

**GOVERNMENT OF KHYBER PAKHTUNKHWA  
IRRIGATION DEPARTMENT**

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**CONSTRUCTION OF JABBA DAM  
DISTRICT KHYBER**

**BIDDING DOCUMENTS  
VOLUME-I**

**November 2023**

**Director General Jabba Dam Project**

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**INVITATION  
FOR  
BIDS**

**DIRECTORATE GENERAL JABBA DAM, DISTRICT KHYBER  
GOVERNMENT OF KHYBER PAKHTUNKHWA IRRIGATION DEPARTMENT**

**NOTICE INVITING E-BIDDING FROM CONTRACTORS / FIRMS ON  
SINGLE STAGE SINGLE ENVELOPE (SSSE) SYSTEM**

The Directorate General Jabba Dam, District Khyber, Government of Khyber Pakhtunkhwa, Irrigation Department intends to invite Electronic Bids from the eligible Firms / Contractors in accordance with Rule 14/2-b (Chapter-III) of the Khyber Pakhtunkhwa Public Procurement of Good, Works and Services Rules, 2014 (Amended up-to-date) on **Single Stage Single Envelope Bidding Procedure** for the project, “**Construction of Jabba Dam, District Khyber**” approved by the PDWP Government of Khyber Pakhtunkhwa under ADP/AIP (2023-24) as per details below.

Name of Work	Required PEC Enlistment Category	Bid Security i/c Stamp Duty (Rs. Million)	Date of Pre-Bid Meeting	Last Date & Time for Submission of Bids	Date & Time for opening of Technical Bids	Completion Period
Construction of Jabba Dam, District Khyber (Work Component Cost = Rs. 6234.972 (M))	CA (No Limit)	126.25	05-12-2023 at 11:00 am	20-12-2023 till 1330	20-12-2023 at 1400	48 months

1. Bid solicitation Documents, detailed terms & conditions, Evaluation Criteria and Instructions to Bidders etc., can be downloaded from the Irrigation Department website address [www.irrigation.gkp.pk](http://www.irrigation.gkp.pk) and KPPRA website.
2. The Bidders should submit their E-Bids and hard copies of Financial & Technical Bids in Sealed Single Envelope, along with duly filled Bid Documents as mentioned at Para-1 above, as per KPPRA Notifications.
3. The Bidders are required to be validly registered with the Pakistan Engineering Council (PEC) for relevant category, Khyber Pakhtunkhwa Revenue Authority and other as mentioned in the Bid Solicitation Documents.
4. A foreign bidder is entitled to bid only in a joint venture with a Pakistani constructor enlisted with PEC in category CA, in accordance with the relevant provisions of PEC bye-laws.
5. The bidders are required to quote **SINGLE PERCENTAGE RATE, with two digits after the decimal point, “ABOVE / BELOW / AT PAR”** of the Engineer’s Estimated Cost on Market Rate System - 2022, 2<sup>nd</sup> Bi-Annual and Non-MRS Items as well.
6. Venue of Bid opening is office of the Directorate General, Jabba Dam Project Distt. Khyber (at Peshawar), Bungalow No.254, Hadi Lane Afzal Abad, Old Bara Road University Town, Peshawar.

7. The Envelope containing the Technical and financial proposals should accompany the following:
- (i)** Bid Security in the shape of Call deposit in Original.
  - (ii)** Attested copy of Valid Registration with C & W Department, KP for CFY 2023-24.
  - (iii)** Attested copy of Valid Registration with Khyber Pakhtunkhwa Revenue Authority.
  - (iv)** Attested copy of Computerized National Identity Card.
  - (v)** Attested copy of Valid Pakistan Engineering Council license in category CA.
  - (vi)** Attested copy of Form H of the Company/Firm, where applicable.
  - (vii)** Attested copies of documents showing general capabilities, financial soundness, general and relevant experience record, personnel capabilities, equipment capabilities and Active Income Tax registration status with FBR/NTN certificates etc.,
  - (viii)** Any other documents to support the technical bids.
8. The bid must contain the Bid security of 2% (two percent) up-to a limit of 10% below the Engineer Estimate, in the shape of Call Deposit (in original).
- (i)** The contractors quoting their bids more than 10% below upto 20% below on Engineers' Estimate shall submit along with their bids 8% Additional Security of Engineer's Estimated cost in addition to 2% bid security. If the bid is not accompanied with the required amount of additional security, then it will be considered as non-responsive and the 2% bid security shall be forfeited in favour of Government and the second lowest bidder and so on will be considered accordingly.
  - (ii)** Similarly, a contractor quoting bid more than 20% below shall submit with his bid an additional security on Engineer's Estimated cost equal to the differential amount of submitted bid and Engineers' Estimate along with detailed rate analysis. In case of more than 20% below bids, if the bid is not accompanied by the detailed rate analysis and / or required amount of additional security, then the said bid shall be considered as non-responsive. All the securities submitted along with such non responsive bid shall be forfeited in favour of Government and the 2<sup>nd</sup> lowest bidder and so on will be considered accordingly.
  - (iii)** In case detailed rate analysis submitted with the bids is, in view of the Procuring Entity, not convincing, the Head of the Procuring Entity may declare such bid as non- responsive without any forfeiture of bid securities and record reasons thereof.
  - (iv)** The procuring entity may offer the contract to next lowest bidder after due diligence in the context of financial difference between such two bids or may advertise procurement opportunity afresh.
  - (v)** After commencements of work by the successful bidder, the procuring entity may replace the Additional Security with a bank guarantee of the same amount from the scheduled bank; if the already deposited security is not in the form of bank guarantee.

- (vi) The Additional Security shall be released to the contractor in four installments i.e., 1<sup>st</sup> installment of 25% to be released upon completion of 25% of the project, 2<sup>nd</sup> installment of 25% to be released upon completion of 50% of the project, 3<sup>rd</sup> installment of 25% to be released upon completion of 75% of the project and the 4<sup>th</sup> installment of 25% to be released after 100% completion of the project.

***The above procedures and hereinafter shall be as per all Khyber Pakhtunkhwa Public Procurement Regulation***

9. The Bids containing Incorrect, fake or fraudulent documents shall be considered as non-responsive.
10. All the bids shall be opened and evaluated in the manner prescribed in the Bidding Documents
11. Electronic Bid shall be valid for 182 days.
12. Successful Bidder shall sign the Contract Agreement with the department within 28 days after issuance of Letter of Acceptance.
13. Call Deposit of only Scheduled Banks shall be acceptable.
14. If the evaluated electronic responsive bids of two or more lowest bidders are found equal, then the successful bidder shall be determined through past performance.
15. Bids will be opened after 30 minutes of closing time in the presence of Bidders/their Authorized Representatives who choose to be present.
16. The Procuring Entity reserves the right to reject any or all bids at any time prior to acceptance of a bid, as per KPPRA rules
17. Bid Security of the 1st, 2nd & 3rd lowest bidders shall be retained by the Procuring Entity till signing of the Contract Agreement with the successful bidder.
18. All taxes levied from time to time by the Government shall be deducted according to the Government rules.
19. A complete set of Bid Solicitation Documents containing detailed description, specifications and drawings, should be obtained by an interested eligible bidder from the office of the undersigned between 09:00 AM - 05:00 PM on any working day (Monday to Friday) on submission of a written application to the undersigned on or before 18-12-2023 and upon payment of a Non-refundable fee of Rs.15,000/-, otherwise his bid will not be entertained.

**DIRECTOR GENERAL,  
Jabba Dam Project District Khyber  
Irrigation Department Peshawar**  
Bungalow No.254, Hadi Lane Afzal Abad,  
OLD Bara Road, University Town, Peshawar  
(Phone No.091-5700417)  
Email: jabbadam.khyber@gmail.com

**INSTRUCTIONS  
TO  
BIDDERS**

## **INSTRUCTIONS TO BIDDERS**

*(Note: These Instructions to Bidders along with Bidding Data will not be part of the Contract and will cease to have effect once the contract is signed.)*

### **A. GENERAL**

#### **IB.1 Scope of Bid**

- 1.1 The Procuring Entity as defined in the Bidding Data hereinafter called “the Procuring Entity” wishes to receive bids for the construction and completion of works as described in these Bidding Documents, and summarized in the Bidding Data hereinafter referred to as the “Works”.
- 1.2 The successful bidder will be expected to complete the Works within the time specified in Appendix-A to Bid.
- 1.3 Throughout these bidding documents, the terms ‘bid’ and ‘tender’ and their derivatives (bidder / tenderer, bid / tender, bidding / tendering etc.) are synonymous

#### **IB.2 Source of Funds**

- 2.1 The project is proposed to be financed from the provincial resources of Khyber Pakhtunkhwa under AIP/ADP.

#### **IB.3 Eligible Bidders**

- 3.1 This Invitation for Bids is open to all bidders meeting the following requirements:
  - a Duly licensed by the Pakistan Engineering Council (PEC) in the category relevant to the value of the Works.
  - b Duly prequalified / enlisted with the Procuring Entity in the category relevant to the value of the Works.
  - c Is neither associated, nor has been associated, directly or indirectly, with the Consultants or any other entity that has prepared the design, specifications and other documents for the Project or being proposed for any position in the Project Management.
- 3.2 A bidder having a conflict of interest will be declared as non-responsive if the bidder has a close business relationship with the Procuring Entity’s professional personnel, who directly or indirectly involved in any part of:

- (i) The preparation of the bidding documents for the Works,
- (ii) The Bid evaluation or
- (iii) The supervision of such Works.

#### **IB.4 One Bid per Bidder**

- 4.1 Each bidder shall submit only one bid either by himself, or as a partner in a joint venture. A bidder who submits or participates in more than one bid (other than alternatives pursuant to Clause IB.16) will be disqualified.

#### **IB.5 Cost of Bidding**

- 5.1 The bidders shall bear all costs associated with the preparation and submission of their respective bids and the Procuring Entity will in no case be responsible or liable for those costs, regardless of the conduct or outcome of the bidding process.

#### **IB.6 Site Visit**

- 6.1 The bidders are advised to visit and examine the site of Works and its surroundings and obtain for themselves on their own responsibility all information that may be necessary for preparing the bid and entering into a contract for construction of the Works. All cost in this respect shall be at the bidder's own expense.
- 6.2 The bidders and any of their personnel or agents will be granted permission by the Procuring Entity to enter upon his premises and lands for the purpose of such inspection, but only upon the express condition that the bidders, their personnel and agents, will release and indemnify the Procuring Entity, his personnel and agents from and against all liability in respect thereof and will be responsible for death or personal injury, loss of or damage to property and any other loss, damage, costs and expenses incurred as a result of such inspection.

### **B. BIDDING DOCUMENTS**

#### **IB.7 Contents of Bidding Documents**

- 7.1 The Bidding Documents, in addition to invitation for bids, are those stated below and should be read in conjunction with any Addenda issued in accordance with Clause IB.9
  - 1. Instructions to Bidders.
  - 2. Bidding Data.
  - 3. General Conditions of Contract, Part-I (GCC).
  - 4. Particular Conditions of Contract, Part-II (PCC).

5. Specifications – Special Provisions.
6. Specifications – Technical Provisions.
7. Form of Bid & Appendices to Bid.
8. Bill of Quantities (Appendix-D to Bid).
9. Form of Bid Security.
10. Form of Contract Agreement.
11. Forms of Performance Security and Mobilization Advance Guarantee/Bond.
12. Drawings.

7.2 The bidders are expected to examine carefully the contents of all the above documents. Failure to comply with the requirements of bid submission will be at the Bidder's own risk. ***Pursuant to Clause IB.26, bids which are not substantially responsive to the requirements of the Bidding Documents will be rejected.***

#### **IB.8 Clarification of Bidding Documents**

8.1 Any prospective bidder requiring any clarification (s) in respect of the Bidding Documents may notify the Procuring Entity in writing at the Procuring Entity address indicated in the Invitation for Bids. The Procuring Entity will respond to any request for clarification which he receives earlier than 28 days prior to the deadline for submission of Bids.

Copies of the Procuring Entity's response will be forwarded to all purchasers of the Bidding Documents, including a description of the enquiry but without identifying its source.

#### **IB.9 Amendment of Bidding Documents**

9.1 At any time prior to the deadline for submission of bids, the Procuring Entity may, for any reason, whether at its own initiative or in response to a clarification requested by a prospective bidder, modify the Bidding Documents by issuing addendum.

9.2 Any addendum thus issued shall be part of the Bidding Documents pursuant to Sub-Clause 7.1 hereof and shall be communicated in writing to all purchasers of the Bidding Documents. Prospective bidders shall acknowledge receipt of each addendum in writing to the Procuring Entity.

9.3 To afford prospective bidders reasonable time in which to take an addendum into account in preparing their bids, the Procuring Entity may extend the deadline for submission of bids in accordance with Clause IB.20.

## C. PREPARATION OF BIDS

### IB.10 Language of Bid

10.1 The bid and all correspondence and documents related to the bid exchanged by a bidder and the Procuring Entity shall be in the bid language stipulated in the Bidding Data and Particular Conditions of Contract. Supporting documents and printed literature furnished by the bidders may be in any other language provided the same are accompanied by an accurate translation of the relevant parts in the bid language, in which case, for purposes of evaluation of the bid, the translation in bid language shall prevail.

### IB.11 Documents Accompanying the Bid

11.1 Each bidder shall:

- (a) submit a written power of attorney authorizing the signatory of the bid to act for and on behalf of the bidder;
- (b) update the information indicated and listed in the Bidding Data and previously submitted with the application for prequalification and continue to meet the minimum criteria set out in the prequalification documents which as a minimum, would include the following:
  - (i) Evidence of access to financial resources along with average annual construction turnover;
  - (ii) Financial predictions for the current year and the two following years including the effect of known commitments;
  - (iii) Work commitments since prequalification;
  - (iv) Current litigation information; and
  - (v) Availability of critical equipment.

and

- (c) furnish a technical proposal taking into account the various Appendices to Bid specially the following:

Appendix-E to Bid	Proposed Construction Schedule
Appendix-F to Bid	Method of Performing the Work
Appendix-G to Bid	List of Major Equipment
Appendix-K to Bid	Organization Chart for Supervisory Staff and other pertinent information such as mobilization program etc.;

- 11.2 Bids submitted by a joint venture of two (2) or more firms shall comply with the following requirements:
- (a) the bid and in case of a successful bid, the Form of Contract Agreement shall be signed so as to be legally binding on all partners;
  - (b) one of the joint venture partners shall be nominated as being in charge; and this authorization shall be evidenced by submitting a power of attorney signed by legally authorized signatories of all the joint venture partners;
  - (c) the partner-in-charge shall always be duly authorized to deal with the Procuring Entity regarding all matters related with and/or incidental to the execution of Works as per the terms and Conditions of Contract and in this regard to incur any and all liabilities, receive instructions, give binding undertakings and receive payments on behalf of the joint venture;
  - (d) all partners of the joint venture shall at all times and under all circumstances be liable jointly and severally for the execution of the Contract in accordance with the Contract terms and a statement to this effect shall be included in the authorization mentioned under Sub-Para (b) above as well as in the Form of Bid and in the Form of Contract Agreement (in case of a successful bid); and
  - (e) a copy of the agreement entered into by the joint venture partners shall be submitted with the bid stating the conditions under which it will function, its period of duration, the persons authorized to represent and obligate it and which persons will be directly responsible for due performance of the Contract and can give valid receipts on behalf of the joint venture, the proportionate participation of the several firms forming the joint venture, and any other information necessary to permit a full appraisal of its functioning. No amendments / modifications whatsoever in the joint venture agreement shall be agreed to between the joint venture partners without prior written consent of the Procuring Entity.
- 11.3 Bidders shall also submit proposals of work methods and schedule, in sufficient detail to demonstrate the adequacy of the Bidders' proposals to meet the technical specifications and the completion time referred to in Sub-Clause 1.2 hereof.

## **IB.12 Bid Prices**

- 12.1 The Contract shall be for the whole of the Works as described in Sub-Clause 1.1(b) hereinabove, based on the **SINGLE PERCENTAGE RATE**, with two digits after the decimal point, "**ABOVE / BELOW / AT PAR**" of the Engineer's Estimated Cost on Market Rate System – 2022, 2<sup>nd</sup> Bi-Annual and Non-MRS Items as well, submitted by the bidder.

***(Vide para (i) of the KPPRA Notification No. KPPRA / M&E/ Estt: / 1-17 / 2019-20; dated June 12, 2020).***

12.2 The Bidder shall fill in rates and prices for all items of the Works described in the Bill of Quantities. Unit rate offered for an item shall be considered upto two significant decimal places for evaluation purposes. Items against which no rate or price is entered by a bidder will not be paid for by the Procuring Entity when executed and shall be deemed covered by rates and prices for other items in the Bill of Quantities. Corrections in rates and prices, if any, shall be made by crossing out, initialing, dating and re-writing.

12.3 All duties, taxes and other levies payable by the Contractor under the Contract, or for any other cause, as on the date 28 days prior to the deadline for submission of bids shall be included in the rates and prices and the total Bid Price submitted by a bidder.

Additional / reduced duties, taxes and levies due to subsequent additions or changes in legislation shall be reimbursed / deducted as per Sub-Clause 70.2 of the General Conditions of Contract Part-I.

12.4 The rates and prices quoted by the bidders are subject to adjustment during the performance of the Contract in accordance with the provisions of Clause 70 of the Conditions of Contract. The Procuring Entity shall furnish the prescribed information for the price adjustment formulae in Appendix-C to Bid, and shall submit with their bids such other supporting information as required under the said Clause.

### **IB.13 Currencies of Bid and Payment**

13.1 The unit rates and the prices shall entirely be in Pak rupees. A bidder expecting to incur expenditures in other currencies for inputs to the Works supplied from outside the Procuring Entity's country (referred to as the "Foreign Currency Requirements") shall indicate the same in Appendix-B to Bid. The proportion of the Bid Price (excluding Provisional Sums) needed by him for the payment of such Foreign Currency Requirements either

- (i) entirely in the currency of the Bidder's home country or,
- (ii) at the bidder's option, entirely in Pak rupees provided always that a bidder expecting to incur expenditures in a currency or currencies other than those stated in (i) and (ii) above for a portion of the foreign currency requirements, and wishing to be paid accordingly, shall indicate the respective portions in his bid.

13.2 The rates of exchange to be used by the bidder for currency conversion shall be the TT & OD Selling Rates published or authorized by the State

Bank of Pakistan prevailing on the date 28 days prior to the deadline for submission of bids.

For the purpose of payments, the exchange rates used in bid preparation shall apply for the duration of the Contract.

#### **IB.14 Bid Validity**

- 14.1 Bids shall remain valid for the period stipulated in the Bidding Data after the Date of Bid Opening specified in Clause IB.23.
- 14.2 In exceptional circumstances, prior to expiry of the original bid validity period, the Procuring Entity may request that the bidders extend the period of validity for a specified additional period which shall in no case be more than the original bid validity period. The request and the responses thereto shall be made in writing. A bidder may refuse the request without forfeiting his Bid Security. A bidder agreeing to the request will not be required or permitted to modify his bid, but will be required to extend the validity of his Bid Security for the period of the extension, and in compliance with Clause IB.15 in all respects. The bidder shall bear all costs to be incurred on such extensions.

#### **IB.15 Bid Security**

- 15.1 Each bidder shall furnish, as part of his bid, a Bid Security in original form and in the amount stipulated in the Bidding Data in Pak Rupees or an equivalent amount in a freely convertible currency.

The bid security shall be submitted from the account of the firm/ bidder/ contractor who submits the bid, *vide KPPRA Notification No. KPPRA/ M&E/ Esst:/1-12/2017-18 dated April 05, 2018.*

- 15.2 The Bid Security shall be, at the option of the bidder, in the form of Deposit at Call or a Bank Guarantee issued by a Scheduled Bank in Pakistan or from a foreign bank duly counter guaranteed by a Scheduled Bank in Pakistan in favor of the Procuring Entity valid for a period 28 days beyond the Bid Validity date.
- 15.3 ***Any bid not accompanied by an acceptable Bid Security shall be rejected by the Procuring Entity as non-responsive.***
- 15.4 The bid securities of unsuccessful bidders will be returned as promptly as possible, but not later than 28 days after the expiration of the period of Bid Validity.
- 15.5 The bid Security of the successful bidder shall be retained with the Procuring Entity till completion of the defect liability period and the amount of guarantee will be reduced by an equivalent amount (*Vide KPPRA Notification No. KPPRA/ M&E/ Estt: /1-4/2016 dated May 24, 2016*).

15.6 The Bid Security may be forfeited:

- (a) If the bidder withdraws his bid except as provided in Sub-Clause 22.1;
- (b) If the bidder does not accept the correction of his Bid Price pursuant to Sub-Clause 27.2 hereof; or
- (c) In the case of successful bidder, if he fails within the specified time limit to:
  - (i) furnish the required Performance Security; or
  - (ii) sign the Contract Agreement

#### **IB.16 Alternate Proposals by Bidder**

- 16.1 Should any bidder consider that he can offer any advantages to the Procuring Entity by a modification to the designs, specifications or other conditions, he may, in addition to his bid to be submitted in strict compliance with the Bidding Documents, submit any Alternate Proposal(s) containing
- (a) relevant design calculations;
  - (b) technical specifications;
  - (c) proposed construction methodology; and
  - (d) any other relevant details / conditions, provided always that the total sum entered on the Form of Bid shall be that which represents complete compliance with the Bidding Documents.
- 16.2 Alternate Proposal(s), if any, of the lowest evaluated responsive bidder only may be considered by the Procuring Entity as the basis for the award of Contract to such bidder.

#### **IB.17 Pre-Bid Meeting**

- 17.1 The Procuring Entity may, on his own motion or at the request of any prospective bidder(s), hold a pre-bid meeting to clarify issues and to answer any questions on matters related to the Bidding Documents or any other matter that may be raised at that stage. The date, time and venue of pre-bid meeting, if convened, is as stipulated in the Bidding Data. All prospective bidders or their authorized representatives shall be invited to attend such a pre-bid meeting.
- 17.2 The bidders are requested to submit questions, if any, in writing so as to reach the Procuring Entity not later than seven (7) days before the proposed pre-bid meeting.

- 17.3 Minutes of the pre-bid meeting, including the text of the questions raised and the replies given, will be transmitted without delay to all purchasers of the Bidding Documents. Any modification of the Bidding Documents listed in Sub-Clause 7.1 hereof which may become necessary as a result of the pre-bid meeting shall be made by the Procuring Entity exclusively through the issue of an Addendum pursuant to Clause IB.9 and not through the minutes of the pre-bid meeting.
- 17.4 Absence at the pre-bid meeting will not be a cause for disqualification of a bidder.

#### **IB.18 Format and Signing of Bid**

- 18.1 Bidders are particularly directed that the amount entered on the Form of Bid shall be for performing the Contract strictly in accordance with the Bidding Documents.
- 18.2 All appendices to Bid are to be properly completed and signed.
- 18.3 ***No alteration is to be made in the Form of Bid nor in the Appendices thereto except in filling up the blanks as directed. If any such alterations be made or if these instructions be not fully complied with, the bid may be rejected.***
- 18.4 Each bidder shall prepare by filling out the forms completely and without alterations one (1) original and number of copies, specified in the Bidding Data, of the documents comprising the bid as described in Clause IB.7 and clearly mark them "ORIGINAL" and "COPY" as appropriate. In the event of discrepancy between them, the original shall prevail.
- 18.5 The original and all copies of the bid shall be typed or written in indelible ink (in the case of copies, photostats are also acceptable) and shall be signed by a person or persons duly authorized to sign on behalf of the bidder pursuant to Sub-Clause 11.1(a) hereof. All pages of the bid shall be initialed and stamped by the person or persons signing the bid.
- 18.6 The bid shall contain no alterations, omissions or additions, except to comply with instructions issued by the Procuring Entity, or as are necessary to correct errors made by the bidder, in which case such corrections shall be initialed by the person or persons signing the bid.
- 18.7 Bidders shall indicate in the space provided in the Form of Bid their full and proper addresses at which notices may be legally served on them and to which all correspondence in connection with their bids and the Contract is to be sent.

18.8 Bidders should retain a copy of the Bidding Documents as their file copy.

**D. SUBMISSION OF BIDS**

**IB.19 Sealing and Marking of Bids**

19.1 Each bidder shall submit his bid as under:

- (a) ORIGINAL and each copy of the Bid shall be separately sealed and put in separate envelopes and marked as such.
- (b) The envelopes containing the ORIGINAL and copies will be put in one sealed envelope and addressed / identified as given in Sub- Clause 19.2 hereof.

19.2 The inner and outer envelopes shall:

- (a) be addressed to the Procuring Entity at the address provided in the Bidding Data;
- (b) bear the name and identification number of the contract as defined in the Bidding Data; and
- (c) provide a warning not to open before the time and date for bid opening, as specified in the Bidding Data.

19.3 In addition to the identification required in Sub- Clause 19.2 hereof, the inner envelope shall indicate the name and address of the bidder to enable the bid to be returned unopened in case it is declared "late" pursuant to Clause IB.21

19.4 If the outer envelope is not sealed and marked as above, the Procuring Entity will assume no responsibility for the misplacement or premature opening of the Bid.

**IB.20 Deadline for Submission of Bids**

- 20.1 (a) Complete Bids must be received by the Procuring Entity at the address specified no later than the time and date stipulated in the Bidding Data. In the event of the specified date for the submission of bids declared a holiday for the Procuring Entity, the Bids will be received up to the appointed time on the next working day.
- (b) Bids with charges payable will not be accepted, nor will arrangements be undertaken to collect the bids from any delivery point other than that specified above. Bidders shall

bear all expenses incurred in the preparation and delivery of bids. No claims will be entertained for refund of such expenses.

- (c) Where delivery of a bid is by mail and the bidder wishes to receive an acknowledgment of receipt of such bid, he shall make a request for such acknowledgment in a separate letter attached to but not included in the sealed bid package.
- (d) Upon request, acknowledgment of receipt of bids will be provided to those making delivery in person or by messenger.

20.2 The Procuring Entity may, at his discretion, extend the deadline for submission of bids by issuing an amendment in accordance with Clause IB.9, in which case all rights and obligations of the Procuring Entity and the bidders previously subject to the original deadline will thereafter be subject to the deadline as extended.

#### **IB.21 Late Bids**

- 21.1 (a) Any bid received by the Procuring Entity after the deadline for submission of bids prescribed in Clause IB.20 will be returned unopened to such bidder.
- (b) Delays in the mail, delays of person in transit, or delivery of a bid to the wrong office or due to any other reason, shall not be accepted as an excuse for failure to deliver a bid at the proper place and time. It shall be the bidder's responsibility to determine the manner in which timely delivery of his bid will be accomplished either in person, by messenger or by mail.

#### **IB.22 Modification, Substitution and Withdrawal of Bids**

- 22.1 Any bidder may modify, substitute or withdraw his bid after bid submission provided that the modification, substitution or written notice of withdrawal of the bid is received by the Procuring Entity prior to the deadline or the extended deadline pursuant to clause IB.20.2, for submission of bids.
- 22.2 The modification, substitution, or notice for withdrawal of any bid shall be prepared, sealed, marked and delivered in accordance with the provisions of Clause IB.19 with the outer and inner envelopes additionally marked "MODIFICATION", "SUBSTITUTION" or "WITHDRAWAL" as appropriate.
- 22.3 No bid may be modified by a bidder after the deadline for submission of bids except in accordance with Sub-Clauses 22.1 and 27.2.
- 22.4 Withdrawal of a bid during the interval between the deadline for

submission of bids and the expiration of the period of bid validity specified in the Form of Bid may result in forfeiture of the Bid Security in pursuance to Clause IB.15.

## **E. BID OPENING AND EVALUATION**

### **IB.23 Bid Opening**

- 23.1 The Procuring Entity will open all the bids received (except those received late), including withdrawals, substitution and modifications made pursuant to Clause IB.22, in the presence of bidder's or their representatives who choose to attend, at the time, date and location stipulated in the Bidding Data. In the event of the specified date for the opening of bids being declared a holiday for the Procuring Entity, the Bids will be opened at the appointed time and location on the next working day. The bidder's or their representatives who are present shall sign a register evidencing their attendance.
- 23.2 Envelopes marked "MODIFICATION", "SUBSTITUTION" or "WITHDRAWAL" shall be opened and read out first. Bids for which an acceptable notice of withdrawal has been submitted pursuant to Clause IB.22 shall not be opened.
- 23.3 The bidder's name, total Bid Price and price of any Alternate Proposal(s), any discounts, bid modifications, substitution and withdrawals, the presence or absence of Bid Security and such other details as the Procuring Entity may consider appropriate, will be announced by the Procuring Entity at the opening of bids.
- 23.4 Procuring Entity shall prepare minutes of the bid opening, including the information disclosed to those present in accordance with the Sub-Clause 23.3.

### **IB.24 Process to be Confidential**

- 24.1 Information relating to the examination, clarification, evaluation and comparison of bid and recommendations for the award of a contract shall not be disclosed to bidders or any other person not officially concerned with such process before the announcement of the final result of the bid evaluation which shall be done at least ten (10) days prior to issue of Letter of Acceptance and place the same on its and Authority's Website (KP-PPRA Rule-45).The announcement to all Bidders will include table(s) comprising read out prices, discounted prices, price adjustments made, final evaluated prices and recommendations against all the bids evaluated. Any effort by a bidder to influence the Procuring Entity's processing of bids or award decisions may result in the rejection of such bidder's bid. Whereas any bidder feeling aggrieved may lodge a written complaint not later than fifteen

(15) days after the announcement of the bid evaluation report; however, mere fact of lodging a complaint shall not warrant suspension of the procurement process.

#### **IB.25 Clarification of Bids**

25.1 To assist in the examination, evaluation and comparison of bids, the Procuring Entity may, at his discretion, ask any bidder for clarification of his bid, including breakdowns of unit rates. The request for clarification and the response shall be in writing but no change in the price or substance of the bid shall be sought, offered or permitted except as required to confirm the correction of arithmetic errors discovered by the Procuring Entity in the evaluation of the bids in accordance with Clause IB.28.

#### **IB.26 Examination of Bids and Determination of Responsiveness**

26.1 Prior to the detailed evaluation of bids, the Procuring Entity will determine whether each bid is substantially responsive to the requirements of the Bidding Documents.

26.2 A substantially responsive bid is one which

- (i) meets the eligibility criteria;
- (ii) has been properly signed;
- (iii) is accompanied by the required Bid Security; and
- (iv) conforms to all the terms, conditions and specifications of the Bidding Documents, without material deviation or reservation.

A material deviation or reservation is one

- (i) which affect in any substantial way the scope, quality or performance of the Works;
- (ii) which limits in any substantial way, inconsistent with the Bidding Documents, the Procuring Entity's rights or the bidder's obligations under the Contract; or
- (iii) adoption / rectification whereof would affect unfairly the competitive position of other bidders presenting substantially responsive bids.

26.3 ***If a bid is not substantially responsive, it will be rejected by the Procuring Entity, and may not subsequently be made responsive by correction or withdrawal of the non-conforming deviation or reservation.***

#### **IB.27 Correction of Errors**

27.1 Bids determined to be substantially responsive will be checked by the Procuring Entity for any arithmetic errors. Errors will be corrected by the Procuring Entity as follows:

- (a) where there is a discrepancy between the amounts in figures and in words, the amount in words will govern; and
  - (b) where there is a discrepancy between the unit rate and the line-item total resulting from multiplying the unit rate by the quantity, the unit rate as quoted will govern, unless in the opinion of the Procuring Entity there is an obviously gross misplacement of the decimal point in the unit rate, in which case the line-item total as quoted will govern and the unit rate will be corrected.
- 27.2 The amount stated in the Form of Bid will be adjusted by the Procuring Entity in accordance with the above procedure for the correction of errors and with the concurrence of the bidder, shall be considered as binding upon the bidder. If the bidder does not accept the corrected bid price, his Bid will be rejected, and the Bid Security shall be forfeited in accordance with Sub- Clause 15.6(b) hereof.

#### **IB.28 Evaluation and Comparison of Bids**

- 28.1 The Procuring Entity will evaluate and compare only the bids determined to be substantially responsive in accordance with Clause IB.26.
- 28.2 In evaluating the bids, the Procuring Entity will determine for each bid the evaluated Bid Price by adjusting the Bid Price as follows:
- (a) making any correction for errors pursuant to Clause IB.27;
  - (b) excluding Provisional Sums and the provision, if any, for contingencies in the Summary Bill of Quantities, but including competitively priced Day work; and
  - (c) making an appropriate adjustment for any other acceptable variation or deviation including discounts or other price modification in the bids.
- 28.3 The estimated effect of the price adjustment provisions of the Conditions of Contract, applied over the period of execution of the Contract, shall not be taken into account in Bid evaluation.
- 28.4 If the Bid of the successful bidder is seriously unbalanced in relation to the Procuring Entity's estimate of the cost of work to be performed under the Contract, the Procuring Entity may require the bidder to produce detailed price analysis for any or all items of the Bill of Quantities to demonstrate the internal consistency of those prices with the construction methods and schedule proposed. After evaluation of the price analysis, the Procuring Entity may require that the amount of the Performance Security set forth in Clause IB.32 be

increased at the expense of the successful bidder to a level sufficient to protect the Procuring Entity against financial loss in the event of default of the successful bidder under the Contract.

#### **IB.29 Post Qualification of the Bidder**

- 29.1 The Procuring Entity shall determine to its satisfaction whether the Bidder that is selected as having submitted the lowest evaluated and substantially responsive Bid is technically qualified to perform the Contract satisfactorily.
- 29.2 The determination shall be based upon an examination of the documentary evidence of the Bidder's qualifications submitted by the Bidder.
- 29.2 An affirmative determination shall be a prerequisite for award of the Contract to the Bidder. A negative determination shall result in disqualification of the Bid, in which event the Procuring Entity shall proceed to the next lowest evaluated bid to make a similar determination of that Bidder's capabilities to perform satisfactorily.

### **F. AWARD OF CONTRACT**

#### **IB.30 Award**

- 30.1 Subject to Clauses IB.31 and IB.35, the Procuring Entity will award the Contract to the bidder whose bid has been determined to be substantially responsive to the Bidding Documents and who has offered the lowest evaluated Bid Price, provided that such bidder has been determined to be eligible in accordance with the provisions of Clause IB.3 and qualify pursuant to Sub-Clause IB 29.2.
- 30.2 The Procuring Entity, at any stage of the bid evaluation, having credible reasons for or *prima facie* evidence of any defect in supplier's or contractor's capacities, may require the suppliers or contractors to provide information concerning their professional, technical, financial, legal or managerial competence whether already pre-qualified or not:

Provided that such qualification shall only be laid down after recording reasons therefore in writing. They shall form part of the records of that bid evaluation report.

#### **IB.31 Procuring Entity Right to Accept or Reject any or all Bids**

- 31.1 Notwithstanding Clause IB.29, the Procuring Entity reserves the right to accept or reject any Bid, and to annul the bidding process and

reject all bids, at any time prior to award of Contract, without thereby incurring any liability to the affected bidders or any obligation except that the grounds for rejection of all bids shall upon request be communicated to any bidder who submitted a bid, without justification of grounds. Rejection of all bids shall be notified to all bidders promptly.

### **IB.32 Notification of Award**

- 32.1 Prior to expiration of the period of bid validity prescribed by the Procuring Entity, the Procuring Entity will notify the successful bidder in writing ("Letter of Acceptance") that his Bid has been accepted. This letter shall name the sum which the Procuring Entity will pay the Contractor in consideration of the execution and completion of the Works by the Contractor as prescribed by the Contract (hereinafter and in the Conditions of Contract called the "Contract Price").
- 32.2 No Negotiation with the bidder having evaluated as lowest responsive or any other bidder shall be permitted, however, Procuring Entity may have clarification meetings to get clarify any item in the bid evaluation report.
- 32.3 The notification of award and its acceptance by the bidder will constitute the formation of the Contract, binding the Procuring Entity and the bidder till signing of the formal Contract Agreement.
- 32.4 Upon furnishing by the successful bidder of a Performance Security, the Procuring Entity will promptly notify the other bidders that their Bids have been unsuccessful and return their bid securities.

### **IB.33 Performance Security**

- 33.1 The successful bidder shall furnish to the Procuring Entity a Performance Security in the form and the amount stipulated in the Bidding Data and the Conditions of Contract plus additional security for unbalanced bids in accordance with Clause IB.28.4 within a period of 28 days after the receipt of Letter of Acceptance.
- 33.2 ***Failure of the successful bidder to comply with the requirements of Sub-Clause IB.32.1 or Clauses IB.33 or IB.35 shall constitute sufficient grounds for the annulment of the award and forfeiture of the Bid Security.***

### **IB.34 Signing of Contract Agreement**

- 34.1 Within 14 days from the date of furnishing of acceptable Performance Security under the Conditions of Contract, the Procuring Entity will send the successful bidder the Contract Agreement in the form

provided in the Bidding Documents, incorporating all agreements between the parties.

- 34.2 The formal Agreement between the Procuring Entity and the successful bidder shall be executed within 14 days of the receipt of the Contract Agreement by the successful bidder from the Procuring Entity.

#### **IB.35 General Performance of the Bidders**

The Procuring Entity reserves the right to obtain information regarding performance of the bidders on their previously awarded contracts / works. The Procuring Entity may in case of consistent poor performance of any Bidder as reported by the Procuring Entities of the previously awarded contracts, inter alia, reject his bid and/or refer the case to the Pakistan Engineering Council (PEC) and KPPRA. Upon such reference, PEC / KPPRA in accordance with its rules, procedures and relevant laws of the land take such action as may be deemed appropriate under the circumstances of the case including black listing of such Bidder and debarring him from participation in future bidding for similar works.

#### **IB.36 Integrity Pact**

***The Bidder shall sign and stamp the Integrity Pact provided at Appendix-L to Bid in the Bidding Documents for all procurement contracts exceeding Rupees ten million. Failure to provide such Integrity Pact shall make the bidder non-responsive.***

#### **IB.37 Instructions not Part of Contract**

Bids shall be prepared and submitted in accordance with these Instructions which are provided to assist bidders in preparing their bids, and do not constitute part of the Bid or the Contract Documents.

# **BIDDING DATA SHEET**

**[NOTES ON BIDDING DATA SHEET]**

This Section is intended to assist the Procuring Entity in providing the specific information in relation to corresponding clauses in Instructions to Bidders and should be prepared to suit each individual contract.

The Procuring Entity should provide in the Bidding Data information and requirements specific to the circumstances of the Procuring Entity, the processing of the Bid, the applicable rules regarding Bid Price and currency, and the Bid evaluation criteria that will apply to the Bids. In preparing this section, the following aspects should be checked:

- (a) Information that specifies and complements the provisions of section; Instruction to Bidders must be incorporated.
  
- (b) Amendments and/or supplements, if any, to the provisions of Instructions to Bidders, necessitated by the circumstances of each individual contract, can be introduced only in this section since Instructions to Bidders will remain unchanged.

## **Bidding Data Sheet**

The following specific data for the Works to be bided shall complement, amend, or supplement the provisions in the Instructions to Bidders. Wherever there is a conflict, the provisions herein shall prevail over those in the Instructions to Bidders.

Procurement of Works is being done through E-bidding system. Prospective bidders will be required to send their bid electronically (hereinafter called E-Bid) and submit the hard copy of E-bid as mentioned in the bidding data sheet.

It is to be noted that Hard Copy of E-Bid shall be submitted before the deadline time for submission of bid, failing which the e-Bid received on the E-Bidding system will be evaluated as non-responsive.

Bidder has to start the Bid preparation well in advance so that the submission process is completed within the scheduled period. Bidder is responsible to plan their time sufficient to complete the documents uploading, fill-in the required online forms, E-Bid submission, prepare the hard copy of Bid and its submission, as stipulated in the bidding data.

### **Instructions to Bidders**

#### **Clause Reference**

#### **1.1(a) Name and Address of the Procuring Entity:**

Director General,  
Jabba Dam Project District Khyber,  
Government of Khyber Pakhtunkhwa,  
Irrigation Department, Peshawar  
Said House, Bungalow No. 254, Hadi Lane,  
Afzal Abad, Old Bara Road, University Town,  
Peshawar.  
Phone No: 091-5700417  
Email: jabbadam.khyber@gmail.com

#### **1.1(b) Name of the Project & Summary of the Works:**

Name of Project: Construction of Jabba Dam, District Khyber

Summary of the Works:

- 1) Main Dam & Cofferdam
- 2) Spillway & Access Bridge
- 3) Intake Tower & Access Bridge
- 4) Diversion Tunnel
- 5) Access Road
- 6) Delivery Pipe (From Dam to Diversion Tunnel Outlet)
- 7) Irrigation Colony, Chowkidar Hut & Other Buildings

## 2.1 Name of the Borrower/Source of Financing/Funding Agency:

The Procuring Entity is funding the project through funds available under Block allocation, Irrigation Department KP ADP / AIP-*Accelerated Implementation Plan*

## 3 Eligible Bidders

### 3.1 This Invitation for Bids is open to all those bidders meeting the following eligibility requirements:

- a) Duly licensed by the Pakistan Engineering Council (PEC) in the **category CA (No Limit)**, with specialization codes of CE-01, CE-02, CE-04 & CE-06.
- b) Duly Registered with C& W / Irrigation Departments, Govt of Khyber Pakhtunkhwa in **category PK-1 (No Limit)**.
- c) Duly registered with Khyber Pakhtunkhwa Revenue Authority for the purpose of sales tax on services. Referred reference: KPPRA Notification No. KPPRA / M&E / Esst: / 1-14 / 2017-18 dated June 27, 2018.
- d) Duly registered with FBR and is on the Active Tax Payers list of FBR.
- e) Bid Security (**as per NIT**) in the shape of Call deposit in Original in the sealed Technical Bid.
- f) Is neither associated, nor has been associated, directly or indirectly, with the Consultants or any other entity that has prepared the design, specifications and other documents for the Project or being proposed for any position in the Project Management.

### 3.2 A bidder having a conflict of interest will be declared as non-responsive if the bidder has a close business relationship with the Procuring Entity professional personnel, who directly or indirectly involved in any part of:

- (i) The preparation of the bidding documents for the Works,
- (ii) The Bid evaluation or
- (iii) The supervision of such Works.

## 7.1 Contents of Bidding Documents

The Bidding Documents, in addition to invitation for bids, are those stated below and should be read in conjunction with any Addenda issued in accordance with Clause IB.9.

1. Instructions to Bidders.
2. Bidding Data Sheet.
3. Letter of Technical Bid.

4. Letter of Price Bid.
5. Appendices to Bid (A through P to Bid).
6. Form of Bid Security.
7. Form of Performance Security.
8. Forms of Contract Agreement, and Mobilization Advance Guarantee.
9. Forms of Credit Line Facility.
10. General Conditions of Contract, Part-I (GCC).
11. Particular Conditions of Contract, Part-II (PCC).
12. Special Provisions and Particular Specifications.
13. Supplementary Specifications.
14. General Specifications (Technical Specifications for Workmanship) MRS – 2019, Communication and Works Department, KPK.
15. Drawings

#### **8.1 Time Limit for Clarification:**

Minimum number of days to seek clarification by the prospective bidder is **Fourteen (14)** days before the latest deadline for submission of Bid.

#### **9.2 Amendment of Bidding Documents**

Delete the text of clause 9.2 and replace with the following:

All modifications to the bidding documents will be issued via an addendum. Any addendum thus issued shall be part of the Bidding Documents pursuant to IB 7.1 hereof. Hard copies of the addenda will not be forwarded. E-Bidding System will return all submitted E-bids upon issuance of Addendum (if any), to the respective bidders. The bidder is solely responsible for reviewing all addenda posted on the Procuring Entity E-Bidding System and submit their bids accordingly.

#### **10.1 Bid Language:**

The same language in which the Bidding Documents are written i.e., English, should be used for preparation of bid and all communication's / documents related to the bid exchanged by the bidder and the Procuring Entity.

#### **11 Documents Accompanying the Bid**

Delete the text of clause 11.1 and replace with the following:

**11.1(a)** Bids which are prepared through E-Bidding system will only be considered for submission and evaluation, whereas the other bids will be rejected. Prospective Bidders

shall follow the procedure **mentioned in the E-Bidding System:**

**11.1(b)** For preparation of E-Bid, Prospective Bidders are initially required to fill the details and attach the requisite documents. The bidders shall prepare the Bid by uploading the scanned copy of following documents **as instructed in the E-Bidding System:**

**(i) Bid Security**

Prepare the Bid Security as per **IB.15** of Instructions to Bidders and Bidding Data Sheet. Scan and attach the same **as instructed in the E-Bidding System.**

**(ii) Written confirmation (Power of Attorney) authorizing a person to submit the Bid**

The Bid must accompany a Power of Attorney issued by authorized representative of the Firm / Company / (for all partners of a JV) having the name and CNIC No. of the person to whom Power of Attorney has been issued to submit the bid to the Employer on behalf of the Firm / Company / JV etc.

**(iii) Written confirmation (Power of Attorney) authorizing the signatory of the Bid to commit the Bidder (IB.18.5)**

Original Power of Attorney on Judicial Stamp Paper duly attested by Notary Public with original signatures to sign/commit the bid on following format must accompany the bid:

- a) The person issuing authority of Power of Attorney shall provide the legal documents establishing his / her authority of issuing the Power of Attorney on behalf of Firm / Company / (for all partners of JV);
- b) The name, designation / title in the Firm / Company, CNIC No. of the person issuing the Power of Attorney must be mentioned on the Power of Attorney.
- c) The Power of Attorney shall bear the name, specimen signature, specimen initial of the signatory of the Bid as well as his designation/title in the Firm/Company and country identification number/ CNIC No.

**11.1(c)** After uploading the documents “**Bid Security**” and “**Power of Attorney’s**” as mentioned hereinabove, the prospective bidder shall **quote SINGLE PERCENTAGE RATE**, with two digits after the decimal point, “**ABOVE / BELOW / AT PAR**” of the Engineer’s Estimated Cost, *based on Market Rate System – 2022, 2<sup>nd</sup> Bi-Annual and Non-MRS Items as well, for all items of the Works described in the Bill of Quantities (Appendix –D)*

**11.1(d) Prepare the remaining part of E-Bid by uploading the following documents:**

- (i) The Bidders shall submit with their Financial Proposal:**

a) **Letter of Price Bid:**

Download the Letter of Bid and upload it with company's stamp & sign.

b) **Estimated Progress Payments.** **(Appendix –J)**

(ii) The Bidders shall submit with their **Technical Proposal**, the following documents in sufficient detail to demonstrate the adequacy of the bid in meeting requirements for timely completion of the Works.

- a) Letter of Technical Bid.
- b) Copy of Articles of Incorporation or Constitution of the Bidder as a legal entity.
- c) Valid Certificate of Registration (Constructor's License) from Pakistan Engineering Council.
- d) Certified audit reports for last three (3) years. i.e., Financial Year 2020-21, 2021-22 and 2022-23 of the bidders which close their account on June 30 every year OR Calendar Year 2020, 2021 and 2022 of the bidders which close their account on 31<sup>st</sup> December every year, prepared by registered Chartered Accountant appearing on list of firms on ICAP directory as per **International Standard on Auditing (ISA's), referred in Table – I.**
- e) Joint Venture Agreement or the Letter of Intent to execute the JV Agreement (if applicable).
- f) Pending litigation and No Blacklisting information.
- g) Special Stipulations (as filled by the Procuring Entity). (Appendix –A)
- h) Proposed Construction Schedule. (Appendix –E)
- i) Method of Performing the Work. (Appendix –F)
- j) Availability of Major Equipment – Related Items. (Appendix –G)
- k) Construction Camp and Housing Facilities. (Appendix –H)
- l) List of Sub-contractors (as required). (Appendix –I)
- m) Organization Chart for Supervisory Staff. (Appendix –K)
- n) Integrity Pact. (Appendix –L)
- o) Financial Competence & Access to Financial Resources (Appendix –M)
- p) Past Performance / Experience. (Appendix –N)
- q) Qualification of Key Staff (Appendix –O)
- r) Current Commitments / Projects in Hand. (Appendix –P)
- s) *To facilitate evaluation, bidders are encouraged to submit **Soft copies (One CD) in PDF format with their Original Technical Bids.***

### 11.1(e) Submission of E-Bid

(i) After finalization of all attachments and uploading on the E-Bidding system, bidder shall proceed with **Submission of E-Bid**. By this action, the bidder will submit his bid electronically (*i.e., E-Bid*) which will remain confidential in encrypted format.

(ii) Download the E-Bid in PDF format and print the same.

- (iii) Sign and Stamp each page of the E-Bid (*i.e. printed PDF file*).
- (iv) Bind the pages to prepare the hard copy of E-Bid which shall be put in **single envelope** as further detailed in **clause 18.4** hereinbelow, prior to sealing.
- (v) Outer envelope shall be prepared by putting the following documents in it:
  - a) Original Bid Security.
  - b) Original Power of Attorney's.
  - c) Sealed inner envelopes A & B.
- (vi) Seal the Outer envelope which will be called as hard copy of E-Bid.
- (vii) Bidder will be required to submit hard copy of E-Bid to the address mentioned in the clause 19.2 (a) of Bidding Data prior to time mentioned in clause 20.1 of Bidding Data.
- (viii) It is to be noted that Hard Copy of E-Bid must be submitted before the deadline time for submission of bid, failing which the E-Bid received on the E-Bidding system will be evaluated as **non-responsive**.

#### **IB.12 Bid Prices**

The phrase “**unit rates and / or prices**” wherever appears in these **instructions to bidders**, shall be read and construed according to “**para (i) of the KPPRA Notification No. KPPRA / M&E /Estt: / 1-17 /2019-20; dated June 12, 2020**”.

#### **12.2** The text is deleted and substituted with the following:

The Bidder shall offer **SINGLE PERCENTAGE RATE**, with two digits after the decimal point, “**ABOVE / BELOW / AT PAR**” of the Engineer’s Estimated Cost on Market Rate System – 2022, 2<sup>nd</sup> Bi-Annual and Non-MRS Items as well, for all items of the Works described in the Bill of Quantities. Corrections in quoted single percentage rate, if any, shall be made by crossing out, initialing, dating and re-writing.

#### **12.4** The text is deleted and substituted with the following:

The rates and prices, resulting from the bidders quoted **SINGLE PERCENTAGE RATE**, with two digits after the decimal point, “**ABOVE / BELOW / AT PAR**” of the Engineer’s Estimated Cost, are subject to adjustment during the performance of the Contract in accordance with the provisions of Clause 70 of the Conditions of Contract. The Procuring Entity shall furnish the prescribed information for the price adjustment formulae in Appendix-C to Bid, and the Bidders shall submit with their bids such other supporting information as required under the said Clause.

#### **13.1 Bidders Quote Entirely in Pak Rupees**

Bidders to quote entirely in Pak. Rupees and no foreign currency payment is admissible.

**14.1 Period of Bid Validity:**

Bid shall remain valid and open for acceptance for a period of **one hundred and Eighty (180)** calendar days after the latest dead line for submission of bid.

**15.1 Amount of Bid Security:**

The amount of Bid Security shall be at the rate of 2% of the Engineer's Estimated cost.

***The conditions for above stated bid security and procedures for any additional securities shall be as per Khyber Pakhtunkhwa Public Procurement Regulation No. XIV 2022 issued vide S.R.O. (14) / Vol:1-24 / 2021-22, dated May 10,2022.***

**17.1 Venue, Time, and Date of the Pre-Bid Meeting:**

As per NIT.

**17.4 Presence at the Pre-Bid Meeting**

Absence at the pre-bid meeting will not be a cause for disqualification of a bidder, however the bidders are asked to attend the meeting where they will be guided regarding preparation of the bids in the light of Instructions to Bidders.

**18.4 Number of hard Copies of the Bid to be Completed and Returned:**

Prospective bidders shall submit "**Single Envelope**" containing

- (i) **Signed copies of E-Bid** and,
- (ii) **Original copies** of respective **Appendices** of Technical and Financial proposals.

**Where there is a discrepancy between the E-bid and the hard copy of Bid, the E-Bid in the E-Bidding System shall govern.**

The detail of the Envelope is given as under:

**Single Envelope                      -                      (Sealed)**

**19.2(a) Procuring Entity Address for the Purpose of Bid Submission:**

Director General,  
Jabba Dam Project District Khyber,  
Government of Khyber Pakhtunkhwa,  
Irrigation Department, Peshawar  
Said House, Bungalow No. 254, Hadi Lane,  
Afzal Abad, Old Bara Road, University Town, Peshawar.  
Phone No: 091-5700417  
Email: jabbadam.khyber@gmail.com

**(b) Name and Number of the Contract:**

Construction of Jabba Dam, District Khyber

Main Dam & Cofferdam, Spillway & Access Bridge, Diversion Tunnel, Intake Tower & Access Bridge, MS Delivery Pipe from Dam to Tunnel Outlet, Access Road and Irrigation Colony, Chowkidar Hut & Other Buildings

**20.1 Deadline for Submission of Bids:**

As per NIT.

*It is to be noted that Hard Copy of E-Bid must be submitted before the deadline time for submission of bid, failing which the E-Bid received on the E-Bidding system will be evaluated as **non-responsive**.*

**IB.21 Late Bids**

Add the following para at the end:

- 21(c)** The time indicated in the Procuring Entity E-Bidding System will be the time by which the bid submission activity will be allowed till the deadline for submission of Bids. Once the Bid Submission period is over, the bidder cannot submit their E-Bid. It is to be noted that Hard Copy of E-Bid must be submitted before the deadline time for submission of bid, failing which the E-Bid received on the e-Bidding system will be evaluated as non-responsive.

Bidder has to start the Bid Submission well in advance so that the submission process is completed within the scheduled period. Bidder is responsible to plan their time sufficient to complete the documents upload, fill-in required online forms, E-Bid submission, prepare the hard copy of Bid and its submission as stipulated in the bidding data.

**IB.21 Modification, Substitution and Withdrawal of Bids**

- 21.1** Any E-Bid may be withdrawn prior to the deadline time designated for submission of bids upon electronically proceeding with “**Withdraw Bid Response**”. Withdrawn bids may be modified and resubmitted up to the deadline time designated for the submission of bids.
- 21.2** After withdrawal, if the Bidder again submits his E-bid prior to bid submission, a new version of E-Bid shall be generated. Bidder is required to submit hard copy of E-Bid as per **Clause 11.1 of Bidding Data** prior to deadline date & time for submission of bids.
- 21.3** No bid may be modified by a bidder after the deadline for submission of bids. Withdrawal of a bid during the interval between the deadline for submission of bids and the expiration of the period of bid validity specified in the Form of Bid may result in

forfeiture of the Bid Security in pursuance to **Clause IB.15**.

- 21.4** Prospective Bidder is responsible to plan their time sufficient to submit their Hard copy of E-Bid prior to deadline for submission of Bid.

**E BID OPENING AND EVALUATION FOR SINGLE STAGE SINGLE ENVELOPE BIDDING PROCEDURE**

**IB. 23 Bid Opening**

**Sub-Clause's 23.1 to 23.4** are deleted in their entirety, and substituted with the followings:

- 23.1** All the Bids submitted by the bidders will remain in encrypted form in the system till the time of Bid opening. The Procuring Entity will open the E-Bids in public at the address, date and time specified below in the presence of Bidder's designated representatives and anyone who choose to attend. Bidders' representatives who are present shall be requested to sign the record. The omission of a Bidder's signature on the record shall not invalidate the contents and effect of the record.

The committee will consider only those Bidders for opening of their E-Bids who have submitted **the Bid Security (Original Hard Copy)**. After authentication from the Bid Opening & Evaluation Committee, the E-Bids will be decrypted and visible to the Committee for evaluation.

**Where there is a discrepancy between the E-bid and the hard copy of Bid, the E-Bid in the E-Bidding System shall govern.**

Discount/ Premium, if offered, though a separate letter of discount submitted with the Bid, will not be entertained and shall be considered null & void.

**If there is a discrepancy in the E-bid Amount between the Letter of Bid and Bill of Quantities, the amount mentioned in the Bill of Quantities shall govern.**

**In case, an event of Force Majeure occurs that affects the availability and/ or performance of the E-Bidding System, the Procuring Entity shall consider the Hard copy of E-Bid for evaluation.**

- 23.2** First, the name of bidders is read out at bid opening who submitted the E-Bid and his corresponding hard copy of Bid.

- 23.3** Second, if the bidder has dispatched the hard copy of E-bid prior to its withdrawal through E-Bidding System, then the same will not be considered further.

- 23.4** In case of modification and substitution, latest version of E-Bid will be considered, if the Bidder has submitted his "hard copy" prior to time of Bid submission, failing which the E-Bid will not be considered.

## **IB.27 Correction of Errors**

**Sub-Clause 27.1(b)** is deleted in its entirety.

## **IB.28 Evaluation and Comparison of Bids – Financial and Technical Evaluation Criteria**

Sub-Clause's **28.1 to 28.4** are deleted in their entirety, and substituted with the followings:

**28.1** The Procuring Entity will evaluate and compare only the bids previously determined to be substantially responsive in accordance with Clause IB.26, as per requirements given hereunder.

Bids will be evaluated for complete scope of works and compliance with the bidding documents including specifications.

### **28.2 Financial Proposal Evaluation**

- (i)** The Financial Proposal evaluation will be conducted under the Khyber Pakhtunkhwa Public Procurement of Good, Works and Services Rules, 2014, (*Amended up-to-date*).
- (ii)** The Bid price shall be considered inclusive of the all duties, taxes, expenses, customs and import duties on imported items (if any).
- (iii)** The quoted **single percentage rate, with two digits after the decimal point, "ABOVE / BELOW / AT PAR"** of the Engineer' s Estimated Cost on Market Rate System - 2022, 2<sup>nd</sup> Bi-Annual and Non-MRS Items as well, of the technically qualified bidders will be compared on the basis of the Evaluated Bid Price, as per procedure mentioned in **sub-para (iv) hereinbelow**.
- (iv)** In evaluating the financial proposals, the Procuring Entity will determine for each bid the Evaluated Bid Price by adjusting the Bid Price as follows:
  - a)** making any correction for errors pursuant to Clause IB.27;
  - b)** excluding Provisional Sums and the provision, if any, for contingencies in the Summary Bill of Quantities, but including competitively priced Day work; and
  - c)** making an appropriate adjustment for any other acceptable variation or deviation including discounts or other price modification in the bids.
- (v)** The estimated effect of the price adjustment provisions of the Conditions of Contract, applied over the period of execution of the Contract, shall not be taken into account in Bid evaluation.

### **28.3 Other Factors**

A firm or a member of a JV may participate only in one bid for the contract.

***If a firm submits more than one bid, singly or as a JV, all bids involving that bidder will be rejected.***

This rule will not apply in respect of bids which include specialist sub-contractors who are used by more than one bidder.

- 28.4** If the Bid of the successful bidder is seriously unbalanced in relation to the Procuring Entity's estimate of the cost of work to be performed under the Contract, the Procuring Entity may require the bidder to produce detailed price analysis for any or all items of the Bill of Quantities to demonstrate the internal consistency of those prices with the construction methods and schedule proposed.

After evaluation of the price analysis, the Procuring Entity may require that the amount of the Performance Security set forth in Clause IB.32 be increased at the expense of the successful bidder to a level sufficient to protect the Procuring Entity against financial loss in the event of default of the successful bidder under the Contract.

- 28.5** Any discount / premium offered by the Bidder on its quoted **single percentage rate**, "**ABOVE / BELOW / AT PAR**" of the Engineer's Estimated Cost, shall only be considered if such discount is either shown on the duly filled-in, signed and stamped Letter of Price Bid or on the summary page of Bill of Quantities as applicable.

Discount / Premium, if offered through a separate letter of discount submitted with the Bid, will not be entertained and shall be considered null & void. However, envelope marked "SUBSTITUTION" or "MODIFICATION" shall be considered as per **Clause IB. 22 & BDS. 23**.

- 28.6** The technical proposal shall be evaluated in accordance with the specified guidelines and evaluation criteria, mentioned below: -

**28.6.1 Guidelines for Submission of Technical Proposals**

As per provision contained under KPPRA Rules 2014, the Bid for the work is on **Single Stage Single Envelope procedure**, therefore while submitting the Technical Proposals by the Bidder(s), the detail information mentioned in the Criteria explained hereinbelow are required to be followed strictly.

- (i)** Each page of the Technical Proposal should be machine numbered, stamped & signed by the owner or authorized representative of the Firm. Photocopies of signatures and seals will not be considered.
- (ii)** Attachment of un-necessary documents should be avoided and the proposals must be well staple binded.
- (iii)** Complications as a result of non-compliance of these requirements shall be the responsibility of prospective bidder.
- (iv)** The documents on the basis of which experience of the bidder is claimed such as Letter of acceptance, award of contract, work order, completion certificate etc. must be signed & attested by the concerned XEN / Deputy Director etc. otherwise such Technical Proposal will not be considered for evaluation.
- (v)** All information is required to be submitted in legible English language. Any certificate / document/data/ information other than English language shall be treated as document not attached.

- (vi) Marks under **para 28.6.2 – Technical Qualification Criteria** shall be given only when clear, authorized and valid supporting documents are provided with the bid.

**28.6.2 Technical Qualification Criteria**

- (i) A bidder, based on conditions listed in this document, not meeting the **60% pass marks limit will be declared as non-responsive**
- (ii) Technical Evaluation will be based on the criteria given in the succeeding paras (a) To (d) regarding the Bidder’s / Applicant’s Experience Record, Personnel Capabilities, Financial Soundness and Equipment Capabilities as demonstrated by the Applicant’s responses in the forms attached herewith.
- (iii) The Procuring Entity reserves the right to waive minor deviations, if these don’t materially affect the capability of an applicant to perform the contract.
- (iv) Sub-contractor’s experience and resources shall not be taken into account in determining the Applicant’s compliance with the qualifying criteria. However, Joint Venture experience & resources will be considered.
- (v) Consortium or Association of firms will be considered for similar treatment as in case of Joint Venture.

S.No:	Category	Weightage/Marks
1	General Experience	35
2	Personnel Capabilities	15
3	Equipment Capabilities	20
4	Financial Soundness	30
	<b>Total:</b>	<b>100</b>

**Note:**

- (i) **Technical Qualification of the bidder’s shall be decided on Pass/Fail basis.**
- (ii) **The bidder must secure at least 50% score in each category.**
- (iii) **Bidder’s securing 60% marks in aggregate shall be declared pass in the technical evaluation.**

The competing firms must provide comprehensive, clear information asked for in succeeding paras (a) to (d) in proper order with separators. Incomplete & confused information will not be considered.

**(a) General Experience**

Marks for experience shall be awarded on the basis of following qualifications:

S.No:	Description	Maximum Points	Explanation for Marks Obtained
1.	Dam Projects Completed in last ten years.	20	<p>I. <b>20 Marks</b> will be awarded to a prospective bidder who has executed:</p> <ul style="list-style-type: none"><li>i. A single Dam project (<b>costing Rs.3500 Million</b>), involving <b>Tunnel</b><sup>1</sup> as a part of project; <b>OR</b></li><li>ii. A single Dam project (<b>costing Rs.3000 Million</b>) plus independent <b>Tunnel</b><sup>1</sup> project; <b>OR</b></li><li>iii. A single Dam project (<b>costing Rs.3000 Million</b>) plus any other project involving <b>Tunnel</b><sup>1</sup>.</li></ul> <p><b>OR</b></p> <p>II. <b>3 Marks</b> will be awarded for each Single Dam project completed in last ten years that costs <b>Rs.2000 Million</b> or more subject to a maximum of 15 Marks.</p> <p><b>OR</b></p> <p>III. <b>2.5 Marks</b> will be awarded to each Single Dam project completed in last ten years, that costs between <b>Rs.1200 Million</b> and <b>Rs.2000 Million</b> subject to a maximum of 15 Marks.</p> <p><b>Note:</b></p> <ul style="list-style-type: none"><li>I. No marks will be awarded in case of experience of less than 2 Dam projects.</li><li>II. <b>Tunnel</b><sup>1</sup> in the above criterion means Tunnel having diam not less than <b>2.5m</b> with length of not less than <b>200m</b>;</li><li>III. Grouping and Merging of projects will not be considered;</li><li>IV. Separate Summary/Sheet for each category of works as mentioned under <b>a) to d) above</b> shall be maintained as mentioned in the format below.</li></ul>

S.No:	Description	Maximum Points	Explanation for Marks Obtained
2.	Dam Projects in-hand.	08	<p>a) 8 Marks will be awarded to in-hand:</p> <p>(i) Single Dam project (<b>costing Rs.3500 Million</b>).involving <b>Tunnel</b><sup>1</sup> as a part of project; <b>OR</b></p> <p>(ii) Single Dam project (<b>costing Rs.3000 Million</b>) plus independent <b>Tunnel</b><sup>1</sup> project; <b>OR</b></p> <p>(iii)Single Dam project (<b>costing Rs.3000 Million</b>) plus any other project involving <b>Tunnel</b><sup>1</sup>.</p> <p style="text-align: center;"><b>OR</b></p> <p>b) 4 Marks will be awarded for each Single Dam project in-hand subject to a maximum of 8 Marks.</p>
3.	Projects of fabricating, jointing, welding, lining, coating, and laying of M.S pipe having dia not less than 0.6 m for Watermains/Delivery Pipe along-with associated appurtenances etc, completed or in-hand in last seven years costing more than <b>Rs. 100 Million</b> .	04	<ul style="list-style-type: none"> <li>2 Marks will be awarded for each Single project subject to a maximum of 04 Marks.</li> </ul>
4.	Status of enlistment with other Government Organizations and other agencies (Other than Irrigation Department, Govt of KPK)	03	<ul style="list-style-type: none"> <li>0.50 Marks will be awarded for each enlistment up to maximum of 3 Marks.</li> </ul>
<b>Total Marks Allocated</b>		<b>35</b>	

S.No:	Name of Work	Agency/Department with full address & contact No	Date of Award to Contractor	Date of Completion	Value of contract	Role (Sole, Sub or J/V partner)
1						
2						

- Each work mentioned in the above proforma must be supported by successful completion certificate issued by the Department concerned with Letter of Acceptance & Work Order of Executing Agency / Department duly attested by the Issuing Authority and stamped & signed by the bidder/applicant, otherwise the experience shall not be considered in evaluation process.

**(b) Personnel Capabilities**

Personnel capabilities shall not be limited to the following; however, Marks shall be awarded under this category using the following criteria:

S.No:	Description	Maximum Points	Explanation for Marks Obtained
1.	One Number B.Sc Engineer with Master in Geotechnical Engineering and registered with Pakistan Engineering Council (PEC) as PE.	03	<ul style="list-style-type: none"> <li>0.5 Mark each will be awarded for each year of experience related to Dams and/or Tunnels Construction subject to a maximum of 03 Marks.</li> </ul>
2.	One Number B.Sc Civil Engineer registered with Pakistan Engineering Council (PEC) as PE.	03	<ul style="list-style-type: none"> <li>Should have overall Civil Works experience of 10 years and               <ol style="list-style-type: none"> <li>03 Marks will be awarded for having 5 years or more experience of Dam Construction;</li> <li>02 Marks will be awarded for having experience of Dam Construction between 3 to 5 years;</li> <li>No Marks shall be awarded for less than 3 years of experience.</li> </ol> </li> </ul>
3.	4 number of B.Sc Civil Engineers registered with Pakistan Engineering Council (PEC) as RE.	04	<ul style="list-style-type: none"> <li>01 Mark shall be awarded for each number of Registered Engineer (RE) subject to a maximum of 04 Marks.</li> </ul>
4.	8 number Associates Engineers (DAE CIVIL)	05	<ul style="list-style-type: none"> <li>0.625 Marks shall be awarded for five years or more experience per Associates Engineer subject to a maximum of 05 Marks.</li> <li>No Marks shall be awarded for having experience less than 5 years.</li> </ul>
<b>Total Marks Allocated</b>		<b>15</b>	

- CVs of the above personnel should be submitted with the proposal; however, the procuring entity reserves the right to interview the personnel or verify credentials/documents etc. at any stage.

**(c) Equipment Capabilities**

Marks shall be awarded on the basis of the following criteria for various categories of equipment & machinery relevant for the Project:

<b>S.No:</b>	<b>Equipment Type and Characteristics</b>	<b>Min No Required</b>	<b>Maximum Marks</b>
1	Concrete Batching Plant (30 Cu-M/Hr. capacity)	01	10
2	Concrete Pump	02	10
3	Crane mobile (30 ton capacity)	02	10
4	Dewatering Pump-Heavy duty	06	10
5	Water Tanker (25000 Liters capacity)	06	10
6	Dumper Truck-18 Ton	20	10
7	Shovel/Loader	04	10
8	Jumbo Drilling & Grouting Machine	02	10
9	Jack Hammer with pusher leg	04	08
10	Concrete Transit Mixer	05	10
11	Vibratory Rollers (10-12 tons)	03	10
12	Padfoot / Tamping / Sheepsfoot Rollers	02	05
13	Grader	02	05
14	Excavator with detachable Jack Hammer	08	10
15	Dozer (Not less than D8)	05	10
16	Crushing / Screening Plant	01	04
17	Wheel Loader	04	08
18	Generator Set (250 KVA)	04	10
19	Auger Machine/Drilling Machine	02	05
20	Air Compressors	04	05
21	Truck/Tractors	05	10
22	Scaffolding Pipes with Joints	500	05
23	Formwork (Steel)	2000 Sft	05
24	Laboratory & Survey Equipment's	2 sets each complete	10
	<b>Sub-total:</b>		<b>200</b>
	<b>Weighted Marks</b>	<b>(Marks obtained /200) *20)</b>	

- Marks shall be awarded proportionately to each category of machinery when number of machineries in that category is less than the specified number(s).
- Machinery shall be in good working condition.

- 100% marks will be given on availability of ownership documents at least on a judicial stamp paper of the machinery.
- 25% marks will be given on undertaking on judicial stamp paper for ensuring availability of rented machinery.

**(d) Financial Soundness**

Credit Marks shall be awarded on the basis of the following criteria;

The prospective bidders shall comply 100% with the criteria at **S. No: 1 to 3**, otherwise **Zero marks** will be awarded.

<b>S.No:</b>	<b>Description</b>	<b>Maximum Marks</b>
1.	Available Bank Credit Line not less than <b>Rs. 800 Million *</b>	6
2.	Working Capital (Best 03 year's) not less than <b>Rs. 1,200 Million *</b>	6
3.	Average Annual Turnover (Last 03 years) $\geq$ <b>Rs. 3,500 Million *</b>	6
4.	Certified Audit Reports of Last three (03) years	4
5.	Registration with Income Tax Department	3
6.	No Litigation & Blacklisting from any Agency	2
7.	Valid PEC License's for other related items of work.	3
	<b>Sub-total:</b>	<b>30</b>

**\* In case of JV, each partner must also meet as per its JV share.**

- Individual Bidder/ Lead Firm of JV and JV members of the Joint Venture has to submit Audit Reports of last three years i.e., Financial Year 2019-20, 2020-21 and 2021-22 of the bidders which close their account on June 30 every year OR Calendar Year 2019, 2020 and 2021 of the bidders which close their account on 31<sup>st</sup> December every year, prepared by registered Chartered Accountant appearing on list of firms on ICAP directory as per **International Standard on Auditing (ISA's)**, referred in **Table – I**, in order to demonstrate the current soundness of the bidder's financial position and to evaluate its prospective long term profitability.
- The Bidder must demonstrate access to, or availability of, financial resources such as liquid assets, unencumbered real assets, lines of credits, and other financial means, other than any contractual advance payments, to meet the financial requirements of the contract in the amount to satisfy the Cash Flow requirements.
- Bank statement with respect to Project Specific Credit Line Facility shall be clear, readable, stamped and signed by the authorized

representative of the Bank concerned and issued for this Contract, within last six months.

- Income tax registration certificate & proofs of income tax paid shall be provided.
- No litigation & No blacklisting history shall be provided on separate judicial stamp paper.
- 03 more PEC valid license holders, with registration's other than KP Departments and in addition to CE-04, including

**(i) CE-06 Tunneling**

**(ii) CE-01 Road and Pavements Drainage & Retaining Structure.**

**(iii) CE-02 Bridge Structures and Piling.**

will make the firm eligible for full marks at **S. No: 7 hereinabove.**

### **28.6.3**

#### **Joint Venture (JV)**

- a)** All Joint Venture shall comply with the following minimum qualification requirements: -
- (i)** All joint venture partners shall fulfill the minimum criteria of valid registration with PEC & KPPRA along with code of specialization and shall have valid enlistment with Irrigation Department, Govt of Khyber Pakhtunkhwa.
  - (ii)** The lead partner shall meet **not less than 50 percent** of all qualifying criteria given in paras **28.6.1** and **28.6.2** hereinabove.
  - (iii)** Each of the partners shall meet **not less than 25 percent** of all the qualifying criteria given in paras **28.6.1** and **28.6.2** hereinabove.
  - (iv)** The joint venture must collectively satisfy the criteria of paras **28.6.1**, **28.6.2** and **28.6.3**, for which purpose the relevant figures for each of the partners shall be added together to arrive at the JV's total capacity.
- b)** Any change in a qualified JV after qualification, shall be subject to the written approval of the Procuring Entity prior to the deadline for submission of bids. Such approval may be denied if: -
- (i)** Partner(s) withdraws from a JV and remaining partners do not meet the qualifying requirements;
  - (ii)** The new partners to a JV are not qualified individually or as another JV; or

(iii) In the opinion of the Procuring Entity, it may lead to substantial reduction in competition.

- c) Bid shall be signed by all members in the JV so as to legally bind all partners, jointly and severally, and any bid shall be submitted with a copy of the JV agreement providing the joint and several liability with respect to the contract.

**32.1 Standard form and amount of Performance Security acceptable to the Procuring Entity:**

The Contractor shall provide Performance Security to the Procuring Entity in the prescribed form. The said Security shall be furnished or caused to be furnished by the Contractor within 28 days after the receipt of the Letter of Acceptance.

The Performance Security shall be of an amount equal to 10% of the Contract Price stated in the Letter of Acceptance.

Such Security shall be in the form of either (a) bank guarantee from any Scheduled Bank in Pakistan or (b) bank guarantee from a bank located outside Pakistan duly counter-guaranteed by a Schedule Bank in Pakistan.

**TABLE - I**

<b>S. No:</b>	<b>Types of Organization</b>	<b>Minimum requirement of Auditors</b>	<b>Basis of Preparation of Audit Reports</b>	<b>Basis of Preparation of Financial Statements</b>
1.	Corporate entities (duly registered with Securities and Exchange Commission of Pakistan)	Licensed Chartered Accountant Firms (Minimum Partnership Firm with international affiliation) enlisted and appearing on the list of firms in ICAP directory as at the finalization of procurement.	International auditing standards as applicable in Pakistan	(i) Companies Ordinance 1984 or Companies Act 2017 (whichever is applicable). (ii) International accounting and financial reporting standards as applicable in Pakistan at the time of issuance of the reports.
2.	Partnership Firm / AOPs / Joint Ventures.	Licensed Chartered Accountant Firms (Minimum Partnership Firm) enlisted and appearing on the list of firms in ICAP directory as at the finalization of procurement.		International accounting and financial reporting standards as applicable in Pakistan at the time of issuance of the reports.
3.	Individuals / Sole Proprietorship	Licensed Cost & Management Accountant Firms enlisted and appearing on the list of firms in ICMAP directory as at the finalization of procurement for organization of net worth up-to Rs. 10 million only. In all other cases, Licensed Chartered Accountant Firms enlisted and appearing on the list of firms in ICAP directory as at the finalization of procurement.		Consistent and acceptable Accounting policies.

**LETTERS OF TECHNICAL BID / PRICE BID,  
AND  
APPENDICES TO BID**

LETTER OF TECHNICAL BID

Date: .....

**Bid Reference No:** Construction of Jabba Dam  
District Khyber

Main Dam & Coffer Dam, Spillway  
& Access Bridge, Diversion Tunnel,  
Intake Tower & Access Bridge, MS  
Delivery Pipe from Dam to Diversion  
Tunnel Outlet, Access Road and  
Irrigation Colony, Chowkidar Hut &  
Other Buildings

To

The Director General,  
Jabba Dam, District Khyber  
Govt of KP, Irrigation Department,  
Peshawar.

We, the undersigned, declare that:

- (a) We have examined and have no reservations to the Bidding Documents, including Addenda issued in accordance with Instructions to Bidders (IB) 9;
- (b) We offer to execute and complete in conformity with the Bidding Documents the following Works:
- (c) Our Bid consisting of the Technical Bid and the Price Bid shall be valid for a period of **182 days** from the date fixed for the bid submission deadline in accordance with the Bidding Documents, and it shall remain binding upon us and may be accepted at any time before the expiration of that period;
- (d) As security for due performance of the under takings and obligations of our bid, we submit here with a Bid security, in the amount specified in Bidding Data Sheet, which is valid (at least) 28 days beyond validity of Bid itself.
- (e) We are not participating, as a Bidder or as a subcontractor, in more than one bid in this bidding process, other than alternative offers submitted in accordance with IB16 (as applicable).

- (f) We agree to permit Procuring Entity or its representative to inspect our accounts and records and other documents relating to the bid submission and to have them audited by auditors. This permission is extended for verification of any information provided in our Technical Bid which comprises all documents enclosed herewith in accordance with IB.11.1 of the Bidding Data Sheet.

Name .....

In the capacity of .....

Signed .....

.....

Duly authorized to sign the Bid for and on behalf of .....

Date .....

Address.....

**LETTER OF PRICE BID**

**Date:** .....

**Bid Reference No:..** Construction of Jabba Dam  
District Khyber

Main Dam & Coffor Dam, Spillway  
& Access Bridge, Diversion Tunnel,  
Intake Tower & Access Bridge, MS  
Delivery Pipe from Dam to Diversion  
Tunnel Outlet, Access Road and  
Irrigation Colony, Chowkidar Hut &  
Other Buildings

To

The Director General,  
Jabba Dam, District Khyber  
Govt of KP, Irrigation Department,  
Peshawar.

We, the undersigned, declare that:

- (a) We have examined the Bidding Documents including Instructions to Bidders, Bidding Data, and Conditions of Contract. Specifications, Drawings, Bill of Quantities and Addenda for the execution of the above-named Works and have no reservations to the Bidding Documents, including Addenda issued in accordance with Instructions to Bidders (IB) 9.
- (b) We offer to execute and complete such Works and remedy any defects therein in conformity with the Conditions of Contract, Specifications, Drawings, Bill of Quantities and Addenda for the sum of Rs. \_\_\_\_\_ (Rupees \_\_\_\_\_) or such other sum as may be ascertained in accordance with the said conditions.
- (c) We understand that all the Appendices attached hereto form part of this Bid.
- (d) We undertake, if our Bid is accepted, to obtain a performance security in accordance with the Bidding Documents, Commence the Works and to Complete the whole of the Works comprised in the Contract within the time stated in Appendix-A to Bid

- (e) We agree to abide by this Bid for the period of **182 days** from the date fixed for the bid submission deadline in accordance with the Bidding Documents and it shall remain binding upon us and may be accepted at any time before the expiration of that period.
- (f) Unless and until a formal Agreement is prepared and executed, this Bid, together with your written acceptance thereof, shall constitute a binding contract between us.
- (g) We do hereby declare that the Bid is made without any collusion, comparison of figures or arrangement with any other bidder for the Works.
- (h) We understand that you are not bound to accept the lowest or any Bid you may receive.

Dated this \_\_\_\_\_ day of \_\_\_\_\_ 20\_\_\_\_\_

Signature: \_\_\_\_\_

in the capacity of \_\_\_\_\_ duly authorized to sign Bids for and on behalf of

\_\_\_\_\_  
(Name of Bidder in Block Capitals) (CNIC #)

\_\_\_\_\_  
(Seal)

Address: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Witness:

Signature: \_\_\_\_\_

Name: \_\_\_\_\_

CNIC # \_\_\_\_\_

Address. \_\_\_\_\_  
\_\_\_\_\_

Occupation \_\_\_\_\_

## **APPENDICES TO BID**

**SPECIAL STIPULATIONS**  
**Clause**  
**Conditions of Contract**

1.	Engineer's Authority to issue Variation in emergency	2.1	2% of the Contract Price stated in the Letter of Acceptance.
2.	Amount of Performance Security	10.1	10% of Contract Price stated in the Letter of Acceptance.
3.	Time for Furnishing Programme	14.1	Within 42 days from the date of receipt of Letter of Acceptance.
4.	Minimum amount of Third-Party Insurance	23.2	Rs. 1.0 million per occurrence with number of occurrences unlimited.
5.	Time for Commencement	41.1	Within 14 days from the date of receipt of Engineer's Notice to Commence which shall be issued within fourteen (14) days after signing of Contract Agreement
6.	Time for Completion	43.1, 48.2	<b>1187 days</b> from the date of receipt of Engineer's Notice to Commence.
7.	a) Amount of Liquidated Damages	47.1	Rs. 0.05 % of the Contract price for each day of delay in completion of the Works subject to a maximum of 10% of Contract Price stated in the Letter of Acceptance.
	b) Amount of Bonus	47.3	Not Applicable
8.	Defects Liability Period	49.1	<b>365 days</b> from the effective date of Taking Over Certificate.
9.	Percentage of Retention Money	60.2	10 % of the amount of Interim Payment Certificate.
10.	Limit of Retention Money	60.2	8 % of Contract Price stated in the Letter of Acceptance.
11.	Minimum amount of Interim Payment Certificates (Running Bills)	60.2	<b>Rs. 180 million</b>
12.	Time of Payment from delivery of Engineer's Interim Payment Certificate to the Procuring Entity.	60.10	<b>28 days</b> (subject to appearance of Contractor's name on Active Tax Payers list of FBR).
13.	Mobilization Advance (Interest free)	60.12	<b>10 %</b> of Contract Price stated in the Letter of Acceptance

FOREIGN CURRENCY REQUIREMENTS

**NOT APPLICABLE**

**PRICE ADJUSTMENT UNDER CLAUSE 70 OF CONDITIONS OF CONTRACT**

The source of indices and the weightages or coefficients for use in the adjustment formula under Clause 70 shall be as follows:

<b>Cost Element</b>	<b>Description</b>	<b>Weightages</b>	<b>Applicable index</b>
1	2	3	4
(i)	Fixed Portion	0.45	
(ii)	Local Labour (Skilled & Unskilled) <i>With unskilled as representative items.</i>	0.25	Government of Pakistan (GoP) Federal Bureau of Statistics (FBS) Monthly Statistical Bulletin.
(iii)	Cement – <b>in bags.</b> <i>Portland cement shall be considered representative items for all types of cement.</i>	0.07	Government of Pakistan (GoP) Federal Bureau of Statistics (FBS) Monthly Statistical Bulletin.
(iv)	Reinforcing Steel - <b>in tons.</b> <i>½" diameter round bar is the representative item for all types of steel to be used in this project.</i>	0.10	Government of Pakistan (GoP) Federal Bureau of Statistics (FBS) Monthly Statistical Bulletin.
(v)	High Speed Diesel (HSD) – <b>in Liter</b>	0.13	Government of Pakistan (GoP) Federal Bureau of Statistics (FBS) Monthly Statistical Bulletin.
<b>Total</b>		<b>1.00</b>	

**Notes:**

- 1) Indices for “(ii) to (iv)” shall be taken from the Government of Pakistan Federal Bureau of Statistics, Monthly Statistical Bulletin for the nearest city of the project area.
- 2) The base prices of specified materials shall be those applying 28 days prior to the latest day for submission of bids (inclusive of all kinds of taxes and duties that can be levied at the source) and shall be obtained from the respective sources and to be verified and notified by the Engineer after the Consent of the Procuring Entity.
- 3) The Current price are meant to be ex-factory prices (inclusive of all kinds of taxes and duties that can be levied at the source) 28 days prior to submitted date of IPC. (Price adjustment shall be processed month-wise).
- 4) Any fluctuation in the indices or prices of materials other than those given above shall not be subject to adjustment of the Contract Price.
- 5) Except Labour & POL, if any other adjustable item(s) is not used in the particular billing period, then the ratio of the current date price and the base date price for this particular adjustable item(s) shall be considered as one.
- 6) Value of work done for price adjustment purpose shall be the value of permanent works, excluding bill for day works & provisional sums (if any).

## **BILL OF QUANTITIES**

### **A. Preamble**

1. The Bill of Quantities shall be read in conjunction with the Conditions of Contract, Specifications and Drawings.
2. The quantities given in the Bill of Quantities are estimated and provisional, and are given to provide a common basis for bidding. The basis of payment will be the actual quantities of work executed and measured by the Contractor and verified by the Engineer / Engineer's representative and valued at the rates and prices entered in the priced Bill of Quantities, where applicable, and otherwise at such rates and prices as the Engineer may fix in accordance with provisions of the Contract.
3. The rates and prices, resulting from the bidders quoted **SINGLE PERCENTAGE RATE**, with two digits after the decimal point, "**ABOVE / BELOW / AT PAR**" of the Engineer's Estimated Cost on Market Rate System – 2022, 2<sup>nd</sup> Bi-Annual and Non-MRS Items as well, shall, except insofar as it is otherwise provided under the Contract include all costs of Contractor's plant, labour, supervision, materials, execution, insurance, profit, taxes and duties, together with all general risks, liabilities and obligations set out or implied in the Contract. Furthermore, all duties, taxes and other levies payable by the Contractor under the Contract, or for any other cause, as on the date 28 days prior to deadline for submission of Bids, shall be included in the offered percentage's "**ABOVE / BELOW / AT PAR**" of the Engineer's Estimated Rates and Prices and the Total Bid Price, by the Bidder.
4. The whole cost of complying with the provisions of the Contract shall be included in the items provided in the priced Bill of Quantities, and where no items are provided, the cost shall be deemed to be distributed among the rates and prices entered for the related items of the Works.
5. General directions and description of work and materials are not necessarily repeated nor summarised in the Bill of Quantities. References to the relevant sections of the Bidding Documents shall be made before entering prices against each item in the priced Bill of Quantities.
6. Works, under the terms set out in the daywork schedule and at the rates & prices affixed thereto, shall be expended in whole or in part at the direction, discretion and written order of the Engineer/Engineer representative in accordance with Sub-Clause 52.4 of Part-I, General Conditions of Contract.
7. ***The Single Percentage Rate with two digits after the decimal point, "Above / Below / At Par" must be quoted in figures as well as in words; Quoting more than two digits after the decimal point shall not be considered for evaluation.***

**BILL OF QUANTITIES**

**SUMMARY**

Bill No's	Description of Bills / Works	Amount in Million (PKR)
B1	Main Dam & Cofferdam	2854.74
B2	Spillway & Access Bridge	2048.92
B3	Diversion Tunnel	793.83
B4	Intake Tower & Access Bridge	77.98
B5	Delivery Pipe (From Dam To Tunnel Outlet)	172.63
B6	Access Road	184.39
B7	Irrigation Colony, Chowkidar Hut & Other Buildings	102.49
<b>Engineer's Estimated Cost</b>		<b>6234.972</b>

1. We offer \_\_\_\_\_ % **Above / Below /At Par** (In words: \_\_\_\_\_) on the above Engineer's Estimated cost.
  
2. All Daywork Items are to be expended in whole or, in part at the direction and discretion of the Engineer/Engineer representative in accordance with Sub-Clauses 52.4 of the General Conditions of Contract Part-I.
  
3. Any other items(s) cropped up during execution of the project will be payable on prevailing Market Rate System (MRS) 2022, 2<sup>nd</sup> Bi-Annual.

**BILL OF QUANTITIES**

**B. Work Items**

1. The Bill of Quantities contains the following Bills and Schedule:
2. Bidders shall price the Bill of Quantities in Pakistani Rupees only.

**JABBA DAM, DISTRICT KHYBER**

**BILL OF QUANTITIES**

**GENERAL ABSTRACT OF COST**

Identification (ID) No.	Description	Total Amount (PKR)
<b>WORKS ITEMS</b>		
1	MAIN DAM & COFFER DAM	2854.74
2	SPILLWAY & ACCESS BRIDGE	2048.92
3	DIVERSION TUNNEL	793.83
4	INTAKE TOWER & ACCESS BRIDGE	77.98
5	DELIVERY PIPE (FROM DAM TO TUNNEL OUTLET)	172.63
6	ACCESS ROAD	184.39
7	IRRIGATION COLONY, CHOWKIDAR HUT & OTHER BUILDINGS	102.49
<b>GRAND TOTAL (PKR)</b>		<b>6234.972 Million</b>

**BILL OF QUANTITIES**  
**(ATTACHED ONLINE COMPUTER GENERATED BOQ)**

<b>JABBA DAM, DISTRICT KHYBER</b>				
<b>BILL OF QUANTITIES (AS PER MRS 2022 2<sup>nd</sup> BI-ANNUAL)</b>				
<b>ID NO.</b>	<b>BILL NO.</b>	<b>WORKS ITEMS</b>	<b>TOTAL AMOUNT (RS)</b>	<b>TOTAL AMOUNT (RS) IN MILLION</b>
1	1.	MAIN DAM & COFFER DAM	2,492,591,446	2854.74
2	2.	SPILLWAY & ACCESS BRIDGE	1,675,356,728	2048.92
3	3.	DIVERSION TUNNEL	680,673,877	793.83
4	4.	INTAKE TOWER & ACCESS BRIDGE	168,765,004	77.98
5	5.	DELIVERY PIPE (FROM DAM TO TUNNEL OUTLET)	973,595,389	172.63
6	6.	ACCESS ROAD	155,213,553	184.39
7	7.	IRRIGATION COLONY, CHOWKIDAR HUT & OTHER BUILDINGS	72,232,877	102.49
		<b>TOTAL</b>	<b>6,225,608,244</b>	<b>6234.972</b>

JABBA DAM, DISTRICT KHYBER						
BILL OF QUANTITIES (AS PER MRS 2022 2 <sup>nd</sup> BI-ANNUAL)						
ID # 1	MAIN DAM & COFFER DAM					
BILL # 1 - MAIN DAM & COFFER DAM						
Item	MRS 2022 Ref:	Description	Unit	Quantity	Rate (Rs)	Amount (Rs)
1-1	NS	Care, handling, controlling water, maintaining all work areas free of water regardless of source, including bailing out of surface, sub-surface and standing water	LS	-	32,500,000	32,500,000
1-2	06-05-i	Plain Cement Concrete including placing, compacting, finishing & curing (Ratio 1:4:8)	m <sup>3</sup>	12,300.00	9,237.44	113,620,512
1-3	06-05-f	Plain Cement Concrete including placing, compacting, finishing & curing (Ratio 1:2:4)	m <sup>3</sup>	2,700.00	12,745.86	34,413,822
1-4	03-73	Provide, place and compact impervious clay core in dam embankment of specified grading, permeability i/c leveling dressing and haulage* obtaining 95% modified AASHTO dry density i/c 1.5 KM lead (For cavities filling)	m <sup>3</sup>	75,243.00	531.68	40,005,198 *
1-4.1	03-20-c	Transportation of earth all types for every 500m extra lead beyond 1.5 km. upto 8 km.	m <sup>3</sup>	75,243.00	35.17	2,646,296
1-4.1.1	03-20-c	Transportation of earth all types for every 500m extra lead beyond 1.5 km. upto 8 km.	m <sup>3</sup>	75,243.00	35.17	2,646,296
1-4.1.2	03-20-c	Transportation of earth all types for every 500m extra lead beyond 1.5 km. upto 8 km.	m <sup>3</sup>	75,243.00	35.17	2,646,296
1-4.1.3	03-20-c	Transportation of earth all types for every 500m extra lead beyond 1.5 km. upto 8 km.	m <sup>3</sup>	75,243.00	35.17	2,646,296
1-4.1.4	03-20-c	Transportation of earth all types for every 500m extra lead beyond 1.5 km. upto 8 km.	m <sup>3</sup>	75,243.00	35.17	2,646,296
1-4.1.5	03-20-c	Transportation of earth all types for every 500m extra lead beyond 1.5 km. upto 8 km.	m <sup>3</sup>	75,243.00	35.17	2,646,296

JABBA DAM, DISTRICT KHYBER						
BILL OF QUANTITIES (AS PER MRS 2022 2 <sup>nd</sup> BI-ANNUAL)						
ID # 1	MAIN DAM & COFFER DAM					
BILL # 1 - MAIN DAM & COFFER DAM						
Item	MRS 2022 Ref:	Description	Unit	Quantity	Rate (Rs)	Amount (Rs)
1-4.1.6	03-20-c	Transportation of earth all types for every 500m extra lead beyond 1.5 km. upto 8 km.	m <sup>3</sup>	75,243.00	35.17	2,646,296
1-4.1.7	03-20-c	Transportation of earth all types for every 500m extra lead beyond 1.5 km. upto 8 km.	m <sup>3</sup>	75,243.00	35.17	2,646,296
1-4.1.8	03-20-c	Transportation of earth all types for every 500m extra lead beyond 1.5 km. upto 8 km.	m <sup>3</sup>	75,243.00	35.17	2,646,296
1-4.1.9	03-20-c	Transportation of earth all types for every 500m extra lead beyond 1.5 km. upto 8 km.	m <sup>3</sup>	75,243.00	35.17	2,646,296
1-4.1.10	03-20-c	Transportation of earth all types for every 500m extra lead beyond 1.5 km. upto*8 km.	m <sup>3</sup>	75,243.00	35.17	2,646,296 *
1-4.1.11	03-20-c	Transportation of earth all types for every 500m extra lead beyond 1.5 km. upto 8 km.	m <sup>3</sup>	75,243.00	35.17	2,646,296
1-4.1.12	03-20-c	Transportation of earth all types for every 500m extra lead beyond 1.5 km. upto 8 km.	m <sup>3</sup>	75,243.00	35.17	2,646,296
1-4.2	03-20-d	Transportation of earth all types for every 1 km extra lead or part thereof beyond 8 km.	m <sup>3</sup>	75,243.00	24.62	1,852,483
1-4.2.1	03-20-d	Transportation of earth all types for every 1 km extra lead or part thereof beyond 8 km.	m <sup>3</sup>	75,243.00	24.62	1,852,483
1-4.2.2	03-20-d	Transportation of earth all types for every 1 km extra lead or part thereof beyond 8 km.	m <sup>3</sup>	75,243.00	24.62	1,852,483
1-4.2.3	03-20-d	Transportation of earth all types for every 1 km extra lead or part thereof beyond 8 km.	m <sup>3</sup>	75,243.00	24.62	1,852,483
1-4.2.4	03-20-d	Transportation of earth all types for every 1 km extra lead or part thereof beyond 8 km.	m <sup>3</sup>	75,243.00	24.62	1,852,483
1-4.2.5	03-20-d	Transportation of earth all types for every 1 km extra lead or part thereof beyond 8 km.	m <sup>3</sup>	75,243.00	24.62	1,852,483
1-4.2.6	03-20-d	Transportation of earth all types	m <sup>3</sup>	75,243.00	24.62	1,852,483

JABBA DAM, DISTRICT KHYBER						
BILL OF QUANTITIES (AS PER MRS 2022 2 <sup>nd</sup> BI-ANNUAL)						
ID # 1	MAIN DAM & COFFER DAM					
BILL # 1 - MAIN DAM & COFFER DAM						
Item	MRS 2022 Ref:	Description	Unit	Quantity	Rate (Rs)	Amount (Rs)
		for every 1 km extra lead or part thereof beyond 8 km.				
1-5	25-42	Providing and fixing barbed wire (12 Guage) fencing consisting of 1.5"x1.5"x3/16" angle iron post 3.25 ft long, 5 to 6 ft centre to	m	6,000.00	1,014.00	6,084,000
1-6	03-66-a	Roadway Excavation in Surplus / Unsuitable Common Material	m <sup>3</sup>	15,000.00	444.75	6,671,250
1-7	03-66-b	Roadway Excavation in Surplus / Unsuitable Rock (Hard) Material requiring blasting.	m <sup>3</sup>	25,000.00	818.70	20,467,500
1-8	03-66-c	Roadway Excavation in Surplus / Unsuitable Rock (Medium) Material requiring blasting	m <sup>3</sup>	23,000.00	712.86	16,395,780
1-9	03-67-c	Structural backfill using Common Material available at site.	m <sup>3</sup>	15,000.00	413.21	6,198,150 *
1-10	03-29-a	Compaction of earth with power road roller 95% to 100% max. mod. AASHTO dry density	m <sup>3</sup>	15,000.00	297.89	4,468,350
1-11	03-28-a	Mixing & moistening of earthwork to OMC in layers for compaction etc. complete	m <sup>3</sup>	15,000.00	32.92	493,800
1-12	03-67-c	Structural backfill using Common Material available at site.(Retaining wall outer face)	m <sup>3</sup>	7,500.00	413.21	3,099,075
1-13	06-05-i	Plain Cement Concrete including placing, compacting, finishing & curing (Ratio 1:4:8)	m <sup>3</sup>	2,800.00	9,237.44	25,864,832
1-14	06-44-a	PCC 1:3:6 in mass concrete less formwork using 50% boulders	m <sup>3</sup>	6,750.00	7,083.39	47,812,883
1-15	06-46-b	Erection and removal of Form work with Wood Surface Finishing for RCC or Plain cement Concrete in any shape - Position / Vertical	m <sup>2</sup>	840.00	710.56	596,870
1-16	06-07-a-03	RCC in roof slab, beam, column & other structural members, insitu or precast. (1:2:4)	m <sup>3</sup>	1,200.00	14,653.95	17,584,740

JABBA DAM, DISTRICT KHYBER						
BILL OF QUANTITIES (AS PER MRS 2022 2 <sup>nd</sup> BI-ANNUAL)						
ID # 1	MAIN DAM & COFFER DAM					
BILL # 1 - MAIN DAM & COFFER DAM						
Item	MRS 2022 Ref:	Description	Unit	Quantity	Rate (Rs)	Amount (Rs)
1-17	06-08-c	Supply & fabricate M.S. reinforcement for cement concrete (Hot rolled deformed bars Grade 40)	Tonne	40.00	291,590.41	11,663,616
1-18	16-29-a-iii	Reinforced Concrete Pipe Culvert (AASHTO M-170) Dia: 460mm	m	80.00	3,336.34	266,907
1-19	16-29-b-i	Reinforced Concrete Pipe Culvert (AASHTO M-170) Dia: 610mm	m	65.00	4,558.83	296,324
1-20	16-29-c-i	Reinforced Concrete Pipe Culvert (AASHTO M-170) Dia: 760mm	m	58.00	6,614.80	383,658
1-21	16-29-d-i	Reinforced Concrete Pipe Culvert (AASHTO M-170) Dia: 910mm	m	60.00	11,023.19	661,391
1-22	16-29-e-i	Reinforced Concrete Pipe Culvert (AASHTO M-170) Dia: 1070mm	m	40.00	11,324.01	452,960
1-23	16-31	Concrete Class B in Bedding and Encasement of Concrete Pipe Culvert	m <sup>3</sup>	350.00	14,477.78	5,067,223
<b>Core Trench</b>						
1-24	03-78-d	Excavation for core trench of Dam Embankment/ Spillway/Intake & Outlet Structure and Irrigation System upto design depth in Hard Rock requiring 75% blasting i/c removing of material from outside of the structure area lead upto 1.5 KM	m <sup>3</sup>	36,151.87	1,176.71	42,540,262
1-24.1	03-62	Clearing and Grubbing by mechanical means	m <sup>2</sup>	43,150.69	19.05	822,021

JABBA DAM, DISTRICT KHYBER						
BILL OF QUANTITIES (AS PER MRS 2022 2 <sup>nd</sup> BI-ANNUAL)						
ID # 1	MAIN DAM & COFFER DAM					
BILL # 1 - MAIN DAM & COFFER DAM						
Item	MRS 2022 Ref:	Description	Unit	Quantity	Rate (Rs)	Amount (Rs)
1-25	03-78-a	Excavation for core trench of Dam Embankment/ Spillway/Intake & Outlet Structure and Irrigation System upto a minimum depth of 35 ft in shingle gravel including removing of excavated material by machinery in 1.5 KM radius	m <sup>3</sup>	42,129.81	301.99	12,722,780
<b>Zone-1: Clay Core</b>						
1-26	03-73	Provide, place and compact impervious clay core in dam embankment of specified grading, permeability i/c leveling dressing and haulage obtaining 95% modified AASHTO dry density i/c 1.5 KM lead	m <sup>3</sup>	425,804.93	531.68	226,391,967
1-26.1	03-20-c	Transportation of earth all types for every 500m extra lead beyond 1.5 km. upto 8 km.	m <sup>3</sup>	385,804.93	35.17	13,568,760
1-26.1.1	03-20-c	Transportation of earth all types for every 500m extra lead beyond 1.5 km. upto 8 km.	m <sup>3</sup>	385,804.93	35.17	13,568,760
1-26.1.2	03-20-c	Transportation of earth all types for every 500m extra lead beyond 1.5 km. upto 8 km.	m <sup>3</sup>	385,804.93	35.17	13,568,760
1-26.1.3	03-20-c	Transportation of earth all types for every 500m extra lead beyond 1.5 km. upto 8 km.	m <sup>3</sup>	385,804.93	35.17	13,568,760
1-26.1.4	03-20-c	Transportation of earth all types for every 500m extra lead beyond 1.5 km. upto 8 km.	m <sup>3</sup>	385,804.93	35.17	13,568,760
1-26.1.5	03-20-c	Transportation of earth all types for every 500m extra lead beyond 1.5 km. upto 8 km.	m <sup>3</sup>	385,804.93	35.17	13,568,760
1-26.1.6	03-20-c	Transportation of earth all types for every 500m extra lead beyond 1.5 km. upto 8 km.	m <sup>3</sup>	385,804.93	35.17	13,568,760

JABBA DAM, DISTRICT KHYBER						
BILL OF QUANTITIES (AS PER MRS 2022 2 <sup>nd</sup> BI-ANNUAL)						
ID # 1	MAIN DAM & COFFER DAM					
BILL # 1 - MAIN DAM & COFFER DAM						
Item	MRS 2022 Ref:	Description	Unit	Quantity	Rate (Rs)	Amount (Rs)
1-26.1.7	03-20-c	Transportation of earth all types for every 500m extra lead beyond 1.5 km. upto 8 km.	m <sup>3</sup>	385,804.93	35.17	13,568,760
1-26.1.8	03-20-c	Transportation of earth all types for every 500m extra lead beyond 1.5 km. upto 8 km.	m <sup>3</sup>	385,804.93	35.17	13,568,760
1-26.1.9	03-20-c	Transportation of earth all types for every 500m extra lead beyond 1.5 km. upto 8 km.	m <sup>3</sup>	385,804.93	35.17	13,568,760
1-26.1.10	03-20-c	Transportation of earth all types for every 500m extra lead beyond 1.5 km. upto 8 km.	m <sup>3</sup>	385,804.93	35.17	13,568,760
1-26.1.11	03-20-c	Transportation of earth all types for every 500m extra lead beyond 1.5 km. upto 8 km. *	m <sup>3</sup>	385,804.93	35.17	13,568,760
1-26.1.12	03-20-c	Transportation of earth all types for every 500m extra lead beyond 1.5 km. upto 8 km.	m <sup>3</sup>	385,804.93	35.17	13,568,760
1-26.2	03-20-d	Transportation of earth all types for every 1 km extra lead or part thereof beyond 8 km.	m <sup>3</sup>	385,804.93	24.62	9,498,517
1-26.2.1	03-20-d	Transportation of earth all types for every 1 km extra lead or part thereof beyond 8 km.	m <sup>3</sup>	385,804.93	24.62	9,498,517
1-26.2.2	03-20-d	Transportation of earth all types for every 1 km extra lead or part thereof beyond 8 km.	m <sup>3</sup>	385,804.93	24.62	9,498,517
1-26.2.3	03-20-d	Transportation of earth all types for every 1 km extra lead or part thereof beyond 8 km.	m <sup>3</sup>	385,804.93	24.62	9,498,517
1-26.2.4	03-20-d	Transportation of earth all types for every 1 km extra lead or part thereof beyond 8 km.	m <sup>3</sup>	385,804.93	24.62	9,498,517
1-26.2.5	03-20-d	Transportation of earth all types for every 1 km extra lead or part thereof beyond 8 km.	m <sup>3</sup>	385,804.93	24.62	9,498,517

JABBA DAM, DISTRICT KHYBER						
BILL OF QUANTITIES (AS PER MRS 2022 2 <sup>nd</sup> BI-ANNUAL)						
ID # 1	MAIN DAM & COFFER DAM					
BILL # 1 - MAIN DAM & COFFER DAM						
Item	MRS 2022 Ref:	Description	Unit	Quantity	Rate (Rs)	Amount (Rs)
1-26.2.6	03-20-d	Transportation of earth all types for every 1 km extra lead or part thereof beyond 8 km.	m <sup>3</sup>	385,804.93	24.62	9,498,517
<b>Zone-2A: Fine Filter</b>						
1-27	03-75	Provide , Place & compact Fine Filter in chimney drain vertical / horizontal on downstream of clay core (both upstream and downstream)	m <sup>3</sup>	43,683.87	1,947.81	85,087,872
<b>Zone-2B: Coarse Filter</b>						
1-28	03-76	Provide , Place & compact Coarse Filter (well graded gravel) in chimney drain vertical / horizontal on downstream of fine filter i/c leveling, moistening etc. (upstream, downstream and in horizontal layer)	m <sup>3</sup>	104,193.05	1,301.60	135,617,675 *
<b>(Zone-3A): Overburden / Excavated Fines</b>						
1-29	03-74	Provide , Place & compact shoulder material (sandy / silty gravel) in Dam Embankment, of specified grading, leveling/ dressing i/c haulage for obtaining of 95% modified AASHTO dry density. Zone 3A (Cofferdam core zone).	m <sup>3</sup>	34,528.10	452.39	15,620,166
1-29.1	03-20-c	Transportation of earth all types for every 500m extra lead beyond 1.5 km. upto 8 km.	m <sup>3</sup>	34,528.10	35.17	1,214,353
1-29.2	03-20-c	Transportation of earth all types for every 500m extra lead beyond 1.5 km. upto 8 km.	m <sup>3</sup>	34,528.10	35.17	1,214,353

JABBA DAM, DISTRICT KHYBER						
BILL OF QUANTITIES (AS PER MRS 2022 2 <sup>nd</sup> BI-ANNUAL)						
ID # 1	MAIN DAM & COFFER DAM					
BILL # 1 - MAIN DAM & COFFER DAM						
Item	MRS 2022 Ref:	Description	Unit	Quantity	Rate (Rs)	Amount (Rs)
1-29.3	03-20-c	Transportation of earth all types for every 500m extra lead beyond 1.5 km. upto 8 km.	m <sup>3</sup>	34,528.10	35.17	1,214,353
1-29.4	03-20-c	Transportation of earth all types for every 500m extra lead beyond 1.5 km. upto 8 km.	m <sup>3</sup>	34,528.10	35.17	1,214,353
1-29.5	03-20-c	Transportation of earth all types for every 500m extra lead beyond 1.5 km. upto 8 km.	m <sup>3</sup>	34,528.10	35.17	1,214,353
1-29.6	03-20-c	Transportation of earth all types for every 500m extra lead beyond 1.5 km. upto 8 km.	m <sup>3</sup>	34,528.10	35.17	1,214,353
1-29.7	03-20-c	Transportation of earth all types for every 500m extra lead beyond 1.5 km. upto*8 km.	m <sup>3</sup>	34,528.10	35.17	1,214,353 *
1-30	03-28-a	Mixing & moistening of earthwork to OMC in layers for compaction etc. complete	m <sup>3</sup>	79,200.00	32.92	2,607,264
1-31	03-29-a	Compaction of earth with power road roller 95% to 100% max. mod. AASHTO dry density	m <sup>3</sup>	79,200.00	297.89	23,592,888
Zone-3B: Rock fill						
1-32	03-74	Provide , Place & compact shoulder material (sandy / silty gravel) in Dam Embankment, of specified grading, leveling/ dressing i/c haulage for obtaining of 95% modified AASHTO dry density.	m <sup>3</sup>	138,322.60	452.39	62,575,762
1-32.1	03-20-c	Transportation of earth all types for every 500m extra lead beyond 1.5 km. upto 8 km.	m <sup>3</sup>	138,322.60	35.17	4,864,806
1-32.2	03-20-c	Transportation of earth all types for every 500m extra lead beyond 1.5 km. upto 8 km.	m <sup>3</sup>	138,322.60	35.17	4,864,806

JABBA DAM, DISTRICT KHYBER						
BILL OF QUANTITIES (AS PER MRS 2022 2 <sup>nd</sup> BI-ANNUAL)						
ID # 1	MAIN DAM & COFFER DAM					
BILL # 1 - MAIN DAM & COFFER DAM						
Item	MRS 2022 Ref:	Description	Unit	Quantity	Rate (Rs)	Amount (Rs)
1-32.3	03-20-c	Transportation of earth all types for every 500m extra lead beyond 1.5 km. upto 8 km.	m <sup>3</sup>	138,322.60	35.17	4,864,806
1-32.4	03-20-c	Transportation of earth all types for every 500m extra lead beyond 1.5 km. upto 8 km.	m <sup>3</sup>	138,322.60	35.17	4,864,806
1-32.5	03-20-c	Transportation of earth all types for every 500m extra lead beyond 1.5 km. upto 8 km.	m <sup>3</sup>	138,322.60	35.17	4,864,806
1-32.6	03-20-c	Transportation of earth all types for every 500m extra lead beyond 1.5 km. upto 8 km.	m <sup>3</sup>	138,322.60	35.17	4,864,806
1-32.7	03-20-c	Transportation of earth all types for every 500m extra lead beyond 1.5 km. upto 8 km.	m <sup>3</sup>	138,322.60	35.17	4,864,806
1-33	03-28-a	Mixing & moistening of earthwork to OMC in layers for compaction etc complete	m <sup>3</sup>	1,244,903.42	32.92	40,982,220
1-34	03-29-a	Compaction of earth with power road roller 95% to 100% max. mod. AASHTO dry density	m <sup>3</sup>	1,244,903.42	297.89	370,844,279
1-35	03-20-a	Transportation of earth all types beyond 250 m and upto 500 m.	m <sup>3</sup>	825,000.00	249.73	206,027,250
Geomembrane/Geotextile						
1-36	NS	Provide & place 2 mm thick Geomembrane beneath upstream shoulder of the dam and upstream face of the Cofferdam	m <sup>2</sup>	50.00	920.00	46,000
1-37	NS	Provide & place 2 mm thick Geotextile beneath upstream shoulder of the dam and upstream face of the Cofferdam	m <sup>2</sup>	70.00	977.50	68,425
Rip Rap material						
1-38	19-28-a	Providing and Laying stone pitching for top layer only : On slope (Rip Rap on u/s)	m <sup>3</sup>	8,668.17	4,751.94	41,190,644

JABBA DAM, DISTRICT KHYBER						
BILL OF QUANTITIES (AS PER MRS 2022 2 <sup>nd</sup> BI-ANNUAL)						
ID # 1	MAIN DAM & COFFER DAM					
BILL # 1 - MAIN DAM & COFFER DAM						
Item	MRS 2022 Ref:	Description	Unit	Quantity	Rate (Rs)	Amount (Rs)
1-39	NS	Providing and Laying stone pitching for top layer only : On slope (Rip Rap on u/s)(Labour only)	m <sup>3</sup>	17,336.35	2,980.94	51,678,684
1-40	19-29-a	Providing and Laying stone or spawl filling : On slope	m <sup>3</sup>	4,335.76	2,434.23	10,554,232
1-41	NS	Providing and Laying stone pitching for top layer only : On slope (Rip Rap on d/s)(Labour only)	m <sup>3</sup>	17,129.40	2,980.94	51,061,791
Toe Drain						
1-42	19-31-a	Grouting stone pitching or apron etc., in : Cement, sand mortar (1:3)	m <sup>2</sup>	701.93	1,296.15	909,807
1-43	19-28-a	Providing and Laying stone pitching for top layer only : On slope	m <sup>3</sup>	532.63	4,751.94	2,531,031
1-44	19-28-b	Providing and Laying stone pitching for top layer only : On level	m <sup>3</sup>	2,617.19	4,048.47	10,595,599

<b>Upstream Wave wall</b>						
1-45	06-07-d-03	Reinforced cement concrete work as in dams, spillways, weirs, barrages, cross drainage works and other hydraulic structures using crushed stone aggregate(screening & washing) and coarse sand i/c cost of all labour and material and all kinds of form works, moulds, shuttering lifting/pumping, curing, rendering and finishing the exposed surface, cast in situ/precast excluding the cost of steel reinforcement and labour for bending binding also excluding cost of additives which have to be paid	m <sup>3</sup>	360.21	14,280.23	5,143,924
1-46	06-08-b	Supply & fabricate M.S. reinforcement for cement concrete (Hot rolled deformed bars Grade 60)	Tonne	28.27	303,740.41	8,588,078
1-47	24-16-c-08	Providing, laying, cutting, jointing, testing and disinfecting GI pipeline in trenches, with socket joint, using GI pipes of EN 10255 - 2004 (Approved Light quality ) including specials etc. Complete as per specifications 3" Nominal Pipe Size (NPS)	m	334.66	3,213.29	1,075,366
1-48	14-144-c	Supplying and Fixing UPVC soil waste and vent pipe class B : 3" dia	m	300.00	1,669.48	500,844
1-49	NS	Supply & mixing additives in concrete as per direction of Engineer	Litres	561.93	130.00	73,051
<b>Downstream Railing</b>						
1-50	16-16	Providing and fixing GI pipe railing (3 feet high)	m /3 row	241.74	7,326.23	1,771,043

1-51	06-07-d-03	Reinforced cement concrete work as in dams, spillways, weirs, barrages, cross drainage works and other hydraulic structures using crushed stone aggregate(screening & washing) and coarse sand i/c cost of all labour and material and all kinds of form works, moulds, shuttering lifting/pumping, curing, rendering and finishing the exposed surface, cast in situ/precast excluding the cost of steel reinforcement and labour for bending binding also excluding cost of additives	m <sup>3</sup>	44.88	14,280.23	640,897
1-52	06-08-b	Supply & fabricate M.S. reinforcement for cement concrete (Hot rolled deformed bars Grade 60)	Tonne	3.59	303,740.41	1,091,504
1-53	14-144-c	Supplying and Fixing UPVC soil waste and vent pipe class B : 3" dia	m	300.00	1,669.48	500,844
1-54	NS	Supply & mixing additives in concrete as per direction of Engineer	Litres	70.01	130.00	9,102
<b>Light Poles</b>						
1-55	15-40-b-03	Providing street light poles of 40 ft height without arms including fixing complete.	Each	20.00	54,324.23	1,086,485
1-56	15-34	Supply and Fixing dust & weather proof street light fitting with reflector, 400W mercury vapour lamp etc comp.	Each	20.00	2,541.60	50,832
1-57	NS	Electrical accessories	PS	-		1,000,000
<b>Dam Instrumentation</b>						
1-58	NS	Providing and Installation of 3 No. Stand Pipe Casagrande Piezometers	No	3.00	81,000.00	243,000
1-59	NS	Providing and Installation of 15 No. Vibrating Wire Piezometers in all respects as Directed by Engineer In charge (instrumentation)	No	15.00	162,000.00	2,430,000

1-60	NS	Cables for Vibrating Wire Piezometers	m	3,000.00	810.00	2,430,000
1-61	NS	Data Readout Device for Piezometers	No	2.00	67,500.00	135,000
1-62	NS	Miscellaneous Items including Provisions for Automated Data Acquisition System (SCADA)	PS	-	1,890,000	1,890,000
1-63	NS	Inclinometer with spider magnets at intervals	No.	3.00	135,000	405,000
1-64	NS	Surface Markers for observation of Settlement (instrumentation)	No	9.00	20,250.00	182,250
<b>Road on Dam crest</b>						
1-65	16-14-b	Asphaltic Wearing Course (Asphalt Batch Plant Hot Mixed)	m <sup>3</sup>	81.77	27,649.44	5,425,816
1-66	16-05-b	Water Bound Macadam Base Course	m <sup>3</sup>	234.63	3,257.94	764,410
1-67	16-04-a	Granular Sub Base Course using Pit Run Gravel	m <sup>3</sup>	317.58	1,704.76	541,398
<b>Instrumentation House</b>						
<b>FOUNDATION</b>						
1-68	03-25-b	Excavation in foundation of building, bridges etc. complete : in ordinary soil	m <sup>3</sup>	14.12	312.82	4,417
1-69	03-24	Dressing of earthwork (done by machinery or otherwise & left undressed) to designed Section	m <sup>2</sup>	18.54	14.47	268
1-70	06-05-i	Plain Cement Concrete including placing, compacting, finishing & curing (Ratio 1:4:8)	m <sup>3</sup>	2.16	9,237.44	19,937

1-71	06-07-d-03	Reinforced cement concrete work as in dams, spillways, weirs, barrages, cross drainage works and other hydraulic structures using crushed stone aggregate(screening & washing) and coarse sand i/c cost of all labour and material and all kinds of form works, moulds, shuttering lifting/pumping, curing, rendering and finishing the exposed surface, cast in situ/precast excluding the cost of steel reinforcement and labour for bending binding also excluding cost of additives which have to be paid separately. (1:2:4)	m <sup>3</sup>	5.76	14,280.23	82,188
1-72	06-08-c	Supply & fabricate M.S. reinforcement for cement concrete (Hot rolled deformed bars Grade 40)	Tonne	0.15	291,590.41	43,755
1-73	06-46-b	Erecting & removing formwork to concrete in any shape / position (Vertical)	m <sup>2</sup>	5.62	710.56	3,996
1-74	07-04-a-05	1st class brick work in foundation and plinth in Cement, sand mortar 1:6	m <sup>3</sup>	3.33	12,982.95	43,214
1-75	03-18-a	Filling, watering and ramming earth under floor with surplus earth from foundation, etc	m <sup>3</sup>	5.59	105.24	588
1-76	NS	Supply & mixing Additives in concrete as per direction of Engineer Incharge	Litres	8.98	100.00	898
<b>DAMP PROOF COURSE</b>						
1-77	06-26-a-01	Damp proof course of cem. conc. 1:2:4 including bitumen coat, 1 layer polythene & 1 coat bitumen (1.5" thick)	sq m	6.90	1,065.33	7,352
<b>RCC IN SUPER STRUCTURE</b>						
1-78	06-07-a-03	RCC in roof slab, beam, column & other structural members, insitu or precast. (1:2:4)	m <sup>3</sup>	8.19	14,653.95	120,072
1-79	06-08-c	Supply & fabricate M.S. reinforcement for cement concrete (Hot rolled deformed bars Grade 40)	Tonne	0.67	291,590.41	194,418

<b>BRICK WORK IN SUPER STRUCTURE</b>						
1-80	07-04-a-05	1st class brick work in foundation and plinth in Cement, sand mortar 1:6	m <sup>3</sup>	22.04	12,982.95	286,162
<b>FLOORING</b>						
1-81	07-30	Supplying and filling sand under floor or plugging in wells	m <sup>3</sup>	1.70	1,571.12	2,669
1-82	06-05-i	Plain Cement Concrete including placing, compacting, finishing & curing (Ratio 1:4:8)	m <sup>3</sup>	2.27	9,237.44	20,923
1-83	06-05-f	Plain Cement Concrete including placing, compacting, finishing & curing (Ratio 1:2:4)	m <sup>3</sup>	1.13	12,745.86	14,435
1-84	10-26-b-ii	Provide & lay marble fine dressed stone flooring on surface in white cement complete: 0.5" thick 12 x 12 Sunny White Marble	m <sup>2</sup>	22.31	1,876.67	41,865
<b>SURFACE RENDERING</b>						
1-85	11-11-b	Cement plaster 1:5, upto 20' height 1/2" thick	sq m	51.49	397.72	20,480
<b>DOOR / WINDOWS</b>						
1-86	12-48-a	Fixing Door including chowkats	Each	5.00	423.80	2,119
1-87	12-65-d-03	Supply and Fixing aluminum door/window, Sliding Door Deluxe model (1.60 mm gauge) 3" section	m <sup>2</sup>	11.90	11,829.40	140,742
<b>ROOFING</b>						
1-88	09-06	Single layer of tiles 12"x6"x2" laid over 4" earth and 1" mud plaster on top of RC roof slab	m <sup>2</sup>	40.00	1,624.09	64,960
1-89	09-13	2 coats of bitumen laid hot using 34 lbs. for %sft over roof & blinded with sand at 1 cft per % sft	m <sup>2</sup>	40.00	395.02	15,800

<b>CUT OFF TRENCH</b>						
1-90	NS	Excavation for cut off walls of 1.0 m width by mechanical equipment in riverbed (overburden and bed rock) of all kinds, including construction of guide wall from EGL to specified depth, trench stabilization by circulation of bentonite slurry, including pouring of Plastic Concrete or, Cement-Bentonite (CB) slurry, complete in all respect with all leads and lifts in accordance with the drawings and specification or as directed by the Engineer.	m <sup>2</sup> (Length x Depth)	2,980.00	45,883.07	136,731,542
<b>GROUTING</b>						
1-91	NS	Core drilling in soil and rock for primary, secondary and tertiary holes for grouting by NX size bits with double tube core barrel using rotary machine, dia 76mm	m	44,525.00	7,200.00	320,580,000
1-92	NS	Cement slurry for grouting	Bag	67,394.40	1,050.00	70,764,120
1-93	NS	Cement bentonite slurry for grouting	Bag	44,929.60	960.00	43,132,416
1-94	NS	Injection & Mixing of Cement slurry, cement bentonite slurry, Cement Sand slurry for Grouting using pumping	Bag	112,324.00	420.00	47,176,080
1-95	03-48	Supplying clean and screened river or pit sand within 150m including removal of loose earth or overburden. (cement sand grouting)	m <sup>3</sup>	592.00	151.74	89,830
1-96	NS	Water Pressure Tests in each borehole at a depth interval of 3 to 5 m	Nos	1,312.00	7,200.00	9,446,400
<b>GEOTECHNICAL INVESTIGATION</b>						

1-97	28-27-a	Drilling approximately 75 mm dia. holes by calyx or any other rotary process (except diamond drilling) through overburden providing black steel or suitable casing pipe, using casing shoe bit, vertical or inclined upto 10 degrees to vertical as directed including cost of all materials, machinery, labour, water charges, reaming, collection of wash samples/disturbed samples at suitable intervals, logging and labelling, supplying wooden core box, fixing casing pipes etc. complete. from depth (0 to 50 m), excluding cost of mobilization & demobilization.	m	100.00	11,785.68	1,178,568
1-98	28-27-e	Drilling by diamond drilling, holes of minimum 75 mm dia. vertical or at specified inclination using diamond core drilling bit, double barrel tube in masonry, concrete or rock including cost of all materials, machinery, labour, water, collection of core samples, logging & labelling samples, supplying wooden core box and re-drilling in case of collapse of sides etc. complete. excluding cost of mobilization & demobilization. (For depth beyond 50 m and inclined at 0° to 10° vertically downward)	m	1,400.00	17,746.68	24,845,352
1-99	NS	Standard Penetration Tests (SPT) in borehole along with collection of samples at every 1.0-1.5 m depth interval, labeling, packing, storage and transportation to the laboratory. In gravelly soil, cone head (CPT) shall be used	No	100.00	2,000.00	200,000
1-100	NS	Water pressure tests in boreholes in rock at interval of 3-5m depth	No	50.00	7,200.00	360,000

1-101	NS	Permeability tests in overburden/ river bed materials by constant/ variable head method.	No	50.00	7,200.00	360,000
<b>Sub-Total for Bill No. 1</b>						<b>2,813,918,711</b>
<b>Add 2% Area factor on MRS-2022 Scheduled items i.e., Rs 2,041,014,953</b>						<b>40,820,299</b>
<b>Total for Bill No. 1 (with area factor)</b>						<b>2,854,739,010</b>
<i>Note: Any other items cropped up during execution will be paid on MRS 2022 2<sup>nd</sup> Bi-Annual including contractor premium</i>						

**JABBA DAM, DISTRICT KHYBER**

**BILL OF QUANTITIES (AS PER MRS 2022 2<sup>nd</sup> BI-ANNUAL)**

**ID # 2 SPILLWAY & ACCESS BRIDGE**

**BILL # 2A - SPILLWAY**

<b>Item</b>	<b>MRS 2022 Ref:</b>	<b>Description</b>	<b>Unit</b>	<b>Quantity</b>	<b>Rate (Rs)</b>	<b>Amount (Rs)</b>
2-1	03-78-b	Excavation for core trench of Dam Embankment/ Spillway/Intake & Outlet Structure and Irrigation System upto design depth in Soft Rock/Shale requiring 20% blasting i/c removing of material from outside of the structure area lead upto 1.5 KM	m <sup>3</sup>	230,844.21	469.91	108,476,005
2-2	03-78-c	Excavation for core trench of Dam Embankment/ Spillway/Intake & Outlet Structure and Irrigation System upto design depth in Medium Hard Rock requiring 50% blasting i/c removing of material from outside of the structure area lead upto 1.5 KM	m <sup>3</sup>	1,022,769.50	704.54	720,582,024
2-3	03-78-a	Excavation for core trench of Dam Embankment/Spillway/Intake & Outlet Structure and Irrigation System upto a minimum depth of 35 ft in shingle gravel including removing of excavated material by machinery in 1.5 KM radius	m <sup>3</sup>	112,958.40	251.66	28,427,111
2-4	06-05-c	Plain Cement Concrete including placing, compacting, finishing & curing (Ratio 1:1.5:3)	m <sup>3</sup>	235.62	10,657.07	2,511,019
2-5	06-45-a	PCC 1:4:8 in mass concrete less formwork using 50% boulders	m <sup>3</sup>	2,120.00	4,696.40	9,956,368
2-6	06-46-a	Erection and removal of Form work with Wood Surface Finishing for RCC or Plain cement Concrete in any shape - Position / Horizontal	m <sup>2</sup>	2,000.00	614.09	1,228,180

2-7	06-22	Providing and fixing 6" wide GI sheet 18 SWG. stopper to expansion joint.	m	1,064.89	307.51	327,464
2-8	NS	Joint sealant (Ultra Bitumastic Sealant)	m	362.44	430.00	155,851
2-9	24-09-b-02	Providing and installing PVC Strainer BSS Class "C" of approved make \ quality in tube well bore hole, including socket, special sockets, studs etc. complete as per specification:-8" Nominal Pipe Size (NPS) (250 mm)	m	831.64	3,348.13	2,784,446
2-10	03-76	Provide, Place & compact Coarse Filter (well graded gravel) in chimney drain vertical / horizontal on downstream of fine filter i/c leveling, moistening etc	m <sup>3</sup>	61.66	1,207.83	74,470
2-11	24-12-b-01	Providing and installing PVC blind pipe BSS Class "C" in Tube Well Bore Hole including Sockets and Solvents and jointing with strainer etc. complete : 6" Nominal Pipe Size (NPS) (150 mm)	m	216.00	2,496.91	539,333
2-12	03-67-c	Structural backfill using Common Material available at site.	m <sup>3</sup>	3,849.13	397.25	1,529,065
2-13	03-34-a	Filling and Compacting Soil, Earth and Boulders behind retaining walls (Available material)	m <sup>3</sup>	8,695.85	296.78	2,580,756
2-14	06-08-b	Supply & fabricate M.S. reinforcement for cement concrete (Hot rolled deformed bars Grade 60)	Tonne	1,400.00	242,684.09	339,757,726

2-15	06-07-d-01	Reinforced cement concrete work as in dams, spillways, weirs, barrages, cross drainage works and other hydraulic structures using crushed stone aggregate(screening & washing) and coarse sand i/c cost of all labour and material and all kinds of form works, moulds, shuttering lifting/pumping, curing, rendering and finishing the exposed surface, cast in situ/precast excluding the cost of steel reinforcement and labour for bending binding also excluding cost of additives which have to be paid separately. (1:1:2) (Spillway Bed)	m <sup>3</sup>	11,185.03	14,410.59	161,182,839
2-16	06-07-d-02	Reinforced cement concrete work as in dams, spillways, weirs, barrages, cross drainage works and other hydraulic structures using crushed stone aggregate(screening & washing) and coarse sand i/c cost of all labour and material and all kinds of form works, moulds, shuttering lifting/pumping, curing, rendering and finishing the exposed surface, cast in situ/precast excluding the cost of steel reinforcement and	m <sup>3</sup>	3,451.23	12,035.14	41,536,075
2-17	NS	Fully cement grouted Grade-60 rock bolt 150 KN - 200 KN including cleaning, scaling, drilling, grouting, all accessories and testing etc. dia 25mm, 6m long. (Surface)	No.	6,000.00	4,501.00	27,006,000
2-18	NS	Supply and install welded steel mesh of 4.5 mm diameter and 200 mm x 200 mm opening size (1.54 kg /sqm, as per specs., for shotcrete reinforcement)	Tonne	51.80	250,000.00	12,950,000

2-19	06-06	Shotcrete (100 mm) thickness, grade B-25 as per specifications. (as per direction of the Engineer)	m <sup>3</sup>	3,500.00	12,801.51	44,805,285
2-20	24-86	Installation of Anchor Bars in spill way & Dam Embankment by using No. 11 bar (11' length) including 3" dia borehole along with cement slurry bentonite.	m	7,038.00	3,583.66	25,221,799
2-21	NS	Drilling of drain holes of 50 mm dia and 5 m long as directed by Engineer	No.	5,000.00	4,500.00	22,500,000
2-22	08-17	Provide and laying Dry Stone Pitching complete in all respect	m <sup>2</sup>	537.00	808.69	434,267
2-23	19-31-a	Grouting stone pitching or apron etc., in Cement, sand mortar (1:3)	m <sup>2</sup>	3,637.61	982.11	3,572,533
2-24	24-40	Supplying and Fixing PVC Water Stopper 8" wide 3/8" thick. Providing and fixing PVC water stopper 8" wide 3/8" thick in vertical (Wall/Column) or horizontal (Floor/Slab) expansion joint including cutting and jointing complete in all respects.	m	200.00	561.81	112,362
2-25	NS	Supply & mixing additives in concrete as per direction of Engineer	Litres	9,345.00	100.00	934,500
2-26	06-44-a	PCC 1:3:6 in mass concrete less formwork using 50% boulders	m <sup>3</sup>	12,420.30	5,340.52	66,330,882
2-27	06-05-f	Plain Cement Concrete including placing, compacting, finishing & curing (Ratio 1:2:4)	m <sup>3</sup>	119.63	9,299.67	1,112,506
2-28	06-05-i	Plain Cement Concrete including placing, compacting, finishing & curing (Ratio 1:4:8)	m <sup>3</sup>	21.10	7,002.53	147,724

2-29	06-46-a	Erection and removal of Form work with Wood Surface Finishing for RCC or Plain cement Concrete in any shape - Position / Horizontal	m <sup>2</sup>	2,000.00	614.09	1,228,180
2-30	NS	Erecting & removing formwork to concrete in any shape / position (Horizontal) (Labour only)	m <sup>2</sup>	4,120.00	182.30	751,076
<b>Sub-Total for Bill No. 2A</b>						<b>1,991,554,793</b>
<b>Add 2% Area factor on MRS-2022 Scheduled items i.e., Rs. 1,913,462,801</b>						<b>38,269,256</b>
<b>Total for Bill No. 2A (with area factor)</b>						<b>2,029,824,050</b>
<b>BILL # 2B - ACCESS BRIDGE</b>						
2-31	06-07-d-01	Reinforced cement concrete work as in dams, spillways, weirs, barrages, cross drainage works and other hydraulic structures using crushed stone aggregate(screening & washing) and coarse sand i/c cost of all labour and material and all kinds of form works, moulds, shuttering lifting/pumping, curing, rendering and finishing the exposed surface, cast in situ/precast excluding the cost of steel reinforcement and labour for bending binding also excluding cost of additives which have to be paid separately. (1:1:2)	m <sup>3</sup>	187.63	14,410.59	2,703,809
2-32	06-07-a-03	RCC in roof slab, beam, column & other structural members, insitu or precast. (1:2:4)	m <sup>3</sup>	36.54	11,062.45	404,182
2-33	06-48-g	Class D2 concrete for concrete in pre-stressed & post tensioned with minimum cylinder compressive strength 6045 psi on 28 days and consistency range in slump 50-100 mm with water cement	m <sup>3</sup>	115.11	15,962.91	1,837,528

		ratio 0.40				
2-34	06-08-b	Supply & fabricate M.S. reinforcement for cement concrete (Hot rolled deformed bars Grade 60)	Tonne	26.40	242,684.09	6,405,691
2-35	16-38-a	Supply and Fixing Neoprene Bearing Pad as per specs & design	cm <sup>3</sup>	153,000.0	4.09	625,770
2-36	16-85-a	Supply of High Tensile Prestressed concrete steel wire strand Grade 270K 0.5" dia. Packed in standard reeless/weldless coils of two 2000 kgs approximately binded and wrapped in Hessian Cloth.	Tonne	0.62	350,597.19	218,071
2-37	16-83-f	Jack Anchorage For 5 to 7 Wires 0.5" Strand (Comprising Trumpet, Stressing Block & Wedges Complete)	Each	60.00	5,519.31	331,159
2-38	16-86-f	Galvanized Sheath for 5 to 7 Wires 0.5" Strand Cable	m	802.26	516.34	414,239
2-39	16-84-j	Stressing and Grouting for Cable below 13/0.5" (Single End Stressing).	Each	30.00	2,682.34	80,470
2-40	16-40	Supply and Fixing stressing anchorages for high tensile steel wire cables in precast girders	Set	60.00	967.16	58,030
2-41	16-41	Launching girders in place, including lifting & handling if any	m	164.10	2,953.84	484,725
2-42	16-53	Cut off projecting wire ends of cables & make good anchorage recess with 1:2:4 cem. conc.	Each	60.00	807.48	48,449
2-43	16-54	Supply and place in position MS expansion joint assemblies as specified & as per drawing	kg	1,229.31	264.80	325,521
2-44	16-55	Supply and place in position galvanised steel 3" dia drain scuppers in deck slab as per specs/drwg	Each	37.00	538.93	19,940
2-45	16-14-b	Asphaltic Wearing Course (Asphalt Batch Plant Hot	m <sup>3</sup>	31.80	22,800.78	725,065

		Mixed)				
2-46	16-57	Supply and Fixing polystrene fill in expansion joints & under diaphragms at transoms.	m <sup>3</sup>	1.04	3,617.32	3,776
2-47	16-65	Providing and Laying PVC pipe (b) 8" dia in footpath of bridge for utilities.	m	109.40	2,075.16	227,023
2-48	NS	Supply & mixing Additives in concrete as per direction of Engineer Incharge	Liters	1,000.00	100.00	100,000
<b>Sub-Total for Bill No. 2B</b>						<b>18,720,528</b>
<b>Add 2% Area factor on MRS-2022 Scheduled items i.e., Rs. 18,590,528</b>						<b>371,811</b>
<b>Total for Bill No. 2B (with area factor)</b>						<b>19,092,339</b>
<b>Total for Bill No. 2 (with area factor)</b>						<b>2,048,916,388</b>
<i>Note: Any other items cropped up during execution will be paid on MRS 2022 2<sup>nd</sup> Bi-Annual including contractor premium</i>						

**JABBA DAM, DISTRICT KHYBER**

**BILL OF QUANTITIES (AS PER MRS 2022 2<sup>nd</sup> BI-ANNUAL)**

**ID # 3 DIVERSION TUNNEL**

**BILL # 3 - DIVERSION TUNNEL**

Item	MRS 2022 Ref:	Description	Unit	Quantity	Rate (Rs)	Amount (Rs)
3-1	NS	Care and Handling of water during construction	LS	-		550,000
3-2	03-78-b	Excavation for core trench of Dam Embankment/ Spillway/Intake & Outlet Structure and Irrigation System upto design depth in Soft Rock/Shale requiring 20% blasting i/c removing of material from outside of the structure area lead upto 1.5 KM	m <sup>3</sup>	7,322.95	469.91	3,441,128
3-3	03-78-c	Excavation for core trench of Dam Embankment/ Spillway/Intake & Outlet Structure and Irrigation System upto design depth in Medium Hard Rock requiring 50% blasting i/c removing of material from outside of the structure area lead upto 1.5 KM	m <sup>3</sup>	17,086.89	704.54	12,038,396
3-4	03-78-a	Excavation for core trench of Dam Embankment/ Spillway/Intake & Outlet Structure and Irrigation System upto a minimum depth of 35 ft in shingle gravel including removing of excavated material by machinery in 1.5 KM radius	m <sup>3</sup>	2,600.00	251.66	654,316
3-5	NS	Underground excavation in Rock Type A & B including scalping & disposal of muck, any lead/lift to designated area outside the tunnel including proper ventilation after each blast inside the tunnel as directed by the Engineer	m <sup>3</sup>	1,452.21	5,767.50	8,375,621
3-6	NS	Underground excavation in Rock Type C including scalping disposal of muck, any lead/lift to designated area outside tunnel including proper ventilation after each blast inside tunnel as directed by the Engineer	m <sup>3</sup>	3,388.49	6,343.75	21,495,733
3-7	NS	Underground excavation in Rock Type D including scalping disposal of muck, any lead/lift to designated area outside tunnel including proper ventilation after each blast inside tunnel as directed by the Engineer	m <sup>3</sup>	16,700.00	6,500.00	108,550,000

Item	MRS 2022 Ref:	Description	Unit	Quantity	Rate (Rs)	Amount (Rs)
3-8	NS	Underground excavation in Rock Type E including scalping disposal of muck, any lead/lift to designated area outside tunnel including proper ventilation after each blast inside tunnel as directed by the Engineer	m <sup>3</sup>	19,300.00	6,977.50	134,665,750
3-9	16-52-b	Rock SN-Bolts (Grouted Bolts) 25mm dia - 3 m in length including fixing and strengthening etc.	No.	530.00	2,795.07	1,481,387
3-10	16-52-c	Rock SN-Bolts (Grouted Bolts) 25mm dia - 4 m in length including fixing and strengthening etc.	No.	4,270.00	3,655.66	15,609,668
3-11	16-52-d	Rock SN-Bolts (Grouted Bolts) 25mm dia -5 m in length including fixing and strengthening etc.	No.	5,308.00	4,516.27	23,972,361
3-12	NS	Supply and install 25 mm rock bolts (6 m length) complete with pieces of pipe, plate, washers all accessories and grouting, all directions, including of holes, untensioned. Rock bolt with Resin cartridge Grade-60.	No.	3,028.00	4,501.22	13,629,694
3-13	NS	Supply and fix Lattice Girder for rock support, incl. blocking, lagging on all sides, and M.S. bracings, as per specs.	Tonne	180.00	240,000.00	43,200,000
3-14	NS	Supply and install welded steel mesh of 4.5 mm diameter and 200 mm x 200 mm opening size (1.54 kg /sqm, as per specs., for shotcrete reinforcement)	Tonne	32.00	250,000.00	8,000,000
3-15	06-06	Shotcrete (100 mm) thickness, grade B-25 as per specifications	m <sup>3</sup>	4,690.00	12,801.51	60,039,082
3-16	NS	Drilling of drain holes of 50 mm dia and 5 m long in roof of tunnel and portal slopes	No.	603.20	2,500.00	1,508,000
3-17	NS	Tunnel outlet portal steel Gate installation	LS	1.00	400,000.00	400,000
3-18	06-45-a	PCC 1:4:8 in mass concrete less formwork using 50% boulders	m <sup>3</sup>	130.00	4,696.40	610,532
3-19	06-05-c	Plain Cement Concrete including placing, compacting, finishing & curing (Ratio 1:1.5:3) (Tunnel Lining/plugging)	m <sup>3</sup>	5,280.04	10,657.07	56,269,735

3-20	06-46-b	Erection and removal of Form work with Wood Surface Finishing for RCC or Plain cement Concrete in any shape - Position / Vertical	m <sup>2</sup>	3,410.60	640.23	2,183,568
3-21	NS	Erection and removal of Form work with Wood Surface Finishing for RCC or Plain cement Concrete in any shape - Position / Vertical (Labour only)	m <sup>2</sup>	6,821.20	371.74	2,535,713
3-22	06-07-d-03	Reinforced cement concrete work as in dams, spillways, weirs, barrages, cross drainage works and other hydraulic structures using crushed stone aggregate(screening & washing) and coarse sand i/c cost of all labour and material and all kinds of form works, moulds, shuttering lifting/pumping, curing, rendering and finishing the exposed surface, cast in situ/precast excluding the cost of steel reinforcement and labour for bending binding also excluding cost of additives which have to be paid separately. (1:2:4)	m <sup>3</sup>	200.00	10,677.74	2,135,548
3-23	06-08-b	Supply & fabricate M.S. reinforcement for cement concrete (Hot rolled deformed bars Grade 60)	Tonne	19.63	242,684.09	4,762,675
3-24	NS	Supply & mixing Additives in concrete as per direction of Engineer Incharge	Litres	2,300.00	100.00	230,000
3-25	NS	Drilling of Consolidation/Contact Grout holes (length 10 m) using rotary machine having 76 mm diameter as per site condition.	m	19,000.00	5,000.00	95,000,000
3-26	NS	Cement grouting if required as per site condition.	Bag	53,020.00	750.00	39,765,000
3-27	NS	Injection & Mixing of Cement & water for Grouting using pumping if required as per site condition.	Bag	53,020.00	300.00	15,906,000
<b>Sub-Total for Bill No. 3</b>						<b>789,279,707</b>
<b>Add 2% Area factor on MRS-2022 Scheduled items i.e., Rs. 227,545,624</b>						<b>4,550,912</b>
<b>Total for Bill No. 3 (with area factor)</b>						<b>793,830,620</b>
<i>Note:- Any other items cropped up during execution will be paid on MRS 2022 2<sup>nd</sup> Bi-Annual including contractor premium</i>						

**JABBA DAM, DISTRICT KHYBER**

**BILL OF QUANTITIES (AS PER MRS 2022 2<sup>nd</sup> BI-ANNUAL)**

**ID # 4 INTAKE TOWER & ACCESS BRIDGE**

**BILL # 4A - INTAKE TOWER**

Item	MRS 2022 Ref:	Description	Unit	Quantity	Rate (Rs)	Amount (Rs)
4-1	03-78-c	Excavation for core trench of Dam Embankment/ Spillway/Intake & Outlet Structure and Irrigation System upto design depth in Medium Hard Rock requiring 50% blasting i/c removing of material from outside of the structure area lead upto 1.5 KM	m <sup>3</sup>	2,884.00	818.50	2,360,554
4-2	03-78-b	Excavation for core trench of Dam Embankment/ Spillway/Intake & Outlet Structure and Irrigation System upto design depth in Soft Rock/Shale requiring 20% blasting i/c removing of material from outside of the structure area lead upto 1.5 KM	m <sup>3</sup>	4,326.00	553.11	2,392,754
4-3	06-05-h	Plain Cement Concrete including placing, compacting, finishing & curing (Ratio 1:3:6)	m <sup>3</sup>	11.35	10,465.39	118,782
4-4	06-07-d-02	Reinforced cement concrete work as in dams, spillways, weirs, barrages, cross drainage works and other hydraulic structures using crushed stone aggregate (screening & washing) and coarse sand i/c cost of all labour and material and all kinds of form works, moulds, shuttering lifting/pumping, curing, rendering and finishing the exposed surface, cast in situ/precast excluding the cost of steel reinforcement and labour for bending binding also excluding cost of additives which have to be paid separately. (1:1.5:3)	m <sup>3</sup>	665.75	16,353.38	10,887,263

Item	MRS 2022 Ref:	Description	Unit	Quantity	Rate (Rs)	Amount (Rs)
4-5	NS	Supply & mixing Additives in concrete as per direction of Engineer Incharge	Liters	1,038.57	100.00	103,857
4-6	06-08-b	Supply & fabricate M.S. reinforcement for cement concrete (Hot rolled deformed bars Grade 60)	Tonne	78.39	303,740.41	23,810,837
4-7	NS	Anchors providing in the foundation of Intake tower including drilling and grouting	No	49.00	6,500.00	318,500
4-8	16-16	Providing and fixing GI pipe railing (3 feet high)	m /3row	21.00	7,326.23	153,851
4-9	06-06	Shotcrete (100 mm) thickness, grade B-25 as per specifications	m <sup>3</sup>	75.00	16,499.18	1,237,439
4-10	06-08-a	Supply & fabricate M.S. reinforcement for cement concrete (Plain bars)	Tonne	0.50	218,690.41	109,345
<b>Mechanical Works - Gate Equipment's</b>						
4-11	NS	Design, manufacture, sand blasting, painting, transportation to site, installation, testing and commissioning of vertical lift slide gate of size (1300mm x 1300mm), complete with bronze seals and all accessories.	No.	1.00	282,107.19	282,107
4-12	NS	Embedded Metal Parts along with all Fixture (1st stage and 2nd Stage, sill beams, gate guides and breast wall angles etc) according to Drawings/specifications.	Set	1.00	1,353,300.00	1,353,300
4-13	NS	Design (including shop drawings), manufacture, painting, transportation to site, installation, testing and commissioning of manually operated (with provision of electrical operation) stem rod type hoisting system, complete in all respect. Manual lifting speed shall not be less than three inch per minute.	Set	1.00	747,500.00	747,500

Item	MRS 2022 Ref:	Description	Unit	Quantity	Rate (Rs)	Amount (Rs)
4-14	NS	Design & drawing, material fabrication, sand blasting, painting, transportation to site, corrosion protection (hot dip galvanizing of steel grating), welding, installation of Galvanized Steel 6mm thick and 32mm deep strip with side angles 8mm thick, Grill Platform / Hoist ,Girders, embedded plates, Anchors Deck of size 6.5m x 6.5m including hand railing as per drawings/ specifications. Complete in all respect.	Set	1.00	1,144,000.00	1,144,000
4-15	NS	Steel bucket of size 0.6m x 1m designed to carry load up to 200kg along with steel wire slings of adequate capacity adequate.	No.	1.00	84,500.00	84,500
4-16	NS	Design (including shop drawings), manufacturing corrosion protection (hot dip galvanizing), transportation to site, installation, testing and commissioning of carbon steel trash racks for clear opening span of 2 m and height of 39 m along with 1st stage and 2nd stage embedded metal parts complete in all respects and as per drawings/ specifications.	Set	1.00	5,686,889.00	5,686,889
4-17	06-07-a-01	RCC in roof slab, beam, column & other structural members, insitu or precast. (1:1:2)	m <sup>3</sup>	8.33	20,355.11	169,574
4-18	06-08-b	Supply & fabricate M.S. reinforcement for cement concrete (Hot rolled deformed bars Grade 60)	Tonne	0.78	303,740.41	238,364
4-19	NS	Providing, fixing, corrosion protection, transportation of angle iron 2"x2"x1/4" for stoplogs	Tonne	2.58	266,970.60	687,749
4-20	NS	Lifting beam for handling of stoplogs panels along with steel wire slings of adequate capacity.	Set	1.00	689,000.00	689,000

Item	MRS 2022 Ref:	Description	Unit	Quantity	Rate (Rs)	Amount (Rs)
4-21	NS	Stoplog handling trolley of steel of adequate capacity designed to manually carry one stoplog panel at a time from intake tower to storage area on dam crest.	No.	1.00	448,500.00	448,500
4-22	NS	Design (including shop drawings), manufacture, sand blasting, painting, transportation to site, installation of 1st stage and 2nd stage embedded metal parts for future stoplogs having clear span of 2.0m and height of 41 m.	Set	1.00	1,353,300.00	1,353,300
4-23	NS	Provide and install a carbon steel air vent pipe of diameter 150 mm and 41m long to be installed in 1m dia. delivery pipe at downstream wall of the intake tower after intake slide gate. The Pipe shall be painted and have 180 degree bend at top with wire mesh at outer end.	No.	1.00	546,000.00	546,000
4-24	NS	Electrically operated, under running single girder gantry crane of 5 tonne capacity provided to be fixed on a concrete gantry structure at intake tower deck as per drawing and specifications. The scope of supply shall include all electrical auxiliary equipment and shall be complete in all respects. Lifting height is about 48m.	No.	1.00	1,430,000.00	1,430,000
<b>Sub-Total for Bill No. 4A</b>						<b>56,353,965</b>
<b>Add 2% Area factor on MRS-2022 Scheduled items i.e., Rs. 41,478,762</b>						<b>829,575</b>
<b>Total for Bill No. 4A (with area factor)</b>						<b>57,183,540</b>

Item	MRS 2022 Ref:	Description	Unit	Quantity	Rate (Rs)	Amount (Rs)
<b>BILL # 4B - ACCESS BRIDGE</b>						
4-25	NS	Provide and install steel work for access bridge (approx; 27m in length) including Parallel Flanged C- Sections, H-Beams, Angles, Base Plates, welding, nuts and bolts and installation and lifting / launching, painting (complete job in all respects as per drawings and specifications and as directed by the Engineer Incharge).	kg	67,500.00	308.04	20,792,903
<b>Sub-Total for Bill No. 4B</b>						<b>20,792,903</b>
<b>Add 2% Area factor on MRS-2022 Scheduled items</b>						<b>-</b>
<b>Total for Bill No. 4B (with area factor)</b>						<b>20,792,903</b>
<b>Total for Bill No. 4 (with area factor)</b>						<b>77,976,443</b>
<b>Note: -</b>	<i>Any other items cropped up during execution will be paid on MRS 2022 2<sup>nd</sup> Bi-Annual including contractor premium</i>					

JABBA DAM, DISTRICT KHYBER						
BILL OF QUANTITIES (AS PER MRS 2022 2 <sup>nd</sup> BI-ANNUAL)						
ID # 5 DELIVERY PIPE						
BILL # 5 - DELIVERY PIPE						
Item	MRS 2022 Ref:	Description	Unit	Quantity	Rate (Rs)	Amount (Rs)
5-1	NS	Underground excavation in Rock Type C ,including scalping disposal of muck, any lead/lift to designated area outside tunnel including proper ventilation after each blast inside tunnel as directed by the Engineer	m <sup>3</sup>	313.00	6,419.88	2,009,421
5-2	06-05-i	Plain Cement Concrete including placing, compacting, finishing & curing (Ratio 1:4:8)	m <sup>3</sup>	77.65	9,237.44	717,287
5-3	NS	Manufacturing, supplying, laying in position, aligning, jointing, testing and commissioning of electric resistance welded / submerged arc welded mild steel (A-36) delivery pipes of 1000mm diameter and specified plate thickness with flanged ends wherever required and provided with 1 coat of 70 micron thick zinc rich epoxy primer paint and 3 coats of coal-tar epoxy paint, with each coat of 150 micron thickness for outer surface and 1 coat of 70 micron thick zinc rich epoxy primer paint for inner surface including cost of all materials, machinery, labour, cutting, bending, welding, finishing, painting, conveying to spot, lowering, aligning, jointing, arranging water for hydraulic testing at fabrication site and after laying and jointing at specified test pressure, Radiographic testing of welded joints , complete as per specifications and approved drawings with any lead and lifts.	Tonne	311.22	485,456.16	151,084,101
5-4	NS	Time of Flight Diffraction (TOFD) Test of total welded joints as per relevant ASTM E2373/E2373M-19 standards and specifications.	m	1,134.31	766.67	869,640
5-5	NS	Provide, Installing, Commissioning and testing of Mechanical accessories of air vent including access pipe, air and	Nos	3.00	202,500.00	607,500

		vacuum valve, open-close valve etc as specified and indicated on drawings & directions of Engr. Incharge				
5-6	NS	Providing and fixing cast iron special of BSS class " 'B', 'C', 'D' " (such as bend, tee, cross collar, reducer, tail piece, flanged spigot, cap, flanged socket, taper, angle branch, plug, etc.) for stainless steel pipe line, complete.(b) stainless steel Flanged special with flanged joints. 3" to 6" i/d.	kg	167.17	485.10	81,096
5-7	NS	Valves and necessary accessories	LS	-	14,009,446.44	14,009,446
5-8	NS	Providing, installation, testing and commissioning of Stainless steel Penstock Valve (for 900 mm dia opening) along with SS operating rod and Stainless steel operating spindle fixed in concrete slabs as per drawings and specifications	Nos	2.00	1,526,262.75	3,052,526
5-9	<p><b>"Mild Steel Pipes</b>  Providing, laying, fixing, testing and commissioning of M.S pipe (API 5L Grade B) including specials, disinfection and two coats of yellow enamel paint over two coats of red lead oxide primer as per drawings and specifications. The rate will include cutting, making and fabricating of Mild Steel specials like tees, bends, curves, reducers, increasers, coating with heat shrink sleeve system and cement mortar lining of pipe joints and specials, 100% X-Ray testing of pipe joints, performing of Holiday Detection Testing of coating and lining of pipes and specials."</p>					
5-10	NS	450 mm dia pipe.	m	5.00	8,164.80	40,824
5-11	NS	600 mm dia pipe.	m	10.00	14,596.20	145,962
<b>Sub-Total for Bill No. 5</b>						<b>172,617,803</b>
<b>Add 2% Area factor on MRS-2022 Scheduled items i.e., Rs. 717,287</b>						<b>14,346</b>
<b>Total for Bill No. 5 (with area factor)</b>						<b>172,632,148.38</b>
<i>Note:- Any other items cropped up during execution will be paid on MRS 2022 2<sup>nd</sup> Bi-Annual including contractor premium</i>						

JABBA DAM DISTRICT KHYBER						
BILL OF QUANTITIES (AS PER MRS 2022 2 <sup>nd</sup> BI-ANNUAL)						
ID# 6	ACCESS ROAD					
BILL # 6 – ACCESS ROAD						
Item	MRS 2022 Ref:	Description	Unit	Quantity	Rate (Rs)	Amount (Rs)
6-1	03-66-a	Roadway Excavation in Surplus / Unsuitable Common Material	m <sup>3</sup>	15417.85	444.75	6,857,090
6-2	03-66-b	Roadway Excavation in Surplus / Unsuitable Rock (Hard) Material requiring blasting.	m <sup>3</sup>	9602.47	818.70	7,861,538
6-3	03-66-c	Roadway Excavation in Surplus / Unsuitable Rock (Medium) Material requiring blasting	m <sup>3</sup>	13443.45	712.86	9,583,299
6-4	03-67-c	Structural backfill using Common Material available at site. (Retaining wall)	m <sup>3</sup>	1000.00	413.21	413,210
6-5	03-71-a	Subgrade Preparation In Earth Cut ; Mod. AASHTO 95%	m <sup>2</sup>	17043.70	52.31	891,556
6-6	03-71-b	Subgrade Preparation in Rock Cut ; Mod. AASHTO 95%	m <sup>2</sup>	15485.10	126.39	1,957,162
6-7	16-04-a	Granular Sub Base Course using Pit Run Gravel	m <sup>3</sup>	8063.33	1704.76	13,746,048
6-8	16-05-b	Water Bound Macadam Base Course	m <sup>3</sup>	3510.58	3257.94	11,437,261
6-9	16-09-a	Bitumenous Prime Coat	m <sup>2</sup>	22539.20	241.84	5,450,879
6-10	16-14-a	Asphaltic Base Course (Asphalt Batch Plant Hot Mixed) i/c Transportation and Finishing complete	m <sup>3</sup>	1766.24	23844.64	42,115,424
6-11	16-09-b	Bitumenous Tack Coat	m <sup>2</sup>	21616.88	83.44	1,803,712
6-12	16-14-b	Asphaltic Wearing Course (Asphalt Batch Plant Hot Mixed) i/c Transportation and Finishing complete	m <sup>3</sup>	1066.43	27649.44	29,486,261
6-13	16-10-b	Double bitumenous Surface Treatment	m <sup>2</sup>	10040.00	624.91	6,274,096
6-14	06-05-f	Plain Cement Concrete including placing, compacting, finishing & curing (Ratio 1:2:4)	m <sup>3</sup>	444.79	12745.86	5,669,193
6-15	06-05-i	Plain Cement Concrete including placing, compacting, finishing & curing (Ratio 1:4:8)	m <sup>3</sup>	8.91	9237.44	82,303
6-16	06-44-a	PCC 1:3:6 in mass concrete less formwork using 50% boulders	m <sup>3</sup>	3441.67	7083.39	24,378,670
6-17	06-46-b	Erection and removal of Form				

		work with Wood Surface Finishing for RCC or Plain cement Concrete in any shape - Position / Vertical	m <sup>2</sup>	200.00	710.56	142,112
6-18	06-07-a-03	RCC in roof slab, beam, column & other structural members, insitu or precast. (1:2:4)	m <sup>3</sup>	114.89	14653.95	1,683,607
6-19	06-08-c	Supply & fabricate M.S. reinforcement for cement concrete (Hot rolled deformed bars Grade 40)	Tonne	9.02	291590.41	2,629,837
6-20	06-23	Fill expansion joints with bitumen, sand & saw dust in Ratio 1:2:2	m	1,503.36	122.97	184,868
6-21	16-29-a-iii	Reinforced Concrete Pipe Culvert (AASHTO M-170) Dia: 460mm	m	250.00	3336.34	834,085
6-22	16-29-b-i	Reinforced Concrete Pipe Culvert (AASHTO M-170) Dia: 610mm	m	70.00	4,558.83	319,118
6-23	16-29-c-i	Reinforced Concrete Pipe Culvert (AASHTO M-170) Dia: 760mm	m	59.00	6,614.80	390,273
6-24	16-29-d-i	Reinforced Concrete Pipe Culvert (AASHTO M-170) Dia: 910mm	m	63.00	11,023.19	694,461
6-25	16-29-e-i	Reinforced Concrete Pipe Culvert (AASHTO M-170) Dia: 1070mm	m	35.00	11,324.01	396,340
6-26	16-31	Concrete Class B in Bedding and Encasement of Concrete Pipe Culvert	m <sup>3</sup>	362.00	14,477.78	5,240,956
6-27	16-30	Granular Material in Bed to RCC Pipe Culvert	m <sup>3</sup>	127.53	1973.03	251,620
<b>Sub Total Bill No 6</b>						<b>180,774,981</b>
<b>Add 2% Area factor on MRS rates i.e Rs.180774980.73</b>						<b>3,615,500</b>
<b>Total for Bill No. 6 (with area factor)</b>						<b>184,390,480</b>
<b>Note:-</b>	Any other items cropped up during execution will be paid on MRS 2022 2 <sup>nd</sup> Bi-Annual including contractor premium					

<b>JABBA DAM, DISTRICT KHYBER</b>			
<b>BILL OF QUANTITIES (AS PER MRS 2022 2<sup>nd</sup> BI - ANNUAL)</b>			
<b>7</b>	<b>IRRIGATION COLONY AND OTHER BUILDINGS</b>		
<b>S No</b>	<b>Description</b>	<b>Covered Area(Sq.ft)</b>	<b>Amount (Rs)</b>
7-1	CONSTRUCTION OF MASJID	2,393	10,691,429
7-2	CONSTRUCTION OF OFFICE BUILDING	3,314	14,806,267
7-3	CONSTRUCTION OF OFFICER'S RESIDENCE (SDO RESIDENCE)	2,873	12,837,087
7-4	CONSTRUCTION OF STAFF RESIDENCES (5 No's)	7,577	33,850,458
7-5	CONSTRUCTION COST OF WATCH TOWERS (6 No's)	-	3,266,184
7-6	CONSTRUCTION OF CHOWKIDAR HUT	-	6,861,379
7-7	CONSTRUCTION OF TUBE WELL AND SECURITY FENCE (RAZOR TYPE) AT PERIMETER WALL	-	20,174,134
		<b>Total Cost</b>	<b>102,486,938</b>

JABBA DAM, DISTRICT KHYBER						
BILL OF QUANTITIES (AS PER MRS 2022 2 <sup>nd</sup> BI-ANNUAL)						
ID#7-5 CONSTRUCTION OF BOUNDARY WALL, MAIN GATE, WATCH TOWER ETC.						
BILL # 7-5 -						
7-5 WATCH TOWER						
Item	MRS 2022 Ref:	Description	Unit	Quantity	Rate (Rs)	Amount (Rs)
<b>EXCAVATION</b>						
7-5.1	03-25-d	Excavation in foundation of building, bridges etc. complete : in shingle/gravel	m <sup>3</sup>	4.30	421.14	1,812
7-5.2	03-24	Dressing of earthwork (done by machinery or otherwise & left undressed) to designed Section	m <sup>2</sup>	22.86	14.47	331
<b>FOUNDATION</b>						
7-5.3	06-05-i	Plain Cement Concrete including placing, compacting, finishing & curing (Ratio 1:4:8)	m <sup>3</sup>	0.41	9,237.44	3,792
7-5.4	06-07-b-03	RCC in raft foundation slab, base slab of column & ret. wall etc, not including in 06-07-a-03 (1:2:4)	m <sup>3</sup>	1.18	14,653.95	17,287
7-5.5	06-46-b	Erection and removal of Form work with Wood Surface Finishing for RCC or Plain cement Concrete in any shape - Position / Vertical	m <sup>2</sup>	3.04	710.56	2,157
7-5.6	07-04-a-05	1st class brick work in foundation and plinth in Cement, sand mortar 1:6	m <sup>3</sup>	0.35	12,982.95	4,549
7-5.7	03-18-a	Filling, watering and ramming earth under floor with surplus earth from foundation, etc	m <sup>3</sup>	1.43	105.24	151
<b>DAMP PROOF COURSE</b>						
7-5.8	06-26-a-03	Damp proof course of cem. conc. 1:2:4 including bitumen coat, 1 layer polythene & 1 coat bitumen (3" thick)	m <sup>2</sup>	0.77	1,481.33	1,136
<b>RCC IN SUPER STRUCTURE</b>						
7-5.9	06-07-b-03	RCC in raft foundation slab, base slab of column & ret. wall etc, not including in 06-07-a-03 (1:2:4)	m <sup>3</sup>	4.96	14,653.95	72,619
7-5.10	06-08-c	Supply & fabricate M.S. reinforcement for cement concrete (Hot rolled deformed bars Grade 40)	Tonne	0.60	291,590.41	175,599
<b>BRICK WORK IN SUPER STRUCTURE</b>						
7-5.11	07-04-a-05	1st class brick work in foundation and plinth in Cement, sand mortar 1:6	m <sup>3</sup>	7.07	12,982.95	91,734
7-5.12	07-06-a	Add extra on item No.07-05 for brick work in First floor	m <sup>3</sup>	6.14	534.12	3,278

<b>FLOORING</b>						
7-5.13	10-15-d	Provide & lay topping of concrete 1:2:4, including surface finishing & dividing in panels : 2" thick	m <sup>2</sup>	6.71	1,079.45	7,248
<b>SURFACE RENDERING</b>						
7-5.14	11-11-b	Cement plaster 1:5, upto 20' height 1/2" thick	m <sup>2</sup>	66.08	397.72	26,281
7-5.15	11-10-c	Cement plaster 3/8" thick under soffit of RCC roof slabs only upto 20' height : (1:4)	m <sup>2</sup>	8.64	390.96	3,377
<b>CEILING</b>						
7-5.16	12-47	Supply and Fixing accoustic mineral fibre tile ceiling fixed with aluminium tee hung by GI wire fixed in roof	m <sup>2</sup>	9.29	2,565.49	23,843
<b>DOOR / WINDOWS</b>						
7-5.17	25-56	Providing and fixing steel gate of 16-18 SWG MS Sheet Gate with angle iron frame (2"x2"x3/16") with side window, lock, painting etc M.S. sheet covering including hold fast, with or without rollers and track arrangement including providing wicket shutter of required size with all accessories and locking arrangement complete	m <sup>2</sup>	1.63	8,652.80	14,073
7-5.18	12-65-a-03	Supply and Fixing aluminium door/window, Sliding Window Deluxe model (1.60 mm gauge) 3" section	m <sup>2</sup>	2.79	11,073.63	30,874
7-5.19	12-61	MS flat 1/2"x1/8" grill in windows of approved design	m <sup>2</sup>	2.79	3,278.91	9,142
<b>PAINT &amp; VARNISH</b>						
7-5.20	13-22-a	Preparing surface and painting with emulsion paint : First coat	m <sup>2</sup>	27.97	148.96	4,166
7-5.21	13-22-b	Preparing surface and painting with emulsion paint : 2nd & each subsequent coat.	m <sup>2</sup>	27.97	93.73	2,621
7-5.22	13-25-a	Preparing surface & painting with snowcem / weathershield paint : First coat	m <sup>2</sup>	27.32	243.39	6,650
7-5.23	13-25-b	Preparing surface & painting with snowcem / weathershield paint : 2nd & subsequent coats	m <sup>2</sup>	27.32	124.83	3,411
	<b>Civil Work (Sch: Item)</b>					<b>506,131</b>

Item	MRS-2022 Ref:	Description	Unit	Quantity	Rate (Rs)	Amount (Rs)
<b>NON SCHEDULE ITEMS</b>						
7-5.24	NS	Supply and laying of Khapril Tiles on Roof as per Design/Drawings and Instruction of Engineer Incharge	SFT	121.00	150	18,150
7-5.25	NS	Supply and fix angle iron steel stair from ground upto 8-9' height, 2.5' wide including hand railing of steel pipe and bars including welding, erection on site as per Design/Drawings and Instruction of Engineer Incharge	Rft	12.00	830	9,960
	<b>Civil Work (N. Sch: Item)</b>					<b>28,110</b>
<b>Total Cost (Schedule+NonSchedule) (Rs)</b>						<b>534,241</b>
<b>Add 2% Area factor on MRS rates i.e Rs.506131.37</b>						<b>10,123</b>
<b>Total for Bill No. 7-5 (with area factor)</b>						<b>544,364</b>
Note:-	Any other items cropped up during execution will be paid on MRS 2022 including contractor premium					

JABBA DAM, DISTRICT KHYBER						
BILL OF QUANTITIES (AS PER MRS 2022 2 <sup>nd</sup> BI-ANNUAL)						
7-6	CHOWKIDAR HUT					
BILL # 7-6						
Item	MRS 2022 Ref:	Description	Unit	Quantity	Rate (Rs)	Amount (Rs)
7-6.1	03-25-d	Excavation in foundation of building, bridges etc complete : in shingle/gravel	CFT	5,800.56	11.925	69,173.07
7-6.2	06-03-a	Cement Concrete (brick/stone ballast, 1.5" to 2"/nullah shingle well graded and cleaned) in foundation & plinth (Ratio 1:3:6)	CFT	1,126.36	273.92	308,533.09
7-6.3	07-04-a-03	1st class brick work in foundation and plinth in Cement, sand mortar 1:4	CFT	1,775.69	384.49	682,728.83
7-6.4	06-26-a-02	Damp proof course of cem. conc. 1:2:4 including bitumen coat, 1 layer polythene & 1 coat bitumen (2" thick)	SFT	627.32	110.81	69,515.84
7-6.5	07-05-a-03	1st class brick work in ground floor Cement, sand mortar 1:4	CFT	1,420.36	408.88	580,755.94
7-6.6	06-07-a-03	RCC in roof slab, beam, column & other structural members, insitu or precast. (1:2:4)	CFT	563.00	414.95	233,618.71
7-6.7	06-08-b	Supply & fabricate M.S. reinforcement for cement concrete (Hot rolled deformed bars Grade 60)	Tonne	8.00	303740.41	2,429,923.28
7-6.8	12-08-b	First class deodar wood wrought joinery in doors and windows etc. complete : 1-3/4" thick	SFT	50.00	2441.50	122,075.00
7-6.9	10-15-h	Provide & lay topping of concrete 1:2:4 including surface finishing & dividing in panels :3" thick.	SFT	820.00	151.48	124,211.96
7-6.10	11-12-b	Cement plaster 1:6, upto 20' height 1/2" thick.	SFT	1,628.72	35.29	57,477.04
7-6.11	13-05-a	French polishing complete: on new work.	SFT	355.00	91.16	32,361.62
7-6.12	11-21-a-03	Distember New surface: three coats.	SFT	589.36	15.14	8,923.15
7-6.13	03-18-d	Filling, watering and ramming earth under floor with earth excavated from outside lead upto 30m	CFT	655.56	12.00	7,867.43
7-6.14	03-19-a	Extra for every 15 m extra lead or part thereof for earthwork soft, ordinary, hard & very hard	CFT	280.96	0.17	47.57
7-6.15	11-36	P/C Ceramic External Finish Tiles over 1/2" cement sand mortar 1:1	SFT	360.00	263.23	94,762.01

		including curing complete.				
7-6.16	25-45-a	Supplying and fixing 18 SWG MS Sheet Door with angle iron frame ( 1.5"x1.5"x1/8").bolt , hinges,paint etc complete.	SFT	55.00	827.52	45,513.60
7-6.17	09-01	First class tile roofing including earth, mud , plaster, gobri leeping cement plaster etc complete.	SFT	543.32	271.29	147,397.28
7-6.18	12-64-a-06	Supply and Fixing aluminium door/window,Fixed Glazing Premium model (2.00 mm gauge) 4" section	SFT	190.26	1345.97	256,084.25
7-6.19	14-03-a	Providing and fitting glazed earthenware water closet (WC), squatter type (orisa pattern) combined with foot rest. complete in all respects :White	Nos	2.00	3713.81	7,427.62
7-6.20	14-05-a-01	Providing and fixing glazed earthen ware WHB complete size 22"x16" white with pedestal	Nos	4.00	9136.16	36,544.64
7-6.21	14-18-a	Providing and fixing best quality 5mm glass shelf (60 x 13) cm 24"x5" complete: With chromium plated brackets & railing	Nos	4.00	1184.03	4,736.12
7-6.22	14-17-a	Providing and fixing best quality looking glass 5 mm thick neatly fitted on masonry wall etc. as per instruction of Engineer In-charge complete. Mirror 60 x 45 cm (24"x18") size	Nos	4.00	2529.49	10,117.96
7-6.23	14-16-a	Providing and Fixing chromium plated (CP) towel rail complete: 60 cm (24") long and 2 cm (3/4") dia	Nos	4.00	1267.94	5,071.76
7-6.24	14-15	Providing and fixing CP toilet paper holder.	Nos	4.00	802.84	3,211.36
7-6.25	14-13	Providing and fixing CP soap dish.	Nos	4.00	829.33	3,317.32
7-6.26	14-10-a	Providing and Fixing glazed earthen ware low down flushing cistern 3 gallons (13.63 Liters) capacity including bracket set, copper connection, etc. complete in all respects: White	Nos	4.00	4237.11	16,948.44
7-6.27	14-06-a	Providing and Fixing stainless steel sink with drain board size (120 x 60 cm) 48"x24", including set of brackets, waste pipe etc - (Best Quality)	Nos	1.00	6595.50	6,595.50
7-6.28	14-27-a	Providing and fixing chorimum plated (CP) mixing valve for wash hand basin (WHB), sink or shower	Nos	4.00	4357.08	17,428.32

		of approved (Best) quality				
7-6.29	14-26-b	Providing and fixing chromium plated (CP) shower rose : Size 3/4"x6" (20mm x 150 mm) (Best Quality)	Nos	2.00	2690.10	5,380.20
7-6.30	14-32-b	Providing and fixing 'P' trap including GI grating & PCC chamber 4" glazed.	Nos	10.00	469.17	4,691.70
7-6.31	14-55-d	Providing and fixing GI pipe & including specials complete 1" dia ( light ).	RFT	92.00	344.76	31,717.92
7-6.32	14-55-e	Providing and fixing GI pipe & including specials complete 3/4" dia ( light ).	RFT	180.00	259.41	46,693.80
7-6.33	14-55-f	Providing and fixing GI pipe & including specials complete 1/2" dia ( light ).	RFT	225.00	190.68	42,903.00
7-6.34	14-61-d	Providing and fixing approved best quality cooking range with 3 burner, oven, hot case & roastery.	Nos	1.00	26201.54	26,201.54
7-6.35	14-69-a-01	Providing and fixing Fibre Glass , corrosion resistant, UV stabilized Water Tank : 300 gallons	Nos	1.00	13790.57	13,790.57
7-6.36	23-10	Septic Tank ( int . Size: 7'x2'x5' ) complete.	Nos	1.00	28931.39	28,931.39
7-6.37	23-11	Soakage pit ( 6' dia x 15' deep ) complete.	Nos	1.00	26151.81	26,151.81
7-6.38	23-01-a	Providing and laying R.C.C. pipe, moulded with cement concrete 1:1-1/2:3, with spigot, socket or collar joint, etc. including cost of reinforcement, conforming to B.S. 5911: Part-I, 1981 Class "L" including carriage, lowering in trenches to correct alignment and grade, jointing, cutting pipe where necessary, finishing and testing, etc. complete:- 4" dia:	RFT	1.00	268.52	268.52
7-6.39	14-37-a	Providing and fixing CI main hole cover with frame etc complete 12" dia	Nos	9.00	1705.50	15,349.50
7-6.40	14-28-g	Providing and fixing gun metal peet / gate valve (screwed) 25 mm (1") dia of approved quality.	Nos	10.00	1574.73	15,747.30
7-6.41	14-39-a	Providing and Fixing brass stop/bib cock of approved quality: 1/2" (13 mm) dia	Nos	10.00	595.20	5,952.00
7-6.42	15-02-a-03	Supply and Erection PVC pipe for wiring purpose complete On surface including clamps etc: 1" i/d.	RFT	200.00	37.24	7,448.00

7-6.43	15-50	Wiring of light/fan/call-bell point in 3/0.029" PVC insulated bare cable in PVC pipe recessed	Nos	20.00	1575.83	31,516.60
7-6.44	15-51	Wiring of 2/3-pin 5-Amp. plug point in 3/0.029" PVC insulated bare cable in PVC pipe recessed	Nos	20.00	593.75	11,875.00
7-6.45	15-69-a	Supply and Erection best quality exhaust fan complete with shutter & regulator : 12"sweep	Nos	3.00	3551.40	10,654.20
7-6.46	15-68-c	Supply and Erection best quality AC ceiling fan complete with GI rod, canopy, blades & regulator : 56" sweep	Nos	6.00	6261.75	37,570.50
7-6.47	15-75-b	Supply and Erection cubical type factory fabricated floor/wall mounting steel main board comp. : Recessed	SFT	1.00	2893.40	2,893.40
7-6.48	15-64-b	Supply and Erection garden-light fitting with holder and 160 W mercury blended lamp & choke : 19" dia	Nos	10.00	810.90	8,109.00
7-6.49	15-24-b	Supply and Erection tube light, including rod, choke etc complete Single rod (40 watts) with 1 choke & 1 starter	Nos	20.00	1497.15	29,943.00
7-6.50	15-47-c	Wiring of main & sub-main in 2 single core PVC insulated & sheathed cable : 7/0.044"	RFT	130.00	254.64	33,103.20
7-6.51	14-80-b	Supply and fixing of 2.0 HP Monoblock water pump 1.5"x1.5" 4 stage model DE-S4 single phase for 190 ft head with all accessories	Nos	1.00	35103.63	35,103.63
7-6.52	08-03-d-03	Random rubble masonry in ground floor in cement,sand mortar : Ratio 1:6	CFT	3,220.20	270.94	872,478.09
<b>Total Amount</b>						<b>6,726,843</b>
<b>Add 2% Area factor on MRS rates i.e Rs.6726842.59</b>						<b>134,537</b>
<b>Total for Bill No. 7-6 (with area factor)</b>						<b>6,861,379</b>
<b>Note:-</b> Any other items cropped up during execution will be paid on MRS 2022 2 <sup>nd</sup> Bi-Annual including contractor premium						

JABBA DAM, DISTRICT KHYBER						
BILL OF QUANTITIES (AS PER MRS 2022 2 <sup>nd</sup> BI-ANNUAL)						
7-7	CONSTRUCTION OF TUBE WELL AND SECURITY FENCE (RAZOR TYPE) AT PERIMETER WALL					
BILL # 7-7						
7-7A	TUBE WELL					
Item	MRS 2022 Ref:	Description	Unit	Quantity	Rate (Rs)	Amount (Rs)
MOBILIZATION AND BORE HOLE DRILLING TESTING ETC.						
7-7A.1	24-01-a	Mobilization of plant, equipment and camping arrangements etc & demobilization after completion	Job	1.00	66,922.20	66,922
7-7A.2	24-41	Conducting Elec: Resistivity survey of the area and furnishing its reports.	No	1.00	32,439.75	32,440
7-7A.3	24-42	Logging of bore hole with electrical equipment and furnishing reports.	Job	1.00	23,643.00	23,643
7-7A.4	24-04	Providing strong box of deodar wood 4' x 2½' x 9" with compartments, lock and locking arrangement, and preserving in it the corings / samples of strata collected from bore hole and supply to the approved soil testing laboratory for testing.	Job	1.00	31,746.20	31,746
7-7A.5	24-02-a-06	Drilling of Bore holes for tube well in all types of soil and soft rock except hard rock from ground level upto 328 ft depth (0m to 100m), including sinking, collection of 100 % corings and withdrawing of pipe, complete as per specifications.: Dia of Bore 10" (250 mm) i/d	m	60.98	9,463.84	577,105
7-7A.6	24-03-b-04	Drilling of Bore holes for tube well in hard rock having unconfirmed compressive strength of 50 MPa and above from a depth of 328 ft to 656 ft (100 m to 200 m) depth, including sinking, collection of 100 % corings and withdrawing of pipe, complete as per specifications.: 12" (300 mm) i/d	m	121.95	24,559.63	2,995,047
7-7A.7	24-42	Logging of bore hole with electrical equipment and furnishing reports.	Per Set	4.00	23,643.00	94,572
7-7A.8	24-13-b	Testing and developing of tubewell	Hour	48.00	2,760.03	132,481

		with DNT unit 8" i/d and above complete as per specifications				
7-7A.9	24-07-d	Providing and installing Brass Strainer of approved make \ quality in tubewell bore hole, including socket, special sockets, studs etc. complete as per specification:- 10" (250 mm) Nominal Pipe Size (NPS) 1/4" (6mm) thick	m	45.73	32,639.11	1,492,587
7-7A.10	24-08-c	Providing and installing M.S. Bail plug of approved make / quality in tubewell bore hole complete as per specification:- 10" (250 mm) i/d 2 ft (450 mm) long.	m	0.61	35,700.07	21,777
7-7A.11	24-11-c	Providing and installing M.S. blind pipe of socketed & welded, M.S. reducer (where necessary) of approved make / quality in tubewell bore hole, including jointing/welding with strainer, etc. complete as per specification: 10" (250 mm) Nominal Pipe Size (NPS) 1/4" (6 mm) thick	m	182.93	10,121.94	1,851,606
7-7A.12	24-25-b-01	Providing and fitting MS Flanges 5/8" thick on pipes, including turning, threading, facing and fitting etc., complete in all respects. 8"	Each	10.00	176.45	1,765
7-7A.13	24-36-a	Supplying and Fixing MS cap of 3/8" thick sheet : 10" i/d	Each	1.00	3,811.64	3,812
7-7A.14	24-38-d	Supplying and Fixing Flanged ExpanSon Joints BSS 2035: 10" i/d	Each	2.00	20,544.38	41,089
7-7A.15	24-39-d	Supplying and Fixing MS SuspeNson Clamp 3/8" thick for housing pipe : 10" i/d	Each	10.00	2,538.90	25,389
7-7A.16	24-14	Shrouding with graded pack gravel 3/8" (10 mm) to 1/8" (3 mm) around tubewell in bore hole complete as per specification:-	m	182.93	289.88	53,028
7-7A.17	24-31-g	S/H/J G.I. Flanged Pipe 4" i/d 5 mm thick	m	243.90	3,880.11	946,359
7-7A.18	24-38-g	Supplying and Fixing Flanged ExpanSon Joints BSS 2035: 4" i/d	Each	5.00	9,476.10	47,381
7-7A.19	14-52-a	Providing and Fixing high pressure flange type valve : 4" dia	Each	2.00	16,655.03	33,310
7-7A.20	24-22-b	Providing and fixing sluice valve of BSS quality (BS 5163) and weight Class 'B' for GI & PVC pipeline	Each	2.00	34,509.27	69,019

		(including cost of jointing material): b) 4" (100 mm) dia of Valve				
7-7A.21	24-49-g	Providing and Fixing Brass peet / gate valve 4" dia	Each	2.00	13,294.17	26,588
7-7A.22	24-24-b	Providing and fixing, air valve (Kitz Japan make or equivalent) 3" dia of B.S.S. quality and weight (BS 1074) complete with jointing material b. Double air valve 3" (75 mm) dia	Each	2.00	5,381.23	10,762
7-7A.23	24-48-f	Supply and installation of three phase automatic voltage stabilizers having output volatage of 400 volts $\pm 5\%$ , three phase 99.9% copper equipped with protective devices 60-100 KV A	Each	1.00	673,176.38	673,176
7-7A.24	24-80	Yield test by using air compressor in test bore	Job	1.00	9,258.00	9,258
7-7A.25	NS	Supply and fixing of MS Strips size 25 x 4.5 mm thick for strengthing of Brass Strainer from 4 sides Vertically complete in all respects as per instructions and approval of the Engineer.	m	182.93	287.0875	52,517
7-7A.26	NS	Washing with Air Compressor for development and cleaning of water for drinking purpose complete in all respects as per instructions and approval of the Engineer.	Job	1.00	106250	106,250
7-7A.27	NS	Supply and fixing, testing and commissioning etc. of solar based pumping system (i/c Submersible Pump, rubber gaskets, reflux valve, non-return valve, top bend, top adopter, rising clamp, casing cover plate, G/Kit, Solar panel, Frame, Manual Sun tracker, Cabling, Circuit Bracker, Junction Box, inverter, etc. complete) as per specifications and design given in the attached documents in all required accessories as per instructions and approval of the Engineer.	Watt	42500.00	187.5	7,968,750
<b>Sub Total</b>						<b>17,388,378</b>
<b>Add 2% Area factor on MRS rates i.e Rs.9260861.2163</b>						<b>185,217</b>
<b>Sub total (1) of Bill # 7-7</b>						<b>17,573,595</b>
<b>ELECTRIFICATION OF TUBEWELL</b>						
7-7A.28	NS	Supply and Installation Testing & commission 4 Core 70 mm PVC/PVC Cables from Transformer	m	80.00	3,765.00	301,200

		to M C U Complete in all respects as per Instruction of Engineer Incharge.				
7-7A.29	NS	Providing & Installation Testing Commissioning of 3 Core 35 mm PVC/PVC Flate Cable from M.C.U to Water Pump Down Complete in all respects as per Instruction of Engineer Incharge.	m	100.00	1,448.75	144,875
7-7A.30	NS	S/E Earthling 24"x24"x1/4 copper plate riveting Bear copper Conductor 2 x 70 mm 1.5" G.I Light gage ,Pipe Stall Net Bolt , placing mixture of salt & chare cool complete in all Respects 15 TO 20 Feet's Deeps Pitts Including the cost of E C P Bus bar 12"long 2" wide and half inch thick copper bus bare completed with insulators washers nuts, bolts Complete in all respects as per Instruction of Engineer Incharge.	Each	1.00	88,500.00	88,500
7-7A.31	NS	Supply , installation, testing and commisssioning of 200 KVA Transformer with accessories complete in all respect	Each	1.00	800,000.0	800,000
<b>Sub Total</b>						1,334,575
<b>Add 2% Area factor on MRS rates i.e Rs.0</b>						0
<b>Sub total (2) of Bill # 7-7A</b>						<b>1,334,575</b>
<b>CONSTRUCTION OF TUBEWELL CHAMBER</b>						
7-7A.32	03-25-d	Excavation in foundation of building, bridges etc. complete : in shingle/gravel	m3	9.17	421.14	3,862
7-7A.33	03-18-a	Filling, watering and ramming earth under floor with surplus earth from foundation, etc	m3	4.59	105.24	483
7-7A.34	06-05-i	Plain Cement Concrete including placing, compacting, finishing & curing (Ratio 1:4:8)	m3	1.53	9,237.44	14,133
7-7A.35	07-04-a-04	1st class brick work in foundation and plinth in Cement, sand mortar 1:5	m3	4.59	13,201.04	60,593
7-7A.36	06-26-b-02	Damp proof course of cem. conc. 1:2:4 including bitumen coat, 1 layer polythene & 2 coats bitumen (2 thick)	m2	3.35	1,280.60	4,290
7-7A.37	06-07-a-03	RCC in roof slab, beam, column & other structural members, iNStu or precast. (1:2:4)	m3	3.16	14,653.95	46,306

7-7A.38	06-08-b	Supply & fabricate M.S. reinforcement for cement concrete (Hot rolled deformed bars Grade 60)	Tonne	0.62	303,740.41	188,319
		<b>1.2 : WORK AT GROUND FLOOR</b>				
7-7A.39	07-05-a-04	1st class brick work in ground floor Cement, sand mortar 1:5	m3	10.12	14,089.41	142,585
7-7A.40	11-10-b	Cement plaster 3/8" thick under soffit of RCC roof slabs only upto 20' height : (1:3)	m2	19.19	401.57	7,706
7-7A.41	11-09-b	Cement plaster 1:4 upto 20' height 1/2" thick	m2	87.69	406.01	35,603
7-7A.42	09-15	Khassi parnalas in c/s mortar 1:2, 12" outside width finished smooth with a floating coat	m	3.66	736.91	2,697
7-7A.43	07-30	Supplying and filling sand under floor or plugging in wells	m3	4.08	1,571.12	6,410
7-7A.44	06-05-i	Plain Cement Concrete including placing, compacting, finishing & curing (Ratio 1:4:8)	m3	1.02	9,237.44	9,422
7-7A.45	06-05-f	Plain Cement Concrete including placing, compacting, finishing & curing (Ratio 1:2:4)	m3	4.10	12,745.86	52,258
7-7A.46	10-15-h	Provide & lay topping of concrete 1:2:4, including surface finishing & dividing in panels : 3" thick	m2	13.48	1,629.90	21,971
7-7A.47	10-22-a	1.5" thick mosaic flooring, including rubbing & polishing complete : Using grey cement	m2	13.38	2,300.73	30,784
7-7A.48	10-41-a-02	Mosaic dado or skirting complete as per specs Using grey cement : 1/2" thick	m2	8.92	1,502.05	13,398
7-7A.49	25-45-a	Supplying and Fixing 18 SWG MS Sheet Door with angle iron frame (1.5"x1.5"x1/8"), bolt, hinges, paint etc complete	m2	2.28	8,904.08	20,301
7-7A.50	25-39-b-05	Providing and Fixing steel windows 18 gauge with openable glazed panels With 22 SWG wire gauze : Glass pane 5mm	m2	3.72	10,159.46	37,793
7-7A.51	11-20-a	Priming coat of chalk under distemper	m2	98.98	34.89	3,453
7-7A.52	11-21-a-03	Distemping New surface : Three coats	m2	98.98	162.91	16,125
7-7A.53	13-25-a	Preparing surface & painting with snowcem / weather shield paint : First coat	m2	7.90	243.39	1,923
7-7A.54	13-25-b	Preparing surface & painting with snowcem / weathershield paint : 2nd & subsequent coats	m2	7.90	124.83	986
7-7A.55	09-06	Single layer of tiles 10"x5"x1.25"	m2	13.38	1,624.0	21,730

		laid over 4" earth and 1" mud plaster on top of RC roof slab			9	
7-7A.56	25-52	Providing, making & fixing of Steel manhole cover i/c angle iron (1 1/2" x 1 1/4" x 1/8") frame with M.S. sheet'complete .	m2	1.14	765.95	873
7-7A.57	25-10	Fabrication of heavy steel work with angle, tees, sheet iron etc for making trusses, girders etc	Tonne	0.22	274,802.09	60,456
<b>Sub Total</b>						<b>804,463</b>
<b>Add 2% Area factor on MRS rates i.e Rs.804462.7058</b>						<b>16,089</b>
<b>Sub total (3) of Bill # 7-7A</b>						<b>820,552</b>
<b>ELECTRIFICATION OF TUBE WELL CHAMBER</b>						
7-7A.58	15-50	Wiring of light/fan/call-bell point in 3/0.029 PVC insulated bare cable in PVC pipe recessed	Each	4.00	1,575.83	6,303
7-7A.59	15-61-a	Supply and Erection fluorescent tube light fitting including 4' rod, choke, starter, flexible wire etc : Single	Each	4.00	1,789.65	7,159
7-7A.60	15-15	Supply and Erection wall/pole type bracket with double cover water tight reflector, flexible wire & brass holder	Each	1.00	278.46	278
7-7A.61	15-67	Making hole in wall with necessary masonry work for exhaust fan any size complete	Each	1.00	224.1	224
7-7A.62	15-69-a	Supply and Erection best quality exhaust fan complete with shutter & regulator : 12"sweep	Each	1.00	3,551.40	3,551
7-7A.63	15-68-c	Supply and Erection best quality AC ceiling fan complete with GI rod, canopy, blades & regulator : 56" sweep	Each	1.00	6,261.75	6,262
7-7A.64	15-71-a	Supply and Erection single phase imported auto circuit breaker 6 Amp.	Each	1.00	658.8	659
7-7A.65	15-71-d	Supply and Erection single phase imported auto circuit breaker 30 Amp.	Each	1.00	950.4	950
7-7A.66	15-71-b	Supply and Erection single phase imported auto circuit breaker 15 Amp.	Each	1.00	658.8	659
7-7A.67	15-02-b-02	Supply and Erection PVC pipe for wiring purpose complete Recessed in walls including chase etc : 3/4" i/d	m	20.00	301.93	6,039
7-7A.68	15-05-c	Supply and Erection single core PVC insulated copper conductor	m	20.00	135.21	2,704

		250/440 V grade cable : 7/0.029"				
7-7A.69	15-05-e	Supply and Erection single core PVC insulated copper conductor 250/440 V grade cable : 7/0.044"	m	10.00	268.1	2,681
7-7A.70	15-75-b	Supply and Erection cubical type factory fabricated floor/wall mounting steel main board comp. : Recessed	Each	1.00	31,132.93	31,133
<b>Sub Total</b>						68,602
<b>Add 2% Area factor on MRS rates i.e Rs.68602.36</b>						1,372
<b>Sub total (4) of Bill # 7-7A</b>						<b>69,974</b>
<b>7-7B</b>	<b>SECURITY FENCE AT COLONY PERIMETER WALL</b>					
7-7B.1	25-60-d	Supply and fixing razor wire (1'-6" dia) consisting of 1-1/2"X1-1/2"X3/16" angle iron Y post 2'-6" long 6' to 8' center to center fixed with bolt anchorage, at top of boundary wall including painting posts etc. Complete in all respects.	m	385.00	956.04	368,075
<b>Sub Total</b>						368,075
<b>Add 2% Area factor on MRS rates i.e Rs.368075.4</b>						7,362
<b>Sub total (5) of Bill # 7-7B</b>						<b>375,437</b>
<b>Bill No 7-7 Total (1+2+3+4+5)</b>						<b>20,174,134</b>

**NOTE: -**

1. The above rates include all wastages.
2. No extra payment for loading, unloading, handling, lead, lift, stacking, storage, security will be made. The quoted rates shall be deemed to be inclusive of all these components.
3. Rates for all the above items are inclusive of labour, materials, plant & equipment, consumables, quality control measures, QA / QC testings, and remedying the defects.
4. The inclusions and exclusions from quoted rates are specified in the details of each item of work in the project specifications and the Bill of Quantities. In case there is no specific mention of a particular detail, the mode of measurements for such an item shall be as prescribed in the other standard specifications, currently practiced within the country.
5. Reinforced and plain cement concrete rates shall be inclusive of shuttering and centering / formwork (shuttering plate made of welded smooth finish plate of min 4 mm thick MS plate, thickness of formwork shall be such that no bulging or deformation of concrete element occurs) for fair finish concrete, lift charges, scaffolding, staging, propping etc., and tie-rod assembly of PVC cone and coil on both side of the concrete walls, filling the same with non-shrink grout or polymer mortar and excluding cost of steel reinforcement. Full height shuttering with single pour system shall be followed. Contractor shall have to prepare shuttering drawing as per the shuttering pattern approved by the Engineer / Engineer representative. All concrete works shall be fair finish (without any honey comb). Contractor shall use mould release agent of approved make before use of shuttering material very time.

## BILL OF QUANTITIES

### C. Daywork Schedule

#### A. General

1. Reference is made to Sub-Clause 52.4 of the General Conditions of Contract Part-I; Work shall not be executed on a day work basis except by written order of the Engineer/Engineer representative. The Contractor shall execute the Daywork items in the Schedules, at the basic rates entered thereto, inclusive of contractor's profit / overhead and shall apply to any quantity of Daywork items, ordered by the Engineer/Engineer representative. The extended total for Daywork have been carried forward to the Bid Price.

#### Daywork Labour

2. In calculating payments due to the Contractor for the execution of Daywork, the actual time of classes of labour directly doing the Daywork ordered by the Engineer/Engineer representative and for which they are competent to perform will be measured excluding meal breaks and rest periods. The time of gangers (charge hands) actually doing work with the gang will also be measured but not the time of foreman or other supervisory personnel.
3. The Contractor shall be entitled to payment in respect of the total time that labour is employed on Daywork, calculated at the basic rates entered in the Schedule of Daywork Rates for labour together with an additional percentage payment on basic rates representing the Contractor's profit, overheads, etc., as described below:
  - a) the basic rates in local currency for labour covered all direct costs to the Contractor, including (but not limited to) the amount of wages paid to such labour, transportation time, overtime, subsistence allowances and any sums paid to or on behalf of such labour for social benefits in accordance with Pakistan law; and
  - b) the additional percentage payment to cover the Contractor's profit, overheads, superintendence, liabilities and insurances and allowances to labour timekeeping and clerical and office work have been added to costs incurred under Sub-Para(a) above.

**NOT APPLICABLE**

SCHEDULE OF DAYWORK RATES

JABBA DAM, DISTRICT KHYBER					
BILL OF QUANTITIES					
ID # H	DAYWORKS				
BILL # 8A	SCHEDULE OF DAYWORK RATES FOR LABOR				
Item #	Description	Unit	Quantity	Rate (Rs)	Amount (Rs)
1	Ganger	Hour			
2	Labor	Hour			
3	Brick Layer	Hour			
4	Mason	Hour			
5	Carpenter	Hour			
6	Steel work Erector	Hour			
7	Steel work binders	Hour			
8	Driver for vehicles up to 10 tons	Hour			
9	Operator for Excavator, shovel or crane.	Hour			
10	Operator for tractor, dozer blade or ripper.	Hour			
11	Operator for compressor machine	Hour			
12	Other Skilled operators	Hour			
<b>Sub Total for Bill No. 8A - Labor (excluding contractor's profit)</b>					
Allow 15% of subtotal for contractor's overhead, profit etc., (in accordance with Paragraph 3(b) of Daywork Schedule)					
<b>Total for Bill No. 8A - Labor (including contractor's profit)</b>					

**NOT APPLICABLE**

**Daywork Material**

4. The Contractor shall be entitled to payment in respect of materials used for Daywork (except for materials for which the cost is included in the percentage addition to labour costs as detailed heretofore), at the basic rates entered by him in the Schedule of Daywork Rates for materials together with an additional percentage payment on the basic rates to cover overhead charges and profit, as follows:
- a) the basic rates for materials shall be calculated on the basis of the invoiced price, freight, insurance, handling expenses, damage, waste, etc., and shall provide for delivery to store for stockpiling at the site. The basic rates shall be stated in local currency but payment will be made in the currency or currencies expended upon presentation of supporting documentation;
  - b) the additional percentage payment to cover the Contractor's profit, overheads have been added to costs incurred under Sub-Para(a) above; and
  - c) the cost of hauling materials used on work ordered to be carried out as Daywork from the store or stockpile on the site to the place where it is to be used will be paid in accordance with the terms for Labour and Constructional Plant in this Schedule.

**NOT APPLICABLE**

SCHEDULE OF DAYWORK RATES

JABBA DAM, DISTRICT KHYBER					
BILL OF QUANTITIES					
ID # H	DAYWORKS				
BILL # 8B	SCHEDULE OF DAYWORK RATES FOR MATERIAL				
Item #	Description	Unit	Quantity	Rate (Rs)	Amount (Rs)
1	Ordinary Portland cement.	bags			
2	Sulphate resistant cement in bags.	bags			
3	Reinforcing Steel up to 25mm diameter to BS 4449 or equivalent.	Metric.Ton			
4	Structural Steel WF 200mm x 150mm x 12mm.	Metric.Ton			
5	Aggregates for Concrete.	cu.m			
6	Sand for Concrete.	cu.m			
<b>Sub Total for Bill No. 8B - Material (excluding contractor's profit)</b>					
<b>Allow 15% of subtotal for contractor's overhead, profit etc., (in accordance with Paragraph 3(b) of Daywork Schedule)</b>					
<b>Total for Bill No. 8B - Material (including contractor's profit)</b>					

**NOT APPLICABLE**

**Daywork Constructional Plant**

5. The Contractor shall be entitled to payments in respect of constructional plant already on Site and employed on Daywork at the basic rental rates entered thereto in the Schedule of Daywork Rates for constructional plant. The entered rates included complete allowance for depreciation, interest, indemnity and insurance, repairs, maintenance, supplies, fuel, lubricants, and other consumables, and all overhead, profit and administrative costs related to the use of such equipment. The cost of drivers, operators and assistants will be paid for separately as described under the section on Daywork Labour.
6. In calculating the payment due to the Contractor for constructional plant employed on Daywork, only the actual number of working hours will be eligible for payment, except that where applicable and agreed with the Engineer/Engineer representative, the travelling time from the part of the Site where the constructional plant was located when ordered by the Engineer/Engineer representative to be employed on Daywork and the time for return journey thereto shall be included for payment.

**NOT APPLICABLE**

SCHEDULE OF DAYWORK RATES

JABBA DAM, DISTRICT KHYBER					
BILL OF QUANTITIES					
ID # H	DAYWORKS				
BILL # 8C	SCHEDULE OF DAYWORK RATES FOR CONSTRUCTION PLANT				
Item #	Description	Unit	Quantity	Rate (Rs)	Amount (Rs)
1	Excavator (Hydraulic), face-shovel or dragline:				
	1: up to including 1 Cu. M.	Hour			
	2: over 1 to 2 Cu.M.	Hour			
	3: over 2 Cu. M.	Hour			
2	Tractor (tracked) including bull or angle dozer:				
	1: up to and including 150 HP	Hour			
	2: over 150 to 200 HP	Hour			
	3: over 200 to 250HP	Hour			
3	Tractor (tracked) with ripper				
	1: over 150 to 200 HP	Hour			
	2: over 200 to 250HP	Hour			
4	Wheel Loader up to 4 Cu. m capacity	Hour			
5	Rear Dump Trucks				
	1: 10 tons capacity	Hour			
	2: 20 tons capacity	Hour			
7	Concrete Mixer up to 1 Cu.M.	Hour			
<b>Total for Bill No. 8C – Construction plant (including contractor's profit)</b>					

NOT APPLICABLE

DAYWORK

Summary (Dayworks)

	Amount (Rs.)
1. Sub Total for Daywork: Bill No. 8A - Labour	
2. Sub Total for Daywork: Bill No. 8B – Material	
3. Sub Total for Daywork: Bill No. 8C - Constructional plant	
<b>Total for Dayworks Bill Nos 8A, 8B &amp; 8C</b>	

**NOT APPLICABLE**

### PROPOSED CONSTRUCTION SCHEDULE

Pursuant to Sub-Clause 43.1 of the General Conditions of Contract, the Works shall be completed on or before the date stated in Appendix-A to Bid. The Bidder shall provide as Appendix-E to Bid, the Construction Schedule as specified herein showing the sequence of work items and the period of time during which he proposes to complete each work item in such a manner that his proposed programme for completion of the whole of the Works (and parts of the Works) may meet Procuring Entity completion targets in days noted below and counted from the date of receipt of Engineer's Notice to Commence.

Details of Construction Schedule as mentioned in sub-paras (a), (b) & (c) below, will be submitted by the successful bidder to the Procuring Entity after the Contract Agreement is signed and letter of Commencement is issued.

- a) Manpower, Equipment, and other resources must be allocated to each activity according to their capacity.
- b) Critical Path be identified in different colour.
- c) CD containing the soft copy of schedule in MS Project/Primavera format / Bar Charts must be provided, in which the linkage between manpower, equipment and activities must be provided.

(Attach sheets as required for the specified form of Construction Schedule):

	<u>Description</u>	<u>Time for Completion</u>
a)	Whole Works	<u>1230</u> days
b)	Main Dam	<u>          </u> days
c)	Spillway & Access Bridge	<u>          </u> days
d)	Diversion Tunnel & Access Road	<u>          </u> days
e)	Intake Tower, Access Bridge & Delivery Pipe	<u>          </u> days
f)	Irrigation Colony, Chowkidar Hut & Other Buildings	<u>          </u> days

**METHOD OF PERFORMING THE WORK**

[The Bidder is required to submit a narrative outlining the method of performing the Work. The narrative should indicate in detail and include but not be limited to:

1. Organization Chart indicating head office and field office personnel involved in management and supervision, engineering, equipment maintenance and purchasing.
2. Mobilization at Site, the type of facilities including personnel accommodation, office accommodation, provision for maintenance and for storage, communications, security and other services to be used.
3. The method of executing the Works, the procedures for installation of equipment and machinery and transportation of equipment and materials to the site.
4. Methodology Regarding Safety of Environment/ Environmental Management Plan (EMP), as per EPA rules.
5. Quality control / Quality assurance measures to be adopted including procedures to be followed for carrying out all tests required under the specifications.
6. Safety/ Security Management System

**LIST OF MAJOR EQUIPMENT – RELATED ITEMS**

[The Bidder will provide on Sheet 2 of this Appendix a list of all major equipment and related items, under separate heading for items owned, to be purchased or to be arranged on lease by him to carry out the Works. The information shall include make, type, capacity, and anticipated period of utilization for all equipment which shall be in sufficient detail to demonstrate fully that the equipment will meet all requirements of the Specifications.]

**LIST OF MAJOR EQUIPMENT**

Owned Purchased or Leased	Description of Unit (Make, Model, Year)	Capacity HP Rating	Condition	Present Location or Source	Date of Delivery at Site	Period of Work on Project
1	2	3	4	5	6	7
a. Owned						
b. To be Purchased						
c. To be arranged on Lease						

### **CONSTRUCTION CAMP AND HOUSING FACILITIES**

The Contractor in accordance with Clause 34 of the Conditions of Contract shall provide description of his construction camp's facilities and staff housing requirements.

The Contractor shall be responsible for pumps, electrical power, water and electrical distribution systems, and sewerage system including all fittings, pipes and other items necessary for servicing the Contractor's construction camp.

The Bidder shall list or explain his plans for providing these facilities for the service of the Contract as follows:

1. Site Preparation (clearing, land preparation, etc.).
2. Provision of Services.
  - a) Power (expected power load, etc.).
  - b) Water (required amount and system proposed).
  - c) Sanitation (sewage disposal system, etc.).
3. Construction of Facilities
  - a) Contractor's Office, Workshop and Work Areas (areas required and proposed layout, type of construction of buildings, etc.).
  - b) Warehouses and Storage Areas (area required, type of construction and layout).
  - c) Housing and Staff Facilities (Plans for housing for proposed staff, layout, type of construction, etc.).
4. Construction Equipment Assembly and Repair / Maintenance yard (detailed plans for carrying out this activity).
5. Other Items Proposed (Security services, etc.).
6. The Contractor should mention his proposed environmental measures for the project camp area's as per EPA rules like treatment of wastewater and water quality etc. The Contractor shall submit a detailed EMP (Environmental Management Plan) to describe how materials will be removed from the residential buildings, construction yards and disposed of at a safe location, prevention for the contamination of ground and surface water in neighboring areas etc. including remedial measures for adoption.
7. Detail of testing Lab with testing equipment etc.

**LIST OF SUBCONTRACTORS**

I/We intend to subcontract the following parts of the Work to subcontractors. In my/our opinion, the subcontractors named hereunder are reliable and competent to perform that part of the work for which each is listed.

Enclosed are documentation outlining experience of subcontractors, the curriculum vitae and experience of their key personnel who will be assigned to the Contract, equipment to be supplied by them, size, location and type of contracts carried out in the past.

<b>Part of Works (Give Details)</b>	<b>Subcontractor (With Complete Address)</b>
<b>1</b>	<b>2</b>

**ESTIMATED PROGRESS PAYMENTS**

Bidder's estimate of the value of work which would be executed by him during each of the periods stated below, based on his Programme of the Works and the Rates in the Bill of Quantities.

<b>Quarter/ Year/ Period</b>	<b>Amounts (1000 Rs.)</b>
<b>1</b>	<b>2</b>
1st Quarter	
2 <sup>nd</sup> Quarter	
3 <sup>rd</sup> Quarter	
4 <sup>th</sup> Quarter	
5 <sup>th</sup> Quarter	
6 <sup>th</sup> Quarter	
7 <sup>th</sup> Quarter	
8 <sup>th</sup> Quarter	
9 <sup>th</sup> Quarter	
10 <sup>th</sup> Quarter	
11 <sup>th</sup> Quarter	
12 <sup>th</sup> Quarter	
13 <sup>th</sup> Quarter	
14 <sup>th</sup> Quarter	
<b>Bid Price</b>	

**ORGANIZATION CHART  
FOR THE  
SUPERVISORY STAFF AND LABOUR**

*(It shall be restricted to the staff and labor to be allocated to the Contract in case of award; brochure of the Firm listing the entire staff of the Firm **should not** be attached).*

**(INTEGRITY PACT)**

**DECLARATION OF FEES, COMMISSION AND BROKERAGE ETC.  
PAYABLE BY THE SUPPLIERS OF GOODS, SERVICES & WORKS IN  
CONTRACTS WORTH RS. 10.00 MILLION OR MORE**

Contract No. \_\_\_\_\_ Dated \_\_\_\_\_

Contract Value: \_\_\_\_\_

**Contract Title: Construction of Jabba Dam, District Khyber (Package-A)**

..... [Name of Constructor] hereby declares that it has not obtained or induced the procurement of any contract, right, interest, privilege or other obligation or benefit from Government of Pakistan/Khyber Pakhtunkhwa (GoP/GoKP) or any administrative subdivision or agency thereof or any other entity owned or controlled by GoP through any corrupt business practice.

Without limiting the generality of the foregoing, [name of Constructor] represents and warrants that it has fully declared the brokerage, commission, fees etc. paid or payable to anyone and not given or agreed to give and shall not give or agree to give to anyone within or outside Pakistan either directly or indirectly through any natural or juridical person, including its affiliate, agent, associate, broker, consultant, director, promoter, shareholder, sponsor or subsidiary, any commission, gratification, bribe, finder's fee or kickback, whether described as consultation fee or otherwise, with the object of obtaining or inducing the procurement of a contract, right, interest, privilege or other obligation or benefit in whatsoever form from GoP/GoKP, except that which has been expressly declared pursuant hereto.

[Name of Constructor] certifies that it has made and will make full disclosure of all agreements and arrangements with all persons in respect of or related to the transaction with GoP/GoKP and has not taken any action or will not take any action to circumvent the above declaration, representation or warranty.

[Name of Constructor] accepts full responsibility and strict liability for making any false declaration, not making full disclosure, misrepresenting facts or taking any action likely to defeat the purpose of this declaration, representation and warranty. It agrees that any contract, right, interest, privilege or other obligation or benefit obtained or procured as aforesaid shall, without prejudice to any other rights and remedies available to GoP/GoKP under any law, contract or other instrument, be voidable at the option of GoP/GoKP.

Notwithstanding any rights and remedies exercised by GoP/GoKP in this regard, [name of Constructor] agrees to indemnify GoP/GoKP for any loss or damage incurred by it on account of its corrupt business practices and further pay compensation to GoP/GoKP in an amount equivalent to ten time the sum of any commission, gratification, bribe, finder's fee or kickback given by [name of Supplier] as aforesaid for the purpose of obtaining or inducing the procurement of any contract, right, interest, privilege or other obligation or benefit in whatsoever form from GoP/GoKP.

Name of Procuring Entity: .....

Name of Constructor: .....

Signature: .....  
[Seal]

Signature: .....  
[Seal]

## FINANCIAL COMPETENCE AND ACCESS TO FINANCIAL RESOURCES

The financial position of the bidder shall be checked as per the following details:

1) **SOUNDNESS AND ACCESS TO FINANCIAL RESOURCES (CASH FLOW)**

The Bidder must demonstrate access to, or availability of, financial resources such as liquid assets, unencumbered real assets, lines of credits\*, and other financial means, other than any contractual advance payments, to meet the financial requirements of the contract in the amount to satisfy the Cash Flow requirement. As a minimum the Bidder must show that his resources, in term of at least his latest year's working capital and line of credits, will be adequate to cover an amount equivalent to his bid price and current work commitments i.e.,

[Latest Years Working Capital - 100% of  
Current Contract Commitments (*excluding advance payment*) + Project specific lines of credit\*]  $\geq$  **Rs. 1600 Million**

Working capital is the difference between current assets and current liabilities and measures the firm's ability to generate cash in the short term.

*(Working capital of Best Three Years Audit Reports of the last Ten Years will be considered only)*

*\* Project Specific Credit Line Facility, indicated for this (tendered) project needs to have been issued by the Bank, within the last six months. The stated credit facility shall only be considered if submitted as per **Form CL – 1** and enclosed with this Appendix.*

2) **AVERAGE ANNUAL CONSTRUCTION TURNOVER**

Criteria	Bidders to list their certified yearly Construction Turnover for last 3 years
Minimum Average Annual Construction Turnover of Pak. Rupees <b>3,500 Million</b> calculated as total certified payments received for contracts in progress or completed, within the last <b>3 years</b> .	

## PAST PERFORMANCE AND EXPERIENCE

### 1) GENERAL CONSTRUCTION EXPERIENCE

Requirement	Bidder to Provide details	Role
Experience under construction contracts in the role of Contractor or Management Contractor for at least the last 10 years prior to the bid submission deadline.	Certificate of registration of Firm / PEC registration along with experience record	Contractor, or Management Contractor

### 2) CONTRACTS OF SIMILAR SIZE AND NATURE

Requirement	Bidder to provide specific details	Role
Participation as Contractor, Management contractor, or Subcontractor, within the last 10 years, each with a value of <b>at least Rs. 3000 Million</b> that has been successfully or is substantially completed and that are similar to the proposed works. The similarity shall be based on the physical size, complexity, methods, technology or other characteristics as indicated in these Bidding Documents.	<ul style="list-style-type: none"> <li>• Letter of Acceptance.</li> <li>• Signed Bill of Quantities (Original BOQ, as per latest VO).</li> <li>• Completion Certificate</li> <li>• Abstract of Latest / Final Interim Payment Certificate.</li> </ul>	Contractor or Management Contractor (but not as Sub-Contractor)

#### Important Notes:

- 1) The similar experience of bidders in the role of sub-contractor shall not be considered for eligibility criterion against the requirement of contract of Similar Size and Nature.
- 2) In case of enhancement of similar nature of contract(s) with original amount of award less than the threshold specified hereof, the bidder must submit substantial relevant documents / approvals of respective employer(s) to establish that it possesses the requisite similar work experience.
- 3) If a bidder(s) submits project of similar nature completed in Joint Venture, it should also attach the JV Agreement of that particular project, clearly showing the share of each partner. Similar experience to the extent of its share shall only be considered against prescribed threshold.

### QUALIFICATION OF KEY STAFF

*(List to be provided on Judicial / Stamp Paper alongwith their PEC Registration Number)*

S. No.	Name of Key Staff	Designation	CNIC No.	PEC Registration No.	Qualification	Experience
1						
2						
3						
4						
5						
6						
7						
8						
9						

Note:

- The above-mentioned staffs are the minimum required key staff for this project that must be available at construction site all the time during the currency of the Contract. In case any of these staffs abandons the project site for any reason whatsoever the Contractor must immediately arrange his equivalent replacement with prior approval of the Engineer.
- The staff other than above mentioned key staff e.g., supervisors, assistants, operators and laborers etc. must also be available in accordance to the Contractors Work Program.

**CURRENT COMMITMENTS/PROJECTS IN HAND**

S.No	Contract Identification	Name of Employer	Total Value of Work (Rs. In Million)	% age J.V share (in case of J.V)	Total Value of Work, as per J.V share (Rs. In Million)	Date of Start	*Date of Completion	Total Value of Project Completed, as per IPC w.r.t J.V share (Rs. In Million)	Average Monthly invoicing over last one year (Rs. In Million)	Balance Work, as per J.V share (Rs. In Million)	Leftover time in months	Average monthly invoicing of current commitments, to complete the balance work in time (Rs. In Million)
A	B	C	D	E	F= (D x E)	G	H	I	J	K=F- I	L=H-Base Date) / 30	M = K / L

Note:

- \* Latest Completion date to be mentioned.
- Base date will be the date 28 days prior to the latest date for submission of Bid.

## **FORMS**

**BID SECURITY**

**CREDIT LINE FACILITY**

**PERFORMANCE SECURITY**

**CONTRACT AGREEMENT**

**MOBILIZATION ADVANCE GUARANTEE/BOND**

**BID SECURITY**  
**(Bank Guarantee)**

Security Executed on \_\_\_\_\_  
(Date)

Name of Surety (Bank) with Address: \_\_\_\_\_  
(Scheduled Bank in Pakistan)

Name of Principal (Bidder) with Address \_\_\_\_\_

Penal Sum of Security Rupees. \_\_\_\_\_ (Rs. \_\_\_\_\_)

Bid Reference No. **Construction of Jabba Dam, District Khyber**

KNOW ALL MEN BY THESE PRESENTS, that in pursuance of the terms of the Bid and at the request of the said Principal (Bidder) we, the Surety above named, are held and firmly bound unto **The Director General, Jabba Dam, Irrigation Department KP Peshawar** (hereafter called the "Procuring Entity") in the sum stated above for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators and successors, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH, that whereas the Bidder has submitted the accompanying Bid dated \_\_\_\_\_ for Bid No. \_\_\_\_\_ for \_\_\_\_\_ (Particulars of Bid) to the said Procuring Entity; and

WHEREAS, the Procuring Entity has required as a condition for considering said Bid that the Bidder furnishes a Bid Security in the above said sum from a Scheduled Bank in Pakistan or from a foreign bank duly counter-guaranteed by a Scheduled Bank in Pakistan, to the Procuring Entity/Employer, conditioned as under:

- (1) that the Bid Security shall remain in force up to and including the date 28 days after the deadline for validity of bids as stated in the Instructions to Bidders or as it may be extended by the Procuring Entity, notice of which extension(s) to the Surety is hereby waived;
- (2) that the Bid Security of unsuccessful Bidders will be returned by the Procuring Entity after expiry of its validity or upon signing of the Contract Agreement; and
- (3) that in the event of failure of the successful Bidder to execute the proposed Contract Agreement for such work and furnish the required Performance Security, the entire said sum be paid immediately to the said Procuring Entity pursuant to Clause 15.6 of the Instruction to Bidders for the successful Bidder's failure to perform.

NOW THEREFORE, if the successful Bidder shall, within the period specified therefore, on the prescribed form presented to him for signature enter into a formal Contract with the said Procuring Entity in accordance with his Bid as accepted and furnish within twenty-eight (28) days of his being requested to do so, a Performance Security with good and sufficient surety, as may be required, upon the form prescribed by the said Procuring Entity for the

faithful performance and proper fulfilment of the said Contract or in the event of non-withdrawal of the said Bid within the time specified for its validity then this obligation shall be void and of no effect, but otherwise to remain in full force and effect.

PROVIDED THAT the Surety shall forthwith pay the Procuring Entity the said sum upon first written demand of the Procuring Entity (without cavil or argument) and without requiring the Procuring Entity to prove or to show grounds or reasons for such demand, notice of which shall be sent by the Procuring Entity by registered post duly addressed to the Surety at its address given above.

PROVIDED ALSO THAT the Procuring Entity shall be the sole and final judge for deciding whether the Principal (Bidder) has duly performed his obligations to sign the Contract Agreement and to furnish the requisite Performance Security within the time stated above, or has defaulted in fulfilling said requirements and the Surety shall pay without objection the said sum upon demand from the Procuring Entity forthwith and without any reference to the Principal (Bidder) or any other person.

IN WITNESS WHEREOF, the above bounden Surety has executed the instrument under its seal on the date indicated above, the name and seal of the Surety being hereto affixed and these presents duly signed by its undersigned representative pursuant to authority of its governing body.

SURETY (Bank)

WITNESS:

1. \_\_\_\_\_

\_\_\_\_\_

Corporate Secretary (Seal)

2. \_\_\_\_\_

\_\_\_\_\_

Name, Title & Address

Signature \_\_\_\_\_

Name \_\_\_\_\_

Title \_\_\_\_\_

Corporate Guarantor (Seal)

**CREDIT LINE FACILITY  
(Bank's Undertaking)**

To,

The Director General  
Jabba Dam Project, District Khyber,  
Govt of Khyber Pakhtunkhwa,  
Irrigation Department,  
**PESHAWAR.**

This is to certify that M/s \_\_\_\_\_ (Name & address of the Bidder) are maintaining their Account No. \_\_\_\_\_ since \_\_\_\_\_ with our Bank / Branch.

We also certify that our Bank \_\_\_\_\_ (Bank Name & address) has committed a credit line facility upto Pak Rs. \_\_\_\_\_ to M/s \_\_\_\_\_ (Name of Bidder) for the project \_\_\_\_\_ (Project Name) for the duration from \_\_\_\_\_ to \_\_\_\_\_ on the basis of their financial strength, market reputation and securities with this bank.

1. Name \_\_\_\_\_  
2. Designation \_\_\_\_\_  
3. Official Seal \_\_\_\_\_

of Authorized Signatory

1. Name \_\_\_\_\_  
2. Designation \_\_\_\_\_  
3. Official Seal \_\_\_\_\_

of Authorized Signatory

**FORM OF PERFORMANCE SECURITY  
(Bank Guarantee)**

Guarantee No. \_\_\_\_\_

Executed on \_\_\_\_\_

Expiry date \_\_\_\_\_

[Letter by the Guarantor to the Procuring Entity]

Name of Guarantor (Bank) with address: \_\_\_\_\_

(Scheduled Bank in Pakistan)

Name of Principal (Contractor) with address: \_\_\_\_\_

Penal Sum of Security (express in words and figures) \_\_\_\_\_

Letter of Acceptance No. \_\_\_\_\_ Dated \_\_\_\_\_

KNOW ALL MEN BY THESE PRESENTS, that in pursuance of the terms of the Bidding Documents and above said Letter of Acceptance (hereinafter called the Documents) and at the request of the said Principal we, the Guarantor above named, are held and firmly bound unto **The Director General, Jabba Dam Project, Irrigation Department KP Peshawar** (hereafter called the "Procuring Entity") in the penal sum of the amount stated above for the payment of which sum well and truly to be made to the said Procuring Entity, we bind ourselves, our heirs, executors, administrators and successors, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH, that whereas the Principal has accepted the Procuring Entity above said Letter of Acceptance for \_\_\_\_\_ (Name of Contract) for the **Construction of Jabba Dam, District Khyber** (Name of Project).

NOW THEREFORE, if the Principal (Contractor) shall well and truly perform and fulfill all the undertakings, covenants, terms and conditions of the said Documents during the original terms of the said Documents and any extensions thereof that may be granted by the Procuring Entity, with or without notice to the Guarantor, which notice is, hereby, waived and shall also well and truly perform and fulfill all the undertakings, covenants terms and conditions of the Contract and of any and all modifications of said Documents that may hereafter be made, notice of which modifications to the Guarantor being hereby waived, then, this obligation to be void; otherwise to remain in full force and virtue till all requirements of Clause 49, Defects Liability, of Conditions of Contract are fulfilled.

Our total liability under this Guarantee is limited to the sum stated above and it is a condition of any liability attaching to us under this Guarantee that the claim for payment in writing shall be received by us within the validity period of this Guarantee, failing which we shall be discharged of our liability, if any, under this Guarantee.

We, \_\_\_\_\_ (the Guarantor), waiving all objections and defenses under the Contract, do hereby irrevocably and independently guarantee to pay to the Procuring Entity without delay upon the Procuring Entity first written demand without cavil or arguments and without requiring the Procuring Entity to prove or to show grounds or reasons for such demand any sum or sums up to the amount stated above, against the Procuring Entity written declaration that the Principal has refused or failed to perform the obligations under the Contract which payment will be effected by the Guarantor to Procuring Entity designated Bank & Account Number.

PROVIDED ALSO THAT the Procuring Entity shall be the sole and final judge for deciding whether the Principal (Contractor) has duly performed his obligations under the Contract or has defaulted in fulfilling said obligations and the Guarantor shall pay without objection any sum or sums up to the amount stated above upon first written demand from the Procuring Entity forthwith and without any reference to the Principal or any other person.

IN WITNESS WHEREOF, the above-bounden Guarantor has executed this Instrument under its seal on the date indicated above, the name and corporate seal of the Guarantor being hereto affixed and these presents duly signed by its undersigned representative, pursuant to authority of its governing body.

	_____ Guarantor (Bank)
Witness:	
1. _____	Signature _____
_____	Name _____
Corporate Secretary (Seal)	Title _____
2. _____	
_____	_____
Name, Title & Address	Corporate Guarantor (Seal)

## FORM OF CONTRACT AGREEMENT

THIS CONTRACT AGREEMENT (hereinafter called the "Agreement") made on the \_\_\_\_\_ day of \_\_\_\_\_ (month) 20\_\_\_\_ between **The Director General, Jabba Dam Project, Irrigation Department KP Peshawar** (hereafter called the "Procuring Entity") of the one part and \_\_\_\_\_ (hereafter called the "Contractor") of the other part.

WHEREAS the Procuring Entity is desirous that certain Works, for **Construction of Jabba Dam, District Khyber** should be executed by the Contractor and has accepted a Bid by the Contractor for the execution and completion of such Works and the remedying of any defects therein.

NOW this Agreement witnessed as follows:

1. In this Agreement words and expressions shall have the same meanings as are respectively assigned to them in the Conditions of Contract hereinafter referred to.
2. The following documents after incorporating addenda, if any, except those parts relating to Instructions to Bidders shall be deemed to form and be read and construed as part of this Agreement, viz:
  - a) The Contract Agreement;
  - b) The Letter of Acceptance;
  - c) The completed Form of Bid (Letter of Technical Bid and Letter of Price Bid);
  - d) Addendum/Corrigendum, if any, pertaining to Contract documents;
  - e) Special Stipulations (Appendix-A to Bid);
  - f) The Particular Conditions of Contract – Part II;
  - g) The General Conditions of Contract – Part I;
  - h) The priced Bill of Quantities (Appendix-D to Bid);
  - i) The completed Appendices to Bid;
  - j) Special Provisions (Specifications);
  - k) Particular and Supplementary Specifications;
  - l) General Specifications (Technical Specifications for Workmanship) MRS – 2019, Communication and Works Department, KPK;
  - m) The Drawings; and
  - n) Any other document.
3. In consideration of the payments to be made by the Procuring Entity to the Contractor as hereinafter mentioned, the Contractor hereby covenants with the Procuring Entity to execute and complete the Works and remedy defects therein in conformity and in all respects with the provisions of the Contract.
4. The Procuring Entity hereby covenants to pay the Contractor, in consideration of the execution and completion of the Works as per provisions of the Contract, the Contract Price or such other sum as may become payable under the provisions of the Contract at the times and in the manner prescribed by the Contract.

IN WITNESS WHEREOF the parties hereto have caused this Agreement to be executed on the day, month and year first before written in accordance with their respective laws.

Signature of the Contactor

Signature on behalf of Procuring Entity

\_\_\_\_\_  
(Seal)

\_\_\_\_\_  
(Seal)

Signed, Sealed and Delivered in the presence of:

Witness:

Witness:

\_\_\_\_\_

\_\_\_\_\_

(Name, Title and Address)

(Name, Title and Address)

**MOBILIZATION ADVANCE GUARANTEE**

Guarantee No. \_\_\_\_\_ Date \_\_\_\_\_

WHEREAS **The Director General, Jabba Dam Project, Irrigation Department KP Peshawar** (hereinafter called the 'Procuring Entity') has entered into a Contract for **Construction of Jabba Dam, District Khyber** with \_\_\_\_\_ (hereinafter called the "Contractor").

AND WHEREAS, the Procuring Entity has agreed to advance to the Contractor, at the Contractor's request, an amount of Rupees \_\_\_\_\_ (Rs \_\_\_\_\_) which amount shall be advanced to the Contractor as per provisions of the Contract.

AND WHEREAS, the Procuring Entity has asked the Contractor to furnish Guarantee to secure the mobilization advance for the performance of his obligations under the said Contract.

AND WHEREAS, \_\_\_\_\_  
(Scheduled Bank in Pakistan acceptable to the Procuring Entity)

(hereinafter called the "Guarantor") at the request of the Contractor and in consideration of the Procuring Entity agreeing to make the above advance to the Contractor, has agreed to furnish the said Guarantee.

NOW, THEREFORE, the Guarantor hereby guarantees that the Contractor shall use the advance for the purpose of above-mentioned Contract and if he fails and commits default in fulfilment of any of his obligations for which the advance payment is made, the Guarantor shall be liable to the Procuring Entity for payment not exceeding the aforementioned amount.

Notice in writing of any default, of which the Procuring Entity shall be the sole and final judge, on the part of the Contractor, shall be given by the Procuring Entity to the Guarantor, and on such first written demand, payment shall be made by the Guarantor of all sums then due under this Guarantee without any reference to the Contractor and without any objection.

This Guarantee shall remain in force until the advance is fully adjusted against payments from the Interim Payment Certificates of the Contractor or until \_\_\_\_\_  
\_\_\_\_\_ whichever is earlier.

(Date)

The Guarantor's liability under this Guarantee shall not in any case exceed the sum of Rupees \_\_\_\_\_ (Rs \_\_\_\_\_).

This Guarantee shall remain valid up to the aforesaid date and shall be null and void after the aforesaid date or earlier if the advance made to the Contractor is fully adjusted against payments from Interim Payment Certificates of the Contractor provided that the Guarantor agrees that the aforesaid period of validity shall be deemed to be extended if on the above-mentioned date, the advance payment is not fully adjusted.

**GUARANTOR (BANK)**

- 1. Signature \_\_\_\_\_
- 2. Name \_\_\_\_\_
- 3. Title \_\_\_\_\_

**WITNESS**

- 1. \_\_\_\_\_  
\_\_\_\_\_  
Corporate Secretary (Seal)

- 2. \_\_\_\_\_  
(Name Title & Address)
- \_\_\_\_\_ Corporate Guarantor (Seal)

## **PART I - GENERAL CONDITIONS OF CONTRACT**

**FEDERATION INTERNATIONALE DES INGENIEURS-CONSEILS**

**CONDITIONS OF CONTRACT**

**FOR WORKS OF CIVIL**

**ENGINEERING  
CONSTRUCTION**

**PART I GENERAL CONDITIONS  
WITH FORMS OF TENDER AND AGREEMENT**

FOURTH EDITION 1987

Reprinted in 1988 with editorial amendments

Reprinted in 1992 with further amendments

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Copies of the FIDIC Conditions of Contract can be  
obtained from: FIDIC Secretariat  
P.O. Box 86  
1000 Lausanne 12  
Switzerland  
e-mail: [fidic.pub@fidic.org](mailto:fidic.pub@fidic.org) - [FIDIC.org/bookshop](http://FIDIC.org/bookshop)

## **PART II - PARTICULAR CONDITIONS OF CONTRACT**

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## PART II - PARTICULAR CONDITIONS OF CONTRACT

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## PART II - PARTICULAR CONDITIONS OF CONTRACT

### 1.1 Definitions

- (a) (i) Replace the word “Employer” with the “Procuring Entity” wherever appears in these Conditions of Contract.

The Procuring Entity is the Director General, Jabba Dam Project District Khyber, Govt of Khyber Pakhtunkhwa, Irrigation Department, Peshawar

- (a) (iv) The Engineer will be the Director Jabba Dam, Irrigation Department KP Peshawar, and his full address will be communicated to the contractor, or any other competent person appointed by the Procuring Entity, and notified to the contractor, to act in replacement of the Engineer. Provided always that except in cases of professional misconduct, the outgoing Engineer’s shall have to formulate their certification/recommendations in relation to all outstanding matter, disputes and claims relating to the execution of the Works during their tenure.

- (a)(vi) “Bidder or Tenderer” means any person or persons, company, corporation, firm or joint venture submitting a Bid or Tender.

- (b)(v) The following is added at the end of the paragraph:

The word “Tender” is synonymous with “Bid” and the word “Tender Documents” with “Bidding Documents”.

- (b)(viii) Amend Part - I to read as:

The term “Appendix to Tender” shall be replaced by the term “Appendices to Tender”.

“Appendices to Tender” mean **Appendix A through P** annexed to the Tender and forming a part thereof.

The following paragraph is added:

- (b)(ix) “Programme” means the programme to be submitted by the Contractor in accordance with Sub-Clause 14.1 and any approved revisions thereto.

- (e)(i) The text is deleted and substituted with the following:

“Contract Price” means the sum stated in the Letter of Acceptance as payable to the Contractor for the execution and completion of the Works subject to such additions thereto or deductions therefrom as may be made and remedying of any defects therein in accordance with the provisions of the Contract.

### 2.1 Engineer's Duties and Authority

With reference to Sub-Clause 2.1(b), the following provisions shall also apply;

The Engineer shall obtain the specific approval of the Procuring Entity before carrying out his duties in accordance with the following Clauses:

- (i) Consenting to the sub-letting of any part of the Works under Sub-Clause 4.1 “Subcontracting”.
- (ii) Certifying additional cost determined under Sub-Clause 12.2 “Not Foreseeable Physical Obstructions or Conditions”.
- (iii) Any action under Clause 10 “Performance Security” and Clauses 21,23,24 & 25 “Insurance” of sorts.
- (iv) Any action under Clause 40 “Suspension”.
- (v) Any action under Clause 44 “Extension of Time for Completion”.
- (vi) Any action under Clause 47 “Liquidated Damages for Delay”.
- (vii) Issuance of “Taking Over Certificate” under Clause 48.
- (viii) Issuing a Variation Order under Clause 51, except:
  - a) in an emergency\* situation, as stated here below, or
  - b) if such variation would increase the Contract Price by less than the amount stated in the Appendix-A to Bid.
- (ix) Fixing rates or prices under Clause 52.
- (x) Extra payment as a result of Contractor’s claims under Clause 53.
- (xi) Release of Retention Money to the Contractor under Sub-Clause 60.3 “Payment of Retention Money”.
- (xii) Issuance of “Final Payment Certificate” under Sub-Clause 60.8.
- (xiii) Issuance of “Defect Liability Certificate” under Sub-Clause 62.1.
- (xiv) Any change in the ratios of Contract currency proportions and payments thereof under Clause 72 “Currency and Rate of Exchange”.
- (xv) Certify additional cost under Clauses 6,20, 27, 42, 65, 69 and 70.
- (xvi) Issuing instructions under Clause 58.

\* (If in the opinion of the Engineer an emergency occurs affecting the safety of life or of the Works or of adjoining property, the Engineer may, without relieving the Contractor of any of his duties and responsibilities under the Contract, instruct the Contractor to execute all such work or to do all such things as may, in the opinion of the Engineer, be necessary to abate or reduce the risk. The Contractor shall forthwith comply with any such instruction of the Engineer. The Engineer shall determine an addition to the Contract Price, in respect of such instruction, in accordance with Clause 52 and shall notify the Contractor accordingly, with a copy to the Procuring Entity).

## **2.2 Engineer's Representative**

The following paragraph is added:

**Jabba Dam Consultants** (*BAK, JV AGES and PES*) will be the Engineer's Representative.

**The following Sub-Clauses 2.7 and 2.8 are added:**

## **2.7 Engineer Not Liable**

Approval, reviews and inspection by the Engineer of any part of the Works does not relieve the Contractor from his sole responsibility and liability for the supply of materials, plant and equipment for construction of the Works and their parts in accordance with the Contract and neither the Engineer's authority to act nor any decision made by him in good faith as provided for under the Contract whether to exercise or not to exercise such authority shall give rise to any duty or responsibility of the Engineer to the Contractor, any Subcontractor, any of their representatives or employees or any other person performing any portion of the Works.

## **2.8 Replacement of the Engineer**

If the Procuring Entity intends to replace the Engineer, the Procuring Entity shall, not less than 14 days before the intended date of replacement, give notice to the Contractor, of the name, address and relevant experience of the intended replacement Engineer. The Procuring Entity shall not replace the Engineer with a person against whom the Contractor raises reasonable objection by notice to the Procuring Entity, with supporting particulars.

**New Sub-Clause 4.3 is added as following:**

## **4.3 Approval of Sub-contractor's list**

Where a list of Sub – Contractor's is provided under **Appendix – I to Bid**, the Sub – Contractor's in that list shall be subject to the prior approval of the Procuring Entity (which approval, notwithstanding the provision of Sub-clause 1.5, shall be at the sole discretion of the Procuring Entity).

## **5.1 Language(s) and Law**

- (a) The Contract Documents, shall be drawn up in the English language.
- (b) The Contract shall be subject to the Laws of Islamic Republic of Pakistan.

## **5.2 Priority of Contract Documents**

**The documents listed at (1) to (6) of the Sub-Clause are deleted and substituted with the following:**

- 1) The Contract Agreement (if completed);

- 2) The Letter of Acceptance;
- 3) The Completed Form of Bid (Letter of Technical Bid and Letter of Price Bid);
- 4) Addendum /Corrigendum, if any, pertaining to Contract documents;
- 5) Special Stipulations (Appendix-A to Bid);
- 6) The Particular Conditions of Contract – Part II;
- 7) The General Conditions of Contract – Part I;
- 8) The Priced Bill of Quantities (Appendix-D to Bid);
- 9) The Completed Appendices to Bid;
- 10) Special Provisions (Specifications);
- 11) Particular Specifications
- 12) Supplementary Specifications
- 13) General Specifications (Technical Specifications for Workmanship) - MRS 2019 (KPK)
- 14) The Drawings;

In case of discrepancies between drawings, those of larger scale shall govern unless they are superseded by a drawing of later date regardless of scale. All Drawings and Specifications shall be interpreted in conformity with the Contract and these Conditions. Addendum, if any, shall be deemed to have been incorporated at the appropriate places in the documents forming the Contract.

**The following Sub-Clauses 6.6 and 6.7 are added:**

#### **6.6 Shop Drawings**

The Contractor shall submit to the Engineer for review 3 copies of all shop and erection drawings applicable to this Contract as per provision of relevant Sub-Clause of the Contract.

Review and approval by the Engineer shall not be construed as a complete check but will indicate only that the general method of construction and detailing is satisfactory and that the Engineer's review or approval shall not relieve the Contractor of any of his responsibilities under the Contract.

#### **6.7 As-Built Drawings**

At the completion of the Works under the Contract, the Contractor shall furnish to the Engineer 6 copies and one reproducible of all drawings amended to conform with the Works as built. The price of such Drawings shall be deemed to be included in the Contract Price.

#### **10.1 Performance Security**

**The text is deleted and substituted with the following:**

The Contractor shall provide Performance Security to the Procuring Entity in the prescribed form. The said Security shall be furnished or caused to be furnished by the Contractor within 28 days after the receipt of the Letter of Acceptance. The Performance Security shall be of an amount equal to 10% of the Contract Price stated in the Letter of Acceptance. Such Security shall, at the option of the bidder, be in the form of either (a) bank guarantee from any Scheduled Bank in Pakistan or (b) bank guarantee from a bank located outside Pakistan duly counter-guaranteed by a Scheduled Bank in Pakistan.

The cost of complying with requirements of this Sub-Clause shall be borne by the Contractor.

**The following Sub-Clause 10.4 is added:**

#### **10.4 Performance Security Binding on Variations and Changes**

The Performance Security shall be binding irrespective of changes in the quantities or variations in the Works or extensions in Time for Completion of the Works which are granted or agreed upon under the provisions of the Contract.

#### **11.1 Inspection of Site**

**Add the following paragraphs at the end of this Sub-Clause:**

The Contractor shall satisfy himself as to the nature of the ground, the geological, hydrological and climatic conditions, the form and nature of the Site, the quantities and nature of the Works and materials necessary for the completion of the Works, and the means of access to the Site, the accommodation he may require and in general shall himself obtain all necessary information as to risks, contingencies, and other circumstances which may influence or affect his Bid.

The Procuring Entity does not guarantee the correctness of any data / information / drawings either verbal and / or written provided herein nor any interpretations, or conclusions relative to conditions at Site.

The Contractor must form his own opinion of the character of the Works and of the materials to be excavated etc. He must make his own interpretations, and satisfy himself by his own investigations and research regarding all conditions affecting the Works to be done.

The Contractor must assume all responsibility for presumptions and conclusions as to the nature or conditions of the materials to be excavated and of doing other work affected by the geology at the Site.

In particular and without limiting the generality of the aforesaid, the Contractor shall not rely upon such opinion or interpretation of the Procuring Entity, for any claim with respect to additional time or cost under the contract.

#### **14.1 Programme to be Submitted**

The Contractor shall submit two copies of the programme of Works referred to in sub-Clause 14.1 within 42 days from the date of receipt of Letter of Acceptance.

The programme shall be revised every three (3) months and should include a chart of the principal quantities of the Works forecast for execution monthly, and an updated schedule of payments expected to be made to the Contractor by the Procuring Entity.

The programme shall be computerized and drawn on the critical path method ,in the form of

MS Project / Primavera P6, identifying all items of work including the temporary Works. Progress reporting by the Contractor should be supported on a monthly basis with an up-to-date analysis of the progress including a statement on items which are or about to become critical to the Progress of Works, alongwith proposals on how the Contractor intends to alleviate the situation.

### **14.3 Cash Flow Estimate to be Submitted**

The detailed Cash Flow Estimate shall be submitted within 21 days from the date of receipt of Letter of Acceptance.

**The following paragraph is added at the end of this Sub-Clause:**

The Cash Flow Estimate previously submitted shall be revised each time the construction programme is revised and submitted under sub-clause 14.1

**The following Sub-Clause 14.5 is added:**

### **14.5 Detailed Programme and Monthly Progress Report**

- a) For purposes of Sub-Clause 14.1, the Contractor shall submit to the Engineer detailed programme for the following:
- (1) Execution of Works;
  - (2) Labour Employment;
  - (3) Local Material Procurement;
  - (4) Material Imports, if any; and
  - (5) Other details as required by the Engineer.
- (b) During the period of the Contract, the Contractor shall submit to the Engineer not later than the 8<sup>th</sup> day of the following month, 10 copies each of Monthly Progress Reports covering:
- (1) A Construction Schedule indicating the monthly progress in percentage;
  - (2) Description of all work carried out since the last report;
  - (3) Description of the work planned for the next 56 days sufficiently detailed to enable the Engineer to determine his programme of inspection and testing;
  - (4) Monthly summary of daily job record;
  - (5) Photographs to illustrate progress; and
  - (6) Information about problems and difficulties encountered, if any, and proposals to overcome the same.
- (c) During the period of the Contract, the Contractor shall keep a daily record of the work progress, which shall be made available to the Engineer as and when requested. The daily record shall include particulars of weather conditions, number of men working, deliveries of materials, quantity, location and assignment of Contractor's equipment.

**The following Sub-Clauses 15.2 and 15.3 are added:**

**15.2 Language Ability of Contractor's Representative**

The Contractor's authorized representative shall be fluent in the English / Urdu language. Alternately an interpreter with ability of English / Urdu language shall be provided by the Contractor on full time basis. The Engineer / Procuring Entity, however, may relax conditions of the language from English to other local languages if deemed appropriate.

**15.3 Contractor's Representative**

The Contractor's authorised representative and his other Professional Engineers working at Site shall register themselves with the Pakistan Engineering Council.

The Contractor's authorised representative at Site shall be authorised to exercise adequate administrative and financial powers on behalf of the Contractor so as to achieve completion of the Works as per the Contract.

**The following Sub-Clauses 16.3 and 16.4 are added:**

**16.3 Language Ability of Superintending Staff of Contractor**

A reasonable proportion of the Contractor's superintending staff shall have a working knowledge of the English / Urdu language. If the Contractor's superintending staff are not fluent in English / Urdu language, the Contractor shall make competent interpreters available during all working hours in a number deemed sufficient by the Engineer. The Engineer / Procuring Entity, however, may relax conditions of the language from English / Urdu to other local languages if deemed appropriate.

**16.4 Employment of Local Personnel**

The Contractor is encouraged, to the extent practicable and reasonable, to employ staff and labour from sources within KPK.

**New Sub-para's (d), (e) & (f) are added to Sub-Clause 19.1 as following:**

**19.1 Safety, Security and Protection of the Environment**

(d) The contractor shall exercise care to protect the natural landscape and shall conduct his construction operations so as to prevent any unnecessary destruction, scarring or defacing of the natural surroundings in the vicinity of the Works, except where clearing is required for permanent Works, approved temporary Works and for excavation operations. All trees and native vegetation shall be preserved and shall be protected from damage which may be caused by the Contractor's construction operations and equipment. On completion of the Works, all work areas shall be smoothed and graded in a manner to conform the natural appearance of the landscape. Where unnecessary destruction, scarring damage or defacing may occur as a result of the Contractor's operations, it shall be repaired, replanted or otherwise corrected as directed by the Engineer at Contractor's expense.

- (e) Borrow areas shall be located and operated so as not to detract from the future usefulness or value of the sites. Upon completion of operations, borrow areas shall be left in a safe and slightly conditions. No borrow areas shall be located too close to the populated area, to jeopardize safety and security of the inhabitants.
- (f) During the performance of the work required under the Contract, the Contractor shall carry out proper and efficient measures as often as necessary to reduce the dust nuisance, and to prevent dust originating from his operations.

**The following Sub-Clauses 19.3 and 19.4 are added:**

### **19.3 Safety Precautions**

In order to provide for the safety, health and welfare of persons, and for prevention of damage of any kind, all operations for the purposes of or in connection with the Contract shall be carried out in compliance with the Safety Requirements of the Government of Pakistan and KPK with such modifications thereto as the Engineer may authorise or direct and the Contractor shall take or cause to be taken such further measures and comply with such further requirements as the Engineer may determine to be reasonably necessary for such purpose.

The Contractor shall make, maintain and submit reports to the Engineer concerning safety, health and welfare of persons and damage to property, as the Engineer may from time to time prescribe.

### **19.4 Lighting Work at Night**

In the event of work being carried out at night, the Contractor shall at his own cost, provide and maintain such good and sufficient light as will enable the work to proceed satisfactorily and without danger. The approaches to the Site and the Works where the night-work is being carried out shall be sufficiently lighted. All arrangement adopted for such lighting shall be to the satisfaction of the Engineer's Representative.

### **20.4 Procuring Entity Risks**

The Procuring Entity risks are:

Delete the text and substitute with the following:

**(a)** insofar as they directly affect the execution of the Works in KPK:

- (i) war and hostilities (whether war be declared or not), invasion, act of foreign enemies,
- (ii) rebellion, revolution, insurrection, or military or usurped power, or civil war,
- (iii) ionizing radiations, or contamination by radioactivity from any nuclear fuel, or from any nuclear waste from the combustion of nuclear fuel, radioactive toxic explosive or other hazardous properties of any explosive, nuclear assembly or nuclear component thereof,

- (iv) pressure waves caused by aircraft or other aerial devices travelling at sonic or supersonic speeds,
  - (v) riot, commotion or disorder, unless solely restricted to the employees of the Contractor or of his Subcontractors and arising from the conduct of the Works;
- (b)** loss or damage due to the use or occupation by the Procuring Entity` of any Section or part of the Permanent Works, except as may be provided for in the Contract;
- (c)** loss or damage to the extent that it is due to the design of the Works, other than any part of the design provided by the Contractor or for which the Contractor is responsible; and
- (d)** any operation of the forces of nature (insofar as it occurs on the Site) which an experienced contractor:
- (i) could not have reasonably foreseen, or
  - (ii) could reasonably have foreseen, but against which he could not reasonably have taken at least one of the following measures:
    - (a)** prevent loss or damage to physical property from occurring by taking appropriate measures, or
    - (b)** insure against.

## **21.2 Scope of Cover**

Sub para (a) of Sub-Clause 21.2 is amended by deletion of “from the start of work at the Site” and substituted by “from the first working day after the Commencement Date”.

## **21.3 Responsibility for Amounts not Recovered**

The text is deleted and substituted with the following:

Any amounts not insured or not recovered from the insurers shall be borne by the Contractor in accordance with his responsibilities under Clause 20.

## **21.4 Exclusions**

The text is deleted and substituted with the following:

There shall be no obligation for the insurances in Sub-Clause 21.1 to include loss or damage caused by the risks listed under Sub-Clause 20.4 paras (a) (i) to (iv).

**The following Sub-Clause 21.5 is added:**

## **21.5 Responsibility to Notify Insurers**

It shall be the responsibility of the Contractor to notify the insurers of any changes in nature and extent of the Works and to ensure the adequacy of the insurance coverage at all times in accordance with the provision of this Clause.

**The following Sub-Clause 25.5 is added:**

### **25.5 Insurance Company**

The Contractor shall be obliged to place all insurances relating to the Contract (including, but not limited to, the insurances referred to in Clauses 21, 23 and 24) with either National Insurance Company of Pakistan or any other insurance company, enjoying minimum rating "AA", operating in Pakistan and acceptable to the Procuring Entity.

All Costs of such insurances shall be borne by the Contractor.

**The following Sub-Clause 31.3 is added:**

### **31.3 Co-operation with other Contractors**

During the execution of the Works, the Contractor shall co-operate fully with other contractors working for the Procuring Entity at and in the vicinity of the Site and also shall provide adequate precautionary facilities not to make himself a nuisance to local residents and other contractors.

**The following Sub-Clauses 34.2 to 34.12 are added:**

### **34.2 Rates of Wages and Conditions of Labour**

The Contractor shall pay rates of wages and observe conditions of labour not less favourable than those established for the trade or industry where the work is carried out. In the absence of any rates of wages or conditions of labour so established, the Contractor shall pay rates of wages and observe conditions of labour which are not less favourable than the general level of wages and conditions observed by other Procuring Entities whose general circumstances in the trade or in industry in which the Contractor is engaged are similar.

### **34.3 Employment of Persons in the Service of Others**

The Contractor shall not recruit his staff and labour from amongst the persons in the services of the Procuring Entity or the Engineer; except with the prior written consent of the Procuring Entity or the Engineer, as the case may be.

### **34.4 Housing for Labour**

Save insofar as the Contract otherwise provides, the Contractor shall provide and maintain such housing accommodation and amenities as he may consider necessary for all his supervisory staff and labour, employed for the purposes of or in connection with the Contract including all fencing, electricity supply, sanitation, cookhouses, fire prevention, water supply and other requirements in connection with such housing accommodation or amenities. On completion of the Contract, these facilities shall be handed over to the Procuring Entity or if

the Procuring Entity so desires, the temporary camps or housing provided by the Contractor shall be removed and the Site reinstated to its original condition, all to the approval of the Engineer.

#### **34.5 Health and Safety**

Due precautions shall be taken by the Contractor, and at his own cost, to ensure the safety of his staff and labour at all times throughout the period of the Contract. The Contractor shall further ensure that suitable arrangements are made for the prevention of epidemics and for all necessary welfare and hygiene requirements.

#### **34.6 Epidemics**

In the event of any outbreak of illness of an epidemic nature, the Contractor shall comply with and carry out such regulations, orders and requirements as may be made by the Government, or the local medical or sanitary authorities, for purpose of dealing with and overcoming the same.

#### **34.7 Supply of Water**

The Contractor shall, so far as is reasonably practicable, having regard to local conditions, provide on the Site, to the satisfaction of the Engineer or his representative, adequate supply of drinking and other water for the use of his staff and labour.

#### **34.8 Alcoholic Liquor or Drugs**

The Contractor shall not, otherwise than in accordance with the Statutes, Ordinances and Government Regulations or Orders for the time being in force, import, sell, give, barter or otherwise dispose of any alcoholic liquor or drugs, or permit or suffer any such importation, sale, gift, barter or disposal by his Subcontractors, agents, staff or labour.

#### **34.9 Arms and Ammunition**

The Contractor shall not give, or otherwise dispose of to any person or persons, any arms or ammunition of any kind or permit or suffer the same as aforesaid.

#### **34.10 Festivals and Religious Customs**

The Contractor shall in all dealings with his staff and labour have due regard to all recognized festivals, days of rest and religious and other customs.

#### **34.11 Disorderly Conduct**

The Contractor shall at all times take all reasonable precautions to prevent any unlawful, riotous or disorderly conduct by or amongst staff and labour and for the preservation of peace and protection of persons and property in the neighborhood of the Works against the same.

### **34.12 Compliance by Subcontractors**

The Contractor shall be responsible for compliance by his Subcontractors of the provisions of this Clause.

**The following Sub-Clauses 35.2 and 35.3 are added:**

### **35.2 Records of Safety and Health**

The Contractor shall maintain such records and make such reports concerning safety, health and welfare of persons and damage to property as the Engineer may from time to time prescribe.

### **35.3 Reporting of Accidents**

The Contractor shall report to the Engineer details of any accident as soon as possible after its occurrence. In the case of any fatality or serious accident, the Contractor shall, in addition, notify the Engineer immediately by the quickest available means.

**The following Sub-Clause 36.6 is added:**

### **36.6 Use of Pakistani Materials and Services**

The Contractor shall, so far as may be consistent with the Contract, make the maximum use of materials, supplies, plant and equipment indigenous to or produced or fabricated in Pakistan and services, available in Pakistan preferably in KPK provided such materials, supplies, plant, equipment and services shall be of required standard.

**The following Sub-clause 37.6 is added:**

### **37.6 Witnessing of Factory Acceptance Tests**

Factory acceptance test shall be witnessed by the personnel (one each) of the Procuring Entity and the Engineer. All costs in connection with witnessing of the factory acceptance tests by the Procuring Entity and the Engineer shall be borne by the Contractor, deemed to be covered in rates quoted by Contractor in BOQ. These shall include the cost of air travel (economy class) from Pakistan to place of inspection / testing and back, hotel accommodation / boarding / lodging (as per actual) and inland transportation. Besides other costs of travelling and lodging etc. (as above) for inspection / testing to be conducted inside Pakistan for each visit of every person to witness these tests.

**The following Sub-Clause 39.3 is added:**

### **39.3 Engineer's Decision Final**

Any decision of the Engineer under Sub-Clause 39.1 shall be final and conclusive.

#### 41.1 Commencement of Works

The text is deleted and substituted with the following:

The Contractor shall commence the Works on Site within the period named in Appendix-A to Bid from the date of receipt by him from the Engineer of a written Notice to Commence. Thereafter, the Contractor shall proceed with the Works with due expedition and without delay.

#### 45.1 Restriction on Working Hours

After the first paragraph add the following paragraph:

If as a result of carrying out the Works on holidays or locally recognized days of rest or at night or after the normal working hours, the assistants to the Engineer's Representative perform supervision of the Works, the additional supervision cost based on hourly rates shall be determined by the Engineer after due consultation with the Procuring Entity and the Contractor, which shall be paid by the Contractor to the assistants through the Engineer's Representative; this mode of compensation shall be applicable also under Sub-Clause 46.1.

#### 51.2 Instructions for Variations

At the end of the first sentence, after the word "Engineer", the words "in writing" are added.

#### 52.1 Valuation of Variations

In the tenth line, after the words "Engineer shall" the following is added:

within a period not exceeding one-eighth of the completion time subject to a minimum of 56 days from the date of disagreement whichever is later.

#### 52.2 Power of Engineer to Fix Rates

At the end of the first paragraph add:

Provided further that no change in the rate or price for any item contained in the Contract shall be considered unless such item (**varied quantity only**) accounts for an amount more than **2 percent of the Contract Price**, and the actual quantity of work executed under the item exceeds or falls short of the quantity set out in the Bill of Quantities by **more than 30%** and **applicable to the varied quantity only** i.e., starting from 130 percent to onward (**in case the quantity of an item exceeds**) provided the conditions set above are fulfilled and if the quantity of a BOQ item is reduced more than 30 (thirty) percent the change in rate will be applicable to all the **leftover / remaining quantity**.

#### 53.4 Failure to Comply

This Sub-Clause is deleted in its entirety.

**The existing texts of Sub-Clauses 54.3 and 54.4 are deleted and substituted with the following: -**

**54.3 Customs Clearance**

Customs Clearance of the Contractors Equipment, materials, and other things required for the Works shall be the responsibility of the Contractor.

**54.4 Re-export of Contractor's Equipment**

The Contractor shall be responsible in procuring any necessary Government consent to the re-export of such Contractor's Equipment, which the Contractor has imported for the purposes of the Works, when it is removed from the site.

**54.5 Conditions of Hire of Contractor's Equipment**

The following paragraph is added:

The Contractor shall, upon request by the Engineer at any time in relation to any item of hired Contractor's Equipment, forthwith notify the Engineer in writing the name and address of the Owner of the equipment and shall certify that the agreement for the hire thereof contains a provision in accordance with the requirements set forth above.

**The Sub-Clauses 59.4 & 59.5 are deleted and substituted with the following:**

**59.4 Payments to Nominated Subcontractors**

The Contractor shall pay to the nominated Subcontractor the amounts which the Engineer certifies to be due in accordance with the subcontract. These amounts plus other charges shall be included in the Contract Price in accordance with Clause 58 (Provisional Sums), except as stated in Sub-Clause 59.5 (Certification of Payments).

**59.5 Certification of Payments & Nominated Subcontractors**

Before issuing a Payment, Certificate which includes an amount payable to a nominated Subcontractor, the Engineer may request the Contractor to supply reasonable evidence that the nominated Subcontractor has received all amounts due in accordance with previous Payment Certificates, less applicable deductions for retention or otherwise. Unless the Contractor:

- a) submits reasonable evidence to the Engineer, or
- b) (i) satisfies the Engineer in writing that the Contractor is reasonably entitled to withhold or refuse to pay these amounts, and
- (ii) submits to the Engineer reasonable evidence that the nominated Subcontractor has been notified of the Contractor's entitlement, then the Procuring Entity may (at his sole discretion) pay direct to the nominated

Subcontractor, part or all of such amounts previously certified (less applicable deductions) as are due to the nominated Subcontractor and for which the Contractor has failed to submit the evidence described in sub-paragraphs (a) or (b) above. The Contractor shall then repay, to the Procuring Entity, the amount which the nominated Subcontractor was directly paid by the Procuring Entity.

#### **60.1 Monthly Statements**

In the first line after the word “shall”, the following is added:

“on the basis of the joint measurement of work done under Clause 56.1,”

Under Para (c), Secured Advance on Materials is not applicable (because Mobilization Advance is included at **serial number 13 in Appendix-A to Bid**).

#### **60.2 Monthly Payments**

In the first line, “28” is substituted by “14”.

#### **60.10 Time for Payment**

The text is deleted and substituted with the following:

The amount due to the Contractor under any Interim Payment Certificate issued by the Engineer pursuant to this Clause, or to any other terms of the Contract, shall , subject to Clause – 47, be paid by the Procuring Entity to the Contractor within **28 days** after such Interim Payment Certificate has been jointly verified by Procuring Entity and Contractor, or, in the case of the Final Certificate referred to in Sub-Clause 60.8, within 60 days after such Final Payment Certificate has been jointly verified by Procuring Entity and Contractor; Provided that the Interim Payment shall be caused in **49 days** and Final Payment in **60 days** in case of foreign funded project. In the event of the failure of the Procuring Entity to make payment within the times stated, the Procuring Entity shall pay to the Contractor compensation at the 28 days rate of KIBOR+ 2% per annum for local currency and LIBOR+1 % for foreign currency, upon all sums unpaid from the date by which the same should have been paid. The provisions of this Sub-Clause are without prejudice to the Contractor's entitlement under Clause 69.

**The following Sub-Clause 60.11 is added:**

#### **60.11 Financial Assistance to Contractor**

Financial assistance shall be made available to the Contractor by the Procuring Entity by adopting the following procedure for Mobilization Advance payment:

- 1) An interest-free Mobilization Advance up to **10 % of the Contract Price** stated in the

Letter of Acceptance, excluding Provisional Sums, shall be paid by the Procuring Entity to the Contractor in two equal parts upon submission by the Contractor of a Mobilization Advance Guarantee / Bond for the full amount of the Advance in the specified form from a Scheduled Bank in Pakistan acceptable to the Procuring Entity:

- a) First part (5% of the Contract Price excluding Provisional Sums) within **28 days** after receipt of the Bank Guarantee against the Advance duly verified from the Bank by the Procuring Entity, after signing of the Contract Agreement; and
- b) Second part (5% of the Contract Price excluding Provisional Sums)
  - 60 % of this second part (i.e., 3% of the Contract Price excluding Provisional Sums) shall be paid within **42 days** from the date of payment of the first part, subject to the satisfaction of the Engineer as to the state of mobilization of the Contractor.
  - The remaining 40 % of this second part (i.e., 2% of the Contract Price excluding Provisional Sums) shall be paid within **84 days** from the date of payment of the first part subject to establishment of Contractor's Camp, Material Testing Laboratory and Site office facilities for the Procuring Entity, the Engineer's Representative and his Assistants.
- 2) The bank guarantee shall remain valid and in force until the mobilization advance is repaid in full.
- 3) At any time, the bank guarantee shall be valid for an amount not less than the amount of the original Mobilization Advance less any partial repayment of that Advance which may have been affected. The Contractor shall inform the guarantying bank, by letter counter signed by the Procuring Entity, of the required amount of the guarantee from time to time. Reduction of the amount shall not be made without such authorizing letter.
- 4) The Procuring Entity shall be empowered to call in the guarantee in whole or in part(s) if the Contractor defaults in the repayment(s) for any reason.
- 5) Recovery of the Mobilization Advance shall be made by deduction in installments from Interim Payment Certificates.
  - a) Deduction shall be made after the deduction of Retention Money.
  - b) Regardless of the frequency or amount of Interim Payment Certificates, repayment of the Mobilization Advance shall be in equal monthly installments equivalent to Original Mobilization Advance / (Number of Months in Original Time for Completion minus six).
  - c) The first installment shall fall due **Six months** following the Order to Commence, thereafter each month until full repayment has been affected.
  - d) Recovery of the full amount of Advance shall be ensured at least **two months** prior to expiry of the Time for Completion as per clause 43 hereof.
- 6) Where an Extension of Time is granted due to the Procuring Entity's default under

Sub-Clause 6.4 or under Sub-Clause 42.2 of the General Conditions of Contract, the Procuring Entity shall, on the request of the Contractor, defer repayment(s) of Mobilization Advance and consequently extend the period of repayment. for a period not exceeding the actual Extension of Time given or the Engineer's assessment for the time being of any Extension of Time which may be due. The value of monthly repayments shall not be altered.

- 7) In the event that the amount of monies certified and due to the Contractor under the Contract at any time less than the total of due repayments of Mobilization Advance, the balance of the due repayments shall be paid to the Procuring Entity by the Contractor within **seven days** of demand by the Procuring Entity. If the balance is not so paid, the Procuring Entity shall be empowered to call in sufficient of the Mobilization Advance bank guarantee to cover the said balance.
- 8) If the payment of Mobilization advance in installments is delayed from the Schedule dates due to non-availability or shortage of funds from the Procuring Entity then in such case, the Contractor shall not be entitled to claim interest on the delayed payment as financing charges.

#### **61.1 Approval only by Defects Liability Certificate**

The text is deleted and substituted with the following:

Only the Defects Liability Certificate, referred to in Clause 62, shall be deemed to constitute completion and approval of the Works.

#### **63.1 Default of Contractor**

The following para is added at the end of the Sub-Clause:

Provided further that in addition to the action taken by the Procuring Entity against the Contractor under this Clause, the Procuring Entity may also refer the case of default of the Contractor to Pakistan Engineering Council for punitive action under the Construction and Operation of Engineering Works Bye-Laws 1987, as amended from time to time as well as the prevailing rules of KPPRA.

#### **65.2 Special Risks**

The text is deleted and substituted with the following:

The Special Risks are the risks defined under para **(a)**, sub-paras **(i) to (v)** of Sub-Clause 20.4.

#### **65.4 Projectile Missile**

Delete the words "whenever and wherever occurring" in line 2 and add "occurring on the Site" after the words "explosive of war" in line 3.

#### **67.3 Arbitration**

In the Sixth to Eighth lines, the words "shall be finally settled ..... appointed under such Rules"

are deleted and substituted with the following:

shall be finally settled under the provisions of the Arbitration Act, 1940 as amended or any statutory modification or re-enactment thereof for the time being in force.

The following paragraph is added at the end:

The place of arbitration shall be Peshawar, Khyber Pakhtunkhwa.

#### **68.1 Notice to Contractor**

The following paragraph is added at the end:

For the purposes of this Sub-Clause, the Contractor shall, immediately after receipt of Letter of Acceptance, intimate in writing to the Procuring Entity and the Engineer by registered post, the address of his principal place of business or any change in such address during the period of the Contract.

#### **68.2 Notice to Procuring Entity and Engineer**

For the purposes of this Sub-Clause, the respective addresses are:

a) The Procuring Entity:

**DIRECTOR GENERAL,  
Jabba Dam Project, District Khyber  
Irrigation Department Peshawar**  
Bungalow No.254, Hadi Lane Afzal Abad,  
OLD Bara Road, University Town, Peshawar  
(Phone No.091-5700417)  
Email: jabbadam.khyber@gmail.com

b) The Engineer:

**DIRECTOR,  
Jabba Dam Project, District Khyber  
Irrigation Department Peshawar**  
Bungalow No.254, Hadi Lane Afzal Abad,  
OLD Bara Road, University Town, Peshawar

#### **69.1 Default of Procuring Entity**

- (a) In second line substitute "56 days" for "28 days".
- (b) Delete paragraph (c) and re-number paragraph (d) as (c).

## 70.1 Increase or Decrease of Cost

Sub-Clause 70.1 is deleted in its entirety, and substituted with the following:

The amounts payable to the Contractor, pursuant to Sub-Clause 60.1, shall be adjusted in respect of the rise or fall in the cost of labor, materials, and other inputs to the Works, by applying to such amount the formula prescribed in this Sub-Clause.

### (a) Other Changes in Cost

To the extent that full compensation for any rise or fall in costs to the Contractor is not covered by the provisions of this or other Clauses in the Contract, the unit rates and prices included in the Contract shall be deemed to include amounts to cover the contingency of such other rise or fall of costs.

### (b) Adjustment Formula

The adjustment to the monthly statements in respect of changes in cost shall be determined from the following formula: -

$$P_n = A + b \frac{L_n}{L_o} + c \frac{M_n}{M_o} + d \frac{E_n}{E_o} + \dots$$

Where:

$P_n$  is a price adjustment factor to be applied to the amount for the payment of the work carried out in the subject month, determined in accordance with Paragraph 60.1 (a), and with Paragraphs 60.1 (b) and (e), where any variations and daywork are not otherwise subject to adjustment;

$A$  is a constant, specified in Appendix-C to Bid, representing the nonadjustable portion in contractual payments;

$b, c, d, \text{ etc.}$ , are weightages or coefficients representing the estimated proportion of each cost element (labour, cement and reinforcing steel etc.) in the Works or Sections thereof, net of Provisional Sums and Prime Cost; the sum of  $A, b, c, d, \text{ etc.}$ , shall be one;

$L_n, M_n, E_n, \text{ etc.}$ , are the current cost indices or reference prices of the cost elements for month "n", determined pursuant to Sub-Clause 70.1(d), applicable to each cost element; and

$L_o, M_o, E_o, \text{ etc.}$ , are the base cost indices or reference prices corresponding to the above cost elements at the date specified in Sub-Clause 70.1(d).

Except Labour & POL, if any other adjustable item(s) is not used in the particular billing period, then the ratio of the current date price and the base date price for this

particular adjustable item(s) shall be considered as one.

**(c) Sources of Indices and Weightages**

The sources of indices shall be those listed in Appendix-C to Bid, as duly filled in by the Procuring Entity / Engineer.

**(d) Base, Current, and Provisional Indices**

The base cost indices or prices shall be those prevailing on the day 28 days prior to the latest date for submission of bids. Current indices or prices shall be those prevailing on the day 28 days prior to the last day of the period to which a particular monthly statement is related. If at any time the current indices are not available, provisional indices as determined by the Engineer will be used, subject to subsequent correction of the amounts paid to the Contractor when the current indices become available.

**(e) Adjustment after Completion**

If the Contractor fails to complete the Works within the Time for Completion prescribed under Clause 43, adjustment of prices thereafter until the date of completion of the Works shall be made using either the indices or prices relating to the prescribed time for completion, or the current indices or prices, whichever is more favorable to the Procuring Entity, provided that if an extension of time is granted pursuant to Clause 44, the above provision shall apply only to adjustments made after the expiry of such extension of time.

**(f) Weightages**

The weightages for each of the factors of cost given in Appendix-C to Bid shall be adjusted if, in the opinion of the Engineer, they have been rendered unreasonable, unbalanced, or inapplicable as a result of varied or additional work executed or instructed under Clause 51. Such adjustment(s) shall have to be agreed in the variation order.

**72.2 Currency Proportions**

All payments shall be in local currency only.

**72.3 Currencies of Payment for Provisional Sums**

All payments shall be in local currency only.

**The following Sub-Clauses 73.1, 73.2, 74.1, 75.1, 76.1, 77.1 , 78.1,79.1 & 80.1 are added:**

**73.1 Payment of Income Tax**

The Contractor, Subcontractors and their employees shall be responsible for payment of all their income tax, super tax and other taxes on income arising out of the Contract and the rates and prices stated in the Contract shall be deemed to cover all such taxes.

## **73.2 Customs Duty & Taxes**

The prices tendered by the Contractor shall include all import license fees, custom duties, excise duties, sale taxes, surcharges, business taxes, income and other taxes that are levied according to the laws and regulations of Pakistan on the Contractor's Equipment, materials, and supplies (both permanent, temporary and consumable) acquired for the purpose of the Contract and on the services performed under the Contract. Nothing in the Contract shall relieve the Contractor from his responsibility to pay any tax that may be levied in the country on profits made by him in respect of the Contract whatsoever is the rate of the tax during execution of the Works and payments for the same to the Contractor.

## **74.1 Integrity Pact**

If the Contractor or any of his Subcontractors, agents or servants is found to have violated or involved in violation of the Integrity Pact signed by the Contractor as Appendix-L to his Bid, then the Procuring Entity shall be entitled to:

- (a) recover from the Contractor an amount equivalent to ten times the sum of any commission, gratification, bribe, finder's fee or kickback given by the Contractor or any of his Subcontractors, agents or servants;
- (b) terminate the Contract; and
- (c) recover from the Contractor any loss or damage to the Procuring Entity as a result of such termination or of any other corrupt business practices of the Contractor or any of his Subcontractors, agents or servants.

The termination under Sub-Para (b) of this Sub-Clause shall proceed in the manner prescribed under Sub-Clauses 63.1 to 63.4 and the payment under Sub-Clause 63.3 shall be made after having deducted the amounts due to the Procuring Entity under Sub-Para's (a) and (c) of this Sub-Clause.

## **75.1 Termination of Contract for Procuring Entity's Convenience**

The Procuring Entity shall be entitled to terminate the Contract at any time for the Procuring Entity's convenience after giving 56 days prior notice to the Contractor, with a copy to the Engineer. In the event of such termination, the Contractor:

- (a) shall proceed as provided in Sub-Clause 65.7 hereof; and
- (b) shall be paid by the Procuring Entity as provided in Sub-Clause 65.8 hereof.

## **76.1 Liability of Contractor**

The Contractor or his Subcontractors or assignees shall follow strictly, all relevant labour laws including the Workmen's Compensation Act and the Procuring Entity shall be fully indemnified for all claims, damages etc. arising out of any dispute between the Contractor, his Subcontractors or assignees and the labour employed by them.

### **77.1 Joint and Several Liability**

If the Contractor is a joint venture of two or more persons, all such persons shall be jointly and severally bound to the Procuring Entity for the fulfilment of the terms of the Contract and shall designate one of such persons to act as leader with authority to bind the joint venture. The composition or the constitution of the joint venture shall not be altered without the prior consent of the Procuring Entity.

### **78.1 Details to be Confidential**

The Contractor shall treat the details of the Contract as private and confidential, save in so far as may be necessary for the purposes thereof, and shall not publish or disclose the same or any particulars thereof in any trade or technical paper or elsewhere without the prior consent in writing of the Procuring Entity or the Engineer. If any dispute arises as to the necessity of any publication or disclosure for the purpose of the Contract, the same shall be referred to the decision of the Engineer whose award shall be final.

### **79.1 Electricity, Water and Gas**

The Contractor shall be responsible for making his own arrangements for the adequate supply of electricity, water and gas required for the effective performance of his obligations in relation to execution of the Works under the Contract.

### **80.1 Funeral Arrangements**

The Contractor shall be responsible, to the extent required by local regulations, for making any funeral arrangements for any of his local employees who may die while engaged upon the Works.