

REQUEST FOR QUOTATION - SERVICES (RFQS)

Project Title: Enhancing climate-resilient ground water management approaches

Source of Funding: Grant ADF 13 Thematic Pool grant funds

Contract Ref: RFQ#DED-1 Detailed engineering design

Date of Issue of Request: **January 8, 2024**

To: _____

Sir/Madam:

1. The _____ (Client) hereby requests you to submit price quotation/(s) for the performance of the services described in the **Scope of Services** attached as **Appendix A** in these documents. If you, however, have been associated with the preparation of this **Scope of Services** that is the subject of this request, you shall be disqualified.

To assist you in the preparation of your price quotation we enclose, in addition to the **Scope of Services**, the **Form of Quotation** and form of **Contract** are also attached.

2. If you/your firm, however, falls under any of the following conditions, your proposal shall not be considered:
 - (a) you/your firm are/is not a citizen/national of an ADB member country, or
 - (b) you/your firm have/has been associated with the firm that prepared the terms of reference or engaged in the preparation of the Project for which the contract that is subject of this request for quotations was identified, or
 - (c) you/your firm are/is owned by the Client, or
 - (d) you/your firm are/is currently sanctioned or temporarily suspended by the Asian Development Bank for a violation of its [Anticorruption Policy](#) (1998, as amended to date) or
 - (e) the contracting of services from your country or any payment to persons or entities in your country is prohibited in compliance with a decision of the United Nations Security Council under Chapter VII of the Charter of the United Nations.
3. To be qualified, you must have experience as a Service Provider of the services covered by this **Request for Quotation**. As evidence, you must attach a document of your experience as Service Provider in at least one contract in the last 3 years of a size and nature similar to the requirements of this contract.
4. Your quotation/(s) should be submitted in accordance with the following instructions, procedures, and the terms and conditions of the **Contract**.

Preparation of Quotations

- (a) Your price quotation/(s) shall be for all the items as described in the **Scope of Services**, and submitted only in the attached **Form of Quotation**. The currency of quoted prices and payment shall be **KGS**.
- (b) You shall submit only one set of quotations for the above items. Your quotation must be typed or written in indelible ink and shall be signed by you or your authorized representative. Without a signature in your **Form of Quotation**, your quotation will not be considered further.
- (c) You shall submit one original of the **Form of Quotation**, and clearly marked “Original”. In addition, you shall also submit one copy marked as “COPY”. In case of any discrepancy between the Original and Copy, the Original shall prevail.
- (d) Your quotation(s) should be valid for a period of 30 days from the deadline for submission of the quotation/(s) as indicated below. If you withdraw your quotation during the validity period and/or refuse to accept the award of a contract when and if awarded, then you will be excluded from the list of Service Providers for the project for two years.

Submission and Opening

- (e) Your **Form of Quotation** should be submitted by **February 8, 2024 - 15:00 (Bishkek time)** with the required documents that should be signed, sealed in an envelope and addressed to and delivered to the following address:

Client’s Address: Water Resources Service State Institution
under the Ministry of Agriculture of the Kyrgyz Republic
Project Implementation Unit
Room 328, 4A, Toktonaliev Street
Bishkek City, Kyrgyz Republic
Telephone: (+996) 54 90 72

Quotations shall be opened in public, in the presence of participating Service Providers’ representatives who choose to attend, on **same date as for quotation submission at time within one hour of stated deadline above** and at the following address.

Water Resources Service State Institution
under the Ministry of Agriculture of the Kyrgyz Republic
Project Implementation Unit
Room 328, 4A, Toktonaliev Street
Bishkek City, Kyrgyz Republic

Evaluation and Comparison

- (f) Quotations determined to be substantially responsive to this **Request for Quotation** will be evaluated by comparison of their offer prices. A quotation is not substantially responsive if it contains material deviations or reservations to the terms, conditions, and specifications in this **Request for Quotation**.
- (g) In evaluating the quotations, the Client will adjust for any arithmetical errors as follows:
 - (i) where there is a discrepancy between amounts in figures and in words, the amount in words will govern; and
 - (ii) where there is a discrepancy between the unit rate (where applicable) and the line item total resulting from multiplying the unit rate by the quantity, the unit rate as quoted will govern; and

If you refuse to accept the correction/(s), your quotation will be rejected.

Award of Contract

- (h) The Client shall award the contract to the Service Provider whose quotation has been determined to be substantially responsive to this Request for Quotation and who has offered the lowest price quotation.
- (i) The Service Provider whose quotation has been accepted will be notified by the Client within 30 days from the date of submission of quotation through the return of a copy of the **Form of Quotation** with **Acceptance** signed by the authorized representative of the Client.
- (j) The successful Service Provider shall sign the **Contract** governed by the annexed **Contract Terms and Conditions**. Quoted price and the contract price shall include Value Added Tax (VAT) and Sales Tax in the Kyrgyz Republic (Client's country)".

5. Further information can be obtained from:

Name : Nabiev Nurlan, PIU Director
Address : 4A Toktonaliev Street, room # 328, Bishkek, Kyrgyz Republic
Telephone : +996 312 54 90 72
Fax : +996 312 54 90 72
E-mail : ccd-rwrsp@water.gov.kg

6. The Client intends to apply funds from the **Asian Development Bank (ADB)** for eligible payments under the **Contract** resulting from this **Request for Quotation**.

7. Under [ADB's Anticorruption Policy](#) (1998, as amended to date) Service Providers shall observe the highest standard of ethics during the procurement and execution of such contracts. ADB may reject a proposal for award, and may impose sanctions or other remedial actions on parties involved, if it determines that the Service Provider recommended for award or any other party, directly or through an agent, has engaged in corrupt, fraudulent, collusive, coercive, or obstructive practices or other integrity violations in competing for, or in executing, the Contract. At the time of submission of your quotation, you should not be in ADB's sanctions list. A firm/individual shall not be eligible to participate in any procurement activities under an ADB-financed, -administered, or -supported project while under temporary suspension or debarment by ADB pursuant to its Anticorruption Policy, whether such debarment was directly imposed by ADB, or enforced by ADB pursuant to the Agreement for Mutual Enforcement of Debarment Decisions.
8. You/your firm, joint venture partners, associates, parent company, affiliates or subsidiaries, including any subcontractors or suppliers for any part of the Contract, are not, or have never been, temporarily suspended, debarred, declared ineligible, or blacklisted by the client's country, any international organization, and other donor agency.

If so debarred, declared ineligible, temporarily suspended, or blacklisted, please state details (as applicable to each joint venture partner, associate, parent company, affiliate, subsidiaries, subcontractors, and/or suppliers):¹

- (a) Name of Institution: _____
- (b) Period of debarment, ineligibility, or blacklisting (start and end date): _____
- (c) Reason for the debarment, ineligibility, or blacklisting: _____

9. You/your firm's, joint venture partners', associates', parent company's affiliates' or subsidiaries', including any subcontractors' or suppliers', key officers and directors have not been [charged or convicted] of any criminal offense (including felonies and misdemeanors) or infractions/violations of ordinance which carry the penalty of imprisonment.

If so charged or convicted, please state details:²

- (a) Nature of the offense/violation: _____
- (b) Court/Area of jurisdiction: _____
- (c) Resolution (i.e. dismissed; settled; convicted/duration of penalty): _____
- (d) Other relevant details:

¹ Any such disclosure shall be forwarded by the Client to ADB.

² Any such disclosure shall be forwarded by the Client to ADB.

10. You/your firm understands that it is your obligation to notify ADB should you/your firm, joint venture partners, associates, parent company, affiliates or subsidiaries, including any Subcontractors or Suppliers, be temporarily suspended, debarred or become ineligible to work with ADB or any other multilateral development banks, the client's country, international organizations, and other donor agencies, or any of your key officers and directors be charged or convicted of any criminal offense or infractions/violations of ordinance which carry the penalty of imprisonment.
11. Any misrepresentation that knowingly or recklessly misleads, or attempts to mislead may lead to the automatic rejection of the quotation/bid or cancellation of the contract, if awarded, and may result in remedial actions, in accordance with ADB's Anticorruption Policy (1998, as amended to date) and Integrity Principles and Guidelines (2015 as amended from time to time).
12. A bidder shall not have a conflict of interest. All bidders found to have a conflict of interest shall be disqualified.
13. Please confirm by fax/e-mail the receipt of this request and whether or not you will submit the price quotation(s).

Sincerely,

Nabiev Nurlan, PIU Director
(Client)

FORM OF QUOTATION
(Detailed engineering design)

_____ [date]

To: Water Resources Service State Institution under the Ministry of Agriculture of the Kyrgyz Republic, Project Implementation Unit
Room 328, 4A, Toktonaliev str.
Bishkek City, Kyrgyz Republic

We offer to execute the _____ [name and number of Contract] in accordance with the **Contract Terms and Conditions** and the **Scope of Services** accompanying this Quotation for the Contract Price of _____ [amount in words and numbers] (_____) [name of currency]_____.

We offer to execute the _____ [name and number of Contract] in accordance with the **Contract Terms and Conditions** and the **Scope of Services** accompanying this Quotation for the Contract Price of _____ [amount in words and numbers] (_____) [name of currency]_____ per unit of output as described in the **Scope of Services**.

We propose to complete the performance of the services described in the **Contract** within the Completion Period indicated in the priced **Scope of Services**.

This Quotation and your written acceptance will constitute a binding Contract between us. We understand that you are not bound to accept the lowest or any Quotation you receive.

We hereby confirm that this Quotation complies with the Validity of the Offer condition imposed by the **Request for Quotation** document.

We: (a) are a national of an ADB member country; (b) have not been associated with the firm that prepared the terms of reference or engaged in the preparation of the Project for which the contract that is subject of this request for quotations was identified; (c) are not owned by the Client; (d) are not currently sanctioned or temporarily suspended by the Asian Development Bank; and (e) to the best of our knowledge, is not prohibited from being contracted in compliance with a decision of the United Nations Security Council.

Name of Service Provider: _____

Authorized Signature : _____

Name of Signatory : _____

Title of Signatory : _____

Address : _____

Telephone Number : _____

Fax Number, if any : _____

Email address (optional) : _____

ACCEPTANCE

The Client accepts the Service Provider's offer to provide the service.

Name of Client: Water Resources Service State Institution under the Ministry of Agriculture of the Kyrgyz Republic, Project Implementation Unit.

Authorized Signature: _____

Name of Signatory : _____

Title of Signatory: _____

Date: _____

PRICE SCHEDULE
Detailed Engineering Design

No.	Name of services	Cost	Amount (KGS)
1.	<p>The service provider will be responsible for the following:</p> <p>a) Develop and coordinate with the WRS through PIU (Customer) sketches (concepts) of project sites:</p> <ul style="list-style-type: none"> • existing wells • new wells • solar stations for district irrigation pumping stations including an assessment determining the capacity of the pumps, the required capacity of the solar panels to support the pumps and other engineering specifications <p>b) Conduct engineering surveys of locations of designed facilities;</p> <p>c) Develop working design documents for construction and restoration of wells.</p> <p>d) Develop Implementation Plan</p>		
2.	<p>a) Obtain an Architectural and Urban Planning Conclusion (AGZ), approval of the project and Technical Specifications (TU) for connection to electricity from the Office of Urban Planning and Architecture.</p> <p>b) Prepare and receive environmental expertise of design estimates by the agencies of the Ministry of Natural Resources, Ecology and Technical Supervision of the Kyrgyz Republic;</p> <p>c) Conduct state examination of design and estimate documentation by the bodies of the State Agency for Architecture, Construction and Housing and Communal Services under the Government of the Kyrgyz Republic;</p> <p>d) Set up the project sites, Correct design decisions during the project implementation;</p> <p>e) Conduct field supervision.</p>		
3.	Preparation of specifications and bill of quantities		
4.	Trips (business trips)		
5.	VAT amount		
6.	Sales tax amount		
	Total:		

CONTRACT

Name of Country: Kyrgyz Republic

Project Name: Enhancing climate-resilient ground water management approaches

Contract No. RFQ#DED-1 Detailed engineering design

This Contract is entered into on _____[*date*]__ day of _[*month*]_,_ [year]___, between _____[*name of Client*]_____ (hereinafter called “the Client”) on the one part, and _____[*name of Service Provider*]_____ (hereinafter called “the Service Provider”) on the other part.

Whereas the Client has requested a quotation for _____ [*description of services*] to be performed by the Service Provider in accordance with the **Contract**, and has accepted the Quotation by the Service Provider in the amount of __[*amount in words*]__ [*amount in figures*] hereinafter called “the Contract Price”.

The Client and the Service Provider agree as follows:

1. The following documents shall be deemed to form and be read and construed as part of this Contract, viz:

a) Form of Quotation, with Scope of Services and Appendix and Price Schedule; and

b) Contract Terms and Conditions;

2. Taking into account payments to be made by the Client to the Service Provider as hereinafter mentioned, the Service Provider hereby enters into this Agreement with the Client to execute and complete the performance of services under the Contract.

3. The Client hereby agrees to pay, in consideration of the successful performance of the services, the **Contract Price** as indicated and accepted in the **Form of Quotation**, under payment terms stipulated in the **Contract Terms and Conditions**.

IN WITNESS whereof the parties hereto have executed the **Contract** under the laws of the Kyrgyz Republic on the date indicated above.

Signature and seal of the Client:

For and on behalf of

Signature and seal of the Service Provider:

For and on behalf of

Name of Authorized Representative

Name of Authorized Representative

CONTRACT TERMS AND CONDITIONS

Project Name: Enhancing climate-resilient ground water management approaches
Client: Water Resources Service State Institution under the Ministry of Agriculture of the Kyrgyz Republic
Contract No. RFQ#DED-1 Detailed engineering design

1. Definitions

- a) “Contract” means the agreement entered into between the Client and the Service Provider, together with the Contract Documents referred to therein, including all attachments, appendixes, and all documents incorporated by reference therein.
- b) “Contract Documents” means the documents listed in the Contract, including any amendments thereto.
- c) “Contract Price” means the price payable to the Service Provider as specified in the Contract, subject to such additions and adjustments thereto pursuant to the Contract.
- d) “Completion” means the fulfilment of the committed services by the Service Provider in accordance with the terms and conditions set forth in the Contract.
- e) “Client” means the entity purchasing the Services.
- f) “Services” means the services the Service Provider will perform as specified in the Scope of Services in Appendix A.
- g) “Service Provider” means the natural person, private or government entity, or a combination of the above, whose bid to perform the Contract has been accepted by the Client and is named as such in the Contract.
- h) “ADB” is the Asian Development Bank.

2. Applicable Law

The Contract shall be interpreted in accordance with the laws of the Client's country.

3. Language

All communications and documents related to the Contract shall be in **Russian language with English translation.**

4. Assignment

Any assignment of this Contract or of any rights hereunder, in whole or in part without the prior written consent of the Client shall be void.

5. Fraud and Corruption

This Contract shall be covered by the provisions of [ADB’s Anticorruption Policy](#) (1998, as amended to date) and [Integrity Principles and Guidelines](#) (2015, as amended from time to time) that requires Borrowers (including beneficiaries of ADB-financed activity), as well as Service Providers and Contractors under ADB-financed contracts, to observe the highest standard of ethics during the procurement and execution of such contracts.

6. Performance of the Services

The Service Provider shall carry out the Services with due diligence and efficiency and shall furnish to the Client such information related to the Services as the Client may from time to time reasonably request. The Service Provider shall at all times cooperate and coordinate with the Client with respect to the performance of the Services.

7. Required Performance Standards (with attachments as necessary to be prescribed by Client.)

- a) General Description
- b) Specific Standards
- c) Performance Parameters

Service Provider confirms compliance with above standards and parameters.

8. Service Completion Schedule

The services should be completed as per schedule indicated in the **Scope of Services** but not exceeding **9 (nine)** months from the date of signing of contract.

9. Fixed Contract Price

The prices indicated in the **Form of Quotation** are firm and fixed and not subject to any adjustment during contract performance, subject to Clause 11 [Payment] below.

10. Taxes and Duties

The Service Provider shall be entirely responsible for all taxes, duties, license fees, etc., incurred until completion of the services to the Client.

11. Payment

Upon submission by Service Provider of claim and subsequent verification of the claim by Client, payment of the contract price shall be made in the following manner:

Advance payment of 10% within 14 days of signing the contract, upon evidence of mobilization of service Provider.

90% of the value of confirmed output as indicated in the **Price Schedule**.

12. Resolution of Disputes

The Client and the Service Provider shall make every effort to resolve amicably by direct informal negotiation any disagreement or dispute between them under or in connection with the Contract. In the case of an unresolved dispute, the dispute shall be settled in accordance with the provisions of the arbitration law or rules of the Kyrgyz Republic.

13. Independent Service Provider

Nothing contained in this Contract shall be construed as establishing or creating the relationship of master and servant, employer and employee or principal and agent between the Client and the Service Provider, or his employees or agents or other persons engaged by

the Service Provider to perform any of the services.

14. Intellectual Property Rights

Intellectual Property Rights: (a) The Service Provider shall indemnify the Client from and against any and all claims, liabilities, obligations, losses, damages, penalties, actions, judgments, suits, proceedings, demands, costs, expenses and disbursements of whatsoever nature that may be imposed on, incurred by or asserted against, the Client during or in connection with the Services by reason of: (i) infringement or alleged infringement by the Service provider of any patent or other protected right, or (ii) plagiarism or alleged plagiarism by the Service provider.

15. Failure to Perform

The Client may terminate the Contract if the Service Provider fails to perform the services, in accordance with the above terms and conditions, in spite of a 14-day notice given by the Client, without incurring any liability to the Service Provider. In the event of such termination, the amount due under the Contract shall be subject to equitable adjustment.

16. Termination Due to Integrity Violation

The Client may terminate this Contract, in whole or in part, if the Service Provider, in the judgment of the Client has engaged in integrity violations in accordance with Clause 5 [Fraud and Corruption], in competing for or in executing this Contract.

17. Other Grounds for Termination

The Client may also terminate this Contract, in whole or in part, if the Service Provider becomes insolvent, bankrupt or gives the Client reasonable evidence of its inability to complete the Services as specified, or fails to correct any non-conformity in the Services or performs in bad faith by willfully not observing the terms and conditions of this Contract.

18. Force Majeure

The Service Provider shall not be liable for penalties or termination for default if and to the extent that its delay in performance or other failure to perform its obligations under the Contract is the result of an event of Force Majeure.

a) For purposes of this Clause, “Force Majeure” means an events beyond the control of the Service Provider and not involving the Service Provider’s fault or negligence and not foreseeable. Such events may include, but not restricted to, act of Client in its sovereign capacity, wars or revolutions, fires, floods, epidemics, quarantine restrictions, and freight embargoes.

b) If a Force Majeure situation arises, the Service Provider shall promptly notify the Client in writing of such condition and the cause thereof. Unless otherwise directed by the Client in writing, the Service Provider shall continue to perform its obligations under the Contract as far as is reasonably practical, and shall seek all reasonable alternative means for performance not prevented by Force Majeure event.

19. Accounts and Records

- a) The Service Provider shall keep accurate and systematic accounts and records in respect of the Services in such form and detail as are customary in its profession and are sufficient to establish accurately that the costs have been duly incurred.
- b) Notwithstanding anything to the contrary stated herein, the Service Provider shall maintain accounts and records, including original receipts, invoices and other supporting documents evidencing payments made by the Service Provider under this Contract, for the period of the Services and for a period no less than 3 years after the expiration or termination of this Contract.
- c) The Service Provider shall permit ADB to inspect the accounts, records, and other documents relating to the submission of bids and contract performance of the Service Provider and to have them audited by auditors appointed by ADB.

20. Suspension of ADB Loan or Credit.

In the event that ADB suspends the Loan or Credit to the Client, from which part of the payments to the Service Provider are being made, the Client is obligated to notify the Service Provider, with copy to the Client's representative, of such suspension within 7 days of having received ADB's suspension notice.

21. Termination Notice Due to Non-payment

If the Service Provider has not received payments due within the 28 days as provided for in Clause 11 [Payment], the Service Provider may immediately issue a 14-day termination notice.

Appendix A
SCOPE OF SERVICES
(Detailed Engineering Design)

A. Objective and Purpose of the Assignment

1. The government of the Kyrgyz Republic (“the government”) has received a small expenditure financing facility (SEFF) grant in the amount of \$10 million from the Asian Development Bank (ADB).³ The government has requested \$1.884 million from the SEFF funds be provided as Activity 6 to support the implementation of the Climate change and disaster-resilient water resources sector project (“linked project”). In 2018 the ADB approved \$38.6 million for the linked project.

The executing agency is Water Resources Service (WRS) under the Ministry of Agriculture of the Kyrgyz Republic. WRS through its Project Implementation Unit (PIU) will be responsible for the implementation of the activity. The purpose of these Terms of Reference is to develop detailed engineering design for construction of new wells and rehabilitation of existing wells.

Implementation of all activities should be carried out by performers in accordance with the current legislation of the Kyrgyz Republic.

For each facility it is necessary to develop design and estimate documentation in accordance with the Construction Norms of the Kyrgyz Republic (SN KR) 11:03-2018 “Composition, procedure for development and approval of design documentation for buildings, structures and complexes in the Kyrgyz Republic”.

2. Scope work.

The service provider will be responsible for the following:

- a) Develop and coordinate with the WRS through PIU (Customer) of sketches (concepts) of project sites:
 - existing wells (21 units)
 - new wells (4 units)
 - solar power stations 35-50kW (2 units)
- b) Conduct engineering surveys of locations of designed facilities;
- c) Develop of working design documents for construction and restoration of wells.
- d) Develop Implementation Plan
- e) Obtain an Architectural and Urban Planning Conclusion (AGZ), approval of the project and Technical Specifications (TU) for connection to electricity from the Office of Urban Planning and Architecture.

³ ADB. 2019. *Report and Recommendation of the President to the Board of Directors: Proposed Small Expenditure Financing Facility Grant to the Kyrgyz Republic for the Multisector Activities Support Facility*. Manila.

- f) Prepare and receive environmental expertise of design estimates by the agencies of the Ministry of natural resources, ecology and technical supervision of the Kyrgyz Republic ;
- g) Conduct state examination of design and estimate documentation by the bodies of the State Agency for Architecture, Construction and Housing and Communal Services under the Government of the Kyrgyz Republic;
- h) Set up the project sites,
- i) Correct design decisions during the project implementation;
- j) Conduct field supervision.

3. Detailed tasks include:

- b) Develop and coordination with the Customer of a sketch (concept) of standard projects:
 - existing wells (21 units)
 - new wells (4 units)
 - solar power stations 35-50kW (2 units)

As part of this task, the Contractor develops and agrees with the Customer the sketches - a preliminary architectural concept with a description of the conceptual space-planning and technical and economic indicators.

- c) Engineering surveys of locations of designed facilities:
Engineering surveys must be carried out in accordance with the requirements of the current legislation (Construction norms and rules, etc.) in the range and scope sufficient for development of a detailed design of designed wells. The data of geological and engineering surveys should be sufficient for development of design estimates.

- d) Development of working construction projects:
As part of this task, the Contractor must develop a detailed well design and link the project to the geological conditions of each area. It is also necessary to develop a project for construction of solar power plants on the territory of four District Irrigation Pumping stations. The capacity of solar stations (35-50kW) is determined by the project.

Each working design for construction of facilities should include the following sections: An explanatory note that contains a brief description of the object, the main technical and economic indicators and the results of calculations of the economic efficiency of design solutions, measures for environmental protection, fire protection, fundamental decisions on external and internal engineering systems, calculation of the main capacity of the object for connection to networks.

General site plan. The master plan should include a plan for location of wells, water supply systems, sewerage, city roads, as well as intersections with underground utilities, if any are included in the project. The contractor, if necessary, must obtain permits and technical conditions for crossing the water supply system, sewerage and city roads with existing underground and above-ground communications from the relevant organizations and enterprises of the settlement, provide for an effective solution to the general layout of the site, taking into account the layout of the ground space, pedestrian and access roads. The removal of rain and melt water from the territory of the projected object is carried out by vertical planning. The general plan and the vertical planning of the site should be

carried out taking into account the surrounding existing buildings and utilities. The master plan of construction site must be in color.

Architectural solutions. Architectural and planning solutions of sites must comply with requirements of the current regulatory documents of the Kyrgyz Republic in accordance with the current GOSTs and SNiPs in the territory of the Kyrgyz Republic or international standards, the approved Terms of Reference, sanitary and hygienic and fire safety standards, taking into account existing underground utilities and sanitary protection zones. All architectural and planning solutions, the nomenclature of types and areas are specified by the project (With the obligatory provision of the results of topographic survey, APU, ITU and others). The main design criterion for the Contractor is the creation of simple, reliable, economical projects in terms of construction, ensuring the normative service life of structures. It is necessary to adopt such simple repetitive standard parts that can be applied wherever possible in order to reduce the cost of both design and construction work.

Construction decisions. Construction and space-planning decisions should be made taking into account dimensions and features of the site, in accordance with this Terms of Reference, current regulatory documents. The project provides for provision of necessary strength, stability and spatial rigidity of structures. Structural analysis should ensure the reliability of all surface and underground structures, especially taking into account the provided design resource. The service life of wells is at least 20 years. Safety is an important aspect to be taken into account during the design process, the Contractor shall ensure compliance with national Kyrgyz safety standards both at the construction stage and at the stage of subsequent operation. Building aboveground and underground structures should be calculated taking into account seismic data for zones and territories of the Kyrgyz Republic. The contractor must assess the need for load on the power supply. The choice of materials for future construction is critical. The Contractor shall carefully select materials to meet specified design criteria with particular regard to the required design life, in light of prevailing climatic conditions, ground conditions and seismic activity.

Basic requirements for engineering and process equipment, engineering networks design. Perform external networks and facilities of engineering and technological support to the extent established by technical specifications, in accordance with current rules and regulations.

Provide engineering and technological equipment in accordance with functional purpose of structures and current regulations; provide for the use of domestic technological equipment. The equipment must comply with requirements of the manufacturer, which is confirmed by certificates; design solutions for supply networks should be focused on the use of modern advanced technologies and equipment, resource and energy saving; the project should include:

- **power supply:** provide for a power supply system for wells (in accordance with technical conditions), connection points, installed capacity of the PTS (according to the technical specifications for calculation). Design solutions for engineering systems must be carried out taking into account energy-saving measures, in

accordance with international standards, laying of network is hidden, with a ground loop device.

- **grounding:** improvement of grounding and installation of lightning rods.

Technical means of the system must comply with safety requirements. Requirements and conditions for development of environmental measures for the section "Environmental Protection" to environmental and sanitary - epidemiological conditions. Landscaping and environmental protection measures (including access and internal roads, fencing, etc.). The project must comply with requirements of SanPiN of the State Sanitary and Epidemiological Supervision for design of the construction and operation of facilities, as well as requirements of technical and environmental supervision adopted in the Kyrgyz Republic.

Develop a section "List of measures for environmental protection" in accordance with modern requirements, assess the impact of the facility on environment. Provide for measures that exclude the harmful impact of the projected facility on living conditions in the surrounding residential surrounding residential development and the environment, and also include in the cost estimate involuntary resettlement of the population, if any. As part of the project, develop a dendrology project, a compensatory landscaping project, if necessary, a project for replanting green spaces that fall into the work area, draw up a list of trees and shrubs.

Measures to ensure fire safety. Provide a system of integrated and fire safety, fire extinguishing and smoke removal (if necessary), a system of natural supply and exhaust ventilation and air conditioning.

Measures to ensure compliance with energy efficiency requirements. Buildings and structures must be designed and constructed in such a way that during their operation the efficient use of energy resources is ensured and their waste is excluded.

Measures for the disposal of construction waste, organization and restoration of the adjacent territory. The project to provide for the Technological regulations for management of construction waste, demolition and dismantling and restoration of the adjacent territory after the performance of production work in accordance with the requirements of the current legislation.

Requirement for development of engineering and technical measures to prevent emergency situations (ES). According to SNiP II -7-81 "Construction in seismic regions. MSN 2.03-01-95 Geophysics of natural hazards", SNiP 2.01 07-85 "Loads and impacts", SNiP KR 20-01-99 "Loads and impacts from wind and ice on wires, routes and supports of overhead lines", SNiP 3.04 . 03-85 "Protection of building structures from corrosion".

Cost estimate. Estimate documentation to be developed in two versions: based on identifying current unit prices of the Gosstroy of the Kyrgyz Republic, as well as according to market prices. It should also indicate the identification of possible unaccounted scope of works in the estimated part of the project. In the event of other

unaccounted scopes during construction, the developer of design estimates makes appropriate adjustments to the design and estimate documentation.

Upon being developed, the working design for construction of facilities must be agreed with the Customer.

Each section should include a necessary set of drawings and calculations.

- e) Implementation plan
 - Develop an action plan for preparation of construction site, placement of workers, placement of construction equipment and the storage of building materials, taking into account environmental protection, health and labor protection measures.
 - Develop a detailed calendar schedule for construction of facilities in accordance with the approved design and estimate documentation.
 - The Contractor shall propose a plan for technical supervision and monitoring of construction works.
- f) Develop a plan for delivery of building materials to the construction site.
- g) Obtaining an Architectural and Urban Planning Conclusion (АГЗ), approval of the project and Technical Specifications (ТУ) for connection to electricity from the Department of Urban Planning and Architecture. The Contractor is responsible for preparation and delivery of materials for obtaining the APL, ТУ and approval of the project from the district Office for Urban Planning and Architecture.
- h) Preparation and conducting of environmental review of design and estimate documentation by the agencies of the State Agency for Environmental Protection and Forestry under the Government of the Kyrgyz Republic.
The contractor is responsible for the development of an environment impact assessment (EIA) in accordance with the legislation and current regulatory guidance documents of the Kyrgyz Republic or international standards. Also, the Contractor is responsible for preparation and examination of all design and estimate documentation by agencies of the Ministry of natural resources, ecology and technical supervision of the Kyrgyz Republic.
- i) Carrying out the state (technical) expertise of design estimates by agencies of the State Agency for Architecture, Construction and Housing and Communal Services under the Government of the Kyrgyz Republic
The Contractor is responsible for conducting the state expertise of all design and estimate documentation by agencies of the State Agency for Architecture, Construction, Housing and Communal Services under the Government of the Kyrgyz Republic.
- j) Project setting up
Before starting construction and installation works the contractor (design and estimate documentation developer) according to the topographic and geodetic basis presents the construction company / contractor with a layout of benchmarks with their elevation marks and carry out the laying out of the project according to the act.
- k) Correction of design decisions

Correction of design solutions during the project implementation period as a result of not finalizing projects, the Contractor (design company) additionally develops for free of charge within one week after receiving a written request from the Customer.

k) Author's field supervision

Architectural supervision services during the period of construction work required during construction phase will be carried out in accordance with the contract within the framework of the prepared detailed design and concluded contracts for construction work.

Author's supervision should be carried out in accordance with SNiP KR 11-02-00 "Regulations on the author's supervision of design organizations for the construction of enterprises, buildings and structures" and other current regulatory documents of the Kyrgyz Republic on author's supervision.

Additions or changes to the above scope and range of works, or reflection of other aspects in the specified area known to the performers of this Terms of Reference, it is possible to coordinate routinely in the process of developing and presenting the results.

4. Key timelines or milestones

Activities	Timing	Completion of work in percent, %
Development and coordination with the Customer: Calendar plan / work schedule. Mobilization of the project company and site visits for topographic surveys	Within 20 working days after signing the contract	10 %
Development of design and estimate documentation for 3 zones, state expertise (environmental and technical)	Within 7 months from the date of signing the contract	Panfilov district 25 %
		Nookat and Aravan districts 25 %
		Leilek district 25 %
Preparation of specifications and bill of quantities	During 1 month	15 %

5. Personnel requirements. Requirements for team members and qualifications of key experts (and any other requirements that will be used to assess key experts in accordance with ITB Information Sheet 21.1)

A legal entity with relevant registration documents and a license not lower than the third level of responsibility for the right to conduct design and survey work (attach copies of certificates of registration and license).

Requirements for the main (key) executors of the project:

a) The composition of key experts in the relevant areas, confirmed by a CV/ resume and the availability of relevant education documents, qualification certificates and work experience:

- The chief project engineer and team leader must have a higher education / master's degree in the specialty of a hydraulic engineer, an appropriate certificate for performing the work specified in this TOR, at least 7 years of relevant professional experience in the areas related to design of wells using modern technologies, as well as supervision of construction.
- Engineer-hydrogeologist, must have a higher education / master's degree in the specialty engineer-hydrogeologist or engineer-geologist, additional certificates are welcome, conducting engineering-geological surveys for construction purposes for at least 5 years;
- Civil engineer (designer / architect), must have a higher education / master's degree in the field of construction, additional certificates are welcome experience in the design of industrial and civil facilities for at least 5 years;
- An engineer-economist-estimator, must have a higher education / master's degree in the specialty civil engineer-economist with at least 5 years of experience in developing estimates for construction and repair work; additional certificates are welcome,
- Topographer, education in the field of topography or geodesy, conducting topographic surveys of the area for at least 5 years; additional certificates are welcome,
- Hydraulic engineer, must have a higher education / master's degree in the specialty of a hydraulic engineer or a hydraulic engineer, conducting hydraulic engineering surveys for construction purposes for at least 5 years; additional certificates are welcome,
- Electrical engineer, must have a technical education / master's degree in the specialty electrical engineer, work experience in the field of operation of electrical equipment for at least 5 years; additional certifications are welcome.
- If necessary, the Contractor may involve additional non-key specialists, if they have documents confirming their qualifications.

6. Reporting requirements and delivery schedule

The service provider must report in accordance with the results achieved in an agreed format (according to the calendar plan / work schedule), describing the activities performed:

- For project work, in accordance with the submitted work plan / schedule, the Contractor must submit an initial progress report.
- In future, after completion of each stage of work, the Contractor must provide the Customer with Interim Progress Reports, which should include: a brief description of progress of works at the moment in terms of the entire program and the identification of any problems that could affect the completion work and actions to be taken to solve these problems.
- Estimated date of completion of the work compared to the planned date of completion.

Three weeks prior to the end of the assignment, the Service Provider must submit a Draft Final Report and must include the following: a brief description of the work performed under this assignment.

The Service Provider prepares the Technical Documentation, including all detailed design drawings that include site plans, layout drawings, detailed drawings and containing sufficient and detailed information to enable in a subsequent bid to invite

contractors to perform construction work without further modification of working drawings, as well as sufficiently detailed for the Customer to be able to issue them to the contractor who wins the bid for construction work. It is necessary to prepare specifications in accordance with the current GOST and SNIIP standards. In the absence of a suitable standard for a particular design element, an appropriate international standard should be adopted.

The drawings must be prepared in A-3 format and delivered to the Customer on CD / DVD or flash card (in electronic format) in addition to 4 hard paper copies for each item separately. Separate drawings must be prepared in color (master plan, situational plan, etc.) in A-3 and A-1 format at the request of the Customer. Text must be in MSWord format; drawings - in MSVisio format.

Preparation of final drawings and documentation

Drafts of all drawings and estimate documentation must be submitted to the Customer for their consideration and approval. The Service Provider shall incorporate such comments and prepare the final version of drawings and documentation.

Preparation of estimates at base prices (local, consolidated), as well as bills of quantities

Estimates are prepared based on identifying of the existing unit prices of the State Agency for Architecture, Construction and Housing and Communal Services under the Government of the Kyrgyz Republic or according to international standards, if it is suitable and necessary for the purposes of the project from the Customer's point of view, in accordance with the Standard Method for Measuring Volumes adopted in civil construction.

The bill of quantities of work is prepared on the basis of prepared estimates, taking into account proposals and comments of the Customer.

Drawing up Instructions for organizing the operation of facilities.

The Service Provider must develop an "Instruction for organizing the operation of facilities" for each project.

Technical documentation for each item should be bound into a single document in the form of a booklet with a table of contents, highlighted sections and continuous page numbering. Technical documentation must be prepared in Russian, if the original documentation is in English, then it is necessary to submit documentation with a translation into Russian, signed and stamped by the translation company as "True Copy" in accordance with the main provisions of translations of documents, or international equivalents of standards and transferred to the Customer at the address: **Bishkek, Toktonaliev St. 4A, Water Resources Service State Institution under the Ministry of Agriculture of the Kyrgyz Republic.**

Reports and Certificates of Completion signed by the Customer will serve as the basis for payment and must be submitted in accordance with the work schedule after each achievement of the result of the work and approved by the head of the ADB PIU "Climate Change and Disaster Resilient Water Resources" at the address: **Bishkek, Toktonaliev str. 4Aa, room 328.**

- **Trips (business trips)**

As part of the TOR for implementation of research field work, trips to the design sites in Chui, Batken, Osh regions are planned according to **Table 1**.

The number of travel days should be set in accordance with the work norms. Business travel expenses must be included in the Service Provider's financial proposal.

7. Scope of services, tasks (components) and expected results

4.1. Additional terms

- All listed Services must be provided by the Service Provider's personnel and its official subcontractors.
- If the provision of the Services requires any technological tool and/or consumables, then such tool and/or materials must be provided by the Service Provider at no cost to the Customer.
- When providing the Services, the requirements stipulated by the State Standards, Technical Specifications (TU) and Technical Documentation of the manufacturers of the relevant equipment must be observed.
- When providing the Services, the requirements for the safety of work, including electrical, environmental and fire safety, provided for by the State Standards, Specifications and Technical Documentation of the manufacturers of the relevant equipment, must be observed.
- Services are provided by the Service Provider subject to the fulfillment by the Customer of his obligations.

8. Additions to the terms of reference

All these design requirements are mandatory, but not limited to the above. The requirements that arise during the design are binding after agreement by the parties.

These Terms of Reference may be changed, supplemented, revised depending on the specifics of the provision of design consulting services. These changes are agreed separately by the Customer and the Service Provider.

9. Customer contribution and partner's staff

The Customer will ensure:

- Providing information to the personnel of the observation units on the planned measures for technical re-equipment of observation network.
- Access of the Service Provider's personnel to all Work Performance Sites (WPS) to carry out work.
- Preparation of the necessary technical documentation (legal document for the land plot Gosakt) and other materials necessary for the Service Provider to carry out the work.
- Participation of representatives-specialists (heads of departments, engineering, and technical workers) of the WRS in the survey by the Service Provider of Work Performance Sites (WPS), as well as participation in the delivery of design estimates and interim reports by the Service Provider.

- Provision of historical and current data (discharge/level curves, maximum, minimum, average water levels, and discharges, etc.) necessary for design of structures of hydrological stations to be built or modernized.

Table 1: Sites location of 25 boreholes

No.	No. of wells	New/rehabilitation	End section of the Main Canal	Districts
1	No. 1976	Rehabilitated	Saparbaeva 1	Nookat
2	No. 2448	Rehabilitated	Gray Shoron	
3	No. 1869	Rehabilitated	Saparbaeva 2	
4	No. 21280	Rehabilitated	Saparbaeva 2	
5	No. 21008	Rehabilitated	Gray Shoron	
6	No. 1453	Rehabilitated		
7	No. 208	Rehabilitated		
1	No. 2101	Rehabilitated	TMR	Aravan
2	No. 2395-D	Rehabilitated	TMR	
3	No. 2178-D	Rehabilitated	TMR	
4	No. 3028-D	Rehabilitated	TMR	
5	No. 2149-D	Rehabilitated	SFC	
6	No. 21177-D	Rehabilitated	TMR	
7	No. 21025-D	Rehabilitated	TMR	
8	No. 2234-D	Rehabilitated	Karimberdi	
1	No. 2131-D	Rehabilitated	Abdubasher	Leilek
2	No. 2713-D	Rehabilitated	Abdubasher	
3	No. 3063-D	Rehabilitated	Abdubasher	
4	No. 3061-D	Rehabilitated	Abdubasher	
5	No. 2916-D	Rehabilitated	Margun	
6	No. 422	rehab/new	Margun	
7	without number	New	Margun	
8	without number	New	Churbek	
1	without number	New	R-27-1	Panfiov
2	without number	New	R-27-1	
25	Total	21/4		