GOVERNMENT OF KHYBER PAKTUNKHWA IRRIGATION DEPARTMENT



BID SOLICITATION DOCUMENTS

FOR

THE WORK OF

Name of Work:- Construction of Irrigation Tube Wells / Lift Irrigation

Schemes & Solarization of Existing Irrigation Tube Wells in Merged Areas Orakzai AIP NO. 1914/210588 (2024-25)"

Sub Work: Construction of New Solar Irrigation Tube Well at Mani

Khel Zarghon Khel TSD Darra Kohat

Estimated Cost: 2.392 (M)

IRRIGATION DIVISION, DISTRICT ORAKZAI

TABLE OF CONTENTS

Description

No. INVITATION FOR BIDS

Form

INSTRUCTIONS TO BIDDERS

A.	General		
	IB.1 Scope of Bid		17
	IB.2 Source of Funds		17
	IB.3 Eligible Bidders		17
	IB.4 One Bid Per Bidder		18
	IB.5 Cost of Bidding		18
	IB.6 Site Visit		18
В.	Bidding Documents		
	IB.7 Contents of Bidding Document	s	18
	IB.8 Clarification of Bidding Docum	nents	19
	IB.9 Amendment of Bidding Docum	nents	19
C.	Preparation of Bids		
	IB.10. Language of Bid		19
	IB.11 Documents Accompanying the	Bid	19
	IB.12 Bid Prices		21
	IB.13 Currencies of Bid and Payment		21
	IB.14 Bid Validity		22
	IB.15 Bid Security		22
	IB.16 Alternate Proposals by Bidder		23
	IB.17 Pre-Bid Meeting		23
	IB.18 Format and Signing of Bid		24
D.	Submission of Bids		
	IB.19 Sealing and Marking of Bids		24
	IB.20 Deadline for Submission of Bid	s	25
	IB.21 Late Bids		25
	IB.22 Modification, Substitution and	Withdrawal of Bids	26

E.	Bid Opening and Evalu	iation		
	IB.23 Bid Opening		26	
	IB.24 Process to be Co	nfidential	27	
	IB.25 Clarification of I	Bids	27	
	IB.26 Examination of I	Bids and Determination of Responsiveness	27	
	IB.27 Correction of Errors			
	IB.28 Evaluation and C	Comparison of Bids	28	
F.	Award of Contract			
	IB.29 Award		29	
	IB.30 Procuring Entity Bids	's Right to Accept any Bid and to Reject any or all	29	
	IB.31 Notification of A	Award	30	
	IB.32 Performance Sec	curity	30	
	IB.33 Signing of Contr	act Agreement	30	
	IB.34 General Perform	ance of the Bidders	31	
	IB.35 Integrity Pact		31	
	IB.36 Instructions Not	Part of Contract	31	
BIDDING I	DATA		33	
FORM OF	BID AND APPENDICES	TO BID	36	
	FORM OF BID		37	
	Appendix-A to Bid	: Special Stipulations	39	
	Appendix-B to Bid	: Foreign Currency Requirements	4(
	Appendix-C to Bid	: Price Adjustment (Under Clause 70)	4 1	
	Appendix-D to Bid	: Bill of Quantities	42	
	Appendix-E to Bid	: Proposed Construction Schedule	44	
	Appendix-F to Bid	: Method of Performing the Work	45	
	Appendix-G to Bid	: List of Major Equipment – Related Items	46	
	Appendix-H to Bid	: Construction Camp and Housing Facilities		
	Appendix-I to Bid	: List of Subcontractors		
	Appendix-J to Bid	: Estimated Progress Payments	48	
	Appendix-K to Bid	: Organization Chart of the Supervisory Staff and Labor	49	
	Appendix-L to Bid	: Integrity Pact		
FORMS				
	BID SECURITY		52	
	PERFORMANCE SEC	URITY	54	
	CONTRACT AGREEM		56 58	
	MOBILIZATION ADVANCE GUARANTEE/BOND			

PART-I: GENERAL CONDITIONS OF CONTRACT

PART-II: PARTICULAR CONDITIONS OF CONTRACT

SPECIFICATIONS - SPECIAL PROVISIONS

SPECIFICATIONS - TECHNICAL PROVISIONS

DRAWINGS

INVITATION FOR BIDS

2.0 INVITATION FOR BID

GOVERNMENT OF KHYBER PAKHTUNKHWA IRRIGATION DIVISION DISTRICT ORAKZAI NOTICE INVITING E-BIDDING (SINGLE STAGE TWO ENVELOPE E-PAD SYSTEM)

Irrigation Department, Government of Khyber Pakhtunkhwa, Orakzai Irrigation Division invites Technical and Financial (Electronic Bids) proposals on the basis of Single Stage Two Envelope procedure for the following works from the eligible firms / contractors who have renewed their enlistment and PEC license in relevant category for Solar (EE-11) for the year 2025-26, registered with the Khyber Pakhtunkhwa Revenue Authority (KPRA) and on active tax payer list of Income Tax Department & KPRA.

S#	Name of Work/Sub Work.	Estimated Cost Rs. (M)	2% E/ Money +Stamp Duty (in Rs)
Α	Construction of Irrigation Tube Wells / Lift Irrigation Schemes & Solarization of Existing Irrigation T Areas AIP No. 1914/210588 (2024-25)	ube Wells	in Merged
1	Construction of Existing Solar Irrigation Tube Well at Ali Khel Section Upper Orakzai	2.941	65700
2	Construction of New Solar Irrigation Tube Well at Kalaya	2.141	49670
3	Construction of New Solar Irrigation Tube Well at Arkhi Pyala Mamozai Upper Orakzai	3.183	70550
4	Construction of New Solar Irrigation Tube Well at Feroz Khel Lower Orakzai	2.941	65700
5	Construction of New Solar Irrigation Tube Well at Hussaini Ghari near Kadda Bazar Lower	2.941	65700
6	Construction of New Solar Irrigation Tube Well at Mani Khel Lower Orakzai	3.174	70550
7	Construction of New Solar Irrigation Tube Well at Mishti 01 Central Orakzai	2.941	65700
8	Construction of New Solar Irrigation Tube Well at Mula Khel Upper Orakzai	2.941	65700
9	Construction of New Solar Irrigation Tube Well at Sheikhan Central Orakzai	2.941	65700
10	Construction of New Solar Irrigation Tube Well at Sra Khuna Sheikhan Central Orakzai	2.941	65700
11	Construction of New Solar Irrigation Tube Well at Mani Khel Kaly Zarghon Khel TSD Darra	2.392	54700
12	Construction of New Solar Irrigation Tube Well at Shapalkai Wall Zarghon Khel TSD Darra	2.392	54700
13	Construction of New Solar Irrigation Tube Well at Ajun Kaly Zarghon Khel Darra Bazar TSD Darra	2.392	54700
14	Construction of New Solar Irrigation Tube Well at Ateri Wall Akhor Wall TSD Darra	2.392	54700
15	Construction of New Solar Irrigation Tube Well at Mari Khel Shaheed Talab Zarghon Khel TSD Darra	2.392	54700
16	Construction of Existing Solar Irrigation Tube Well at Zarghon Khel Darra bazar TSD Darra	2.889	64650
17	Construction of Existing Solar Irrigation Tube Well at Zarghon Khel Bazi Khel TSD Darra	2.889	64650
18	Construction of Existing Solar Irrigation Tube Well at Chattar Galli Khel Jawaki TSD Darra	2.889	64650
19	Construction Solarization of Existing Irrigation Tube Well at Ibrahim Khel Jawaki TSD Darra	2.889	64650

TERMS AND CONDITIONS

- 1. Last date & time for submission of Technical & Financial Proposals is 27/11/2025 at 12:00 (Noon) & the Technical Proposal will be opened on the same day at 02:00 PM.
- 2. Bidding documents including instructions to bidders, Terms and conditions and evaluation criteria can be downloaded from Irrigation Department Web site (www.irrigation.gkp.pk) and KPPRA official website.
- 3. Technical design should be based on Hydraulic Parameter of the schemes provided in the bidding documents and rates should be quoted accordingly in the financial bid. Specification and design parameter of pumping machinery are given in the bidding documents.
- 4. For Additional Security in case of abnormally low bids KPPRA, Notification S.R.O (14)/Vol: 1-24/2021-22, Dated: 10th May, 2022 shall be enforced.
- 5. Pre-bid meeting will be held on 19/11/2025 at 11:30 AM in the office of the undersigned.
- 6. All the prevailing KPPRA rules / Act and other Govt: notifications issued from time to time shall be applicable.
- 7. Bid shall accompanied with 0.03% of Estimated Cost is tender entry fee in a shape of separate CDR which is non-refundable.

EXECUTIVE ENGINEER

IRRIGATION DIVISION
DISTRICT ORAKZAI
(PHONE NO.0925-690184)

BID SOLICITA	ATION D	OCUN	MENTS
---------------------	---------	-------------	--------------

FOR THE WORKS, TENDER DATED 27-11-2025

S.No	Name of Work / Sub Work.	E/Cost (M)	
	Construction of Irrigation Tube Wells / Lift Irrigation Schemes & Solarization of Existing Irrigation Tube Wells in Merged Areas AIP No. 1914/ 210588 (2024-25)		
11	Construction of New Solar Irrigation Tube Well at Mani Khel Zarghon Khel TSD Darra Kohat	2.392	

Contractor:			
For the Work:			

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" invites bids for the construction and completion of each sub work tabulated in the title page 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 and refer to sub work as per title page separately.

IB.2 Source of Funds

2.1 The Procuring Entity intends to execute the works from Provincial ADP / AIP Fund as tabulated in the title page.

IB.3 Eligible Bidders

- 3.1 This Invitation for Bids is open to all bidders meeting the following requirements which are considered to be mandatory and to be submitted on or before closing dated at order and making them eligible for participation.
- a. Duly licensed by the Pakistan Engineering Council (PEC) in the category relevant to the value of the works with specialization code as mentioned in the invitation for E-Bidding.
- b. Firms have not been blacklisted by any Govt: Organization or involved in such like litigations
- c. Registered with KPRA
- d. NTN/Registration certificate from income Tax department along with up to date clearance certificate. The contractor must also be active on "Active Tax Payer list."

- e. List of similar type and size of works under execution and completed during the last five years with equivalent cost to the subject bid. Two supportive certificates from the relevant department.
- f. Enlistment with the Irrigation Department.
- g. In case of Bid / Rate quoted by the bidder more than 10% below Engineer Estimate, the Additional Bid security shall be sought from the successful bidder only to the extent of bid more than 10% below on the Engineer estimate in the form of Percentage. The amount of Additional Bid Security shall be equal to the impact of financial difference occurring in the quoted rates beyond 10% below Engineer estimate. The bidder shall be bound to produce the Additional Bid security within 03 working days from the issuance of letter of acceptance failing which the procuring entity shall forfeit the bid security of successful bidder may also initiate legal proceedings against the bidder who repudiated the contract under KPPRA Procurement Rules.
- 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 Not Applicable

IB.5 Cost of Bidding

5.1 The bidder shall bear all costs including bid solicitation documents fee Rs.500/- per set as mentioned in NIT (nominal so as to cover printing/reproduction and mailing costs or download the bidding solicitation documents from the website www.irrigation.gkp.pk) and other costs associated with the preparation and submission of its bid including the submitted Bid Securities and Additional Security (If applicable) 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.

I-2

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 Bidders 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's address indicated in the Invitation for Bids. The Procuring Entity will respond to any request for clarification which he receives earlier than 7 days prior to the deadline for submission of bids.

I-3

Copies of the Procuring Entities response will be forwarded to all purchasers of the Bidding Documents, including a description of the enquiry but without identifying it's 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 his 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 (10)

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) (i-v)Deleted / N.A
- (c) furnish a technical proposal taking into account the various Appendices to Bid Specially the following (As per Engineer's directions):

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 (If deemed necessary).

I-5

IB.12 Bid Prices

- 12.1 Unless stated otherwise in the Bidding Documents, the Contract shall be for the whole of the Works as described in Sub-Clause 1.1 hereof, based on the unit rates and / or prices submitted by the bidder.
- 12.2 The bidders shall fill in rates premiums and prices for all items of the Works described in the Bill of Quantities. Premium/unit rate offered for an item shall be considered upto two significant decimals places for evaluation purposes. Items against which no premium/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 premium/rates and prices for other items in the Bill of Quantities. Corrections in premium/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, shall be considered by the bidder in quoting his bid on E-bidding System.
 - 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 premium/rates and prices quoted by the bidders are not subject to adjustment during the performance of the Contract in accordance with the provisions of Clause 70 of the Conditions of Contract.

IB.13 Currencies of Bid and Payment

13.1 The unit rates/premium and the prices shall be quoted by the bidder entirely 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, at the option of the bidder, a Bid Security in the amount stipulated in NIT in Pak. Rupees in the form of Deposit at Call [Deleted] 1 in fevour of the Procuring Entity. [The bid security shall be submitted from the account of the firm/bidder/contractor who submits the bid]
- 15.2 The Bid Security shall be in the form of Deposit at Call from a Scheduled Bank in Pakistan, in favour of the Procuring Entity.
- 15.3 Any bid not accompanied by an acceptable Bid Security & Additional Security (If Applicable) 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 and those of first three may be retained till award of contract.
- 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".]
- 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.
- (d) If the bidder fails to submit additional security as per KPPRA Notification No. KPPRA/M&E/Estt:/1-17/2019-20, dated June 12/06/2020

IB.16 Alternate Proposals by Bidder (Not Applicable)

- 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 NIT. All prospective bidders or their authorized representatives can 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. (In the instant case E-Bidding system is utilized)
- 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: (One original copy)
 - (a) ORIGINAL and each copy of the Bid shall be sealed and put in separate envelopes and marked as such containing the applicable deposit at calls, printed and signed copy of tender form from E-bidding System.
 - (b) The envelopes containing the ORIGINAL 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/Title page/NIT; 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/NIT
 - 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 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 bidders' or their representatives who choose to attend, at the time, date and location stipulated in the Bidding Data/Title page/NIT. 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.
- 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.

I-11

23.4 Procuring Entity may 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 may 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 Comparative Statements 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 premium/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.
- 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.

In case of Bid / rate quoted by the bidder more than 10% below Engineer Estimate, the Additional Bid security shall be sought from the successful bidder only to the extent of bid more than 10% below on the Engineer estimate in the form of Percentage. The amount of Additional Bid Security shall be equal to the impact of financial difference occurring in the quoted rates beyond 10% below Engineer estimate. The bidder shall be bound to produce the Additional Bid security within 03 working days from the issuance of letter of acceptance failing which the procuring entity shall forfeit the bid security of successful bidder may also initiate legal proceedings against the bidder who repudiated the contract under KPPRA Procurement Rules.

F. AWARD OF CONTRACT

IB.29 Award

- 29.1 Subject to Clauses IB.30 and IB.34, 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.
- 29.2 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.30 Procuring Entity's Right to accept any Bid and to reject any or all Bids

30.1 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.31 Notification of Award

- 31.1 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").
- 31.2 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 clarification of any item in the bid evaluation report.
- 31.3 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.

IB.32 Performance Security

- 32.1 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.
- 32.2 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.33 Signing of Contract Agreement

- 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.
- 33.2 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.34 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 Entity's 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 / K P P R A 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.35 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.36 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

Bidding Data

(This section should be filled in by the Procuring Entity before issuance of the Bidding Documents.) The following specific data for the Works to be bid 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.

[Instructions are provided, as needed, in italics.]

Instructions to Bidders

Clause Reference

1.1 Name and address of the Procuring Entity:

CHIEF ENGINEER (MERGED AREA), IRRIGATION DEPARTMENT, PESHAWA THROUGH EXECUTIVE ENGINEER, IRRIGATION DIVISION ORAKZAI

1.1 Name of the Project:

AS PER NIT

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

Govt: of Khyber Pakhtunkhwa through Irrigation Department

8.1 Time limit for clarification:

[Minimum number of days to seek clarification by the prospective bidder may be inserted as 05 days.] Prior to the dead line of the submission of bid.

10.1 Bid language:

English/Urdu

11.1 (b) Prequalification Information to be updated:

Enlistment with Irrigation Department have valid E-bidding system login/password, Registration with PEC in the relevant categories (As per NIT), Registration with KPPRA and EPAD System.

11.1(c) Furnish Technical Proposal:

The bidder may submit a technical proposal in sufficient detail to demonstrate the adequacy of the bid in meeting requirements for timely completion of the Works.

- 13.1 Bidders to quote entirely in Pak. Rupees on above/below premium on E-bidding system for each sub work separately
- 14.1 Period of Bid Validity:

120 days

15.1 Amount of Bid Security:

2% of Estimated Cost

17.1 Venue, time, and date of the pre-Bid meeting:

Office of the Executive Engineer, Irrigation Division Orakzai, Phone No: 0925-690184

- 18.4 Number of copies of the Bid to be completed and returned: *One original*
- 19.2(a) Procuring Entity's address for the purpose of Bid submission:

<u>As mentioned in the NIT</u>
<u>Office of the Executive Engineer, Irrigation Division Orakzai,</u>
Phone No: 0925-690184.

19.2(b) Name and Number of the Contract: As per title page / NIT

20.1(a) Deadline for submission of bids:

As per NIT

23.1 Venue, time, and date of Bid opening:

Office of the Executive Engineer, Irrigation Division Orakzai, Phone No: 0925-690184

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

A bank guarantee 10% of the contract price stated in the Letter of Acceptance from a scheduled bank.

FORM OF BID AND APPENDICES TO BID

FORM OF BID

Bid F	Reference No.
NIT I	No
Date	of Opening No
Work	x No. as per NIT
То:	
	Executive Engineer Irrigation Division, District Orakzai.
Gent	leman,
1.	Having examined the Bidding Documents including Instructions to Bidders, Bidding Data, Conditions of Contract. Specifications, Drawings and Bill of Quantities and Addenda Nos. for the execution of the above-named Works, we, the undersigned, 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
	Other sum as may be ascertained in accordance with the said conditions.
2.	We understand that all the Appendices attached hereto form part of this Bid.
3.	As security for due performance of the undertakings and obligations of this Bid, we Submit herewith a Bid Security in the amount of Rupees
4.	We undertake, if our Bid is accepted, to commence the Works and to complete the whole of the Works comprised in the Contract within the time stated in Appendix-A to Bid.
5.	We agree to abide by this Bid for the period of <u>120 days</u> from the date fixed for Receiving the same and it shall remain binding upon us and may be accepted at any time before the expiration of that period.
6.	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.
7.	We do hereby declare that the Bid is made without any collusion, comparison of figures or arrangement with any other bidder for the Works.

We understand that you are not bound to accept the lowest or any Bid you mareceive.		
Dated this	day of	20
Signature:		_
in the capacity of	duly authorize	ed to sign Bids for and on behalf of
(N	ame of Bidder in Bloc (Seal)	k Capitals)
Address:		
Witness:		
Signature:		
Address.		
Occupation		

SPECIAL STIPULATIONS Clause

Conditions of Contract

1.	Engineer's Authority to issue Variation in	2.1	15% of the Contract Price stated in the
	Emergency		Letter of Acceptance.
2.	Amount of Performance Security	10.1	10% of Contract Price stated in the Letter
			Of Acceptance.
3.	Time for Furnishing Program	14.1	Within 20 days from the date of receipt of
			Letter of Acceptance.
4.	Minimum amount of Third Party Insurance		N/A
5.	Time for Commencement	41.1	Wishin 14 days from the date of manifest of
3.	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,	As per work order
	1	48.2	
7.	a) Amount of Liquidated Damages	47.1	Rs. 0.05% of E/C 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	N/A
8.	Defects Liability Period	49.1	days from the effective date of
			Taking Over Certificate.
9.	Percentage of Retention Money	60.2	8 % of the amount of Interim Payment
			Certificate.
10.	Limit of Retention Money	60.2	[8 %] ⁴ of Contract Price stated in the Letter
	•		of acceptance.
11.	Minimum amount of Interim Payment	60.2	Rs: 0.1 million minimum, however subject
	Certificates (Running Bills)		to availability of funds.
12	Time of Payment from delivery of Engineer's	60.10	After release of funds and verification of
			work as per specification and due
			consideration of other works in the head and
12	Interim Payment Certificate to the Procuring	60.16	importance of each work (DDO Decision)
13	Mobilization Advance [* (Interest Free)] ⁵	60.12	N/A

^{*} Delete if alternative one is not adopted.

FOREIGN CURRENCY REQUIREMENTS (NOT APPLICABLE)

1.

1.	The Bidder may indicate herein below his requirements of foreign currency (if any), with reference to various inputs to the Works.		
2.	Foreign Currency Requirement as percentage of the Bid Price excluding Provisional Sums%.		
3.	Table of Exchange Rates		
	Unit of Currency	Equivalent in Pak. Rupees	
	Not Applicable		

PRICE ADJUSTMENT UNDER CLAUSE 70 OF CONDITIONS OF CONTRACT (NOT APPLICABLE)

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

(To be filled by the Procuring Entity).

Cost	Description	Weightages	Applicable index
Element			
1	2	3	4
(i)	Fixed Portion	0.350	
(ii)	Local Labour		Government of Pakistan (GP) Federal Bureau of Statistics (FBS) Monthly Statistical Bulletin.
(iii)	Cement – in bags		
(iv)	Reinforcing Steel		" "
(v)	High Speed Diesel (HSD)		" "
(vi)	Bricks		" "
(vii)	Bitumen		" "
(viii)			
	Total	1.000	

Notes:

- 1) Indices for "(ii)" to "(vii)" are taken from the Government of Pakistan Federal Bureau of Statistics, Monthly Statistical Bulletin. The base cost indices or prices shall be those applying 28 days prior to the latest day for submission of bids. Current indices or prices shall be those applying 28 days prior to the last day of the billing period.
- 2) Any fluctuation in the indices or prices of materials other than those given above shall not be subject to adjustment of the Contract Price.
- 3) Fixed portion shown here is for typical road project, Procuring Entity to determine the weightage of Fixed Portion considering only those cost elements having cost impact of seven (7) percent or more on his specific project.

(Procuring Entity's using this price adjustment provisions may add or delete any elements as deemed appropriate to the project.)

BILL OF QUANTITIES

A. Preamble

- 1. The Bill of Quantities shall be read in conjunction with the Conditions of Contract, Specifications (Technical & Materials Specifications of MRS) and Drawings, if any.
- 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 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 as per the Contract.
- 3. The rates/premiums and prices entered in the priced Bill of Quantities 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 rates and prices and the total Bid Price submitted by the Bidder.

- 4. A rate/premium or price shall be entered against each item in the priced Bill of Quantities, whether quantities are stated or not. Unit rates must be offered in two decimal places for an item. In case the bidder quotes rates for an item in more than two decimal places, the same shall be considered upto two significant decimal places for evaluation purposes. The cost of items against which the Contractor will have failed to enter a rate or price shall be deemed to be covered by other rates and prices entered in the Bill of Quantities.
- 5. 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.
- 6. General directions and description of work and materials are not necessarily repeated nor summarized 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.
- 7. Provisional sums included and so designated in the Bill of Quantities shall be expended in whole or in part at the direction and discretion of the Engineer in accordance with Sub-Clause 58.2 of Part I, General Conditions of Contract.

Appendix-D to Bid

BILL OF QUANTITIES

THE BOQ SHALL BE FILLED IN HARD COPY AS PASTE IN THE BIDDING DOCUMENTS & ONLINE ON IRRIGATION DEPARTMENT WEBSITE, THE PROCURING ENTITY SHALL NOT BE LIABLE FOR THE ERRORS/MALFUNCTIONS OF THE E-BIDDING SYSTEM, LOSS OR NON-PROVISION OF EBIDDING SYSTEM LOGIN & PASSWORD

http://www.irrigation.gkp.pk

OR

http://www.irrigation.gkp.pk/tenders.php

NOTE: - Action will be taken in framing the *Comparative Statement* on those firms who fulfill the mandatory requirements as mentioned in the NIT and holding the Pakistan Engineering Council relevant categories *as per NIT, Registration with KPRA*.

Appendix-E to Bid

PROPOSED CONSTRUCTION SCHEDULE

(WINING BIDDR AT THE TIME OF SIGNING OF CONTRACT AGREEMENT)

Pursuant to Sub-Clause 43.1 of the General Conditions of Contract, the Works may be completed on or before the date stated in Appendix-A to Bid. The Bidder may provide as Appendix-E to Bid, the Construction Schedule in the bar chart (CPM, PERT or any other to be 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 program for Completion of the whole of the Works and parts of the Works may meet Procuring Entity's completion targets in days noted below and counted from the date of receipt of Engineer's Notice to Commence (Attach sheets as required for the specified form of Construction Schedule):

Description		Time for Compl	<u>etion</u>
a)	Whole Works		days
b)	Part-A		days
c)	Part-B		days
d)			days
e)			days
		Signature:	
		Seal:	
		Dated:	

Appendix-F to Bid

METHOD OF PERFORMING THE WORK

The Bidder may 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 in Pakistan, 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. The bidder work at site will be executed through a PEC registered Engineer.

Signature:	 	
Seal:	 	
Dated:		

Appendix-G to Bid

LIST OF MAJOR EQUIPMENT – RELATED ITEMS

The Bidder may 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.

Signature:	
Seal:	
Dated:	

BG-2

Appendix-G to Bid

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						

ESTIMATED PROGRESS PAYMENTS (SUB JECT TO AVAILIBILITY OF FUNDS, WORK DONE, IMPORTANCE)

Bidder' estimate of the value of work which would be executed by him during each of the periods stated below, based on his Program of the Works and the Rates in the Bill of Quantities, expressed in thousands of Pakistani Rupees:

Quarter/ Year/ Period	Amounts (1,000 Rs.)
1	2
1 st Quarter	
2 nd Quarter	
3 rd Quarter	
4 th Quarter	
5 th Quarter	
6 th Quarter	
7 th Quarter	
8 th Quarter	
9 th Quarter	
Bid Price	

Signature:	
Seal:	
Dated:	

BK-1

Appendix-K to Bid

ORGANIZATION CHART FOR THE SUPERVISORY STAFF AND LABOUR

(INTEGRITY PACT)

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

Contract No.	Dated
Contract Value:	<u> </u>
Contract Title:	
or induced the procurement of ar benefit from Government of Pak	[Name of Supplier] hereby declares that it has not obtained ny contract, right, interest, privilege or other obligation or cistan (GoP) or any administrative subdivision or agency d or controlled by GoP through any corrupt business practice.
that it has fully declared the brunot given or agreed to give an Pakistan either directly or indiaffiliate, agent, associate, broke subsidiary, any commission, grass consultation fee or otherwise a contract, right, interest, privile	of the foregoing, [name of Supplier] represents and warrants rokerage, commission, fees etc. paid or payable to anyone and d shall not give or agree to give to anyone within or outside irectly through any natural or juridical person, including its er, consultant, director, promoter, shareholder, sponsor or atification, bribe, finder's fee or kickback, whether described e, with the object of obtaining or inducing the procurement of ege or other obligation or benefit in whatsoever form from an expressly declared pursuant hereto.
and arrangements with all person	at it has made and will make full disclosure of all agreements ns in respect of or related to the transaction with GoP and has not take any action to circumvent the above declaration,
declaration, not making full dis defeat the purpose of this declar- right, interest, privilege or other	ull responsibility and strict liability for making any false sclosure, misrepresenting facts or taking any action likely to ation, representation and warranty. It agrees that any contract, obligation or benefit obtained or procured as aforesaid shall, ghts and remedies available to GoP under any law, contract or the option of GoP.
agrees to indemnify GoP for a business practices and further pa the sum of any commission, gra Supplier] as aforesaid for the	remedies exercised by GoP in this regard, [name of Supplier] my loss or damage incurred by it on account of its corrupt ay compensation to GoP in an amount equivalent to ten time attification, bribe, finder's fee or kickback given by [name of purpose of obtaining or inducing the procurement of any e or other obligation or benefit in whatsoever form from GoP.
Name of Buyer:	Name of Seller/Supplier: Signature: [Seal]

FORMS

BID SECURITY PERFORMANCE SECURITY CONTRACT AGREEMENT MOBILIZATION ADVANCE GUARANTEE/BOND

BID SECURITY (Bank Guarantee)

(Date)

Security Executed on

Name	of Surety (Bank) with Address:	,			
		(Scheduled Ba	nk in Pakistaı	n)	
Name	of Principal (Bidder) with Address				-
					ı.
Penal	Sum of Security Rupees.	(Rs))
KNOV the red bound	eference No. W ALL MEN BY THESE PRESENT equest of the said Principal (Bidder)	we, the Surety above	named, are h	neld and fin	rmly
sum w	nafter called the 'Procuring Entity') in well and truly to be made, we bind of ssors, jointly and severally, firmly by	ourselves, our heirs, e			
THE C	CONDITION OF THIS OBLIGAT	TION IS SUCH, the	it whereas the	he Bidder	has
submit	itted the accompanying Bid dated	for Bid No	for	(Particu	lars
of Bid	d) to the said Procuring Entity; and				
Bidden Pakista	REAS, the Procuring Entity has required furnishes a Bid Security in the above tan or from a foreign bank duly counter tan, to the Procuring Entity, conditions	e said sum from a Scher-guaranteed by a Sch	eduled Bank i		the in
(1)	that the Bid Security shall remain in the deadline for validity of bids as s extended by the Procuring Entity, no waived;	tated in the Instruction	ns to Bidders	or as it ma	y be
(2)	that the Bid Security of unsuccessful after expiry of its validity or upon si				tity
(3)	that in the event of failure of the su Agreement for such work and furn said sum be paid immediately to the the Instruction to Bidders for the suc	ish the required Performs and Procuring Entity	ormance Secury pursuant to	rity, the entity Clause 15.	ntire

no effect, but otherwise to remain in full force and effect.

NOW THEREFORE, if the successful Bidder shall, within the period specified therefor, 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 fulfillment 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

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)

TITNESS:	Signature
-	Name
	Title
Corporate Secretary (Seal)	Corporate Guarantor (Seal)
Name Title & Address	

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 f	igures)
Letter of Acceptance No.	Dated
Documents and above said Letter of Acceptant request of the said Principal we, the Guarantor the (hereinafter called the Procuring Entity) in the payment of which sum well and truly to	, that in pursuance of the terms of the Bidding ce (hereinafter called the Documents) and at the above named, are held and firmly bound unto the penal sum of the amount stated above for be made to the said Procuring Entity, we bind and successors, jointly and severally, firmly by
THE CONDITION OF THIS OBLIGATION In the Procuring Entity's above said Legarity for the	<u>-</u>
(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 irre Procuring Entity without delay upon the Pr or arguments and without requiring the I reasons for such demand any sum or su Procuring Entity's written declaration that	evocably and independently guarantee to pay to the rocuring Entity's first written demand without cavil Procuring Entity to prove or to show grounds or ams up to the amount stated above, against the the Principal has refused or failed to perform the nent will be effected by the Guarantor to Procuring
whether the Principal (Contractor) has dul has defaulted in fulfilling said obligations	Entity shall be the sole and final judge for deciding y performed his obligations under the Contract or and the Guarantor shall pay without objection any ove upon first written demand from the Procuring to the Principal or any other person.
its seal on the date indicated above, the nan	nden Guarantor has executed this Instrument under ne and corporate seal of the Guarantor being hereto ts undersigned representative, pursuant to authority
11 77.	Guarantor (Bank)
Witness: 1.	Signature
Compounts Connetours (Conl.)	Name
Corporate Secretary (Seal)	Title
2	
Name, Title & Address	Corporate Guarantor (Seal)

FORM OF CONTRACT AGREEMENT

THIS	CONTRA	ACT AG	REEMEN	*	er called the				
			day	Of	(mont	n)	20	_	etween
Execu	tive Engir	neer, Irrig	gation Div	ision Orakzai					
(herea	after	called	the	"Procuring	Entity")	Of	the	one	part
and									
(herea	after calle	d the "Co	ontractor")	of the other p	oart.				
WHE	REAS the	Procurii	ng Entity i	s desirous tha	t certain Wo	orks, viz	Z		
		•		ractor and ha Works and th	-		•		for the
NOW	this Agre	eement w	itnesseth a	as follows:					
1.				nd expression em in the Con					to.
2.	relating	to Instru		s after incorp Bidders shall viz:	-		-	-	-
	(a)	The Cor	ntract Agr	eement:					
	(b)		ter of Acc						
	(c)			orm of Bid;					
	(d)	Special	Stipulatio	ns (Appendix nditions of Co	-A to Bid);				
	(e)	The Par	ticular Co	nditions of Co	ontract – Pai	rt II;			
	(f)			ditions – Part		to Did)			
	(g) (h)			Quantities (Appendices to E			,		
	(i)	The Con	-	ppendices to 1	na (b, c, L	ιο L),			
	(i) (j)		ecification	S					
	(k)	The Spe	ZIIICUIIOII		(any ot	her)			
	(11)				(uii) 00				

- 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 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

.....*NOT APPLICABLE*.....

GUARANTOR (BANK)

	1. 2. 3.	Signature Name Title
WITNESS		
1.		
Corporate Secretary (Seal)		
2.		
(Name Title & Address)		Corporate Guarantor (Seal)

Copies of the FIDIC Conditions of Contract can be obtained by the bidder from: FIDIC Secretariat P.O. Box 86 1000 Lausanne 12 Switzerland e-mail: fidic.pub@fidic.org - FIDIC.org/bookshop



FEDERATION INTERNATIONAL DES INGENIEURS-CONSEILS

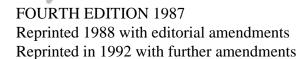
CONDITIONS OF

CONTRACT FOR WORKS OF

CIVIL ENGINEERING

CONSTRUCTION

PART I GENERAL CONDITIONS
WITH FORMS OF TENDER AND AGREEMENT



Copies of the FIDIC Conditions of Contract 4th Edition, 1987 reprinted in 1992 with further amendments can be obtained from:

FIDIC SECRETARIAT

P.O BOX NO. 86

1000 Lausanne 12

Switzerland

e-mail fidic.pub@fidic.org-FIDIC org/bookshop

TABLE OF CONTENTS

PART II - PARTICULAR CONDITIONS OF CONTRACT

Clause	Title	Page
1.1	Definitions	64
2.1	Engineer's Duties and Authority	64-65
2.2	Engineer's Representative	66
2.7	Engineer Not Liable	66
2.8	Replacement of the Engineer	66
5.1	Language(s) and Law	66
5.2	Priority of Contract Documents	66
6.6	Shop Drawings	67
6.7	As-Built Drawings	67
10.1	Performance Security	67
10.4	Performance Security Binding on Variations and Changes	68
14.1	Program to be Submitted	68
14.3	Cash Flow Estimate to be Submitted	68
14.5	Detailed Program and Monthly Progress Report	68
15.2	Language Ability of Contractor's Representative	69
15.3	Contractor's Representative	69
16.3	Language Ability of Superintending Staff of Contractor	69
16.4	Employment of Local Personnel	69
19.3	Safety Precautions	69
19.4	Lighting Works at Night	70
20.4	Procuring Entity's Risks	70
21.1	Insurance of Works and Contractor's Equipment	70
21.4	Exclusions	71
25.5	Insurance Company	71
31.3	Co-operation with Other Contractors	71
34.2	Rates of Wages and Conditions of Labour	71
34.3	Employment of Persons in the Service of Others	71
34.4	Housing for Labour	71
34.5	Health and Safety	72
34.6	Epidemics	72
34.7	Supply of Water	72
34.8	Alcoholic Liquor or Drugs	72
34.9	Arms and Ammunition	72
34.10	Festivals and Religious Customs	72
34.11	Disorderly Conduct	73
34.12	Compliance by Subcontractors	73
35.2	Records of Safety and Health	73
35.3	Reporting of Accidents	73
36.6	Use of Pakistani Materials and Services	73
41.1	Commencement of Works	73
47.3	Bonus for Early Completion of Works	74
48.2	Taking Over of Sections or Parts	74
51.2	Instructions for Variations	74

TABLE OF CONTENTS

PART II - PARTICULAR CONDITIONS OF CONTRACT

Clause	Title	Page
52.1	Valuation of Variations	74
53.4	Failure to Comply	74
54.3	Customs Clearance	74
54.5	Conditions of Hire of Contractor's Equipment	74
59.4	Payments to Nominated Sub-contractors	74
59.5	Evidence of Payments	75
60.1	Monthly Statements	75
60.2	Monthly Payments	75
60.10	Time for Payment	75
60.11	Secured Advance on Materials	76
60.11	Financial Assistance to Contractor	76
63.1	Default of Contractor	77
65.2	Special Risks	77
67.3	Arbitration	77
68.1	Notice to Contractor	78
68.2	Notice to Procuring Entity and Engineer	78
70.1	Increase or Decrease of Cost	78
73.1	Payment of Income Tax	78
73.2	Customs Duty & Taxes	79
74.1	Integrity Pact	79
75.1	Termination of Contract for Procuring Entity's Convenience	79
76.1	Liability of Contractor	79
77.1	Joint and Several Liability	80
78.1	Details to be Confidential	80

PART II - PARTICULAR CONDITIONS OF CONTRACT (Mandatory Provisions not to be Amended / Substituted except as instructed by KPPRA)

1.1 Definitions

- (a) (i) The Procuring Entity is **Executive Engineer, Irrigation Division District Orakzai**, **Phone No.: 0925-690184**
- (a) (iv) The Engineer is **Executive Engineer, Irrigation Division District Orakzai**, **Phone**No.: 0925-690184 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 Engineers is to formulate his certifications/ recommendations in relation to all outstanding matters, disputes and claims relating to the execution of the Works during his tenure.

The following paragraph is added:

- (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".

The following paragraph is added:

- (b)(ix) "Program" means the program 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" or Payment of Bonus for Early Completion of Works (PCC Sub-Clause 47.3).
- (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".

(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 may 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.) However, responsibility of restoring damages to ongoing work will be within liability the contract price and of the contractor

2.2 **Engineer's Representative**

The following paragraph is added:

The Procuring Entity shall ensure that the Engineer's Representative is a Sub Divisional Officer or superior, posted by the competent authority (GOP).

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 (NOT APPLICABLE)

"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."

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;
- (4)
- Special Stipulations (Appendix-A to Bid); The Particular Conditions of Contract Part II; (5)
- The General Conditions Part I: (6)
- The priced Bill of Quantities (Appendix-D to Bid); (7)
- (8) The completed Appendices to Bid (B, C, E to L);
- The Drawings; (9)

- (10) The Specifications; and
- (11)____(any other).

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 (As per requirement of Engineer incharge, if required)

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, if required by Engineer.

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 (As per requirement of Engineer incharge, if required)

If required by the Engineer, 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 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.

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

The following Sub-Clause 10.4 is added:

-

⁶ Words "(c) an insurance company having at least AA rating from PACRA/JCR" deleted by KPPRA Notification No. KPPRA/M&E/Estt:/1-4/2016 dated May 24, 2016.

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.

14.1 Program to be submitted

(If required) The program shall be submitted within <u>14</u> days from the date of receipt of Letter of Acceptance, which shall be in the form of:

a Bar Chart identifying the critical activities.

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 (Payment shall be subject to availability of fund, work done, other works, importance of works as deemed appropriate according to situation by the Procuring Entity)

The following Sub-Clause 14.5 is added:

14.5 Detailed Program and Monthly Progress Report

a) For purposes of Sub-Clause 14.1, the Contractor shall submit to the Engineer detailed program for the following:

As per written directions of Engineer's

- (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 8th day of the following month, 5 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 program 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/Pashto language.

15.3 Contractor's Representative

The Contractor's representative will be a professional Engineers working at site registered with the Pakistan Engineering Council.

The Contractor's authorized representative at Site shall be authorized 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 (N/A)

A reasonable proportion of the Contractor's superintending staff shall have a working knowledge of the English/Urdu/Pashto language.

16.4 Employment of Local Personnel

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

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 authorize 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.

The contractor shall provide all the safety gear to its employees and also put safety / diversion signs with messages for ease of public traffic movement etc. the contractor will also ensured safety measures to the skilled and unskilled labours during any sort of pandemic.

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's Risks

The Procuring Entity's risks are:

- (a) insofar as they directly affect the execution of the Works in Khyber Pakhtunkhwa Province
 - (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) 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.

21.1 Insurance of Works and Contractor's Equipment

(Procuring Entity may vary this Sub-clause 1.1 (b))

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 para (a) (i) to (iv).

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 operating in Pakistan and acceptable to the Procuring Entity.

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 favorable 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 favorable 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. Minimum wage per day/month paid to the labor as notified by the labor department.

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 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 Khyber Pakhtunkhwa Province provided such materials, supplies, plant, equipment and services shall be of required standard.

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.

The following Sub-Clause 47.3 is added:

47.3 Bonus for Early Completion of Works (Not Applicable)

The Contractor shall in case of earlier completion for either whole or part(s) of the Works pursuant to Sub-Clauses 48.1 and 48.2(a) respectively of the General Conditions of Contract, be paid bonus up-to a limit and at a rate equivalent to 50% of the relevant limit and rate of liquidated damages prescribed in Appendix-A to Bid "Special Stipulations".

48.2 Taking Over of Sections or Parts

For the purposes of para (a) of this Sub-Clause, separate Times for Completion shall be provided in the Appendix-A to Bid "Special Stipulations".

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 28 days from the date of disagreement whichever is later.

53.4 Failure to Comply

This Sub-Clause is deleted in its entirety.

54.3 Customs Clearance

(Procuring Entity may vary this Sub-Clause)

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 following Sub-Clauses 59.4 & 59.5 are added:

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,"

In Para (c) the words "the Appendix to Tender" are deleted and substituted with the words "Sub-Cause 60.11 (a)(6) hereof". (in case Clause 60.11 is applicable)

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 30 days after such Interim Payment Certificate has been jointly verified by Procuring Entity and Contractor(Subject to availability of fund, importance in relation to other works, decision of the Procuring Entity) or, in the case of the Final Certificate referred to in Sub Clause 60.8, within 60 days (Subject to availability of fund, importance in relation to other works, decision of the Procuring Entity) after such Final Payment Certificate has been jointly verified by Procuring Entity and Contractor.

The following Sub-Clause 60.11 is added:

60.11 Secured Advance on Materials

- a) The Contractor shall be entitled to receive from the Procuring Entity Secured Advance against an indemnity bond acceptable to the Procuring Entity of such sum as the Engineer may consider proper in respect of non-perishable materials brought at the Site but not yet incorporated in the Permanent Works provided that:
 - (1) The materials are in accordance with the Specifications for the Permanent Works;
 - (2) Such materials have been delivered to the Site and are properly stored and protected against loss or damage or deterioration to the satisfaction of the Engineer but at the risk and cost of the Contractor;
 - (3) The Contractor's records of the requirements, orders, receipts and use of materials are kept in a form approved by the Engineer, and such records shall be available for inspection by the Engineer;
 - (4) The Contractor shall submit with his monthly statement the estimated value of the materials on Site together with such documents as may be required by the Engineer for the purpose of valuation of materials and providing evidence of ownership and payment therefor;
 - (5) Ownership of such materials shall be deemed to vest in the Procuring Entity and these materials shall not be removed from the Site or otherwise disposed of without written permission of the Procuring Entity; and
 - (6) The sum payable for such materials on Site shall not exceed 75 % of the (i) landed cost of imported materials, or (ii) ex-factory / ex-warehouse price of locally manufactured or produced materials, or (iii) market price of other materials.
- (b) The recovery of Secured Advance paid to the Contractor under the above provisions shall be effected from the monthly payments on actual consumption basis or in installments as deemed appropriate by the Procuring Entity.

60.11 Financial Assistance to Contractor (NOT APPLICABLE)

(Appropriate alternative only to be retained)

Alternative One: Mobilization Advance (Subject to Availability/release of Funds)

- (a) An interest-free Mobilization Advance 10-15 % of the Contract Price stated in the Letter of Acceptance shall be paid by the Procuring Entity to the Contractor in two equal parts
- (b) upon submission by the Contractor of a Mobilization Advance Guarantee/ for the full amount of the Advance in the specified form from a Scheduled Bank in Pakistan:
 - (1) First part within 14 days after signing of the Contract Agreement or date of receipt of Engineer's Notice to Commence, whichever is earlier; and
 - (2) Second part 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.
- (b) This Advance shall be recovered in equal installments; first installment at the expiry of third month after the date of payment of first part of Advance and the last installment two months before the date of completion of the Works as per Clause 43 hereof.

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 under 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 Sub-Clause 20.4 sub paragraphs (a) (i) to (a) (v).

67.3 Arbitration

In the sixth to eight 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:

The place of arbitration shall be office of the Executive Engineer, Irrigation Division District Orakzai.

If in conflict with KPPRA Act & Rules then KPPRA Act & Rules shall be followed.

68.1 Notice to Contractor

The following paragraph is added:

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 address are:

a) The Procuring Entity:

Office of the Executive Engineer, Irrigation Division Orakzai,

Phone No: 0925-690184,

- b) The Engineer <u>Executive Engineer, Irrigation Division Orakzai</u>, <u>Phone No: 0925-690184</u>,
- c) Engrs Representative: -

Sub Divisional Officer,.

70.1 Increase or Decrease of Cost

Sub-Clause 70.1 is deleted in its entirety, and substituted with the following: (NOT APPLICABLE)

The following Sub-Clauses 73.1, 73.2, 74.1, 75.1, 76.1, 77.1 and 78.1 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

These shall be the responsibility of the contractor as per prevailing rules & law.

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 (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 assigns shall follow strictly, all relevant labor 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 assigns 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 fulfillment 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.

PART II -PARTICULAR CONDITIONS OF CONTRACT

Index	Clause
Alcoholic Liquor or Drugs	34.8
Arbitration	67.3
Arms and Ammunition	34.9
As-Built Drawings	6.7
Bonus for Early Completion of Works	47.3
Cash Flow Estimate to be Submitted	14.3
Commencement of Works	41.1
Compliance by Sub-Contractors	34.12
Conditions of Hire of Contractor's Equipment	54.5
Contractor's Representative	15.3
Co-operation with Other Contractors	31.3
Customs Clearance	54.3
Customs Duty and Taxes	73.2
Default of Contractor	63.1
Definitions	1.1
Detailed Program and Monthly Progress Report	14.5
Details to be Confidential	78.1
Disorderly Conduct	34.11
Procuring Entity's Risks	20.4
Local Personnel	16.4
Employment of Persons in the Service of Others	34.3
Engineer Not Liable	2.7
Employment of Engineer's Duties and Authority	2.1
Engineer's Representative	2.2
Epidemics	34.6
Exclusions	21.4
Failure to Comply	53.4
Festivals and Religious Customs	34.10
Financial Assistance to Contractor	60.11
Health and Safety	34.5
Housing for Labour	34.4
Increase or Decrease of Cost	70.1
Instructions for Variations	51.2
Insurance of Works and Contractor's Equipment	21.1
Insurance Company	25.5
Integrity Pact	74.1
Joint and Several Liability	77.1
Language Ability of Contractor's Representative	15.2
Language Ability of Superintending Staff of Contractor	16.3
Language(s) and Law	5.1
Liability of Contractor	76.1

Index	Clause
Lighting Work at Night	19.4
Monthly Payments	60.2
Monthly Statements	60.1
Notice to Contractor	68.1
Notice to Procuring Entity and Engineer	68.2
Payment of Income Tax	73.1
Payments of Nominated Subcontractors	59.4
Performance Security	10.1
Performance Security Binding on Variation and Changes	10.4
Priority of Contract Documents	5.2
Program to be Submitted	14.1
Rates of Wages and Conditions of Labour	34.2
Records of Safety and Health	35.2
Replacement of the Engineer	2.8
Reporting of Accidents	35.3
Safety Precautions	19.3
Secured Advance on Materials	60.11
Shop Drawings	6.6
Special Risks	65.2
Supply of Water	34.7
Taking Over of Sections or Parts	48.2
Termination of Contract for Procuring Entity's Convenience	75.1
Time for Payment	60.10
Use of Pakistani Materials and Services	36.6
Valuation of Variations	52.1

SPECIFICATIONS-SPECIAL PROVISIONS

Essential Material & Technical specification as per document at the following link are required: https://www.cwd.gkp.pk/images/CSR/Technical-Specification-MRS-KPK-2020.pdf any other specification

SPECIFICATIONS-TECHNICAL PROVISIONS

Essential technical specification as per document at the following link are required: https://www.cwd.gkp.pk/images/CSR/Technical-Specification-MRS-KPK-2020.pdf any other specification

Construction of Irrigation Tube Wells / Lift Irrigation Schemes & Solarization of Existing Irrigation Tube Wells in Merged Areas AIP No. 1914/ 210588 (2024-25)

S# **Sub work:** Construction of New Solar Irrigation Tube Well at Mani Khel Zarghon Khel TSD Darra
11 Kohat

Discharge (IGPH)		3000 GPH				
Head (ft)		320′				
Pump Setting (ft)		282'				
Water Horse F	Power (WHP)					
Pump Efficien	су (70% 80%)					
Motor Efficien	ncy (%)					
Shaft Power (F	Pump HP)					
BREAK HOURS	SE POWER (with 20% safety factor)					
Say Motor Ho	rse Power					
Motor Basic Input Power						
PV Derating Fa	actor (30% 80%)					
Total PV Powe	er (Watt) with Safety Factor					
PVC	No of Pv Modules in String					
Generator Peak Power	No of String in Serries					
(Watts)	Single PV Module Size (Watts)					
	Total PV Generation					
Motor Model Make, & HP						
Pump Model, Make & HP						
Inverter Make	, Model & K.watt					
PV Module Make & Watt						

DRAWING

As per PC-I/T.S and subsequent sanctions as per site requirement

BILL OF QUANTITIES

(Available at website also)

Construction of Irrigation Tube wells / lift Irrigation schemes and Solarization of existing Irrigation Tube wells in Marged areas 210588

Construction of New Solarization Irrigation Tube well at Mani Khel Kaly Zarghon khel TSD Darra

Sub Work:

Estimate of Solarization of Tube Well

5. No.	Ref: Schedule Item	Description .	Unit	Quantity	Rate (Rs.)	Amount
1	26-01-d-01	Supply & Eriction of Solar PV module (Solar Panel) Mono-crystalline A-Grade (Per Watt) (as per approved specification)	Watt	7,985	104.17	831,797
- 2	26-01-b-02	Supply & Eriction of PVC flexible pipe "1.5 i/d.	м	30	363.34	10,900
3	26-01-g-04	Supply & Eriction 1X10 sq. mm flexible copper cable	м	140	460.93	64,530
4	26-01-h-01	Supply & Eriction MC4 connector (TUV approved)	Pair	10	342.92	3,42
5	26-01-i-04	Supply and Erection of 3 Phase 220/380V Solar Pump inverter (MPPT) 7.5 KW and above	Watt	7,985	20.39	162,81
6	26-01-m-01	Supply & Eriction of hot dipped (80 microns Average) galvanised steel of minimum thickness of 12 SWG/2.64 mm channel/pipe or 8 SWG/4.06 mm angle.	Watt	7,985	22.19	177,18
7	26-01-n-02	Supply & Eriction of 1x1 ft 4 mm Copper Earthing Plate	Watt	7,985	3.92	31,30
8	26-01-n-03	Supply & Eriction of stainless steel nuts & bolts	Watt	7,985	3.92	31,30
9	24-50-a-01	Supply & Installation, testing and commissioning of Submersible Pump (ISO – 9906 Certified) Coupled with Submersible rewind-able Electric Motor with AC winding and all accessories like Motor Control Unit (equipped with UV/OV, dry run protection device, surge protection, phase reverse indicator) Complete in all accessories including NRV, Pressure Gauge, Sluice valve except column pipe and power cable with appropriate Head and Discharge: 10 HP,	Set	1	332,748.59	332,74
10	24-50-c-02	Supply and installation of Submersible Flat Cable made of 99,9% copper, coated with double PVC as per BSS Standards, 3x16 mm2	м	140	944.63	132,248
11	24-56-b	Supply & Fixing MS Column Pipe with flunges for Submersible Pump 3" (75 mm) Nominal Pipe Size 3/16" thick, 10' length	м	140	2,858.78	400,229

G.Total				2,392,149		
Add Cost Factor i.e 2%				46,909		
		Total				2,345,244
15	06-05-f	Plain Cement Concrete (PCC) including placing, compacting, finishing and curing (Ratio 1:2:4).	M³	9.557	9,299.67	88,87
14	03-25-c	Excavation in foundation of building, bridges etc: complete : complete in hard soil or soft murum	M ³	11.150	330.13	3,68
13	24-30-c-03	Providing, laying, cutting, jointing, testing and disinfecting High Density Polyethylene Pipe (HDPE) Din-8074/Din-8075/ISO-4427 in trenches, complete in all respects except excavation. (32 mm dia) PN-12.5	М	140	132.88	18,60
12	24-30-c-06	Providing, laying, cutting, jointing, testing and disinfecting High Density Polyethylene Pipe (HDPE) Din-8074/Din-8075/ISO-4427 in trenches, complete in all respects except excavation. (63 mm dia) PN-12.5	М	140	397.12	55,597

Sub Engineer Irrigation Division District Orakzai Assistant Enginee

District Orakzai