

LIAQUAT UNIVERSITY OF MEDICAL & HEALTH SCIENCES JAMSHORO

CONSTRUCTION OF LIBRARY BLOCK FOR LUMHS, JAMSHORO FOR THE PROJECT TITLED "UP GRADATION AND IMPROVEMENT OF PEOPLE NURSING SCHOOL, LIAQUAT UNIVERSITY OF MEDICAL & HEALTH SCIENCES JAMSHORO"

TENDER DOCUMENTS
CONDITIONS OF CONTRACT

April 2024

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These	Tender/B	Bid Doc	uments	are issue	d to M/s	S	
for b	oidding	purpose	for the	CONST	TRUCTI	ON OF	LIBRARY
BLOCI	K FOR I	LUMHS	, JAMSI	HORO FO	OR THE	PROJEC	CT TITLED
"UP GI	RADAT	ION AN	D IMPI	ROVEME	ENT OF	PEOPLE	NURSING
SCHOO	OL, LIA	QUAT	UNIVE	RSITY (OF MED	OICAL &	HEALTH
SCIEN	CES JA	MSHOI	RO" as p	er Instruc	ctions to b	oidders, C	Conditions of
Contrac	t, Techr	nical Sp	ecificatio	ons, Bill	of Quan	tities, Dr	awings and
Special	Stipulasi	ions.					
Dated:-							

INVITATION FOR BID



RSITY Doc # LUMHS/DW&S/ 4392 Issue Date: 26 / 04 / 2024

OF MEDICAL & HEALTH SCIENCES, JAMSHORO, SINDH - PAKISTAN

URL: www.lumhs.edu.pk
Tel: # 92-22-9213331
Web Site: www.lumhs.edu.pk

WORKS & SERVICES DEPT.

NOTICE INVITING TENDER

The Liaquat University of Medical & Health Sciences Jamshoro Invites sealed bids from interested bidders under the PPRA rules 2010 for the Following Works.

S/No	Name of work	Estimated Cost	Earnest Money	Tender Fee	Time for Completion
1)	Construction of Girls Hostel for LUMHS, Jamshoro.	Rs. 183.00 Million	(2% of Bid Amount)	3000/-	12 Months
2)	Construction of Library Block for LUMHS, Jamshoro.	Rs.114.00 Million	(2% of Bid Amount)	3000/-	12 Months
3)	Construction of Academic Section @ PNS LUMHS Jamshoro.	Rs. 40.00 Million	(2% of Bid Amount)	3000/-	06 Months
4)	Construction of Cafeteria Block for LUMHS, Jamshoro.	Rs.13.50 Million	(2% of Bid Amount)	3000/-	04 Months

Eligibility:

Valid Registration with Federal Board of Revenue (FBR) for Income tax, Registration with Sindh Revenue Board (SRB), Valid Electrical Inspector License & having Registration with Pakistan Engineering Council in relevant C-4 & above category for Sr. No. 1&2, C-5 & above Category for Sr.No.3, C-6 & above Category for Sr. No.4 in the field of specialization in CE 09, CE 10, EE-04, EE-06 discipline.

Oualification:

- i. List of similar assignment along with cost undertaken over past 05 years and Performance Certificate issued by Procuring Agency.
- ii. Detail of office, and machineries / transport owned / leased / hired by firm / bidders.
- iii. Detailed Portfolio of company Profile.
- iv. Details of turnover (including in terms of rupees) at least last Five years that average turnover should not be less than estimated cost and supported by audited reports.
- v. Undertaking on Affidavit that the Firm is not involved in any litigation and black listed in any department.

Method of Procurement: Single Stage – One Envelope Procedure

Bidding / Tender Documents:

Issuance:

Complete set of Bidding Documents can be obtained on payment of a Tender Fee of Rs. 3000/= in the shape of Pay Order / Demand Draft (Non-Refundable) in favour of Vice Chancellor LUMHS, Jamshoro and can be downloaded from PPRA's Website i.e. www.ppra.org.pk & i.e. www.lumhs.edu.pk/tender on any working day from 30-04-2024 up to 15-05-2024.

Submission & Opening:

Bids completed in all respects in sealed envelopes must be submitted on or before below mentioned schedule and must be accompanied by a Bid Security 2% of Bid Price in the shape of Pay Order / Demand Draft in favour of Vice Chancellor LUMHS, Jamshoro.



Doc # LUMHS/DW&S/ 4392 Issue Date: 26 / 04 / 2024

OF MEDICAL & HEALTH SCIENCES, JAMSHORO, SINDH - PAKISTAN

URL: www.lumhs.edu.pk Tel: # 92-22-9213331 Web Site: www.lumhs.edu.pk

ORKS & SERVICES DEPT.

S/No	Name of work	Submission Date & Time	Opening Date & Time
1)	Construction of Girls Hostel for LUMHS, Jamshoro.	16-05-2024	16-05-2024
1)	Construction of Offis Hoster for LOWITS, Janishoro.	10.00 A.M	10.30 A.M
2)	Construction of Library Block for LUMHS, Jamshoro.		16-05-2024
2)		10.30 A.M	11.00 A.M
2)	Construction of Academic Section @ PNS LUMHS	16-05-2024	16-05-2024
3)	Jamshoro.	11.00 A.M	11.30 A.M
4)	Construction of Cafeteria Block for LUMHS,	16-05-2024	16-05-2024
4)	Jamshoro.	11.30 A.M	12.00 P.M

- The Bids will be opened on above schedule in presence of Committee Members and representative of bidders who wish to attend.
- 2. In case of unusual circumstances, Tender will be opened on next working day at the same time.

Place of Issuance, Submission, Inquiries & Opening: Office of the Director Works & Services Department, Liaquat University of Medical & Health Sciences (LUMHS), Jamshoro, Sindh.

Telephone Numbers: 92-22-9213331

Terms & Conditions: Under the following conditions, Bid will be rejected:

- Conditional and Telegraphic Bids / Tenders. i.
- ii. Bids not accompanied by Bid Security of required amount and form.
- iii. Bids received after specified Date and Time.
- Bids submitted by Black Listed Firms. iv.
- Incomplete Bids as per instructions given in Bidding Documents. v.
- Only Tape Binding Tender Document will be considered. vi.

Un-responded tenders will be again issued/ submitted/ opened on following dates:-2^{nd Attempt}:(a) Issue date. (b) Submission date: Opening date:

03-06-2024 up to 11:00 am

03-06-2024 up to 11:30 am

17-05-2024 **Bid validity period:** Ninety (90) days.

Procuring Agency reserves the right to reject any or all bids subject to the relevant provisions of Public Procurement rules 2010 up to date.

D.A./ AS ABOVE

Director Works & Services Department LUMHS, Jamshoro

INSTRUCTIONS TO BIDDERS (IB)

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INSTRUCTIONS TO BIDDERS

[Mandatory Provisions not to be amended/substituted except as instructed by PEC in writing]

A. GENERAL

1.1

IB.1 Scope of Bid

- The Employer as defined in the **Bidding Data** hereinafter called "the Employer" wishes to receive bids for the construction and completion of works as described in these Bidding Documents, and summarized in the **Bidding Data** hereinafter referred to as the "Works".
- 1.2 The successful Bidder will be expected to complete the Works within the time specified in the **Bidding Data**.

IB.2 Source of Funds

2.1 The Employer has applied for/received a funding from the source(s) in various currencies towards the cost of the project specified in the **Bidding Data** and it is intended that part of the proceeds of this funding will be applied to eligible payments under the Contract for which these Bidding Documents are issued.

IB.3 Eligible Bidders

- 3.1 This Invitation for Bids is open to all Bidders meeting the following requirements at the time of submission of Bids and thereafter:
 - (a) Duly prequalified for this bidding process;
 - (b) Duly licensed by the Pakistan Engineering Council (PEC) in the category relevant to the value of the Works in the relevant field of specialization.

However, a Foreign Constructor can submit provisional licence with its Bid but the Foreign Constructor will be required to submit standard licence after award of Contract and before start of work.

Foreign Constructor shall not be eligible to participate in bidding individually. Foreign Constructor shall enter into joint venture with Pakistani Constructor registered with the Pakistan Engineering Council in equivalent/compatible category and submit the joint venture agreement to the Employer before participating in bidding in accordance with PEC Construction and Operation of Engineering Works Bye-laws, 1987;

- (c) Pakistani Constructor must be on Active Taxpayer List of the Federal Board of Revenue and provincial revenue authority/ board where applicable; and
- (d) All partners constituting the Bidder including proposed subcontractors do not appear in the list of debarred/blacklisted firms and individuals on the websites of PEC and Federal & Provincial Procurement Regulatory Authorities and have not been declared debarred/blacklisted by foreign country, international organizations or other foreign institutions.

IB.4 Eligible Materials, Equipment and Services

- 4.1 All materials, equipment and services to be supplied under this Contract shall have their origin in eligible countries described under paragraph 4.4 hereunder.
- 4.2 For purpose of this Clause, "origin" means the place where the Goods are mined, grown or produced or from where the ancillary services are supplied. Goods are produced when, through manufacturing, processing or substantial and major assembling of components, a commercially recognized product results that is substantially different in basic characteristics or in purpose or utility from its components.
- 4.3 The origin of Goods and Services is distinct from the nationality of the Bidder.
- 4.4 Eligible countries to participate in this bidding process are those which have been notified by Ministry of Interior, Government of Pakistan as Business Friendly Countries (BVL); information can be accessed through following link:

http://www.dgip.gov.pk/Files/Visa%20Categories.aspx#L

IB.5 One Bid per Bidder

5.1 Each Bidder shall submit only one Bid either by himself, or as a partner in a joint venture. A Bidder who submits or participates in more than one Bid (other than alternatives pursuant to Clause IB.17) will be disqualified.

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 Employer 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 Employer, 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. Evaluation Criteria and Qualification Updating Forms;
- 4. General Conditions (GC);
- 5. Particular Conditions (PC):
 - Part A Contract Data;
 - Part B Special Provisions;
- 6. Specifications (SP):
 - Part A Specific Provisions;
 - Part B Technical Provisions;
- 7. Letter of Bid:
- 8. Schedules to Bid:
- 9. Standard Forms:
 - (i) Form of Bid Security;
 - (ii) Letter of Acceptance;
 - (iii)Form of Contract Agreement;
 - (iv) Form of Performance Security;
 - (v) DAAB Agreement;
 - (vi) Form of Mobilization Advance Guarantee;
- 10. Drawings.
- 7.2 The Bidders are expected to examine carefully the contents of all the above documents. Failure to comply with the requirements of Bid submission will be at the Bidder's own risk. Pursuant to Clause IB.26, bids which are not substantially responsive to the requirements of the Bidding Documents will be rejected.
- IB.8 Clarification of Bidding Documents, Pre-Bid Meeting
- 8.1 Any prospective Bidder requiring any clarification(s) in respect of the Bidding Documents may notify the Employer in writing at the Employer's address indicated in the Invitation for Bids. The Employer will respond to any request for clarification which he receives earlier than the period specified in the **Bidding Data**, prior to the deadline for submission of bids.
- 8.2 Copies of the Employer's response will be forwarded to all purchasers of the Bidding Documents, including a description of the enquiry but without identifying its source.
- 8.3 The Employer may, on his own 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. The date, time and venue of pre-bid meeting, if convened, are as stipulated in the **Bidding Data**. All prospective Bidders or their authorized representatives shall be invited to attend such a pre-bid meeting.
- 8.4 The Bidders are requested to submit questions, if any, in writing so as to reach the Employer not later than seven (7) days before the proposed pre-bid meeting.

- 8.5 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 IB.7.1 hereof which may become necessary as a result of the pre-bid meeting shall be made by the Employer exclusively through the issue of an Addendum pursuant to Clause IB.9 and not through the minutes of the pre-bid meeting.
- 8.6 Absence at the pre-bid meeting will not be a cause for disqualification of a Bidder.

IB.9 Amendment of Bidding Documents

- 9.1 At any time prior to the deadline for submission of bids, the Employer 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 listed in Sub-Clause IB.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 Employer.
- 9.3 Such addendum shall be issued not later than number of days prior to the deadline for submission of bids, specified in the **Bidding Data**. To afford prospective Bidders reasonable time in which to take an addendum into account in preparing their bids, the Employer may extend the deadline for submission of bids in accordance with Clause IB.20.

C. PREPARATION OF BIDS

IB.10 Cost of Bidding

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

IB.11 Language of Bid

11.1 The Bid and all correspondence and documents related to the Bid exchanged by a Bidder and the Employer 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 duly certified 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.12 Documents Comprising the Bid

12.1 Each Bidder shall:

(a) submit duly filled in, signed and stamped Letter of Bid and completed Schedules to Bid as required, including priced Bill of Quantities, in accordance with Clause IB.18 hereof;

- (b) submit Bid Security in accordance with Clause IB.16 hereof;
- (c) submit alternative proposal, if permissible in accordance with Clause IB.17;
- (d) submit a written power of attorney authorizing the signatory of the Bid to act for and on behalf of the Bidder. The name and position held by each person signing the authorization must be typed or printed below the signature;
- (e) submit the Qualification Updating Forms duly filled in, signed and stamped along with requisite attachments, to establish that the Bidder continues to meet the Eligibility and Qualification Criteria set out in the Pre-Qualification Documents and as provided in the Section "Evaluation Criteria and Qualification Updating Forms";
- (f) furnish a technical proposal taking into account the various Schedules to Bid, specially the following:

Schedule-C to Bid, Proposed Construction Schedule;

Schedule-D to Bid, Method of Performing the Work;

Schedule-E to Bid, List of Major Equipment;

Schedule-F to Bid, Organization Chart for Supervisory Staff;

and other pertinent information, such as mobilization programme, etc.

- 12.2 Bids submitted by a joint venture of two (2) or more firms specified in **Bidding Data**, shall comply with the following requirements:
 - (a) the bid, and in case of a successful bid, the Form of Contract Agreement shall be signed by all members 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 Employer 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 Letter 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 and corresponding duties & responsibilities of the several firms forming the joint venture, and any other information necessary to permit a full appraisal of 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 Employer.
- 12.3 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 IB.1.2 hereof.

IB.13 Bid Prices

- 13.1 The price and discount if any quoted by the Bidders in the Letter of Bid and in the Bill of Quantity shall conform to the requirement specified below:
- 13.2 The Bidder shall quote any discounts and the methodology for their application.
- 13.3 If bids are being invited for individual lots (contracts) or for any combination of lots, the Bidders can offer discounts for the individual lots (contracts) as well as for award of more than one Contract and shall specify in their bid.
- 13.4 Unless stated otherwise in the Bidding Documents, the Contract shall be for the whole of the Works as described in Sub-Clause IB.1.1 hereof, based on the unit rates and/or prices.
- 13.5 The Bidders shall fill in rates and prices for all items of the Works described in the Bill of Quantities. Items against which no rate or price is entered by a Bidder will not be paid for by the Employer when executed and shall be deemed covered by rates and prices for other items in the Bill of Quantities.
- 13.6 All duties, taxes and other levies payable by the Contractor under the Contract, or for any other cause, as on the date 28 days prior to the deadline for submission of bids shall be included in the rates and prices and the total Bid Price submitted by a Bidder.

Additional/reduced duties, taxes and levies due to subsequent additions or changes in legislation shall be reimbursed/deducted as per Sub Clause 13.6 [Adjustment for Changes in Laws] of the Conditions of Contract.

13.7 The rates and prices quoted by the Bidders are subject to adjustment during the performance of the Contract in accordance with the provisions of Sub-Clause 13.7 [Adjustments for Changes in Cost] of the General Conditions of Contract. The Bidders shall furnish the prescribed information for the price adjustment formulae in Schedule-A to Bid, and shall submit with their bids such other requisite supporting information if required under the said Schedule.

IB.14 Currencies of Bid and Payment

4.1 The unit rates and the prices shall be quoted by the Bidder entirely PKR.

A Bidder expecting to incur expenditures in other currencies for inputs to the Works supplied from outside the Employer's country (referred to as the "Foreign Currency Requirements") shall indicate in Table III of Schedule-A to Bid the proportion of the Bid Price (excluding Provisional Sums) needed by him for the payment of such Foreign Currency Requirements; in such case the unit rates and the prices shall be quoted by the Bidder in Equivalent PKR.

14.2 The rates of exchange to be used by the Bidder for currency conversion shall be the TT Selling Rates published or authorized by the State Bank of Pakistan prevailing on the date twenty eight (28) days prior to the deadline for submission of bids. Such rates shall be notified by the Employer not later than fourteen (14) 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.15 Bid Validity

- 15.1 Bids shall remain valid for the period stipulated in the **Bidding Data** after the date of Bid Opening specified in Clause IB.23.
- 15.2 In exceptional circumstances, prior to expiry of the original bid validity period, the Employer may request that the Bidders extend the period of validity for a specified additional period which normally may not 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.16 in all respects.

IB.16 Bid Security

16.1 Each Bidder shall furnish, as part of his bid, a Bid Security in original form in the amount stipulated in the **Bidding Data** in PKR or an equivalent amount in a freely convertible currency.

16.2 The Bid Security shall be, at the option of the Bidder, in the form of Call Deposit Receipt (CDR)/ Pay Order or a Security issued in the prescribed form included in the Bidding Documents, by (a) a Scheduled Bank in Pakistan or (b) a foreign bank duly counter-guaranteed by a Scheduled Bank in Pakistan or (c) an Insurance Company listed in the **Bidding Data** and rated by PACRA/VIS of rating as provided in Table below in favour of the Employer valid for a period 14 days beyond the Bid Validity date. The Bid Security of Joint Venture shall be in the name of Joint Venture or Lead/either Firm of the JV or in ratio of shares of the individual JV partners, submitting the bid.

Bid Price (In Eq. million PKR)	Minimum Rating of Insurance Companies
Up to 1000	A (+)
1001 to no limit	AA

[Note: Insurance Company includes Joint Ventures of Insurance Companies also]

- 16.3 Any Bid not accompanied by an acceptable Bid Security shall be rejected by the Employer as non-responsive.
- 16.4 The Bid Securities of the Bidders except the lowest three will be returned by the Employer within twenty eight (28) days from the opening of Bids, provided a Bidder requests for the return of its Bid Security, or upon the expiry of original validity of Bid Security or as extended, whichever is earlier.
- 16.5 The Bid Security of the lowest three Bidders including the successful Bidder will be returned when the successful Bidder has furnished the required Performance Security.
- 16.6 The Bid Security may be forfeited:
 - (a) if the Bidder withdraws his bid except as provided in Sub Clause IB.22.1;
 - (b) if the Bidder does not accept the correction of his Bid Price pursuant to Sub Clause IB.28.2 hereof; or
 - (c) in the case of successful Bidder, fails to furnish the required Performance Security.
- 16.7 In case of annulment, all Bids submitted and specially, Bid securities, shall be returned to the Bidders within 14 days of annulment.

IB.17 Alternative Proposals by Bidder

- 17.1 Unless otherwise specified in the **Bidding Data**, alternative proposal(s) shall not be considered.
- 17.2 Should any Bidder consider that he can offer any advantages to the Employer 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 alternative 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 Letter of Bid shall be that which represents complete compliance with the Bidding Documents.

17.3 Alternative proposal(s), if any, of the Bidder having submitted most advantageous Bid only may be considered by the Employer as the basis for the award of Contract to such Bidder.

IB.18 Format and Signing of Bid

- 18.1 Bidders are particularly directed that the amount entered on the Letter of Bid shall be for performing the Contract strictly in accordance with the Bidding Documents.
- 18.2 All Schedules to Bid are to be properly completed and signed.
- 18.3 No alteration is to be made in the Letter of Bid nor in the Schedules 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.
- 8.4 Each Bidder shall prepare by filling in 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.12 and clearly mark them "ORIGINAL" and 'COPY" as appropriate. In the event of discrepancy between them, the original shall prevail.
 - The Bidder shall also provide complete searchable PDF versions as well as Word, Excel_etc., versions of the Bid if so required in the **Bidding Data**.
- 18.5 The original of the Bid shall be typed or written in indelible ink and shall be signed by a person or persons duly authorized to sign on behalf of the Bidder pursuant to Sub-Clause IB.12.1(d) hereof. All pages of the Bid shall be initialled 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 Employer, or as are necessary to correct errors made by the Bidder, in which case such corrections shall be initialled by the person or persons signing the Bid.
- 18.7 Bidders shall indicate in the space provided in the Letter 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 and the Bid as their file copy.
- 18.9 All documents executed outside Pakistan required to be submitted with the Bid must be certified by Pakistani Embassy in the respective country(ies).

D. SUBMISSION OF BIDS

IB.19 Sealing and Marking of Bids

- 19.1 Each Bidder shall submit his Bid as under:
 - (a) ORIGINAL and each copy of the Bid shall be separately sealed and put in separate envelopes and marked as such.
 - (b) The envelopes containing the ORIGINAL and copies will be put in one sealed envelope and addressed / identified as given in Sub Clause IB.19.2 hereof.
- 19.2 The inner and outer envelopes shall:
 - (a) be addressed to the Employer at the address provided in the **Bidding Data**;
 - (b) bear the specific identification of this bidding process as specified in the **Bidding Data**; and
 - (c) provide a warning not to open before the time and date for bid opening, as specified in the **Bidding Data**.
- 19.3 In addition to the identification required in Sub-Clause IB.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 Employer will assume no responsibility for the misplacement or premature opening of the Bid.

IB.20 Deadline for Submission of Bids

- 20.1 (a) Bids must be received by the Employer at the address specified no later than the time and date stipulated in the **Bidding Data**.
 - (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 envelope.
 - (d) Upon request, acknowledgment of receipt of Bids will be provided to those making delivery in person or by messenger.
- 20.2 The Employer 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 Employer 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 Employer after the deadline for submission of bids prescribed in Clause IB.20 shall be declared late, rejected and returned unopened to such Bidder.
 - (b) Delays in the mail, delays of person in transit, or delivery of a Bid to the wrong office 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 Employer prior to the deadline 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 IB.22.1 and 28.2.
- 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 Letter of Bid may result in forfeiture of the Bid security in pursuance to Clause IB.16.

E. BID OPENING AND EVALUATION

IB.23 Bid Opening

- 23.1 The Employer will open the Bids including withdrawals, substitution and modifications made pursuant to Clause IB.22, in the presence of Bidders' representatives who choose to attend, at the time, date and location stipulated in the **Bidding Data**. The Bidders' representatives who are present shall sign a register evidencing their attendance.
- 23.2 Envelopes marked "MODIFICATION", "SUBSTITUTION" or "WITHDRAWAL" shall be opened and read out first. Bids for which an acceptable notice of withdrawal has been submitted pursuant to Clause IB.22 shall not be opened. Only bids that are opened and read out at Bid opening shall be considered further.
- 23.3 The Bidder's name, total Bid Price and price of any alternative proposal(s), any discounts, Bid modifications, substitution and withdrawals, the presence or absence of Bid security, and such other details as the Employer may consider appropriate, will be announced by the Employer at the opening of Bids. Only discounts and alternative proposals

read out at Bid opening shall be considered for evaluation. The Letter of Bid and the Summary Bill of Quantities are to be initialled by representative(s) of the Employer attending Bid opening. The Employer shall neither discuss the merits of any Bid nor reject any Bid (except for late Bids, in accordance with Sub-Clause IB 21.1).

23.4 The Employer shall prepare minutes of the Bid opening, including the information disclosed to those present in accordance with the Sub-Clause IB.23.3.

IB.24 Process to be Confidential

Information relating to the examination, clarification, 24.1 evaluation and comparison of Bids and recommendations for the award of Contract shall not be disclosed to Bidders or any other person not officially concerned with such process before the announcement of the result of Bid evaluation in the form of final evaluation report giving justification for acceptance or rejection of Bids which shall be done at least fifteen (15) days prior to award of Contract. The announcement to all Bidders will include table(s) comprising read out prices, discounted prices, price adjustments made, final evaluated prices and recommendations against all the Bids evaluated. Any effort by a Bidder to influence the Employer's processing of Bids or Contract 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 five (5) days after the announcement of the final evaluation report.

IB.25 Clarification of 25.1 Bids

- 5.1 To assist in the examination, evaluation and comparison of Bids, the Employer may, at his discretion, ask any Bidder for clarification of his Bid, including breakdowns of unit rates and lump sum prices. Any clarification submitted by a Bidder that is not in response to a request by the Employer shall not be considered. The request for clarification and the response shall be in writing. No change in the price or substance of the Bid shall be sought, offered or permitted except as required to confirm the correction of arithmetic errors discovered by the Employer in the evaluation of the Bids in accordance with Clause IB.28.
- 25.2 The Employer may, at his discretion, ask any Bidder for confirmation/submission of missing information to clarify its Bid. However, the Employer does not have an obligation to request any additional information or clarification with respect to missing or deficient information in a Bid. The Employer may reject any Bid as non-responsive if found materially incomplete, obscure, irregular or omitting any material information required to be submitted in accordance with the Bidding Documents.
- 25.3 If a Bidder does not provide clarifications of its Bid by the date and time set reasonably (not less than seven (7) days) in the Employer's request for clarification, the Employer may proceed with the evaluation based on the information submitted in the Bid without waiting for the Bidder's response.

IB.26 Examination of Bids and Determination of Responsiveness

- 26.1 Prior to the comparison of Bids, the Employer will determine whether each Bid is substantially responsive to the requirements of the Bidding Documents.
- 26.2 The Employer's determination of a Bid's responsiveness is to be based on the contents of the Bid itself, as defined in Sub-Clause IB.12.
- 26.3 A substantially responsive Bid is one which meets the requirements of the Bidding Documents, without material deviation, reservation or omission. A material deviation, reservation or omission is one that,
 - (a) if accepted, would:
 - (i) affect in any substantial way the scope, quality or performance of the Works; or
 - (ii) limit in any substantial way, inconsistent with the Bidding Documents, the Employer's rights or the Bidder's obligations under the proposed Contract; or
 - (b) if rectified, would unfairly affect the competitive position of other Bidders presenting substantially responsive Bids.
- 26.4 During the evaluation of Bids, the following definitions apply:
 - (a) "Deviation" is a departure from the requirements specified in the Bidding Documents;
 - (b) "Reservation" is the setting of limiting conditions or withholding from complete acceptance of the requirements specified in the Bidding Documents; and
 - (c) "Omission" is the failure to submit part or all of the information or documentation required in the Bidding Documents.
- 26.5 The Employer shall examine the technical aspects of the Bid submitted in accordance with Sub-Clause IB.12.1(f), in particular, to confirm that all requirements stated in Specifications have been met without any material deviation, reservation or omission.
- 26.6 If a Bid is not substantially responsive to the requirements of the Bidding Documents, it will be rejected by the Employer, and may not subsequently be made responsive by correction or withdrawal of the non-conforming deviation, reservation or omission.

IB.27 Nonmaterial Nonconformities

- 27.1 Provided that a Bid is substantially responsive, the Employer may waive any nonconformities in the Bid.
- 27.2 Provided that a Bid is substantially responsive, the Employer may request that the Bidder submit the necessary information or documentation, within a reasonable period of time, to rectify nonmaterial nonconformities in the Bid related to documentation requirements. Requesting information or

documentation on such nonconformities shall not be related to any aspect of the price of the Bid. Failure of the Bidder to comply with the request may result in the rejection of its Bid.

27.3 Provided that a Bid is substantially responsive, the Employer shall rectify quantifiable nonmaterial nonconformities related to the Bid Price. To this effect, the Bid Price shall be adjusted, for comparison purposes only, to reflect the price of a missing or non-conforming item or component, by adding the average price of the item or component quoted by other lowest two evaluated substantially responsive Bidders. If the price of the item or component cannot be derived from the price of other substantially responsive Bids, the Employer shall use a suitable CSR, adjusted to the date 28 days earlier to the Bid submission date or its best assessment.

IB.28 Correction of Arithmetic Errors

- 28.1 Bids determined to be substantially responsive will be checked by the Employer for any arithmetic errors. Errors will be corrected by the Employer as follows:
 - (a) where there is a discrepancy between the amounts in figures and in words, the amount in words will govern.
 - (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 Employer 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.
 - (c) if there is an error in a total corresponding to the addition or subtraction of subtotals, the subtotals shall prevail and the total shall be corrected.
- 28.2 The amount stated in the Letter of Bid will be adjusted by the Employer 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 IB.16.6(b) hereof.

IB.29 Evaluation and Comparison of Bids

- 29.1 The Employer will evaluate and compare only the Bids determined to be substantially responsive in accordance with Clause IB.26. The Employer shall use the criteria and methodologies listed in this Clause. No other evaluation criteria or methodologies shall be permitted.
- 29.2 In evaluating and comparing the Bids, the Employer will determine for each Bid the evaluated Bid Price by adjusting the Bid Price as follows:
 - (a) making any correction for arithmetic errors pursuant to Clause IB.28:

- (b) price adjustment due to discounts offered in accordance with Sub-Clause IB.23.3;
- (c) excluding Provisional Sums and the provision, if any, for contingencies in the Summary Bill of Quantities, but including competitively priced daywork;
- (d) making an appropriate price adjustment for any quantifiable nonmaterial nonconformities in accordance with Sub-Clause IB.27.3; and
- (e) the additional evaluation factors are specified in Section Evaluation Criteria and Qualification Updating Forms.
- 29.3 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 Bids' comparison.

IB.30 Abnormally Low Bids

30.1 If the Bid Price of the successful Bidder is more than 15% below the lower of the Employer's estimate of the cost of work to be performed under the Contract or average of other lowest two evaluated substantially responsive Bids, the Employer may require the Bidder to produce detailed price analyses for any or all items of the Bill of Quantities to demonstrate the internal consistency of those prices with the construction methods and schedule proposed. After evaluation of the price analyses, the Employer may require an additional Performance Security by 10% of the difference of the Bid Price as determined hereinabove upto issuance of Taking Over Certificate at the expense of the successful Bidder to a level sufficient to protect the Employer against financial loss in the event of default of the successful Bidder under the Contract. The Bids having Bid Price lower than 25% shall be liable to be rejected.

IB.31 Unbalanced or Front Loaded Bids

31.1 If the Bid of the successful Bidder is seriously unbalanced (Front Loaded) in relation to the average of other evaluated substantially responsive Bids, the Employer during execution of contract may pay against measured quantities of significantly higher quoted line item(s) rate(s) with respect to same line item(s) rate(s) determined from the average of other lowest two evaluated substantially responsive Bids as instructed by the Engineer. The balance line item(s) rate(s) may be paid against the same measured quantities at the time of issuance of Taking Over Certificate or as instructed by the Engineer.

F. AWARD OF CONTRACT

IB.32 Award Criteria

32.1 Subject to Clauses IB.33 and IB.39, the Employer will award the Contract to the Bidder whose Bid has been determined as most advantageous Bid (substantially responsive to requirements of the Bidding Documents with the lowest evaluated Bid Price).

IB.33 Employer's Right to Annul the Bidding Process

33.1 Notwithstanding Clause IB.32, the Employer reserves the right 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.

The Employer shall upon request communicate to any Bidder who submitted a Bid, the grounds for its rejection of all Bids but is not required to justify those grounds. Rejection of all Bids shall be notified to all Bidders promptly.

IB.34 Notification of Award

34.1 Prior to expiration of the period of Bid validity prescribed by the Employer, the Employer will notify the successful Bidder in writing ("Letter of Acceptance") that his Bid has been accepted. This letter shall name the sum which the Employer 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 "Accepted Contract Amount").

The Letter of Acceptance will also state the remedies with respect to Sub-Clauses IB.30 & IB.31 if applicable.

- 34.2 No negotiation with the Bidder having submitted most advantageous Bid or any other Bidder shall be permitted, however, Employer may have clarification meetings before issuing Letter of Acceptance to get clarified any item in the Bid evaluation report.
- 34.3 The Letter of Acceptance/ notification of award and its acknowledgement/acceptance by the Bidder will constitute the formation of the Contract, binding the Employer and the Bidder till signing of the formal Contract Agreement.
- 34.4 Upon furnishing by the successful Bidder of a Performance Security, the Employer will promptly notify the other Bidders that their Bids have been unsuccessful and return their Bid securities in accordance with Sub-Clause IB.16.5.

IB.35 Performance Security

- 35.1 The successful Bidder shall furnish to the Employer a Performance Security in the form and the amount stipulated in the Conditions of Contract and additional Performance Security if applicable under IB.30 as stated in the Letter of Acceptance, within a period of 28 days after the receipt of Letter of Acceptance.
- 35.2 Failure of the successful Bidder to comply with the requirements of Sub Clause IB.35.1 or Clauses IB.36 or IB.37 shall constitute sufficient grounds for the annulment of the award, forfeiture of the Bid security and to award the Contract to the Bidder having submitted next advantageous Bid.

IB.36 Signing of Contract Agreement

36.1 Within 14 days from the date of furnishing of acceptable Performance Security under the Conditions of Contract, the Employer will notify the successful Bidder to depute its representative with appropriate Power of Attorney to sign the Contract Agreement in the form provided in the Bidding Documents, incorporating all agreements between the parties.

- 36.2 The formal Agreement between the Employer and the successful Bidder shall be executed within 14 days of the receipt of the above stated notification by the successful Bidder from the Employer.
- **IB.37** Integrity Pact
- 37.1 The Bidder shall sign and stamp the Integrity Pact provided at Schedule-J to Bid in the Bidding Documents for all Federal Government procurement contracts exceeding PKR ten million. Failure to provide such Integrity Pact shall make the Bidder non-responsive.
- IB.38 Instructions not Part of Contract
- 38.1 Bids shall be prepared and submitted in accordance with the Instructions to Bidders which are provided to assist the Bidders in preparing Bids but do not constitute part of the Contract.
- IB.39 Corrupt and Fraudulent Practices
- 39.1 The Employer will reject a Bid if it determines that the Bidder recommended for award, or any of its personnel, or its agents, or its sub-contractors, service providers, suppliers and/or their employees, has, directly or indirectly, engaged in corrupt, fraudulent, collusive, coercive, or obstructive practices in competing for the contract under this bidding.
- 39.2 The Employer will blacklist and hence forthwith debar a Constructor or individual, at any time, in accordance with the prevailing Public Procurement Rules 2004.

BIDDING DATA (BD)

BIDDING DATA

IB Clause Reference	Bidding Data		
1.1	Name and address of the Employer:		
	Liaquat University of Medical & Health Sciences Jamshoro		
	Address: Office of the Director Works & Services Department, Liaquat University of Medical & Health Sciences (LUMHS), Jamshoro, Sindh.		
1.1	Name of the Project:		
	Construction of Library Block for LUMHS, Jamshoro for the Project Titled "Up Gradation and Improvement of People Nursing School, Liaquat University Of Medical & Health Sciences Jamshoro"		
1.2	Time for Completion for the Works:		
	12 months or as stated in Letter of Acceptance.		
2.1	Name of the Borrower/Source of Funding:		
	PSDP Funded HEC Project.		
2.1	Amount and type of Funding:		
	Public Federal Financing.		
3.1	Eligible Bidders		
	Delete the text of clause 3.1 and replace with the following:		
	 This Invitation for Bids is open to all bidders meeting the following requirements: Contractors / Firms registered with Income Tax (who are Active on Taxpayers List & non-defaulter of Federal Board of Revenue (FBR) & Sindh Board of Revenue (SRB)). Contractors/Firms have No litigation history. Contractor/Firms No blacklisted. Valid/active registration certificate of Pakistan Engineering Council (PEC) in the category C-4 or above and at least specialization in PEC codes CE 09, CE 10, EE-04, EE-06 discipline is mandatory. Having Valid/active Electrical Inspector License. 		
8.1	Time limit for clarification: 7 days before deadline of submission of bids.		
8.3	Venue, time, and date of the Pre-Bid meeting:		
	Delete the text of clause 8.3 and replace with the following:		
	No Pre-Bid Meeting to take place.		
11.1	Bid language: English.		
12.1	Documents comprising the Bid: Delete the text of clause 12.1 (a) & (f) and replace with the following: 1. The bid is being invited as per 'Single Stage-One Envelope' procedure, in Compliance of PPRA Rule No. 36(a).		

IB Clause Reference	Bidding Data Bidding Data		
ID Clause Reference	_		
	Each bid shall comprise one single envelope having technical and financial requirements. All bids received shall be opened and evaluated in the manner prescribed in the bidding document.		
	3. The 'Technical Proposal' must contain the following as per the		
	requirements of this document and criteria mentioned in clause 26.1(vi) of bidding data:		
	 a. Name of firm/contractor with year of establishment along with Postal Address and telephone number. b. Partnership deed of the firm (if applicable) c. Name of Technical Supervisory Staff along with their qualification/experience & proof for their stay with the firm, with fresh affidavit as per criteria specified in 		
	clause 26.1(vi) of bidding data		
	d. Detail of equipment such as shuttering, scaffolding, automatic concrete batching plant, tractor with blade, water tankers, concrete mixers, concrete vibrators and road roller complete in all respect giving their model, make, condition & location. Proof / lease affidavit of possession/provision of equipment is mandatory (Details should be given as mentioned in clause 26.1(vi)		
	of bidding data)		
	e. No. of project of similar nature and general works in hand and completed. (Details should be given as mentioned in clause 26.1(vi) of bidding data) f. Registration/Clearance from FBR and SRB.		
	g. Detail of Court cases if any/arbitration cases etc.		
	h. Enlistment with concerned Government Departments.		
	i. Detail of financial soundness.		
	 j. Undertaking on judicial paper that the firm was never blacklisted by any Government, Semi Govt. Organization. 		
	k. Copy of Valid Registration with Pakistan Engineering Council. Any additional information with documents in addition to the above that the firm might like to furnish in support of their application.		
	Appendix-C to Bid Proposed Construction Schedule		
	m. Appendix-D to Bid Method of Performing the Work		
	n. Appendix-I to Bid Construction camp and housing facilities		
	o. Appendix-G to Bid List of Subcontractors		
	p. Appendix-F to Bid Organization Chart of the Supervisory Staff and Labour		
	q. Appendix-J to Bid Integrity Pact		
	 4. The "Financial proposal" must contain following documents: a. Priced BOQ Bid Security @ 2% of bid amount in the form of Pay 		
	Order / Demand Draft from any scheduled bank of Pakistan in favour of Vice Chancellor LUMHS, Jamshoro.		

	Bidding Data		
IB Clause Reference	Bidding Data		
10.0			
12.2	Joint Venture (JV): Delete the text of clause 12.2 and replace with the following:		
	No Joint Venture is applicable for the said Project.		
14.1	Currencies of Bid and Payment:		
	Bidders to quote entirely in Pak. Rupees.		
15.1	Period of Bid Validity:		
	90 days.		
16.1	Amount of Bid Security: Bid Security @ 2% of bid amount in the form of Pay Order / Demand Draft from any scheduled bank of Pakistan in favour of Vice Chancellor LUMHS, Jamshoro.		
17.1	Alternative Proposal(s) by the Bidder shall not be considered.		
18.4	Number of copies of the Bid to be completed and submitted:		
	One original and one copy.		
19.2(a)	Employer's address for the purpose of Bid submission: Liaquat University of Medical & Health Sciences Jamshoro		
	Address: Office of the Director Works & Services Department, Liaquat University of Medical & Health Sciences (LUMHS), Jamshoro, Sindh		
19.2(b)	Name and Number of the Contract: Construction of Library Block for LUMHS, Jamshoro.		
	Telephone Numbers: 92-22-9213331		
20.1(a)	Deadline for submission of Bids: Bids completed in all respects in sealed envelopes must be submitted on or before 16-05-2024 upto 10:30 A.M		
23.1	Venue, time, and date of Bid opening:		
	Bids will be opened on 16-05-2024 at 11:00 A.M. in presence of Committee Members and representative of bidders who wish to attend.		
	In case of unusual circumstances, Tender will be opened on next working day at the same time.		
26.1	Evaluation and Comparison of Bids:		
	 Add following text to clause 26.1 i. Each bid shall comprise one single having technical and financial requirements. All bids received shall be opened and evaluated in the manner prescribed in the bidding document. ii. Technical Evaluation Criteria Technical proposal of contractors will be evaluated as per 		
	following criteria:		

B Clause Reference	Bidding Data			
	Sr. No.	Category	Weightage/Marks	
	1.	Experience Record	35	
	2.	Personnel Capabilities	20	
	3.	Equipment Capabilities	15	
	4.	Financial Soundness	20	
	5.	Technical Capabilities	05	
	6.	HSE Statement	05	
		Total:	100	

Note: Technical soundness shall be decided on the basis of Pass/Fail basis. The applicant must secure at least 50% score in each category and overall, 75% score..

Relevant Experience and PEC Requirement

Sr. No.	Type of Work	PEC Requirement
1.	Building Works	(PEC) in the category
		C-4 or above and at
		least specialization in
		PEC codes CE 09, CE
		10, EE-04, EE-06
		discipline.

a. General Experience

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

Sr. No.	Description	Maximum Points
	Buildings Completed:	
i)	Buildings Projects completed of Rs. 114 million or above in last 05 years (5 points for each project, Projects below 114 million will not be awarded any marks/points). (Supporting documents including work order and completion certificate are mandatory).	10
	Building Projects of Similar Nature Completed:	
ii)	Projects having similar nature and complexity completed in last 05 years (5 points for each project of Rs. 114 million or above) Project below Rs. 114 million will not be awarded marks/points). (Supporting documents including work order & completion certificate are mandatory).	15
	Building Projects in Hand:	
iii)	Building Project in hand of Rs. 114	10

IB Clause Reference	Bidding Data			
	million will be (05 marks. Project below 114 million will not be awarded marks/points). (Supporting documents including work order is mandatory).			
	Total Maximum Marks: 35			

b. Personnel Capabilities

Credit Marks shall be awarded under this category using the following Criteria:

S. No	Description	No. Requ ired	Marks Assign ed	Remarks
1.	Project Manager BE/BSC in (Civil Engg.) /BE(Civil) Engineers registered with Pakistan Engineering Council (PEC) with experience of 10 years or above.	01	05	03 Marks for experience of 5 years or above. 04 Marks for above 10 years. (Attach Tax payment challans & Bank statement showing at least 1-year continuous employment with firm.
2.	Electrical Engineer: Engineer BE/BSC in relevant filed registered with Pakistan Engineering Council (PEC) with experience of 05 years or above	01	03	01 Marks for experience of 05 years. 02 Marks for experience of 07 to 10 years. (Attach Tax payment challans & Bank statement showing at least 01-year continuous employment with firm.
4.	Site Engineer: B. E/B.sc in Civil Engineering with Pakistan Engineering Council (PEC) with experience of 5 years or above.	02	04	1.5 marks for 05 years or above experience. (Attach Tax payment challans & Bank statement showing at least 1-year continuous employment with firm.
5.	Quantity Surveyor Diploma in Civil Engineering with	02	02	01 marks for 03 years' experience & 02 marks for 05 years or above experience. (Attach

IB Clause Reference	Bidding Data				
		experience of 03 years or above.			Tax payment challans & Bank statement showing at least 1-year continuous employment with firm.
	6.	Site Supervisor: Diploma in Civil Engineering with experience of 03 years or above.	03	03	01 marks for 03 years or above experience. (Attach Tax payment challans & Bank statement showing at least 1-year continuous employment with firm.
	7.	Planning Engineer B. E/B.sc in Civil Engineering having Primavera P-6/P-7 experience of 03 years or above. (Certificate of Primavera from reputable Institution is mandatory).	01	02	01 marks for 03 years' experience & 02 marks for 05 years or above experience. (Attach Tax payment challans & Bank statement showing at least 1-year continuous employment with firm.
	8.	Computer Operator Diploma in information Technology with experience of 03 years or above	01	01	01 marks for 03 years' experience or above (Attach Tax payment challans & Bank statement showing at least 1-year continuous employment with firm.
		Total M	Iaximum	Marks:	20

a. Equipment Capabilities

Credit Marks shall be granted on the basis of the following criteria for various kinds of equipment, Proof of possession / lease affidavit is mandatory:

Sr. No.	Description	Max. Mar ks
1	Excavator (1.00 mark for each unit owned)	1
2	Dumper Truck (1.00 point for each unit owned)	1
3	Tractor along-with Trolley and Bowser (1.00 point for unit owned, 0.5 for point for unit rented))	1

IB Clause Reference		Bidding Data		
	4	Concrete Mixer Machine and Transit Mixers		
	5	Concrete Vibrators (2 nos.) (0.5 mark for each)	1	
	6	Rebar/ Steel Cutting and Bending Machine	1	
	7	Steel Formwork (Shuttering Plates, Scaffolding, pipes and accessories)	2	
	8	De-watering Pump	1	
	9	Earth Rammer	1	
	10	Rendering Float	1	
	11	Power Float (0.5 marks for each)	1	
	12	Winch Tower Hoist	1	
	13	Total Station, Auto Level & other Survey Equipment	1	
	14	Power plant (0.5 marks for each)	1	
		Total Maximum Marks:	15	

b. Financial Soundness /Status:

20

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

For Financial Status assessment, the Applicants may be required to submit Audited Financial Statements for the last five years or any other document which verifies their Financial Status. Where necessary, the Procuring Agency will make enquiries with the firm's/contractor's bankers.

Working Capital in hand for this project/work (Attach proof of Bank Statement/Credit Facilities)

Sr. No.	Description	Max. Marks	Remarks
i)	Available Bank Credit Line/Bank Financial Resources.	05	(2.5) marks will be given if the available bank credit line is equal to Rs. 90 million. Full marks will be given in case of limit exceeding Rs. 95 million.
ii)	Working Capital in last (03) Years.	05	(2.5) marks will be given if the average working capital for last 03 Years is equal to Rs. 105 million. Full marks will be given in case of working capital exceeding Rs. 110 million.
iii)	Average Annual Turnover for last (03) Years.	05	(05) marks will be given if the average annual Turnover in last 05 Years is equal or above to 105 million. (2.5) marks will be given in case of average annual Turnover in last five years is equal or above to Rs. 105 million.
iv)	Audited Financial statement for the last (05) years and any	05	Balance sheet & PLS statement from private Audit firm showing the worth of company.

IB Clause Reference	Bidding Data Bidding Data					
		other supporting documents which verifies their financial				
		Status. 20				
	c. Tecl	hnical Capabilities 05				
		Marks shall be awarded	on the basis of	the following		
	criteria:	T		3.5		
	Sr. No.	Descripti	on	Maximum Marks		
	i)	Appendix-C to E Construction Schedule	Bid: Proposed	1.5		
	ii)	Appendix-D to Bid: Method of Performing the Work				
	iii)	Appendix-I to Bid: Construction camp and housing facilities				
	iv)	Appendix-G to Bid: List of 1 Subcontractors				
		Total Marks: 05				
		SE Policy 05				
32.1	Award of the					
	Delete the text of clause 32.1 replace with the following: Subject to Clause IB.33 and IB.39, the Employer will award the Contract to the bidder whose bid has been determined to be substantially responsive to the Bidding Document, has met the technical requirement criteria as mentioned in clause 26.1(vi) and 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.					
33.1	Employer's Right to Annul the Bidding Process: Delete the text of clause 33.1 replace with the following: Under the following conditions, Bid will be rejected: i. Conditional and Telegraphic Bids / Tenders. ii. Bids not accompanied by Bid Security of required amount and form. iii. Bids received after specified Date and Time. iv. Bids submitted by Black Listed Firms. v. Incomplete Bids as per instructions given in Bidding Documents. vi. Only Tape Binding Tender Document will be considered.					
35.1	Standard for	andard form and amount of Performance Security acceptable to Employer:				
	the Employer	T•				

EVALUATION CRITERIA AND QUALIFICATION UPDATING FORMS

EVALUATION CRITERIA AND QUALIFICATION UPDATING FORMS

1. General

This Section contains Eligibility and Qualification Criteria that the Employer shall use to evaluate Bids and qualify Bidders in accordance with Clauses IB.26 of Instructions to Bidders. The Bidder shall provide all the information requested in the relevant forms contained in Bidder's Qualification Updating Forms provided herein.

The information provided in the forms shall be substantiated with valid documentary evidences otherwise the requirement will not be considered as complied.

Wherever a Bidder is required to state a monetary amount, Bidders shall indicate the PKR equivalent using the rate of exchange determined as follows:

- For financial data - Exchange rate prevailing on the last day of the respective calendar year (in which the amounts for that year is to be converted) was originally established.

Exchange rates shall be taken from the publicly available source identified in the Sub-Clause IB.14.2. Any error in determining the exchange rates in the Bid may be corrected by the Employer.

2. Domestic Preference

A margin of preference of 7.5% (seven and a half percent) shall be granted to domestic Bidders (in case of JV, all partners are Pakistani Constructors), in accordance with and subject to the following provisions:

- (a) The Bidders applying for such preference shall provide, as part of the data for qualification, such information, including details of ownership, as shall be required to determine whether, according to the classification established by the Employer, a Bidder qualifies for a domestic preference.
- (b) After Bids have been received and reviewed by the Employer, responsive Bids shall be classified into the following groups:
 - (i) Group A: Bids offered by domestic Bidders eligible for the preference.
 - (ii) Group B: Bids offered by other Bidders.

All evaluated Bids in each group shall, as a first evaluation step, be compared to determine the lowest Bid, and the lowest evaluated Bids in each group shall be further compared with each other. If, as a result of this comparison, a Bid from Group A is the lowest, it shall be selected for the award. If a Bid from Group B is the lowest, as a second evaluation step, all Bids from Group B shall then be further compared with the lowest evaluated Bid from Group A. For the purpose of this further comparison only, an amount equal to 7.5% (seven and a half percent) of the respective Bid Price corrected for arithmetical errors, including unconditional discounts and excluding Provisional Sums and the cost of dayworks, if any, shall be added to the evaluated price offered in each Bid from Group B. If the Bid from Group A is the lowest, it shall be selected for award. If not, the lowest evaluated Bid from Group B based on the first evaluation step shall be selected.

3. Evaluation (IB 29.2(e))

In addition to the criteria listed in IB 29.2 (a) - (d) the following criteria shall apply:

3.1 Assessment of adequacy of Technical Proposal with Requirements

3.2 Multiple Contracts, if permitted under Sub-Clause 1.1 of Bidding Data, will be evaluated as follows:

Award Criteria for Multiple Contracts

Bidders have the option to Bid for any one or more lots. Bids will be evaluated lot-wise, taking into account discounts offered, if any, for combined lots. The contract(s) will be awarded to the Bidder or Bidders offering the lowest evaluated cost to the Employer for combined lots, subject to the selected Bidder(s) meeting the required qualification criteria for lot or combination of lots as the case may be.

Qualification Criteria for Multiple Contracts

This Section describes criteria for qualification for each lot (contract). For multiple lots (contracts) the criteria for qualification is aggregate minimum requirement for respective lots.

3.3 Price Adjustments, if permitted under IB.29.2(d), will be evaluated as follows:

(a) Price Adjustment for Completeness in Scope of Work

In case of omission in the scope of work of a quoted item, no price adjustment for the omitted item(s) shall be applied provided that the Bidder has mentioned in his Bid that the same is covered in any other item. Otherwise the adjustments will be applied for comparison purpose only, taking the average price quoted by other lowest two evaluated substantially responsive Bidders in their original Bids for corresponding item. In case of non-availability of price from other Bidders, the price will be estimated by the Employer from a suitable CSR, adjusted to the date 28 days earlier to the Bid submission date or the Employer shall use its best assessment.

The price adjustment shall not justify any additional payment by the Employer and the price(s) of omitted item(s) shall be deemed covered by other prices of the Bill of Quantities.

(b) Price Adjustment for Technical/Commercial Non Compliance

The cost of making good any deficiency resulting from technical/commercial non-compliance will be added to the Corrected Total Bid Price for comparison purpose only.

The adjustments will be applied taking the average price quoted by other lowest two evaluated substantially responsive Bidders in their original Bids for corresponding item. In case of non-availability of price from other Bidders, the price will be estimated by the Employer in accordance with sub-para (a) hereof.

4. Qualification (Updating of Pre-Qualification)

Eligibility and Qualification information described here below must be met by the legal entity(ies) comprising the Bidder, and not the Bidder's/JV partner's sister or parent companies, subsidiaries or affiliates.

	Eligibility and Qualific	ation Criteria	Compliance Requirements				Documentation
No.	Subject	Requirement	Single Entity		Joint Venture		Submission
	,	•		All Partners Combined	Each Member	Lead Member	Requirements
1. Eli	1. Eligibility						
1.1	PEC Licencing	Licencing by Pakistan Engineering Council (PEC) in accordance with paragraph (b) of Sub-Clause IB.3.1.	must meet requirement	must meet requirement	must be PEC Licencee	N/A	Provisional/ Standard PEC Licence. Foreign Constructor must submit JV Agreement with Pakistani Constructor.
1.2	Pakistani Constructor's Tax Registration	Requirement of Pakistani Constructor on Active Taxpayer List (ATL) of FBR in accordance with paragraph (c) of Sub- Clause IB.3.1.	must meet requirement	N/A	must meet requirement	N/A	Extracts of ATL
1.3	Debarment/Blacklisting	Not having been debarred/blacklisted in accordance with paragraph (d) of Sub- Clause IB.3.1.	Must meet requirement	N/A	Must meet requirement	N/A	Undertaking in the Letter of Bid

Eligibility and Qualification Criteria		Compliance Requirements				Documentation	
No.	Subject	Requirement	Single Entity		Joint Venture		Submission
	, and the second			All Partners Combined	Each Member	Lead Member	Requirements
2. Pe	nding Litigation			•			
2.1	Pending Litigation	Bidder's financial position and prospective long term profitability sound according to criteria established in 3.1 below and assuming that all pending litigation will be resolved against the Bidder	Must meet requirement	N/A	Must meet requirement	N/A	Form CON – 1
3. Fin	nancial Situation and Perfor	mance [Employer to spec	rify requirements fo	or each lot as appl	icable as prescribed	in the Pre-Qualifica	tion Documents]
3.1	Financial Capabilities	(i) The Bidder shall demonstrate that it has access to, or has available, liquid assets, unencumbered real assets, lines of credit, and other financial means (independent of any contractual advance payment) sufficient to meet the construction cash flow requirements estimated as Eq. PKR	Must meet requirement	Must meet requirement	N/A	N/A	Form FIN – 3.1, FIN – 3.2, FIN – 3.3, with attachments

	Eligibility and Qualification Criteria		Compliance Requirements				Documentation
No.	Subject	Requirement	Single Entity		Joint Venture		Submission
	C	-	· ·	All Partners Combined	Each Member	Lead Member	Requirements
		the subject contract(s) net of the Bidders other commitments (ii) The Bidders shall also demonstrate, to the satisfaction of the Employer, that it has adequate sources of finance to meet the cash flow requirements on works currently in progress and for future contract commitments. (iii) The audited balance sheets or, if not required by the laws of the Bidder's country, other financial statements acceptable to the Employer, for the last year shall be submitted and must demonstrate the current soundness of the Bidder's financial position and indicate its prospective long-term profitability.	Must meet requirement Must meet requirement	Must meet requirement	N/A Must meet requirement	N/A	

Bidders Qualification Updating Forms

To establish its qualifications to perform the contract in accordance with Section (Evaluation Criteria and Qualification Updating Forms) the Bidder shall provide the information requested in the corresponding Information Sheets included hereunder.

Form ELI -1.1

Bidder Information Form

	Date:	
Bid Reference No. (if an		
	of	
Bidder's name		
In case of Joint Venture (JV), name of each member:		
Bidder's country of registration:		
[indicate country of Constitution]		
Bidder's year of incorporation:		
Bidder's legal address [in country of registration]:		
Bidder's authorized representative information		
Name:		
Address:		
Telephone/Fax numbers:		
E-mail address:		
1. Attached are copies of original documents, in case of JV, JV agr Sub-Clause IB 3.1.	reement, in accordance	e with

Form ELI -1.2

Bidder's JV Information Form (to be completed for each member of Bidder's JV)

		Date:	
	Bid Reference No. (if a	any) and title:	
	Bid Reference No. (if a Page	of	page
	-		
Bidder's JV name:			
IV mombar's nome.			
JV member's name:			
JV member's country of registration:			
JV member's year of constitution:			
JV member's legal address in country of	f constitution:		
JV member's authorized representativ	e information		
Name:			
Address:			
Telephone/Fax numbers:			
E-mail address:			

Form CON - 1

Pending Litigation

			Bidder's Name	:
			Date:	
			JV Member's Name	
		Bid Ref	ference No. (if any) and title:	
			Pageof _	page
	Per	nding Litigation, in acco	rdance with Eligibility and Qualification (Criteria
L	No pending l	itigation in accordance	with Eligibility and Qualification Criteria	, Sub-Factor 2.1.
	Pending litigatindicated bel		Eligibility and Qualification Criteria, Sub	-Factor 2.1 as
	Year of	Amount in dispute	Contract Identification	Total Contract
	dispute	(currency)		Amount
				(currency),
				Eq. PKR
				(exchange
				rate)
			Contract Identification:	
			Name of Employer:	
			Address of Employer:	
			Matter in dispute:	
			Party who initiated the dispute:	
			Status of dispute:	
			Contract Identification:	
			Name of Employer:	
			Address of Employer:	
			Matter in dispute:	
			Party who initiated the dispute:	
			Status of dispute:	

Bidder's Name:

Form FIN – 3.1:

Financial Situation and Performance

		Date:	
	JV Member's	s Name	
Bi	id Reference No. (if any) and	d title:	
	Page	of	pages
1. Financial data			
Type of Financial information	Historic info	ormation for last year,	
in	(amount in currency, cur		. Ea. PKR)
(currency)	(, , , , , , , , , , , , , , , , , , ,	•
Statement of Financial Position	(Information from Balance S	heet)	
		· 	
Total Assets (TA)			
Total Liabilities (TL)			
Total Equity/Net Worth (NW)			
Current Assets (CA)			
Current Liabilities (CL)			
Working Capital (WC)			
	Information from Income	Statement	
Total Revenue (TR)			
Profits Before Taxes (PBT)			
	Cash Flow In	formation	
Cash Flow from Operating Activities			
*Refer to IB 14.2 for the exchange	e rate		
2. Financial documents			
The Bidder and its parties shall Eligibility and Qualification Criter	•	_	ar pursuant to
(a) reflect the financial situat entity (such as parent con		of JV member, and not a	n affiliated
(b) be independently audited	or certified in accordance wi	th local legislation.	
(c) be complete, including all	notes to the financial statem	ients.	
(d) correspond to accounting	periods already completed ar	nd audited.	
☐ Attached are copies of financia	l statements ¹ for the last year	required above; and con	mplying with

the requirements

¹ If the most recent set of financial statements is for a period earlier than 12 months from the date of bid, the reason for this should be justified.

Form FIN – 3.2:

Financial Resources

Specify proposed sources of financing, such as liquid assets, unencumbered real assets, lines of credit, and other financial means, net of current commitments, available to meet the total construction cash flow demands of the subject contract or contracts as specified in Eligibility and Qualification Criteria.

No.	Source of financing	Amount (Eq. PKR)
1		
2		
3		

Form FIN – 3.3:

Current Contract Commitments / Works in Progress

Bidders and each member to a JV should provide information on their current commitments on all contracts that have been awarded, or for which a letter of intent or acceptance has been received, or for contracts approaching completion, but for which an unqualified, full completion certificate has yet to be issued.

	Current Contract Commitments							
No.	Name of Contract	Employer's Contact Address, Tel, Fax	Value of Outstanding Work [Current Eq. PKR]	Estimated Completio n Date	Average Monthly Invoicing Over Last Six Months [Eq. PKR /month)]			
1								
2								
3								
4								
5								

LETTER OF BID AND SCHEDULES TO BID

LETTER OF BID

Bid	Reference No
	[Name of Contract/ Works]
To:	
Gen	tleman,
1.	Having examined the Bidding Documents including Instructions to Bidders, Bidding Data, Conditions of Contract, Specifications, Schedules to Bid including Bill of Quantities, Drawings and Addenda Nos
) or such other sum as may be ascertained in accordance with the said conditions.
2.	We meet the eligibility requirements in accordance with IB.3.
3.	We, including any Subcontractors for any part of the Contract, are not debarred/blacklisted by the Employer, any Government/Semi Government/Public Department in Pakistan or foreign country, international organizations or other foreign institutions.
4.	Our subcontractors or suppliers for any part of the Contract, if any, shall have nationalities from eligible countries, in accordance with IB.4.4.
5.	We understand that all the Schedules attached hereto form part of this Bid.
6.	As security for due performance of the undertakings and obligations of this Bid, we submit herewith a Bid Security in the amount of PKR(Pak. Rupees) drawn in your favour or made payable to you and valid for a period ofdays beginning from the date Bids are opened.
7.	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 Contract Data.
8.	We agree to abide by this Bid for the period ofdays, inclusive of 14 days beyond Bid validity period (as mentioned at Sr. No. 6 above) and it shall remain binding upon us and may be accepted at any time before the expiration of that period.
9.	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.
10.	We do hereby declare that the Bid is made without any collusion, comparison of figures or arrangement with any other Bidder for the Works.
11.	We understand that you are not bound to accept the lowest or any Bid you may receive.
12.	We undertake that all the information and documents submitted with the Bid are genuine, and in case of incorrect information of fake documents we shall be liable for punitive action under the Applicable Law.

Dated this	day of	20
Signature:		
in the capacity of		duly authorized to sign Bids for and on behalf of
		(Name of Bidder in Block Capitals) (Seal)
Address:		
Witness:		
Signature:		
Name:		
Occupation_		

A-1 Schedule-A to Bid

SCHEDULE OF ADJUSTMENT DATA

Schedule of Cost Indexation

[The Employer is to engage a professional with experience in construction costs and the inflationary effect on construction costs when preparing the contents of the Schedule of Cost Indexation. In the case of very large and/or complex works contracts, it may be necessary to specify several families of price adjustment formulae corresponding to the different works involved.]

[The formulae for price adjustment shall be of the following general type:]

Pn = a + b Ln / Lo + c En / Eo + d Mn / Mo +

where:

"Pn" is the adjustment multiplier to be applied to the estimated Contract value in the relevant currency of the work carried out in period "n", this period being a month;

"a" is a fixed coefficient, stated in the relevant table of adjustment data, representing the non-adjustable portion in contractual payments;

"b", "c", "d", ... are coefficients representing the estimated proportion of each cost element related to the execution of the Works as stated in the relevant table of adjustment data; such tabulated cost elements may be indicative of resources such as labour, equipment and materials;

"Ln", "En", "Mn", ... are the current cost indices or reference prices for period "n", expressed in the relevant currency of payment, each of which is applicable to the relevant tabulated cost element on the date 49 days prior to the last day of the period (to which the particular Payment Certificate relates); and

"Lo", "Eo", "Mo", ... are the base cost indices or reference prices, expressed in the relevant currency of payment, each of which is applicable to the relevant tabulated cost element on the Base Date.

The weightings (coefficients) for each of the factors of cost stated in the following table(s) of adjustment data shall only be adjusted if they have been rendered unreasonable, unbalanced or inapplicable, as a result of Variation(s).

If the currency in which the Contract price is expressed is different from the currency of the country of origin of the indices, a correction factor will be applied to avoid incorrect adjustments of the Contract price. The correction factor shall be: $\mathbb{Z}_0 / \mathbb{Z}_1$, where,

 Z_0 = the number of units of currency of the origin of the indices which equal to one unit of the currency of the Contract Price on the Base date, and

 Z_1 = the number of units of currency of the origin of the indices which equal to one unit of the currency of the Contract Price on the Date of Adjustment.

A-2 Schedule-A to Bid

SCHEDULE OF ADJUSTMENT DATA

Table I. Local Currency (LC) For Bill Nos.

Index code	Index description	Source of index		Bidder's related currency amount	Weighting
(i) (ii) (iii) (iv) (v) (vi)	The Employer to select "elements of price adjustment using PEC Standard Procedure and Formula for Price Adjustment (Second Edition), May, 2022 as amended time to time.]				A: B: C: D: E: F:
			Total		1.00

A-3 Schedule-A to Bid

SCHEDULE OF ADJUSTMENT DATA

Table II. Foreign Currency (FC) For Bill Nos._____

[In the Table below, the Bidder shall (a) indicate amount of foreign currency payment, (b) indicate the source and base values of indices for the different foreign currency elements of cost, (c) derive its proposed weightings of foreign currency payment, except the non-adjustable portion which will be filled in by the Employer.

If the Bidder wishes to incur in more than one foreign currency (up to two currencies permitted) then this table should be repeated for each foreign currency.]

Index code	Index description	Source of index	Base value and date	Bidder's related source currency in type/amount	Equivalent in FC1	Bidder's proposed weighting
(i) (ii) (iii) (iv) (v)	Non- adjustable					A: B: C: D: E:
				Total		1.00

A-4 Schedule-A to Bid

SCHEDULE OF ADJUSTMENT DATA

Table III. Foreign Currency Requirements

[With reference to Sub Clause IB.14.1, the Bidder shall provide information below on the proportion of various currencies in which he requires payment to be made. The Bidders shall also indicate Factors (inputs) related to the requirement of respective currencies.]

Sr. No	Currency (name)	Percentage payable in currency	Factors (inputs) to which the Requirements Refer
1.	LC (Pak. Rs.)		* General Expenses Manpower, Local Staff, Expatriate Staff, Spare Parts, Fuel & Lubricants, Hydraulic Binder, Timber & Plywood, Additives & Protectives, Joints & Waterstops, Explosives-Fuses-Detonators, Resteel & Wire mesh, Metal Pipes & Fittings, Structural Steel, Miscellaneous Metals, Concrete Pipes, PVC Pipes, Build Materials, Sub-Contractor, Drilling & Grouting Sub-Contractor Third Party Supplies, Import Charges, General Expenses, Plants.
2.	FC1 (US \$ Dollar)		* Expatriate Staff, Spare Parts, Hydraulic Binder, Timber & Plywood, Additives & Protectives, Drilling Materials, Miscellaneous, Sub-Contractor, Import Charges, General Expenses, Plants.
3.	FC2 (EUR € EURO)		* Expatriate Staff, Spare Parts, Additives & Protectives, Welding Materials, Miscellaneous, Electrical Sub-Contractor, Import Charges, General Expenses, Equipment, Plants.
	TOTAL	100.00	

[*The above Factors (Inputs) related to the requirement of respective currencies, are for guidance only, and shall be indicated specific to the Contract.]

A-5 Schedule-A to Bid

SCHEDULE OF ADJUSTMENT DATA

Table IV. Summary of Payment Currencies

Name of payment currency	a Amount of currency	b Rate of exchange (local currency per unit of foreign)	c Local currency equivalent c =a x b	d Percentage of Total Bid Price (TBP) 100xc TBP
Local currency (Pak. Rs)		1.00		
FC1				
FC2				
Total Bid Price				100.00
Provisional sums expressed in local currency	[To be entered by the Employer]		[To be entered by the Employer]	
TOTAL BID PRICE (including provisional sum)				

B-1 Schedule-B to Bid

BILL OF QUANTITIES

A. Preamble:

- 1. The Bill of Quantities shall be read in conjunction with the Conditions of Contract, Specifications and Drawings.
- 2. The quantities given in the Bill of Quantities are estimated and provisional, and are given to provide a common basis for bidding. The basis of payment will be the actual quantities of work executed and measured by the Contractor and verified by the Engineer and valued at the rates and prices as given 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 and prices as given 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 or price shall be entered against each item in the priced Bill of Quantities, whether quantities are stated or not. 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, or the same shall be determined by the Engineer in accordance with Clause 13, General Conditions.
- 6. General directions and description of work and materials are not necessarily repeated nor summarised in the Bill of Quantities. References to the relevant sections of the Bidding Documents shall be made before entering prices against each item in the 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 13.4 of General Conditions of Contract.
- 8. The following abbreviations for units have been used in Bill of Quantities:

Units	Abb	reviations
Cubic Meter	=	cum
Square Meter	=	sqm
Kilogram	=	kg
Provisional Sum	=	PS
Lump-Sum	=	LS

B-2 Schedule-B to Bid

BILL OF QUANTITIES

(Sample)

B. Work Items:

1. The Bill of Quantities contains the following Bills and Schedule

Bill No. 1 - General Items

Bill No. 2 - Earthworks

Bill No. 3 - Culverts and Bridges

Bill No. 4 - Subsurface Drains

Bill No. 5 - Miscellaneous Items

Daywork Schedule

Summary of Bill of Quantities

2. Bidders shall price the Bill of Quantities in Pak. Rupees (PKR) only.

B-3 Schedule-B to Bid

BILL OF QUANTITIES

Bill No. 1 General Items

		Specific				Rate	Amount
Item	Description	Provisions Ref.	Unit	Quantity	PKR in figures	PKR in words	PKR
1	2	3	4	5		6	7
101	Insurances of the Works	SP	LS				
102	Insurance of the Goods	SP	LS				
103	Professional Indemnity Insurance	SP	LS				
104	Third party insurance	SP	LS				
105	Workmen Compensation Insurance	SP	LS				
106	Performance Security	SP	LS				
107	Price Adjustment	SP	PS				
108	Provide and equip Engineer's offices	SP	LS				
109	Maintain Engineer's offices	SP	LS				
110	Provide diversion road	SP	LS				
111	Provide for cleaning up the Site on completion	SP	LS				
112	*Provide for other facilities for Engineer and Employer's Personnel		LS				
113	Contingencies		PS				
114	DAAB Fee		PS				
То	otal for Bill No. 1_			(C	arried forwa	rd to Summary	Page)

[Note: The above descriptions of items are given by way of example only.] [*Refer to SP-14]

B-4 Schedule-B to Bid

BILL OF QUANTITIES

Bill No. 2 Earthworks

Item	Description	Technical Provisions	Unit	Quantity	PKR	Rate PKR	Amount
	_	Ref.			in figures	in words	PKR
1	2	3	4	5		6	7
201		TS					
202							
203							
204							
205							
206							
	tal for Bill No. 2				(C) 15	ward to Summar	D

B-5 Schedule-B to Bid

BILL OF QUANTITIES

Bill No. 3 Culverts and Bridges

		Technical				Amount	
Item	Description	Provisions Ref.	Unit	Quantity	PKR in figures	PKR in words	PKR
1	2	3	4	5		6	7
301		TS					
302							
303							
304							
305							
306							
То	tal for Bill No. 3				(Carried for	ward to Summar	v Page)

B-6 Schedule-B to Bid

BILL OF QUANTITIES

Bill No. 4 Subsurface Drains

		Technical				Rate	Amount
Item	Description	Provisions Ref.	Unit	Quantity	PKR	PKR	PKR
1	2	3	4	5	in figures	in words	7
		3		3		0	,
401							
402							
403							
404							
405							
406							
То	otal for Bill No. 4		l		(Carried for	ward to Summar	y Page)

B-7 Schedule-B to Bid

BILL OF QUANTITIES

Bill No. 5 Miscellaneous Items

		Technical				Rate	Amount
Item	Description	Provisions Ref.	Unit	Quantity	PKR in figures	PKR in words	PKR
1	2	3	4	5	III figures	6	7
501							
502							
503							
504							
505							
506							
То	otal for Bill No. 5	1	ı		(Carried for	ward to Summary	Page)

B-8 Schedule-B to Bid

BILL OF QUANTITIES

Daywork Schedule

C. Daywork

General

1. Reference is made to Sub-Clause 13.5 of the General Conditions of Contract. Work shall not be executed on a Daywork basis except by written order of the Engineer. Bidders shall enter basic rates for Daywork items in the Schedules, which rates shall apply to any quantity of Daywork ordered by the Engineer. Nominal quantities have been indicated against each item of Daywork, and the extended total for Daywork shall be carried forward to the Bid Price.

Daywork Labour

- 2. In calculating payments due to the Contractor for the execution of Daywork, the actual time of classes of labour directly doing the Daywork ordered by the Engineer and for which they are competent to perform will be measured excluding meal breaks and rest periods. The time of gangers (charge hands) actually doing work with the gang will also be measured but not the time of foreman or other supervisory personnel.
- 3. The Contractor shall be entitled to payment in respect of the total time that labour is employed on Daywork, calculated at the basic rates entered by him in the Schedule of Daywork Rates for labour together with an additional percentage, payment on basic rates representing the Contractor's profit, overheads, etc., as described below:
 - a. The basic rates for labour shall cover all direct costs to the Contractor, including (but not limited to) the amount of wages paid to such labour, transportation time, overtime, subsistence allowances and any sums paid to or on behalf of such labour for social benefits in accordance with Pakistan law. The basic rates will be payable in local currency only; and
 - b. The additional percentage payment to be quoted by the Bidder and applied to costs incurred under (a) above shall be deemed to cover the Contractor's profit, overheads, superintendence, liabilities and insurances and allowances to labour time keeping and clerical and office work; the use of consumable stores, water, lighting and power; the use and repair of staging, scaffolding, workshops and stores, portable power tools, manual plant and tools; supervision by the Contractor's staff, foremen and other supervisory personnel; and charges incidental to the foregoing.

B-9 Schedule-B to Bid

BILL OF QUANTITIES

Daywork Schedule

I. Labour

Item No.	Description	Unit	Nominal Quantity	Rate (PKR) in Figure	Rate (PKR) in Words	Extended Amount (PKR.)
1	2	3	4	5	6	7
D101	Ganger	Hr	500			
D102	Labourer	Hr	5,000			
D103	Brick layer	Hr	500			
D104	Mason	Hr	500			
D105	Carpenter	Hr	500			
D106	Steel work Erector	Hr	500			
D107	etc	Hr				
D113	Driver for vehicle up to 10 tons	Hr	1,000			
D114	Operator for excavator, dragline, shovel or crane	Hr	500			
D115	Operator for tractor, (tracked) with dozer blade or ripper	Hr	500			
D122						
		Sub	Total			1
	percent of subtotal for aph 3(b) of Daywork Schedule	or Contr	actor's over	rhead, profit,	etc, in accordar	nce with
Total f	for Daywork: Labour :		(Car	ried forward	to Daywork Sur	nmary)

[Note:

- 1. The above description of items and their quantities are indicative only; the Employer shall fill the type of Labour and quantities thereof, estimated to be utilized under Daywork.
- 2. The Bidders are required to fill the rest of the columns, Sub Total and percentage of overhead, profit, etc.]

B-10 Schedule-B to Bid

BILL OF QUANTITIES

Daywork Schedule

Daywork Material

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

B-11 Schedule-B to Bid

BILL OF QUANTITIES

Daywork Schedule

II. Material

Item No.	Description	Unit	Nominal Quantity	Rate (PKR) in Figure	Rate (PKR) in Words	Extended Amount (PKR)
1	2	3	4	5	6	7
D201	Cement, ordinary Portland or equivalent in bags	M.Ton	200			
D202	Mild Steel reinforcing bar upto 16mm diameter to BS 4449 or equivalent	M.Ton	100			
D203	Fine aggregate for concrete	Cu.M	1,000			
D204	etc					
D222	Gelignite (Noble Special Gelatine 60 % or equivalent) including caps, fuse, wire and requisite accessories	M.Ton	10			
		Sub	Total			
	percent of subtaragraph 4(b) of Daywork Scheo			's overhead,]		cordance
Total fo	or Daywork: Material :		(Car	ried forward	to Daywork Sur	mmary)

[Note:

- 1. The above description of items and their quantities are indicative only; the Employer shall fill the type of Material and quantities thereof, estimated to be utilized under Daywork.
- 2. The Bidders are required to fill the rest of the columns, Sub Total and percentage of overhead, profit, etc.]

B-12 Schedule-B to Bid

BILL OF QUANTITIES

Daywork Schedule

Daywork Constructional Plant

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

B-13 Schedule-B to Bid

BILL OF QUANTITIES

Daywork Schedule

III. Constructional Plant

Item No.	Description	Unit	Nominal Quantity	Rate (PKR) in Figure	Rate (PKR) in Words	Extended Amount (PKR)		
1	2	3	4	5	6	7		
D301	Excavator, face shovel or dragline:							
	1. Up-to and including 1 Cu.M.	Hr	500					
	2. Over 1 Cu.M to 2 Cu. M.	Hr	400					
	3. Over 2 Cu. M	Hr	100					
D302	Tractor (tracked) including bull or angle dozer:							
	1. Up-to and including 150 HP	Hr	500					
	2. Over 150 to 200 HP	Hr	400					
	3. Over 200 to 250 HP	Hr	200					
		111	200					
D303	Tractor with ripper:							
	1. Up-to and including 200 HP	Hr	400					
	2. Over 200 to 250 HP	Hr	200					
D304	etc							
	,	Sub	Total			1		
	Total for Daywork: Constructional Plant:(Carried forward to Daywork Summary)							

[Note:

- 1. The above description of items and their quantities are indicative only; the Employer shall fill the type of Plant and quantities thereof, estimated to be utilized under daywork.
- 2. The Bidders are required to fill the rest of the columns and Sub Total.]

B-14 Schedule-B to Bid

BILL OF QUANTITIES

Daywork Schedule

Summary

Sr. No	Daywork	Amount (PKR)
I.	Labour	
II.	Materials	
III.	Constructional Plant	

B-15 Schedule-B to Bid

BILL OF QUANTITIES

Summary

Bill No	Bill	Amount (PKR)
1.	General Items	
2.	Earthworks	
3.	Culverts and Bridges	
4.	Subsurface Drains	
5.	Miscellaneous Items	
	Sub-Total of Bills	
	Daywork Schedule	
	Bid Price(Carried forward to Letter Of Bid)	
	Federal/ Provincial Sales Tax on Services (%) [To be entered by the Employer]	
	Grand Total	

Note: All Provisional Sums are to be expended in whole or, in part at the direction and discretion of the Engineer in accordance with Sub-Clauses 13.4 of the General Conditions except with respect to DAAB fees and the expenses in accordance with GC Clause 21.

C-1 Schedule-C to Bid

CONSTRUCTION SCHEDULE

Pursuant to Sub-Clause 8.3 of the General Conditions, the whole of the Works, and each Section (if any), shall be completed within the Time for Completion for the Works or Section (as the case may be) stated as hereunder and mentioned in Contract Data:

Description	Time for Completion (days)
a) Whole Works	
b) Section A	
c) Section B	
d)	
e)	

[The Bidder shall provide, 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 programme for completion of the whole of the Works and Sections of the Works may meet Employer's completion targets in days noted above and counted from the Commencement Date (Attach sheets as required for the specified form of Construction Schedule)]

D-1 Schedule-D to Bid

METHOD OF PERFORMING THE WORK

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

1. Organization Chart:

Shall indicate 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. Method of executing the Works:

The procedures for installation of equipment and machinery and transportation of equipment and materials to the site.]

E-1 Schedule-E to Bid

LIST OF MAJOR EQUIPMENT

[The Bidder will provide on Sheet E-2 of this Schedule 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.

The Bidder shall provide adequate information to demonstrate clearly that it has the capability to meet the requirements for the key equipment listed in Sheet E-3.]

E-2 Schedule-E to Bid

LIST OF MAJOR EQUIPMENT

Owned, Purchased or Leased

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						

E-3 Schedule-E to Bid

LIST OF MAJOR EQUIPMENT

Equipment details

Item of equipment			
Equipment information	Name of manufacturer	Model and power rating	
	Capacity	Year of manufacture	
Current status	Current location		
	Details of current commitment	ts	
Source	Indicate source of the equipment ☐ Owned ☐ Rented ☐ Leased ☐ Specially manufactured		
The following informa	The following information shall not be applicable for equipment owned by the Bidder		
Owner	Name of owner Address of owner		
	Telephone	Contact name and title	
	Fax	Telex	
Agreements	Details of rental / lease / manufacture agreements specific to the project		
	-		

[This Table shall be used for each item of Equipment separately]

F-1 Schedule-F to Bid

ORGANIZATION CHART FOR THE SUPERVISORY STAFF AND LABOUR

G-1 Schedule-G to Bid

LIST OF SUBCONTRACTORS

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

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

Part of Works (Give Details)	Subcontractor (With Complete Address)
1	2

H-1 Schedule-H to Bid

ESTIMATED PROGRESS PAYMENTS

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

Quarter	Amounts (1,000 PKR)
1	2
1 st	
$\overset{ ext{nd}}{2}$	
rd 3	
th 4	
th 5	
th 6	
7 th	
8 th	
9 th	
Bid Price	

I-1 Schedule-I to Bid

CONSTRUCTION CAMP AND HOUSING FACILITIES

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

- 1. Site Preparation (clearing, land preparation, etc.).
- 2. Provision of Services.
 - a) Electrical power (expected power load, etc.).
 - b) Water (required amount and system proposed).
 - c) Sanitation (sewage disposal system, etc.)
- 3. Construction of Facilities
 - a) Contractor's Office. Workshop and Work Areas (areas required and proposed layout, type of construction of buildings, etc.).
 - *b)* Warehouses and Storage Areas (area required, type of construction and layout).
 - c) Housing and Staff Facilities (Plans for housing for proposed staff, layout, type of construction, etc.).
- **4.** Construction Equipment Assembly and Preparation (detailed plans for carrying out this activity).
- **5.** *Other Items Proposed (Security services, etc.)*]

Note:

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

J-1 Schedule-J to Bid

INTEGRITY PACT

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

Contract No	Dated
Contract Value: Contract Title:	-
Contract Title.	-
obtained or induced the procurement benefit from Government of Pakistan	ame of Bidder/Contractor] hereby declares that it has not of any contract, right, interest, privilege or other obligation or a (GoP) or any administrative subdivision or agency thereof or by GoP through any corrupt business practice.
warrants that it has fully declared the and not given or agreed to give and Pakistan either directly or indirectly agent, associate, broker, consultant, commission, gratification, bribe, find otherwise, with the object of obtaini	the foregoing, [Name of Bidder/ Contractor] represents and the brokerage, commission, fees etc. paid or payable to anyone I shall not give or agree to give to anyone within or outside through any natural or juridical person, including its affiliate director, promoter, shareholder, sponsor or subsidiary, any ler's fee or kickback, whether described as consultation fee or ag or inducing the procurement of a contract, right, interest fit in whatsoever form from GoP, except that which has been
agreements and arrangements with a	Ties that it has made and will make full disclosure of all ll persons in respect of or related to the transaction with GoP ll not take any action to circumvent the above declaration,
declaration, not making full disclosurable purpose of this declaration, reprinterest, privilege or other obligation	es full responsibility and strict liability for making any false re, misrepresenting facts or taking any action likely to defeat resentation and warranty. It agrees that any contract, right, n or benefit obtained or procured as aforesaid shall, without emedies available to GoP under any law, contract or other of GoP.
Bidder/Contractor] agrees to indemnic corrupt business practices and further the sum of any commission, gratifications. Bidder/Contractor] as aforesaid for the sum of the sum o	remedies exercised by GoP in this regard, [name of ify GoP for any loss or damage incurred by it on account of its pay compensation to GoP in an amount equivalent to ten time ication, bribe, finder's fee or kickback given by [name of the purpose of obtaining or inducing the procurement of any her obligation or benefit in whatsoever form from GoP.
Name of Employer:	Name of Bidder/Contractor:

STANDARD FORMS

BS-1

FORM OF BID SECURITY

Secui	Security Executed on			
Evni	Expiry on(Date)			
Ехрп				
Name	of Surety with Address:			
Name	of Principal (Bidder) with Address			
Penal	um of Security PKR(Pak Rupees			
Bid F	Ference No			
reque unto (here truly	ALL MEN BY THESE PRESENTS, that in pursuance of the terms of the Bid and at the of the said Principal (Bidder) we, the Surety above named, are held and firmly bound after called the 'Employer') in the sum stated above for the payment of which sum well and be made, we bind ourselves, our heirs, executors, administrators and successors, jointly erally, firmly by these presents.			
THE	ONDITION OF THIS OBLIGATION IS SUCH, that whereas the Bidder has submitted the panying Bid datedfor			
(1)	WHEREAS, the Employer has required as a condition for considering said Bid that the Bidder furnishes a Bid Security in the above said sum to the Employer, conditioned as under: that the Bid Security shall remain in force for a period fourteen (14) days beyond the Bid Validity date i.e., upto			
(2)	that the Bid Securities of the Bidders except the lowest three will be returned by the Employer within twenty eight (28) days from the opening of Bids, provided a Bidder request for the return of its Bid Security, or on the expiry of original validity of Bid Security or as extended, whichever is earlier;			
(3)	that the Bid Security of the lowest three Bidders comprising the successful Bidder will be returned when the successful Bidder has furnished the required Performance Security; and			
(4)	that in the event of failure of the successful Bidder to furnish the required Performance Security, the entire said sum be paid immediately to the said Employer pursuant to IB.16 and IB.35 of the Instructions to Bidders for the successful Bidder's failure to perform.			

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

BS-2

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

PROVIDED ALSO THAT the Employer shall decide, 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 Employer 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 (Schedule Bank/Insurance Company)
WITNESS:	Signature
1	Name
	Title
Corporate Secretary (Seal)	Corporate Guarantor (Seal)
2.	
Name, Title & Address	

PS-1

FORM OF PERFORMANCE SECURITY

	Guarantee No
	Executed on
	Expiry date
[Letter by the Guarantor to the Employer]	
Name of Guarantor with address:	
Name of Principal (Contractor) with address:	
Penal Sum of Security (express in words and fig	ures)
Letter of Acceptance No	Dated
Documents and above said Letter of Acceptance (lof the said Principal we, the Guarantor above	that in pursuance of the terms of the Bidding hereinafter called the Documents) and at the request re named, are held and firmly bound unto the (hereinafter called the
Employer) in the penal sum of the amount stated	above for the payment of which sum well and truly rselves, our heirs, executors, administrators and
THE CONDITION OF THIS OBLIGATION IS Employer's above said Letter of Acceptance for	SUCH, that whereas the Principal has accepted the
(Name o	f Contract) for the
	(Name of Project).
undertakings, covenants, terms and conditions of said Documents and any extensions thereof that notice to the Guarantor, which notice is, hereby, fulfill all the undertakings, covenants terms an modifications of said Documents that may herea Guarantor being hereby waived, then, this obligate	or) shall well and truly perform and fulfill all the the said Documents during the original terms of the may be granted by the Employer, with or without waived and shall also well and truly perform and d conditions of the Contract and of any and all fter be made, notice of which modifications to the ion to be void; otherwise to remain in full force and After Taking Over, of Conditions of Contract are
liability attaching to us under this Guarantee that the	to the sum stated above and it is a condition of any he claim for payment in writing shall be received by ling which we shall be discharged of our liability, if
We,	(the Guarantor), waiving all
·	eby irrevocably and independently guarantee to pay s's first written demand without cavil or arguments

PS-2

and without requiring the Employer to prove or to show grounds or reasons for such demand any sum or sums up to the amount stated above, against the Employer's written declaration that the Principal has refused or failed to perform the obligations under the Contract which payment will be effected by the Guarantor to Employer's designated Bank & Account Number.

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

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

		Guarantor (Schedule Bank/ Insurance Company)
WITNESS:		Signature
1		Name
		Title
Corporate Secretary	(Seal)	Corporate Guarantor (Seal)
2		
Name Title & Addres	<u></u>	

LOA-1

Letter of Acceptance

[letterhead paper of the Employer]

NAME OF CONTRACT:	
CONTRACT NUMBER:	
TO :	
Date:	
Your Reference:	
Our Reference:	
completion of the Works comprising all in conformity with the terms and	for the execution and the above-named Contract and remedying of defects therein, conditions contained in the Contract. Bid for the Accepted Contract Amount of:
[currency and amount in figures]	_
[currency and amount in words]	_
	nd truly performing the Contract, we agree to pay you the other sums to which you may become entitled under the terms prescribed by the Contract.
	Acceptance creates a binding Contract between us, and we and duties in accordance with the terms of this Contract.
Signature:	
Signed by:	
For and on behalf of:	
Date:	

CA-1

FORM OF CONTRACT AGREEMENT

		(hereinafter called to n) 20 betw	,	nade on the
			(hereinafter ca	lled the "Employer") of
the one part and			· 	_(hereinafter called the
"Contractor") of	the other part.			
WHEREAS the	e Employer is	desirous that c	*	viz., ractor and has accepted
a Bid by the Condefects therein.	tractor for the exec		•	d the remedying of any
NOW this Agreer	ment witnessed as fo	ollows:		
1. In this Agree	ement words and	expressions shall hav	ve the same meanir	ngs as are respectively

- assigned to them in the Conditions of Contract hereinafter referred to.
- 2. The following documents, in the order of priority, after incorporating addenda, if any, except those parts relating to Instructions to Bidders shall be deemed to form and be read and construed as part of this Agreement:
 - a) This Contract Agreement;
 - b) The Letter of Acceptance;
 - c) The Letter of Bid;
 - d) The Particular Conditions Part A Contract Data;
 - e) The Particular Conditions Part B Special Provisions;
 - f) The General Conditions;
 - g) The Specifications Part A Specific Provisions;
 - h) The Specifications Part B Technical Provisions;
 - i) The Drawings;
 - j) The Completed Schedules to Bid including Schedule of Prices;
 - k) the JV Undertaking (if the Contractor is a JV); and
 - 1) [Employer to insert any other documents forming part of the Contract]

The addenda/corrigenda, if any, (Excluding part relating to Instructions to Bidders alongwith Bidding Data) shall be deemed to have been incorporated at the appropriate places in the "Documents forming the Contract".

- 3. In consideration of the payments to be made by the Employer to the Contractor as hereinafter mentioned, the Contractor hereby covenants with the Employer to execute and complete the Works and remedy defects therein in conformity and in all respects with the provisions of the Contract.
- 4. The Employer 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.

	WITNESS WHEREOF the parties hereto have caus onth and year first before written in accordance with	•
-	Signature of Contactor	Signature of Employer
	(Seal) Signed, Sealed and Delivered in the presence of:	(Seal)
	Witness	Witness
	(Name, Title and Address)	(Name, Title and Address)

DAAB-1

DAAB Agreement

Name and details of the Contract			
This Agreement made theo	day of	[month],	[year], between
Name and contact details of the Er	nployer		(name)
			(address)
			(telephone)
			(email / other contact details);
Name and contact details of the C	ontractor		(name)
		(address)	
			(telephone)
			(email / other contactdetails);
Name and contact details of the Member	he DAAB		(name)
			(address)
			(telephone)
			(email / other contact details);
("DAAB Agreement")			

Whereas:

- A. the Employer and the Contractor have entered (or intend to enter) into the Contract;
- B. under the Contract, the "**DAAB**" or "**Dispute Avoidance/Adjudication Board**" means the sole member or three members (as stated in the Contract Data of the Contract) so named in the Contract, or appointed under Sub-Clause 21.1 [*Constitution of the DAAB*] or Sub-Clause 21.2 [*Failure to Appoint DAAB Members*] of the Conditions of Contract;
- C. the Employer and the Contractor desire jointly to appoint the above-named DAAB Member to act on the DAAB as:
 - a. the sole member of the DAAB, and where this is the case, all references to the "Other Members" do not apply; or
 - b. one of three members / chairman [delete the one which is not applicable] of the DAAB and, where this is the case, the other two persons are:

			DAAB-2
		(name) (address) (telephone)	(name)(address)(telephone)
		(email/ other contact details)	(email/ other contact details)
tl	he " O 1	ther Members"; and	
		DAAB Member accepts this appointment.	
The	Emplo	oyer, Contractor and DAAB Member joi	intly agree as follows:
1.	The	e conditions of this DAAB Agreement com	prise:
	(a)	Clause 21 [Disputes and Arbitration] of provisions of the Contract that are application.	f the Conditions of Contract, and any other able to the DAAB's Activities; and
	(b)	appended to the General Conditions of the	pidance/Adjudication Agreement", which is the "Conditions of Contract for Construction" ("GCs"), as amended and/or added to by the
2.	[De	etails of amendments to the GCs, if any. Fo	r example:
	In t	he procedural rules annexed to the GCs, Ru	ule _ is deleted and replaced by: " "]
3.		e DAAB Member shall be paid in accordate payment shall be	nce with Clause 9 of the GCs. The currency
		respect of Sub-Clauses 9.1 and 9.2 of the Gonthly fee and daily fee shall be:	iCs, the amounts of the DAAB Member's
	mo	nthly feeper month	n, and
	dai	ly fee ofper day	
	(or	as otherwise set under Sub-Clause 9.3 of the	he GCs).
4.	In consideration of the above fees, and other payments to be made to the DAAB Member in accordance with the GCs, the DAAB Member undertakes to act as DAAB Member in accordance with the terms of this DAAB Agreement.		
5.	Me		jointly and severally liable for the DAAB le to the DAAB Member in accordance with
6.		is DAAB Agreement shall be governed by law that governs the Contract under Sub-C	the law of (if not stated, Clause 1.4 of the Conditions of Contract).

DAAB-3

SIGNED by:	_ SIGNED by:	SIGNED by:
Print name:	Print name:	DAAB Member
Title:	Title:	Title:
for and on behalf of the Employer	for and on behalf of the Contractor	
in the presence of	in the presence of	in the presence of
Witness:	Witness:	Witness:
Name:	Name:	Name:
Address:	Address:	Address:
Date:	Date:	Date:

MG-1

FORM OF MOBILIZATION ADVANCE GUARANTEE/BOND

Guarantee No	Date
WHEREAS	(hereinafter called the 'Employer')
has entered into a Contract for	
with	(Particulars of Contract)(hereinafter called the "Contractor').
	d to advance to the Contractor, at the Contractor's (PKR) actor as per provisions of the Contract.
which amount shall be advanced to the Contra	actor as per provisions of the Contract.
AND WHEREAS, the Employer has asked mobilization advance for the performance of l	the Contractor to furnish Guarantee to secure the his obligations under the said Contract.
AND WHEREAS,	
	equest of the Contractor and in consideration of the ace to the Contractor, has agreed to furnish the said
for the purpose of above mentioned Contract	guarantees that the Contractor shall use the advance and if he fails and commits default in fulfilment of payment is made, the Guarantor shall be liable to the ementioned amount.
discretion of making decision, shall be given	et of the Contractor, of which the Employer at his by the Employer to the Guarantor, and on such first e Guarantor of all sums then due under this Guarantee without any objection.
This Guarantee shall remain in force until the Interim Payment Certificates of the Contracto is earlier.	advance is fully adjusted against payments from the or or untilwhichever (Date)
PKR (Pak	antee shall not in any case exceed the sum of Rupees
).	
aforesaid date or earlier if the advance made	aforesaid date and shall be null and void after the to the Contractor is fully adjusted against payments the Contractor provided that the Guarantor

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agrees that the aforesaid period of validity shall be deemed to be extended if on the above mentioned date the advance payment is not fully adjusted.

	Guarantor (Scheduled Bank/ Insurance Company)
WITNESS:	Signature
1.	Name
	Title
Corporate Secretary (Seal)	Corporate Guarantor (Seal)
2.	
Name, Title & Address	

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ı	Conditions	O.T	Contract

CONDITIONS OF CONTRACT

CONDITIONS OF CONTRACT

The Conditions of Contract comprise two parts:

- (a) General Conditions
- (b) Particular Conditions

General Conditions

These Conditions are the "General Conditions" which form part of the "FIDIC Conditions of Contract for Construction for Building and Engineering Works Designed by the Employer Second Edition (2017 Red book, Reprinted 2022 with amendments)" published by:

International Federation of Consulting Engineers (Fédération Internationale des Ingénieurs – Conseils) – (FIDIC) World Trade Center II - Geneva Airport P. O. Box 311 CH-1215 Geneva 15 Switzerland

Email: fidic@fidic.org, fidic.pub@fidic.org

Website: https://fidic.org/bookshop

The successful Bidder after award of Works shall have to provide two (02) copies of above said "General Conditions" for incorporation in the Contract.

Particular Conditions

(Mandatory Provisions not to be amended/substituted except as instructed/permitted by PEC in writing)

The Particular Conditions (PC) complement the General Conditions (GC) to specify dates, contractual requirements, and special circumstances related to the Works. The PC consists of two parts, Part A - Contract Data and Part B - Special Provisions. The provisions to be found in the Special Provisions (Particular Conditions - Part B) take precedence over the equivalent provisions found under the same Sub-Clause number(s) in the General Conditions, and the provisions of the Contract Data (Particular Conditions - Part A) take precedence over the Special Provisions (Particular Conditions - Part B).

Part A - Contract Data

Sub- Clause	Data to be Given	Data
1.1.27	Defects Notification Period (DNP):	days [As required by the Employer,
1.1.31	Employer's name and address:	Liaquat University of Medical & Health Sciences Jamshoro Address: Office of the Director Works & Services Department, Liaquat University of Medical & Health Sciences (LUMHS), Jamshoro, Sindh
1.1.35	Engineer's name and address:	Liaquat University of Medical & Health Sciences Jamshoro Address: Office of the Director Works & Services Department, Liaquat University of Medical & Health Sciences (LUMHS), Jamshoro, Sindh
1.1.73	Sections:	[If Sections are used, insert "Refer to Table: Summary of Sections of the Works given below" otherwise insert "None" and delete the Table]
1.1.84	Time for Completion:	365 days for whole of the Works
1.3(a)(ii)	agreed methods of electronic transmission:	[insert systems of electronic transmission, if any, at the time of signing of the Contract]
1.3(d)	address of Employer for communications:	Office of the Director Works & Services Department, Liaquat University of Medical & Health Sciences (LUMHS), Jamshoro, Sindh
	address of Engineer for communications:	Office of the Director Works & Services Department, Liaquat University of Medical & Health Sciences (LUMHS), Jamshoro, Sindh

Sub- Clause	Data to be Given	Data
	address of Contractor for communications:	[insert Contractor's address at the time of signing of the Contract]
1.4	Contract shall be governed by the law of:	Islamic Republic of Pakistan
	ruling language:	English
	language for communications:	English
1.8	number of additional paper copies of Contractor's Documents:	[insert number of copies say six (06)]
2.1	after receiving the Letter of Acceptance, the Contractor shall be given right of access to all or part of the Site within:	No later than the Commencement Date, except for the following parts: days after Commencement Datelif
		applicable, include detailed description of parts concerned].
2.4	Employer's financial arrangements	[insert financial arrangements e.g. loan/credit/fund from Funding Agency/ GOP/Provincial Govt/PSDP/Any Other]
3.2 (e)(ii)	Engineer's Duties and Authority	Variation resulting in an increase of the Accepted Contract Amount in excess of ten percent (10%) subject to accumulative Variations not exceeding fifteen percent (15%) of the Accepted Contract Amount
4.2	Performance Security (as percentage of the Accepted Contract Amount in Currencies) percent: currency:	Ten percent (10%) denominated in the currency(ies) of the Contract or in a freely convertible currency acceptable to the Employer
4.2.1	List of Insurance Companies	1 2 3 [insert list of Insurance Companies acceptable to the Employer as per criteria given in PC 4.2.1]
4.7.2	period for notification of errors in the items of reference	Twenty Eight (28) days
4.19	period of payment for temporary utilities	each month

Sub- Clause	Data to be Given	Data
4.20	number of additional paper copies of progress reports	[insert number of copies say three (03)]
5.1(a)	maximum allowable accumulated value of work subcontracted (as a percentage of the Accepted Contract Amount)	Thirty percent (30%) [Employer may vary this percentage according to the nature and complexity of the Works]
5.1(b)	parts of the Works for which subcontracting is not permitted	[Employer to provide his requirement according to the nature and complexity of the Works or state "None"]
6.5	Normal working hours on the Site	[insert eight (08) hours per day under normal circumstances]
8.3	number of additional paper copies of programmes	[insert number of copies say three (03)]
8.8 & 14.15(b)	Delay Damages payable for each day of delay	Pak. Rs or% of the Accepted Contract Amount for delay in completion of whole of the Works [If Sections are to be used, refer to Table: Summary of Sections below] [Delay Damages should correspond to anticipated damages or max.
		amount of Delay Damages be achieved in one third of the Time for Completion]
8.8	maximum amount of Delay Damages	Ten percent (10%) of the Accepted Contract Amount
8.14	Applicability of Incentives for Early Completion	[insert "Yes" or "No"]
12.3	Percentage profit	Ten percent (10%)
13.4.(b)(ii)	percentage rate to be applied to Provisional Sums for overhead charges and profit	Twenty Five percent (25%)
14.2	total Advance Payment	Fifteen percent (15%) of the Accepted Contract Amount excluding Provisional Sums payable in the currencies and proportions in which the Accepted Contract Amount is payable

Sub- Clause	Data to be Given	Data
14.2.1	List of Insurance Companies	1 2 3 [insert list of Insurance Companies acceptable to the Employer as per criteria given in PC 14.2.1]
14.2.3	percentage deductions for the repayment of the Advance Payment	Deduction shall be made at the amortization rate of 17.5 % of the value of the Works executed of each IPC as provided in paragraph (i) of Sub-Clause GCC 14.3, starting from 2 nd IPC provided that the advance payment shall be completely repaid prior to the time when 90% of the Accepted Contract Amount less Provisional Sums has been certified for payment. It may be more than 17.5% in the last instalment to ensure full repayment.
14.3	period of payment	one month
14.3(b)	number of additional paper copies of Statements	[insert number of copies say six (06)]
14.3 (iii)	percentage of retention	Ten percent (7%)
14.3 (iii)	limit of Retention Money (as a percentage of the Contract Price)	Ten percent (5%)
14.5(b)(i)	Plant and Materials for payment when shipped	Plant and Materials under Bill of "Imported Plant and Materials" or [Employer shall list accordingly].
14.5(c)(i)	Plant and Materials for payment when delivered to the Site	Plant and Non Perishable Materials [Employer shall list accordingly].
14.6.2	minimum amount of Interim Payment Certificate (IPC)	Rs. 10 million
14.7(a)	period of payment of Advance Payment to the Contractor	14 days

Sub-		Conditions of Confiden
Clause	Data to be Given	Data
14.7b (i)	period for the Employer to make interim payments to the Contractor under Sub- Clause 14.6 [Interim Payment]	28 days
14.7b (ii)	period for the Employer to make interim payments to the Contractor under Sub- Clause 14.13 (Final Payment)	28 days
14.7(c)	period for the Employer to make final payment to the Contractor	56 days
14.8	financing charges for delayed payment	KIBOR+3% per annum for local currency and SOFR (Secured Overnight Financing Rate) +1% per annum for foreign currency.
14.11 .1(b)	number of additional paper copies of draft Final Statements	[insert number of copies say six (06)]
14.15	currencies of payment of Contract Price	as stated in the Table III of Schedule A [Schedule of Adjustment Data]
14.15 (a)(i)	Proportions or amounts of Local and Foreign currencies	as stated in the Table IV of Schedule A [Schedule of Adjustment Data]
14.15 (c)	currencies and proportions for payment of Delay Damages	as stated in the Table IV of Schedule A [Schedule of Adjustment Data]
14.15 (f)	rates of exchange	as stated in the Table IV of Schedule A [Schedule of Adjustment Data]
17.2 (d)	forces of nature, the risks of which are allocated to the Contractor	Nil

		Conditions of Contract	
Sub- Clause	Data to be Given	Data	
19.1	permitted deductible limits:		
	i) insurance required for the Works	i) Ten percent (10%) of loss amount on each & every loss	
	ii) insurance required for Goods	ii) Nil	
	iii) insurance required for liability for breach of professional duty	iii) Nil	
	iv) insurance required against liability for fitness for purpose (if any is required)	iv) Nil	
	v) insurance required for injury to persons and damage to property	v) Nil	
	vi) insurance required for injury to employees	vi) N	
	vii) other insurances required by Laws and by local practice	il	
		vii)	
		Nil	
19.1	Periods for submission of insurance: a) evidence of insurance	Not later than the Commencement Date	
	b) relevant policies	Within twenty eight (28) day from the Commencement Date	
19.2. 1(b)	additional amount to be insured (as a percentage of the replacement value)	15% of the replacement value (Accepted Contract Amount)	
19.2.2	extent of insurance required for Goods	from Ex-Works (i.e., works, factory, warehouse, etc) to delivery at the Site	
	amount of insurance required for Goods	Full replacement value	
19.2.3 (a)	amount of insurance required for liability for breach of professional duty	Full replacement value of the Works to be designed by the Contractor	
19.2. 3(b)	insurance required against liability for fitness for purpose	Yes	
19.2.3	period of insurance required for liability for breach of professional duty	Until the date of issuance of Performance Certificate	
I	1	1	

Sub-	5	Conditions of Contract	
Clause	Data to be Given	Data	
19.2.4	amount of insurance required for injury to persons and damage to property	Injury to person and Fatal case: in accordance with Workmen Compensation Act	
		Damage to Property:	
		[Employer to insert amount(s) as per his assessment of the adjoining property(ies) other than the Works]	
		without limit to the number of incidents	
19.2.6	other insurances required by Laws and by local practice	All insurances as applicable, to the extent of execution of the project, under Federal and Provincial laws of Islamic Republic of Pakistan	
21.1	time for appointment of the DAAB	Within 28 days from the Commencement Date.	
		In case the Accepted Contract Amount is lesser than PKR one (01) billion, appointment of the DAAB shall be made when Dispute arises between the Parties.	
21.1	the DAAB shall comprise		
		[insert either "a sole Member" or "Three Members"]	
		[For a Contract estimated to cost above PKR 2.5 billion, the DAAB	
		shall comprise of three members. For a Contract estimated to cost between	
		PKR 1 billion and PKR 2.5 billion, the DAAB may comprise of three	
		members or a sole member. For a Contract estimated to cost less than PKR 1 billion, a sole member is recommended.]	
21.1	List of proposed members of DAAB - proposed by Employer	[to be inserted at the time of signing of the	
		Contra ct]	
	- proposed by Contractor	1 2	
		3	
		1	
		3	

Sub- Clause	Data to be Given	Data
21.2	Appointing entity (official) for DAAB members	Chairman Pakistan Engineering Council (PEC) from the list of PEC approved arbitrators published at its website
21.6	Rules of Arbitration	PEC Rules of Conciliation and Arbitration or Pakistan Arbitration Act of 1940, if the former is inactive. The place of Arbitration shall be in the Employer's country: [Insert name of city]

Summary of Sections of the Works

Section Name/Description of parts of the Works that shall be designated a Section for the purposes of the Contract (Sub-Clause 1.1.73)	Value: Percentage* of Accepted Contract Amount (Sub-Clause 14.9)	Time for Completion (Sub-Clause 1.1.84)	Delay Damages (Sub-Clause 8.8)
A			
В			
С			

^{*} These percentages shall also be applied to each half of the Retention Money under Sub-Clause 14.9.

Section Name/Description (Sub-Clause 1.1.73)	Time for Completion (Sub-Clause 1.1.84)	Incentives for Early Completion (Sub-Clause 8.14)
A		
В		
С		

Particular Conditions

Part B - Special Provisions

1.1 Definitions

1.1.76 "Specification"

Following is added at the end:

"and consists of two parts i.e.,

- i) "Part A Specific Provisions"; and
- ii) "Part B Technical Provisions"."

1.2 Interpretation

"and" is deleted from the end of sub-paragraph (i) and added at the end of sub-paragraph (j).

Sub-paragraph (k) is added:

"(k) The word "tender" is synonymous with "bid" the word tenderer with "bidder", the words "tender documents" with "bidding documents" and "Schedule of Prices" with "Bill of Quantities", as applicable."

1.5 Priority of Documents

The documents listed at (a) through (k) of this Sub-Clause are deleted and substituted with the following:

- (a) the Contract Agreement;
- (b) the Letter of Acceptance;
- (c) the Letter of Bid:
- (d) the Particular Conditions Part A Contract Data;
- (e) the Particular Conditions Part B Special Provisions;
- (f) the General Conditions;
- (g) the Specification Part A Specific Provisions;
- (h) the Specification Part B Technical Provisions;
- (i) the Drawings;
- (j) the completed Schedules to Bid including Bill of Ouantities;
- (k) the JV Undertaking (if the Contractor is a JV); and
- (1) any other documents forming part of the Contract.

The addenda/corrigenda, if any, shall be deemed to have been incorporated at the appropriate places in the documents forming the Contract.

1.6 Contract Agreement

In the last line of the 1st paragraph the text "shall be borne by the Employer" is substituted by "shall be reimbursed by the Employer to the Contractor".

3.1 The Engineer

In sub-paragraph (a) the text "as defined in the Pakistan Engineering Council Act, 1975 (Act No. V of 1976)" are added after the words "professional engineer".

3.2 Engineer's Duties and Authority

The Engineer shall obtain the consent in writing of the Employer before taking action under the following Sub-Clauses of these Conditions:

(a) Consenting to the subcontracting of any part of the Works

- under Sub-Clause 5.1 [Subcontractors]
- (b) Any action under Sub-Clauses 8.9 [Employer's Suspension] and 8.12 [Prolonged Suspension]
- (c) Issuance of "Taking Over Certificate" under Sub-Clause 10.1 [Taking Over the Works and Sections].
- (d) Issuing the "Performance Certificate" under Sub-Clause 11.9 [Performance Certificate].
- (e) Sub-Clause 13.1 [Right to Vary]: instructing a Variation, except;
 - (i) in an emergency situation as determined by the Engineer, or
 - (ii) if such a Variation would increase the Accepted Contract Amount by less than the percentage specified in the Contract Data.
- (f) Sub-Clause 13.3 [Variation Procedure]: approving a proposal for Variation submitted by the Contractor in accordance with Sub-Clause 13.3.2 [Variation by Request for Proposal] or 13.2 [Value Engineering].
- (g) Certifying release of second half of the Retention Money under Sub-Clause 14.9 [Release of Retention Money].
- (h) Issuing Final Payment Certificate under Sub-Clause 14.13 [Issue of FPC].
- (i) Sub-Clause _____*
- (j) Sub-Clause _____ *

Any such requirement shall not be applied to any action by the Engineer under Sub-Clause 3.7 [Agreement or Determination], as stated in Sub-Clause 3.2 [Engineer's Duties and Authority] of the General Conditions.

Notwithstanding the obligation, as set out above, to obtain approval, if, in the opinion of the Engineer, an emergency occurs affecting the safety of life or of the Works or of adjoining property, he may, without relieving the Contractor of any of his duties and responsibility 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, despite the absence of approval of the Employer, with any such instruction of the Engineer. The Engineer shall determine an addition to the Contract Price, in respect of such instruction, in accordance with Clause 13 and shall notify the Contractor accordingly, with a copy to the Employer.

Following is added after the words "the Employer's consent is required" in 4th paragraph:

"stating that the Employer's consent has been obtained for that specified authority"

^{*[}insert Sub-Clause number (not Sub-Clause 3.7 [Agreement or Determination]

4.1 Performance Security

4.2.1 Contractor's Obligations

The entity issuing the Performance Security and its form shall be as under:

The Performance Security shall be, at the option of the Contractor, issued in the prescribed form included in the Bidding Documents, by (a) a Scheduled Bank in Pakistan or (b) a foreign bank duly counter-guaranteed by a Scheduled Bank in Pakistan or (c) an Insurance Company listed in the Contract Data and rated by PACRA/VIS of rating as provided in Table below:

Accepted Contract Amount (In Eq. PKR million)	Minimum Rating of Insurance Companies	
Up to 1000	A (+)	
1001 to no limit	AA	

In case of Joint Venture, the Performance Security shall be in the name of the Joint Venture or in the name of Lead/either firm of the JV or in ratio of shares of the individual JV partners.

Following paragraph is added at the end of this Sub-Clause:

"The amount of Performance Security shall be reduced to 50% following issue of the Taking-Over Certificate for the whole of the Works under Clause 10 of Conditions of Contract."

4.2 Contractor's Representative

In second paragraph the text "professional engineer as defined in the Pakistan Engineering Council Act, 1975 (Act No. V of 1976) (having temporary licence in case of foreign engineer under Section 12 of the Pakistan Engineering Council Act, 1975 (Act No. V of 1976)" are added after the words "qualified, experienced".

In the 3rd paragraph the words "28 days" are substituted by "14 days". In 2nd line of 4th paragraph the text "or appoint a replacement" is substituted by "except appointment of a suitable temporary replacement is deployed at the Site"

4.3 Contractor's Documents

4.4.2 As-Built Records

First paragraph is deleted and the text in the last paragraph is substituted with the following:

"The Contractor shall furnish to the Engineer 6 copies, one reproducible and one electronic copy (provided the Engineer has made available to the Contractor editable form of the Drawings) of all Drawings amended to conform to the Works as built. In case the Engineer does not make available to the Contractor editable form of the Drawings, the Contractor shall furnish to the Engineer as-built data for incorporation in the Drawings. Upon receipt of PDF versions of the as-built drawings prepared by the Engineer, the Contractor shall furnish to the Engineer 6 copies and one reproducible of these Drawings.

The price of such Drawings shall be deemed to be included in the Contract Price."

Following Sub-Clause is added:

4.4.4 Shop Drawings

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

Review and approval by the Engineer shall not exceed 21 days and be construed as a complete check but will indicate only that the general method of construction and detailing is satisfactory and the Engineer's review or approval shall not relieve the Contractor of any of his responsibilities under the Contract.

4.8 Health and Safety Obligations

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

In the event of work being carried out outside the normal working hours and 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.

4.20 Progress Reports

At the end of sub-paragraph (g) the word "and" is deleted and at the end of sub-paragraph (h) the full stop (.) is replaced with ";", and the following new sub-paragraphs are added as:

- (i) planned programme for the execution of the Works for next 56 days to enable the Engineer to determine its programme of inspection and testing;
- (j) monthly summery of daily job record indicating weather conditions, deployment of Contractor's Equipment, labour employment, local material procurement and material import, if any; and
- (k) salient contractual and project information.

5.1 Subcontractors

Add the following text at the end of paragraph (ii):

"under Schedule to Bid"

The following is added at the end of the last paragraph of Sub-Clause 5.1:

"All subcontracts relating to the Works shall include provisions which entitle the Employer to require the subcontract to be assigned to the Employer under sub-paragraph (a) of Sub-Clause 15.2.3 [After Termination].

The Contractor shall give reasonable opportunity to contractors from Islamic Republic of Pakistan for subcontracts for the Works, and endeavour to employ such contractors as Subcontractors."

5.2 Nominated Subcontractors

5.2.2 Objection to Nomination

In sub-paragraph (c), "and" is deleted from the end of (i);

"." at the end of (ii) is replaced with: ", and".

The following is then added as (iii):

"(iii) be paid only if and when the Contractor has received from the Employer payments for sums due under the Subcontract referred to under Sub-Clause 5.2.3 [Payment to nominated Subcontractors]."

6.1 Engagement of Staff and Labour

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

"The Contractor shall, to the extent practicable and reasonable, employ staff (not less than 50%) and labour (not less than 85%) with appropriate qualifications and experience from sources within the Islamic Republic of Pakistan."

6.7 Health and Safety of Personnel

The existing text is substituted with the following:

"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 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 also provide all other medical services and appoint a health and safety officer at Site if stated in the Specifications. In case of any fatality or serious accident, the Contractor shall, in addition, notify the Engineer immediately by the quickest available means."

6.8 Contractor's Superintendence

Insert at the end of sub-paragraph (a) of this Sub-Clause:

"or, if not, the Contractor shall make competent interpreters available during all working hours, in a number sufficient for those persons to properly perform their superintendence duties"

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

"The Contractor's authorized representative and his other engineers working at site shall possess valid registration 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."

6.12 Key Personnel

The following is inserted at the end of the last paragraph:

"If any of the Key Personnel are not fluent in this language, the Contractor shall make competent interpreters available during all working hours in a number deemed sufficient by the Engineer."

The following Sub-Clauses 6.13 to 6.26 are added at the end of Sub-Clause 6.12:

6.13 Foreign Personnel

The Contractor may bring in to the Country any foreign personnel who are necessary for the execution of the Works to the extent allowed by the applicable Laws. The Contractor shall ensure that these personnel are provided with the required

residence visas and work permits. The Employer will, if requested by the Contractor, use all reasonable endeavours in a timely and expeditious manner to assist the Contractor in obtaining any local, state, national, or government permission required for bringing in the Contractor's personnel.

The Contractor shall be responsible for the return of these personnel to the place where they were recruited or to their domicile. In the event of the death in the Country of any of these personnel or members of their families, the Contractor shall similarly be responsible for making the appropriate arrangements for their return or burial.

6.14 Supply of Foodstuffs

The Contractor shall arrange for the provision of a sufficient supply of suitable food as may be stated in the Specification at reasonable prices for the Contractor's Personnel for the purposes of or in connection with the Contract.

6.15 Supply of Water

The Contractor shall, having regard to local conditions, provide on the Site an adequate supply of drinking and other water for the use of the Contractor's Personnel.

6.16 Measures against Insect and Pest Nuisance

The Contractor shall at all times take the necessary precautions to protect the Contractor's Personnel employed on the Site from insect and pest nuisance, and to reduce the danger to their health. The Contractor shall comply with all the regulations of the local health authorities, including use of appropriate insecticide.

6.17 Alcoholic Liquor or Drugs

The Contractor shall not, otherwise than in accordance with the Laws of the Country, import, sell, give, barter or otherwise dispose of any alcoholic liquor or drugs, or permit or allow importation, sale, gift, barter or disposal thereto by Contractor's Personnel.

6.18 Arms and Ammunition

The Contractor shall not give, barter, or otherwise dispose of, to any person, any arms or ammunition of any kind, or allow Contractor's Personnel to do so.

6.19 Festivals and Religious Customs

The Contractor shall respect the Country's recognized festivals, days of rest and religious or other customs.

6.20 Funeral Arrangements

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

6.21 Forced Labour

The Contractor, including its Subcontractors, shall not employ or engage forced labour which consists of any work or service, not voluntarily performed, that is exacted from an individual under threat of force or penalty, and includes any kind of involuntary or compulsory labour, such as indentured labour, bonded labour or similar labour-contracting arrangements.

6.22 Child Labour

The Contractor, including its Subcontractors, shall not employ or engage child labour in accordance with relevant law(s) in force in Islamic Republic of Pakistan.

6.23 Employment Records of Workers

The Contractor shall keep complete and accurate records of the employment of labour at the Site. The records shall include the names, ages, genders, hours worked and wages paid to all workers. These records shall be summarized on a monthly basis and submitted to the Engineer. These records shall be included in the details to be submitted by the Contractor under Sub-Clause 6.10 [Contractor's Records].

6.24 Workers' Organizations

The Contractor shall comply with the relevant labour laws of Pakistan which recognize workers' rights to form and to join workers' organizations/Trade Union of their choosing and to bargain collectively without interference.

6.25 Non-Discrimination and Equal Opportunity

The Contractor shall not make decisions relating to the employment or treatment of Contractor's Personnel on the basis of personal characteristics unrelated to inherent job requirements. The Contractor shall base the employment of Contractor's Personnel on the principle of equal opportunity and fair treatment, and shall not discriminate with respect to any aspects of the employment relationship, including recruitment and hiring, compensation (including wages and benefits), working conditions and terms of employment, access to training, job assignment, promotion, termination of employment or retirement, and disciplinary practices.

Special measures of protection or assistance to remedy past discrimination or selection for a particular job based on the inherent requirements of the job shall not be deemed discrimination. The Contractor shall provide protection and assistance as necessary to ensure nondiscrimination and equal opportunity, including for specific groups such as women, persons with disabilities, migrant workers and children (of working age in accordance with Sub-Clause 6.22).

6.26 Epidemics

In the event of any out-break of illness of 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 the purpose of overcoming the same.

7.7 Ownership of Plant and Materials

The following is added before the first paragraph:

"Except as otherwise provided in the Contract,"

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

"No Plant and/or Materials that is the property of the Employer shall be removed from the Site. If it becomes necessary to:

(i) remove any item of such Plant from the Site for the purposes of repair, the Contractor shall give a Notice, with reasons, to the Engineer requesting consent to remove the defective or damaged item off the Site. This Notice shall clearly identify the item of defective or damaged Plant, and shall give details of: the defect or damage to be repaired; the place to which defective or damaged item of Plant is to be taken for repair; the transportation to be used (and insurance cover for such transportation); the proposed

inspections and testing off the Site; and the planned duration required before the repaired item of Plant shall be returned to the Site. The Contractor shall also provide any further details that the Employer may reasonably require; or

(ii) replace any item(s) of such Plant and/or Materials, the Contractor shall give a Notice, with reasons, to the Engineer clearly identifying the item(s) of Plant and/or Materials to be replaced, and giving details of the due date of delivery to the Site of the replacement item(s).

Where any item of Plant and/or Materials has become the property of the Employer under this Sub-Clause before it has been delivered to the Site, the Contractor shall ensure that such an item is not moved except for its delivery to the Site.

The Contractor shall indemnify and hold the Employer harmless against and from the consequences of any defect in title or encumbrance or charge (except any reasonable restriction arising from the intellectual property rights of the manufacturer or producer) on any item of Plant and/or Materials that has become the property of the Employer under this Sub-Clause."

The following Sub-Clause 7.9 is added after Sub Clause 7.8:

7.9 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 provided such materials, supplies, plant, equipment and services shall be of required standard.

8.1 Commencement of Works

The following is added before the first paragraph:

"After signing of the Contract Agreement by both Parties," and thereafter the word "The" is replaced with the word "the".

8.5 Extension of Time for Completion

The following is added after paragraph (c):

"for last five years".

The following Sub-Clause 8.14 is added after Sub-Clause 8.13:

8.14 Incentives For Early Completion

If Contract Data does not state applicability of incentives for early completion, this Sub-Clause shall not apply.

The Contractor shall be entitled subject to Sub-Clause 20.2 [Claims for Payment and/or EOT] to bonus payment if the Works and/or each Section is completed earlier than the Time for Completion for the Works or Section (as the case may be). The amount of bonus for early completion of the Works and/or each Section shall be upto a limit and at a rate to 50% of the relevant limit and rate of delay damages prescribed in Contract Data and shall be paid for every day which shall elapse between the relevant Date of Completion of the Works or Section and the relevant Time for Completion.

For the purposes of calculating any bonus payment, the applicable Time for Completion stated in the Contract Data is fixed and no adjustments of this time by reason of granting an

EOT will be allowed.

The following Sub-Clause 11.12 is added after Sub-Clause 11.11:

11.12 Supervisory Assistance During DNP

If provided under the Schedule of Prices, the Contractor shall provide supervisory assistance to the Employer during the DNP for the Works. Such supervisory assistance shall be as described in the Specification for the purpose of supporting the Employer's operation and maintenance of the Plant for the period specified in the Schedule of Prices after the Date of Completion.

12.2 Method of Measurement

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

"Summary of measured quantity for payment shall be delineated item-wise under four heads namely; "Schedule of Prices Quantity", "Quantity Executed To-date", "Quantity Certified Previously" and "Net Quantity Executed under this Certificate".

12.3 Valuation of the Works

The following text is added at the end of fifth paragraph of the Sub-Clause:

"Sum of overhead charges and profit for sub-paragraph (a) shall be Twenty Five percent (25%)".

13.4 Provisional Sums

The following paragraph is inserted as the penultimate paragraph:

"The Provisional Sum shall be used to cover the Employer's share of the DAAB members' fees and expenses, in accordance with Clause 21. No prior instruction of the Engineer shall be required with respect to the work of the DAAB. The Contractor shall submit the DAAB members' invoices and the satisfactory evidence of having paid 100% of such invoices as part of the substantiation of those Statements submitted under Sub-Clause 14.3.

13.6 Adjustments for Changes in Laws

The following paragraphs are added at the end of the Sub- Clause:

"Notwithstanding the foregoing, the Contractor shall not be entitled to an extension of time if the relevant delay has already been taken into account in the determination of a previous extension of time and such Cost shall not be separately paid if the same shall already have been taken into account in the indexing of any inputs to the Table of Adjustment Data in accordance with the provisions of Sub-Clause 13.7 [Adjustments for Changes in Cost]."

14.1 The Contract Price

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

"Notwithstanding the provisions of subparagraph (b), Contractor's Equipment, including essential spare parts, imported by the Contractor for the sole purpose of executing the Contract shall be temporarily exempt from the payment of import duties and taxes upon initial importation, provided the Contractor shall post with the customs authorities at the port of entry an approved re-export bond or bank guarantee, valid until

the Time for Completion plus six months, in an amount equal to the full import duties and taxes which would be payable on the

assessed imported value of such Contractor's Equipment and spare parts, and callable in the event the Contractor's Equipment is not re-exported from the Country on completion of the Contract. A copy of the bond or bank guarantee endorsed by the customs authorities shall be provided by the Contractor to the Employer upon the importation of individual items of Contractor's Equipment and spare parts. Upon re-export of individual items of Contractor's Equipment or spare parts, or upon the completion of the Contract, the Contractor shall prepare, for approval by the customs authorities, an assessment of the residual value of the Contractor's Equipment and spare part to be re-exported, based on the depreciation scale(s) and other criteria used by the customs authorities for such purposes under the provisions of the applicable Laws. Import duties and taxes shall be due and payable to the customs authorities by the Contractor on (a) the difference between the initial imported value and the residual value of the Contractor's Equipment and spare parts to re-exported; and (b) on the initial imported value of the Contractor's Equipment and spare parts remaining in the Country after completion of the Contract. Upon payment of such dues within 28 days of being invoiced, the bond or bank guarantee shall be reduced or released accordingly; otherwise the security shall be called in the full amount remaining."

[The Employer may change or delete this Sub-Clause as per Project requirements]

14.2 Advance Payment

14.2.1 Advance Payment Guarantee

The entity issuing the Advance Payment Guarantee and its form shall be as under:

The Advance Payment Guarantee shall be in the form of Guarantee issued by (a) a Scheduled Bank in Pakistan or (b) a foreign bank duly counter-guaranteed by a Scheduled Bank in Pakistan or (c) an Insurance Company listed in the Contract Data and rated by PACRA/VIS of rating as provided in Table below:

Accepted Contract Amount (In Eq. million PKR)	Minimum Rating of Insurance Companies
Up to 1000	A (+)
1001 to no limit	AA

In case of Joint Venture, the Advance Payment Guarantee(s) shall be in the name of the Joint Venture or in the name of Lead/either firm of the JV or in ratio of shares of the individual JV partners.

14.6 Issue of IPC

14.6.1 The IPC

In the first line of the 1st paragraph the words "28 days" are substituted by "14 days".

14.7 Payment

The words "or through crossed cheque in favour of the Contractor or JV partners. The Payment to JV partners shall be made at the request of the Joint Ventures in the ratio of their

shares specified by them" are added at the end of the Sub-Clause.

14.8 Delayed Payment

In the first paragraph, third line, the words "compounded monthly" are deleted.

The text of 2nd paragraph is deleted and substituted with the following:

"The Employer shall pay to the Contractor compensation at the rate stated in the Contract Data."

15.2 Termination for Contractor's Default

15.2.1 Notice

Following text is added at the end of sub-paragraph (h) of this Sub-Clause:

"For the purposes of this Contract, corrupt and fraudulent practices have been defined in Public Procurement Rules 2004."

15.2.3 After Termination

The word "and" at the end of sub-paragraph (ii) of paragraph (b) is deleted the following paragraph is added after sub-paragraph (iii):

"(iv) all Employer-Supplied Materials and/or Employer's Equipment made available to the Contractor in accordance with Sub-Clause 2.6 [Employer-Supplied Materials and Employer's Equipment], and"

15.4 Payment after Termination

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

"The Employer shall be entitled to sell any of the Contractor's Equipment, Temporary Works and unused materials and apply the proceeds of sale towards payment of any debt due from the Contractor to the Employer under this Clause including any outstanding payments to the Subcontractors.

16.2 Termination by Contractor

16.2.1 Notice

The sub-paragraph (j) is deleted in its entirety.

At the end of sub-paragraph (i) "; or" is replaced with "." and at the end of sub-paragraph (h) ";" is replaced with "; or".

In sub-paragraph (f) "84 days" are replaced with "180 days" and text "for reasons not attributable to the Contractor" is added at the end.

16.3 Contractor's Obligations After Termination

Sub-paragraph (c) is deleted and replaced with:

- "(c) deliver to the Engineer all Employer-Supplied Materials and/or Employer's Equipment made available to the Contractor in accordance with Sub-Clause 2.6 [Employer-Supplied Materials and Employer's Equipment]; and
- (d) remove all other Goods from the Site, except as necessary for safety, and leave the Site."

17.1 Responsibility for Care of the Works

After the two instances of "Goods" in the last paragraph, the words "Employer-Supplied Materials and/or Employer's Equipment" are added.

The following Sub-Clause 17.7 is added after Sub-Clause 17.6:

17.7 Use of Employer's Accommodation/ Facilities

The Contractor shall take full responsibility for the care of the items of the Employer's facilities and/or accommodation, if any, as detailed in the Specification, from the date of use and/or occupation by the Contractor until the date on which such use and/or occupation is re-vested in the Employer.

If any loss or damage happens to any of the above items during a time while the Contractor is responsible for its care, arising from any cause other than a cause for which the Employer is responsible or liable, the Contractor shall promptly rectify the loss or damage at the Contractor's risk and cost.

18.1 Exceptional Events

The words "or disorder" are replaced with "disorder or sabotage" in sub-paragraph (c) of the Clause.

18.4 Consequences of an Exceptional Event

The following is added at the end of sub-paragraph (b) after deleting the ".":

", including the costs of rectifying or replacing the Works and/or Goods damaged or destroyed by Exceptional Events, to the extent they are not indemnified through the insurance policy referred to in Sub-Clause 19.2 [Insurance to be provided by the Contractor]."

18.5 Optional Termination

In sub-paragraph (c), the words "and necessarily" are added after the words "was reasonably".

19.1 General Requirements

Following text is added at the end of first paragraph:

"The Contractor shall immediately after the date of the Letter of Acceptance submit the draft of insurance policies for the Employer's consent."

Following text is added at the end of third paragraph:

"The Contractor shall, within the respective periods stated in the Contract Data submit to the Engineer and the Employer a) evidence that the insurances described in this Clause have been effected, and b) copies of policies of the insurances described in Sub-Clauses 19.2.1, 19.2.4 and 19.2.5."

19.2 Insurance to be provided by the Contractor

19.2.5 Injury to employees

The words "sickness, disease" are deleted in the third line of first paragraph.

The following Sub-Clause is added after Sub-Clause 19.2.6:

19.2.7 Insurance Company

"The Contractor shall be obliged to place all insurances described in this Clause with insurers listed in the Contract Data and rated by PACRA/VIS of rating as provided in Table below:

Accepted Contract Amount (In Eq. million PKR)	Minimum Rating of Insurance Companies
Up to 1000	A (+)
1001 to no limit	AA

21.6 Arbitration

The word "international" is deleted in the sixth line of first paragraph. The text of sub-paragraph (a) is substituted with the following:

"the Dispute shall be finally settled under the Rules of Arbitration, specified in the Contract Data;"

The following Clauses are added after Clause 21

22 Custom Duty

[Employer may incorporate provisions where applicable. However, in order to make the bid more balanced, the payment of Customs Duties should be the responsibility of the Employer.]

23 Taxes

The Contractor, Subcontractors and their employees shall be liable to pay income tax, withholding tax, super tax and other taxes on income arising out of the Contract. The rates and prices as stated in the contract shall be deemed to cover all such taxes.

24 Integrity Part

If it is found and established at any stage that the Contractor or any of his Subcontractors, agents or servants have violated or involved in violation of the Integrity Pact signed by the Contractor then the Employer 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, agent or servants;
- (b) terminate the Contract; and
- (c) recover from the Contractor any loss or damage to the Employer as a result of such termination or of any other corrupt business practices of the Contractor or any of his Subcontractors, agent or servants.

The termination under sub-paragraph (b) of this Sub-Clause shall proceed in the manner prescribed under Sub-Clause 15.1 to 15.4 and the payment under Sub-Clause 15.4 shall be made after having deducted the amounts due to the Employer under sub-paragraph (a) and (c) of this Sub-Clause.

SPECIFICATIONS PART A - SPECIFIC PROVISIONS

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SP-4	Project Features
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SP-6	Drawings
SP-7	Physical and Other Data Available to Contractor
SP-8	Layout of Work and Surveys
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SP-11	Construction Schedule
SP-12	Facilities Provided by the Employer
SP-13	Construction Camps and Colonies
SP-14	Other Facilities for Engineers and Employers Personnel
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SP-16	Cooperation with other Contractors
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SP-22	Environmental Protection
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Sp. No.	Description
SP-25	Unit Price Breakdown
SP-26	Transport and Handling of Cargo
SP-27	Directed and Required
SP-28	Communications to the Engineer
SP-29	Any Other Provision
SP-30	Measurement and Payment – General
SP-31	Measurement and Payment

[Note:

The above Sections of Specifications, are for guidance only, and shall be indicated appropriate to the work/project.

The Employer may adopt the above format. However, if any section is not applicable, it may be mentioned as "Not Used".]

SPECIFICATIONS PART B - TECHNICAL PROVISIONS

DRAWINGS



CONSTRUCTION OF LIBRARY BLOCK FOR THE LIAQUAT UNIVERSITY OF MEDICIAL & HEALTH SCIENCE JAMSHORO, SINDH



LIBRARY BLOCK (COVERED AREA = 18805 SFT) BILL OF QUANTITIES APRIL 2024



BILL OF QUANTITIES

Rates Based on Composite Schedule of Rate (GENERAL-2012) Sindh

Sr. No.	DESCRIPTION	AMOUNT
1.	CIVIL WORKS	
а	Cost of Schedule Items	24,732,695
b	Add/ Deduct % above/ below on Scheduled Items	
С	Cost of Non-Schedule Items	
	TOTAL OF CIVIL WORKS-A	
2.	PUBLIC HEALTH WORKS	
а	Cost of Schedule Items	1,587,379
b	Add/ Deduct % above/ below on Scheduled Items	
С	Cost of Non-Schedule Items	
	TOTAL OF PHE WORKS -B	
3.	ELECTRICAL WORKS	
а	Cost of Schedule Items	2,581,834
b	Add/ Deduct % above/ below on Scheduled Items	
С	Cost of Non-Schedule Items	
	TOTAL OF ELECTRICAL WORKS-C	
	TOTAL (A+B+C)	
	5% SST	
	GRAND TOTAL WITH SST	

Amount in Words:

Contractor

BILL OF QUANTITIES

CIVIL WORKS

Rates Based on Composite Schedule of Rate (GENERAL-2012) Sindh

Sr. No.	Item No.	Description	Unit	Qty	Rate	Amount
1	C-1/18(b)	Excavtion in foundation of Building Bridges and other structures including dagbelling dressing, refilling around structrure with excavated earth Watering and ramming lead upto 5 ft in Ordinary Soil.		11254.39	3176.25	35,747
2	C-1/19	Cutting hard rock such as granite, ballast, hard lime stone or sand stone etc. with chisels and hammers for small foundations.	%0Cft	10774.51	28672.05	308,927
3	C-18/92	Providing Anti -termmite treatment by spraying /sprinkling /spreading Neptachlar 0.5% Emulsion as an overall pre -construction treatment in slab type construction under the slab and along attached perches or entrances etc, complete as per directions of Engineer Incharge.	P.Sft	22500.00	9.74	219,150
4	C-4/5(i)	Cement concrete plain including placing compacting, finishing and curing, complete (including screening and washing at stone aggregate without for all shuttering.(Mix 1:4:8)	%Cft	1679.94	11288.75	189,644
5		R.C work in roof slab, beams columns rafts, lintels and other structural members laid in situ or precast laid in position complete in all respects (I) Ratio (1 : 2: 4) 90 Lbs.cement 2 Cft. Sand 4 Cft. Shingle 1/8" to 1/4" gauge .(Foundation, Beams, Slabs, Stairs)	70 0 11	1070.04	11200.70	100,011
(i)	C-4/6 a-i	Ground Floor	P.Cft	11148.51	337.00	3,757,047
(ii)	C-4/6 a-i +6 (d)	First Floor				
(iii)	C-4/6 a-i +6 (d)	Second Floor	P.Cft	1888.35	349.10 361.20	2,326,811
6		Reinforced cement concrete in roof slab, beams, columns lintels, girders and other structural members laid in situ or precast laid in position, or prestressed members cast in situ, complete in all respects:- Type B (nominal mix 1: 1.5: 3) Columns	r.oit	1000.33	301.20	002,070
(i)	C-4/6 a-ii	Ground Floor				
(ii)	C-4/6 a-ii +6 (d)	First Floor	P.Cft	6223.56	349.00	2,172,024
(iii)	C-4/6 a-ii +6 (d)	Second Floor	P.Cft	1918.18	361.10	692,654
7	C-5/4-I(e)	Pacca brick work in foundation and plinth in cement sand mortar	P.Cft	614.25	373.20	229,238
8	C-1/21	1:6. Filling, watering and ramming earth in floors with surplus earth from foundation lead upto one chain and lift jupto 5 feet.	%Cft %0Cft	10889.98 7342.97	11948.36 1512.50	1,301,174
9	C-5/5-I(d)	Pacca brick work in Ground Floor cement, sand mortar Ratio 1:5	%0Cft	7165.77	12902.08	924,533
10	C-5/5-I(c)	Pacca brick work in Ground Floor cement, sand mortar Ratio 1:4	%Cft	7217.94	13227.41	954,747
11	C-5/5-I(d) + 6	Pacca brick work in First Floor cement, sand mortar Ratio 1:5	%Cft	3549.66	13340.71	473,549
12	C-5/5-I-c + 6	Pacca brick work in First Floor cement, sand mortar Ratio 1:4	%Cft	995.04	13666.04	135,983

Sr. No.	Item No.	Description	Unit	Qty	Rate	Amount
13		Cement plaster 1:5 upto 12' height:- b) 1/2" thick. Ground Floor				
(i)	C-9/12(b)	Ground Floor	%Sft	34542.32	2241.80	774,370
(ii)	C-9/12(b)+29	First Floor				
(iii)	C-9/12(b)+29	Second Floor	%Sft	18302.18	2382.77	436,099
			%Sft	13883.42	2523.74	350,381
14		Cement plaster 1:4 upto 12' height:- b) 3/8" thick. Ground Floor				
(i)	C-9/11(a)	Ground Floor	%Sft	34042.52	2197.52	748,091
(ii)	C-9/11(a) +29	First Floor	0/ C ft	17520.06	2229 40	400.060
(iii)	C-9/11(a) +29	Second Floor	%Sft	17530.96	2338.49	409,960
15	C-9/40.A	Preparing the surface and painting with plastic emulsion paint of	%Sft	13222.30	2479.46	327,842
15	+ 40-B	approved make I/c rubbing the surface with sand Paper, filling the voids with chalk / plaster of paris and then painting etc.				
		complete. Three Coats	%Sft	29873.65	2237.95	668,557
16	C-9/(38.A+38.B)	Preparing the surface and painting with weather coat I/c rubbing the surface with rubbing brick / sand Paper, filling the voids with chalk/ plaster of Paris and then painting with weather				
17	C-4/5(i)	coat of approved make.:- three coats Cement concrete plain including placing compacting, finishing	%Sft	14230.03	2567.95	365,420
		and curing, comlete (including screening and washing at stone aggregate without for all shuttering.(Mix 1:4:8)				
18	C-4/5(f)	Cement concrete plain including placing compacting, finishing	%Cft	7175.13	11288.75	809,982
10	O 4/0(i)	and curing, comlete (including screening and washing at stone aggregate without for all shuttering.(Mix 1:2:4)				
			%Cft	1748.35	14429.25	252,274
19	C-8/16-a +C-8/18	Providing and laying 3" thick topping cement concrete (1:2:4) including Surface finishing and dividiing into panels: (Roof)	%Sft	7500.00	4638.70	347,902.50
20	C-7/18	Khuras on roof 2'x2'x6" (600 x 600 x 150 mm)	Each	15.00	358.68	5,380
21	C-10/03 (a)	Teak wood wrought framed and fixed in place including chowkats hold fasts, tower bolts, chocks, cleats, handles cord with hooks and cost of nails and screws, etc.	D 0"	400.00	0557.00	44.40.47
22	C-10/19-(A)-ii	Providing and fixing sliding bolt to doors.Iron sliding bolt 12"	P.Sft	162.00	2557.08	414247
		long.(a) Panelled or panelled and glazed or fully glazed 2" thick.	Each	5.00	222.23	1,111
23	C-10/21	Providing and fixing, approved quality mortice lock.	Each	17.00	1786.13	30,364
24	C-11/7-(a)	French Polishing Complete (a) on New Works	%Sft			
25	C-18/83(a)	Supplying & fixing in position Aluminium channels framing for hinged doors or Alcop made with 5 mm thick tinted glass glazing	/0 3 11	264.60	2116.41	5,600
		(Belgium) and Alpha (Japan) locks I/c handles, stoppers etc. (a) Deluxe model (White)	P.Sft	128.00	1450.76	185,697.28
26	C-18/84(a)	Supplying & fixing in position Aluminium channels framing for slidding windows & ventilators of Alcop made with 5 mm thick tinted glass glazing (Belgium) & Aluminium fly screen I/c handles stoppers & locking arrangement etc. complete. (a)				
07	C Dublish Haalit Day	Deluxe model (White).	P.Sft	2625.00	1592.69	4,180,811
27	C-Publich Health Part B/J/Page-35	Providing C.I Manhole Cover & Frame i/c cost of Material etc.	P.Kg	30.00	140.00	4,200
		Total of SOR ITEMS				24,732,695

BILL OF QUANTITIES

CIVIL WORKS

Non-Scheduled Items

Sr. No.	Item No.	Description	Unit	Qty	Rate	Amount
1		Providing and laying hard grade ribbed deformed (minimum yield point 60,000 psi) reinforcement bars of all sizes with & including the cost of straightening, cutting, bending laying in position, making joints, wastage, overlaps, steel chairs, etc. including the cost of binding wire and labor charges for binding of steel reinforcement overlaps other than those shown on drawings, steel chairs, precast chairs, removal of rust from bars placing in position on cement concrete complete in all respect Amreli Steel, Agha Steel, Razaque Steel or equivalent approved by engineer incharge.	P.Kg	130000.00		
2	NSI	Providing and laying sweat earth with new earth excavated from outside including watering ramming compacting in layers up to 12" thick etc completed as directed by engineer Incharge including 15 km carriage etc.	P.Cft	87000.00		
3	NSI	Supplying laying River sand or pit sand of approved quarry and levelling dressing, watering ramming and compacting by manual / electric compactor method etc complete. Incharge including 15 km carriage etc.				
4	NSI	Providing and laying travertine stone of (12" x 6") size of laid in white cement and matching pigment over 3/4" thick cement sand mortar (1:2) i/c filling joints in white cement and matching pigment and also including all type labours and also scaffolding charges with labour complete in all respect as approved by the Engineer incharge.	P.Cft P.Sft	4452.84 6052.73		
5	NSI	Providing and laying porcelain tiles flooring 24"x24"x3/8" light color laid in white cement and matching pigment over 3/4" thick cement sand mortar (1:2) i/c filling joints in white cement and matching pigment complete in all respect. (Master, Shabbir Tiles or Equivalent)	P.Sft	14207.78		
6	NSI	Providing and laying porcelain tiles for dado size 24"x48"x3/8" light color laid in white cement and matching pigment over 3/4" thick cement sand mortar (1:2) i/c filling joints in white cement and matching pigment complete in all respect. (Master, Shabbir Tiles or Equivalent)	P.Sft	566.99		
7	NSI	Providing and laying Ceramic Matt Tiles Texture Light color for flooring size 12"x18"x3/8" laid over 3/4" thick cement sand mortar (1:2) i/c filling joints in white cement and matching pigment i/c cutting charges complete in all respect as approved & directed by the Engineer/ Incharge. (Shabbir Tile, Master or Equivalent)	P.Sft	894.77		
8	NSI	Providing and laying Ceramic Tiles Texture Light color for skirting / dado size 12"x18"x3/8" laid over 3/4" thick cement sand mortar (1:2) i/c filling joints in white cement and matching pigment i/c cutting charges complete in all respect as approved & directed by the Engineer/ Incharge. (Shabbir Tiles, Master or Equivalent)	P.Sft	3725.70		

Sr. No.	Item No.	Description	Unit	Qty	Rate	Amount
9	NSI	Providing and fixing 3/4" thick China Verona full width area above 2 Sft laid in white cement matching pigment 3/4" thick cement sand mortar (1:2) i/c filling joints in white cement & matching pigment, making gola on exposed edges complete in all respect as approved by the Engineer/ Incharge.(Stairs, Podium, Planter and Vanity)	P.Sft	3632.02		
10	NSI	P/F 1-1/2" thick solid flush door comprising of 2.5 mm thick Commercial ply compressed over 2.5 mm thick commercial ply over 1" thick packing wood in style and rails under proper pressure i/c french polish Master, Happy or Equivalent Brand the cost of nails, sliding bolt, tower bolt, handles, glue, sawing charges, Painting charges, sand papering and 3/8" thick matching wooden lipping as approved and directed by the Engineer Incharge.				
11	NSI	Providing and fixing PVC Doors 38mm thickness i/c deluex matching color PVC frame matt or glossy finish having color (white-Gray-Marble Gray-Oak Wood- Dard Oak Wood, Coffee Wood Honey Pine Wood-Mahagony-Marry Gold-Chocolate Brown-Honey Dew) i/c all accessories i/c mortice locks complete in all respect as approval by the Engineer Incharge.	P.Sft	308.00		
12	NSI	Providing and fixing M.S. grill fabricated with MS Square polished Vertical/horizontal Bars of specified size @ 4" c/c ' passed through punched holes in MS Patti of 1-1/4"x1/8" i/c the cost of 1-1/4"x1/8" MS patti for Frame of windows and painting Master, Happy or Equivalent 3 coat complete in all respect as approved and directed by the Engineer Incharge. (ii) 1/2" Square Bars	P.Sft P.Sft	400.58 19.25		
13	NSI	Providing and fixing aluminium glazed partition of anodized / powder coated using section of M/s. Al-Cop/ Pakistan Cable or approved equivalent manufacturer, having 2 mm thick Frame size D48-A, i/c 12 mm Tempered glass with sand blasting and edge polishing i/c the cost of tear resistance film,rubber gasket,Floor Hinges, Door Lock, Handle and all hardware etc. complete in all respect as approved and directed by the Engineer Incharge.	P.Sft	1421.40		
14	NSI	Providing and fixing 2'-9" high stair railing comprising of non magnetic (304) Stain less steel 2" dia pipe railing of 18 SWG welded with vertical posts of 2" dia stainless steel round/ Squar pipe/ Tong (chimta) @ 2-ft c/c fixed on alternate steps with 3" long steel screws and brass rawal plugs , 3-Nos diagonal stainless steel pipes of 1/2" dia passes through goties fixed on vertical post, i/c stainles steel welding, fixing & polishing complete in all respects as approved and directed by the Engineer Incharge	P.Rft	358.80		
15	NSI	Providing and fixing steel Fire Rated Emergency Exit Door ,Door manufactured as per NFPA 252 & UL 10C standards Steel Door (MS) Size: 60" x 98" Double Leaf door, Filled with fire-rated material With Inner Steel Stiffeners for reinforcement.Door Leaf 1.2-1.5mm, Door Frame 1.5- 2.0mm, Accessories: Hinges, Panic Bar On single Leaf, SS Handle, Glass 12x24 ft, and Door closer on single Leaf. complete in all respect as approved & directed by the Engineer/ Incharge. (TECHNO (PVT) LTD or Equivalent)	Each	4.00		
16	NSI	Providing and applying of 2 coat of Acrylic Re-enforced Cementitious water proofing & Protective Coating (ConFlex 515) Complete in all respects.		11512.70		

Sr. No.	Item No.	Description	Unit	Qty	Rate	Amount
17	NSI	Providing and fixing 5.00 ft dia MS spiral stair comprising of triangular steps made of 1-1/4"x1-1/4"x3/16" duly welded with 3/8"MS squar bars steps, supported/welded with main vertical post of 4" dia GI pipe (Medium Quality) embeded in PCC in ground i/c the cost of pipe railing comprising of 2" dia MS pipe of 16 SWG supportrd with 2 no 5/8" squar bars in each step, i/c fixing & painting complete in all respects as approved and directed by the Engineer Incharge.		16.00		
18	NSI	Providing and fixing Steel Sheet (Jisti) hollow press frame of doors, etc. (Chowkhat only) of 16 SWG welded with M.S. flat 6"x1½"x1/8" (150x40x3mm) M.S. hold fast 9"x1"x1/8" (225x25x3mm) welded/ screwed 4" (100mm) long iron hinges including fitting chowkhat with cement sand mortar 1:8 and embedding hold fast in cement concrete 1:2:, Single Rebate, 10" wide, including of Master, Happy or Equilant Paint of 3 Coats complete in all respect as per direction of Engineer in-charge.				
19	NSI	Providing and fixing auotomatic hydraulic operated door closer imported heavy duty complete in all respect as approved and directed by the Engineer Incharge.	P.Sft Each	449.40 17.00		
20	NSI	Providing and fixing Stainless Steel (24 SWG) Letters of 2 feet Height with CNC laser cutting i/c all hardware required complete in all respect as per drawings and direction of Engineer Incharge. (Drawing Reference Page No. 3D-02)	Each	12.00		
21	NSI	Providing and fixing stainless steel mesh of 16 guage fixed with nails for concrete and bricks joint complete in all respect and as approved and directed by the Engineer Incharge.	P.Sft	7500.00		
		Total of Non SOR ITEMS				

BILL OF QUANTITIES

PUBLIC HEALTH WORKS

Rates Based on Composite Schedule of Rate (GENERAL-2012) Sindh

Sr. No.	Item No.	Description	Unit	Qty	Rate	Amount
		SANITARY FIXTURES AND FITTINGS Providing and fixing European type white glazed earthen				
1	supply & Sewerage	ware wash down W.C. pan complete with and I/c the cost of white/black plastic seat (Best quality) and lid with C.P.brass hineges and buffers, 3 gallons white glazed earthen ware low level foushing cistern with siphon fitting 1-1/2" dia white porcelain enamelled fluish bend 3/4" dia and making requiste number of holes in walls, plinth and floor for pipe connections and making good in cement concrete 1:2:4. (ICL or Equivalent)	Each	3.00	11,477.40	34,432.20
2	supply & Sewerage (Ch 1/2-A ii)	Providing and Fixing squating type white glazed earthen ware w.c pan with front fresh inlet & complete with including the cost of flushing cistern with internal fitting and flush pipe with bend and making requisite number of holes in walls plinth & floor for pipe connection and making good in cement concrete 1:2:4. (A) W.C pan 23" & low level earthen ware flush tank 3 gallons. (ii) with 4" dia white glazed earthen ware trap and plastic thumble. (Foriegn Quality)	Each	10.00		
3	supply & Sewerage	Providing and fixing steel sinks stainless local make complete with cast iron or wraught iron brackets 6 inches built in wall, 1-1/2" c.p bubber plug chrome plated brass chain, 1-1/2" c.p brass waste, with 1-1/2" P.V.C. waste pipe & making requiste number of holes in wall, plinth & floor for pipe connection & making good in cement concrete 1:2:4. (c) Steel sink stainless sized 33" x 18" local make (Standard pattern) (Master or Equivalent)			5,772.80	57,728.00
4		Providing and fixing CP Muslim shower with double bib cock & ring pipe etc complete.	Each Each	12.00	5,712.30 3,432.00	17,136.90 41,184.00
5	. , , ,	Providing and fixing soap tray earthen ware with c.p screws etc.complete.	Each	12.00	497.20	5,966.40
6		Providing and fixing chrome plated brass towel rail complete with brackets fixing with 1" long c.p brass screws. (iii) Towel Rail 24" long (b) 3/4" dia round or square (Superior Quality)	Each	12.00	1,082.95	12,995.40
7	SOR(Water supply & Sewerage (Ch 2/2 (b)	Providing and fixing c,p brass toilet paper holder of standard size with chrome plated brass brackets complete (Similar to twyfords design No 1108) (b) Superior Quality	Each	12.00	1,071.40	12,856.80
8	Sewerage	Providing and fixing (½") dia, lead connection complete with a (½") dia brass stop cock, two brass nuts & lining jointed to lead pipe with plumber wiped solder joints (½" lead pipe to be of not less than 4lbs per lineal yard.	Each	105.00	689.70	72,418.50

Sr. No.	Item No.	Description	Unit	Qty	Rate	Amount
9	SOR(Water supply & Sewerage	Providing and fixing 6" x 4" C.C gully trap with 4" oulet complete with 4" thick 1:2:4 C.C for bed & 1/2" thick cement plaster (1:3) to the karb. C.I grating 6" x 6' C.I cover and frame 12" x 12" (inside) etc complete. Earthan ware glazed Gully trap 6" x 6" x 4" with C.I cover & Frame.	Each	5.00	1,220.67	6,103.35
10	SOR (PHE works) Part-B	Providing and laying R.C.C. pipe & collors of class "B" and fixing in trench i/c cutting, fitting and jointing with maxphalt composition and cement mortar (1:1) i/e. testing with water to a head of 22.5 meter or 76 ft. (e) 300mm (12") i/d		550.00	543.75	299,062.50
11	SOR (PHE works) Part-B (III) A-1	Excavation for pipeline in trechches, and pits in soft soils i/c trimming and dressing sides to true allignment and shape levelling of beds of trenches to correct level and grade, cutting joint and holes and disposal of surplus earth within a one chain as directed by engineer incharge. Providing fence guards, lights, flags and temperory crossings for non-vehicular traffic where ever required lift upto 5ft. (1.52 m) and lead upto one chain (30.5 m).	1000.06			
12	(Earth work compaction (Soft, ordinary or hard soil). (d)	1000 Cft	4,950.00	3,600.00	17,820.00
12	CII/ I/ 13 (u)	Ramming earth work (All types of soil). Rehandling of earth work. (a) Lead upto a single throw of	1000 Cft	4,950.00	453.75	2,246.06
13	Ch/1/9 (a)	Kassi, Phawrah or a = Shovel.				
	COD/Matar	Providing and fixing full way gun metal peet/gate valve with	1000 Cft	4,950.00	756.25	3,743.44
14	Cappi, c	wheels, threaded or flabged ends with rubber washing. (iv) 1-1/4" (Light pattern)	Each	6.00	337.92	2,027.52
15	supply & Sewerage	Providing and fixing full way gun metal peet/gate valve with wheels, threaded or flabged ends with rubber washing. (v) 1-1/2" (Light pattern)				2,0202
	(Ch 6/4 (v)	MANHOLE	Each	6.00	695.42	4,172.52
16	SOR (PHE works) P-1	Constructing manhole or inspection chamber for the required diameter of circular sewer and 3'-6" (1067 mm) depth waith walls of BB in cement sand mortar 1:3 cement plastered 1:3, 1/2" thick. Inside of walls and 1" (25 mm) thick over benching and channel i/c fixing C.I manhole cover with frame of clear opening 1-1/2' x 1-1/2' (457 x 457mm) of 1.75 cwt. (88.9 Kg) embaded in plain C.C 1:2:4 and fixing 1"(25mm) dia MS steps 6" (150 mm) wide projecting 4" (102mm) from the face of wall at 12" (305mm) C/C duly painted etc. Complete as per Standard specification and drawing.				
		Providing & fixing 22"x 16" lavatory basin in white glazed	Job	13.00	14,748.00	191,724.00
17	Sanitary works) Ch 1- 13	earthen ware complete with & i/c the cost of W.I or C.I cantilever brackets 6 inches built into walls, painted white in 2 coats after a primary coat of red lead paint, a pair of 1/2" rubber plug & chrome brass waste of approved pattern 1-1/4" dia malloable iron or CP brass trap, malloable iron or brass unions and making requisite number of holes in walls plinth and floor for pipe connection &making good in cement concrete 1:2:4 (Foreign or Equivalant)	Each	30.00	6,237.00	187,110.00
18	Supply &	Providing and fixing 6" x 2" or 6" x 3" C.I floor trap of the approved selt cleaning design with a C.I screwed down gratting without a vent arm complete with & i/c making requisite number of holes in walls, plinth & floor for pipe connections & makinggood cement concrete 1:2:4.				
			Each	62.00	2,042.43	126,630.66

SOR (Water supply & Sanitary works) Ch 6-5 ii 3/4 inch Each 14.00 271.92 3.6 ii 1/2 inch Each 10.00 200.42 2.0 21 SOR (Water supply & Sanitary works) Ch 6-6 (iv) 22 SOR (Water supply & Sanitary works) Ch 6-6 (iv) 23 SOR (Water supply & Sanitary works) Ch 6-6 (v) 24 SOR (Water supply & Sanitary works) Ch 6-6 (v) 25 SOR (Water supply & Sanitary works) Ch 6-6 (v) 26 SOR (Water supply & Sanitary works) Ch 6-6 (v) 27 SOR (Water supply & Sanitary works) Ch 6-6 (v) 28 SOR (Water supply & Sanitary works) Ch 6-6 (v) 29 SOR (Water supply & Sanitary works) Ch 6-6 (v) 20 SOR (Water supply & Sanitary works) Ch 6-6 (v) 20 SOR (Water supply & Sanitary works) Ch 6-1 (v) 21 SOR (Water supply & Sanitary works) Ch 6-1 (v) 22 SOR (Water supply & Sanitary works) Ch 6-1 (v) 23 SOR (Water supply & Sanitary works) Ch 6-1 (v) 24 SOR (Water supply & Sanitary works) Ch 6-1 (v) 25 SOR (Water supply & Sanitary works) Ch 6-1 (v) 26 SOR (PHE works) Part-B (II) (O-1 (a)) 27 SOR (PHE works) Part-B (II) (O-9 (a)) 28 SOR (PHE works) Part-B (II) (O-9 (a)) 29 SOR (PHE works) Part-B (II) (O-9 (a)) 20 SOR (PHE works) Part-B (II) (O-9 (a)) 20 SOR (PHE works) Part-B (II) (O-9 (a)) 20 SOR (PHE works) Part-B (II) (O-9 (a)) 21 SOR (PHE works) Part-B (II) (O-9 (a)) 22 SOR (PHE works) Part-B (II) (O-9 (a)) 23 SOR (PHE works) Part-B (II) (O-9 (a)) 24 SOR (PHE works) Part-B (II) (O-9 (a)) 25 SOR (PHE works) Part-B (III) (O-9 (a)) 26 SOR (PHE works) Part-B (III) (O-9 (a)) 27 SOR (PHE works) Part-B (III) (O-9 (a)) 28 SOR (PHE works) Part-B (III) (O-9 (a)) 29 SOR (PHE works) Part-B (III) (O-9 (a)) 20 SOR (PHE works) Part-B (III) (O-9 (a)) 21 SOR (PHE works) Part-B (III) (O-9 (a)) 22 SOR (PHE works) Part-B (III) (O-9 (a)) 23 SOR	Sr. No.	Item No.	Description	Unit	Qty	Rate	Amount
VALVES SOR (Water supply & Sanitary works) Ch 6-5 ii	19	supply & Sanitary works) Ch 1-	glass complete with 1/8' thick hard board and c.p screws	Sft	160.00	2,376.00	380,160.00
supply & Sanitary works) Ch 6-5 ii 3/4 inch Each 14.00 271.92 3.8 i 1/2 inch Providing, fixing and testing PPRC ball valve 32mm, (with usoldered copper ball) made to B.B.S 1212. 21 SOR (Water supply & Sanitary works) Ch 6-6 (iv) 22 SOR (Water supply & Sanitary works) Ch 6-6 (v) 23 SOR (Water supply & Sanitary works) Ch 6-6 (v) 24 SOR (Water supply & Sanitary works) Ch 6-6 (v) 25 SOR (Water supply & Sanitary works) Ch 6-6 (v) 26 SOR (Water supply & Sanitary works) Ch 6-6 (v) 27 SOR (Water supply & Sanitary works) Ch 4-1 (v) 28 SOR (Water supply & Sanitary works) Ch 4-1 (v) 29 SOR (Water supply & Sanitary works) Ch 4-1 (v) 20 SOR (Water supply & Sanitary works) Ch 4-1 (v) 20 SOR (Water supply & Sanitary works) Ch 4-1 (v) 21 SOR (Water supply & Sanitary works) Ch 4-1 (v) 22 SOR (Water supply & Sanitary works) Ch 4-1 (v) 23 SOR (Water supply & Sanitary works) Ch 4-1 (v) 24 SOR (Water supply & Sanitary works) Ch 4-1 (v) 25 SOR (Water supply & Sanitary works) Ch 4-1 (v) 26 Toroiding G.I Pipes, specials, and clamps etc. including fixing cutting & fitting complete with and I/c the cost of breaking through walls and roof, making good etc. Painting two coats after cleaning the pipe etc. with white zink paint with pigment to a pressure head of 200 feet and handling. 27 dia G.I pipe 28 Toroiding G.I Pipes, specials, and clamps etc. including fixing cutting & fitting complete with and I/c the cost of breaking through walls and roof, making good etc. Painting two coats after cleaning the pipe etc. with white zink paint with pigment to a pressure head of 200 feet and handling. 29 dia G.I pipe 20 Toroiding G.I Pipes, specials, and clamps etc. including fixing with water to a pressure head of 200 feet and handling. 20 Toroiding G.I Pipes, specials, and clamps etc. including fixing with water to a pressure head of 200 feet and handling. 20 Toroiding G.I Pipes, specials, and clamps etc. including fixing with water to a pressure head of 200 feet and handling. 21 Toroiding G.I Pipes, specials, and clamps e		- (-)	VALVES			,	,
i 1/2 inch	20	supply & Sanitary	equivalent complete in all respects as approved by the engineer incharge.				
SOR (Water supply & Sanitary works) Ch 6-6 (iv) 22 SOR (Water supply & Sanitary works) Ch 6-6 (v) 23 SOR (Water supply & Sanitary works) Ch 6-6 (v) 24 SOR (Water supply & Sanitary works) Ch 4-1 (v) 25 SOR (Water supply & Sanitary works) Ch 4-1 (v) 26 SOR (Water supply & Sanitary works) Ch 4-1 (v) 27 SOR (Water supply & Sanitary works) Ch 4-1 (v) 28 SOR (Water supply & Sanitary works) Ch 4-1 (v) 29 SOR (Water supply & Sanitary works) Ch 4-1 (v) 20 SOR (Water supply & Sanitary works) Ch 4-1 (v) 20 SOR (Water supply & Sanitary works) Ch 4-1 (v) 21 SOR (Water supply & Sanitary works) Ch 4-1 (v) 22 SOR (Water supply & Sanitary works) Ch 4-1 (v) 23 SOR (Water supply & Sanitary works) Ch 4-1 (v) 24 SOR (PIE works) Part-B (II) (O-9 (a)) 25 SOR (PIE works) Part-B (II) (O-9 (a)) 26 SOR (PIE works) Part-B (II) (O-9 (a)) 27 SOR (PIE works) Part-B (II) (O-9 (a)) 28 SOR (PIE works) Part-B (II) (O-9 (a)) 29 SOR (PIE works) Part-B (II) (O-9 (a)) 20 SOR (PIE works) Part-B (II) (O-9 (a)) 20 SOR (PIE works) Part-B (II) (O-9 (a)) 20 SOR (PIE works) Part-B (II) (O-9 (a)) 21 SOR (PIE works) Part-B (II) (O-9 (a)) 22 SOR (PIE works) Part-B (II) (O-9 (a)) 23 SOR (PIE works) Part-B (II) (O-9 (a)) 24 SOR (PIE works) Part-B (II) (O-9 (a)) 25 SOR (PIE works) Part-B (II) (O-9 (a)) 26 SOR (PIE works) Part-B (II) (O-9 (a)) 27 SOR (PIE works) Part-B (II) (O-9 (a)) 28 SOR (PIE works) Part-B (II) (O-9 (a)) 29 SOR (PIE works) Part-B (II) (O-9 (a)) 20 SOR (PIE works) Part-B (II) (O-9 (a)) 20 SOR (PIE works) Part-B (II) (O-9 (a)) 20 SOR (PIE works) Part-B (II) (O-9 (a)) 21 SOR (PIE works) Part-B (II) (O-9 (a)) 21 SOR (PIE works) Part-B (II) (O-9 (a)) 22 SOR (PIE works) Part-B (II) (O-9 (a)) 23 SOR (PIE works) Part-B (II) (O-9 (a)) 24 SOR (PIE works) Part-B (II) (O-9 (a)) 25 SOR (PIE works) Part-B (II) (O-9 (a)) 26 SOR (PIE works) Part-B (II) (O-9 (a)) 27 SOR (PIE works) Part-B (II) (O-9 (a)) 28 SOR (PIE works) Part-B (II) (O-9 (a)) 29 SOR (PIE works) Part-B (II) (O-9 (a)) 20 SOR (PIE works) Part-B (II) (ii	3/4 inch	Each	14.00	271.92	3,806.88
SOR (Water supply & Sanitary works) Ch 6-6 (IV) 22 SOR (Water supply & Sanitary works) Ch 6-6 (IV) 23 SOR (Water supply & Sanitary works) Ch 6-6 (IV) 24 SOR (Water supply & Sanitary works) Ch 6-6 (IV) 25 SOR (Water supply & Sanitary works) Ch 6-6 (IV) 26 SOR (Water supply & Sanitary works) Ch 6-6 (IV) 27 SOR (Water supply & Sanitary works) Ch 6-6 (IV) 28 SOR (Water supply & Sanitary works) Ch 6-6 (IV) 29 SOR (Water supply & Sanitary works) Ch 4-1 (IV) 20 SOR (Water supply & Sanitary works) Ch 4-1 (IV) 20 SOR (Water supply & Sanitary works) Ch 4-1 (IV) 21 SOR (Water supply & Sanitary works) Ch 4-1 (IV) 22 In		i	1/2 inch	Each	10.00	200.42	2,004.20
SOR (Water supply & Sanitary works) Ch 6-6 (v) SOR (Water supply & Sanitary works) Ch 4-1 SOR (Water supply & Sanitary works) Ch 4-1 Providing G.I Pipes, specials, and clamps etc. including fixing through walls and roof, making good etc. Painting two coats after cleaning the pipe etc. with white zink paint with pigment to match the color of the building and testing with water to a pressure head of 200 feet and handling. V 1-1/2" dia G.I pipe Rft 150.00 188.97 28,3 Vi 2" dia G.I pipe Rft 110.00 233.00 25,6 Ino. Bore SOR (PHE works) Part-B (II) (O-1 (a)) SOR (PHE works) Part-B (II) (O-9 (a)) SOR (PHE works) Part-B (III) (O-9 (a))	21	supply & Sanitary works) Ch 6-6	Providing, fixing and testing PPRC ball valve 32mm, (with unsoldered copper ball) made to B.B.S 1212.				
SOR (Water supply & Sanitary works) Ch 4-1 V 1-1/2" dia G.I pipe vi 2" dia G.I pipe SOR (PHE works) Part-B (II) (O-9 (a)) SOR (PHE	22	SOR (Water supply &	, , ,	Each	4.00	510.84	2,043.36
supply & Sanitary works) Ch 4-1 to match the color of the building and testing with water to a pressure head of 200 feet and handling. V 1-1/2" dia G.I pipe Rft 150.00 188.97 28,3 vi 2" dia G.I pipe Rft 110.00 233.00 25,6 I no. Bore SOR (PHE Works) Part-B (II) (O-1 (a)) SOR (PHE works) Part-B (II) (O-9 (a))		,		Each	4.00	573.70	2,294.80
vi 2" dia G.I pipe Rft 110.00 233.00 25,6 I no. Bore SOR (PHE works) Part-B (II) (O-1 (a)) SOR (PHE works) Part-B (II) (O-9 (a))	23	supply & Sanitary	cutting & fitting complete with and I/c the cost of breaking through walls and roof, making good etc. Painting two coats after cleaning the pipe etc. with white zink paint with pigment to match the color of the building and testing with water to a				
SOR (PHE works) Part-B (II) (O-1 (a)) SOR (PHE works) Part-B (II) (O-9 (a))		V	1-1/2" dia G.I pipe	Rft	150.00	188.97	28,345.50
SOR (PHE works) Part-B (II) (O-1 (a)) SOR (PHE works) Part-B (II) (O-1 (a)) SOR (PHE works) Part-B (II) (O-9 (a)) SOR (PHE works) Part-B (II) (O-8 (b)) SOR (PHE works) Part-B (II) (O-8 (b)) SOR (PHE works) Part-B (II) (O-8 (b)) SOR (PHE works) Part-B (III) (O-8 (b))		vi	2" dia G.I pipe	Rft	110.00	233.00	25,630.00
24 works) Part-B (II) (O-1 (a)) level upto 100 ft. (30.5 m) depth, including sinking and with drawing of casing pipe:- 3" (80 mm) SOR (PHE works) Part-B (II) (O-9 (a)) SOR (PHE works) Part-B (II) (O-9 (a)) SOR (PHE works) Part-B (II) (O-9 (a)) SOR (PHE works) Part-B (II) (O-8 (b)) SOR (PHE works) Part-B (II) (O-8 (b))			1 no. Bore				
25 Works) Part-B (II) (O-9 (a)) approved design quality and make including necessary sockets and solvent, etc. complete: 3" (80 mm) SOR (PHE works) Part-B (II) (O-8 (b)) (O-8 (b)) (O-8 (b)) (O-8 (b)) (O-8 (b))	24	works) Part-B	level upto 100 ft. (30.5 m) depth, including sinking and with	Rft	150.00	160.00	24,000.00
SOR (PHE works) Part-B	25	works) Part-B	approved design quality and make including necessary				13,308.00
	26	works) Part-B					10,428.00
Total of SOR ITEMS 1.587.3			Total of SOR ITEMS			,	1,587,378.99

CONSTRUCTION OF LIBRARY BLOCK FOR THE LIAQUAT UNIVERSITY OF MEDICIAL & HEALTH SCIENCE JAMSHORO, SINDH

(COVERED AREA = 14,335 Sft)

BILL OF QUANTITIES

PUBLIC HEALTH WORKS

Non-Scheduled Items

Sr. No.	Item No.	Description	Unit	Qty	Rate	Amount
1	NSI	UPVC Multi Floor Trap (110x75mm) including strainer; making required number of connections; breaking concrete or masonry work & then making it good; etc. of approved make.	Each	8.00		
		Providing, Fixing Dadex Class D or equivalent UPVC clean out with cover making requisite number of holes in walls, plinth or floor for pipe connection and making good the same as necessary to the structure complete including, rubber gasket and clamp.				
2	NSI	Draviding and fitting IIDI transii\ 10 are (41) glazad	Each	4.00		
3	NSI	Providing and fitting "P" trap:ii) 10 cm (4") glazed.	Each	37.00		
		Providing and fixing Wall Shower complete in all respects as approved by the Engineer incharge. (Master, Sonex, or Equivalent)				
4	NSI	' '	Each	12.00		
5		WATER SUPPLY PIPES AND FITTINGS P/F Polypropylene Randam copolymer (PPRC) PN-20 pipe with fusion / threaded joints including the cost of all specials/ accessories i.e elbow, bend, sockets etc. (Popular /Beta or equivalent) complete in all respect.				
	i	1 1/2" (50 mm) dia.	Rft	260.00		
	ii	1" (32 mm) dia.	Rft	470.00		
	iii	2" (63 mm) dia.	Rft	220.00		
6	iv	3/4" (25 mm) dia. SOIL, WASTE, VENTILATING PIPES & FITTINGS	Rft	850.00		
0		Providing, fixing and testing UPVC Nikasi type "B" with solution of same quality make including the cost of all specials/ accessories i.e elbow, bend, sockets etc. (Popular/Beta or equivalent) complete in all respect.				
	i	100 mm (4") dia.	Rft	660.00		
	ii	80 mm (3") dia.	Rft	550.00		
	NO	GAS GESYER				
7	NSI	Providing and Fixing Sui Gas Geyser 60 gallon capacity comprising of internal tank of G.I sheet 14-SWG and External M.S sheet 22-SWG covering with proper foot rests dully enamel painted, 4" thick heigh density glass wool insulation with proper warranty with thermostat temperature gauge including fixing and making connection at site etc. complete in all respects as approved by the Engineer Insparage (Ambassador/Eigav/Eigav/Eyguiro)		0.00		
		Incharge. (Ambassador/Firex/Exquire)	No	2.00		

Sr. No.	Item No.	Description	Unit	Qty	Rate	Amount
8	NSI	Providing and Fixing Electric Geyser 20 gallon capacity comprising of internal tank of G.I sheet 14-SWG and External M.S sheet 22-SWG covering with proper foot rests dully enamel painted, 4" thick heigh density glass wool insulation with proper warranty with thermostat temperature gauge including fixing and making connection at site etc. complete in all respects as approved by the Engineer Incharge. (Ambassador/Firex/Exquire)	No	2.00		
9	NSI	Providing and fixing Gate valve 1 bars, RUV(itly) or equivalent complete in all respects as approved by the Engineer incharge.	Each	2.00		
10	NSI	Providing and fixing Gate valve 2 bars, RUV(itly) or equivalent complete in all respects as approved by the Engineer incharge.	Each	2.00		
11	NSI	Providing and fixing of 5.5 HP Centrifugal motor pump having 50mm suction and 100ft head from approved manufacturer complete in all respect as per approval of Engineer Incharge.	Each	2.00		
12	NSI	Supply and fixig, Pressure Booster Pump 0.5 Hp Shahzad company or Equivalent complete in all respects as approved by the Engineer Incharge.	Each	2		
		1 no. Bore				
13	NSI	Supplying and installing PVC blind pipe 'B' Class of approved design quality and make i/c necessary sockets etc. complete.			_	
	а	1¼" i/d (30 mm) 1 x 70	Rft	150.00		
	b	1½" i/d (40 mm) 1 x 40	Rft	150.00		
	С	2" i/d (50 mm) 1 x 50	Rft	150.00		
		Total of Non SOR ITEMS				

BILL OF QUANTITIES

ELECTRICAL WORKS

Rates Based on Composite Schedule of Rate (GENERAL-2012) Sindh

Sr. No.	Item No.	Description	Unit	Qty	Rate	Amount
1		DISTRIBUTION BOARDS				
•		DISTRIBUTION BOARDS				
		(General Description) Supply at site, fabrication, installation, testing				
		and commissioning of Distribution Board (DB), made of sheet steel 16				
		SWG, degreased and derusted, with 2 coats of antirust paint, 2 coats				
		of powder coated paint of approved colour, protection classification IP-				
		44, totally enclosed indoor floor mounting cubicle type in free standing				
		design, with hinged door, handle including cost of all auxiliaries,				
		internal wiring, designation lables on MCCBS, grounding bar suitable	`			
		for system Voltage 440 V, 50 Hz, 3 Phase and neutral bus bars of 99.9% electrolytic copper, including cost of cable terminal blocks				
		wiring from breakers, brass cable glands, all accessories complete in				
		all respects metion in BOQ or not required for performing completely.				
		All incoming and outgoing breakers shall be accessible only by				
		opening the front door having further M.S. sheet cover gaskets shall				
		also be provided where necessary. Panel should be compeltely made				
		in certified factory. ie PEL, Green T & D, Mazcorp enginering or				
		equivalent as per instructions by engineer incharge.				
		(General Description) All MCCBs shall be suitable to operate without				
		any derating at 40°C ambient temperature and shall be of one make				
		only. The sides of MDB shall also have louvers at bottom and top on				
		sides of panel for hot air exhaust, wire mesh etc. The back of the				
		panel shall be lockable door instead of bolted and shall conform to				
		single line diagram. item should be of ABB, Schneider or equivalent as per instructions by engineer incharge				
i)		DISTRIBUTION BOARD DB AC GF				
/		INCOMMING				
_	ELECT SH-	Providing and fixing circuit breaker 125,150,200 & 225 amps TP(XS-				
а	X(208)	225NS) on prepared board as required.	Per No.	1	25541	25,54
b	ELECT SH-	Providing and fixing of current transformer of ration 60/5 amps (round)				
	XV(269)	RLC-30 as required or as per instructed as EI.	Per No.	3	1191	3,57
С	ELECT SH-	Providing and fixing voltmeter size 96/96mm 500 volt as required and				
	XVI(285)	as instruction of El.	Per No.	3	999	2,99
d	ELECT SH-	Providing and fixing circuit breaker 6,10,15,20,30,40,50 & 63 amps	Dor No	2	046	0.74
	X(203)	SP(TB-5S) on prepared board as required. OUTGOING	Per No.	3	916	2,74
	ELECT SH-	Providing and fixing circuit breaker 6,10,15,20,30,40,50 & 63 amps				
е	X(203)	SP(TB-5S) on prepared board as required.	Per No.	6	916	5,49
	ELECT SH-	Providing and fixing circuit breaker 15,20,30,40,50, 75 & 100 amps	. 0		0.0	3,10
f	X(207)	TP(XS-100NS) on prepared board as required.	Per No.	1	9261	9,26
α.	ELECT SH-	Providing and fixing circuit breaker 125,150,200 & 225 amps TP(XS-				
g	X(208)	225NS) on prepared board as required.	Per No.	1	25541	25,54
ii)		DISTRIBUTION BOARD DB- LIGHTING & POWER GF				
	FLEOT C'	INCOMMING				
а	ELECT SH-	Providing and fixing circuit breaker 125,150,200 & 225 amps TP(XS-	Dor Ma	4	05544	05.54
	X(208) ELECT SH-	225NS) on prepared board as required.	Per No.	1	25541	25,54
b	XV(269)	Providing and fixing of current transformer of ration 60/5 amps (round) RLC-30 as required or as per instructed as EI.	Per No.	3	1191	3,57
	ELECT SH-	Providing and fixing voltmeter size 96/96mm 500 volt as required and	i Ci NU.	J	1131	3,37
С	XVI(285)	as instruction of EI.	Per No.	3	999	2,99
	ELECT SH-	Providing and fixing circuit breaker 6,10,15,20,30,40,50 & 63 amps	. 51 1101			2,00
d	X(203)	SP(TB-5S) on prepared board as required.	Per No.	3	916	2,74
		OUTGOING				· · · · · · · · · · · · · · · · · · ·
	ELECT SH-	Providing and fixing circuit breaker 6,10,15,20,30,40,50 & 63 amps				
е	X(203)	SP(TB-5S) on prepared board as required.	Per No.	32	916	29,31

Sr. No.	Item No.	Description	Unit	Qty	Rate	Amount
f		Providing and fixing circuit breaker 15,20,30,40,50, 75 & 100 amps TP(XS-100NS) on prepared board as required.	Per No.	1	9261	9,261

Sr. No.	Item No.	Description	Unit	Qty	Rate	Amount
iii)		DISTRIBUTION BOARD DB- LIGHTING & POWER FF				
		INCOMMING				
а	ELECT SH- X(207)	Providing and fixing circuit breaker 15,20,30,40,50, 75 & 100 amps TP(XS-100NS) on prepared board as required.	Per No.	1	9261	9,261
	ELECT SH-	Providing and fixing of current transformer of ration 60/5 amps (round)	Per No.	ı	9201	9,201
b	XV(269)	RLC-30 as required or as per instructed as EI.	Per No.	3	1191	3,573
	ELECT SH-	Providing and fixing voltmeter size 96/96mm 500 volt as required and	1 01 110.		1131	0,070
С	XVI(285)	as instruction of EI.	Per No.	3	999	2,997
d		Providing and fixing circuit breaker 6,10,15,20,30,40,50 & 63 amps	Per No.	3	916	2.740
	X(203)	SP(TB-5S) on prepared board as required. OUTGOING	Per No.	<u> </u>	910	2,748
е	ELECT SH-	Providing and fixing circuit breaker 6,10,15,20,30,40,50 & 63 amps		00	040	00.450
:	X(203)	SP(TB-5S) on prepared board as required.	Per No.	22	916	20,152
iv)		DISTRIBUTION BOARD DB- AC FF				
		INCOMMING				
а	ELECT SH- X(208)	Providing and fixing circuit breaker 125,150,200 & 225 amps TP(XS-225NS) on prepared board as required.	Per No.	1	25541	25,541
	ELECT SH-	Providing and fixing of current transformer of ration 60/5 amps (round)	Pel No.	ı	25541	25,541
b	XV(269)	RLC-30 as required or as per instructed as EI.	Per No.	3	1191	3,573
	ELECT SH-	Providing and fixing voltmeter size 96/96mm 500 volt as required and				0,0.0
С	XVI(285)	as instruction of EI.	Per No.	3	999	2,997
		Providing and fixing circuit breaker 6,10,15,20,30,40,50 & 63 amps				•
d	X(203)	SP(TB-5S) on prepared board as required.	Per No.	3	916	2,748
		OUTGOING				
0	ELECT SH-	Providing and fixing circuit breaker 6,10,15,20,30,40,50 & 63 amps				
е	X(203)	SP(TB-5S) on prepared board as required.	Per No.	7	916	6,412
f	ELECT SH-	Providing and fixing circuit breaker 15,20,30,40,50, 75 & 100 amps				
·	X(207)	TP(XS-100NS) on prepared board as required.	Per No.	4	9261	37,044
2		WIRING IN CONCEALED CONDUITS				
i)		Distribution board to Switch				
		(General Description) Wiring of light circuit from Distribution Board to				
		switch, with Three nos. single core 2.5 Sqmm PVC insulated 450/750				
		volts grade stranded copper conductor cables in concealed PVC				
		conduits (conduits partly shared) including PVC conduit, and conduit				
		accessories etc. Cable should be of Newage, Fast cable, Universal				
		cables or equivalent and conduit should be of Dadex, Turkplast,				
		Easyfit or equivalent as per instructions by engineer incharge				
		Providing and laying (main or Sub Main Pvc insulated with 3-7.29				
а	ELECT SH-(24)	copper conductor in 3/4" dia PVC conduit recessed in the wall or				
ŭ	22201 011 (21)	column as required.	Rmtr	1000	294.00	294,000
ii)		Switch to light point				
,		(General Description) Wiring from switch to light or fan point with 3				
		nos. single core 1.5 Sqmm PVC insulated 450/750 Volts grade				
		·				
		stranded copper conductor cables in concealed PVC conduit including				
		PVC conduit, Conduit accessories,etc.(conduit partly shared).				
	ELECT OLL (404)	Witten of Links and for a circle with 0.00 Page in culots device in 0.00				
а	ELECT SH-(124)	Wiring of Light and fan point with 3.29 Pvc insulated wire in 20mm	Day/Daint	404	4 400 00	405.000
		(3/4") dia PVC conduit recessed in the wall or column as required.	Per/Point	164	1,130.00	185,320
		Point to point wiring Providing and laying (main or Sub Main Pvc insulated with 3-3.29				
b	ELECT SH-(22)	copper conductor in 3/4" dia PVC conduit recessed in the wall or				
0	ELECT 311-(22)	column as required.	Rmtr	1284	220.00	282,480
iii)		Switch to Switch	IXIIIU	1204	220.00	202,400
··· <i>)</i>		(General Description) Wiring from switch to switch with 3 nos. single			 	
		core 2.5 Sqmm PVC insulated 450/750 Volts grade stranded copper				
		conductor cables in concealed PVC conduit including PVC conduit,				
		Conduit accessories,etc.(conduit partly shared).				
		Providing and laying (main or Sub Main Pvc insulated with 3-7.29			 	
а	ELECT SH-(24)	copper conductor in 3/4" dia PVC conduit recessed in the wall or				
~		column as required.	Rmtr	280	294.00	82,320

Sr. No.	Item No.	Description	Unit	Qty	Rate	Amount
iv)		Distribution board to General Purpose (5A/13A) socket				
		(General Description) Wiring of circuit from Distribution Board to				
		5A/13A ,230Volts with 3 nos. single core 2.5 Sqmm PVC insulated				
		450/750 Volts graded, 2&3 pin switched socket, stranded copper				
		conductor cables in concealed PVC conduit, including conduit				
		accessories, etc(conduit partly shared)				
		Providing and laying (main or Sub Main Pvc insulated with 3-7.29				
а	ELECT SH-(24)	copper conductor in 3/4" dia PVC conduit recessed in the wall or				
,		column as required.	Rmtr	680	294.00	199,920
v)		Socket to Socket				
		(General Description) Wiring from 5 Amps, 2&3 pin socket to socket				
		with 3 nos. single core 2.5 Sqmm PVC insulated 450/750 Volts grade				
		solid or stanerd copper conductor cables in concealed PVC conduit				
		including PVC conduit, Conduit accessories, etc complete. (conduit				
		partly shared)				
	ELECT OF (34)	Providing and laying (main or Sub Main Pvc insulated with 3-7.29 copper conductor in 3/4" dia PVC conduit recessed in the wall or				
а	ELECT SH-(24)	column as required.	Rmtr	126	294.00	37,044
vi)		Distribution board to 20Amps socket	Killu	120	294.00	37,044
VI)		(General Description) Wiring of circuit from distribution board to				
		20A, 230Volts, DP switch with 3 or 5 nos. single core 6 Sqmm PVC				
		insulated 450/750 Volts grade stranded copper conductor cables in				
		concealed PVC conduit including PVC conduit, Conduit accessories,				
		etc (conduit partly shared for A/Cs)				
		Providing and laying (main or Sub Main Pvc) insulated with 3-7.44				
а	ELECT SH-I(26)	copper conductor in 1" dia PVC conduit recessed in the wall or column				
ű	` '	as required.	Rmtr	40	468.00	18,720
		Providing and laying (main or Sub Main Pvc) insulated with 4-7.44			100.00	.0,.20
b		copper conductor in 1-1/2" dia PVC conduit recessed in the wall or				
		column as required.	Rmtr	280	613.00	171,640
vii)		Wiring for flood lights				,
,		Providing and laying (main or Sub Main Pvc) insulated with 3-7.36				
а	ELECT SH-I(25)	copper conductor in 3/4" dia PVC conduit recessed in the wall or				
	` ,	column as required.	Rmtr	140	338.00	47,320
3		LT Cables				·
		Providing and Laying (MAIN or SUB MAIN) PVC insulated & PVC				
i)	ELECT SH-(113)	sheeted with 4 core Armoured copper conductor 600/1000 volts size				
		16 mm2	Per Meter	10	1,679.00	16,790
		Providing and Laying (MAIN or SUB MAIN) PVC insulated & PVC				
ii)	ELECT SH-(116)	sheeted with 4 core Armoured copper conductor 600/1000 volts size				
		50 mm2	Per Meter	70	3,910.00	273,700
		Providing and Laying (MAIN or SUB MAIN) PVC insulated & PVC				
iii)	ELECT SH-(119)	sheeted with 4 core Armoured copper conductor 600/1000 volts size				
		120 mm2	Per Meter	60	9,606.00	576,360
4		MISCELLANEOUS FITTINGS				
ii)	ELECT SH(235)	Providing and fixing brass Ceiling fan 56" (good quality)	Per No.	41	3,185.00	130,585
		Total of SOR Items	. 3 101		5,755.00	·
		Total of SON Items				2,581,834

BILL OF QUANTITIES

ELECTRICAL WORKS

Non-Scheduled Items

Sr. No.	Item No.	Description	Unit	Qty	Rate	Amount
01.110.	item ite.	Description	Onne	Q.y	Nato	Amount
1		DISTRIBUTION BOARDS				
		(General Description) Supply at site, fabrication, installation, testing and commissioning of Distribution Board (DB), made of sheet steel 16 SWG, degreased and derusted, with 2 coats of antirust paint, 2 coats of powder coated paint of approved colour, protection classification IP-44, totally enclosed indoor floor mounting cubicle type in free standing design, with hinged door, handle including cost of all auxiliaries, internal wiring, designation lables on MCCBS, grounding bar suitable for system Voltage 440V, 50 Hz, 3 Phase and neutral bus bars of 99.9% electrolytic copper, including cost of cable terminal blocks wiring from breakers, brass cable glands, all accessories complete in all respects metion in BOQ or not required for performing completely. All incoming and outgoing breakers shall be accessible only by opening the front door having further M.S. sheet cover gaskets shall also be provided where necessary. Panel should be compeltely made in certified factory. ie PEL, Green T & D, Mazcorp engineering or equivalent as per instructions by engineer				
		(General Description) All MCCBs shall be suitable to operate without any derating at 40°C ambient temperature and shall be of one make only. The sides of MDB shall also have louvers at bottom and top on sides of panel for hot air exhaust, wire mesh etc. The back of the panel shall be lockable door instead of bolted and shall conform to single line diagram. item should be of ABB, Schneider or equivalent as per instructions by engineer incharge				
i)		DISTRIBUTION BOARD DB AC GF				
	NSI	Providing and fixing of Metal Clad, free standing, front access, totally enclosed, frame febrecated from 14/16 SWG, MS sheet with surface treatment Powder Coated Paint RAL 7035, Texture White, Suitable for system voltage 400/230, 50HZ, 3 Phase Copper bus bar, Neutral bus bar, Earting bus bar and internally wired., Mechanical interlocking for MCCBs, 03 No Phase Indication Lights, 220 VAC (R-Y-B) 01 No Digital Ampere Meter,01 No Ampere Selector Switch,03 No CTs 200/5A Wall Mounted DB Panel In door Type (Suitable Size) complete in all respect as approved or directed by engineer incharge.	Job	1		
ii)		DISTRIBUTION BOARD DB- LIGHTING & POWER GF				

Sr. No.	Item No.	Description	Unit	Qty	Rate	Amount
	NSI	Providing and fixing of Metal Clad, free standing, front access, totally enclosed, frame febrecated from 14/16 SWG, MS sheet with surface treatment Powder Coated Paint RAL 7035, Texture White, Suitable for system voltage 400/230, 50HZ, 3 Phase Copper bus bar, Neutral bus bar, Earting bus bar and internally wired., Mechanical interlocking for MCCBs, 03 No Phase Indication Lights, 220 VAC (R-Y-B) 01 No Digital Ampere Meter,01 No Ampere Selector Switch,03 No CTs 200/5A Wall Mounted DB Panel In door Type (Suitable Size) complete in all respect as approved or directed by engineer incharge.	Job	1		
iii)		DISTRIBUTION BOARD DB- LIGHTING & POWER FF				
ivl	NSI	Providing and fixing of Metal Clad, free standing, front access, totally enclosed, frame febrecated from 14/16 SWG, MS sheet with surface treatment Powder Coated Paint RAL 7035, Texture White, Suitable for system voltage 400/230, 50HZ, 3 Phase Copper bus bar, Neutral bus bar, Earting bus bar and internally wired., Mechanical interlocking for MCCBs, 03 No Phase Indication Lights, 220 VAC (R-Y-B) 01 No Digital Ampere Meter,01 No Ampere Selector Switch,03 No CTs 200/5A Wall Mounted DB Panel In door Type (Suitable Size) complete in all respect as approved or directed by engineer incharge. DISTRIBUTION BOARD DB- AC FF	Job	1		
iv)						
	NSI	Providing and fixing of Metal Clad, free standing, front access, totally enclosed, frame febrecated from 14/16 SWG, MS sheet with surface treatment Powder Coated Paint RAL 7035, Texture White, Suitable for system voltage 400/230, 50HZ, 3 Phase Copper bus bar, Neutral bus bar, Earting bus bar and internally wired., Mechanical interlocking for MCCBs, 03 No Phase Indication Lights, 220 VAC (R-Y-B) 01 No Digital Ampere Meter,01 No Ampere Selector Switch,03 No CTs 200/5A Wall Mounted DB Panel In door Type (Suitable Size) complete in all respect as approved or directed by engineer incharge.	Job	1		
		LIGHT FIVELIDES				
2		LIGHT FIXTURES (General Description) Supply, installation, testing and commissioning of following light fittings, ceiling, recessed, wall mounted as per specified fixture. Complete with internal wiring, Grounding terminal, driver complete in all respects. Lights should be of Phillips, ledvance, Sky LED or equivalent.				
i)	NSI	24 Watt (White) LED Light Fixture surface/recessed mounted, IP-22 rated	No.	276		
ii)	NSI	18 Watt (White) LED Light Fixture surface/recessed mounted, IP-22 rated		5		
iii)	NSI	12 Watt LED Light Fixture surface/recessed mounted, IP-22 rated	No.	30		
iv)	NSI	20 Watt Flood lights	No.	8		
17)	1101	Lo Tratt I lood lighto	110.			

Sr. No.	Item No.	Description	Unit	Qty	Rate	Amount
3		MISCELLANEOUS FITTINGS				
		(General Description) Supply, installation, testing &				
		commissioning of Ceiling/ Exhaust fan. The ceiling/exhaust				
		fan shall comprise circular fan metallic/ plastic body, metallic				
		fan blades, down rod (if necessary) of suitable dia & length,				
		AC capacitor, internal wiring, terminals all installation &				
		operational accessories as per tender specifications, as per				
		site requirements and as per instructions by the Engineer.				
		make GFC, Pak Fan, Royal Fan or approved equivalent.				
i)	NSI	10 " outer dia exhaust fan with plastic body,fan blades and				
•,		louvers	No.	14		
4		WIRING ACCESSORIES				
		(General Description) Supply at site, installation, testing and				
		commissioning of the following wiring accessories, complete				
		in all respects. Made of TJ, Legrand or approved equivalent.				
i)	NSI	10 Amps, 250Volts one way, One gang light control switches				
,		including appropriate size concealed Plastic back box.	No.	12		
ii)	NSI	10 Amps, 250Volts one way, Two gang light control switches		12		
,		including appropriate size concealed Plastic back box.	No.	7		
iii)	NSI	10 Amps, 250Volts one way, Three gang light control	INO.	,		
,		switches including appropriate size concealed Plastic back				
		box.	No.	10		
iv)	NSI	10 Amps, 250Volts one way, Four gang light control switches				
		including appropriate size concealed Plastic back box.	No.	15		
v)	NSI	10 Amps, 250Volts one way, Five gang light control switches				
		including appropriate size concealed Plastic back box.	No.	7		
vi)	NSI	10 Amps, 250Volts one way, Six gang light control switches				
		including appropriate size concealed Plastic back box.	No.	9		
vii)	NSI	13 Amps, 250Volts, 3 pin flat switch socket single outlet				
		including appropriate size Plastic back box.	No.	35		
viii)	NSI	20A DP Switch with Neon & Earth including appropriate size				
	1101	Plastic back box.	No.	1		
ix)	NSI	45A TP breaker with appropriate size Plastic cover box.	No.	7		
x)	NSI	1Gang Cat-6 RJ45 Data Outlet	No.	21		
xi)	NSI	Fan Dimmer 250 watt with switch including appropriate size				
•••	1	Plastic back box. with all associated accessories.	No.	41		
xii)	NSI	Appropriate size of plastic body fan box and ceiling fan rod 24"	NI	4.4		
\.;!!\	NO	in length	Nos	41		
xiii) 5	NSI	MS BAR for hanging Ceiling fan	Nos	41		
		GROUNDING CANA				
i)		GROUNDING cable				

Sr. No.	Item No.	Description	Unit	Qty	Rate	Amount
		Supply at site, installation, testing and commissioning of PVC insulated non armoured copper conductor cable 450/750 Volt grade (or otherwise mentioned in cable description) in prelaid conduits / trenches to be installed as per routes shown on drawings including cost of all necessary materials, connections, identification tags, cables lugs properly crimped at both ends for the following sizes complete in all respects.				
		Actual length of cables to be installed shall be practically measured at site by the Contractor, duly authenticated by the Engineer before placing the order with the manufacturer, however, approximate length of cables are shown herewith. Payments shall be made as per actual length installed. Cable should be of FAST, Newage or universal cables and conduit should be of Solo,popular,easyfit or equivalent as approved by engineer incharge				
	NSI	Supply and erection of single core PVC insulated, PVC sheathed copper conductor, 450/750 volts grade cable, in prelaid G.I. pipe/M.S. conduits/PVC pipe/G.I. wire/trenches, etc (rate for cable only):-				
a	NSI	6 mm sq (7/0.044") Supply and erection of single core PVC insulated, PVC sheathed copper conductor, 450/750 volts grade cable, in prelaid G.I. pipe/M.S. conduits/PVC pipe/G.I. wire/trenches, etc (rate for cable only):-		290		
b	NSI	10 mm sq (7/0.052") Supply and erection of single core PVC insulated, PVC	rmtr	70		
	INSI	sheathed copper conductor, 450/750 volts grade cable, in prelaid G.I. pipe/M.S. conduits/PVC pipe/G.I. wire/trenches, etc (rate for cable only):-				
С 6		16 mm sq (7/0.064") Earthing	rmtr	60		
0	NSI	Supply, installation, testing and commissioning of earthing system for protecting Earthing of Rod 19 mm 10 ft long with bare solid Earth conductor 1 x 35sq.mm upto earth connecting point, inspection chamber, marconite concrete, drilling etc, to achieve less than 3 ohms specified Earthing results. complete in all respect as per drawing and		4		
7		specification or as per directed by Engineer. Fire Alarm System	Each	1		
		(General Description) Supply, installation, testing and commissioning of following items as per drawings, specifications, & instructions of the Engineer, complete in all respect, all item should be of Gent by honeywell, ETON uk, TNA UK or approved equivalent as per instructions by the Engineer as required.				
i)	NO	Manual Call Point				
	NSI	Supply, install testing and commsiong of Addressable Manual Call Point Flush Mount Resetable Call Point, supplied with resetable key. Optional Accessories: TX7140-MB Surface Mount Back Box, TX7140-PFC Protective Flip Cover. Make:TNA UK or equivalent complete in all respect as approved or directed by engineer incharge.		2		
ii)		Smoke Detector		_		

Sr. No.	Item No.	Description	Unit	Qty	Rate	Amount
	NSI	Supply, install testing and commsiong of Photoelectric type				
		Fastest resoponse to slow burning or smoldering fires,				
		reliable early detection Smart drift compensation, auto compensate for dust or other environmental changes that				
		affect the performance Stability & prevent fault alarm 360-				
		degree visual indicator Support remote indicator				
		output.Accessories: Base: TX7980 Standard Addressable Base, TX7322 Addressable Sounder Base, TX7232 Base				
		Mount Short Circuit Isolator , TX7302 Addressable Flashing				
		Beacon Base Standard base for addressable detectors				
		Make:TNA UK or equivalent complete in all respect as approved or directed by engineer incharge.				
		approved or directed by engineer incharge.	Each	32		
iii)		Sounder		<u> </u>		
-	NSI	Supply, install testing and commsiong of Addressable				
		Sounder 17 sound tones selection Loop powered Low and normal consumption mode Up to 102dB at 1 meter				
		Make:TNA UK or equivalent complete in all respect as				
		approved or directed by engineer incharge.	Each	2		
iv)		<u>FACP</u>				
	NSI					
		Supply, install testing and commsiong of Addressable Fire				
		Alarm Control Panel 1 loop. Fire alarm control panel, indicate fire and fault status LCD screen provide real time system &				
		devices information, easy operation and maintainance PC				
		and keypad programming & control, user firendly Built-in				
		Panel Printer, NC7004 Communication Card Outer glass door				
		Wall-mounted Cabinet Size (W X H X D mm): 530 mm x 490 mm x 135 mm Optional Accessories: TX7814 Dongle for TX7,				
		Batteries Make:TNA UK or equivalent complete in all respect				
		as approved or directed by engineer incharge.	Each	1		
v)	NO	Cable				
	NSI	Supply, install testing and commsiong of 2 x 2.5 mmsq shielded drain wire, 30 minutes fire resistance, red, LPCB				
		approved, BS 7629-1/2008, BS 5839-1 standard.(Newage,				
		Pakistan Cable, Fast or approved equivalent). as per	Б.,			
vil		instructions by engineer incharge. Conduit	Rmtr	220		
vi)	NSI	Supply and erection of PVC pipe for wiring recessed in				
		walls,including inspection boxes, pull boxes, hooks, cutting				
		jharriesand repairing surface, etc., complete with all				
vii)		specials.25 mm i/d Programming, Testing and Commissioning	R.Mtr	220		
VII)	NSI	Programming, Testing and Commissioning of Complete				
		system by authorized certified company complete in all				
		respects as per instructions of the Engineer.	Job	1		
viii)	NSI	Fire Extinguishers Supply & installation of Dry Chemical Powder (M.S-Steel):				
	1401	Providing of New Fire Extinguisher Dry Chemical Powder				
		(DCP) with one year warranty and filled with Nitrogen				
		pressure along with Wall hook and discharge pipe. Complete				
		in All respects.as approved or directed by engineer incharge.	Noc	4		
8		Camera System	Nos.	4		
i)		Camera Cable				

Sr. No.	Item No.	Description	Unit	Qty	Rate	Amount
	NSI	Supply, installation, Testing and commissioning of CAT 6 UTP CABLE IN prelaid PVC PIPE Ø 1"; MEASUREMENT IN METERS complete in all respects. Made of Hikvision,D-Link or equivalent approved by engineer incharge	R.Mtr	625		
ii)		Conduit	N.IVIU	023		
	NSI	Supply and erection of PVC pipe for wiring on surface including inspection boxes, pull boxes, bends, tees, repairing surface, etc., complete with all specials: 25 mmi/d made of easyfit, popular or equivalent as approved or directed by engineer incharge.	R.Mtr	635		
iii)		Optical Fibre				
	NSI	Supply, Installation and commissioning of Black Copper 24- Core Fiber Cable Single Mode Imported Cable top performance cable with good material quality, in prelaid cable tray from Main Cabinet to Floor Level Cabinets, including all accessories, model no BCGYXTW24B1 or equivalent complete in all respect as approved and directed by the Engineer Incharge.	R.Mtr	10		
iv)		Cameras				
	NSI	Supply, installation & connecting 4MP Fixed Bullet Network Camera High quality imaging with 4 MP resolution Efficient H.265+ compression technology Clear imaging even with strong back lighting due to 120 dB WDR Water and dust resistant (IP67) EXIR 2.0: advanced infrared technology with long IR range -UF: Built-in microphone for real-time audio security,made of AXIS Europe/NOVAS Europe/Avigilon by Motorla, Hikvision model number2cd1043g0-i, USA/Bosch Germany, Pollo Australia or equivalent, as approved as directed by the Engineer Incharge.				
		CCTV Cabinet	Each	18		
v)	NSI	Supply , installation of wall mounted CCTV Cabinet comprising of Powder Coated M.S frame, front glass & two side openings, with all necessary accessories/ materials, complete in all respects. Made of Bosch/ HP / Dell , Pollo Australia, or equivalent or as approved and directed by Engineer Incharge(i) 12U	Each	2		
vi)		Cable Manager	24011			
	NSI	Supply and installation of Cable Metal Organizer, 19" Rack mounted with high graded epoxy powder coating and slideable top- UL Listed. Made of Schneider/i-Connect UK/3M Corning: Pollo Australia or equivalent as approved and directed by the Engineer Incharge	Each	2		
vii)		Patch Panel				
	NSI	Supply and installation of CAT-6 (24 Port Patch Panel with Toolless Support 10-Gigabit). UTP Patch Panel with specified toolless support & Rear Cable Management, UL listed, Loaded with UTP of specified Keystone Jack Toolless Support, Made of Schneider / Norden /3M Corning/D-Link, Pollo Australia or equivalent or as Approved and Directed by Engineer Incharge.	Each	2		
viii)	_	PDU				
	NSI	Supply & Installation of PDU as approved or directed by engineer incharge.	Each	2		
ix)		24 Port PoE Data Switch				

Sr. No.	Item No.	Description	Unit	Qty	Rate	Amount
	NSI	Supply, Installation and Connection of Hikvision 24 Port Gigabit Unmanaged POE Switch, 24 × Gigabit PoE ports, 2 × Gigabit SFP fiber optical ports, IEEE 802.3at/af standard, 6 KV surge protection for PoE ports, PoE power management, Gigabit network access, MAC Address Table: 8 K, Switching Capacity: 52 Gbps, Packet Forwarding Rate: 38.688 Mpps, Internal Cache: 4.1 Mbits, Wire-speed forwarding, Store-and-forward switching, Solid high-strength metal shell made of Hikvision Model no DS-3E0526P-E/M,				
		Huawei, Cisco USA or equivalent as approved or directed by engineer incharge.	Each	2		
x)		NVR	Lacii			
,	NSI	Supply & Installation of model number 7732nxi-i4/s 32 channel Hikvision 1.5U AcuSense 4K NVR, up to 1-ch facial recognition, HDMI and VGA output, Incoming bandwidth 160 Mbps, Outgoing bandwidth 256 Mbps, Up to 4 SATA interfaces for HDD connection (up to 10 TB capacity per HDD)r complete in all respect. made of Hikvision, AXIS Europe/NOVAS Europe/Avigilon by Motrola USA /Huawei, Pollo Australia or equivalent as approved and directed by the Engineer Incharge		1		
xi)		Hard Drive				
	NSI	Supply, Installation and Connection of WD 4TB WD42PURU-64C4CY0 Western Digital 4TB WD Purple Surveillance Internal Hard Drive HDD - SATA 6 Gb/s, 256 MB Cache, 3.5",5640 rpm, 128 MB buffer made of WD, Pollo Australia or equivalent, as approved and directed by Engineer Incharge.	Each	1		
xii)		LED				
	NSI	Supply and Installation of 32" LED FHD Monitor, HDMI × 1, VGA × 1, Audio × 1,2 × 2W, 6.91kg net weight,0°C to 50°C operating temperature,<32w power consumption, AC 100 to 240V, 50/60Hz power supply make Uniview model number MW3232-V-K, TCL, Ecostar or equivalent as approved or directed by engineer incharge.	Each	1		
xiii)		HDMI	Lacii	,		
,	NSI	Supply, Installation of HDMI hikvision fibre 4K length 10 meters as approved or directed by engineer incharge.	Each	1		
9 i)		Data System Data Cable				
1)	NSI	Supply, installation, Testing and commissioning of CAT 6 UTP CABLE IN prelaid PVC PIPE Ø 1"; MEASUREMENT IN METERS complete in all respects. Made of Hikvision,D-Link or equivalent approved by engineer incharge		735		
ii)		Conduit	TAIVIU	700		
iii)	NSI	Supply and erection of PVC pipe for wiring recessed in walls,including inspection boxes, pull boxes, hooks, cutting jharriesand repairing surface, etc., complete with all specials.25 mm i/d PDU		735		
ŕ	NSI	Supply & Installation of PDU as approved or directed by engineer incharge.	Each	1		
iv)		24 Port PoE Data Switch				

Sr. No.	Item No.	Description	Unit	Qty	Rate	Amount
	NSI	Supply, Installation and Connection of Hikvision 24 Port Gigabit Unmanaged POE Switch, 24 × Gigabit PoE ports, 2 × Gigabit SFP fiber optical ports, IEEE 802.3at/af standard, 6 KV surge protection for PoE ports, PoE power management, Gigabit network access, MAC Address Table: 8 K, Switching Capacity: 52 Gbps, Packet Forwarding Rate: 38.688 Mpps, Internal Cache: 4.1 Mbits, Wire-speed forwarding, Store-and-forward switching, Solid high-strength metal shell made of Hikvision Model no DS-3E0526P-E/M, Huawei, Cisco USA or equivalent as approved or directed by				
		engineer incharge.	Each	1		
v)	NCI	Wifi Router				
	NSI	Supply, Installation and commissioning of wifi router as per specification as approved or directed by engineer incharge.	Each	6		
10 i)		CIVIL WORKS Trench				
'/	NSI	Trenon				
::\		Labour for excavation and refilling of trench 12" wide, 36" deep 4" sand, bricks and warning tape. Compaction below and above preinstalled PVC pipes if any, ramming watering all necessary material, labour etc, complete in all respect. Actual length of the trench shall be as per site condition and paid accordingly however approximate length of trench is given, as approved and directed by engineer incharge.		50		
ii)	NSI	Manhole For LT Cable Pulling (If Required) Construction of manholes to facilitate pulling of cables in				
		trench or conduit as shown on drawing, manholes shall be of the size 24" x 24" x 30" deep with 9" thick wall with cement mortar, internal plaster 1:4, 100mm thick RCC cover for manhole, including cost of all accessories / materials, complete in all respects. (Tentative number of manholes have been provided, however payment shall be made as per actual and as per quantity requirement)		2		
11		Air Conditioning				
		(General Description) Providing, shifting, fixing, testing, commissioning, adjusting and balancing of standard (Cool only) DC inverter technology air condictioning units, including indoor evaporating and out door condensing unit, the indoor units wall mounted of capacities as specified below, complete with factory charged refrigerant, piping insulation including condensate copper piping connection, between indoor/outdoor units conduiting and any additional charge of refrigerant accessories, and Drain piping upto nearest drain water line included in these rates making the job complete in all respect. AC should be of Haier,dawlance, gree or equivalent, copper piping should be of muller, trox and insulation of Durkflex or equivalent, Drain pipe should be 3/4" dia pvc pipeof master, turkplast or equivalent as per instructions by engineer incharge				
		(General Description) 1/4 and 1/2 copper piping shouls be used till 1.5 ton AC and 5/8 and 3/8 piping should be used for				
		2 ton AC and 3/8 and 1/2 for 4 ton AC between indoor and outdoor unit.				
		(General Description) The AC Unit should maintain approx 11 BTU per cubic feet plus addition of 3000BTU in the total amount for persons and devices				
i)		Copper pipe				

Sr. No.	Item No.	Description	Unit	Qty	Rate	Amount
а	NSI	Supply ,installation testing and commissioning of Copper piping 1/4 insulation and control wire including making jharies and repairing of surface with all neccessary item job must be complete in all respect	RFT	20		
b	NSI	Supply ,installation testing and commissioning of Copper piping 1/2 insulation and control wire including making jharies and repairing of surface with all neccessary item job must be complete in all respect	RFT	160		
b	NSI	Supply ,installation testing and commissioning of Copper piping 3/8 with insulation and control wire including making jharies and repairing of surface with all neccessary item job must be complete in all respect	RFT	140		
ii)		Drain Pipe				
	NSI	Providing, laying, testing and commissioning of 1/2" µ-PVC (Un plasticized Polyvinyl Chloride) Schedule pipe of nominal diameter, Dadex/Popular / Beta or approved equivalent manufacturer, i/c the cost of solvent and specials complete as approved and directed by the Engineer Incharge.	RMTR	50		
iii)		Control Cable				
	NSI	Supply and erection of copper conductor cables for serviceconnection, in prelaid pipe/G.I. wire/trenches, etc. (rate for cable only):- b) PVC insulated, PVC sheathed 3 core flexible cable, 300/500 volt cable: iii) 7/0.74 mm (7/0.029")	Rmtr	50		
iv)	1101	Copper pipe insulation				
	NSI	Supply & installation closed cell type Aluminium foil faced XLPE (Cross linked polyethelene) polyolefin pipe insulation tube of density 25 Kg/m³ of specified thickness & thermal conductivity 0.035 w/m °C and fire retardent of Class "o" rating as specified for refrigerant copper piping as approved by the Engineer Incharge. a) 20 mm thick				
а	NSI	1/4" dia	RFT	20		
a	NSI	1/2" dia	RFT	160		
b	NSI	3/8" dia	RFT	140		
12		Duct panel Supply at site and installation of duct panel on wall where necessary made of popular, dadex, turkplast or equivalent as approved or directed by engineer incharge.				
а	NSI	16 x 25 mm	Rmtr	50		
b	NSI	25 x 25 mm	Rmtr	50		
13		CLAMPS AND FIXING ARRANGEMENTS CLAMPS IN IDEA TO THE PROPERTY OF THE PROPERTY				
		Supply, installation, testing and commisiioning of following conduits laid under floor for telephone/ data cables, optical fiber cables, Sub main power cables & earth cables including all conduit accessories. The PVC conduits shall be laid under floor including chiseling and cutting of floor for required dimensions, laying of conduit, backfilling of remaining cavity with CC as specified for floor in that area, making good, complete in all respect. conduit made of solo, popular, easyfit or equivalent as approved by engineer incharge.				

Sr. No.	Item No.	Description	Unit	Qty	Rate	Amount
i)	NSI	Supply and erection of PVC pipe for wiring recessed in wall including inspection boxes, pull boxes, bends, tees, repairing surface, etc., complete with all specials:made of easyfit, popular or equivalent as approved or directed by engineer incharge. 25 mmi/d		50		
ii)		Supply and erection PVC pipe for recessed wiring (main and sub-main) purpose, including bends, specials, etc. in floor, wall or trenches:				
а	NSI	50 mm i/d	R.Mtr	10		
b	NSI	80 mm i/d	R.Mtr	70		
С	NSI	100 mm i/d	R.Mtr	60		
Total of Non-SOR Items						