislation.
- Verify on-site the accuracy of the provided technical conditions and other baseline data and their compliance with the design requirements.
- Perform detailed measurements and design preparation accordingly based on the actual dimensions for each building.
- Prepare detailed drawings for the proposed solutions including but not limited to thermal
 insulation of the building envelope, the HVAC, cold water, natural gas and electricity
 supply, indoor and outdoor lighting systems.
- Develop design documents for seismic upgrades, according to the seismic survey results
- Ensure the implementation of design work according to the schedule defined in the contract.
- Ensure compliance of the proposed solutions with national construction norms, technical regulations and technical specifications (presented as Annexes to this ToR).
- Adhere to the normative requirements for seismic resistance applicable to reconstruction of buildings, when developing building designs.
- Make the necessary adjustments to the design, considering Client's comments and feedback.
- Take into account the comments and suggestions by expert examination (environmental, fire safety, technical safety, simple, etc.) and make appropriate amendments as needed.

- Consider the comments and suggestions from international experts (if any) regarding the project and making appropriate adjustments as needed.
- Obtain approval of the final design by respective (community leaders, authorized (interested) bodies, supplier organizations, etc.) in accordance with Armenian legislation.
- In cases defined by Armenian law, prepare and submit the preliminary assessment application for environmental impact for state environmental expert examination (if necessary).
- **b. During Author's Supervision** (Author's supervision shall be carried out in accordance with the order of the Minister of Urban Development of the Republic of Armenia No. 143 dated 28.09.1998, ''Instructions' on the Implementation of Author's Supervision over Construction'')

During the construction phase the author of the technical design documents must oversee the construction works and control the conformity of them with the technical design documents.

The Author's Supervision processes include the following:

- Participate in training and capacity building sessions organized by the Client.
- Participate in the process of marking building axes and perimeter.
- Organize site visits according to the schedule agreed with the Client, at least twice (2) a month, and ensure the presence of its personnel as planned.
- If necessary, upon the request of the Client, visit the construction site in addition to the planned intervals.
- Verify the conformity of the on-going and completed works with the design.
- Provide necessary consultations to the Client and the Contractor during construction.
- Properly maintain the Author's Supervision logbook, record all identified deviations, and provide instructions for their elimination.
- Present to the Client the list of employees performing Author's Control, indicating the Team Leader.
- Eliminate any design deficiencies discovered during construction. Promptly address issues related to the design that arise during construction, in coordination with the Client.
- Record any deviations from design solutions in the relevant section of the General Construction logbook, informing the Client accordingly.
- Inform the Client in writing about any detected defects and deviations, including noncompliance with safety regulations.
- Participate in the process of handing over the completed construction works.
- Immediately inform the Client and obtain their approval in case of any necessary changes to the schedule or previously agreed solutions.
- Validate the concealed works and final construction acts prepared during construction, and in case of rejection, submit a written justification to the Client.
- If any defects threatening the stability and reliability of buildings and structures, or unauthorized or significant deviations (which may lead to a substantial increase in

- construction costs or timelines) from the design are detected, inform the Client in writing within two (2) days.
- The final report for each task stipulated by the Author Supervision contract is considered
 the properly completed Author Supervision logbook, which the Author must submit to
 the Client within five (5) days after signing the final construction act for the respective
 task.
- During any construction project, as a current report, the Author must submit a quarterly Author Supervision report to the Client by the 5th of the month following the reporting quarter. The report should reflect the visits made, work performed, and specialists involved during the visits.

The following sections define the phases and detailed schedule referring the planned works for drafting design documents.

3.5. Phase I

Preliminary design, geological investigations of the areas of kindergartens No. 3, No. 73, and No. 120, study of documents related to the ToR, and development of **two (2) versions** of the Environmental and Social Management Plan (ESMP) or separate ESMP.

The duration of Phase I is defined as thirty (30) calendar days after commencement of services.

The author of the design documents must submit the following documents to the Client for approval:

- The results of geodesic survey which should be carried out according to the Universal Transverse Mercator coordinate system (UTM), geological and hydrological surveys, situation plan, site masterplan with necessary sections and layouts.
- Study of cadastral documents.
- Brief description of the historical and cultural monuments, their buffer zones and any structures which are subject to special care according to national regulation, which are located within the vicinity of the project site.
- Identification and description of privatized areas and structures within the boundaries of the project site.
- Clarification of the areas subject to renovation, the list of structures, and their volumes. As previously noted, these areas must either comply with the EAR or be clearly justified in the event that any deviations from the EAR are identified. Additionally, the following comprehensive tables should be added.

Areas	Before renovation (m ²)	After renovation (m²)
Heated area		
Unheated area		

Energy Efficiency Measure	Total building element area (m²)	Area subject to renovation due to poor thermal performance	Area subject to renovation due to the inclusion of	Total area subject to renovation (m²)
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	(m ²)	additional spaces within the building (m²)	
External wall insulation			
External roof insulation			
Internal ceiling (facing non heated areas) insulation			
Walls facing non heated areas insulation			
Walls facing the ground insulation			
Floor facing the ground insulation			
External windows replacement			
External doors replacement			

 Justification of the potential capacity for intervention regarding the heating system upgrade, as well as the Renewable Energy Systems (Photovoltaic system and solar collectors).

Additionally, a comprehensive table should be added.

Energy Efficiency Measure	Type, number and capacity of each module (boilers, AC split units recuperators) before renovation	Type, number and capacity of each module (boilers, photovoltaic & solar collectors panels, AC split units recuperators) after renovation	Total Capacity (kW)	Efficiency ² (%)
New heating system				
Photovoltaic system				
Solar collectors				
AC split units				
Ventilation system installation			-	

- Lighting study using appropriate digital tools and in compliance with relevant lighting standards such as EN 12464, as specified in the Technical Specifications
- Clarification of the list of works scheduled according to the ToR.
- Clarified drawings of the architectural and planning solutions based on the approved preliminary design.

² heat recovery in the case of the ventilation system improvement

- Schematic design of the structural solutions: plans of foundations and floors, sections, layouts, etc.
- Other architectural and construction designs that will provide a complete understanding of the proposed solutions.
- The submitted materials must be agreed with the Client and supplemented with appropriate explanatory notes.

3.6. Description of Phase II

Development of working designs for kindergarten No. 3, No. 73, and No. 120 based on the approved preliminary design

The duration of Phase II is set at one hundred and eighty (180) calendar days.

The Consultant must present for the Client's approval the designs for kindergartens No. 3, No. 73, and No. 120, incorporating all previous observations, according to the following sections:

Development of working designs in accordance with the order of the Chairman of the Urban Development Committee under the Government of the Republic of Armenia No. 128-N dated 11.09.2017:

- General explanatory note,
- Master plan,
- Plans for all levels, including basement and technical floors, showing all structural elements (reinforced concrete structural elements, metal structures, details of metal constructions, wooden structures, etc.),
- Drawings of sections for all main elements of the building façade: roof, ceiling, external walls, doors and windows, basement nodes, and connections,
- Technical solutions (including the drawings) proposed for thermal insulation of the building envelope, and the openings replacement, along with instructions for implementation of the thermal insulation and installation of the fenestration, which should be in-line with the findings and recommendations defined by the Energy Audit report (to be provided to the author) or properly justified in the event that any deviations from the EAR are proposed. Additionally, a comprehensive table should be added.

Building Envelope thermal insulation					
Energy Efficiency Measure	Insulation material	Insulation thickness (cm)	Insulation thermal conductivity (W/mK)	Total U-value of the building element (W/m²K)	
External wall insulation					
External roof insulation					
Internal ceiling (facing non heated areas) insulation					
Walls facing non heated areas insulation					
Walls facing the ground insulation					

Floor facing the ground insulation				
	Opening	s replacement		
Energy Efficiency Measure	Frame material	Glazing material	Total U-value (W/m²K)	
External windows replacement				
External doors replacement				

- Detailed designs and drawings of external walls and related components, such as drainage pipes and gutters, including the installation of anti-icing cable systems, suspension brackets, telecommunication accessories, etc. The drawings should be accompanied by corresponding plans, including piping for solar water heating systems,
- Detailed drawings of sewage and rainwater drainage connections or other appropriate drainage solutions,
- Detailed single-line diagram and drawings of cold and hot water, natural gas, electricity and air supply, including the details of protective conduits and thermal insulation (where applicable).
- Detailed single-line diagram of grounding and lightning protection systems.
- Detailed single-line diagram of internal and external illumination systems.
- Detailed single-line diagram of fire alarm systems and fire safety signboards.
- Detailed single-line diagram of fire extinguishing systems.
- Detailed drawings of evacuation routes.
- Detailed description of evacuation route signage, including light and sound indicators.
- Technical description of the film intended for window tinting: fire resistance, elasticity, operational lifespan, etc.
- Detailed drawings of basic shelters, including relevant furniture, ventilation, water supply, and sanitary facilities.
- Detailed drawings of communication and video surveillance networks and devices.
- Detailed electrical schematic designs of solar photovoltaic systems and solar water heaters.
- Detailed description of energy-efficient illumination devices, following the lighting study performed.
- Technical descriptions and detailed schematics of all mechanical, electrical, and plumbing systems (HVAC equipment, pipelines, electrical equipment, fire extinguishing systems).
- Detailed design documents for the seismic upgrades, according to the seismic survey.
- Technical specifications of all materials and equipment to be used during construction—specifically, a detailed description of equipment and structures (thermal insulation materials, windows, doors, internal and external lighting, HVAC and any utility supply systems, solar photovoltaic and water heating systems, etc.). In addition to the technical

characteristics the technical specifications should also include instructions for installation/assembly works for each system, equipment, or material.

- Environmental protection plan.
- Health and safety plan.
- Detailed description of the safe arrangement and technical conditions of the streets adjacent to the building.
- Engineering and technical measures aimed at civil protection and emergency situation preparedness.
- Construction schedule including the dismantling and demolition phases as well.
- Drawings of elevator shafts along with respective mechanisms and equipment operated within the elevator system.
- Cost Estimate Documents and Bill of Quantities a detailed estimation of costs must be submitted. Additionally, the estimate documents for kindergartens must be presented according to the relevant divisions, with separate versions for energy efficiency improvement works (details to be clarified with the Client).
- Summarized Reports and Specifications of major construction materials, products, buildings, and structures.
- All summary reports and specifications (demolition works, construction works, electrical works, water-sewage, etc.) must be presented in a tabular format, where volumes must be specified separately for each numbered buildings and as a total sum.
- Estimated investment cost of each proposed energy efficiency and renewable energy measure, covering full implementation (from A to Z), to be presented in a tabular format.
 For example:

Energy Efficiency Measure	Estimated investment cost - without VAT (€)	Estimated investment cost - including VAT (€)	Estimated investment cost - without VAT (€/piece³)	Estimated investment cost - including VAT (€/piece)
External wall				
insulation				
External roof				
insulation				
Internal ceiling				
(facing non heated				
areas) insulation				
Walls facing non				
heated areas				
insulation				
Walls facing the				
ground insulation				
Floor facing the				
ground insulation				

³ Per square meter regarding thermal insulation and windows replacement. Per KW regarding heating system replacement, lighting and RES. Per recuperator regarding ventilation installation

External windows		
replacement		
External doors		
replacement		
New heating		
system		
Lighting		
Photovoltaic		
system		
Solar collectors		
Ventilation system installation		
mstanation		

- Estimated investment cost for each non-energy efficiency measure (A to Z), presented in a tabular format (as regarding the energy efficiency measures).
- The technical drawings should be accompanied with high-quality three-dimensional (3D) renderings of both the exterior and interior finishes.
- All proposed construction materials must comply with requirements of the relevant RACNs and ensure resource-efficient performance and the safe operation of buildings. Material selection must be pre-approved by the Client.
- The results of monthly and annual energy yield assessment for solar PV systems must be presented as part of the technical design documents. The simulation must be performed using a licensed simulation software and must take into consideration all external issues which might affect the performance of PV systems, i.e., shading and heat sources.
- The project should include a SMART management system.
- The project should be approved by the Urban Planning working group, which operating under the Mayor of Yerevan, based on the presentation by the designer.

The Consultant must submit the design and cost estimation documentation for nursery kindergartens No. 3, No. 73, and No. 120 to the Client, ensuring that they have obtained positive conclusions from the Urban Development Simple Expert Examination and other required assessments as per Armenian legislation, with the exception of the State Comprehensive Urban Development Expert Examination, which is conducted by the Client. Cost estimation documents must be submitted to Client in both hard copy and electronic formats. The electronic version must include the design structured according to the work program (AutoCAD, ArchiCAD, Revit, or other relevant software), as well as its PDF format, while cost estimation must be provided in both PDF and Excel formats. The hard copy version must be submitted in four (4) copies in A3 format for the design documents, while the budget documents in two (2) copies in A4 format. The entire package of design andestimate documentation must be provided in both Armenian and English.

The Consultant must also have the consent of supplier organizations and head of community on design.

The presented list is not exhaustive. The project must be submitted to the Client in compliance with Order No 128-N of the Chairman of the Committee for Urban Development under the Government of the Republic of Armenia dated September 11, 2017 "On Approval of the Rules Determining the Composition and Content of the Design Documentation for Residential, Public and Industrial Buildings and Structures, and on

Invalidation of the Order No 273 of the Minister of Urban Development of the Republic of Armenia dated November 29, 2006".

3.7. Phase III

Author supervision during construction of kindergartens No. 3, No. 73, and No. 120. The Phase III will commence simultaneously with the corresponding construction works.

Under the Author Supervision Contract, the final report for each assigned task is deemed the properly completed author supervision logbook, which the author supervisor must submit to the Client within **five (5) working days** after the signing of the final completion act for the construction works covered by the assignment.

During the construction phase of any project, as an ongoing report, the Author Supervisor must submit the Author Supervision Logbook to the Client at the end of each quarter. The logbook must reflect the site visits made during the reporting quarter, the performed works, and the specialists who participated in the visits.

3.8. Reporting and Work Acceptance Procedure

At the completion of each design phase, the documents submitted by the Consultant for approval are considered the report for that phase.

Each phase of work is considered completed on the day of acceptance of work by the Client, and from the next day the period provided for the next phase of work starts.

The period of state expert examinations stipulated by the legislation of the Republic of Armenia, the period of study of designs by international experts (if any), as well as the period of review of designs by the Client are not included in the duration of the phases provided for by the terms of reference. At the same time, the deadlines for eliminating the deficiencies revealed as a result of the examinations provided by the legislation of the Republic of Armenia, international examinations and the study of projects by the Client are included in the duration of each stage.

The Client reserves the right to reject the completed work for each phase and request revisions in cases of incomplete design documentation and/or design omissions.

The Client submits the designs for comprehensive examination, urban development simple expert examination and international examination prescribed by the legislation of the Republic of Armenia.

The designs shall be submitted for other examinations (environmental impact assessment expertise, fire safety requirements compliance expertise, technical safety expertise of design documentation for industrial hazardous facilities, etc.) stipulated by the legislation of the Republic of Armenia (payments envisaged for them by the Armenian legislation) by Consultant.

Since the date of acceptance of the previous stage, the term of the next stage of work starts.

3.9. Monitoring, Supervision, and Reporting

Project implementation activities should include provisions consistent with ESMF, ESIA, and site - specific ESMP, which are drafted for all individual sub-projects, the recording of information obtained during the Environmental, Social Health and Safety (ESHS) monitoring process and the reporting mechanisms of supervision results.

Environmental and Social monitoring and reporting measures are described below:

The Technical Supervision Consultant (organization) must include environmental and social specialists in their team for the monthly monitoring of environmental, social, health, and safety activities, in compliance with ESMP requirements. The Consultant's E&S specialists will conduct field visits to the sites at least once a month. The monitoring should be carried out with the same level of professionalism and responsibility as other technical aspects of the works.

The AC will include the Consultant's clearly defined tasks regarding the management of the contractor's environmental and social performance, providing professional support and guidance to contractors on ESHS matters, and reporting to the Client. The Technical Supervisors will be authorized to promptly identify any ESHS issues that may arise during the implementation of the Project and assist the contractors in resolving such issues. The contractor will report to the Technical Supervisor on all aspects of the work performed, including ESHS.

Incident Reporting

The Consultant is responsible for immediate reporting to the management on any incident or accident related to the project that has or may have a significant negative impact on the environment, impacted communities, the public or workers. This also includes incidents resulting in worker or public death or serious injury, violence, discrimination or protests, unexpected impacts on cultural heritage or biodiversity; environmental pollution; cases of forced or child labor; displacement without proper legal procedures (forced eviction); allegations of sexual exploitation, abuse, or sexual harassment (SH); or disease outbreaks.

- Emergency Situation Response Component

An Emergency Situation Response Component (ESRC) manual will be prepared prior to the description of management measures, in accordance with the Environmental and Social Standards (ESSs).

3.10. Completion of Phases and Submission of Materials

PHASE I is considered complete when the Client is provided with:

- Sketch designs and alternative technical solutions, including cost estimates, preliminary construction planning, and economic analysis,
- Justification for any deviations from the Energy Audit Report or the seismic assessment, supported by both technical and economic rationale,
- A report on the environmental and social studies conducted, and, if necessary, information on resettlement,
- "Draft of Project Report" of construction works, based on the results of the feasibility study. The Consultant must submit the draft version to the Client at least fifteen (15) calendar days before the final deadline (including the Environmental and Social Impact Assessment Report), for review, amendments, and approval.
- The final version of the "Draft of Project Report," must incorporate the Client's all comments and which must be approved by the Client.

All materials for Phase I must be submitted to the Client in English (1 copy) and Armenian (2 copies). Reports should also be provided electronically on CD ROM disks.

Phase II design works begin after the Client approves the results of Phase I.

PHASE II: Preparation of the Detailed Design Package

A Detailed Design Package will be prepared, forming the technical part of the Tender Documents (designs, technical specifications, and a bill of quantities). The designs must be created using AutoCAD, the textual parts using Microsoft Word, and the bill of quantities and other calculations using Excel. While preparing the Detailed Design Package, the Consultant must ensure that the site conditions are accurately reflected in the documents presented to the bidders. Along with the Detailed Design, the ESIA/ESMP package and RAP (if necessary) will be prepared. The typical format of the ESMP package is presented in Appendix 2 of these Terms of Reference.

Designs

The Consultant must present the design and cost estimation documents for **Kindergarten No. 3, No. 73, and No. 120** to the Client with positive conclusions from the Urban Development Simple Examination and other required examinations under Armenian legislation, except for the conclusion of the Urban Development Comprehensive State Expert Examination, which will be carried out by the Client.

The design and cost estimation documents must be submitted to the Client in both paper and electronic formats.

The electronic version must include the design structured according to the work program (AutoCAD, ArchiCAD, Revit, or other relevant software), as well as its PDF format, while cost estimation must be provided in both PDF and Excel formats. The hard copy version must be submitted in **four (4) copies** in A3 format for the design documents, while the cost estimate in **three (3) copies** in A4 format.

The Client may request the entire package of design and cost estimation documents from the Contractor in both Armenian and English.

The Designer must come to the agreement with supplying organizations and head of community on design.

Technical Specifications

The "Technical Specifications" of construction works include a detailed description of the provisions and conditions for the execution of works, as well as the requirements for materials, services, and products to be provided by the Contractor. In addition, they include the required standards for materials, products, and services and outline the mandatory work plan for the Contractor. Attached to this Terms of Reference is the complete package of 'Technical Specifications' developed by the client, which has a general and guiding nature. Based on this, it is necessary to develop the technical specifications of the object in close cooperation between the Consultant and the Client.

The Technical Specifications prepared by the Consultant should cover all types of construction works that may arise during the construction process. They should be specifically tailored to each construction contract. This means that certain provisions may be added or removed for each contract.

The Technical Specifications should include, in the form of an "Annex", documents ensuring the continuity of the construction process, such as a list of benchmarks, intersections with gas pipelines, cables, roads, and other communications, coordination with relevant authorities on

water supply interruptions or resumptions, reserve or waste sites, land acquisition, and other necessary issues.

Bill of Quantities (BoQ) and Construction Work Planning

Construction work planning includes all tasks related to the selected option, taking into account the irrigation season duration, winter conditions, and the assessment of actual construction time and methods.

In accordance with the construction work planning, the Consultant should prepare engineering estimates of work volumes. These volumes are included in a table, hereinafter referred to as the "Bill of Quantities" (BoQ), which is incorporated into the tender documents. The Consultant should prepare a simplified BoQ, containing a concise but sufficient description of construction works and their investment cost (for each construction work as well as the overall cost of each energy efficiency, renewable energy and non-energy efficiency measure) with reasonable details of volumes. A comprehensive table should be also added as mentioned above. The BoQ should consist of a summary BoQ and separate sections of the BoQ (earthworks, concrete works, metal works, etc.). The separate sections of the BoQ are presented on separate pages and agreed with the Client. In the "General Annexes" section, the Consultant should provide a table showing the correspondence between the work volumes indicated in the drawings and the relevant items in the BoQ.

The BoQ should not include work volumes related to construction organization, technological schemes, and commissioning, except for those works explicitly defined as mandatory in the design.

Preparation of Design Estimates

The "Engineering Estimates" for construction works are not included in the tender documents. They are intended to provide the Client with information about the estimated cost of the project. Those who have access to such information or are involved in its preparation are strictly prohibited from disclosing it to anyone, particularly to contractors and suppliers.

General Annexes

The General Annexes include materials not directly related to construction, such as:

- Terms of reference:
- Defect reports;
- Meeting minutes;
- Conclusions (on material testing, structures, etc.);
- Letters;
- A table of correspondence between BoQ items and volumes indicated in the designs;
- A table of correspondence between BoQ items and market prices;
- Justifications of economic (agricultural) efficiency according to the World Bank's methodology (ERR);
- Other materials prepared during the design process.

Completion of PHASE II and materials to be submitted

Phase II is considered complete when the Consultant submits to the Client the detailed project, the tender package, and the design and cost estimate documentation, all approved by the relevant expertise (including state and, if necessary, environmental examinations) with all required positive expert conclusions.

The Consultant must prepare separate tender documents for each construction contract, the composition of which is outlined above.

The time required for the review and approval of the Detailed Tender Package by the relevant expertise, including making any necessary changes and corrections, should be included in the overall design duration and reflected in the Work Plan submitted by the Consultant. The costs of expert review services should be borne by the Consultant and included in their financial proposal.

The Consultant must submit the following documents to the Client:

1. Tender documents, consisting of the following materials (for each kindergarten):

- Explanatory notes, baseline data **5 copies** (4 copies in Armenian, 1 copy in English),
- Designs 5 copies (4 set in Armenian, the other in English),
- Technical Specifications 5 copies (4 copies in Armenian, 1 copy in English),
- Bill of Quantities (BoQ) 5 copies (4 copies in Armenian, 1 copy in English),
- Final ESIA/EMP package and RAP (if necessary), with all required permits and approvals **5 copies** (4 copies in Armenian, 1 copy in English).

2. Annexes

- Project cost estimates one copy each in Armenian and English;
- General annexes one copy each in Armenian and English.

The aforementioned all documents must be submitted to the Client within **one hundred eighty** (180) calendar days after the commencement of Phase II.

The task of "Design Works (Phase I and Phase II)" will be carried out under a "Lump-Sum Contract".

Within the framework of the "Yerevan Energy Efficiency Phase II" project, the procurement of construction works for Kindergartens No. 3, No. 73, and No. 120 is planned to be conducted following the **International Competitive Bidding (ICB) procedure**.

PHASE III. Author Supervision

The Consultant is obliged to properly and timely carry out the author (designer) supervision to ensure the construction works' compliance with the working design.

During the construction phase the author of the technical design documents must oversee the construction works and control the conformity of them with the technical design documents. The Author's Supervision processes include the following:

- Participate in training and capacity building sessions organized by the Client.

- Participate in the process of marking building axes and perimeter.
- Organize site visits according to the schedule agreed with the Client, at least twice (2) a month, and ensure the presence of its personnel as planned.
- If necessary, upon the request of the Client, visit the construction site in addition to the planned intervals.
- Verify the conformity of the on-going and completed works with the design.
- Provide necessary consultations to the Client and the Contractor during construction.
- Properly maintain the Author's Supervision logbook, record all identified deviations, and provide instructions for their elimination.
- Present to the Client the list of employees performing Author's Control, indicating the Team Leader.
- Eliminate any design deficiencies discovered during construction. Promptly address issues related to the design that arise during construction, in coordination with the Client.
- Record any deviations from design solutions in the relevant section of the General Construction logbook, informing the Client accordingly.
- Inform the Client in writing about any detected defects and deviations, including noncompliance with safety regulations.
- Participate in the process of handing over the completed construction works.
- Immediately inform the Client and obtain their approval in case of any necessary changes to the schedule or previously agreed solutions.
- Validate the concealed works and final construction acts prepared during construction, and in case of rejection, submit a written justification to the Client.
- If any defects threatening the stability and reliability of buildings and structures, or unauthorized or significant deviations (which may lead to a substantial increase in construction costs or timelines) from the design are detected, inform the Client in writing within two (2) days.
- The final report for each task stipulated by the Author Supervision contract is considered the properly completed Author Supervision logbook, which the Author must submit to the Client within five (5) days after signing the final construction act for the respective task.
- During any construction project, as a current report, the Author must submit a quarterly
 Author Supervision report to the Client by the 5th of the month following the reporting
 quarter. The report should reflect the visits made, work performed, and specialists
 involved during the visits.

The Consultant must provide an opinion to the Client regarding the substantiated proposals submitted by the Contractor(s). The costs of these activities should be included in the Consultant's financial proposal.

The Author's Supervision assignment will be implemented under a "Time-Based" contract. The approximate start date of the "Time-Based" Contract is **March 2027**, with an estimated construction duration of **twenty-four (24) calendar months** and will be calculated from the start date of the works.

The Author's supervision will be carried out throughout the entire period, starting from the commencement of construction works envisaged by the design until the commissioning of the facility, including **Defects Liability Period (DLP)**.

The Defects Liability Period (DLP) for each construction contract will be **365** (three hundred sixty-five) calendar days, starting from the issuance of the "Taking-Over Certificate".

Within the Defects Liability Period (DPL), the Consultant shall:

- Ensure the availability of the necessary experts (team leader, relevant specialists according to the nature of the works) at the construction site(s);
- Ensure the mandatory presence of the relevant experts at the construction site, upon the Client's first request and according to the agreed schedule;
- During the Defects Liability Period, provide the Client and the Contractor with the necessary consultations;
- Provide the Client with a written conclusion regarding the correction of the identified defects.

The Consultant has to prepare his Financial Proposal for Time-Based contract based on that period and conditions.

4. REQUIREMENTS FOR THE QUALIFICATION OF THE CONSULTANT, TEAM COMPOSITION, AND KEY EXPERTS

4.1 Qualification of the Consultant's Key Staff

The Consultant's key staff should consist of the following specialists with appropriate qualifications and work experience:

a. Team Leader/ Project Chief Engineer

- General qualification: Higher education in architecture, civil engineering, or other related fields, with a minimum of 5 years of relevant experience in contract management.
- Relevance to the assignment: At least 5 years of experience in managing at least 3 similar projects, including design, supervision, and/or construction.
- Regional experience (CIS countries) and knowledge of language: English for local experts and Armenian or Russian for international experts.

b. Architect (at least 3 specialists)

- General qualification: Higher education in architecture with a minimum of 5 years of relevant work experience.
- Relevance to the assignment: Participation in at least 3 similar projects as an architect.
- Regional experience (CIS countries) and knowledge of language: English for local experts and Armenian or Russian for international experts.

c. Structural Engineer (at least 2 specialists)

General qualification: Higher education in structural engineering with a minimum of 5 years of work experience.

- Relevance to the assignment: Participation in at least 3 similar projects as a structural engineer.
- Regional experience (CIS countries) and knowledge of language: English for local experts and Armenian or Russian for international experts.

d. Water Supply and drainage Engineer (at least 1 specialist)

- General Qualification: Higher education in water supply and drainage engineering with a minimum of 5 years of work experience.
- Relevance to the Assignment: Participation in at least 3 similar projects as a structural engineer.
- Regional Experience (CIS countries) and knowledge of language: English for local experts and Armenian or Russian for international experts.

e. Electrical - Energy Engineer (at least 1 specialist)

- General Qualification: Higher education in electrical-energy engineering with a minimum of 5 years of work experience in design, development and implementation of energy efficiency measures in buildings, along with renewable energy retrofits, i.e. solar photovoltaic and solar water heating systems.
- Relevance to the Assignment: Participation in at least 3 similar projects as an engineer.
- Regional Experience (CIS countries) and knowledge of language: English for local experts and Armenian or Russian for international experts.

f. Heating, Natural Gas Supply, and Ventilation Engineer (at least 1 specialist)

- General Qualification: Higher education in heating, natural gas supply, and ventilation engineering with a minimum of 5 years of work experience.
- Relevance to the Assignment: Participation in at least 3 similar projects as a structural engineer.
- Regional Experience (CIS countries) and knowledge of language: English for local experts and Armenian or Russian for international experts.

In addition to the core staff, the list of specialists includes:

- Communication Systems Design Engineer,
- Cost Estimator,
- Environmental Specialist,
- Social Issues Specialist.

In the staff of the Local Consultant (organization), at least one specialist must have a 1st and/or 2nd category certificate of the relevant subcategory (Government of the Republic of Armenia Decision No. 2106-N dated November 30, 2023).

If necessary, the Consultant must be ready to supplement its team with additional specialists by agreeing the candidate with the Client (for example, in the case of the task of developing a RAP, a resettlement specialist may be required).

Note: At the time of commencement, the Consultant (local and/or international organization) must have a 1st and/or 2nd category license, excluding structural and architectural parts, and for the provision of surveying and investigation services for urban construction activity objects, along with an annex to it (Government of the Republic of Armenia Decision No. 2106-N dated November 30, 2023) for elaborating of urban planning documents, for the following types:

- Annex 05 Electricity supply (electrical supply, electric illumination internal and external networks, electrical supply systems, photovoltaic and wind power plants)
- **Annex 06** Heating, natural gas supply and ventilation (ventilation, heating, and air conditioning systems, thermal and natural gas supply systems)
- Annex 08 Water supply and drainage (internal and external water supply and drainage networks, hydro-melioration)
- **Annex 10** Communication systems (telecommunication and signaling systems, transmitters, receivers, antennas, amplifiers)
- **Annex 11** Engineering-geological exploration.

Moreover, license must remain valid for at least as long as the period covering both the completion of the construction works and the warranty service for addressing any defects found afterward.

MATERIALS PROVIDED BY THE CLIENT

The Consultant's responsibilities include maintaining close ties with the Client on all matters. All official correspondence related to the work will be sent to the Client.

The Client will provide the selected Consultant with all existing information, data, reports, and maps free of charge to the extent that they are available and will, as far as possible, assist the Consultant in obtaining the remaining relevant data from government agencies and public authorities. However, it is the Consultant's responsibility to verify the quality and applicability of this information. The aforementioned information, data, reports, and other documents will be available to the Consultant throughout the duration of the services.

5. DOCUMENTS SERVING AS THE BASIS FOR DESIGN

- RA Government Decision No. 814-N of 07.06.2012 "On Approving the Procedure for the Introduction and Application of Model Projects and Their Catalogs in the Republic of Armenia."
- RA Minister of Health Order No. 12-N of 28.03.2017 "On Approving the Sanitary Rules and Norms N 2.2.4-016-17 for General Education Institutions and Invalidating RA Minister of Health Order No. 82 of 11 February 2002."
- RA Minister of Health Order No. 50-N of 12.02.2024 "On Approving the Sanitary Rules and Hygienic Norms 2.1.2.001-24 for Preschool Educational Institutions and Invalidating RA Minister of Health Order No. 857 of 20 December 2002."
- RA Government Decision No. 596-N of 19.03.2015 "On Approving the Procedure for Issuance of Permits and Other Documents for Construction in the Republic of Armenia and Invalidating Several Government Decisions."

- Order No. 43-A of 05.04.2018 of the Chairman of the RA State Urban Development Committee "On Approving the Set of Design Rules for Ensuring Accessibility of Buildings and Structures for People with Limited Mobility and Persons with Disabilities."
- RA Construction Norms (RA CN) 31-03 "Public Buildings and Structures."
- RA Government Decision No. 392-N of 16.02.2006 "On Approving the Procedure for Ensuring Accessibility of Social, Transport, and Engineering Infrastructure for Persons with Disabilities and People with Limited Mobility."
- RA CN 31-03.04-2022 "Preschool Institution Buildings: Design Standards."
- RA CN 20-04 "Seismic-Resistant Construction
- RA Government Decision No. 526-N of 04.05.2017 "On Approving the Procedure for Organizing the Procurement Process and Invalidating RA Government Decision No. 168-N of 10.02.2011," Requirements of Clause 33, Sub-Clause 10 of the Procedure
- RA CN 40-01.02-2020 "Water Supply: External Networks and Structures."
- RA Government Decision No. 1504-N of 25.12.2014 "On the Application of Energy-Saving and Energy-Efficiency Improvement Measures in Facilities Constructed (Reconstructed, Renovated) at the Expense of State Funds."
- RA CN 52-01-2021 "Concrete and Reinforced Concrete Structures."
- RA CN 53-01-2020 "Steel Structures"
- Order No. 43-A of 05.04.2018 of the Chairman of the RA Urban Development Committee "On Approving the Set of Design Rules for Ensuring Accessibility of Buildings and Structures for People with Limited Mobility and Persons with Disabilities."
- RA CN 22-03-2017 "Artificial and Natural Illumination" Construction Norms
- RA CN 22-04-2014 "Noise Protection" Construction Norms
- and others (mandatory other normative-technical documents)
- EIB environmental and social requirements
- Energy Audit recommendations

ATTACHMENTS TO THE TERMS OF REFERENCE

ATTACHMENT 1: Composition of the Preliminary Assessment Application to be submitted for Environmental Examination

The Preliminary Assessment Application to be submitted for Environmental Examination must include:

- 1. The name (title) of the entity and its place of residence (location).
- 2. The name and purpose of the planned activity.
- 3. A brief description of the area subject to the proposed activity, including the surrounding environment and a situational scheme.
- 4. Characteristics of the proposed activity (production capacities, utilized natural resources and materials, technical and technological solutions).
- 5. An environmental action plan aimed at preventing, reducing, and compensating for adverse environmental impacts.
- 6. Information on public notification, public hearings, and preliminary consent from local self-government bodies, unless otherwise stipulated by law.

Environmental and Social Management Plan's (ESMP) checklist for small-scale construction and rehabilitation works: General Guidelines for Using the ESMP Checklist: for low-risk subprojects, this ESMP Checklist is prepared to ensure a more optimal approach to project preparation. It is a user-friendly tool that enables compliance with environmental protection policy requirements. The checklist consists of **3 (three) sections:**

- **Section 1:** Descriptive section presenting the subproject, detailing institutional and legislative aspects, the technical project content, potential capacity-building needs, and a description of the public hearing process. This section is typically limited to two pages. For provision of additional information, annexes may be provided as necessary.
- Section 2: Environmental and social preliminary assessment checklist, where activities and potential environmental impacts are indicated in a simple "yes/no" format. If the answer to a specific activity/issue is "yes," a reference is made to the relevant section of the following table, which contains clearly formulated management and mitigation measures.
- Section 3: Monitoring plan for construction and implementation activities. It follows the same format required for Class B project ESMPs under the applicable regulations. This checklist stipulates that Sections 2 and 3 must be included in contractor bidding documents, priced in the bidding process, and their proper implementation monitored during project execution.

CONTENTS

- General information on the project and site
- Measures for information protection
- Mitigation measures
- Monitoring plan
- Minutes of public consultations held on the ESMP project

ATTACHMENT 2: Standard Template for the Environmental and Social Management Plan (ESMP)

Action	Parameter	Mitigation Measures			
General	Notification	The public has been informed about the works through the press and/or notices posted in accessible locations, including the construction site.			
		 All required legal permits, approvals, licenses, and documentation have been obtained for project activities. 			
		The contractor formally agrees that all works will be carried out safely and in an orderly manner to minimize impacts on nearby residents and the environment.			
	Worker Safety	 Personal protective equipment for workers shall comply with international best practices (helmets, masks, protective goggles, if requested, specialized clothing, safety footwear, etc.). 			
		First aid kits and fire extinguishers are available on-site.			
		 Emergency contact information (ambulance, fire department) is clearly displayed at the construction site on signboards. 			
Impact on biodiversity	Flora	 Minimize impact on vegetation by planning and executing large-scale earthworks outside the active growth season (if construction occurs in natural landscapes or adjacent areas). 			
		 Strictly monitor vegetation clearance along rehabilitated canal routes to prevent impacts beyond designated zones. 			
	Fauna	 Limit habitat disruption by restricting construction activities to a narrow corridor along pipeline routes. Prevent vehicle movement and uncontrolled disposal of construction materials/waste in excessively large areas adjacent to the project site. 			
		 Draft a soil work schedule to avoid excavation activities during the wintering and breeding periods of wildlife. 			

Action	Parameter	Mitigation Measures			
Pollution Management	Air Quality	Construction machinery and equipment must be operated and maintained regularly and appropriately.			
		 Excavated soil piles must be rammed. 			
		 Water spraying should be applied to dust-generating areas to minimize inconvenience to nearby residents. 			
	Noise	 Noise-generating construction activities near residential areas must be limited to designated working hours. 			
		 Enclosed or covered generators, air compressors, and other loud mechanical equipment should be used and placed as far from residential areas as possible. 			
	Waste Management	 Permanent waste disposal locations must be identified and approved by locations authorities. 			
		 Designated temporary waste collection areas must be established to prevent scattered waste around the construction site. 			
		 Where possible, construction waste should be recycled and reused (except for asbestos-containing materials). 			
		 Agreements should be concluded with certified companies for the removal and recycling of used tires and filters from construction vehicles and machinery. 			
		 Open-air burning of construction waste at the site must not be allowed. 			
Erosion Management		 Protection of slopes should be implemented through bank stabilization, embankment in critical areas, or reinforcement with vegetation. 			
		The topsoil layer must be removed and stored for later use in site restoration.			
		Excess materials should be used for the rehabilitation of damaged areas.			
Chance Findings		 In case of discovering chance findings during earthworks, activities must be halted, and a written notification should be sent to the Ministry of Education, Science, 			

Action	Parameter	Mitigation Measures		
		Culture, and Sports of the Republic of Armenia. Work may resume only after obtaining official permission from the aforementioned authority.		
Protection of Water Bodies	Turbidity	 Silt traps and/or gabions should be installed along riverbanks to filter soil-laden sediments. 		
		 Erosion control measures should be applied as described above. 		
	Pollution	 Servicing of vehicles and machinery should be prohibited in the immediate vicinity of water bodies. 		
		 Servicing and refueling of vehicles and machinery should be confined to designated areas with impermeable flooring and containment capacity in case of fuel spills. 		
		 Agreements should be established with certified companies for the recycling or deactivation of used oils and petroleum-contaminated sand/gravel. 		
Unexploded Ammunition Hazard	Risk to Human Health and Safety	 Before commencing excavation works, the Contractor must ensure that the site has been inspected and cleared of unexploded ordnance by the relevant authorities. 		
Social Risk Management	Public Relations Management	 Appoint a local liaison officer responsible for communication with the local population and for receiving their requests and complaints. 		
		 Present the Grievance Redress Mechanism (GRM) and maintain a GRM log in all affected communities and construction sites. 		
		 Consult with the local population to identify and manage potential conflicts between external workers and local residents. 		
		 Raise community awareness about sexually transmitted infections due to the presence of external labor force, involving local residents in awareness campaigns. 		
		 Plan project activities as much as possible after the irrigation season to avoid or minimize service disruptions. Inform the local population about construction and other work schedules, service interruptions, changes in traffic routes and temporary bus routes, as well as blasting and demolition activities, where applicable. 		

Action	Parameter	Mitigation Measures
		 Restrict construction activities during nighttime. If night work is necessary, plan it carefully and notify the affected communities in advance.
		 The construction site must be properly marked and fenced.
		 Construction materials or waste must not be temporarily stored on cultivated land or any type of private property.
		 Temporary storage areas for construction materials and waste should be designated in a manner that does not obstruct free traffic movement or pedestrian access.
		 Any accidental damage caused by the Contractor must be restored.
	Work Management	 Whenever possible, avoid locating construction sites in close proximity to communities.
		 Establish and operate construction sites only after consulting with neighboring communities.
		 Maximize the engagement of local unskilled and semi-skilled labor in construction activities. Whenever possible, improve the work skills of local workers to enhance their participation.
		 Ensure that construction sites are equipped with adequate toilet and washing facilities, including hot and cold running water, soap, and hand-drying devices. Any construction site that also serves as worker accommodation must have a temporary septic system to prevent contamination of nearby water bodies.
		 Raise workers' awareness of building good relations with the local population. Develop and strictly enforce a code of conduct aligned with international best practices, including disciplinary actions such as termination of employment and financial penalties.

ENVIRONMENTAL AND SOCIAL MONITORING PLAN

What	Where	How	When	Why	Cost	By whom
(Which parameter should be monitored)	(Is it required to monitor the parameter)	(Is it required to monitor the parameter)	(Specify the frequency or timing – e.g., periodically or continuously)	(Is the monitoring of parameter implemented)	(If not included in the project budget)	(Is responsible for monitoring)
1. Notification						
2. Workforce safety						
3. Biodiversity						
4. Findings						
5. Dust						
6. Constructional and common waste						
7. Noise						
8. Topsoil						
9. Public relations management						
10. Labor management						