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**TDF Project**

**(Hydropower Project)**

**Request for proposal (RFP) for Hiring of Consultant on Single Stage Two Envelop Procedure for HEC funded project**

HEC has approved a project “**To Develop and install a Prototype Hydro Powered Pump and ElectricityGenerator”**through Technology Development Fund (TDF) (**03-214**).

KIU invites technical &financial proposal fromconsultants of local and national firmsbased on **single stage two envelope bidding process**as per PPRA Rule-36(b). Bid shall comprise a single package containing two separate envelope each envelope shall contain separately financial proposal and technical proposal. Initially only technical proposal shall be opened.

Accordingly, you are requested to send the sealed bid through post/register courier latest by **December 16,2019 till 11:00 am** and the same will be opened by “Tender opening Committee for Procurement of Technical/Scientific Equipment/Chemicals/Glassware” on the same day at 11:30 am.

**A. Criteria for evaluation of Technical and Financial proposals of Consultant**

Criteria for bid evaluation will be as under:

1. Weightage of Financial bid: 30%

2. Weightageof technical bid: 70 %

Total: 100

**Financial Scoring Criteria:**

Weight of the Financial Scoring is 30% and Firm’s score will be calculated using following formula:

Firm’s Score = (Minimum bid value / Bid in consideration) x 30

**Score of Technical bid further bifurcated as under**:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Technical Evaluation Proforma** | | | | |
| **Sr. No** | **Attributes** | **Max. Score** | **Weightage** | **Criteria /parameters** |
| **Firm Profile** | | | | |
| 1 | Year of establishment | 5 | 5 | No. of year of Bid in consideration/ Maximum Year amongst all of the Bids x 5 |
| 2 | Firm Status | 15 | 10 | International |
| 5 | National |
| 2 | Individual |
| 3 | JV/partnership |
| 5 | Company |
| 3 | Mechanical Works | 30 | 10 | 10 Marks if the firm has provided Designing of hydraulic turbine. |
| 10 | Manufacturing of low head turbines |
| 10 | Installation/testing/ commissioning |
| 4 | Experience with similar work | 20 | 20 | No. of Projects of Bid in consideration/ Highest No. Projects amongst all bids x 20. |
| 5 | Methodology | 10 | 3 | Work plan and schedule to meet the deadlines |
| 3 | Conceptual design (line plan & elevation) |
| 2 | Quality control plan |
| 2 | Cost effectiveness |
| 6 | Quality of Proposed Team | 10 | 10 | 10 Marks if the firm has more than and equal to 07 relevant technical staff dedicated for this project. |
| 7 | 10 Marks if the firm has 4 - 6 relevant technical staff dedicated for this project. |
| 5 | 05 Marks if the firm has between 02-04 relevant technical staff for this project. |
| 7. | Structure | 10 | 5 | Multidisciplinary Engineering Capacity. |
| 2 | Use of design software |
| 3 | PEC Certificates |
| **Grand Total Marks** | | **100** |  |  |

**B. Draft Contact Agreement**

This Contract made at Gilgit this\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_BETWEEN: TDF Project Managing Committee **Karakoram International University, Gilgit-Baltistan** Gilgit, (a university established under the directive of Chief Executive of Pakistan as notified by the KANA/SAFRON Division vide Notification No. F.12(3)/2001-NA.11 dated the 27th August, 2002, through its Registrar, (hereinafter called the “EMPLOYER” which term where the context so admits shall mean and include its successors in office, representatives and assignees) of the First Part.

**AND**

Through its Managing Director (hereinafter called the “CONSULTANTS” which term where the context so admits shall mean and include their legal representatives, survivors and permitted assignees) of the Second Part.

(Hereinafter also called individually as a “Party” and collectively as “Parties”)

WHEREAS the Employer intends to undertake the planning & designing and top supervision

1. **Project** “**To Develop and install a prototype Hydro-powered Water Pump and ElectricityGenerator”**

WHEREAS the Employer desires to engage the Consultants to undertake the preparation of Planning, detailed designing, tender documents and top supervision in-line with master plan.

WHEREAS the Consultants have offered their services to perform the Works, as detailed in this Contract.

AND WHEREAS the Employer has agreed to engage the Consultants for the Project on terms and conditions hereinafter set forth.

THEREFORE, this Contract witnessed that in consideration of the mutual covenants herein contained the Parties here to agree as follows:-

**ARTICLE 1-APPOINTMENT OF CONSULTANTS:**

* 1. The Employer hereby appoints the Consultants and the Consultants accept the appointment and hereby agree to provide the services hereinafter mentioned in accordance with the terms and conditions of this Contract hereinafter set forth.
  2. The commencement date for the Project shall be\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
  3. The Consultants shall not assign, sublet or transfer, in any form, the benefit or burden of this Contract or any part thereof to anybody without the prior written consent of the Employer in this behalf.
  4. Any change in the constitution of the firm or company of the Consultants shall forthwith be notified in writing by the Consultants to the Employer for its information.

**ARTICLE 2-PROFESIONAL SERVICES:**

2.1 The Consultants shall use its best efforts and engineering and practices to provide professional services, described in the Scope of Services under Article-5 hereinafter. The Consultants shall exercise all skills, care and diligence in the discharge of their duties and all designs and drawings shall be carried out in accordance with the British/American Standards and Practices and as per directions given by the Employer to the better satisfaction of the Employer.

2.2 The Consultants shall be responsible to see that the design work is executed within the stipulated time and in accordance with the specifications. The Consultants shall be responsible for top supervision of the work including visit at,

1. Project Layout (marking).
2. During manufacturing process of turbine and other allied works in industry.
3. During fabrication and installation of low pressure pipe.
4. Installation of turbine and pump/generator.
5. During construction of steel structural power house.
6. During construction of thrust/Anchor blocks for low pressure pipe.
7. During testing/commissioning of turbine generator set and pumping unit

2.3 if the Employer suffers from any loss or damage as a results of proven fault, error or omission in the design of the Project, the Consultants shall make good such loss or damage, subject to the condition that the maximum liability as aforesaid shall not exceed twice the total remuneration of the Consultants for the design phase in accordance with the terms of this Contract.

**ARTICLE 3-THE PROJECT:**

1. To develop and Install Hydro-powered Water Pump and Electricity Generator.

Survey and site investigation, planning, detailed designing of the following main components of the project.

* Intake structures- steel mesh and bell mouth
* Low pressure pipe.
* Floating hydraulic steel gates assembly.
* Access bridge
* Inspection windows.
* In pipe gates./Chamber
* Flexible joints (special design)
* High pressure rectangular duct designing
* Ultra low head turbine.
* Floats designing
* Adjustable vertically & horizontally base frame designing. (special design)
* Drawing & construction documents, tender documents and top supervision.

**ARTICLE 4-RESPONSIBILITIES OF THE EMPLOYER AND THE CONSULTANTS:**

4.1 The Employer shall nominate in writing one of its officers to represent the Employer in dealing with the Consultants on all matters relating to the Project.

4.2 The Employer shall furnish to the Consultants free of cost the site plan and all relevant information and details available to them to enable the Consultants to complete the design.

4.3 The Employer shall not hold the Consultant’s responsible for any delay in the performance of its obligations under this contract caused by the event of any delay or liability on the part of the Employer to furnish any of the information listed in clauses (4.1and 4.2) hereof.

4.4 The Consultants shall appraise the information supplied and shall point out discrepancies and shortcomings, if any for obtaining correct data.

NOTE: In the event of delay in supplying the above information, the Employer may extend the commencement date of the Project having regard to the delay occurred.

**ARTICLE 5-SCOPE OF SERVICES TO BE PROVIDED BY THE CONSULTANTS:**

**5.1 General:**

The scope of work for the consultant shall be total coverage of consultancy services form start till the completion of the project

1. Low pressure pipe- mid steel

Diameter= 5.09 ft, length= 745 RFT

1. Ultra low head turbine 61HP input Power

Discharge = 90cusec, Head = 6 ft (1 No)

1. Multistage pump ( High Head)

H = 400ft, discharge = 94 Gallons per minute (1 No)

1. Delivery pipe (HDPE)

Diameter = 3 inch, Length = 2500 rft

1. Electricity generator

Capacity= 10 kw (1 No)

1. Steel structural power house

30’x30’x23ft (1 No)

1. Floating hydraulic steel gate assembly (1 set), Revolving head= 1 No
2. Floating base for turbine (2 set)
3. Access Bridge 01 No
4. Anchoring block 01 No
5. Thrust Block 01 No
6. Supports for Pipe 75 No
7. Spill ways 4 No
8. Inspection windows ( 4ft\*5ft) 2 No
9. In pipe control valves 5ft\*5ft 4 No
10. Flush out valves (4ft\*4ft 4 No

5.2 **Master Planning**

Project component will be incorporated in the existing master plan of KIU by the consultant.

5.3 **Planning & Designing of Project and Services:**

5.3.1 **Preliminary Planning and Design Phase:**

(a) After approval of the Master Plan by the Employer, the Preliminary Design of the Project component will be prepared to on appropriate a scale along with the Report on the Concept of the Buildings and general description of the Project, highlighting the salient features and provisions, structural system, etc

(b) A statement of areas and the rough cost estimate of the Project based on the fair market current rates of floor areas, volume or sufficient preliminary information regarding the project will be prepared and submitted to the Employer for approval/ comments. The comments of the Employer will be incorporated and the Employer approval to this phase obtained.

5.3.2 **Detailed Design and Drawing Phase:**

a.Detailed services drawing based on approved preliminary drawings shall be prepared on a suitable scale for construction of the following components and submit to employer for approval

1. Intake structure/ steel mesh.
2. Anchor block (RCC work)
3. Floating hydraulic steel gates assembly and sub-components including revolving head
4. Low pressure pipe details
5. Inspection windows.
6. In pipe control gate/chamber.
7. Flush out gate/ chamber
8. Thrust block. (RCC work, including supports pillars for low pressure pipe
9. Adapter ( 5.09ft x 4 ft x 3ft rectangular shape)
10. Rectangular duct 4’x3’x10’.
11. Ultra low head turbine assembly.
12. Runner (Wheel) detail designs / drawings
13. Base frame. Detail designs / drawings
14. Design of steel structural power house
15. Tail race detail drawings
16. RCC foundations for winches at head works.

. Such working drawings shall comprise: -

(a) Technical Specifications for materials and workmanship for works designed by the Consultants.

(b) Bills of Quantities of items of works for works designed by the Consultants.

(c) Engineers Estimate based on bill of Quantities, using NA PWD/ fair market rates for items of work.

(d) Consultant will provide a certificate that estimate is according to the drawings and there will be no increase/decrease beyond 5% of the total of the quantity.

(e) Consultant will be responsible to rectify any ambiguity found during in drawing/execution.

5.4 **Construction Document (Tender Document) Phase:**

Under this phase the Consultants shall:

1. Prepare Tender Documents comprising the following:
2. General and Special Conditions of Contract.
3. Introductions to the Tenders.
4. Technical Specifications for the Works.
5. Bills of Quantities.
6. Tender Drawings.
7. Prepare Engineer’s estimate based on Bill of Quantities using latest schedule of rates of Pak PWD for items of work designed by the Consultants.
8. Prepare Contract Documents for signatures of the Employer with Contractors.

5.5 **Construction Phase:**

5.5.1 **Top Supervision of Construction:**

(a) The Consultants shall provide the following services under top

Supervision:

1. Project Layout (marking).
2. During manufacturing process of turbine and other allied works in industry.
3. During fabrication and installation of low pressure pipe.
4. Installation of turbine and pump/generator.
5. During construction of steel structural power house.
6. During construction of thrust/Anchor blocks for low pressure pipe.
7. During testing/commissioning of turbine generator set and pumping unit

**ARTICLE 6- DELIVERABLE DOCUMENTS:**

6.1 Consultants shall furnish to the Employer free of cost the following documents:-

1. Master Plan & Report 3 Copies

2. Preliminary Planning and Design Drawings 3 Copies

3. Detailed Design Phase Drawings 3 Copies

4. Construction Documents (Tender Documents) 10 Copies

6.2 Additional copies and reproducible will be made available to the Employer on reimbursement at actual.

Additional copies of Tender Documents and drawings required for or by the Contractors bidding for any works or during execution shall be prepared and issued by the Consultants to the Contractors on receipt of charges determined by the Consultants after approval by the Employer.

**ARTICLE 7-TIME SCHEDULE:**

7.1 The design of the works shall be completed by the Consultants according to the Time Schedule for Planning & Designing of two(2) months to be mutually agreed. The Consultants shall make best efforts to adhere to the stipulated schedule as for as possible. For delays beyond the control of the Consultants a new time schedule shall be arrived at by mutual discussions and agreement. The Employer may amend the Time Schedule to suit program of the construction in packages/ modules.

7.2 The time period shall be counted from the date of signing of this contract, and receipt of First Payment by the Consultants whichever is earlier.

7.3 The Time limit stipulated in article 7.1 above may be extended by the Employer under special circumstances if the same are explained in writing by the Consultants to the satisfaction of the Employer.

7.4 Time shall be deemed to be the essence of performance of duties under this contract and the Consultants shall proceed with due earnestness and diligence to achieve progress proportionate to the time elapsed at any time during the currency of this Contract.

7.5 In order to monitor the progress, the Employer may call upon the Consultants to and the consultants shall submit periodic progress reports within a minimum frequency of a month.

7.6 Liquated Damages: If the Consultants fail to perform their duties within the stipulated time limit or proportionate to the time elapsed during the currency of the project without any cogent reasons to the satisfaction of the Employer: -

i) In case the progress is disproportionate to the time elapsed, the Consultants shall pay to the Employer for such defaults, as liquidated damages, a sum of Rs. 10,000/- (Rupees Ten thousand only) or 50% of the retention money available with the Employer, whichever is less.

ii) In case the Consultants fail to complete the work within the prescribed time or extended time(s), the Consultants shall pay to the Employer as liquidated damages, a sum of Rs. 1,000/- (Rupees one thousand only) or any small amount which may be determined by the Employer, for each day the work remains incomplete subject to a maximum of the amount equal to the amount available with the employer as retention money.

iii) If the Consultants fail to perform their duties proportionate to the time elapsed and/or fails to complete his obligations under the contract within the prescribed time or extended time (s) and have rendered itself liable to pay as liquidated damages as amount equal to whole of the retention money, the Employer may terminate the contract and with draw the remaining works from the consultants. The decision of the Employer shall be final and binding on the consultants.

**ARTICLE 8- CONSULTANTS REMUNERATION:**

8.1 The Employer shall pay to the Consultants fee for the performance and completion of duties and service as per Articles (5) “Scope of Services” and Article (6) “Deliverable Documents” as follows:

|  |  |  |
| --- | --- | --- |
| **ID** | **Description of Activity/Services** | **Fee (As % of total approved consultancy fee)** |
| 8.1.1 | Upon completion of Site Survey, designing, drawings, tender documents, BOQs, and costestimates and its approval by Competent Authority | 25% of total consultancy |
| 8.1.2 | Upon Procurements of Raw materials, equipments and machines, manufacturing of floating control gates assembly and its approval by the Competent Authority. | 25% of total consultancy fee |
| 8.1.3 | Fabrication and installation of low pressure pipe line and its approval by the Competent Authority | 25% of total consultancy fee |
| 8.1.4 | Manufacturing of ultra-low head turbine, construction of powerhouse and installation of turbine, pump and generator, testing/commissioning of the project and after approval of the Competent Authority | 25% of total consultancy |

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8.2 Top Supervision:

1. Project Layout (marking).
2. During manufacturing process of turbine and other allied works in industry.
3. During fabrication and installation of low pressure pipe.
4. Installation of turbine and pump/generator.
5. During construction of steel structural power house.
6. During construction of thrust/Anchor blocks for low pressure pipe.
7. During testing/commissioning of turbine generator set and pumping unit.

**ARTICLE 9- SCHEDULE OF PAYMENT:**

The Consultants shall be paid their fee/remuneration by the Employer on the completion of duties shown in Article 8 to the satisfaction of the Employer and submission of requisite report/drawings/documents as per the following schedule: -

1. **MASTER PLANNING:**

9.1 **Repetitive use of Plans/ Designs:** The Employer shall have the right of use of the plans, drawings, etc furnished by the Consultants under this Contract for repetitive Design and Fabrication/construction beyond the scope of this project, without payment of any extra fee. The remuneration stipulated under this contract shall be full compensation to the consultants. On payment of the fee to consultant, such designs shall become property of the Employer.

9.2 **Deduction of Amount due to University by the Consultants:** Any excess payment made to the consultants inadvertently or otherwise under this contract or on any account whatsoever, or any other sum (s) found to be due to University from the consultants in respect of this contract or any other agreement or contract or work order or on any accountwhatsoever, may be deducted from any sum whatsoever payable to University by the Consultants either in respect of this contract or any other agreement., contract or work order or on any account by any other Department of the University.

**ARTICLE 10- OBLIGATIONS AND RIGHT OF THE CONSULTANTS:**

10.1 The Consultants shall in all professional matters, act as faithful advisors to the Employer and to the full benefits of the Employer.

10.2 The Consultants shall exercise all Engineering skills, care and diligence for the accuracy and completeness of their designs and in the discharge of their duties under this Contract.

10.3 The Consultants shall assist the Employer in obtaining approval of any application made to concerned local authorities for the commencement of the works.

**ARTICLE 11- VARIATION IN THE DUTIES OF CONSULTANTS:**

11.1 The scope of duties to be performed by the Consultants both in terms of the nature of the services as well as the size of project may be extended by mutual agreement between the Employer and the Consultants subject to as agreement on the enhancement of remuneration and time limit.

11.2 The Employer may withdraw any component (s) or part of the project/duties to be performed by the Consultants after giving a notice of 30 days. In case of such an event the Consultants shall not be entitled to any fee proportionate to the withdrawn component (s) or part thereof.

11.3 The Employer may at any time decide to postpone or abandon the project or a part thereof and in such an event the Consultants shall be entitled to payment only for the work done by them up to the date of communication to them of the said decision. The Consultants in such a case shall furnish necessary details of work done by them within a week of the date of communication to them of the said decision.

**ARTICLE 12- FORCE MAJEURE:**

Either party hereto shall be held responsible for any delay or failure to perform any or all of the obligations imposed upon such party caused by case of Force Majeure. In this case the time for performance of contract will be extended by a period corresponding to that duly justified and the obligations of the other party shall be extended by an equivalent period, provided that should such an extension exceed or is likely to exceed ninety (90) days, either party hereto may terminate this contract and the provisions of Article 11 shall apply to such termination. The expression “Force Majeure” shall mean cause or causes beyond the control of either party that may intervene after the formation of the contract and which may cause delay or in any way impede its performance, namely industrial dispute, floods or any other natural catastrophe, fire, mobilization, war, insurrection, embargo, requisition or any other circumstances beyond the control of the parties.

**ARTICLE 13- ARBITRATION:**

13.1 If any dispute reference or question shall at any arise between the parties in respect of the interpretation of this contract or concerning anything herein contained or arising out of this contract or as to the rights, obligations or duties of the said parties hereunder, the same shall be referred to arbitration by a sole arbitrator. The Secretary Law, Justice and Human Rights Division, Government of Pakistan or his nominee shall act as sole arbitrator. The award made by the sole arbitrator shall be final and binding on the parties and the provisions of the arbitration Act 1940 shall apply and be deemed to be incorporated in this contract. The venue of arbitration shall be at Gilgit or Islamabad as the Parties may agree.

13.2 Notwithstanding the existence of any difference or dispute or the commencement or continuance of any arbitration proceedings, work under this contract shall, if reasonable possible, continue during the arbitration proceedings and no payment shall be withheld on account of such proceedings unless the same is the subject matter of reference.

**ARTICLE 14- NOTICES:**

All notices hereunder to be effective must, if they are meant for the Employer be addressed to:

Principal Investigator TDF Project (03-214),

Karakoram International University,

Gilgit-Baltistan.

And if they are meant for the Consultants to be addressed to:

Managing Director

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Or such other address as either party to the contract may notify to the other party in writing as the address for service of notice.

IN WITNESS WHEREOF the said parties hereto acting through their authorized representatives have hereunto set their respective hands as at the place and on the day and year first above written.

For and on behalf of For and on behalf of

----------------------------- Karakoram International University,Gilgit-Baltistan, through

(Consultants)Prof. Dr. Attaullah Shah (PI)