

Standard Bidding Document

Construction of Aviation Complex at Blue Area, Islamabad
(Works)

International

Single Stage-Two Envelope



August 28, 2026

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REQUEST FOR BIDS

PROCUREMENT OF CIVIL WORKS

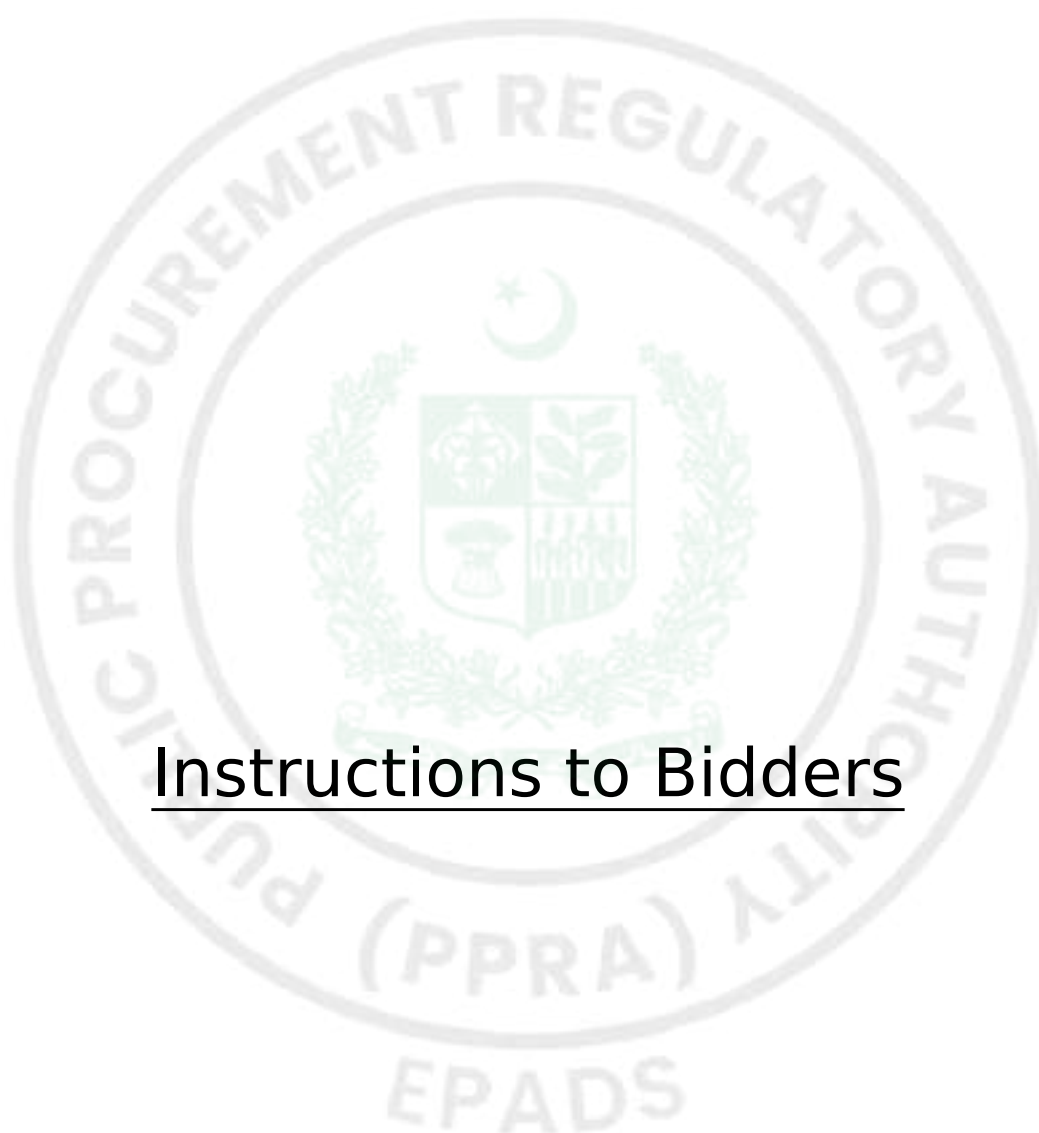
1. The **Pakistan Airports Authority (Planning & Development Directorate)** has reserved Funds for the procurement planned for FY **2026-27**. The **Pakistan Airports Authority (Planning & Development Directorate)** intends to apply part of the proceeds of this Fund to cover eligible payments under the contract for the "**Construction of Aviation Complex at Blue Area, Islamabad**" with the reference of "**P73078**".
2. The **Pakistan Airports Authority (Planning & Development Directorate)** invites electronic Bids from eligible Bidders for procurement of Works (**Construction of Aviation Complex at Blue Area, Islamabad**) described in the bidding documents on **EPADS v2.0**.
3. **Single Stage-Two Envelope** will be used by adopting **Least Cost Based Selection (LCBS)** Technique for the subject procurement, in line with the Public Procurement Rules, 2004 and any Regulations, Regulatory Guides, Procurement Guidelines or Instructions issued by the Authority from time to time.
4. All Bids must be accompanied by a Bid Security amounting described in Bid Security Section in Bidding Document in the form of **Bank Guarantee**. Or all bids must be accompanied by bid securing declaration in the format specified in the Bidding documents
5. E-Bidding documents, containing detailed terms & conditions, specifications and requirements etc. are available on **e-Pak Acquisition and Disposal System (EPADS)** at **<https://epads.gov.pk/opportunities/federal/procurements/73078>** for all the interested bidders registered on **EPADS v2.0**. Bidders are required to get themselves registered on **EPADS v2.0** to participate in Bidding process.
6. The e-bids, prepared in accordance with the instructions in the e-Bidding documents, must be submitted through **EPADS v2.0** on or before **Thursday, October 8, 2026 11:00 AM**. E-bids will be opened by using **EPADS v2.0** on the same day at **Thursday, October 8, 2026 11:30 AM**. Manual submission

of Bids shall not be entertained. Those vendor who have not yet registered on the new version of **EPADS v2.0**, may register themselves on <https://pa.epads.gov.pk/>. A tutorial to explain the registration process is available at <https://www.youtube.com/watch?v=MNW6T38v7tc>.

In terms of Rules 48 of Public Procurement Rules, 2004 Grievance Redressal Committee (GRC) is notified for the subject procurement and notification copy is available on the procuring agency's website and on Authority's website at (www.ppra.org.pk).

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Instructions to Bidders

A. INTRODUCTION

1. Scope of Bid

1.1. The Procuring agency/Employer (PA), as indicated in the **Bid Data Sheet** (BDS) invites Bids for the execution of Works as specified in the BDS and **Section V- Works Requirements**. The name, identification, and number of lots (contracts) of this National/ International Competitive Bidding process are specified in the BDS.

2. Source of Funds

2.1. Source of funds as referred in Clause 2 of Bid Data Sheet.

3. Eligible Bidders

3.1. A bidder may be natural person, company or firm or public or semi-public agency of Pakistan or any foreign country, or any combination of them with a formal existing agreement (on Judicial Papers) in the form of a joint venture or consortium. In the case of a joint venture or consortium, all members shall be jointly and severally liable for the execution of the Contract in accordance with the terms and conditions of the Contract. The joint venture or consortium shall nominate a Lead Member as nominated in the BDS, who shall have the authority to conduct all business for and on behalf of any and all the members of the joint venture or consortium during the Bidding process, and in case of award of contract, during the execution of contract. Verifiable copy of the agreement that forms a joint venture, consortium or association shall be required to be submitted as part of the Bid.

Any bid submitted by the joint venture, consortium or association shall indicate the part of proposed contract to be performed by each party and each party shall be evaluated (or post qualified if required) with respect to its contribution only, and the responsibilities of each party shall not be substantially altered without prior written approval of the Procuring Agency and in line with any instructions issued by the Authority.

(The limit on the number of members of JV or Consortium may be prescribed

in BDS, in accordance with the guidelines issued by the PPRA).

3.2. The invitation for bids is open to all prospective bidders subject to any provisions of incorporation or licensing by the respective national/international incorporating agency or statutory body established for that particular trade or business. Procuring agencies shall specify the registration/licensing requirements for the foreign bidder keeping in view the requirement of that business.

3.3. A Bidder shall not have a conflict of interest. All Bidders found to have a conflict of interest shall be disqualified. A Bidders may be considered to have a conflict of interest with one or more parties in this Bidding process, if they:

3.3.1. are associated or have been associated in the past, directly or indirectly with a firm or any of its affiliates which have been engaged by the Procuring agency/Employer to provide consulting services for the preparation of design or technical specifications of the works that are the subject of the bid; or

3.3.2. have controlling shareholders in common; or

3.3.3. receive or have received any direct or indirect subsidy from any of them; or

3.3.4. have the same legal representative for purposes of this Bid; or

3.3.5. have a relationship with each other, directly or through common third parties, that puts them in a position to have access to information about or influence on the bid of another bidder, or influence the decisions of the Procuring agency/Employer regarding this Bidding process; or

3.3.6. Submit more than one bid in this bidding process.

3.4. A Bidder may be ineligible if –

3.4.1. he is declared bankrupt or, in the case of company or firm, insolvent;

3.4.2. payments in favor of the bidder is suspended in accordance with the judgment of a court of law other than a judgment declaring bankruptcy and resulting (in accordance with the national laws) in the total or partial loss of the right to administer and dispose of its property;

3.4.3. the bidder is convicted, by a final judgment of a Court of Law or relevant Professional Statutory Body, of any offence involving professional conduct;

3.4.4. The bidder is debarred/ blacklisted by a national level Procuring agency/Employer and hence debarred due to involvement in corrupt and fraudulent practices, or performance failure or due to breach of bid securing declaration.

3.5. As and when required, bidders shall provide to the Procuring agency/Employer evidence of their eligibility, proof of compliance with the necessary legal requirements to carry out the contract effectively.

3.6. Bidders shall submit proposal relating to the nature, conditions and modalities of sub-contracting wherever the sub-contracting of any elements of the contract is envisaged.

4. Eligible Material and Equipment

4.1. All the material and equipment to be mobilized under the contract shall have their origin in eligible source countries, and all expenditures made under the contract will be limited to such materials and equipment. For this purpose, ineligible countries are stated in the section-IV titled as “Eligible Countries”.

B. BIDDING DOCUMENTS

5. Contents of Bidding Documents

5.1. The scope of Works, bidding procedures, and terms and conditions of the contract are prescribed in the bidding documents. In addition to the Invitation for Bids, the bidding documents which should be read in

conjunction with any addenda issued in accordance with ITB 7.1 include:

- i. Section I -Invitation for Bids
- ii. Section II Instructions to Bidders (ITBs)
- iii. Section III Bid Data Sheet (BDS)
- iv. Section IV Eligible Countries
- v. Section V Evaluation and Qualification Criteria
- vi. Section VI Works Requirements Technical Specifications & Schedule of Requirements
- vii. Section VII Standard Bidding Forms
- viii. Section VIII General Conditions of Contract (GCC)
- ix. Section IX Particular Conditions of Contract (PCC)
- x. Section X Contract Forms

5.2. The bidder is expected to examine all instructions, forms, specifications, terms and conditions prescribed in the bidding documents. Failure to furnish all the information required in the bidding documents will be at the bidder's risk and may result in the rejection of his bid.

6. Clarification of Bidding Document, Pre-bid Meeting

6.1. A prospective bidder requiring any clarification of the bidding document may notify the Procuring agency/Employer through **EPADS v2.0**.

6.2. The Procuring agency/Employer shall respond to the request for clarification in accordance with the Public Procurement Rules 2004, Rule No.31 i.e. **Clarification of bids**.

6.3. Should the Procuring Agency deem it necessary to amend the BIDDING document as a result of a clarification, it shall do so following the procedure under **ITB 7**.

6.4. If indicated in the **BDS**, the bidder's designated representative is invited at the bidder's cost to attend a pre-bid meeting at the place, date and time mentioned in the BDS. During this pre-bid meeting, prospective bidders may request clarification of the schedule of requirement, the evaluation criteria or any other aspects of the bidding documents.

6.5. Minutes of the pre-bid meeting, if applicable, including the text of the questions asked by bidders, including those during the meeting (without identifying the source) and the responses given, together with any responses prepared after the meeting will be uploaded on **EPADS v2.0**. Any modification to the bidding documents that may become necessary as a result of the pre-bid meeting shall be made by the Procuring agency/Employer exclusively through the use of an Addendum pursuant to **ITB 7**. Non-attendance at the pre-bid meeting will not be a cause for disqualification of a bidder.

6.6. The bidder is advised to visit and examine the Site of Works and its surroundings and obtain for itself on its own responsibility all information that may be necessary for preparing the bid and entering into a contract for construction of the Works. The costs of visiting the Site shall be at the bidder's own expense.

6.7. The bidder and any of its authorized personnel will be granted permission by the Procuring agency/Employer to enter upon its premises and lands for the purpose of such visit, but only upon the express condition that the bidder and its personnel will release and indemnify the Procuring agency/Employer 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 the inspection.

7. Amendment of Bidding Documents

7.1. The procuring agency may issue notification of any change, addition, modification or deletion in accordance with the PP Rules 2004, rule no. 23 i.e. **Bidding Documents**.

7.2. To give prospective bidders reasonable time in which to take an addendum/corrigendum into account in preparing their bids, the Procuring

agency/Employer may, at its discretion, extend the deadline for the submission of bids:

*Provided that the Procuring agency/Employer shall extend the deadline for submission of bid in pursuance of PP Rules 2004, rule no. 27 i.e. **Extension of time for submission of bids**, if such an addendum is issued within last three (03) days of the bid submission deadline.*

C. PREPARATION OF BIDS

8. Language of Bid

8.1. The bid prepared by the bidder, as well as all correspondence and documents relating to the bid exchanged by the bidder and the Procuring agency/Employer shall be written in the English language unless specified in the **BDS**. Supporting documents and printed literature furnished by the bidder may be in another language provided they are accompanied by an accurate translation of the relevant pages in the English language unless specified in the **BDS**, in which case, for purposes of interpretation of the bidder, the translation shall govern.

9. Documents Constituting the Bids

9.1. The Bids prepared by the Bidder shall constitute of all the documents required in the **BDS**.

10. Documents Establishing Eligibility of Material, Equipment and Works, their Conformity to Bidding Documents

10.1. The bid prepared by the bidder shall constitute the following components: -

10.1.1. Documentary evidence established in accordance with **ITB 10** that the material and equipment to be utilized by the Bidder for the executions of works are eligible material and equipment and conform to the Bidding Documents;

10.1.2. Documentary evidence established in accordance with **ITB 11** that the bidder has been authorized to carry out the Construction works;

10.1.3. Documentary evidence established in accordance with **ITB 11** that the bidder is eligible and/or qualified for the subject bidding process;

10.1.4. Form of Bid and Bid Prices completed in accordance with **ITB 12** and **13**;

10.1.5. Completed schedules as required, including priced Bill of Quantities in accordance with **ITB 13**.

10.1.6. Technical Proposal completed in all aspects in accordance with **ITB-15**.

10.1.7. Bid security or Bid Securing Declaration furnished in accordance with **ITB 17**;

10.1.8. Any other document required in the **BDS**.

10.2. In addition to the requirements, bids submitted by a JV shall include a copy of the Joint Venture Agreement entered into by all members. Alternatively, a letter of intent to execute a Joint Venture Agreement in the event of a successful bid shall be signed by all members and submitted with the bid, together with a copy of the proposed Agreement.

10.3. The bidder shall furnish, as part of its bid, all those documents establishing the eligibility in conformity to the terms and conditions specified in the bidding documents for all material, equipment and works which the bidder proposes to execute.

10.4. The documentary evidence of conformity of the material, equipment and works to the Bidding Documents may be in the form of literature, drawings, and data, and shall consist of:

10.4.1. a detailed description of the work methodology, approach, schedule and resources to be mobilized at site;

10.4.2. an item-by-item commentary on the Procuring agency/Employer's Technical Specifications demonstrating substantial responsiveness of the material, equipment and works to those specifications, or a statement of deviations and exceptions to the provisions of the Technical Specifications;

10.4.3. any other procurement specific documentation requirement as stated in the **BDS**.

10.5. The required documents and other accompanying documents must be in English. In case any other language than English is used the pertinent translation into English shall be attached to the original version.

11. Documents Establishing Eligibility and Qualification of the Bidder

11.1. The bidder shall furnish, as part of its bid, all those documents establishing the bidder's eligibility to participate in the bidding process and/or its qualification to perform the contract if its bid is accepted.

11.2. The documentary evidence of the bidder's eligibility to bid shall establish to the satisfaction of the Procuring agency/Employer that the bidder, at the time of submission of its bid, is from an eligible country as defined in Section-IV titled as "Eligible Countries".

11.3. The documentary evidence of the bidder's qualification to perform the contract if its bid is accepted shall establish to the satisfaction of Procuring agency/Employer that:

11.3.1. The bidder has the financial and technical capability necessary to perform the Contract, meets the qualification criteria specified in Section-V, Evaluation and Qualification Criteria and **BDS**.

11.3.2. In the case of a bidder not doing business within Pakistan, the bidder is or will be (if awarded the contract) represented by a local bidder (Joint Venture) in accordance with the PEC works bylaws, and in case of award of works such foreign firm is required to participate in the execution of works to carry out its obligations as prescribed in the Conditions of Contract and /or Technical Specifications.

11.3.3. That the bidder meets the qualification criteria listed in Section-V, Evaluation and Qualification Criteria and **BDS**.

12. **Forms of Bid**

12.1. The Bidder shall fill the Form of Bids furnished in the bidding documents. The Bids Form must be completed without any alterations to its format and no substitute shall be accepted.

13. **Bid Prices**

13.1. The bid prices quoted by the bidder in the Standard bid Forms, Bill of Quantities and in the Price Schedules shall conform to the requirements specified below or exclusively mentioned hereafter in the bidding documents.

13.2. The bidder shall fill in rates and prices for all items of the Works described in the Bill of Quantities. If a Price Schedule shows items listed but not priced, their prices shall be construed to be included in the prices of other items in the Bill of Quantities and will not be paid for separately by the Procuring agency/Employer.

13.3. Items not listed in the Price Schedule shall be assumed not to be included in the bid, and provided that the bid is still substantially responsive in their absence or due to their nominal nature, the corresponding average price of the respective item(s) of the remaining substantially responsive bidder(s) shall be construed to be the price of those missing item(s):

Provided that:

13.3.1. where there is only one (substantially) responsive bidder, or

13.3.2. where there is provision for alternate proposals and the respective items are not listed in the other bids,

The Procuring agency/Employer may fix the price of missing items in accordance with market survey, and the same shall be considered as final price.

13.4. The Bid price to be quoted in the Form of Bid in accordance with ITB 12 shall be the total price of the bid.

13.5. Unless otherwise specified in the **BDS** and the Contract, the rates and prices quoted by the bidder are subject to adjustment during the performance of the Contract in accordance with the provisions of the Conditions of Contract.

13.6. If so specified in ITB 1.1, bids may be invited for individual lots (contracts) or for any combination of lots (packages).

13.7. Prices quoted by the Bidder shall be fixed during the bidder's performance of the contract and not subject to variation on any account. A bid submitted with an adjustable price will be treated as non-responsive and shall be rejected, pursuant to **ITB 27**, unless otherwise price adjustment is permissible under Conditions of the Contract.

13.8. All duties, taxes, and other levies payable by the Contractor under the Contract, or for any other cause, as of the date twenty-eight (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 the bidder.

14. Currencies of Bid and Payment

14.1. Prices shall be quoted in Pakistani Rupees unless otherwise specified in the **BDS**. Comparison of bids and tie of bid shall be treated in accordance with the PP rules 2004, rule no. 30.

15. Documents Comprising the Technical Proposal

15.1. The bidder shall furnish a Technical Proposal including a statement of work methods, equipment, personnel, schedule and any other information as stipulated in Section VII – Standard Bid Forms, in sufficient detail to demonstrate the adequacy of the bidder's proposal to meet the work requirements and the completion time.

16. Bid Validity Period

16.1. Bids shall remain valid for the period specified in the BDS after the bid submission deadline prescribed by the Procuring agency/Employer. A bid valid for a shorter period shall be rejected by the Procuring agency/Employer as non-responsive. The period of bid validity will be determined from the complementary bid securing instrument i.e. the expiry period of bid security or bid securing declaration as the case may be.

16.2. Under exceptional circumstances, prior to the expiration of the initial Bids/Bid validity period, the Procuring Agency may request the Bidders' consent to an extension of the period of validity of their Bids/Bid. Such request for extension of the period of bid validity shall be carried out in accordance with the PP rules 2004, rule no. 26 i.e. Bid Validity.

17. Bid Security or Bid Securing Declaration

17.1. Pursuant to ITB 11.1 unless otherwise specified in the BDS, the bidder shall furnish as part of its bid, a Bid Security in accordance with the PP Rules 2004, rule no. 25 in the amount and currency specified in the BDS or Bid Securing Declaration as specified in the BDS in the format provided in Section VII (Standard Bidding Forms).

In case Procuring agency/Employer is inviting bids in lots / packages, the bidder shall be required to submit his bid security against the respective lot/package for which he is submitting his bid.

Until the development of functionality of auto verification of financial instrument in **EPADS v2.0**, the scanned copy of bid security or bid securing declaration, as the case may be, shall be uploaded on **EPADS v2.0** whereas the original instrument to be submitted to the procuring agency before closing of bid submission deadline,

17.2. The Bid Security shall be denominated in the local currency or in another freely convertible currency, and it shall be in the form specified in the BDS which shall be in any of the following:

17.2.1. A bank guarantee, an irrevocable letter of credit issued by a Scheduled bank in the form provided in the Bidding Documents or another form acceptable to the Procuring agency/Employer and valid for twenty-

eight (28) days beyond the end of the validity of the Bid. This shall also apply if the period for Bid Validity is extended. In either case, the form must include the complete name of the bidder;

17.2.2. A cashier's or certified cheque; or

17.2.3. Another security as indicated in the **BDS**.

17.3. The Bid Security or Bid Securing Declaration shall be in accordance with the Form of the Bid Security or Bid Securing Declaration included in Section VII (Standard Bidding Forms) or another form approved by the Procuring agency/Employer prior to the bid submission.

17.4. The Bid Security shall be payable promptly upon written demand by the Procuring agency/Employer in case any of the conditions listed in **ITB 17.9** are invoked.

17.5. Any bid not accompanied by a Bid Security or Bid Securing Declaration in accordance with **ITB 17.1 or 17.3** shall be rejected by the Procuring agency/Employer and shall be declared as non-responsive bid, pursuant to **ITB 27**.

17.6. Unsuccessful bidders' Bid Security will be discharged or returned as promptly as possible, however in no case later than thirty (30) days after the expiration of the period of Bid Validity prescribed by the Procuring agency/Employer pursuant to **ITB 16**. The Procuring agency/Employer shall make no claim to the amount of the Bid Security, and shall promptly return the Bid Security document, after whichever of the following that occurs earliest:

17.6.1. The expiry of the Bid Security;

17.6.2. The entry into force of a procurement contract and the provision of a performance security (or guarantee), for the performance of the contract if such a security (or guarantee), is required by the Bidding documents;

17.6.3. The rejection by the Procuring agency/Employer of all Bids;

17.6.4. The withdrawal of the bid prior to the deadline for the submission of bids, unless the bidding documents stipulate that no such withdrawal is permitted.

17.7. The successful bidder's Bid Security will be discharged upon the bidder signing the contract pursuant to **ITB 40**, or furnishing the performance security (or guarantee), pursuant to **ITB 41**.

17.8. The Bid Security may be forfeited or the Bid Securing Declaration executed:

if a Bidder:

17.8.1. Withdraws its Bid during the period of Bid Validity as specified by the Procuring agency/Employer, and referred by the bidder on the Form of Bid except as provided for in ITB 16.2; or

17.8.2. In the case of a successful bidder, if the bidder fails:

17.8.2.1. to sign the contract in accordance with ITB 40; or

17.8.2.2. to furnish performance security (or guarantee) in accordance with ITB 41.

17.9. In case of Bid Security issued by the foreign bank is allowed by the Procuring agency/Employer, the same should be counter guaranteed by a corresponding bank in Pakistan. Furthermore, in case of joint venture, it should be in the name of Joint venture to ensure joint responsibility. In case the JV is not legally constituted at the time of bid submission, the bid security or bid securing declaration shall be in the names of all future members as named in the letter of bid.

18. Withdrawal of Bids

18.1. Before bid submission deadline, any bidder may withdraw, substitute, or modify its bid after it has been submitted by sending a written notice, duly signed by an authorized representative, and the corresponding must accompany the respective written notice.

19. Format and Signing of Bid

19.1. The Bidder shall prepare and submit Bids through EPADS with due diligence after carefully reading all the terms and condition before bid submission deadline.

D. SUBMISSION OF BIDS

20. Submission of Bids

20.1. All bids shall be submitted through **EPADS v2.0**.

21. Deadline for Submission of Bids

21.1. All bids shall be received through **EPADS v2.0** not later than bid submission deadline as specified in the **BDS**.

21.2. The Procuring agency/Employer may, under exceptional circumstances and at its discretion, extend the deadline for the submission of bids, pursuant to PP Rules 2025, rule no.39 Extension of Time for submission of bid, by amending the Bidding Documents in accordance with ITB 7, in which case all rights and obligations of the Procuring agency/Employer and bidders previously subject to the deadline will thereafter be subject to the new deadline.

22. Substitution and Modification of bids

22.1. A bidder may substitute or modify his bid after it has been submitted, provided that written notice of the substitution or modification of the bid, is received by the Procuring agency/Employer prior to the deadline for submission of bids.

22.2. Revised bid may be submitted after the substitution or modification made in the original bid in accordance with the provisions referred in ITB 18.

E. OPENING AND EVALUATION OF BIDS

23. Opening of Bids

23.1. The Procuring Agency will open bids in accordance with the PP rules 2004, rule no 28 and as specified in the **BDS**.

24. Confidentiality

24.1. Information relating to the examination, clarification, evaluation and comparison of bids and recommendation of contract award shall not be disclosed to bidders or any other persons not officially concerned with such process until the time of the announcement of the respective evaluation report.

25. Clarification of Bids

25.1. Clarification of Bidding Documents shall be carried out in accordance with the PP Rules 2025, rule no 38 i.e. Clarifications.

25.2. The alteration or modification in the bid which in any case affect the following parameters will be considered as a change in the substance of a bid:

- 25.2.1. evaluation & qualification criteria;
- 25.2.2. required scope of work;
- 25.2.3. contract price;
- 25.2.4. all securities requirements;
- 25.2.5. tax requirements;
- 25.2.6. terms and conditions of bidding documents.
- 25.2.7. change in the ranking of the bidder

26. Preliminary Examination of Bids

26.1. Prior to the detailed evaluation of bids, the Procuring agency/Employer will determine whether each bid:

26.1.1. meets the eligibility criteria defined in ITB 3 and ITB 4;

26.1.2. has been prepared as per the format and contents defined by the Procuring agency/Employer in the bidding documents;

26.1.3. has been properly signed;

26.1.4. is accompanied by the required securities; and

26.1.5. is substantially responsive to the requirements of the bidding documents.

The Procuring agency/Employer's determination of a bid's substantial responsiveness will be based on the contents of the bid itself.

26.2. A substantially responsive Bid is one which conforms to all the terms, conditions, and specifications of the Bidding Documents, without material deviation or reservation. A material deviation or reservation is one that: -

26.2.1. affects in any substantial way the scope, quality, or performance of the Works;

26.2.2. limits in any substantial way, inconsistent with the bidding documents, the Procuring agency/Employer's rights or the bidders' obligations under the Contract; or

26.2.3. if rectified, would affect unfairly the competitive position of other bidders presenting substantially responsive bids.

26.3. The Procuring agency/Employer will confirm that the documents and information specified under ITB 9, 10 and 11 have been provided in the bid. If any of these documents or information is missing, or is not provided in accordance with the Instructions to Bidders, the bid shall be rejected.

26.4. The Procuring agency/Employer may waive-off any minor informality, nonconformity, or irregularity in a bid which does not constitute a material deviation, provided such waiver does not prejudice or affect the relative ranking of any Bidder.

Explanation: A minor informality, non-conformity or irregularity is one that is merely a matter of form and not of substance. It also pertains to some

immaterial defect in a Bid or variation of a bid from the exact requirements of the invitation that can be corrected or waived without being prejudicial to other bidders. The defect or variation is immaterial when the effect on quantity, quality, or delivery is negligible when contrasted with the total cost or scope of the works. The Procuring agency/Employer either shall give the bidder an opportunity to cure any deficiency resulting from a minor informality or irregularity in a bid or waive the deficiency, whichever is advantageous to the Procuring agency/Employer. Examples of minor informalities or irregularities include failure of a bidder to –

26.4.1. Submit the number of copies of signed bids required by the invitation;

26.4.2. Furnish required information concerning the number of its employees;

26.4.3. the firm submitting a bid has formally adopted or authorized, before the date set for opening of bids, the execution of documents by typewritten, printed, or stamped signature and submits evidence of such authorization and the bid carries such a signature.

26.5. Provided that a Technical Bid is substantially responsive, the Procuring agency/Employer may request the bidder to submit the necessary information or documentation, within a reasonable period of time, to rectify nonmaterial nonconformities or omissions in the Technical Bid related to documentation requirements. Requesting information or documentation on such nonconformities shall not be related to any such aspect of the technical Proposal linked with the ranking of the bidders. Failure of the bidder to comply with the request may result in the rejection of its bid.

26.6. Provided that a Technical Bid is substantially responsive, the Procuring agency/Employer shall rectify quantifiable nonmaterial nonconformities or omissions related to the Financial Proposal. To this effect, the Bid Price shall be adjusted, for comparison purposes only, to reflect the price of the missing or nonconforming item or component.

26.7. If a bid is not substantially responsive, it will be rejected by the Procuring agency/Employer and may not subsequently be evaluated for

complete technical responsiveness.

27. Examination of Terms and Conditions; Technical Evaluation

27.1. The Procuring agency/Employer shall examine the bid to confirm that all terms and conditions specified in the GCC and the PCC have been accepted by the bidder without any material deviation or reservation.

For this purpose:

“Deviation” means departure from the requirements specified in the Bidding Document.

“Reservation” means setting of limiting conditions or withholding from complete acceptance of the requirements specified in the Bidding Document.

27.2. The Procuring agency/Employer shall evaluate the technical aspects of the bid submitted in accordance with ITB 30, to confirm that all requirements specified in Section VI – Works Requirement, Technical Specifications of the Bidding Documents have been met without material deviation or reservation.

27.3. If after the examination of the terms and conditions and the technical evaluation, the Procuring agency/Employer determines that the bid is not substantially responsive in accordance with ITB 27, it shall reject the bid.

28. Correction of Arithmetic Errors

28.1. Bids determined to be substantially responsive will be checked for any arithmetic errors. Errors will be corrected as follows: -

28.1.1. if there is a discrepancy between unit prices and the sub-total price that is obtained by multiplying the unit price and quantity, the unit price shall prevail, and the sub-total price shall be corrected, unless in the opinion of the Procuring agency/Employer there is an obvious misplacement of the decimal point in the unit price, in which the total price as quoted shall govern and the unit price shall be corrected;

28.1.2. if there is an error in a total corresponding to the addition or subtraction of sub-totals, the sub-totals shall prevail, and the total shall be corrected; and

28.1.3. where there is a discrepancy between the amounts in figures and in words, the amount in words will govern.

28.1.4. Where there is discrepancy between grand total of price schedule and amount mentioned on the Form of Bid, the amount referred in Price Schedule shall be treated as correct subject to elimination of other errors.

28.2. The amount stated in the Bid will, be rectified by the Procuring agency/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 amount, its bid shall be rejected after forfeiture of Bid Security or execution of the Bid Securing Declaration, as the case may be, in accordance with ITB 41.3.

29. Conversion to Single Currency

29.1. The unit rates and the prices shall be quoted by the bidder entirely in Pak rupees. A bidder expecting to incur expenditures in other currencies for inputs to the Works from outside the Procuring agency/Employer's country (referred to as the "Foreign Currency Requirements") shall indicate the same in the letter of bid-financial proposal. The proportion of the Bid Price (excluding Provisional Sums) needed by him for the payment of such Foreign Currency Requirements either (i) entirely in the currency of the Bidder's home country or, (ii) at the bidder's option, entirely in Pak rupees provided always that a bidder expecting to incur expenditures in a currency or currencies other than those stated in (i) and (ii) above for a portion of the foreign currency requirements, and wishing to be paid accordingly, shall indicate the respective portions in his bid. Comparison of bids quoted in different currencies and conversion of bids into a single currency shall be carried out in accordance with the PP Rule 2004, rule no. 30 (2).

30. Evaluation of Bids

30.1. The Procuring agency/Employer shall evaluate and compare only the bids determined to be substantially responsive, pursuant to ITB 27.

30.2. In evaluating the Technical Proposal of each Bid, the Procuring agency/Employer shall use the criteria and methodologies listed in the BDS and in terms of works requirement. No other evaluation criteria or methodologies shall be permitted.

30.3. The Procuring agency/Employer's evaluation of a bid will take into account:

30.3.1. the bid price, excluding provisional sums and the provision, if any, for contingencies in the summary bill of quantities, but including day work items, where priced competitively;

30.3.2. converting the amount resulting from applying above, if relevant, to a single currency in accordance with ITB 29;

30.4. The estimated effect of the price adjustment provisions of the Conditions of Contract, applied over the period of execution of the Contract, shall not be taken into account in bid evaluation.

30.5. If these bidding documents allow bidders to quote separate prices for different lots, and the award to a single bidder of multiple lots, the methodology of evaluation to determine the lowest evaluated lot combinations in the Form of Bid, is specified in the BDS.

30.6. If the bid, which results in the Evaluated Bid Price (Successful Bid), is seriously unbalanced or front loaded in the opinion of the Employer, 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, taking into consideration the schedule of estimated Contract payments, the Employer may require that the amount of the performance security be increased at the expense of the Bidder to a level sufficient to protect the Employer against financial loss in the event of default of the successful Bidder under the Contract.

Explanation:

“Unbalanced” or “front-loaded” bids consist of deliberately submitting bids with artificially high prices or unit rates for the early stages of a construction project, offset by artificially low prices or unit rates for the later stages of the project, to improve the contractor’s cash flow.

31. Domestic Preference

31.1. If the BDS so specifies, the Procuring agency/Employer will grant a margin of preference to the domestic contractor in line with the rules, regulations, regulatory guides or instructions issued by the Authority from time to time.

32. Determination of Successful Bid

32.1. The Procuring agency/Employer shall compare the evaluated bids in accordance with the predefined bidding procedure, of all substantially responsive bids to determine the Successful bidder.

33. Qualification of Bidder

33.1. The Procuring agency/Employer shall determine to its satisfaction whether the bidder is substantially responsive and whose bid is declared as Successful bid either continues to meet (if prequalification applies) or meets (if post-qualification applies) the qualifying criteria specified in Evaluation and Qualification Criteria.

Note: In case of international bidding, the parameters for incorporation or licensing within Pakistan may be fulfilled as part of post qualification.

33.2. The determination shall be based upon an examination of the documentary evidence of the bidder’s qualifications submitted by the bidder, pursuant to ITB 11.

33.3. Prior to contract award, the Procuring agency/Employer will verify that the successful bidder (including each member of a JV) is not blacklisted/debarred. The Procuring agency/Employer will conduct the same verification for each sub-contractor proposed by the successful bidder.

34. Sub-Contractors

34.1. The bidder shall provide details regarding any specialized sub-contractor to the Procuring agency/Employer. In case change of sub-contractors, the bidder shall promptly notify the Procuring agency/Employer and obtain approval for replacement of sub-contractors.

34.2. Bidders may propose sub-contracting up to the percentage of total value of contracts or the volume of works as specified in the BDS.

35. Abnormally Low Financial Bid

35.1. A procuring Agency may reject abnormally low bids in accordance with the PP Rules 2025 rule no. 43. The decision of the Procuring agency/Employer to reject a bid and reasons for the decision shall be recorded in the procurement proceedings and promptly communicated to the bidder concerned. Moreover, the Procuring agency/Employer shall not incur any liability solely by rejecting abnormally bid

Guidance for Procuring agency/Employer:

An abnormally low bid means, in the light of the Procuring agency/Employer's estimate and of all the bids submitted, the bid appears to be abnormally low by not providing a margin for normal levels of profit. In order to identify the Abnormally Low Bid (ALB) following approaches can be considered to minimize the scope of subjectivity:

35.1.1. Comparing the bid price with the cost estimate;

35.1.2. Comparing the bid price with the bids offered by other bidders submitting substantially responsive bids; and

35.1.3. Comparing the bid price with prices paid in similar contracts in the recent past either government- or development partner-funded.

35.2. The Procuring agency/Employer will determine to its satisfaction whether the bidder that is selected as having submitted the successful bid is qualified to perform the contract satisfactorily, in accordance with the criteria listed in ITB 11

35.3. The determination will take into account the bidder's financial and technical capabilities. It will be based upon an examination of the

documentary evidence of the bidder's qualifications submitted by the bidder, pursuant to ITB 11, as well as such other information as the Procuring agency/Employer deems necessary and appropriate. Factors not included in these bidding documents shall not be used in the evaluation of the bidders' qualifications.

35.4. Procuring agency/Employer may seek "Certificate for Independent Price Determination" from the bidder and the results of reference checks may be used in determining award of contract.

Explanation: *The Certificate shall be furnished by the bidder. The bidder shall certify that the price is determined keeping in view of all the essential aspects such as raw material, its processing, value addition, optimization of resources due to economy of scale, transportation, insurance and margin of profit etc.*

35.5. An affirmative determination will be a prerequisite for award of the contract to the bidder. A negative determination will result in rejection of the bidder's bid, in which event the Procuring agency/Employer will proceed to the next ranked bidder to make a similar determination of that bidder's capabilities to perform satisfactorily.

F. AWARD OF CONTRACT

36. Criteria of Award

36.1. Subject to ITB 36 and 37, the Procuring agency/Employer will award the Contract to the bidder whose bid has been determined to be substantially responsive to the bidding documents and who has been declared as Successful Bidder, provided that such bidder has been determined to be:

36.1.1. eligible in accordance with the provisions of ITB 3;

36.1.2. is determined to be qualified to perform the Contract satisfactorily; and

36.1.3. Successful negotiations have been concluded, if any.

37. Negotiations

37.1. The Committee of the Procuring agency/Employer may negotiate with the Most Advantageous Bidder relating to the following areas:

37.1.1. a minor alteration to the technical (drawings, design technical specifications) details of the statement of works;

37.1.2. Methodology, work plan, staffing in view to streamline the work;

37.1.3. a minor amendment to the Particular conditions of Contract;

37.1.4. finalizing payment arrangements;

37.1.5. clarifying details that were not apparent or could not be finalized at the time of Bidding;

37.2. Where negotiation fails to result into an agreement, the Procuring agency/Employer may invite the next ranked bidder for negotiations. Where negotiations are commenced with the next ranked bidder, the Procuring agency/Employer shall not reopen earlier negotiations.

38. Procuring agency/Employer's Right to reject All Bids

38.1. The procuring agency has the right to reject all bids in accordance with the PP Rules 2025 rule no. 45. However, the Authority (i.e. PPRA) may call from the Procuring agency/Employer the justification of those grounds.

39. Notification of Award

39.1. The procuring agency shall announce and publish the evaluation result in accordance with the PP Rules 2004, rule no. 40.

39.2. Where no complaints have been lodged, the bidder whose bid has been accepted will be notified of the award by the Procuring agency/Employer prior to expiration of the bid validity period through EPADS. However, the Procuring agency/Employer shall not award any procurement contract at least for five (05) days after the announcement of final evaluation report. The notification letter (herein after and in the condition of the contract and contract form called "Letter of Acceptance"

will specify the sum that the Procuring agency/Employer will pay the successful bidder in consideration for the execution and completion of the works as prescribed by the Contract (hereinafter and in the Contract called the "Contract Price).

39.3. The notification of award will constitute the formation of the Contract, subject to the bidder furnishing the Performance Security (or guarantee) in accordance with ITB 41 and signing of the contract in accordance with ITB 40.

39.4. Upon the successful bidder's furnishing of the performance security (or guarantee) pursuant to ITB 41, the Procuring agency/Employer will promptly notify each unsuccessful bidder, the name of the successful bidder and the Contract amount and will discharge the Bid Security or Bid Securing Declaration of the bidder(s) pursuant to ITB 17.

40. Signing of Contract

40.1. Promptly after notification of award, Procuring agency/Employer shall send the successful bidder the draft agreement, incorporating all terms and conditions as agreed by the parties to the contract.

40.2. Immediately after the Redressal of grievance by the GRC, and after fulfillment of all conditions precedent of the Contract Form, the successful bidder and the Procuring agency/Employer shall sign the contract.

40.3. Where no formal signing of a contract is required, work order issued to the bidder shall be construed to be the contract.

41. Performance Security (or Guarantee)

41.1. After the receipt of the Letter of Acceptance, the successful bidder, within the specified time, shall deliver to the Procuring agency/Employer a Performance Guarantee in the amount and in the form stipulated in the BDS and PCC, denominated in the type and proportions of currencies in the Letter of Acceptance and in accordance with the Conditions of Contract.

41.2. If the Performance Guarantee is provided by the successful bidder and it shall be in the form specified in the BDS which shall be in any of the

following:

41.2.1. certified cheque, cashier's or manager's cheque, or bank draft;

41.2.2. irrevocable letter of credit issued by a scheduled bank of Pakistan or in the case of an irrevocable letter of credit issued by a foreign bank, the letter shall be confirmed or authenticated by a scheduled bank of Pakistan;

41.2.3. bank guarantee confirmed by a reputable local bank or, in the case of a successful foreign bidder, bonded by a foreign bank; or

41.2.4. surety bond callable upon demand issued by any reputable surety or insurance company.

Any Performance Guarantee submitted shall be enforceable in Pakistan.

41.3. Failure of the Most Advantageous Bidder to comply with the requirement of ITB 40 shall constitute sufficient grounds for the annulment of the award and forfeiture of the Bid Security or declare blacklisted (in case bid securing declaration is submitted) in which event the Procuring agency/Employer may make the award to the next most advantageous bidder or reinitiate the procurement process afresh (as a case may be).

42. Advance Payment

42.1. Advance payment will be provided to the bidder in percentage and in the manner as agreed by the both parties in terms of Conditions of the Contract.

42.2. The Procuring agency/Employer will provide an advance payment as stipulated in the Conditions of Contract, subject to a maximum amount, as stated and/or Conditions of the Contract. The advance payment request shall be accompanied by an advance payment security (guarantee) in the form provided in Section X. For the purpose of receiving the advance payment, the bidder shall make and estimate of, and include in its bid, the expenses that will relate to the purchase of equipment, machinery, materials, and on the engagement of labor during the first month beginning with the date of the Procuring agency/Employer's "Notice to Commence" as specified in the PCC.

43. General Performance of the Bidders

43.1. The Procuring agency/Employer reserves the right to obtain information regarding performance of the bidders on their previously awarded contracts / works. The Procuring agency/Employer may seek information / report from the previous employer for consideration. However, the Procuring agency/Employer shall incorporate such parameters in the evaluation criteria and accordingly decide the fate of the bid submitted.

44. Corrupt & Fraudulent Practices

44.1. Procuring agencies (including beneficiaries of Government funded projects and procurement) as well as Bidders/Suppliers/Contractors under Government financed contracts, observe the highest standard of ethics during the procurement and execution of such contracts, and will avoid to engage in any corrupt and fraudulent practices.

G. GRIEVANCE REDRESSAL & COMPLAINT REVIEW MECHANISM

45. Grievance Redressal

45.1. Grievance Redressal shall be carried out in accordance with the PP Rules 2025, rule no. 65 i.e. Redressal of grievances by the procuring agency and "Redressal of Grievances Regulations 2021".

H. MECHANISM OF BLACKLISTING

46. Mechanism of Blacklisting

46.1. The Procuring agency/Employer shall proceed Blacklisting of Bidders/Contractors in accordance with PP Rules 2025, rule no.25 i.e. Blacklisting and "Blacklisting and Debarment of Bidders or Contractors Regulations 2024.



Bid Data Sheet

Bid Data Sheet (BDS)

The following specific data for the procurement of works shall complement, supplement, or amend the provisions in the Instructions to Bidders (ITBs). Whenever there is a conflict, the provisions herein shall prevail over those in ITBs.

A. Introduction

ITB Number

Amendments of, and Supplements to, Clauses in the Instruction to Bidders

ITB Number1.1

Name of Procuring agency/Employer: **Pakistan Airports Authority (Planning & Development Directorate)**

The subject of procurement is: **Construction of Aviation Complex at Blue Area, Islamabad**

Period for completion of the works **1645 Days**

Commencement date execution of the works: **14 Days**

Type of Procurement:**International**

ITB Number2.1

Financial year for the operations of the Procuring agency/Employer: **2026-27**

Name of Project [insert: name and summary description of the Project if any]

Name of financing institution: [insert: name if any]

Name and identification number of the Contract: **P73078**

ITB Number3.1

JV/Consortium or Association Allowed: **Yes**

Maximum number of members in the joint venture shall be: **3**.

B. Bidding Documents

ITB Number6.4

The Bidders may seek clarifications through **EPADS v2.0: Last Clarification Date: Thursday, October 1, 2026**
Pre-Bid Meeting: Monday, September 14, 2026 11:30 AM

C. Preparation of Bids

ITB Number 8.1

The Language of all correspondences and documents related to the Bid is:
English

ITB Number 5.1 & 9.1

The following documents must be included to constitute the Bid

1. Please refer to the attached Annexures to the Bidding Document for the bidder's submission requirements. Please attach a one-page declaration here confirming that the bidder has reviewed all Annexures attached to the Bidding Documents and has duly provided all submissions in accordance with the requirements stipulated therein

ITB Number 9.4 (b)

Other procurement specific documentation requirements are:

One original and two (02) hard copies of Technical Bid are to be submitted. Complete Bid duly signed, stamped and scanned shall be submitted online on EPADS v2.0. All Bids must be accompanied by a Bid Security amounting to Pak Rupees Three Hundred and Fifty Million [PKR 350,000,000/-] in the form of Bank Guarantee. Bid Security shall be in the favor of Pakistan Airports Authority and is to be submitted physically on or before the bid submission deadline

ITB Number 12.4

The Bid price will be/will not be subject to the price adjustment **Yes**
Price Adjustment Annexure is attached in the Annexure Section with the name of Adjustment Data.

ITB Number 12.6

The Bid price shall be adjusted in accordance with Schedule-A to Bid - "Schedule of Adjustment Data" if available.

ITB Number 13.1

Bidders to quote entirely in **Pak rupees (PKR)**

Schedule of Adjustment Data for Local Currency (LC)

Index Code	Index Description	Source of Index	Weighting
1	Non-adjustable	---	0.57
2	Labour (Labourer (un-skilled) per day, shall be taken as representative of all types of Labour (skilled/unskilled) deployed at site)	Government of Pakistan (GoP) Federal Bureau of Statistics (FBS)	0.15
3	Cement (OPC cement per bag shall be taken as representative of all types of cement used at the site)	Government of Pakistan (GoP) Federal Bureau of Statistics (FBS)	0.06
4	Reinforcing Steel (½" Ø round M.S. Bars per tonne shall be taken as representative of all types and diameters of Steel Reinforcement)	Government of Pakistan (GoP) Federal Bureau of Statistics (FBS)	0.13
5	High Speed Diesel (HSD) (HSD shall be taken as representative of all kind of fuels used in connection with the Contract)	Pakistan State Oil (PSO)	0.05
6	Aluminum	London Metal Exchange	0.04
	Total	PKR	1.00

ITB Number15.1

The Bid Validity period shall be **180 Days** days.

ITB Number16.1

The amount of Bid Security shall be (insert amount)

The currency of the Bid Security shall be: **PKR**.

ITB Number16.2

The Bid Security shall be in the form of: **Bank Guarantee**

D. Submission of Bids

ITB Number19.1

The deadline for Bid submission is: **Thursday, October 8, 2026 11:00 AM**

Address for submission of Original Bid Security: **P&D Directorate, HQPAA, Terminal-1 Jinnah International Airport, Karachi**

ITB Number21.1

The Bid opening shall take place at: **EPADS v2.0**

Day : **Thursday**

Date: **October 08, 2026**

Time : **11:30 AM**

ITB Number27.1

The currency that shall be used for Bid evaluation and comparison purposes to convert all Bid prices expressed in various currencies is: **PKR Only**

The source of exchange rate shall be: **Nil**

The date of exchange rate shall be: **Nil**

ITB Number28.2 &28.5

Least Cost Based Selection (LCBS)

see Evaluation Criteria

ITB Number29.1

Domestic preference to apply.

Domestic preference: **No**

Preference to domestic or national suppliers or contractors shall be provided in accordance with policies of the Federal Government and/or in accordance with the regulations issued by the Authority.

If Yes, The percentage for the domestic preference alongwith calculation formula is provided in the evaluation and qualification criteria.

ITB Number32.2

Sub-contracting is allowed? : **Yes**

30% of the total value of the contract.

39.1 The Performance Security (or guarantee) shall be **10.00%**

39.2 The Performance Security (or guarantee) shall be in the form of: **Bank Guarantee**

Eligibility Criteria

Bidder's Type	Required Registration
Any	FBR (NTN) PEC

Eligibility Criteria	Document
Nationality in accordance with ITB 4.3 and Section IV: Eligible Countries. Must meet by Single Entity or all members of the Joint Venture and JV Combined. Kindly attach Forms ELI 1 and 2, with attachments	Yes
No conflicts of interest in accordance with ITB 3.7. Must meet by Single Entity or all members of the Joint Venture and JV Combined. Kindly attach Letter of Bid – Technical Proposal.	Yes
Valid registration with Pakistan Engineering Council (PEC). In case of Single Entity: Category C-A and at least in Specialization Codes: CE-02, CE-09, CE-10, BC-03, ME-01, ME-02, EE-02, EE-03, EE-04. In case of Joint Venture: Category Requirement must be met by each member of the Joint Venture and Specialization Codes requirement must be met cumulatively by the JV. Kindly attach PEC Registration License	Yes
In case of Foreign Constructors, valid registration with Pakistan Engineering Council. For Foreign Constructors: Category FC-A. For Local members of the Joint Venture: Category C-A . Specialization Codes requirement must be met cumulatively by the JV. Kindly attach PEC Registration Licenses. In case this requirement does not pertain to you attach a single pager stating this requirement as not applicable.	Yes
Historical Contract Non-Performance, Pending Litigation and Litigation History Form. Must meet by Single Entity or each member of the Joint Venture. Kindly attach duly completed/filled Form CON-2.	Yes
Affidavit on Judicial Stamp Paper prepared within the current month of submission of bidding document that the firm has never been blacklisted. Must meet by Single Entity or each member of the Joint Venture	Yes

Bidder registration with the Federal Board of Revenue for Income Tax. Must meet by Single Entity or each member of the Joint Venture. Kindly attach Income Tax Registration Certificate	Yes
Bidder shall be on the active taxpayer's list of the Federal Board of Revenue for Income Tax. Must meet by Single Entity or each member of the Joint Venture. Kindly attach Record of Active Taxpayer for Income Tax.	Yes
In case of Joint Venture, kindly attach Letter of Intent to form JV on each firm's letter head, agreement that forms a joint venture or consortium and appointment of Lead Member in the joint venture or consortium shall be confirmed by submission of a valid Power of Attorney. In case this requirement does not pertain to you attach a single pager stating this requirement as not applicable.	Yes



Evaluation Criteria

Least Cost Based Selection (LCBS)

Weightage

Technical Evaluation %	
100	
Technical Marks	500
Passing Marks	350
Experience - Please refer to Section V Evaluation Criteria B.1 (Max Marks: 175, Minimum Requirement: 50% for Single Entity/All Parties Combined, 30% for each member of JV and 45% for Lead Member of JV)	
Specific Construction Experience – Completed Projects. Please refer to Section V Evaluation Criteria B1.1 Projects of similar nature and complexity Completed in last fifteen years. (Each of min. 20-Storeyed Building above ground) as Prime Contractor, joint venture member. Max. Marks = 90 • 60 Marks for at least 3 projects • For less than 3 projects, following weightage will be adopted: $60 \times (A/3)$ • For more than 3 projects but less than 6 projects completed, following weightage will be adopted $60 + (A-3) \times 10$ A = No. of projects of similar nature and complexity, completed in last fifteen years Full Marks will be awarded for 6 projects or more. Kindly attach Form. EXP – 4.2 (a) with complete documentary evidences of the projects to substantiate the scope and no. of storeys duly verified by respective Employer and/ or Consultant and Taking Over/ Completion Certificate of each completed project of which the experience is being claimed. Copy of JV Agreement with %age share and scope of services needs to be submitted as documentary evidence. (Qualitative)(Doc Required)	90

Specific Construction Experience – In-hand Projects. Please refer to Section V Evaluation Criteria B1.2 Projects of similar nature and complexity In-hand. (Each of min. 20-Storeyed Building above ground) as Prime Contractor, joint venture member. Max. Marks = 60 • 40 Marks for 3 projects. • For less than 3 projects following weightage will be adopted: $40 \times (A/3)$ • For more than 3 projects but less than 6 projects following weightage will be adopted: $40 + (A-3) \times 20/3$ A = No. of projects of similar nature and complexity in-hand. Full Marks will be awarded in case of 6 projects or more. Kindly attach Form. EXP – 4.2 (b) with complete documentary evidences of the projects to substantiate the scope and no. of storeys duly verified by respective Employer and/ or Consultant and Letter of Award/ Acceptance of each In-hand project of which the experience is being claimed. Copy of JV Agreement with %age share and scope of services needs to be submitted as documentary evidence. (Qualitative) (Doc Required)	60
Specific Experience – Implementation of Building Information Modeling. Please refer to Section V Evaluation Criteria B1.3 Completed and/ or In-hand Projects with implementation of BIM in construction works. Max Marks = 25 15 Marks will be awarded for each Project. Full Marks will be awarded in case of 2 projects or more. Kindly attach Documentary Evidence to confirm adoption of BIM on completed and/ or in-hand projects. (Each of min. 05-Storeyed Building above ground). Project executed as Sub-Contractor and Joint Venture (JV) shall not be considered. (Qualitative)(Doc Required)	25
Personnel Capabilities - Please refer to Section V Evaluation Criteria B.2 (Max Marks: 75, Minimum Requirement: 50% for Single Entity/All Parties Combined, 30% for each member of JV and 45% for Lead Member of JV)	
Project Manager - Please refer to Section V Evaluation Criteria B2.1: 10 marks will be awarded for Civil Engineer, minimum qualification B.Sc./B.E. , having at least 20 years relevant experience in high rise buildings. Max Marks = 10. Kindly attach Form PER-1 and PER-2 for the proposed personnel, along with following for each personnel, failing which, no marks will be awarded: a.verifiable proof of employment with the bidder of the proposed staff b.detailed CV c.valid PEC Registration / Internationally recognized Engineering Body Registration Certificates of proposed Engineers d.Diploma Certificates of DAE staff (Qualitative)(Doc Required)	10

Construction Manager - Please refer to Section V Evaluation Criteria B2.2: 10 marks will be awarded for Civil Engineer, minimum qualification B.Sc./B.E. , having at least 15 years relevant experience in high rise buildings. Max Marks = 10 Kindly attach Form PER-1 and PER-2 for the proposed personnel, along with following for each personnel, failing which, no marks will be awarded: a.verifiable proof of employment with the bidder of the proposed staff b.detailed CV c.valid PEC Registration / Internationally recognized Engineering Body Registration Certificates of proposed Engineers. d.Diploma Certificates of DAE staff (Qualitative)(Doc Required)	10
Planning Engineer - Please refer to Section V Evaluation Criteria B2.3: 5 mark will be awarded for Planning Engineer minimum qualification B.Sc./B.E (Civil/ Electrical/ Mechanical/ Arch. Engg.), , having at least 10 years relevant experience. Max Marks = 5 Kindly attach Form PER-1 and PER-2 for the proposed personnel, along with following for each personnel, failing which, no marks will be awarded: a.verifiable proof of employment with the bidder of the proposed staff b.detailed CV c.valid PEC Registration / Internationally recognized Engineering Body Registration Certificates of proposed Engineers d.Diploma Certificates of DAE staff (Qualitative)(Doc Required)	5
BIM Engineer - Please refer to Section V Evaluation Criteria B2.4: 5 mark will be awarded for BIM Engineer minimum qualification B.Sc/B.E. , having at least 07 years relevant experience. Max Marks = 5 Kindly attach Form PER-1 and PER-2 for the proposed personnel, along with following for each personnel, failing which, no marks will be awarded: a.verifiable proof of employment with the bidder of the proposed staff b.detailed CV c.valid PEC Registration / Internationally recognized Engineering Body Registration Certificates of proposed Engineers d.Diploma Certificates of DAE staff (Qualitative)(Doc Required)	5
Health Safety Environment (HSE) Engineer - Please refer to Section V Evaluation Criteria B2.5: 5 mark will be awarded for BSc. Engineer with OSHA/ NEBOSH Certified having at least 10 years' relevant experience. Max Marks = 5 Kindly attach Form PER-1 and PER-2 for the proposed personnel, along with following for each personnel, failing which, no marks will be awarded: a.verifiable proof of employment with the bidder of the proposed staff b.detailed CV c.valid PEC Registration / Internationally recognized Engineering Body Registration Certificates of proposed Engineers d.Diploma Certificates of DAE staff (Qualitative)(Doc Required)	5

Environmental Officer - Please refer to Section V Evaluation Criteria B2.6: 5 mark will be awarded for BSc. Environmental Engineer, having at least 07 years' relevant experience. Max Marks = 5 Kindly attach Form PER-1 and PER-2 for the proposed personnel, along with following for each personnel, failing which, no marks will be awarded: a.verifiable proof of employment with the bidder of the proposed staff b.detailed CV c.valid PEC Registration / Internationally recognized Engineering Body Registration Certificates of proposed Engineers d.Diploma Certificates of DAE staff (Qualitative)(Doc Required)	5
Site Engineer Civil - Please refer to Section V Evaluation Criteria B2.7: 5 mark will be awarded for Civil Engineer, minimum qualification B.Sc./B.E, having at least 10 years' relevant experience. Max Marks = 5 Kindly attach Form PER-1 and PER-2 for the proposed personnel, along with following for each personnel, failing which, no marks will be awarded: a.verifiable proof of employment with the bidder of the proposed staff b.detailed CV c.valid PEC Registration / Internationally recognized Engineering Body Registration Certificates of proposed Engineers d.Diploma Certificates of DAE staff (Qualitative)(Doc Required)	5
Site Engineer Electrical - Please refer to Section V Evaluation Criteria B2.8: 5 mark will be awarded for Electrical Engineer, minimum qualification B.Sc./B.E, having at least 10 years' relevant experience. Max Marks = 5 Kindly attach Form PER-1 and PER-2 for the proposed personnel, along with following for each personnel, failing which, no marks will be awarded: a.verifiable proof of employment with the bidder of the proposed staff b.detailed CV c.valid PEC Registration / Internationally recognized Engineering Body Registration Certificates of proposed Engineers d.Diploma Certificates of DAE staff (Qualitative)(Doc Required)	5
Site Engineer Mechanical - Please refer to Section V Evaluation Criteria B2.9: 5 mark will be awarded for Mechanical Engineer, minimum qualification B.Sc./B.E, having at least 10 years' relevant experience. Max Marks = 5 Kindly attach Form PER-1 and PER-2 for the proposed personnel, along with following for each personnel, failing which, no marks will be awarded: a.verifiable proof of employment with the bidder of the proposed staff b.detailed CV c.valid PEC Registration / Internationally recognized Engineering Body Registration Certificates of proposed Engineers d.Diploma Certificates of DAE staff (Qualitative)(Doc Required)	5

Sub Engineer Civil - Please refer to Section V Evaluation Criteria B2.10: 5 mark will be awarded for Sub Engineer, minimum qualification DAE (Civil). having at least 15 years' relevant experience. Max Marks = 5 Kindly attach Form PER-1 and PER-2 for the proposed personnel, along with following for each personnel, failing which, no marks will be awarded: a.verifiable proof of employment with the bidder of the proposed staff b.detailed CV c.valid PEC Registration / Internationally recognized Engineering Body Registration Certificates of proposed Engineers d.Diploma Certificates of DAE staff (Qualitative)(Doc Required)	5
Sub Engineer Electrical - Please refer to Section V Evaluation Criteria B2.11: 5 mark will be awarded for Sub Engineer, minimum qualification DAE (Electrical), having at least 15 years' relevant experience. Max Marks = 5 Kindly attach Form PER-1 and PER-2 for the proposed personnel, along with following for each personnel, failing which, no marks will be awarded: a.verifiable proof of employment with the bidder of the proposed staff b.detailed CV c.valid PEC Registration / Internationally recognized Engineering Body Registration Certificates of proposed Engineers d.Diploma Certificates of DAE staff (Qualitative)(Doc Required)	5
Quantity Surveyor - Please refer to Section V Evaluation Criteria B2.12: 5 mark will be awarded for Quantity Surveyor, minimum qualification DAE (Civil), having at least 15 years' relevant experience. Max Marks = 5 Kindly attach Form PER-1 and PER-2 for the proposed personnel, along with following for each personnel, failing which, no marks will be awarded: a.verifiable proof of employment with the bidder of the proposed staff b.detailed CV c.valid PEC Registration / Internationally recognized Engineering Body Registration Certificates of proposed Engineers d.Diploma Certificates of DAE staff (Qualitative)(Doc Required)	5
Surveyor - Please refer to Section V Evaluation Criteria B2.13: 5 mark will be awarded for Surveyor, minimum qualification DAE (Civil), having at least 15 years' relevant experience. Max Marks = 5 Kindly attach Form PER-1 and PER-2 for the proposed personnel, along with following for each personnel, failing which, no marks will be awarded: a.verifiable proof of employment with the bidder of the proposed staff b.detailed CV c.valid PEC Registration / Internationally recognized Engineering Body Registration Certificates of proposed Engineers d.Diploma Certificates of DAE staff (Qualitative)(Doc Required)	5

Equipment Capabilities - Please refer to Section V Evaluation Criteria B.3 (Max Marks: 100, Minimum Requirement: 50% for Single Entity/All Parties Combined, 30% for each member of JV and 45% for Lead Member of JV)	
Please refer to Section V Evaluation Criteria Annexure B.3 for the list of equipment and minimum requirements of each item. Marking Criteria: 40 Marks for each equipment will be awarded if the Contractor meets the minimum requirements for each item. If the available quantity of each equipment is less than specified limit, following weightage shall be applied: $40 \times (A / \text{Required Quantity})$. If the available quantity of each equipment is more than the minimum equipment requirement full marks will be awarded. A = Available quantity of each equipment of each Item. Max 50 Marks for each Sub-Head. Total Marks = $(\text{Marks Obtained}/1200) \times 100$. Kindly attach duly completed/filled Form EQU along with an undertaking on judicial stamp paper to the effect that the listed equipment is available with the firm. (Qualitative)(Doc Required)	100
Financial Soundness - Please refer to Section V Evaluation Criteria B.4 (Max Marks: 150, Minimum Requirement: 50% for Single Entity/All Parties Combined, 30% for each member of JV and 45% for Lead Member of JV)	
Available Unutilized Bank Credit Line - Please refer to Section V Evaluation Criteria B4.1: Available latest Project specific Unutilized Bank Credit Line Max Marks = 75 • 65 Marks will be awarded if the available bank credit line limit is equal to 10,000 million or equivalent Foreign Currency. • For limit less than 10,000 million or equivalent Foreign Currency, following weightage will be adopted: $65 \times (A/10,000)$ • For the limit more than 10,000 million but less than 15,000 million or equivalent Foreign Currency, following weightage will be adopted: $65 + (A/15,000) \times 10$ A= Available Unutilized Bank Credit Line Limit Full Marks will be awarded in case of limit is 15,000 million or equivalent Foreign Currency or more. Kindly attach project specific current dated Bank Credit Line Letter. (Qualitative)(Doc Required)	75

Working Capital - Please refer to Section V Evaluation Criteria B4.2: Average Working Capital in last 5 years Max Marks = 75 • 65 Marks will be awarded if the available average working capital for last five years is equal to 5,000 million or equivalent Foreign Currency. • For the working capital less than 5,000 million or equivalent Foreign Currency, following weightage will be adopted: $65 \times (A/5,000)$ • For the working capital more than 5,000 million but less than 7,000 million or equivalent Foreign Currency, following weightage will be adopted: $65 + (A/7,000) \times 10$ A= Average working capital in last five years. Full Marks will be awarded in case of limit is 7,000 million or equivalent Foreign Currency or more. Kindly attach FORM FIN - 3.1, FIN - 3.2 and FIN 3.3 The bidder or each member of JV shall attach Audited financial statements for the last five years i.e. year 2020-21 to year 2024-25. No marks shall be awarded, if the audited financial statements are not provided for all 5 years. (Qualitative) (Doc Required)

75

Jobs/Lots

Jobs Without Lots :

Job	Delivery Schedule	Quantity	Bid Security
Construction of Aviation Complex at Blue Area, Islamabad	Address: Blue Area, Islamabad Schedule: 1645 Days Quantity: 1/job	1/job	350000000 PKR

Work Specifications and Market Rates

Jobs Without Lots :

Job: Construction of Aviation Complex at Blue Area, Islamabad

Specifications / Requirements:

Sr. No	Bill No.	Description	Unit	Qty	Rate	Amount
1	Bill No. 1	Civil Works				
2	1.A	Retention System				
3	1.B	Structure Works				
4	1.C	Finishes Works				
5	Bill No. 2	Plumbing & Firefighting Works				
6	2.A	Plumbing Works				
7	2.B	Firefighting Works				
8	Bill No. 3	Electrical Works				
9	3.A	Electrification (Internal)				
10	3.B	Energy Monitoring System				

Sr.No	Bill No.	Description	Unit	Qty	Rate	Amount
11	3.C	ELV Works				
12	3.D	External Electrical Works				
13	Bill No. 4	Façade Work				
14	Bill No. 5	HVAC Works				
15	Bill No. 6	Elevators				
16	Bill No. 7	Escalators				
17	Bill No. 8	Integrated Building Management System (IBMS)				
18	Bill No. 9	Natural Gas Work				
19	Bill No. 10	External Development Works				
20	10.A	Roads, Walkways & Paved Areas				
21	10.B	Storm Drainage Works				
22		Total (PKR)				30070550298
					GRAND TOTAL:	Rs30,070,550,298.00

Scope of Work

The scope of work primarily includes the construction of the Aviation Complex at Blue Area Islamabad. The scope of work for the high-rise building (6 basements, ground plus 26 storeys) includes Piling and Earth Retention Works, Civil Works, Architectural finishes Works, HVAC, Elevators, Escalators, Electrical, ELV Systems, Plumbing, Fire Fighting, Integrated Building Management System, Façade System, BIPV System, Metering and HT Room and infrastructure development works. Infrastructure works include PCC roads, concrete paver parking, storm water drainage, sewerage networks and fire-fighting etc. lying within the boundaries and limits shown on the Drawings and any such additional areas adjacent thereto as may be designated by the Engineer from time to time for the construction to be performed under the Contract, and all such areas and additional areas shall comprise the Site.

Price Schedule

For Individual Jobs

#	Job Title	Quantity	Unit Price (PKR)	Total Price (PKR)	Delivery Location	Delivery Period / Year	Country of Origin
1							
2							

For Lots

#	Lot Title	Total Lot Price (PKR)	Country of Origin
1	[Lot 1 Title]		





General Conditions of Contract

Red Book:

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The Conditions of Contract are the “General Conditions” which form part of the “Conditions of Contract for Construction for Building and Engineering Works Designed by the Employer (“Red book”) Second edition 2017” published by the Federation Internationale Des Ingenieurs – Conseils (FIDIC) and the following “Particular Conditions” which shall complement the General Conditions of the Contract.

The successful Bidder, upon contract award, shall be required to furnish two (02) copies of aforementioned “General Conditions” for incorporation in the Works Contract.

International Federation of Consulting Engineers (FIDIC) FIDIC

Bookshop – Box- 311 – CH – 1215 Geneva 15, Switzerland

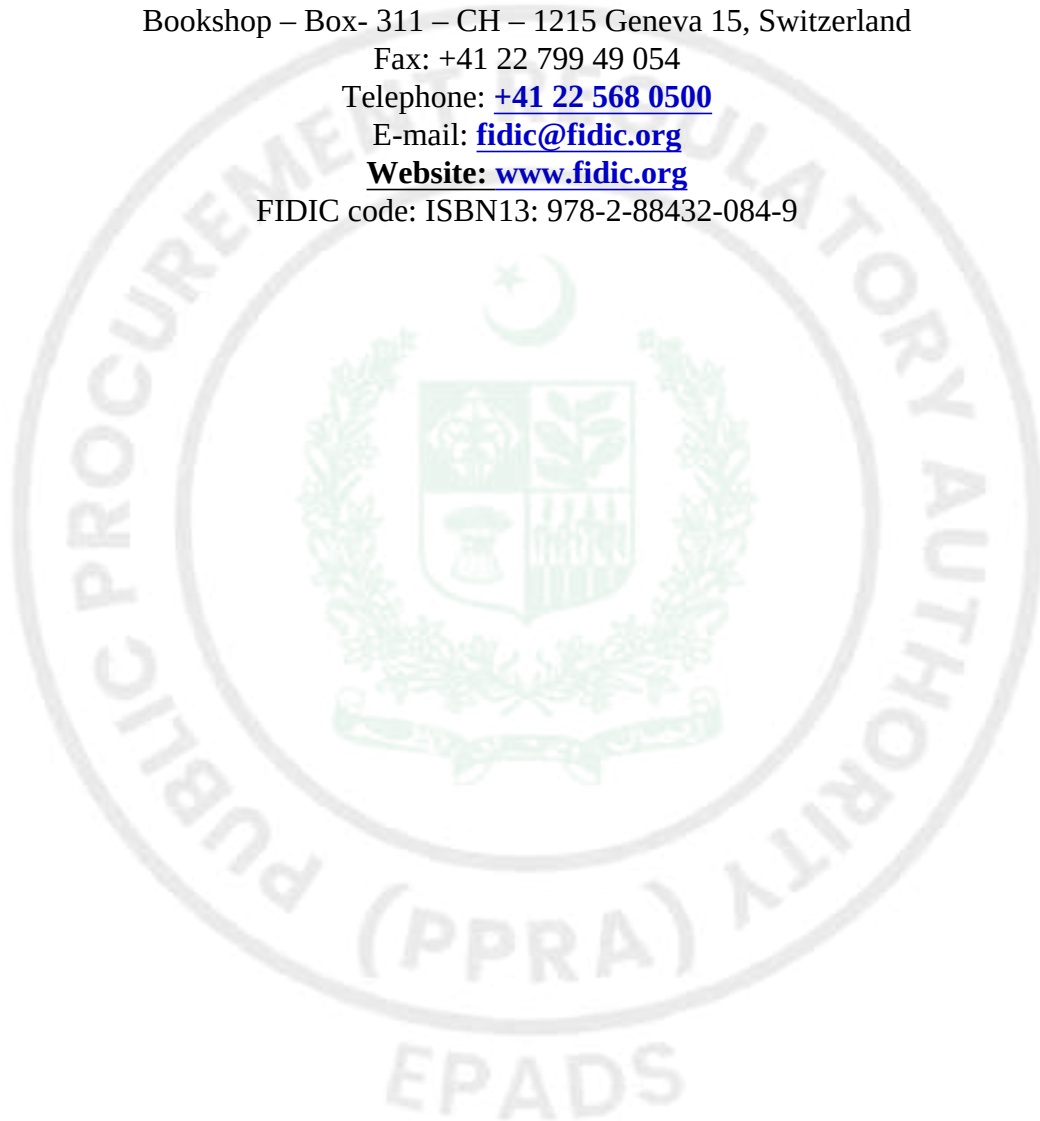
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Website: www.fidic.org

FIDIC code: ISBN13: 978-2-88432-084-9





Special Conditions of Contract

PARTICULAR CONDITIONS OF CONTRACT (PCC)

Particular Conditions

(Mandatory Provisions not to be amended/substituted)

The Particular Conditions (PCC) complement the General Conditions (GCC) to specify dates, contractual requirements, and special circumstances related to the Works. The PCC 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 1.1.27

Defects Notification Period (DNP): **728** Days

Sub-Clause 1.1.31

Employer's name & address: **Pakistan Airports Authority (Planning & Development Directorate), Director Planning & Development P&D Directorate, HQPAA, Terminal-1 Jinnah International Airport, Karachi**

Sub-Clause 1.1.35

Engineer's name & address: **National Engineering Services Pakistan (Pvt.) Limited – NESPAK**

NESPAK House, 5th Floor, Sector G-5/2, Islamabad

Sub-Clause 1.1.84

Time for Completion: **1645** days for whole of the works

Sub-Clause 1.3 (a)(ii)

Agreed method of electronic transmission: **Not Agreed**

Sub-Clause 1.3 (d)

Address of Employer for Communications: **P&D Directorate, HQPAA, Terminal-1 Jinnah International Airport, Karachi**

Address of Engineer for Communications:

NESPAK House, 5th Floor, Sector G-5/2, Islamabad

Address of Contractor for Communications: -----

Sub-Clause 1.4

Contract shall be governed by the law of: **Islamic Republic of Pakistan**

Ruling language: **English**

Language for communications: **English**

Sub-Clause 2.1

After receiving the Letter of Acceptance, the Contractor shall be given right of access to all or part of the Site within: **3** days after Commencement Date

Sub-Clause 2.4

Employer's financial arrangements:

Employer's Own Funds

Sub-Clause 3.2 (e)(ii)

Engineer's Duties and Authority: **Variation resulting in an increase of the Accepted Contract Amount in excess of one percent (1%) subject to accumulative Variations not exceeding five percent (5%) of the Accepted Contract Amount**

Sub-Clause 4.2

Performance Security (as percentage of the Accepted Contract Amount in Currencies): 10.00%

Form of Performance Guarantee: **Bank Guarantee**

Sub-Clause 4.2.1

List of Insurance Companies:

Performance guarantee/ security will be in the form of an unconditional and irrevocable bank guarantee from a scheduled bank

in Pakistan in the amount of 10% as a percentage of the Contract

Price. In case of a foreign bank, the guarantee shall be countersigned and counter-guaranteed by a scheduled bank in Pakistan.

The list of approved Scheduled Bank is attached with the Bidding Documents

Sub-Clause 4.7.2

period for notification of errors in the items of reference: **Twenty Eight (28) days**

Sub-Clause 4.19

Period of payment for temporary utilities: **Each Month**

Sub-Clause 5.1 (a)

Maximum allowable accumulated value of work subcontracted (as a percentage of the Accepted Contract Amount): **30 %**

Sub-Clause 5.1 (b)

Parts of the Works for which subcontracting is not permitted: 100

None

Sub-Clause 6.5

Normal working hours on the Site: **8**

Sub-Clause 8.3

Number of additional paper copies of programmes: **3**

Sub-Clause 8.8 & 14.15(b)

Delay Damages payable for each day of delay **0.01%** of the Accepted Contract Amount for delay in completion of whole of the Works

Sub-Clause 8.8

Maximum amount of Delay Damages **10.00 %** of the Accepted Contract Amount

Sub-Clause 8.14

Applicability of Incentives for Early Completion **Yes**

Sub-Clause 12.3

Percentage profit (Not more than 10%): **2.5%**

Sub-Clause 13.4.(b)(ii)

Percentage rate to be applied to Provisional Sums for overhead charges and profit: **Twenty Five percent (25%)**

Sub-Clause 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 14.2.1

Advance Payment Insurance **Allowed**

Total advance payment shall be 15% (fifteen percent) of the Accepted Contract Amount, excluding Provisional Sums. The advance payment shall be payable in the currency of the contract, in two equal parts. Advance Payment Guarantee shall remain valid one month beyond the stipulated date of completion of Project. The Advance Payment Guarantee shall be progressively reduced to the balance amount of Advance indicated in the IPCs certified by the Engineer.

1. First part within twenty (21) days after the Procuring agency/ Employer receives the Advance Payment Certificates from the Engineer; and 2. Second part within forty-two (42) days from the date of payment of the first part, subject to the satisfaction of the Engineer as to the state of mobilization of the Contractor, payable in the currency and proportion of the contract.

Sub-Clause 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 2nd 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.

Sub-Clause 14.3

Period of payment **One Month**

Sub-Clause 14.3(b)

Number of additional paper copies of Statements: **3**

Sub-Clause 14.3 (iii)

Percentage of retention: **Seven percent (7%)**

Sub-Clause 14.3 (iii)

Limit of Retention Money (as a percentage of the Accepted Contract Amount): **Five percent (5%)**

Sub-Clause 14.5(b)(i)

Plant and Materials for payment when shipped: **Plant and Materials under Bill of “Imported Plant and Materials”**

Sub-Clause 14.5(c)(i)

Plant and Materials for payment when delivered to the Site: Plant and Non Perishable Materials

Plants and Materials Onsite

Plant and Materials for payment when delivered to the Site: 1. Steel Reinforcement 2. Glass 3. Doors 4. False Ceiling 5. Tile, Marble and Granite 6. Aluminum 7. Plumbing Fittings and Fixtures 8. Pipes and Conduits 9. Pumps except Fire-Fighting Pumping Set 10. Electric Cables 11. Electric Panels 12. Transformers 13. CCTV Cameras

Sub-Clause 14.6.2

Minimum amount of Interim Payment Certificate (IPC): **Yes**

The Minimum Amount IPC is 1% of the Accepted Contract Amount

[Employer to give value not exceeding one fifth of the average expected value of Interim Payment Certificate]

Sub-Clause 14.7(a)

Period of payment of Advance Payment to the Contractor: **14 days**

Sub-Clause 14.7b(i)

Period for the Employer to make interim payments to the Contractor under Sub-Clause 14.6: **21 days**

Sub-Clause 14.7b(ii)

Period for the Employer to make interim payments to the Contractor under Sub-Clause 14.13 (Final Payment): **56 days**

Sub-Clause 14.7(c)

Period for the Employer to make final payment to the Contractor: **56 days**

Sub-Clause 14.8

Financing charges for delayed payment Local Currency (PKR):

6-Month KIBOR (Offer) +3% per annum.

Foreign Currency:

USD

6-Month SOFR (Secured Overnight Financing Rate for USD) +1% per annum.

EURO

6-Month EURIBOR (EURO Interbank Offered Rate for EURO) +1% per annum.

Others

Appropriate rates +1% (for other foreign currencies, Ref. Schedule-A, A-4 to Bid).

Sub-Clause 14.11.1(b)

Number of additional paper copies of draft Final Statements: **6**

[insert number of copies say six (06)]

Sub-Clause 14.15

Currencies of payment of Contract Price: **as stated in the Table Schedule of Adjustment Data of Schedule A (if Given)**

Sub-Clause 14.15(a)(i)

Proportions or amounts of Local and Foreign currencies: **as stated in the Table Schedule of Adjustment Data of Schedule A (if Given)**

Sub-Clause 14.15(c)

Currencies and proportions for payment of Delay Damages: **as stated in the Table Schedule of Adjustment Data of Schedule A (if Given)**

Sub-Clause 14.15(f)

rates of exchange: **as stated in the Table IV of Schedule A (If Given)**

Sub-Clause 17.2(d)

Forces of nature, the risks of which are allocated to the Contractor: **Nil**

Sub-Clause 19.1

Permitted deductible limits:

- i) insurance required for the Works: **Ten percent (10%) of loss amount on each & every loss**
- ii) insurance required for Goods: **Nil**
- iii) insurance required for liability for breach of professional duty: **Nil**
- iv) insurance required against liability for fitness for purpose (if any is required): **Nil**
- v) insurance required for injury to persons and damage to property: **Nil**
- vi) insurance required for injury to employees: **Nil**
- vii) other insurances required by Laws and by local practice : **Nil**

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

Sub-Clause 19.2.1(b)

Additional amount to be insured (as a percentage of the replacement value): 15% of the replacement value (Accepted Contract Amount)

Sub-Clause 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

Sub-Clause 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

Sub-Clause 19.2.3(b)

Insurance required against liability for fitness for purpose: **Yes**

Sub-Clause 19.2.3

Period of insurance required for liability for breach of professional duty: Until the date of issuance of Performance Certificate

Sub-Clause 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: The Amount of Insurance Required for Person Injury is In accordance with Workmen Compensation Act

The Amount of Insurance Required for Damage to Property is PKR 50 million without limit to the number of incidents as per his assessment of the adjoining property(ies) other than the Works] without limit to the number of incidents

Sub-Clause 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

Sub-Clause 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.

Sub-Clause 21.1

The DAAB shall comprise 3

[insert either “a sole Member” or “Three Members”]

[For a Contract estimated to cost above PKR 2.5billion, the DAAB shall comprise of three members. For a Contract estimated to cost between PKR1billion and PKR2.5billion, the DAAB may comprise of three members or a sole member. For a Contract estimated to cost less than PKR1billion, a sole member is recommended.]

Sub-Clause 21.1

List of proposed members of DAAB

- proposed by Employer

To be inserted at the time of signing of the Contract

-

-

- proposed by Contractor

[to be inserted at the time of signing of the Contract]

1. _____

2. _____

3. _____

Sub-Clause 21.2

Appointing entity (official) for DAAB members Managing Director Public Procurement Regulatory Authority (PPRA) or Chairman Pakistan Engineering Council (PEC) from the list of PEC approved arbitrators published at its website

Sub-Clause 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: **Islamabad, Pakistan**

[Insert name of city]

Particular Conditions

PartB - 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 - SpecialProvisions;
- (f) the General Conditions;
- (g) the Specification Part A - SpecificProvisions;
- (h) the Specification Part B- Technical Provisions;
- (i) the Drawings;
- (j) the completed Schedules to Bid includingBillof Quantities;
- (k) the JV Undertaking (if the Contractor is a JV); and
- (l) 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)

Issue of FPC Sub Clauses

Variations resulting in an increase of the Accepted Contract Amount in excess of 1% shall require approval of the Procuring agency/ Employer

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

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"

4.2 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 ratings 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."

4.3 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"

4.4 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 summary 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 up to 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.”

14.9 Release of Retention Money

The following is added at the end of Sub-Clause 14.9:

“Unless otherwise stated in the Contract, when the Taking-Over Certificate has been issued for the Works and the first half of the Retention Money has been certified for payment by the Engineer, the Contractor shall be entitled to substitute a guarantee, in the form annexed to the Particular Conditions or in another form approved by the Employer and issued by a schedule bank selected by the Contractor, for the second half of the Retention Money. The Contractor shall ensure that the guarantee is in the amounts and currencies of the second half of the Retention Money and is valid and enforceable until the Contractor has executed and completed the Works and remedied any defects, as specified for the Performance Security. On receipt by the Employer of the required guarantee, the Engineer shall certify, and the Employer shall pay the second half of the Retention Money. The release of the second half of the Retention Money against a guarantee shall then be in lieu of the release after the latest of the expiry dates of the Defects Notification Periods. The Employer shall return the guarantee to the Contractor within 21 days after receiving a copy of the Performance Certificate.

If the Performance Security required under Sub-Clause 4.2 is in the form of a demand guarantee, and the amount guaranteed under them when the Taking-Over Certificate is issued is more than half of the Retention Money, then the Retention Money guarantee will not be required. If the amount guaranteed under the Performance Security when the Taking-Over Certificate is issued is less than half of the Retention Money, the Retention Money guarantee will only be required for the difference between half of the Retention Money and the amount guaranteed under the Performance Security.

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 madeavailable 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/VISOFracting as provided in Table below:

Accepted Contract Amount (In Eq. million PKR)	Minimum Rating of Insurance Companies
---	---------------------------------------

Up to 1000	A (+)
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1001 to no limit	AA
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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.

Appendix General Conditions of Dispute Avoidance/Adjudication Agreement

12 Disputes Under DAAB Agreement

In the first paragraph, third, fourth and fifth line, the text “under the Rules of Arbitration of the International Chamber of Commerce 2017.....shall apply” is substituted with “under the Arbitration Act 1940 by sole arbitrator appointed by the Managing Director Public Procurement Regulatory Authority or Chairman Pakistan Engineering Council.”





Bid Securing Declaration

FORM OF BID SECURING DECLARATION

Date:

No.:

Alternative No.: **P73078**

To: **Pakistan Airports Authority (Planning & Development Directorate), Director Planning & Development P&D Directorate, HQPAA, Terminal-1 Jinnah International Airport, Karachi**

We, the undersigned, declare that:

We understand that, according to your conditions, Bids must be supported by a Bid-Securing Declaration.

We accept that we will be blacklisted and henceforth cross debarred for participating in respective category of public procurement proceedings for a period of (not more than) six months, if fail to abide with a bid securing declaration, however without indulging in corrupt and fraudulent practices, if we are in breach of our obligation(s) under the Bid conditions, because we:

- (a) have withdrawn our Bid during the period of Bid validity specified in the Letter of Bid; or
- (b) having been notified of the acceptance of our Bid by the Procuring agency/Employer during the period of Bid validity, (i) fail or refuse to sign the Contract; or (ii) fail or refuse to furnish the Performance Security (or guarantee), if required, in accordance with the ITB.

We understand this Bid Securing Declaration shall expire if we are not the successful Bidder, upon the earlier of (i) our receipt of your notification to us of the name of the successful Bidder; or (ii) twenty-eight days after the expiration of our Bid.

Name of the Bidder*

Name of the person duly authorized to sign the Bid on behalf of the Bidder** _____

Title of the person signing the Bid _____

Signature of the person named above _____

Date signed _____ day of _____, _____

*: In the case of the Bid submitted by joint venture specify the name of the Joint Venture as Bidder

**: Person signing the Bid shall have the power of attorney given by the Bidder attached to the Bid

[Note: In case of a Joint Venture, the Bid-Securing Declaration must be in the name of all members to the Joint Venture that submits the Bid.]

EPADS



Contract Form

FORM OF CONTRACT AGREEMENT

THIS CONTRACT AGREEMENT (hereinafter called the “Agreement”) made on the _____ day of _____ (month) 20____ between **Pakistan Airports Authority (Planning & Development Directorate), Director Planning & Development P&D Directorate, HQPAA, Terminal-1 Jinnah International Airport, Karachi** (hereinafter called the “Employer”) of the one part and _____ (hereinafter called the “Contractor”) of the other part.

WHEREAS the Employer is desirous that certain Works, viz., **Construction of Aviation Complex at Blue Area, Islamabad (P73078)** should be executed by the Contractor and has accepted a Bid by the Contractor for the execution and completion of such Works and the remedying of any defects therein.

NOW this Agreement witnessed as follows:

1. In this Agreement words and expressions shall have the same meanings as are respectively assigned to them in the Conditions of Contract hereinafter referred to.
2. The following documents, 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 - SpecialProvisions;
 - f) The General Conditions;
 - g) The Specifications Part A - SpecificProvisions;
 - 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
 - l) [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.

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

Signature of the Contactor Signature of Employer

(Seal) (Seal)

Signed, Sealed and Delivered in the presence of:

Witness Witness

(Name, Title and Address) (Name, Title and Address)



DAAB Agreement

[All italicised text and any text within square brackets (except sub-clause headings) in this form of agreement is for use in preparing the form and should be deleted from the final product].

Name and details of the Contract Construction of Aviation Complex at Blue Area, Islamabad

This Agreement made the _____ day of _____ [month], _____ [year], between

Name and contact details of the Employer **Pakistan Airports Authority (Planning & Development Directorate), Director Planning & Development**

P&D Directorate, HQPAA, Terminal-1 Jinnah International Airport, Karachi

+92-219-924-2773

director.pdev@paa.gov.pk

Name and contact details of the Contractor _____ (name)

_____ (address)

_____ (telephone)

_____ (email / other contact details);

Name and contact details of the DAAB Member _____ (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:

_____ (name) _____ (name)

_____ (address) _____ (address)

_____ (telephone) _____ (telephone)

_____ (email/ other contact details) _____ (email/other contact details)

the “**Other Members**”; and

D. the DAAB Member accepts this appointment.

The Employer, Contractor and DAAB Member jointly agree as follows:

1. The conditions of this DAAB Agreement comprise:

(a) Clause 21 [Disputes and Arbitration] of the Conditions of Contract, and any other provisions of the Contract that are applicable to the DAAB’s Activities; and

(b) the “General Conditions of Dispute Avoidance/Adjudication Agreement”, which is appended to the General Conditions of the “Conditions of Contract for Construction” Second Edition 2017 published by FIDIC (“GCs”), as amended and/or added to by the following provisions.

2. [Details of amendments to the GCs, if any. For example:

In the procedural rules annexed to the GCs, Rule _ is deleted and replaced by: “ ... “]

3. The DAAB Member shall be paid in accordance with Clause 9 of the GCs. The currency of payment shall be _____.

In respect of Sub-Clauses 9.1 and 9.2 of the GCs, the amounts of the DAAB Member’s monthly fee and daily fee shall be:

monthly fee _____ per month, and

daily fee of _____ per day

(or as otherwise set under Sub-Clause 9.3 of the 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. The Employer and the Contractor shall be jointly and severally liable for the DAAB Member’s fees and other payments to be made to the DAAB Member in accordance with the GCs.

6. This DAAB Agreement shall be governed by the law of _____ (if not stated, the law that governs the Contract under Sub-Clause 1.4 of the Conditions of Contract).

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: _____

EPADS

FORM OF MOBILIZATION ADVANCE GUARANTEE/ BOND

Guarantee No. _____ Date _____

WHEREAS _____ (hereinafter called the 'Employer')

has entered into a Contract for _____

(Particulars of Contract)

with _____ (hereinafter called the "Contractor").

AND WHEREAS, the Employer has agreed to advance to the Contractor, at the Contractor's request, an amount of Pak Rupees _____ (PKR _____) which amount shall be advanced to the Contractor as per provisions of the Contract.

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

AND WHEREAS, _____

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

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

Notice in writing of any default, on the part of the Contractor, of which the Employer at his discretion of making decision, shall be given by the Employer to the Guarantor, and on such first written demand, payment shall be made by the Guarantor of all sums then due under this Guarantee without any reference to the Contractor and without any objection.

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

(Date)

The Guarantor's liability under this Guarantee shall not in any case exceed the sum of PKR _____ (Pak Rupees _____).

This Guarantee shall remain valid up to the aforesaid date and shall be null and void after the aforesaid date or earlier if the advance made to the Contractor is fully adjusted against payments from Interim Payment Certificates of the Contractor provided that the Guarantor

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

Guarantor
(Scheduled Bank/ Insurance Company)

Signature _____

Name _____

Title _____

WITNESS:

1. _____

Corporate Secretary (Seal) Corporate Guarantor (Seal)
2. _____

Name, Title & Address



Retention Money Security Demand Guarantee

_____ [Guarantor letterhead or SWIFT identifier code]

Beneficiary: _____ [Insert name and Address of Employer]

Date: _____ [Insert date of issue]

RETENTION MONEY GUARANTEE No.: [Insert guarantee reference number]

Guarantor: [Insert name and address of place of issue, unless indicated in the letterhead]

We have been informed that _____ [insert name of Contractor, which in the case of a joint venture shall be the name of the joint venture] (hereinafter called "the Contractor") has entered into Contract No. _____ [insert reference number of the contract] dated _____ with the Employer, for the execution of _____ [insert name of contract and brief description of Works] (hereinafter called "the Contract").

Furthermore, we understand that, according to the conditions of the Contract, the Employer retains moneys up to the limit set forth in the Contract ("the Retention Money"), and that when the Taking-Over Certificate has been issued under the Contract and the first half of the Retention Money has been certified for payment, payment of [insert the second half of the Retention Money or if the amount guaranteed under the Performance Guarantee when the Taking-Over Certificate is issued is less than half of the Retention Money, the difference between half of the Retention Money and the amount guaranteed under the Performance Security and, if required, the ES Performance Security] is to be made against a Retention Money guarantee.

At the request of the Applicant, we, as Guarantor, hereby irrevocably undertake to pay the Beneficiary any sum or sums not exceeding in total an amount of _____ [insert amount in figures] () [amount in words] upon receipt by us of the Employer's complying demand supported by the Beneficiary's statement, whether in the demand itself or in a separate signed document accompanying or identifying the demand, stating that the Applicant is in breach of its obligation(s) under the Contract, without your needing to prove or show grounds for your demand or the sum specified therein.

A demand under this guarantee may be presented as from the presentation to the Guarantor of a certificate from the Employer's bank stating that the second half of the Retention Money as referred to above has been credited to the contractor on its account number _____ at _____ [insert name and address of Contractor's bank].

This guarantee shall expire no later than the day of, 2..., and any demand for payment under it must be received by us at the office indicated above on or before that date.

[signature(s)]

Note: All italicized text (including footnotes) is for use in preparing this form and shall be deleted from the final product.



Integrity Pact

Integrity Pact

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

Contract

Number: Contract

Value: Contract Title:

Dated:

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

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

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

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

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

Name of Employer:

Signature:

[Seal]

Name of Bidder/Contractor:

Signature:

[Seal]



Performance Guarantee Form

FORM OF PERFORMANCE SECURITY

Guarantee No. _____

Executed on _____

Expiry date _____

Name _____ of _____ Guarantor _____ with _____ address: _____

Name _____ of _____ Principal _____ (Contractor) _____ with
address: _____

Penal Sum of Security (express in words and figures) _____

Letter of Acceptance No. _____ Dated _____

KNOW ALL MEN BY THESE PRESENTS, that in pursuance of the terms of the Bidding Documents and above said Letter of Acceptance (hereinafter called the Documents) and at the request of the said Principal we, the Guarantor above named, are held and firmly bound unto the **Pakistan Airports Authority (Planning & Development Directorate), Director Planning & Development P&D Directorate, HQPAA, Terminal-1 Jinnah International Airport, Karachi** (hereinafter called the Employer) in the penal sum of the amount stated above for the payment of which sum well and truly to be made to the said Employer, we bind ourselves, our heirs, executors, administrators and successors, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH, that whereas the Principal has accepted the Employer's above said Letter of Acceptance for _____

(Name of Contract) for the **Construction of Aviation Complex at Blue Area, Islamabad (P73078)**
_____ (Name of Project).

NOW THEREFORE, if the Principal (Contractor) shall well and truly perform and fulfill all the undertakings, covenants, terms and conditions of the said Documents during the original terms of the said Documents and any extensions thereof that may be granted by the Employer, with or without notice to the Guarantor, which notice is, hereby, waived and shall also well and truly perform and fulfill all the undertakings, covenants terms and conditions of the Contract and of any and all modifications of said Documents that may hereafter be made, notice of which modifications to the Guarantor being hereby waived, then, this obligation to be void; otherwise to remain in full force and virtue till all requirements of Clause 11, Defects After Taking Over, of Conditions of Contract are fulfilled.

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

We, _____ (the Guarantor), waiving all objections and defense under the Contract, do hereby irrevocably and independently guarantee to pay to the Employer without delay upon the Employer's first written demand without cavil or arguments 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)

Signature: _____

Name: _____

Title: _____

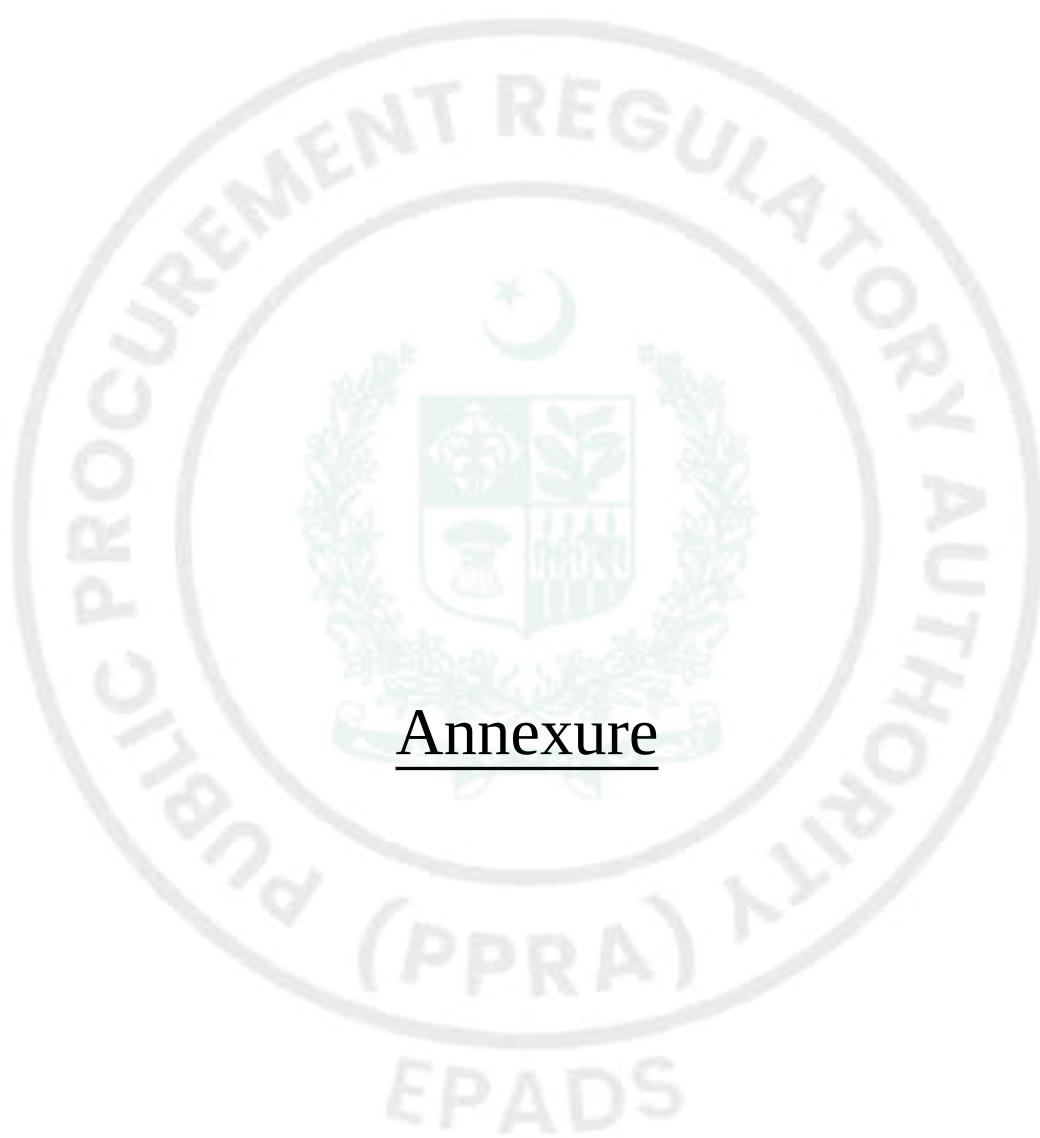
Corporate Guarantor (Seal)

WITNESS:

1.

2.

Name, Title & Address



Annexure

Adjustment Data

Price Adjustment Annexure

SBD Document (Read-Only)

See Form Under Additional Forms and Documents: **Adjustment Data** (page number: 102)

ITB and BDS Annexure

The Annexures attached hereto, including, but not limited to, the Instructions to Bidders (ITB), Bid DataSheet (BDS), Particular Conditions of Contract (Part A – Contract Data and Part B – Special Provisions), and any other documents expressly identified as forming part of the Bidding Documents, shall constitute an integral, essential, and binding part of the Bidding Documents.

Notwithstanding anything to the contrary contained in, or generated through, the EPADS V2.0 system, the ITB and BDS, and Conditions of Contract generated by EPADS V2.0 shall, to the extent of any technical inconsistency, discrepancy, or conflict, be deemed non-binding and shall have no legal or contractual effect. In the event of any ambiguity, discrepancy, inconsistency, or conflict between the system-generated documents and the aforesaid attached Annexures, the attached Annexures, including, but not limited to, the ITB, BDS, Particular Conditions of Contract (Part A – Contract Data and Part B – Special Provisions), and other documents forming part of the Bidding Documents, shall prevail and shall be final and binding upon both the Procuring Agency and the Bidder.

The Bidder shall download the aforesaid Annexures, duly sign and stamp each page thereof, and upload the complete scanned copy as an integral part of its bid submission. Failure to comply with this requirement may render the bid non-responsive, in accordance with the applicable procurement rules and the provisions of the Bidding Documents.

Technical Submission (Vendor)

Document Required

See Form Under Additional Forms and Documents: **ITB and BDS Annexure** (page number: 108)

Evaluation Criteria Annexure

The Evaluation Criteria (Section V) attached hereto as an Annexure shall constitute an integral, essential, and binding part of the Bidding Documents. The Bidder shall download the aforesaid Annexures, duly sign and stamp each page thereof, and upload the complete scanned copy as an integral part of its bid submission. Failure to comply with this requirement may render the bid non-responsive, in accordance with the applicable procurement rules and the provisions of the Bidding Documents.

Technical Submission (Vendor)

Document Required

Section VI Technical Specs Annexure

The Annexure shall constitute an integral, essential, and binding part of the Bidding Documents. The Bidder shall download the aforesaid Annexures, duly sign and stamp each page thereof, and upload the complete scanned copy as an integral part of its bid submission. Failure to comply with this requirement may render the bid non-responsive, in accordance with the applicable procurement rules and the provisions of the Bidding Documents

Technical Submission (Vendor)

Document Required

See Form Under Additional Forms and Documents: **Section VI Technical Specs Annexure** (page number: 171)

Technical Forms - Organization and Schedules

The technical forms attached as annexure shall be duly completed/filled, signed and stamped, together with all supporting documents required therein and the bidder shall upload the complete scanned copy as an integral part of its bid submission. Failure to comply with this requirement may render the bid non-responsive, in accordance with the applicable procurement rules and the provisions of the Bidding Documents.

Technical Submission (Vendor)

Document Required

See Form Under Additional Forms and Documents: **Technical Forms - Organization and Schedules** (page number: 176)

Technical Forms - Equipment

The technical forms attached as annexure shall be duly completed/filled, signed and stamped, together with all supporting documents required therein and the bidder shall upload the complete scanned copy as an integral part of its bid submission. Failure to comply with this requirement may render the bid non-responsive, in accordance with the applicable procurement rules and the provisions of the Bidding Documents.

Technical Submission (Vendor)

Document Required

See Form Under Additional Forms and Documents: **Technical Forms - Equipment** (page number: 181)

Technical Forms - Letter of Bid

The technical forms attached as annexure shall be duly completed/filled, signed and stamped, together with all supporting documents required therein and the bidder shall upload the complete scanned copy as an integral part of its bid submission. Failure to comply with this requirement may render the bid non-responsive, in accordance with the applicable procurement rules and the provisions of the Bidding Documents.

Technical Submission (Vendor)

Document Required

See Form Under Additional Forms and Documents: **Technical Forms - Letter of Bid** (page number: 194)

Technical Forms - ELI

The technical forms attached as annexure shall be duly completed/filled, signed and stamped, together with all supporting documents required therein and the bidder shall upload the complete scanned copy as an integral part of its bid submission. Failure to comply with this requirement may render the bid non-responsive, in accordance with the applicable procurement rules and the provisions of the Bidding Documents.

Technical Submission (Vendor)

Document Required

See Form Under Additional Forms and Documents: **Technical Forms - ELI** (page number: 197)

Technical Forms - Personnel

The technical forms attached as annexure shall be duly completed/filled, signed and stamped, together with all supporting documents required therein and the bidder shall upload the complete scanned copy as an integral part of its bid submission. Failure to comply with this requirement may render the bid non-responsive, in accordance with the applicable procurement rules and the provisions of the Bidding Documents.

Technical Submission (Vendor)

Document Required

See Form Under Additional Forms and Documents: **Technical Forms - Personnel** (page number: 199)

Technical Forms - CON 2

The technical forms attached as annexure shall be duly completed/filled, signed and stamped, together with all supporting documents required therein and the bidder shall upload the complete scanned copy as an integral part of its bid submission. Failure to comply with this requirement may render the bid non-responsive, in accordance with the applicable procurement rules and the provisions of the Bidding Documents.

Technical Submission (Vendor)

Document Required

See Form Under Additional Forms and Documents: **Technical Forms - CON 2** (page number: 203)

Technical Form - FIN 3.1

The technical forms attached as annexure shall be duly completed/filled, signed and stamped, together with all supporting documents required therein (audited financial statements) and the bidder shall upload the complete scanned copy as an integral part of its bid submission. Failure to comply with this requirement may render the bid non-responsive, in accordance with the applicable procurement rules and the provisions of the Bidding Documents.

Technical Submission (Vendor)

Document Required

See Form Under Additional Forms and Documents: **Technical Form - FIN 3.1** (page number: 205)

Technical Forms - FIN Forms

The technical forms attached as annexure shall be duly completed/filled, signed and stamped, together with all supporting documents required therein and the bidder shall upload the complete scanned copy as an integral part of its bid submission. Failure to comply with this requirement may render the bid non-responsive, in accordance with the applicable procurement rules and the provisions of the Bidding Documents.

Technical Submission (Vendor)

Document Required

See Form Under Additional Forms and Documents: **Technical Forms - FIN Forms** (page number: 207)

Technical Forms - Experience

The technical forms attached as annexure shall be duly completed/filled, signed and stamped, together with all supporting documents required therein and the bidder shall upload the complete scanned copy as an integral part of its bid submission. Failure to comply with this requirement may render the bid non-responsive, in accordance with the applicable procurement rules and the provisions of the Bidding Documents.

Technical Submission (Vendor)

Document Required

See Form Under Additional Forms and Documents: **Technical Forms - Experience** (page number: 212)

Financial Forms

The financial forms attached as annexure shall be duly completed/filled, signed and stamped, together with all supporting documents required therein and the bidder shall upload the complete scanned copy as an integral part of its bid submission. Failure to comply with this requirement may render the bid non-responsive, in accordance with the applicable procurement rules and the provisions of the Bidding Documents.

Financial Submission (Vendor)

Document Required

See Form Under Additional Forms and Documents: **Financial Forms** (page number: 218)

Summary of BOQ

The Bill of Quantities attached as annexure shall be duly completed/filled, signed and stamped, and the bidder shall upload the complete scanned copy as an integral part of its bid submission. Failure to comply with this requirement may render the bid non-responsive, in accordance with the applicable procurement rules and the provisions of the Bidding Documents.

Financial Submission (Vendor)

Document Required

See Form Under Additional Forms and Documents: **Summary of BOQ** (page number: 226)

Bill No. 1A

The Bill of Quantities attached as annexure shall be duly completed/filled, signed and stamped, and the bidder shall upload the complete scanned copy as an integral part of its bid submission. Failure to comply with this requirement may render the bid non-responsive, in accordance with the applicable procurement rules and the provisions of the Bidding Documents.

Financial Submission (Vendor)

Document Required

See Form Under Additional Forms and Documents: **Bill No. 1A** (page number: 227)

Bill No. 1B

The Bill of Quantities attached as annexure shall be duly completed/filled, signed and stamped, and the bidder shall upload the complete scanned copy as an integral part of its bid submission. Failure to comply with this requirement may render the bid non-responsive, in accordance with the applicable procurement rules and the provisions of the Bidding Documents.

Financial Submission (Vendor)

Document Required

See Form Under Additional Forms and Documents: **Bill No. 1B** (page number: 229)

Bill No. 1C

The Bill of Quantities attached as annexure shall be duly completed/filled, signed and stamped, and the bidder shall upload the complete scanned copy as an integral part of its bid submission. Failure to comply with this requirement may render the bid non-responsive, in accordance with the applicable procurement rules and the provisions of the Bidding Documents.

Financial Submission (Vendor)

Document Required

See Form Under Additional Forms and Documents: **Bill No. 1C** (page number: 239)

Bill No. 2A

The Bill of Quantities attached as annexure shall be duly completed/filled, signed and stamped, and the bidder shall upload the complete scanned copy as an integral part of its bid submission. Failure to comply with this requirement may render the bid non-responsive, in accordance with the applicable procurement rules and the provisions of the Bidding Documents.

Financial Submission (Vendor)

Document Required

See Form Under Additional Forms and Documents: **Bill No. 2A** (page number: 272)

Bill No. 2B

The Bill of Quantities attached as annexure shall be duly completed/filled, signed and stamped, and the bidder shall upload the complete scanned copy as an integral part of its bid submission. Failure to comply with this requirement may render the bid non-responsive, in accordance with the applicable procurement rules and the provisions of the Bidding Documents.

Financial Submission (Vendor)

Document Required

See Form Under Additional Forms and Documents: **Bill No. 2B** (page number: 291)

Bill No. 3A

The Bill of Quantities attached as annexure shall be duly completed/filled, signed and stamped, and the bidder shall upload the complete scanned copy as an integral part of its bid submission. Failure to comply with this requirement may render the bid non-responsive, in accordance with the applicable procurement rules and the provisions of the Bidding Documents.

Financial Submission (Vendor)

Document Required

See Form Under Additional Forms and Documents: **Bill No. 3A** (page number: 298)

Bill No. 3B

The Bill of Quantities attached as annexure shall be duly completed/filled, signed and stamped, and the bidder shall upload the complete scanned copy as an integral part of its bid submission. Failure to comply with this requirement may render the bid non-responsive, in accordance with the applicable procurement rules and the provisions of the Bidding Documents.

Financial Submission (Vendor)

Document Required

See Form Under Additional Forms and Documents: **Bill No. 3B** (page number: 317)

Bill No. 3C

The Bill of Quantities attached as annexure shall be duly completed/filled, signed and stamped, and the bidder shall upload the complete scanned copy as an integral part of its bid submission. Failure to comply with this requirement may render the bid non-responsive, in accordance with the applicable procurement rules and the provisions of the Bidding Documents.

Financial Submission (Vendor)

Document Required

See Form Under Additional Forms and Documents: **Bill No. 3C** (page number: 318)

Bill No. 3D

The Bill of Quantities attached as annexure shall be duly completed/filled, signed and stamped, and the bidder shall upload the complete scanned copy as an integral part of its bid submission. Failure to comply with this requirement may render the bid non-responsive, in accordance with the applicable procurement rules and the provisions of the Bidding Documents.

Financial Submission (Vendor)

Document Required

See Form Under Additional Forms and Documents: **Bill No. 3D** (page number: 329)

Bill No. 4

The Bill of Quantities attached as annexure shall be duly completed/filled, signed and stamped, and the bidder shall upload the complete scanned copy as an integral part of its bid submission. Failure to comply with this requirement may render the bid non-responsive, in accordance with the applicable procurement rules and the provisions of the Bidding Documents.

Financial Submission (Vendor)

Document Required

See Form Under Additional Forms and Documents: **Bill No. 4** (page number: 334)

Bill No. 5

The Bill of Quantities attached as annexure shall be duly completed/filled, signed and stamped, and the bidder shall upload the complete scanned copy as an integral part of its bid submission. Failure to comply with this requirement may render the bid non-responsive, in accordance with the applicable procurement rules and the provisions of the Bidding Documents.

Financial Submission (Vendor)

Document Required

See Form Under Additional Forms and Documents: **Bill No. 5** (page number: 338)

Bill No. 6

The Bill of Quantities attached as annexure shall be duly completed/filled, signed and stamped, and the bidder shall upload the complete scanned copy as an integral part of its bid submission. Failure to comply with this requirement may render the bid non-responsive, in accordance with the applicable procurement rules and the provisions of the Bidding Documents.

Financial Submission (Vendor)

Document Required

See Form Under Additional Forms and Documents: **Bill No. 6** (page number: 346)

Bill No. 7

The Bill of Quantities attached as annexure shall be duly completed/filled, signed and stamped, and the bidder shall upload the complete scanned copy as an integral part of its bid submission. Failure to comply with this requirement may render the bid non-responsive, in accordance with the applicable procurement rules and the provisions of the Bidding Documents.

Financial Submission (Vendor)

Document Required

See Form Under Additional Forms and Documents: **Bill No. 7** (page number: 348)

Bill No. 8

The Bill of Quantities attached as annexure shall be duly completed/filled, signed and stamped, and the bidder shall upload the complete scanned copy as an integral part of its bid submission. Failure to comply with this requirement may render the bid non-responsive, in accordance with the applicable procurement rules and the provisions of the Bidding Documents.

Financial Submission (Vendor)

Document Required

See Form Under Additional Forms and Documents: **Bill No. 8** (page number: 349)

Bill No. 9

The Bill of Quantities attached as annexure shall be duly completed/filled, signed and stamped, and the bidder shall upload the complete scanned copy as an integral part of its bid submission. Failure to comply with this requirement may render the bid non-responsive, in accordance with the applicable procurement rules and the provisions of the Bidding Documents.

Financial Submission (Vendor)

Document Required

See Form Under Additional Forms and Documents: **Bill No. 9** (page number: 352)

Bill No. 10A

The Bill of Quantities attached as annexure shall be duly completed/filled, signed and stamped, and the bidder shall upload the complete scanned copy as an integral part of its bid submission. Failure to comply with this requirement may render the bid non-responsive, in accordance with the applicable procurement rules and the provisions of the Bidding Documents.

Financial Submission (Vendor)

Document Required

See Form Under Additional Forms and Documents: **Bill No. 10A** (page number: 353)

Bill No. 10B

The Bill of Quantities attached as annexure shall be duly completed/filled, signed and stamped, and the bidder shall upload the complete scanned copy as an integral part of its bid submission. Failure to comply with this requirement may render the bid non-responsive, in accordance with the applicable procurement rules and the provisions of the Bidding Documents.

Financial Submission (Vendor)

Document Required

See Form Under Additional Forms and Documents: **Bill No. 10B** (page number: 356)

Contract Forms Annexure

The Annexures attached hereto, including, but not limited to, the Instructions to Bidders (ITB), Bid Data Sheet (BDS), Particular Conditions of Contract (Part A – Contract Data and Part B – Special Provisions), and any other documents expressly identified as forming part of the Bidding Documents, shall constitute an integral, essential, and binding part of the Bidding Documents.

Notwithstanding anything to the contrary contained in, or generated through, the EPADS V2.0 system, the ITB and BDS, and Conditions of Contract generated by EPADS V2.0 shall, to the extent of any technical inconsistency, discrepancy, or conflict, be deemed non-binding and shall have no legal or contractual effect. In the event of any ambiguity, discrepancy, inconsistency, or conflict between the system-generated documents and the aforesaid attached Annexures, the attached Annexures, including, but not limited to, the ITB, BDS, Particular Conditions of Contract (Part A – Contract Data and Part B – Special Provisions), and other documents forming part of the Bidding Documents, shall prevail and shall be final and binding upon both the Procuring Agency and the Bidder.

The Bidder shall download the aforesaid Annexures, duly sign and stamp each page thereof, and upload the complete scanned copy as an integral part of its bid submission. Failure to comply with this requirement may render the bid non-responsive, in accordance with the applicable procurement rules and the provisions of the Bidding Documents.

Technical Submission (Vendor)

Document Required

See Form Under Additional Forms and Documents: **Contract Forms Annexure** (page number: 357)





Procurement Forms







Additional Forms and Documents

Appendix C

Formula for Price Adjustment

This document will be applicable only for Price Adjustment in local currency (Pak. Rs.). Price Adjustment in foreign currency is not allowed.

The formulae for price adjustment is:

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

where,

“**P_n**” is the Price Adjustment factor for the work carried out in the period “n”.

“**A**” is a constant or the Non-Adjustable Portion of the Price Adjustment Factor to be specified in Appendix-C to Bid, representing the Non-Adjustable Portion of the Contract Price.

“**b, c, d,**” are Coefficients or weightages of the order of 0.xx (i.e., fractions rounded off to two decimals) for each specified element of adjustment in the Contract. The sum of **A, b, c, d**, etc., shall be one.

“**L_n**”, “**E_n**”, “**M_n**”, ... 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 28 days prior to the last day of the period (to which the particular Payment Certificate relates); and

“**L_o**”, “**E_o**”, “**M_o**”, ... 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.

1. Construction schedule should be provided by the Contractor as required in the Contract. Price Adjustment shall be applicable as payable in full for the original scheduled completion period.
2. In the event the completion of contract exceeds the original scheduled period:
 - 2.1 In case of default on the part of the contractor causing delay in original scheduled completion, the rate of Price Adjustment will be frozen at the original scheduled date of completion; however, Price Adjustment will be applicable till actual completion. While computing Price Adjustment beyond the scheduled completion period, in the event the rate is reduced, then that reduced rate will be applied.

3. The Price Adjustment will be payable in full for the extended period if the contractor has been granted an extension of time for no fault on the part of the contractor, duly approved by the Employer.

Base Date Price

The base date price (or base date index) of any element shall be the price of the element for the month on the day falling 28 days prior to the last day for submission of bids.

Current Date Price

The current date price (or current date index) of any element shall be the price of the element for the month falling on the day 28 days prior to the last day of the period to which the particular Payment Certificate relates.

Sources of Prices

The Base Date Prices and Current Date Prices of the specified elements shall be obtained from the sources specified in the contract.

Method for payment of bills

The billed amount of the Works for each calendar month will be obtained from the checked bills submitted by the Contractor. In case the billed amount is for more than one month, the amount of the bill shall be segregated for actual work done in each month.

SCHEDULE OF ADJUSTMENT DATA

Cost Element	Description	Weightages	Applicable Price
(i)	(ii)	(iii)	(iv)
A	Fixed Portion	0.57	
b	Labour <i>(Labourer (un-skilled) per day, shall be taken as representative of all types of Labour (skilled/unskilled) deployed at site)</i>	0.15	Government of Pakistan (GoP) Federal Bureau of Statistics (FBS)
c	Cement <i>(OPC cement per bag shall be taken as representative of all types of cement used at the site)</i>	0.06	- do -
d	Reinforcing Steel <i>(½" Ø round M.S. Bars per tonne shall be taken as representative of all types and diameters of Steel Reinforcement)</i>	0.13	- do -
e	High Speed Diesel (HSD) <i>(HSD shall be taken as representative of all kind of fuels used in connection with the Contract)</i>	0.05	Pakistan State Oil (PSO)
f	Aluminum	0.04	London Metal Exchange
	Total	1.00	

Notes:

- Prices for “(b)” to “(d)” shall be taken from the Government of Pakistan, Federal Bureau of Statistics. The base prices shall be those prevalent 28 days prior to the latest day for submission of Bids. Current date price of any element shall be those prevalent 28 days prior to the start of execution month to which a particular monthly statement is related.

Prices for “(e)” shall be taken from the Pakistan State Oil (PSO). The base prices shall be those applying 28 days prior to the latest day for submission of Bids. Current prices shall be those applying 28 days prior to the start of the execution month to which a particular monthly statement is related.

Prices for “(f)” shall be taken as LME Official Cash Settlement Price for Primary Aluminum (USD/Metric Ton), converted into Pakistani Rupees using the State Bank of Pakistan exchange rate applicable on the relevant index date. The base prices shall be

those applying 28 days prior to the latest day for submission of Bids. Current prices shall be those applying 28 days prior to the start of the execution month to which a particular monthly statement is related.

- 2) The prices for the cost elements of (b) to (d) shall be used for Islamabad City.
- 3) Any fluctuation in the prices of materials other than those given above shall not be subject to adjustment of the Contract Price and shall be deemed to be included in the rates and prices quoted by the Bidders.
- 4) The prices of materials provided in this Appendix are for the purpose of price adjustment only. The Contractor shall base his rates entered in the Bill of Quantities on current market prices.
- 5) Price Adjustment shall not be applicable on items which are covered under “Adjustment of Foreign Exchange Rate for Imported Plant/ Equipment and Materials”.

FORMULA FOR ADJUSTMENT OF FOREIGN EXCHANGE RATES FOR IMPORTED PLANT/ EQUIPMENT AND MATERIALS

- a. For imported plant/ equipment and materials quoted in local currency (Pak. Rs.), foreign currency, exchange rates shall be fixed at the respective interbank currency exchange rates, 28 days prior to the tender opening date. The change in foreign currency exchange rate will be applicable to the foreign currency component stated in the Letter of Credit established by the Contractor or his Vendor.
- b. All payments shall be made in Pak Rupees only; however, increase or decrease in Foreign Currency rate would be paid to or deducted from Contractor's payment for following Equipment on Supply part of following imported items:
 - i. Low-E glass
 - ii. Building-Integrated Photovoltaics (BIPV) System
 - iii. Fire-fighting Pumping Unit
 - iv. Clean Agent
 - v. DG Set
 - vi. Chiller
 - vii. Hot Water Generator
 - viii. Cooling Tower
 - ix. Air Handling Unit
 - x. Fan Coil Unit
 - xi. Elevator
 - xii. Escalator

- c. Price Adjustment (increase or decrease) for any foreign currency transactions against Letter of Credit (L/C) for import of the Goods shall be made as under:

$$PA1 = LC1 (RR1-BR) + LC2 (RR2-BR) + + LCn (RRn-BR)$$

Where,

PA1 = Price Adjustment in PKR for any foreign currency transactions against L/C.

LC1, LC2, LCn = L/C amount in foreign currency for the respective item or 70% of the amount of respective item mentioned in BOQ/ Estimate including premium/ rebate (if any) converted into equivalent foreign currency applicable on the date of opening of L/C, whichever is less.

BR = Base exchange rate prevailing on 28th day prior to the deadline for submission of Bids

RR1, RR2, RRn = Revised exchange rate prevailing on the date of Payment against L/C of the respective item

The rates of exchange to be used in above adjustments shall be Telegraphic Transfer & Over Draft (TT&OD) Selling Rates published or authorized by the State Bank of Pakistan.

- d. The current foreign exchange rate will be the one prevalent on the date of retiring the Letter of Credit (L/C) at the Telegraphic Transfer and Over Draft (TT&OD) composite (selling) exchange rate issued by State Bank of Pakistan. The L/C would be opened by the Contractor or subcontractor or authorized agent/ distributor at his own cost bearing the name of Employer and "Name of Works". In any case, the Contractor shall provide all requisite documents which may include but not limited to Bill of Lading, Letter of Credit documents, custom duties, goods declaration form.
- e. The Contract Price shall not be adjusted by any other reason due to change in foreign currency exchange rate, except as provided in this Sub-Clause.
- f. Contractor shall submit copies of Letter of Credit, shipping documents, certified copies of paid voucher for import duty/ tax and other necessary documents, as required by the Engineer, in support of his Claim under this Sub-Clause.
- g. Adjustment of foreign exchange rates for imported plant/ equipment and materials shall be applicable as payable for the original scheduled completion period.
- h. In the event the completion of contract exceeds the original scheduled period:
 - 1. In case of default on the part of the contractor causing delay in original scheduled completion, the rate of Revised exchange rate will be frozen at the original scheduled date of completion; however, adjustment of foreign exchange rate will be applicable till actual completion. While computing adjustment of foreign exchange rate beyond the scheduled completion period, in the event the rate is reduced, then that reduced rate will be applied.
 - 2. The Adjustment of foreign exchange rates will be payable in full for the extended period if the contractor has been granted an extension of time for no fault on the part of the contractor, duly approved by the Employer.
- i. However, if the Contractor fails to provide requisite documentation in support of his Claim under this Sub-Clause, the foreign exchange rate adjustment under this Sub-Clause shall not be applicable.



SECTION I: INVITATION FOR BIDS

Pakistan Airports Authority

Bid No. Aviation Complex-01

For

Construction of Aviation Complex at Blue Area, Islamabad

Invitation For Bids

Date:

1. This Invitation for Bids follows the Procurement Notice (PN) or Procurement Advertisement (PA) No. ----- for the subject Project/Procurement which appeared in *[insert media]* vide dated *[insert dates of issue of PN/PA]* and on EPADS.
2. The Procuring agency/Employer has reserved the funds for the procurement planned during the financial year 2026-27. It is intended that part of the proceeds of the funds will be used to cover eligible payment under the contract for the **Construction of Aviation Complex at Blue Area, Islamabad.**
3. The Pakistan Airports Authority (PAA) now invites bids from eligible bidders for the subject Contract.
4. The bidding shall be conducted in line with the procedure of the Rule 36(b) Single Stage-two envelop procedure prescribed under Public Procurement Rules 2004, e-Pak Procurement Regulations, 2023 and any Regulations, Regulatory Guides, Procurement Guidelines or Instructions issued by the Authority (from time to time), and is open to all potential bidders registered in the EPADS.
5. All bids must be accompanied by a Bid Security in form of Bank Guarantee from any Scheduled Bank in Pakistan approved by the Employer in the amount of **PKR. 350 million**. The list of approved Bank is attached with the Bidding Document.
6. The electronic bids prepared in accordance with the instructions prescribed in the electronic bidding documents must be submitted through EPADS on or before 08th October 2026 at 1100 hrs. Electronic bids will be opened by using EPADS on the same day at 1130 hrs.
7. A Pre-Bid meeting will be held in the office of Aviation Block New Islamabad International Airport Main Conference Room PD Office on 14th September 2026 at 1130 hrs.
8. Technical Bid in original along with two (02) identical copies are to be the submitted by the given deadline date and time for submission of Bid in the office of the undersigned.

9. Bids received after the due date and time shall be rejected.
10. In case of material deviation between the soft and hard copy of the Bid, the Bid shall be considered rejected and non-responsive. In case of minor deviation, the soft copy uploaded on EPADS shall prevail.
11. Pakistan Airports Authority (PAA) reserves the right to reject all Bids as per Rule 33 of Public Procurement Rules, 2004.

**Director P&D
Pakistan Airports Authority (PAA)
Terminal-1, Head Quarter PAA, JIAP Karachi, Pakistan**

SECTION II: INSTRUCTION TO BIDDERS (ITBs)

A. INTRODUCTION

1. Scope of Bid	1.1	The Procuring agency/Employer (PA), as indicated in the Bid Data Sheet (BDS) invites Bids for the execution of Works as specified in the BDS and Section V- Works Requirements . The name, identification, and number of lots (contracts) of this National/ International Competitive Bidding process are specified in the BDS.
2. Source of Funds	2.1	Source of funds as referred in Bid Data Sheet.
3. Eligible Bidders	3.1	A bidder may be natural person, company or firm or public or semi-public agency of Pakistan or any foreign country, or any combination of them with a formal existing agreement (on Judicial Papers) in the form of a joint venture or consortium. In the case of a joint venture or consortium, all members shall be jointly and severally liable for the execution of the Contract in accordance with the terms and conditions of the Contract. The joint venture or consortium shall nominate a Lead Member as nominated in the BDS, who shall have the authority to conduct all business for and on behalf of any and all the members of the joint venture or consortium during the Bidding process, and in case of award of contract, during the execution of contract. <i>(The limit on the number of members of JV or Consortium may be prescribed in BDS, in accordance with the guidelines issued by the PPRA).</i>
	3.2	The appointment of Lead Member in the joint venture or consortium shall be confirmed by submission of a valid Power of Attorney to the Procuring agency/Employer
	3.3	Verifiable copy of the agreement that forms a joint venture or consortium shall be required to be submitted as part of the Bid.
	3.4	Any bid submitted by the joint venture or consortium shall indicate the part of proposed contract to be performed by each party and each party shall be evaluated (or post qualified if required) with respect to its contribution only, and the responsibilities of each party shall not be substantially altered without prior written approval of the Procuring agency/Employer and in line with any instructions issued by the Authority.
	3.5	The invitation for bids is open to all prospective bidders subject to any provisions of incorporation or licensing by the respective national/ international incorporating agency or

		statutory body established for that particular trade or business.
	3.6 .	Foreign Bidders must be locally registered with the appropriate national incorporating body or the statutory body, before participating in the national/international competitive bidding with the exception of such procurements made by the foreign missions of Pakistan. For such purpose the bidder must have to initiate the registration process before the bid submission and the necessary evidence shall be submitted to the Procuring agency/Employer along with their bid, however, the final award will be subject to the complete registration process.
	3.7	A Bidder shall not have a conflict of interest. All Bidders found to have a conflict of interest shall be disqualified. A Bidders may be considered to have a conflict of interest with one or more parties in this Bidding process, if they: a) are associated or have been associated in the past, directly or indirectly with a firm or any of its affiliates which have been engaged by the Procuring agency/Employer to provide consulting services for the preparation of design or technical specifications of the works that are the subject of the bid; or b) any of its affiliates has been hired (or is proposed to be hired) by the Procuring agency/Employer as Engineer for the Contract implementation; or c) The works to be executed are resulting from or directly related to consulting services for the preparation or implementation of the project that the bidder provided or were provided by any affiliate that directly or indirectly controls, is controlled by, or is under common control with that firm; d) have controlling shareholders in common; or e) receive or have received any direct or indirect subsidy from any of them; or f) have the same legal representative for purposes of this Bid; or g) have a relationship with each other, directly or through common third parties, that puts them in a position to have access to information about or influence on the bid of another bidder, or influence the decisions of the Procuring agency/Employer regarding this Bidding process; or h) Submit more than one bid in this bidding process.
	3.8	A Bidder may be ineligible if –

		(a) he is declared bankrupt or, in the case of company or firm, insolvent; (b) payments in favor of the bidder is suspended in accordance with the judgment of a court of law other than a judgment declaring bankruptcy and resulting (in accordance with the national laws) in the total or partial loss of the right to administer and dispose of its property; (c) legal proceedings are instituted against such bidder involving an order suspending payments and which may result, in accordance with the national laws, in a declaration of bankruptcy or in any other situation entailing the total or partial loss of the right to administer and dispose of the property; (d) the bidder is convicted, by a final judgment of a Court of Law or relevant Professional Statuary Body, of any offence involving professional conduct; (e) The bidder is debarred/ blacklisted by a national level Procuring agency/Employer and hence debarred due to involvement in corrupt and fraudulent practices, or performance failure or due to breach of bid securing declaration. (f) The bidder is blacklisted or debarred by a foreign country, international organization, or other foreign institutions for the period defined by them.
	3.9	Bidders shall provide to the Procuring agency/Employer evidence of their eligibility, proof of compliance with the necessary legal requirements to carry out the contract effectively.
	3.10	Bidders shall provide such evidence of their continued eligibility to the satisfaction of the Procuring agency/Employer, as the Procuring agency/Employer shall reasonably request.
	3.11	Bidders shall submit proposal relating to the nature, conditions and modalities of sub-contracting wherever the sub-contracting of any elements of the contract is envisaged.
4. Eligible Material and Equipment	4.1	All the material and equipment to be mobilized under the contract shall have their origin in eligible source countries, and all expenditures made under the contract will be limited to such materials and equipment. For this purpose, ineligible countries are stated in the section-IV titled as “Eligible Countries”.
	4.2	For purposes of this Clause, “origin” means the place where

		the material, equipment is produced, manufactured, or processed, or through manufacture, procession, or assembly, another commercially recognized article results that differs substantially in its basic characteristics from its imported components or the place from where the services are/to be supplied.
	4.3	The nationality of the bidder shall not determine the origin of the material and equipment.
	4.4	To establish the eligibility of the material and equipment, Bidders shall fill the country-of-origin declarations included in the Form of Bid.
5. One Bid per Bidder	5.1	A bidder shall submit only one bid, in the same bidding process, either individually as a bidder or as a member in a joint venture or any similar arrangement.
	5.2	No bidder can be a sub-contractor while submitting a bid individually or as a member of a joint venture in the same bidding process.
6. Cost of Bidding	6.1	The Bidder shall bear all costs associated with the preparation and submission of its bid, and the Procuring agency/Employer shall in no case be responsible or liable for those costs, regardless of the conduct or outcome of the bidding process.

B. BIDDING DOCUMENTS

7. Contents of Bidding Documents	7.1	The scope of Works, bidding procedures, and terms and conditions of the contract are prescribed in the bidding documents. In addition to the Invitation for Bids, the bidding documents which should be read in conjunction with any addenda issued in accordance with ITB 9.2 include: Section I -Invitation for Bids Section II Instructions to Bidders (ITBs) Section III Bid Data Sheet (BDS) Section IV Eligible Countries Section V Works Requirements Technical Specifications & Schedule of Requirements Section VI Standard Bidding Forms Section VII General Conditions of Contract (GCC) Section VIII Special Conditions of Contract (SCC) Section IX Contract Forms
	7.2	The number of copies to be completed and submitted with the Bid is specified in the BDS .
	7.3	The Procuring agency/Employer is not responsible for the completeness of the bidding documents and their addenda, if they were not obtained directly from the Procuring

		agency/Employer or the signed pdf version downloaded from the website of the Procuring agency/Employer or the Authority's website or e-Procurement System as the case may be. However, Procuring agency/Employer shall place both the pdf and editable version of the same on its website and Authority's website or e-Procurement System to facilitate the bidder for filling the standard bidding forms.
	7.4	The bidder is expected to examine all instructions, forms, specifications, terms and conditions prescribed in the bidding documents. Failure to furnish all the information required in the bidding documents will be at the bidder's risk and may result in the rejection of his bid.
8. Clarification of Bidding Document, Pre-bid Meeting	8.1	A prospective bidder requiring any clarification of the bidding document may notify the Procuring agency/Employer in writing or in electronic form that provides record of the contents of communication at the Procuring agency/Employer's address indicated in the BDS .
	8.2	The Procuring agency/Employer will within three (3) working days after receiving the request for clarification, respond in writing or in electronic form to any request for clarification provided that such request is received not later than three (03) days prior to the deadline for the submission of Bids as prescribed in ITB 24.1 . However, this clause shall not apply in case of alternate methods of procurement.
	8.3	Copies of the Procuring agency/Employer's response will be forwarded to all identified prospective bidders through an identified source of communication, including a description of the inquiry, but without specifying its source. In case of downloading of the bidding documents from the website of Procuring agency/Employer or e-Procurement System, the response of all such queries will also be available on the same platform available at the website.
	8.4	Should the Procuring agency/Employer deem it necessary to amend the bidding documents as a result of a clarification, it shall do so following the procedure as prescribed under ITB 09 .
	8.5	If indicated in the BDS , the bidder's designated representative is invited at the bidder's cost to attend a pre-bid meeting at the place, date and time mentioned in the BDS . During this pre-bid meeting, prospective bidders may request clarification of the schedule of requirement, the evaluation criteria or any other aspects of the bidding documents.
	8.6	Minutes of the pre-bid meeting, if applicable, including the

		text of the questions asked by bidders, including those during the meeting (without identifying the source) and the responses given, together with any responses prepared after the meeting will be transmitted promptly to all prospective bidders who have obtained the bidding documents. Any modification to the bidding documents that may become necessary as a result of the pre-bid meeting shall be made by the Procuring agency/Employer exclusively through the use of an Addendum pursuant to ITB 9 . Non-attendance at the pre-bid meeting will not be a cause for disqualification of a bidder.
	8.7	The bidder is advised to visit and examine the Site of Works and its surroundings and obtain for itself on its own responsibility all information that may be necessary for preparing the bid and entering into a contract for construction of the Works. The costs of visiting the Site shall be at the bidder's own expense.
	8.8	The bidder and any of its authorized personnel will be granted permission by the Procuring agency/Employer to enter upon its premises and lands for the purpose of such visit, but only upon the express condition that the bidder and its personnel will release and indemnify the Procuring agency/Employer 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 the inspection.
9. Amendment of Bidding Documents	9.1	Before the deadline for submission of bids, the Procuring agency/Employer for any reason, whether at its own initiative or in response to a clarification requested by a prospective bidder or pre-bid meeting may modify the bidding documents by issuing addenda.
	9.2	Any addendum issued including the notice of any extension of the deadline shall be part of the bidding documents pursuant to ITB 7.1 and shall be communicated in a timely manner and on equal opportunity basis. Where notification of such change, addition, modification or deletion becomes essential, such notification shall be made in a manner similar to the original advertisement. <i>Provided that the bidder who had either already submitted their bid or handed over the bid to the courier prior to the issuance of any such addendum shall have the right to withdraw his already filed bid and submit the revised bid prior to the original or extended bid submission deadline.</i>
	9.3	To give prospective bidders reasonable time in which to take an addendum/corrigendum into account in preparing their

		bids, the Procuring agency/Employer may, at its discretion, extend the deadline for the submission of bids: <i>Provided that the Procuring agency/Employer shall extend the deadline for submission of bid, if such an addendum is issued within last three (03) days of the bid submission deadline.</i>
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C. PREPARATION OF BID

10. Language of Bid	10.1	The bid prepared by the bidder, as well as all correspondence and documents relating to the bid exchanged by the bidder and the Procuring agency/Employer shall be written in the English language unless specified in the BDS. Supporting documents and printed literature furnished by the bidder may be in another language provided they are accompanied by an accurate translation of the relevant pages in the English language unless specified in the BDS, in which case, for purposes of interpretation of the bidder, the translation shall govern.
11. Documents Establishing Eligibility of Material, Equipment and Works, their Conformity to Bidding Documents	11.1	The bid prepared by the bidder shall constitute the following components: - - Documentary evidence established in accordance with ITB 11 that the material, equipment and services to be provided by the Bidder are eligible material, equipment and services, and conform to the Bidding Documents; - Documentary evidence established in accordance with ITB 12 that the bidder has been authorized to carry out the Construction works; - Documentary evidence established in accordance with ITB 12 that the bidder is eligible and/or qualified for the subject bidding process; - Form of Bid and Bid Prices completed in accordance with ITB 14 and 15; - Completed schedules as required, including priced Bill of Quantities in accordance with ITB 13 & 15. - Technical Proposal completed in all aspects in accordance with ITB-17. - Bid security or Bid Securing Declaration furnished in accordance with ITB 19; - Alternative bids, if permissible, in accordance with ITB 20;

		i) Duly Notarized Power of Attorney authorizing the signatory of the Bidder to submit the bid; and j) Any other document required in the BDS.
	11.2	In addition to the requirements, bids submitted by a JV shall include a copy of the Joint Venture Agreement entered into by all members. Alternatively, a letter of intent to execute a Joint Venture Agreement in the event of a successful bid shall be signed by all members and submitted with the bid, together with a copy of the proposed Agreement.
	11.3	The bidder shall furnish, as part of its bid, all those documents establishing the eligibility in conformity to the terms and conditions specified in the bidding documents for all material, equipment and works which the bidder proposes to execute.
	11.4	The documentary evidence of conformity of the material, equipment and works to the Bidding Documents may be in the form of literature, drawings, and data, and shall consist of: a) a detailed description of the work methodology, approach, schedule and resources to be mobilized at site; b) an item-by-item commentary on the Procuring agency/Employer's Technical Specifications demonstrating substantial responsiveness of the material, equipment and works to those specifications, or a statement of deviations and exceptions to the provisions of the Technical Specifications; c) any other procurement specific documentation requirement as stated in the BDS.
	11.5	The required documents and other accompanying documents must be in English. In case any other language than English is used the pertinent translation into English shall be attached to the original version.
12. Documents Establishing Eligibility and Qualification of the Bidder	12.1	The bidder shall furnish, as part of its bid, all those documents establishing the bidder's eligibility to participate in the bidding process and/or its qualification to perform the contract if its bid is accepted.
	12.2	The documentary evidence of the bidder's eligibility to bid shall establish to the satisfaction of the Procuring agency/Employer that the bidder, at the time of submission of its bid, is from an eligible country as defined in Section-IV titled as "Eligible Countries".
	12.3	The documentary evidence of the bidder's qualification to perform the contract if its bid is accepted shall establish to the

		satisfaction of Procuring agency/Employer that: a) The bidder has the financial and technical capability necessary to perform the Contract, meets the qualification criteria specified in Section-V, Evaluation and Qualification Criteria and BDS. b) In the case of a bidder not doing business within Pakistan, the bidder is or will be (if awarded the contract) represented by a local bidder (Joint Venture) in accordance with the PEC works bylaws, and in case of award of works such foreign firm is required to participate in the execution of works to carry out its obligations as prescribed in the Conditions of Contract and /or Technical Specifications. c) That the bidder meets the qualification criteria listed in Section-V, Evaluation and Qualification Criteria and BDS.
13. Letter of Bid and Schedules	13.1	The Letter of Bid (Technical or Financial as the case may be) and Schedules, including the Bill of Quantities, shall be prepared using the relevant forms furnished in Standard Bid Forms. The forms must be completed without any alterations to the text, and no substitutes shall be accepted except as provided under ITB 22 . All blank spaces shall be filled in with the information requested.
14. Letter of Bid	14.1	The bidder shall fill the Letter of Bid (Technical or Financial as the case may be) furnished in the bidding documents. The Standard Bid Forms must be completed without any alterations to its format and no substitute shall be accepted.
15. Bid Prices	15.1	The bid prices quoted by the bidder in the Standard bid Forms, Bill of Quantities and in the Price Schedules shall conform to the requirements specified below or exclusively mentioned hereafter in the bidding documents.
	15.2	The bidder shall fill in rates and prices for all items of the Works described in the Bill of Quantities. If a Price Schedule shows items listed but not priced, their prices shall be construed to be included in the prices of other items in the Bill of Quantities and will not be paid for separately by the Procuring agency/Employer.
	15.3	Items not listed in the Price Schedule shall be assumed not to be included in the bid, and provided that the bid is still substantially responsive in their absence or due to their nominal nature, the corresponding average price of the respective item(s) of the remaining substantially responsive bidder(s) shall be construed to be the price of those missing item(s):

		Provided that: a) where there is only one (substantially) responsive bidder, or b) where there is provision for alternate proposals and the respective items are not listed in the other bids, The Procuring agency/Employer may fix the price of missing items in accordance with market survey, and the same shall be considered as final price.
	15.4	The Bid price to be quoted in the Form of Bid in accordance with ITB 15.1 shall be the total price of the bid.
	15.5	Unless otherwise specified in the BDS and the Contract, the rates and prices quoted by the bidder are subject to adjustment during the performance of the Contract in accordance with the provisions of the Conditions of Contract.
	15.6	If so specified in ITB 1.1 , bids may be invited for individual lots (contracts) or for any combination of lots (packages).
	15.7	Prices quoted by the Bidder shall be fixed during the bidder's performance of the contract and not subject to variation on any account. A bid submitted with an adjustable price will be treated as non-responsive and shall be rejected, pursuant to ITB 30 , unless otherwise price adjustment is permissible under Conditions of the Contract.
	15.8	All duties, taxes, and other levies payable by the Contractor under the Contract, or for any other cause, as of the date twenty-eight (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 the bidder.
16. Currencies of Bid and Payment	16.1	The currency(ies) of the bid and the currency(ies) of payments shall be as specified in the BDS .
	16.2	For the purposes of comparison of bids quoted in different currencies, the price shall be converted into a single currency specified in the bidding documents. The rate of exchange shall be the selling rate, prevailing on the date of opening of (financial part of) bids specified in the bidding documents, as notified by the State Bank of Pakistan on that day.
	16.3	Bidders shall indicate details of their expected foreign currency requirements in the Bid, if prescribed in the BDS .
	16.4	Bidders may be required by the Procuring agency/Employer to clarify their foreign currency requirements, if prescribed in the BDS and to substantiate that the amounts included in Lump Sum and in the SCC are reasonable and responsive to ITB 16.1 .

17. Documents Comprising the Technical Proposal	17.1	The bidder shall furnish a Technical Proposal including a statement of work methods, equipment, personnel, schedule and any other information as stipulated in Section IV – Standard Bid Forms , in sufficient detail to demonstrate the adequacy of the bidder's proposal to meet the work requirements and the completion time.
18. Bid Validity Period	18.1	Bids shall remain valid for the period specified in the BDS after the bid submission deadline prescribed by the Procuring agency/Employer. A bid valid for a shorter period shall be rejected by the Procuring agency/Employer as non-responsive. The period of bid validity will be determined from the complementary bid securing instrument i.e. the expiry period of bid security or bid securing declaration as the case may be.
	18.2	Under exceptional circumstances, prior to the expiration of the initial bid validity period, the Procuring agency/Employer may request the bidders' consent to an extension of the period of validity of their bids only once, for the period not more than the period of initial bid validity. The request and the bidders' responses shall be made in writing or in electronic forms that provide record of the content of communication. The Bid Security provided under ITB 19 shall also be extended 28 days beyond the deadline of extended bid validity period. A bidder may refuse the request for the extension of his bid without forfeiting his bid security or causing to be executed his Bid Securing Declaration. A bidder agreeing to the request will not be required nor permitted to modify its bid, but will be required to extend the validity of its Bid Security or Bid Securing Declaration for the period of the extension, and in compliance with ITB 19 in all respects.
19. Bid Security or Bid Securing Declaration	19.1	Pursuant to ITB 11.1 unless otherwise specified in the BDS, the bidder shall furnish as part of its bid, a Bid Security in form of fixed amount not exceeding five percent of the estimated value of procurement determined by the Procuring agency/Employer and in the amount and currency specified in the BDS or Bid Securing Declaration as specified in the BDS in the format provided in Section VI (Standard Bidding Forms). In case Procuring agency/Employer is inviting bids in lots / packages, the bidder shall be required to submit his bid security against the respective lot/ package for which he is submitting his bid, which shall not exceed five percent of the

		estimated value of that particular lot/ package.
	19.2	The Bid Security or Bid Securing Declaration is required to protect the Procuring agency/Employer against the risk of Bidder's conduct before award of the contract to the most advantageous bidder which would warrant the security's forfeiture, pursuant to ITB 19.9 .
	19.3	The Bid Security shall be denominated in the local currency or in another freely convertible currency, and it shall be in the form specified in the BDS which shall be in any of the following: a) A bank guarantee, an irrevocable letter of credit issued by a Scheduled bank in the form provided in the Bidding Documents or another form acceptable to the Procuring agency/Employer and valid for twenty-eight (28) days beyond the end of the validity of the Bid. This shall also apply if the period for Bid Validity is extended. In either case, the form must include the complete name of the bidder; b) A cashier's or certified cheque; or c) Another security as indicated in the BDS.
	19.4	The Bid Security or Bid Securing Declaration shall be in accordance with the Form of the Bid Security or Bid Securing Declaration included in Section VI (Standard Bidding Forms) or another form approved by the Procuring agency/Employer prior to the bid submission.
	19.5	The Bid Security shall be payable promptly upon written demand by the Procuring agency/Employer in case any of the conditions listed in ITB 19.9 are invoked.
	19.6	Any bid not accompanied by a Bid Security or Bid Securing Declaration in accordance with ITB 19.1 or 19.3 shall be rejected by the Procuring agency/Employer and shall be declared as non-responsive bid, pursuant to ITB 30 .
	19.7	Unsuccessful bidders' Bid Security will be discharged or returned as promptly as possible, however in no case later than thirty (30) days after the expiration of the period of Bid Validity prescribed by the Procuring agency/Employer pursuant to ITB 18. The Procuring agency/Employer shall make no claim to the amount of the Bid Security, and shall promptly return the Bid Security document, after whichever of the following that occurs earliest: (a) The expiry of the Bid Security; (b) The entry into force of a procurement contract and the provision of a performance security (or guarantee), for

		the performance of the contract if such a security (or guarantee), is required by the Bidding documents; (c) The rejection by the Procuring agency/Employer of all Bids; (d) The withdrawal of the bid prior to the deadline for the submission of bids, unless the bidding documents stipulate that no such withdrawal is permitted.
	19.8	The successful bidder's Bid Security will be discharged upon the bidder signing the contract pursuant to ITB 47 , or furnishing the performance security (or guarantee), pursuant to ITB 48 .
	19.9	The Bid Security may be forfeited or the Bid Securing Declaration executed: a) if a Bidder: i) Withdraws its Bid during the period of Bid Validity as specified by the Procuring agency/Employer, and referred by the bidder on the Form of Bid except as provided for in ITB 18.2; or ii) Does not accept the correction of errors pursuant to ITB 32; or b) In the case of a successful bidder, if the bidder fails: i) to sign the contract in accordance with ITB 47; or ii) to furnish performance security (or guarantee) in accordance with ITB 48.
	19.10	In case of Bid Security issued by the foreign bank is allowed by the Procuring agency/Employer, the same should be counter guaranteed by a corresponding bank in Pakistan. Furthermore, in case of joint venture, it should be in the name of Joint venture to ensure joint responsibility.
20. Alternative Bids by Bidders	20.1	Bidders shall submit offers that comply with the requirements of the bidding documents, including the basic bidder's technical design as indicated in the specifications and Bill of Quantities. Alternatives will not be considered, unless specifically allowed for in the BDS . If so allowed, ITB 20 shall prevail.
	20.2	When alternative schedule for execution of works is explicitly invited, a statement of that effect will be included in the BDS as will the method for evaluating different schedule for execution of works.
	20.3	If so allowed in the BDS , bidders wishing to offer technical alternatives to the requirements of the bidding documents must also submit a bid that complies with the requirements of the bidding documents, including the basic technical design

		as indicated in the specifications. In addition to submitting the basic bid, the bidder shall provide all information necessary for a complete evaluation of the alternative by the Procuring agency/Employer, including technical specifications, breakdown of prices, and other relevant details. Only the technical alternatives, if any, of the Most Advantageous Bidder conforming to the basic technical requirements (without altering the bid price) shall be considered by the Procuring agency/Employer.
21. Withdrawal of Bids	21.1	Before bid submission deadline, any bidder may withdraw, substitute, or modify its bid after it has been submitted by sending a written notice, duly signed by an authorized representative, and the corresponding must accompany the respective written notice.
	21.2	Bids requested to be withdrawn in accordance with ITB 21.1 shall be returned unopened to the bidders.
22. Format and Signing of Bid	22.1	The Bidder shall prepare an original and the number of copies of the bid as indicated in the BDS , clearly marking each “ ORIGINAL ” and “ COPY ” as appropriate. In the event of any discrepancy between them, the original shall prevail: <i>Provided that except in Single Stage One Envelope Procedure, the bid shall include only the copies of technical proposal.</i>
	22.2	The original and the copy (ies) of the bid shall be typed or written in indelible ink and shall be signed by the bidder or a person or persons duly authorized to sign on behalf of the bidder. This authorization shall consist of a written confirmation as specified in the BDS and shall be attached to the bid. The name and position held by each person signing the authorization must be typed or printed below the signature. All pages of the bid, except for un-amended printed literature, shall be initialed by the person or persons signing the bid.
	22.3	Any interlineations, erasures, or overwriting shall be valid only if they are signed by the person(s) authorized for signing the Bid.

D. SUBMISSION OF BIDS

23. Sealing and Marking of Bids	23.1	In case of Single Stage One Envelope Procedure, the bidder shall seal the original and each copy of the bid in separate envelopes, duly marking the envelopes as “ ORIGINAL ” and “ COPY ”. The envelopes shall then be sealed in an outer envelope securely sealed in such a manner that opening and
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		resealing cannot be achieved undetected. Note: <i>The envelopes shall be sealed and marked in accordance with the bidding procedure adopted as referred in Rule-36 of Public Procurement Rules, 2004.</i>
	23.2	The inner and outer envelopes shall: - be addressed to the Procuring agency/Employer at the address given in the BDS; and - bear the title of the subject procurement or project name, as the case may be as indicated in the BDS, the Invitation for Bids (ITB) title and number indicated in the BDS, and a statement: “DO NOT OPEN BEFORE”, to be completed with the time and the date specified in the BDS, pursuant to ITB 24.1.
	23.3	In case of Single Stage Two Envelope Procedure, The Bid shall comprise two envelopes submitted simultaneously, one called the Technical Proposal and the other Financial Proposal. Both envelopes to be enclosed together in an outer single envelope called the Bid. Each Bidder shall submit his bid as under: - Bidder shall submit his TECHNICAL PROPOSAL and FINANCIAL PROPOSAL in separate inner envelopes and enclosed in a single outer envelope. ORIGINAL and each copy of the Bid shall be separately sealed and put in separate envelopes and marked as such. - The envelopes containing the ORIGINAL and copies will be put in one sealed envelope and addressed / identified as given in ITB 23.2.
	23.4	The inner and outer envelopes shall: - be addressed to the Procuring agency/Employer at the address provided in the BDS; - bear the name and identification number of the contract as defined in the BDS; and provide a warning not to open before the time and date for bid opening, as specified in the BDS pursuant to ITB 24.1. - In addition to the identification required in ITB 23 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 ITB 25.
	23.5	If all envelopes are not sealed and marked as required by ITB 23.2, ITB 23.3 and ITB 23.4 or incorrectly marked, the Procuring agency/Employer will assume no responsibility for

		the misplacement or premature opening of bid.
24. Deadline for Submission of Bids	24.1	Bids shall be received to the Procuring agency/Employer no later than the date and time specified in the BDS .
	24.2	The Procuring agency/Employer may, under exceptional circumstances and at its discretion, extend the deadline for the submission of bids by amending the Bidding Documents in accordance with ITB 9 , in which case all rights and obligations of the Procuring agency/Employer and bidders previously subject to the deadline will thereafter be subject to the new deadline.
25. Late Bids	25.1	The Procuring agency/Employer shall not consider for evaluation of any bid that arrives after the deadline for submission of bids, in accordance with ITB 24 .
	25.2	Any bid received by the Procuring agency/Employer after the deadline for submission of bids shall be declared late, recorded, rejected and returned unopened to the bidder.
26. Substitution and Modification of bids	26.1	A bidder may substitute or modify his bid after it has been submitted, provided that written notice of the substitution or modification of the bid, is received by the Procuring agency/Employer prior to the deadline for submission of bids.
	26.2	Revised bid may be submitted after the substitution or modification made in the original bid in accordance with the provisions referred in ITB 22 .

E. OPENING AND EVALUATION OF BIDS

27. Opening of Bids	27.1	The Procuring agency/Employer will open all bids, in public, in the presence of bidders' or their representatives who choose to attend, and other parties with a legitimate interest in the bid proceedings at the place, on the date and at the time, specified in the BDS . The bidders' representatives present shall sign a attendance sheet as a proof of their attendance.
	27.2	First, envelopes marked " WITHDRAWAL " shall be opened and read out and the envelope with the corresponding bid shall not be opened, but returned to the bidder. No bid withdrawal shall be permitted unless the corresponding withdrawal notice contains a valid authorization to request the withdrawal and is read out at bid opening.
	27.3	Second, outer envelopes marked " SUBSTITUTION " shall be opened. The inner envelopes containing the Substitution Bid shall be exchanged for the corresponding Original Bid being substituted, which is to be returned to the bidder unopened. No envelope shall be substituted unless the corresponding Substitution Notice contains a valid authorization to request the substitution and is read out and recorded at bid opening.

	27.4	Next, outer envelopes marked “ MODIFICATION ” shall be opened. No Technical Proposal and/or Financial Proposal shall be modified unless the corresponding Modification Notice contains a valid authorization to request the modification and is read out and recorded at the opening of the bids. Any modification shall be read out along with the Original Bid except in case of Single Stage Two Envelope Procedure where only the Technical Proposal, both Original as well as Modification, are to be opened, read out, and recorded at the opening. Financial Proposal, both Original and Modification, will remain unopened till the prescribed financial bid opening date.
	27.5	Other envelopes holding the bids shall be opened one at a time, in case of Single Stage One Envelope Procedure, the bidders’ names, the bid prices, the total amount of each bid and of any alternative bid (if alternatives have been requested or permitted), the presence or absence of Bid Security, Bid Securing Declaration and such other details as the Procuring agency/Employer may consider appropriate, will be announced by the Procurement Evaluation Committee.
	27.6	In case of Single Stage Two Envelope Procedure, the Procuring agency/Employer will open the Technical Proposals in public at the address, date and time specified in the BDS in the presence of bidders’ designated representatives who choose to attend and other parties with a legitimate interest in the bid proceedings. The Financial Proposals will remain unopened and will be held in custody of the Procuring agency/Employer until the specified time of their opening.
	27.7	The envelopes holding the Technical Proposals shall be opened one at a time, and the following read out and recorded: (a) the name of the bidder; (b) whether there is a modification or substitution; (c) the presence of a Bid Security or Bid Securing Declaration, if required; and (d) Any other details as the Procuring agency/Employer may consider appropriate.
	27.8	Bids not opened and not read out at the bid opening shall not be considered further for evaluation, irrespective of the circumstances.
	27.9	Bidders are advised to send in a representative with the knowledge of the content of the bid who shall verify the information read out from the submitted documents. Failure to send a representative or to point out any un-read information by the sent bidder’s representative shall indemnify the Procuring agency/Employer against any claim or failure to

		read out the correct information contained in the bidder's bid.
	27.10	No bid will be rejected at the time of bid opening except for late bids which will be returned unopened to the bidder, pursuant to ITB 25 .
	27.11	The Procuring agency/Employer shall prepare minutes of the bid opening. The record of the bid opening shall include, as a minimum: the name of the bidder and whether or not there is a withdrawal, substitution or modification, the bid price if applicable and the presence or absence of a Bid Security or Bid Securing Declaration.
	27.12	The bidders' representatives who are present shall be requested to sign on the attendance sheet. The omission of a bidder's signature on the record shall not invalidate the contents and affect the record. A copy of the record shall be distributed to all the bidders.
	27.13	A copy of the minutes of the bid opening shall be furnished to individual bidders upon request.
	27.14	In case of Single Stage -Two Envelop Bidding Procedure, after the announcement of technical evaluation report, the Procuring agency/Employer, shall at a time within the bid validity period, publicly open the financial proposals of the technically responsive bidder only. The financial proposal of bidders found technically non-responsive shall be returned un-opened to the respective bidders after seven days of the announcement of technical evaluation report, except those aggrieved bidder(s) whose complaints are pending before the Grievance Redressal Committee.
28. Confidentiality	28.1	Information relating to the examination, clarification, evaluation and comparison of bids and recommendation of contract award shall not be disclosed to bidders or any other persons not officially concerned with such process until the time of the announcement of the respective evaluation report.
	28.2	Any effort by a bidder to influence the Procuring agency/Employer processing of bids or award decisions may result in the rejection of its bid.
	28.3	Notwithstanding ITB 28.2 from the time of bid opening to the time of contract award, if any bidder wishes to contact the Procuring agency/Employer on any matter related to the bidding process, it should do so in writing or in electronic forms that provides record of the content of communication.

29. Clarification of Bids	29.1	To assist in the examination, evaluation and comparison of bids, the Procuring agency/Employer may, ask any bidder for a clarification of its bid including breakdown of prices invariably in writing. Any clarification submitted by a bidder that is not in response to a request by the Procuring agency/Employer shall not be considered.
	29.2	The request for clarification and the response shall be in writing or in electronic forms that provide record of the content of communication. No change in the prices or substance of the bid shall be sought, offered, or permitted, except clarification for the correction of arithmetic errors discovered by the Procuring agency/Employer during the evaluation of bids which shall be sought in accordance with ITB 32 .
	29.3	The alteration or modification in the bid which in any case affect the following parameters will be considered as a change in the substance of a bid: a) evaluation & qualification criteria; b) required scope of work; c) contract price; d) all securities requirements; e) tax requirements; f) terms and conditions of bidding documents. g) change in the ranking of the bidder
	29.4	From the time of bid opening to the time of Contract award if any bidder wishes to contact the Procuring agency/Employer on any matter related to the bid it should do so in writing or in electronic forms that provide record of the content of communication.

30. Preliminary Examination of Bids	30.1	Prior to the detailed evaluation of bids, the Procuring agency/Employer will determine whether each bid: a) meets the eligibility criteria defined in ITB 3 and ITB 4; b) has been prepared as per the format and contents defined by the Procuring agency/Employer in the bidding documents; c) has been properly signed; d) is accompanied by the required securities; and e) is substantially responsive to the requirements of the bidding documents. The Procuring agency/Employer's determination of a bid's substantial responsiveness will be based on the contents of the bid itself.
	30.2	A substantially responsive Bid is one which conforms to all the terms, conditions, and specifications of the Bidding Documents, without material deviation or reservation. A material deviation or reservation is one that: - a) affects in any substantial way the scope, quality, or performance of the Works; b) limits in any substantial way, inconsistent with the bidding documents, the Procuring agency/Employer's rights or the bidders' obligations under the Contract; or c) if rectified, would affect unfairly the competitive position of other bidders presenting substantially responsive bids.
	30.3	The Procuring agency/Employer will confirm that the documents and information specified under ITB 11, 12 and 13 have been provided in the bid. If any of these documents or information is missing, or is not provided in accordance with the Instructions to Bidders, the bid shall be rejected.
	30.4	The Procuring agency/Employer may waive-off any minor informality, nonconformity, or irregularity in a bid which does not constitute a material deviation, provided such waiver does not prejudice or affect the relative ranking of any Bidder. <i>Explanation:</i> A minor informality, non-conformity or irregularity is one that is merely a matter of form and not of substance. It also pertains to some immaterial defect in a Bid

		<i>or variation of a bid from the exact requirements of the invitation that can be corrected or waived without being prejudicial to other bidders. The defect or variation is immaterial when the effect on quantity, quality, or delivery is negligible when contrasted with the total cost or scope of the works. The Procuring agency/Employer either shall give the bidder an opportunity to cure any deficiency resulting from a minor informality or irregularity in a bid or waive the deficiency, whichever is advantageous to the Procuring agency/Employer. Examples of minor informalities or irregularities include failure of a bidder to –</i> <i>(a) Submit the number of copies of signed bids required by the invitation;</i> <i>(b) Furnish required information concerning the number of its employees;</i> <i>(c) the firm submitting a bid has formally adopted or authorized, before the date set for opening of bids, the execution of documents by typewritten, printed, or stamped signature and submits evidence of such authorization and the bid carries such a signature.</i>
	30.5	Provided that a Technical Bid is substantially responsive, the Procuring agency/Employer may request the bidder to submit the necessary information or documentation, within a reasonable period of time, to rectify nonmaterial nonconformities or omissions in the Technical Bid related to documentation requirements. Requesting information or documentation on such nonconformities shall not be related to any such aspect of the technical Proposal linked with the ranking of the bidders. Failure of the bidder to comply with the request may result in the rejection of its bid.
	30.6	Provided that a Technical Bid is substantially responsive, the Procuring agency/Employer shall rectify quantifiable nonmaterial nonconformities or omissions related to the Financial Proposal. To this effect, the Bid Price shall be adjusted, for comparison purposes only, to reflect the price of the missing or nonconforming item or component.
	30.7	If a bid is not substantially responsive, it will be rejected by the Procuring agency/Employer and may not subsequently be evaluated for complete technical responsiveness.

31. Examination of Terms and Conditions; Technical Evaluation	31.1	The Procuring agency/Employer shall examine the bid to confirm that all terms and conditions specified in the GCC and the SCC have been accepted by the bidder without any material deviation or reservation. For this purpose: “Deviation” means departure from the requirements specified in the Bidding Document. “Reservation” means setting of limiting conditions or withholding from complete acceptance of the requirements specified in the Bidding Document.
	31.2	The Procuring agency/Employer shall evaluate the technical aspects of the bid submitted in accordance with ITB 31, to confirm that all requirements specified in Section V – Works Requirement, Technical Specifications of the Bidding Documents have been met without material deviation or reservation.
	31.3	If after the examination of the terms and conditions and the technical evaluation, the Procuring agency/Employer determines that the bid is not substantially responsive in accordance with ITB 30, it shall reject the bid.

32. Correction of Arithmetic Errors	32.1	Bids determined to be substantially responsive will be checked for any arithmetic errors. Errors will be corrected as follows: - a) if there is a discrepancy between unit prices and the sub-total price that is obtained by multiplying the unit price and quantity, the unit price shall prevail, and the sub-total price shall be corrected, unless in the opinion of the Procuring agency/Employer there is an obvious misplacement of the decimal point in the unit price, in which the total price as quoted shall govern and the unit price shall be corrected; b) if there is an error in a total corresponding to the addition or subtraction of sub-totals, the sub-totals shall prevail, and the total shall be corrected; and c) where there is a discrepancy between the amounts in figures and in words, the amount in words will govern. d) Where there is discrepancy between grand total of price schedule and amount mentioned on the Form of Bid, the amount referred in Price Schedule shall be treated as correct subject to elimination of other errors.
	32.2	The amount stated in the Bid will, be rectified by the Procuring agency/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 amount, its bid shall be rejected after forfeiture of Bid Security or execution of the Bid Securing Declaration, as the case may be, in accordance with ITB 19.9.

33. Conversion to Single Currency	33.1	The unit rates and the prices shall be quoted by the bidder entirely in Pak rupees. A bidder expecting to incur expenditures in other currencies for inputs to the Works from outside the Procuring agency/Employer's country (referred to as the "Foreign Currency Requirements") shall indicate the same in the letter of bid-financial proposal. The proportion of the Bid Price (excluding Provisional Sums) needed by him for the payment of such Foreign Currency Requirements either (i) entirely in the currency of the Bidder's home country or, (ii) at the bidder's option, entirely in Pak rupees provided always that a bidder expecting to incur expenditures in a currency or currencies other than those stated in (i) and (ii) above for a portion of the foreign currency requirements, and wishing to be paid accordingly, shall indicate the respective portions in his bid.
	33.2	To facilitate evaluation and comparison, the Procuring agency/Employer will convert all bid prices expressed in the amounts in various currencies in which the bid prices are payable. For the purposes of comparison of bids quoted in different currencies, the price shall be converted into a single currency specified in the bidding documents. The rate of exchange shall be the selling rate, prevailing on the date of opening of (financial part of) bids specified in the bidding documents, as notified by the State Bank of Pakistan on that day.
	33.3	The currency selected for converting bid prices to a common base for the purpose of evaluation, along with the source and date of the exchange rate, are specified in the BDS.
34. Evaluation of Bids	34.1	The Procuring agency/Employer shall evaluate and compare only the bids determined to be substantially responsive, pursuant to ITB 30.
	34.2	In evaluating the Technical Proposal of each Bid, the Procuring agency/Employer shall use the criteria and methodologies listed in the BDS and in terms of works requirement. No other evaluation criteria or methodologies shall be permitted.
	34.3	The Procuring agency/Employer's evaluation of a bid will take into account: a) the bid price, excluding provisional sums and the provision, if any, for contingencies in the summary bill of quantities, but including day work items, where priced competitively; b) price adjustment for correction of arithmetic errors in

		accordance with ITB 32.1; c) converting the amount resulting from applying (a) and (b) above, if relevant, to a single currency in accordance with ITB 33;
	34.4	The estimated effect of the price adjustment provisions of the Conditions of Contract, applied over the period of execution of the Contract, shall not be taken into account in bid evaluation.
	34.5	If these bidding documents allow bidders to quote separate prices for different lots, and the award to a single bidder of multiple lots, the methodology of evaluation to determine the lowest evaluated lot combinations in the Form of Bid, is specified in the BDS.
	34.6	If the bid, which results in the Evaluated Bid Price (Most Advantageous Bid), is seriously unbalanced or front loaded in the opinion of the Employer, 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, taking into consideration the schedule of estimated Contract payments, the Employer may require that the amount of the performance security be increased at the expense of the Bidder to a level sufficient to protect the Employer against financial loss in the event of default of the successful Bidder under the Contract. Explanation: <i>“Unbalanced” or “front-loaded” bids consist of deliberately submitting bids with artificially high prices or unit rates for the early stages of a construction project, offset by artificially low prices or unit rates for the later stages of the project, to improve the contractor’s cash flow.</i>

35. Domestic Preference	35.1	If the BDS so specifies, the Procuring agency/Employer will grant a margin of preference to the domestic contractor in line with the rules, regulations, regulatory guides or instructions issued by the Authority from time to time.
36. Determination of Most Advantageous Bid	36.1	The Procuring agency/Employer shall compare the evaluated bids in accordance with the predefined bidding procedure, of all substantially responsive bids to determine the Most Advantageous bidder.
37. Qualification of Bidder	37.1	The Procuring agency/Employer shall determine to its satisfaction whether the bidder is substantially responsive and whose bid is declared as most advantageous bid either continues to meet (if prequalification applies) or meets (if post-qualification applies) the qualifying criteria specified in Evaluation and Qualification Criteria. <i>Note: In case of International bidding, the parameters for incorporation or licensing within Pakistan may be fulfilled as part of post qualification.</i>
	37.2	The determination shall be based upon an examination of the documentary evidence of the bidder's qualifications submitted by the bidder, pursuant to ITB 12 .
	37.3	Prior to contract award, the Procuring agency/Employer will verify that the successful bidder (including each member of a JV) is not blacklisted/debarred. The Procuring agency/Employer will conduct the same verification for each sub-contractor proposed by the successful bidder.
38. Sub-Contractors	38.1	The bidder shall provide details regarding any specialized sub-contractor to the Procuring agency/Employer. In case change of sub-contractors, the bidder shall promptly notify the Procuring agency/Employer and obtain approval for replacement of sub-contractors.
	38.2	Bidders may propose sub-contracting up to the percentage of total value of contracts or the volume of works as specified in the BDS .

39. Abnormally Low Financial Bid	39.1	Where the bid price is considered to be abnormally low, the Procuring agency/Employer shall perform price analysis either during determination of Most Advantageous Bid or as a part of the post-qualification process. The following process shall apply: a) The Procuring agency/Employer may reject a bid if the Procuring agency/Employer has determined that the price in combination with other constituent elements of the bid is abnormally low in relation to the subject matter of the procurement (i.e. scope of the procurement or ancillary services) and raises concerns as to the capability and capacity of the respective Bidder to perform that contract; b) Before rejecting an abnormally low bid the Procuring agency/Employer shall request the bidder an explanation of the bid or of those sections which it considers contribute to the bid being abnormally low; take account of the evidence provided in response to a request in writing; and subsequently verify the bid or parts of the bid being abnormally low; c) The decision of the Procuring agency/Employer to reject a bid and reasons for the decision shall be recorded in the procurement proceedings and promptly communicated to the bidder concerned; d) The Procuring agency/Employer shall not incur any liability solely by rejecting abnormally bid; and e) An abnormally low bid means, in the light of the Procuring agency/Employer's estimate and of all the bids submitted, the bid appears to be abnormally low by not providing a margin for normal levels of profit. Guidance for Procuring agency/Employer: In order to identify the Abnormally Low Bid (ALB) following approaches can be considered to minimize the scope of subjectivity: (i) Comparing the bid price with the cost estimate; (ii) Comparing the bid price with the bids offered by other bidders submitting substantially responsive bids; and (iii) Comparing the bid price with prices paid in similar contracts in the recent past either government- or development partner-funded.
	39.2	The Procuring agency/Employer will determine to its satisfaction whether the bidder that is selected as having submitted the most advantageous bid is qualified to perform

		the contract satisfactorily, in accordance with the criteria listed in ITB 12
	39.3	The determination will take into account the bidder's financial and technical capabilities. It will be based upon an examination of the documentary evidence of the bidder's qualifications submitted by the bidder, pursuant to ITB 12 , as well as such other information as the Procuring agency/Employer deems necessary and appropriate. Factors not included in these bidding documents shall not be used in the evaluation of the bidders' qualifications.
	39.4	Procuring agency/Employer may seek "Certificate for Independent Price Determination" from the bidder and the results of reference checks may be used in determining award of contract. Explanation: <i>The Certificate shall be furnished by the bidder. The bidder shall certify that the price is determined keeping in view of all the essential aspects such as raw material, its processing, value addition, optimization of resources due to economy of scale, transportation, insurance and margin of profit etc.</i>
	39.5	An affirmative determination will be a prerequisite for award of the contract to the bidder. A negative determination will result in rejection of the bidder's bid, in which event the Procuring agency/Employer will proceed to the next ranked bidder to make a similar determination of that bidder's capabilities to perform satisfactorily.

F. AWARD OF CONTRACT

40. Criteria of Award	40.1	Subject to ITB 36 and 37, the Procuring agency/Employer will award the Contract to the bidder whose bid has been determined to be substantially responsive to the bidding documents and who has been declared as Most Advantageous Bidder, provided that such bidder has been determined to be: a) eligible in accordance with the provisions of ITB 3; b) is determined to be qualified to perform the Contract satisfactorily; and c) Successful negotiations have been concluded, if any.
41. Negotiations	41.1	The Committee of the Procuring agency/Employer may negotiate with the Most Advantageous Bidder relating to the following areas: (a) a minor alteration to the technical (drawings, design technical specifications) details of the statement of works; (b) Methodology, work plan, staffing in view to streamline the work; (c) a minor amendment to the special conditions of Contract; (d) finalizing payment arrangements; (e) clarifying details that were not apparent or could not be finalized at the time of Bidding;
	41.2	Where negotiation fails to result into an agreement, the Procuring agency/Employer may invite the next ranked bidder for negotiations. Where negotiations are commenced with the next ranked bidder, the Procuring agency/Employer shall not reopen earlier negotiations.
42. Procuring agency/Employer's Right to reject All Bids	42.1	Notwithstanding ITB 37, the Procuring agency/Employer reserves the right to reject all the bids, and to annul the bidding process at any time prior to acceptance of bid, without thereby incurring any liability to the affected bidder(s). However, the Authority (i.e. PPRA) may call from the Procuring agency/Employer the justification of those grounds.
	42.2	Notice of the rejection of all bids shall be given promptly to all bidders that have submitted bids.
	42.3	The Procuring agency/Employer shall upon request communicate to any bidder the grounds for its rejection of its bids, but is not required to justify those grounds.

43. Variations	43.1	The Engineer shall make any variation in the quantity of the Works or any part thereof that may, in his opinion, be necessary and for that purpose, or if for any other reason it shall, in his opinion, be appropriate, he shall have the authority to instruct the Contractor to do and the Contractor shall do any of the following: a) increase or decrease the quantity of any work included in the Contract, b) omit any such work (but not if the omitted work is to be carried out by the Employer or by another contractor), c) change the character or quality or kind of any such work, d) change the levels, lines, position and dimensions of any part of the Works, e) execute additional work of any kind necessary for the completion of the Works, or f) change any specified sequence or timing of construction of any part of the Works. No such variation shall in any way vitiate or invalidate the Contract, but the effect, if any, of all such variations shall be valued in accordance with ITB 15. Provided that where the issue of an instruction to vary the Works is necessitated by some default of or breach of contract by the Contractor or for which he is responsible, any additional cost attributable to such default shall be borne by the Contractor.
44. Instructions for variations	44.1	The Contractor shall not make any such variation without an instruction of the Engineer. Provided that no instruction shall be required for increase or decrease in the quantity of any work where such increase or decrease is not the result of an instruction given under this Clause, but is the result of the quantities exceeding or being less than those stated in the Bill of Quantities.
45. Valuation of Variations	45.1	All variations and any additions to the Contract Price which are required to be determined in accordance with ITB 15 (for the purposes of this Clause referred to as "varied work"), shall be valued at the rates and prices set out in the Contract if, in the opinion of the Engineer, the same shall be applicable. If the Contract does not contain any rates or prices applicable to the varied work, the rates and prices in the Contract shall be used as the basis for valuation so far as may be reasonable, failing which, after due consultation by the Engineer with the Procuring agency/Employer and the Contractor, suitable rates or prices shall be agreed upon between the Engineer and the Contractor. In the event of disagreement, the Engineer shall fix

		such rates or prices as are, in his opinion, appropriate and shall notify the Contractor accordingly, with a copy to the Employer. Until such time as rates or prices are agreed or fixed, the Engineer shall determine provisional rates or prices to enable on-account payments to be included in certificates issued in accordance with ITB 15 .
46. Notification of Award	46.1	Prior to the award of contract, the Procuring agency/Employer shall issue a Final Evaluation Report giving justification for acceptance or rejection of the bids.
	46.2	Where no complaints have been lodged, the bidder whose bid has been accepted will be notified of the award by the Procuring agency/Employer prior to expiration of the bid validity period in writing or through electronic means that provide record of the content of communication. However, the Procuring agency/Employer shall not award any procurement contract atleast for fifteen (15) days after the acceptance of bid. The notification letter (herein after and in the condition of the contract and contract form called "Letter of Acceptance" will specify the sum that the Procuring agency/Employer will pay the successful bidder in consideration for the execution and completion of the works as prescribed by the Contract (hereinafter and in the Contract called the "Contract Price).
	46.3	The notification of award will constitute the formation of the Contract, subject to the bidder furnishing the Performance Security (or guarantee) in accordance with ITB 48 and signing of the contract in accordance with ITB 47 .
	46.4	Upon the successful bidder's furnishing of the performance security (or guarantee) pursuant to ITB 48 , the Procuring agency/Employer will promptly notify each unsuccessful bidder, the name of the successful bidder and the Contract amount and will discharge the Bid Security or Bid Securing Declaration of the bidder(s) pursuant to ITB 19 .
47. Signing of Contract	47.1	Promptly after notification of award, Procuring agency/Employer shall send the successful bidder the draft agreement, incorporating all terms and conditions as agreed by the parties to the contract.
	47.2	Immediately after the Redressal of grievance by the GRC, and after fulfillment of all conditions precedent of the Contract Form, the successful bidder and the Procuring agency/Employer shall sign the contract.
	47.3	Where no formal signing of a contract is required, work order issued to the bidder shall be construed to be the contract.

48. Performance Security (or Guarantee)	48.1	After the receipt of the Letter of Acceptance, the successful bidder, within the specified time, shall deliver to the Procuring agency/Employer a Performance Guarantee in the amount and in the form stipulated in the BDS and SCC , denominated in the type and proportions of currencies in the Letter of Acceptance and in accordance with the Conditions of Contract.
	48.2	If the Performance Guarantee is provided by the successful bidder and it shall be in the form specified in the BDS which shall be in any of the following: (a) certified cheque, cashier's or manager's cheque, or bank draft; (b) irrevocable letter of credit issued by a scheduled bank of Pakistan or in the case of an irrevocable letter of credit issued by a foreign bank, the letter shall be confirmed or authenticated by a scheduled bank of Pakistan; (c) bank guarantee confirmed by a reputable local bank or, in the case of a successful foreign bidder, bonded by a foreign bank; or (d) surety bond callable upon demand issued by any reputable surety or insurance company. Any Performance Guarantee submitted shall be enforceable in Pakistan.
	48.3	Failure of the Most Advantageous Bidder to comply with the requirement of ITB 47 shall constitute sufficient grounds for the annulment of the award and forfeiture of the Bid Security or declare blacklisted (in case bid securing declaration is submitted) in which event the Procuring agency/Employer may make the award to the next most advantageous bidder or reinstate the procurement process afresh (as a case may be).
49. Advance Payment	49.1	Advance payment will be provided to the bidder in percentage and in the manner as agreed by the both parties in terms of Conditions of the Contract.
	49.2	The Procuring agency/Employer will provide an advance payment as stipulated in the Conditions of Contract, subject to a maximum amount, as stated and/or Conditions of the Contract. The advance payment request shall be accompanied by an advance payment security (guarantee) in the form provided in Section X. For the purpose of receiving the advance payment, the bidder shall make and estimate of, and include in its bid, the expenses that will relate to the purchase of equipment, machinery, materials, and on the engagement of labor during the first month beginning with the date of the Procuring agency/Employer's "Notice to Commence" as specified in the

		SCC.
50. General Performance of the Bidders	50.1	The Procuring agency/Employer reserves the right to obtain information regarding performance of the bidders on their previously awarded contracts / works. The Procuring agency/Employer may seek information / report from the previous employer for consideration. However, the Procuring agency/Employer shall incorporate such parameters in the evaluation criteria and accordingly decide the fate of the bid submitted.
51. Corrupt & Fraudulent Practices	51.1	Procuring agencies (including beneficiaries of Government funded projects and procurement) as well as Bidders/Suppliers/Contractors under Government financed contracts, observe the highest standard of ethics during the procurement and execution of such contracts, and will avoid to engage in any corrupt and fraudulent practices.

G. GRIEVANCE REDRESSAL & COMPLAINT REVIEW MECHANISM

52. Constitution of Grievance Redressal	52.1	Procuring agency/Employer shall constitute a Grievance Redressal Committee (GRC) comprising of odd number of persons with proper power and authorization to address the complaint. The GRC shall not have any of the members of Procurement Evaluation Committee. The committee must have one subject specialist depending the nature of the procurement.
53. GRC Procedure	53.1	Any party can file its written complaint against the eligibility parameters or any other terms and conditions prescribed in the prequalification or bidding documents found contrary to provision of Procurement Regulatory Framework, and the same shall be addressed by the GRC well before the bid submission deadline.
	53.2	Any bidder feeling aggrieved by any act of the Procuring agency/Employer after the submission of his bid may lodge a written complaint concerning his grievances not later than seven days of the announcement of technical evaluation report and five days after issuance of final evaluation report.

	53.3	In case, the complaint is filed against the technical evaluation report, the GRC shall suspend the procurement proceedings.
	53.4	In case, the complaint is filed after the issuance of the final evaluation report, the complainant cannot raise any objection on technical evaluation of the report: Provided that the complainant may raise the objection on any part of the final evaluation report in case where single stage one envelope bidding procedure is adopted.
	53.5	The GRC, in both the cases shall investigate and decide upon the complaint within ten days of its receipt.
	53.6	Any bidder or the Procuring agency/Employer not satisfied with the decision of the GRC may file Appeal before the Appellate Committee of the Authority on prescribed format after depositing the Prescribed fee.
	53.7	The Committee, upon receipt of the Appeal against the decision of the GRC complete in all respect shall serve notices in writing upon all the parties to Appeal.
	53.8	The committee shall call the record from the concerned Procuring agency/Employer or the GRC as the case may be, and the same shall be provided within prescribed time.
	53.9	The committee may after examination of the relevant record and hearing all the concerned parties, shall decide the complaint within fifteen (15) days of receipt of the Appeal.
	53.10	The decision of the Committee shall be in writing and shall be signed by the Head and each Member of the Committee. The decision of the committee shall be final.

H. MECHANISM OF BLACKLISTING

54. Mechanism of Blacklisting	54.1	The Procuring agency/Employer shall bar for not more than the time prescribed in Rule-19 of the Public Procurement Rules, 2004, from participating in their respective procurement proceedings, bidder or contractor who either: Involved in corrupt and fraudulent practices as defined in Rule-2 of Public Procurement Rules; i) Fails to perform his contractual obligations; and ii) Fails to abide by the id securing declaration;
	54.2	The show cause notice shall contain: (a) precise allegation, against the bidder or contractor; (b) the maximum period for which the Procuring agency/Employer proposes to debar the bidder or contractor from participating in any public procurement of the Procuring agency/Employer; and (c) the statement, if needed, about the intention of the Procuring agency/Employer to make a request to the Authority for debarring the bidder or contractor from participating in public procurements of all the procuring agencies.
	54.3	The Procuring agency/Employer shall give minimum of seven days to the bidder or contractor for submission of written reply of the show cause notice.
	54.4	In case, the bidder or contractor fails to submit written reply within the requisite time, the Procuring agency/Employer may issue notice for personal hearing to the bidder or contractor/ authorize representative of the bidder or contractor and the Procuring agency/Employer shall decide the matter on the basis of available record and personal hearing, if availed.
	54.5	In case the bidder or contractor submits written reply of the show cause notice, the Procuring agency/Employer may decide to file the matter or direct issuance of a notice to the bidder or contractor for personal hearing.
	54.6	The Procuring agency/Employer shall give minimum of seven days to the bidder or contractor for appearance before the designated officer of the Procuring agency/Employer for personal hearing. The designated officer shall decide the matter on the basis of the available record and personal hearing of the bidder or contractor, if availed.
	54.7	The Procuring agency/Employer shall decide the matter within fifteen (15) days from the date of personal hearing unless the personal hearing is adjourned to a next date and in such an eventuality, the period of personal hearing shall be reckoned from the last date of personal hearing.

	54.8	The Procuring agency/Employer shall communicate to the bidder or contractor the order of debarring the bidder or contractor from participating in any public procurement with a statement that the bidder or contractor may, within thirty (30) days, prefer a representation against the order before the Authority.
	54.9	Such blacklisting or barring action shall be communicated by the Procuring agency/Employer to the Authority and respective bidder or bidders in the form of decision containing the grounds for such action. The same shall be publicized by the Authority after examining the record whether the procedure defined in blacklisting and debarment mechanism has been adhered to by the Procuring agency/Employer.
	54.10	The bidder may file the review petition before the Review Petition Committee Authority within thirty (30) days of communication of such blacklisting or barring action after depositing the prescribed fee and in accordance with “Procedure of filing and disposal of review petition under Rule-19(3) Regulations, 2021”. The Committee shall evaluate the case and decide within ninety (90) days of filing of review petition.
	54.11	The committee shall serve a notice in writing upon all respondent of the review petition. The notices shall be accompanied by the copies of review petition and all attached documents of the review petition including the decision of the Procuring agency/Employer. The parties may file written statements along with essential documents in support of their contentions. The Committee may pass such order on the representation may deem fit.
	54.12	The Authority on the basis of decision made by the committee either may debar a bidder or contractor from participating in any public procurement process of all or some of the procuring agencies for such period as the deemed appropriate or acquit the bidder from the allegations. The decision of the Authority shall be final.



SECTION III: BID DATA SHEET

Bid Data Sheet (BDS)

The following specific data for the procurement of works shall complement, supplement, or amend the provisions in the Instructions to Bidders (ITBs). Whenever there is a conflict, the provisions herein shall prevail over those in ITBs.

BDS Clause Number	ITB Number	Amendments of, and Supplements to, Clauses in the Instruction to Bidders
A. Introduction		
1.	1.1	Name of Procuring agency/Employer: Pakistan Airports Authority The subject of procurement is: Construction of Aviation Complex at Blue Area, Islamabad Period for completion of the works: 1,645 days Commencement date execution of the works: 14 days after signing of Contract Type of Procurement: International competitive bidding
2.	2.1	Financial year for the operations of the Procuring agency/Employer: 2026-27 & onwards Name of Project: Construction of Aviation Complex at Blue Area Islamabad Name of financing institution: Pakistan Airports Authority (PAA) Name and identification number of the Contract: Aviation Complex-01
3.	3.1	Maximum number of members in the joint venture, consortium shall be: 03 (three) “Foreign constructors shall not be eligible to participate in bidding individually. Foreign constructor/ firm shall have to enter into joint venture with Pakistani firm/ constructor in line with PEC Bye Laws.”

B. Bidding Documents

4.	7.1	Delete the text of Sub-Clause 7.1 and substitute with the following: The scope of Works, bidding procedures, and terms and conditions of the contract are prescribed in the bidding documents. In addition to the Invitation for Bids, the bidding documents which should be read in conjunction with any addenda issued in accordance with ITB 9.2 include: <u>Technical Bid</u> 7.1.1 Volume-I Section I Invitation for Bids Section II Instructions to Bidders (ITBs) Section III Bid Data Sheet (BDS) Section IV Eligible Countries Section V Evaluation and Qualification Criteria Section VI Works Requirements, Technical Specifications & Schedule of Requirements Section VII Standard Bidding Forms Section VIII General Conditions (GC) Section IX Special Conditions of Contract (SCC) Part-A Contract Data Part-B Special Provisions (Particular Conditions Part-B) Section X Contract Forms Section XI Specific Provision 7.1.1 Volume-II Technical Specifications 7.1.1 Volume-III Drawings <u>Financial Bid</u> 7.1.1 Volume-IV Letter of Bid – Financial Proposal Preamble to Bill of Quantities Bill of Quantities Estimated Progress Payments Integrity Pact
5.	7.2	One original and two (02) hard copies of Technical Bid is to be submitted. Complete Bid duly signed, stamped and scanned shall be submitted

		online on EPADS v2.0.
6.	8.1	The address for clarification of Bidding Documents is; Director P&D Pakistan Airports Authority (PAA) Terminal-1, Head Quarter PAA, JIAP Karachi, Pakistan
	8.5	Pre-bid meeting venue, time, and date will be as per Invitation For Bids.

C. Preparation of Bids

7.	10.1	The Language of all correspondences and documents related to the Bid is: English
8.	15.5	The bid price shall be adjusted in accordance with Appendix C – Formula for Price Adjustment.
9.	15.6	Name of the works: Construction of Aviation Complex at Blue Area Islamabad The identification No.: Aviation Complex-01 The No. and identification of lots (contracts) comprising this open competitive bid: Not Applicable
10.	15.8	Add the following text between the text ‘and other levies’ and ‘payable by the Contractor’: “except Sales Tax on Services”
11.	16.1	The currency of the Bid shall be in Pak Rupees (PKR)
12.	18.1	The Bid Validity period shall be 180 days .
13.	19.1	The amount of Bid Security shall be PKR 350 million . The currency of the Bid Security shall be: PKR
14.	19.3	The Bid Security shall be in the form of: Bank Guarantee from any Scheduled Bank in Pakistan approved by the Procuring agency/ Employer. The list of approved Bank is attached as annexed with Bidding document. The Bid Security shall be in favour of the Employer valid for a period of two hundred eight (208) days i.e. 28 days beyond the bid validity date.
15.	19.3 (c)	Other forms of security are: Not applicable
16.	20.1	Alternative Bids to the requirements of the Bidding Documents will not be permitted.
17.	20.2	Not applicable
18.	22.1	The Bid prepared in accordance with the instructions in the Bidding documents, must be submitted through EPADS v2.0 . Manual submission of only Technical Bid along with Bid Security

		is to be made.
19.	22.2	The written confirmation of authorization to sign on behalf of the Bidder shall consist of: Written power of Attorney

D. Submission of Bids

20.	23.2 (a)	Bid shall be submitted through EPADS v 2.0. Technical Bid and Original Bid Security shall be submitted at the following address: Director P&D Pakistan Airports Authority (PAA) Terminal-1, Head Quarter PAA, JIAP Karachi, Pakistan
21.	23.2 (b)	Title of the subject Procurement or Project name: Construction of Aviation Complex at Blue Area, Islamabad ITB title and No: Aviation Complex-01 Time and date for submission: As per Invitation For Bids
22.	24.1	The deadline for Bid submission will be as per Invitation For Bids.

E. Opening and Evaluation of Bids

23.	27.1	Bids will be opened by using EPADS v2.0.
24.	33.2	Not Applicable
25.	33.3	The bids shall be quoted in PKR
26.	34	Evaluation Techniques Least Cost Based Selection (LCBS) After meeting the requirements of eligibility, qualification and substantial responsiveness, the bid in compliance with all the mandatory (drawings/ design/ technical specifications /requirements and/or requisite quality threshold (if any), and having lowest evaluated cost (or financial proposal) shall be considered highest ranked bid.
27.	34	Specific criteria in case evaluating the bids submitted by JVs and consortium to be used in the evaluation and their evaluation method or reference to the Technical Specifications as mentioned in Section-V Evaluation and Qualification Criteria.
28.	34.5	Not Applicable
29.	35	Not Applicable
30.	38.2	Sub-contracting 30% (thirty percent) of the total value of the contract.

F. Award of Contract		
31.	48	The Performance Security (or guarantee) shall be 10% (ten percent) of the Contract Price.
32.	48	The Performance Security (or guarantee) shall be in the form of Bank Guarantee confirmed by a reputable local bank or, in the case of successful foreign bidder, bonded by a foreign bank, provided that it is counter-signed and counter-guaranteed by a reputable Scheduled Bank in Pakistan acceptable to the Employer. The list of approved Scheduled Bank is attached with the Bidding Documents.

G. Review of Procurement Decisions

33.	53.1	Any bidder who claims to have suffered loss or damage due to any act of the Procuring Agency inconsistent with the Public Procurement Rules, 2004/PPRA Regulations may lodge a written grievance not later than three (03) days prior to the bid submission deadline, in accordance with Rule 48(2) of the Public Procurement Rules, 2004, addressed to the Grievance Redressal Committee/Director P&D at the address specified in the BDS
34.	53.6	The Address of PPRA to submit a copy of appeal: Grievance Redressal Appellate Committee Public Procurement Regulatory Authority 1 st Floor, G-5/2, Islamabad, Pakistan Tel: +92-51-9202254



SECTION IV: ELIGIBLE COUNTRIES

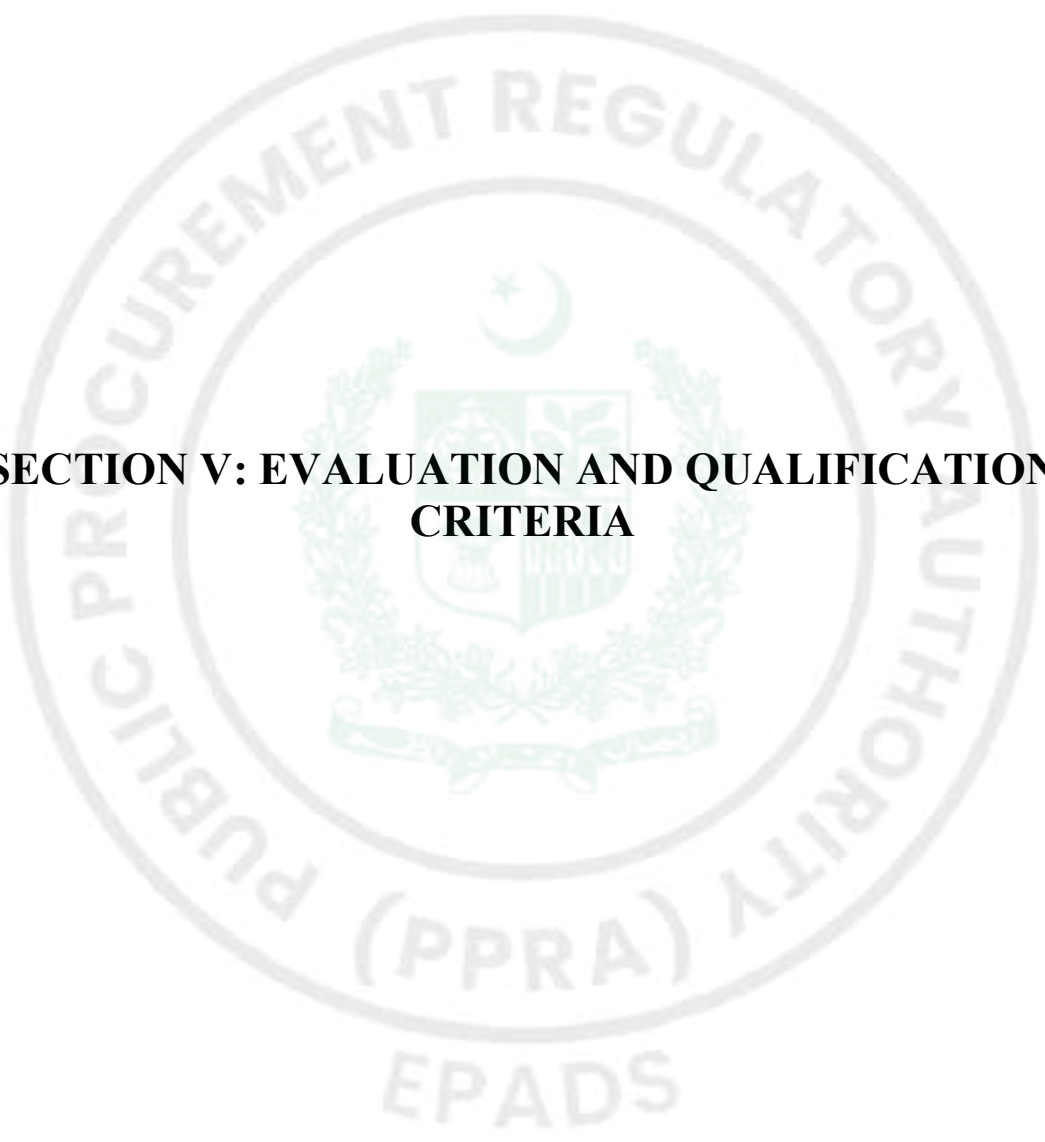
Section IV. Eligible Countries

All the bidders are allowed to participate in the subject procurement without regard to nationality, except bidders of some nationality, prohibited in accordance with policy of the Federal Government.

Following countries are ineligible to participate in the procurement process:

1. India
2. Israel





SECTION V: EVALUATION AND QUALIFICATION CRITERIA

Section V. Evaluation and Qualification Criteria

Qualification of Bidders will be based on the criteria given in succeeding para A regarding eligibility and mandatory requirements. Only those bidders who would meet the eligibility and mandatory requirements will be evaluated on the basis of criteria given in succeeding para B regarding the bidder's Experience, Personnel capabilities, Equipment capabilities and Financial soundness.

The Employer reserves the right to waive minor deviations, if they do not materially affect the capability of the Bidder to perform the Contract.

The foreign constructor shall submit a true copy of the English translation of all documents originally issued in a foreign language, duly notarized and certified by the competent authority.



A. Eligibility and Mandatory Requirements

Eligibility and Mandatory Requirements			Compliance Requirements				Documentation
No.	Subject	Requirement	Single Entity	Joint Venture (existing or intended)			Submission Requirements and Explanation Notes
				All Parties Combined	Each Member	One Member	
1. Eligibility							
1.1	Nationality	Nationality in accordance with ITB 4.3	Must meet requirement	Must meet requirement	Must meet requirement	N/A	Forms ELI 1 and 2, with attachments
1.2	Conflict of Interest	No conflicts of interest in accordance with ITB 3.7	Must meet requirement	Must meet requirement	Must meet requirement	N/A	Letter of Bid – Technical Proposal
2. Valid registration with Pakistan Engineering Council (PEC)							
2.1	In case of Local Constructors, valid registration with Pakistan Engineering Council	Category C-A and at least in Specialization Codes: CE-02, CE-09, CE-10, BC-03, ME-01, ME-02, EE-02, EE-03, EE-04	Must meet requirement	Must meet requirement of Specialization Codes	Must meet Requirement of PEC Category	N/A	PEC Registration License Specialization Codes: CE-02, CE-09, CE-10, BC-03, ME-01, ME-02, EE-02, EE-03, EE-04
2.2	In case of Foreign Constructors, valid registration with Pakistan Engineering Council	For Foreign Constructors: Category FC-A For Local Constructors: Category C-A	N/A (JV needed for Foreign Constructors with Local Constructors as per PEC guidelines)	Must meet requirement of Specialization Codes	Must meet Requirement of PEC Category	N/A	PEC Registration License Specialization Codes: CE-02, CE-09, CE-10, BC-03, ME-01, ME-02, EE-02, EE-03, EE-04
3. Historical Contract Non-Performance							
3.1	History of Non-Performing Contracts	Non-performance of a contract did not occur as a result of contractor default for last 15 years.	Must meet requirement	N/A	Must meet requirement	N/A	Form CON-2
3.2	Pending Litigation	Bidder’s financial position and prospective long-term profitability sound according to criteria established in	Must meet requirement	N/A	Must meet requirement	N/A	Form CON – 2

Eligibility and Mandatory Requirements			Compliance Requirements				Documentation
No.	Subject	Requirement	Single Entity	Joint Venture (existing or intended)			Submission Requirements and Explanation Notes
				All Parties Combined	Each Member	One Member	
		Financial Capabilities below and assuming that all pending litigation will be resolved against the Bidder					
3.3	Litigation History	No consistent history of court/arbitral award decisions against the Bidder since 1 st January 2011.	Must meet requirement	N/A	Must meet requirement	N/A	Form CON – 2
4. No-Blacklisting							
4.1	No- Blacklisting	Bidder has never been blacklisted	Must meet requirement	N/A	Must meet requirement	N/A	Affidavit on Judicial Stamp Paper prepared within the current month of submission of bidding document that the firm has never been blacklisted
5. Registration with Federal Board of Revenue							
5.1	Income Tax Registration Certificate	Bidder registration with the Federal Board of Revenue for Income Tax	Must meet requirement	N/A	Must meet requirement	N/A	Income Tax Registration Certificate
5.2	Active Tax Payer	Bidder shall be on the active taxpayer's list of the Federal Board of Revenue for Income Tax	Must meet requirement	N/A	Must meet requirement	N/A	Record of Active Taxpayer for Income Tax

B. Detailed Qualification Criteria

Only those bidders who successfully meet all the **Eligibility** and **Mandatory Requirements** shall qualify for detailed evaluation, in accordance with the given criteria. The detailed qualification shall be carried out on the basis of the criteria for the different categories and minimum passing marks prescribed hereunder:

S. No.	Category	Weightage / Marks	Passing Marks
B.1	Experience	175	87.5
B.2	Personnel Capabilities	75	37.5
B.3	Equipment Capabilities	100	50
B.4	Financial Soundness	150	75
	Total	500	350 (overall)

No.	Subject	Requirement	Single Entity	Compliance Requirements			Documentation Submission Requirements and Explanation Notes
				Joint Venture (existing or intended)			
				All Parties Combined	Each Member	Lead Member	
B.1 Experience		Max Marks = 175	50%	50%	30%	45%	
B1.1	Specific Construction Experience Completed Projects –	Projects of similar nature and complexity Completed in last fifteen years. (Each of min. 20-Storeyed Building above ground) as Prime Contractor, joint venture member. Max. Marks = 90 60 Marks for at least 3 projects - For less than 3 projects, following weightage will be adopted: 60 x (A/3) - For more than 3 projects but less than 6 projects completed, following weightage will be adopted 60 + (A-3) x 10 A = No. of projects of similar nature and complexity, completed in last fifteen years Full Marks will be awarded for 6 projects or more.					Form. EXP – 4.2 (a) Similar Nature & Complexity means high-rise building projects comprising multi-storey building structure, MEP services, façade systems, and finishing works. No Marks will be awarded for works less than the specified limits and nature & complexity. Basements and lower ground floors shall not be considered as storey(s). Provide complete documentary evidences of the projects to substantiate the scope and no. of storeys duly verified by respective Employer and/ or Consultant. Provide Taking Over/ Completion Certificate of each completed project of which the experience is being claimed. Proportionate marks on the basis of share in JV agreement will be awarded for completed projects as Joint Venture (JV) with atleast 30% share in JV. Copy of JV Agreement with %age share and scope of services needs to be submitted as documentary evidence.

No.	Subject	Requirement	Single Entity	Compliance Requirements			Documentation Submission Requirements and Explanation Notes
				Joint Venture (existing or intended)			
				All Parties Combined	Each Member	Lead Member	
							Project executed as Sub-Contractor shall not be considered.
B1.2	Specific Construction Experience – In-hand Projects	Projects of similar nature and complexity In-hand. (Each of min. 20-Storeyed Building above ground) as Prime Contractor, joint venture member. Max. Marks = 60 40 Marks for 3 projects. - For less than 3 projects following weightage will be adopted: 40 x (A/3) - For more than 3 projects but less than 6 projects following weightage will be adopted: 40 + (A-3) x 20/3 A = No. of projects of similar nature and complexity in-hand. Full Marks will be awarded in case of 6 projects or more.					Form. EXP – 4.2 (b) Similar Nature & Complexity means high-rise building projects comprising multi-storey building structure, MEP services, façade systems, and finishing works. No Marks will be awarded for works less than the specified limits and nature & complexity. Basements and lower ground floors shall not be considered as storey(s). Bidder shall provide complete documentary evidences of the projects to substantiate the scope and no. of storeys duly verified by respective Employer and/ or Consultant. Provide Letter of Award/ Acceptance of each In-hand project of which the experience is being claimed. Proportionate marks on the basis of share in JV agreement will be awarded for completed projects as Joint Venture (JV) with at least 30% share in JV. Copy of JV Agreement with %age share and scope of services needs to be submitted as

No.	Subject	Requirement	Single Entity	Compliance Requirements			Documentation Submission Requirements and Explanation Notes
				Joint Venture (existing or intended)			
				All Parties Combined	Each Member	Lead Member	
							documentary evidence. Project executed as Sub-Contractor shall not be considered.
B1.3	Specific Experience – Implementation of Building Information Modeling	Completed and/ or In-hand Projects with implementation of BIM in construction works. Max Marks = 25 15 Marks will be awarded for each Project. Full Marks will be awarded in case of 2 projects or more.					Documentary Evidence to confirm adoption of BIM on completed and/ or in-hand projects. (Each of min. 05-Storeyed Building above ground). Project executed as Sub-Contractor and Joint Venture (JV) shall not be considered.
B.2 Personnel Capabilities		Max Marks = 75	50%	50%	30%	45%	Form PER-1 and PER-2 Provide the at following for each personnel, failing which, no marks will be awarded: a. verifiable proof of employment with the bidder of the proposed staff b. detailed CV c. valid PEC Registration / Internationally recognized Engineering Body Registration Certificates of proposed Engineers d. Diploma Certificates of DAE staff
B2.1	Project Manager	20 marks will be awarded for Civil Engineer, minimum qualification B.Sc./B.E, , having at least 20 years relevant experience in high rise buildings. Max Marks = 10					

No.	Subject	Requirement	Single Entity	Compliance Requirements			Documentation Submission Requirements and Explanation Notes
				Joint Venture (existing or intended)			
				All Parties Combined	Each Member	Lead Member	
B2.2	Construction Manager	20 marks will be awarded for Civil Engineer, minimum qualification B.Sc./B.E, , having at least 15 years relevant experience in high rise buildings. Max Marks = 10					
B2.3	Planning Engineer	10 mark will be awarded for Planning Engineer minimum qualification B.Sc./B.E (Civil/ Electrical/ Mechanical/ Arch. Engg.), , having at least 10 years relevant experience. Max Marks = 5					
B2.4	BIM Engineer	10 mark will be awarded for BIM Engineer minimum qualification B.Sc./B.E, , having at least 07 years relevant experience. Max Marks = 5					
B2.5	Health Safety Environment (HSE) Engineer	10 mark will be awarded for BSc. Engineer with OSHA/ NEBOSH Certified having at least 10 years’ relevant experience. Max Marks = 5					
B2.6	Environmental Officer	10 mark will be awarded for BSc. Environmental Engineer, having at least 07 years’ relevant experience. Max Marks = 5					
B2.7	Site Engineer Civil	10 mark will be awarded for Civil Engineer, minimum qualification					

No.	Subject	Requirement	Single Entity	Compliance Requirements			Documentation Submission Requirements and Explanation Notes
				Joint Venture (existing or intended)			
				All Parties Combined	Each Member	Lead Member	
		B.Sc./B.E, having at least 10 years’ relevant experience. Max Marks = 5					
B2.8	Site Engineer Electrical	10 mark will be awarded for Electrical Engineer, minimum qualification B.Sc./B.E, having at least 10 years’ relevant experience. Max Marks = 5					
B2.9	Site Engineer Mechanical	10 mark will be awarded for Mechanical Engineer, minimum qualification B.Sc./B.E, having at least 10 years’ relevant experience. Max Marks = 5					
B2.10	Sub Engineer Civil	10 mark will be awarded for Sub Engineer, minimum qualification DAE (Civil). having at least 15 years’ relevant experience. Max Marks = 5					
B2.11	Sub Engineer Electrical	10 mark will be awarded for Sub Engineer, minimum qualification DAE (Electrical), having at least 15 years’ relevant experience. Max Marks = 5					
B2.12	Quantity Surveyor	10 mark will be awarded for Quantity Surveyor, minimum qualification DAE (Civil), having at least 15 years’ relevant experience.					

			Compliance Requirements			Documentation	
No.	Subject	Requirement	Single Entity	Joint Venture (existing or intended)			Submission Requirements and Explanation Notes
				All Parties Combined	Each Member	Lead Member	
		Max Marks = 5					
B2.13	Surveyor	10 mark will be awarded for Surveyor, minimum qualification DAE (Civil), having at least 15 years’ relevant experience. Max Marks = 5					
B.3 Capabilities	Equipment	Max Marks = 100	50%	50%	30%	45%	
			Form EQU: (SECTION VI) Provide an undertaking on judicial stamp paper to the effect that the listed equipment is available with the firm. 40 Marks for each equipment will be awarded if the Contractor meets the minimum requirements for each item. If the available quantity of each equipment is less than specified limit, following weightage shall be applied: 40 x (A / Required Quantity) If the available quantity of each equipment is more than the minimum equipment requirement full marks will be awarded. A = Available quantity of each equipment of each Item. Max 50 Marks for each Sub-Head Total Marks = (Marks Obtained/1200) x 100				

No.	Subject	Requirement	Single Entity	Compliance Requirements (existing or intended)			Documentation Submission Requirements and Explanation Notes
				All Parties Combined	Each Member	Lead Member	
B3.1	Batching Plant	Min. Capacity = 60 Cum/hr Min. Quantity = 1 No.					
B3.2	High-Pressure Stationary/ Static Concrete Pump	For vertical pumping heights > 120m Min. Quantity = 1 No.					
B3.3	Hydraulic Concrete Placing Boom	Spider Boom, minimum 24m–32m reach, floor or core-mounted Min. Quantity = 1 No.					
B3.4	High-Pressure Concrete Delivery Pipeline Set	Min. Quantity = 1 set					
B3.5	Concrete Pump	Min. 50m boom Min. Quantity = 2 Nos.					
B3.6	Concrete Transit Mixer	Min. Capacity = 6 Cum/hr Min. Quantity = 5 Nos.					
B3.7	Crane Mobile	Min. Capacity = 30 Tons Min. Quantity = 1 No.					
B3.8	Crane Tower	Min. 30 M Boom with 12 Ton lifting capacity Min. Quantity = 2 Nos.					
B3.9	Dumper Truck	Min. Quantity = 5 Nos.					
B3.10	Excavator	Min. Quantity = 5 Nos.					
B3.11	Vibratory Roller	Min. Quantity = 3 Nos.					
B3.12	Shower/ Loader/ Backhoe	Min. Quantity = 3 Nos.					
B3.13	Steel cutting & Bending Machine	Min. Quantity = 10 Nos.					
B3.14	Cabin Hoist	Min. Capacity = 1500 kg Min. Quantity = 2 Nos.					

No.	Subject	Requirement	Single Entity	Compliance Requirements (existing or intended)			Documentation Submission Requirements and Explanation Notes
				All Parties Combined	Each Member	Lead Member	
B3.15	Air Compressor	Min. Capacity = 15 HP Min. Quantity = 2 Nos.					
B3.16	Form Work	Steel/ Marine Ply Min. Quantity = 200,000 Sft.					
B3.17	Scaffolding Pipe	Min. Quantity = 300,000 Rft.					
B3.18	Generator	Min. Capacity = 250 KVA Min. Quantity = 5 Nos.					
B3.19	Welding Machine	Arc/ MIG Machine Min. Quantity = 4 Nos.					
B3.20	Water Tanker	Min. Capacity = 10,000 Litres Min. Quantity = 5 Nos.					
B3.21	Dewatering Pump	Min. Capacity = 10 HP Min. Quantity = 5 Nos.					
B3.22	Total Station	Min. Quantity = 5 Nos.					
B3.23	High-Precision Vertical Laser Plummet	For high-rise verticality and axis control Min. Quantity = 1 Nos.					
B3.24	Safety Equipment Set	Lifelines, Harnesses, Helmets, Fire Extinguishers Min. Quantity = 100 Sets					
B.4 Financial Soundness		Max Marks = 150	50%	50%	30%	45%	FORM FIN - 3.1, FIN - 3.2 and FIN 3.3 The bidder or each member of JV shall submit Audited financial statements for the last five years i.e. year 2020-21 to year 2024-25. Foreign firm shall provide English translated financial audited statement duly certified by its original auditor. No marks shall be awarded, if the audited

No.	Subject	Requirement	Single Entity	Compliance Requirements			Documentation
				Joint Venture (existing or intended)			Submission Requirements and Explanation Notes
				All Parties Combined	Each Member	Lead Member	
							financial statements are not provided for all 5 years.
B4.1	Available Unutilized Bank Credit Line	Available latest Project specific Unutilized Bank Credit Line Max Marks = 75 65 Marks will be awarded if the available bank credit line limit is equal to 10,000 million or equivalent Foreign Currency. - For limit less than 10,000 million or equivalent Foreign Currency, following weightage will be adopted: 65 x (A/10,000) - For the limit more than 10,000 million but less than 15,000 million or equivalent Foreign Currency, following weightage will be adopted: 65 + (A/15,000) x 10 A= Available Unutilized Bank Credit Line Limit Full Marks will be awarded in case of limit is 15,000 million or equivalent Foreign Currency or more.					
B4.2	Working Capital	Average Working Capital in last 5 years Max Marks = 75					

			Compliance Requirements			Documentation	
No.	Subject	Requirement	Single Entity	Joint Venture (existing or intended)			Submission Requirements and Explanation Notes
				All Parties Combined	Each Member	Lead Member	
		65 Marks will be awarded if the available average working capital for last five years is equal to 5,000 million or equivalent Foreign Currency. - For the working capital less than 5,000 million or equivalent Foreign Currency, following weightage will be adopted: 65 x (A/5,000) - For the working capital more than 5,000 million but less than 7,000 million or equivalent Foreign Currency, following weightage will be adopted: 65 + (A/7,000) x 10 A= Average working capital in last five years. Full Marks will be awarded in case of limit is 7,000 million or equivalent Foreign Currency or more.					

**SECTION VI: WORKS REQUIREMENT, TECHNICAL
SPECIFICATIONS, DRAWINGS, SUPPLEMENTARY
INFORMATION AND BILL OF QUANTITIES**

Scope of Works

The scope of work primarily includes the construction of the Aviation Complex at Blue Area Islamabad. The scope of work for the high-rise building (6 basements, ground plus 26 storeys) includes Piling and Earth Retention Works, Civil Works, Architectural finishes Works, HVAC, Elevators, Escalators, Electrical, ELV Systems, Plumbing, Fire Fighting, Integrated Building Management System, Façade System, BIPV System, Metering and HT Room and infrastructure development works. Infrastructure works include PCC roads, concrete paver parking, storm water drainage, sewerage networks and fire-fighting etc. lying within the boundaries and limits shown on the Drawings and any such additional areas adjacent thereto as may be designated by the Engineer from time for the construction to be performed under the Contract, and all such areas and additional areas shall comprise the Site.



Technical Specifications

Volume-II covering Technical Specifications may be downloaded from the link given hereunder:

Download Link:



Drawings

Volume-III covering Drawings may be downloaded from the link given hereunder:



Download Link:



Supplementary Information

Following Reports are hereby enclosed for reference and compliance by the Contractor, as the case may be:

1. Topographic Survey
2. Geotechnical Investigation Report
3. Seismic Hazard Assessment Report
4. Environmental Impact Assessment Report

Bidders are advised to visit and thoroughly examine the Site of the Works and its surroundings and, at their own responsibility, risk, and cost, obtain all information that may be necessary for the preparation and submission of their bids. Submission of a bid shall be deemed to constitute confirmation that the Bidder has satisfied itself regarding all site conditions and other factors that may affect the execution of the Works.

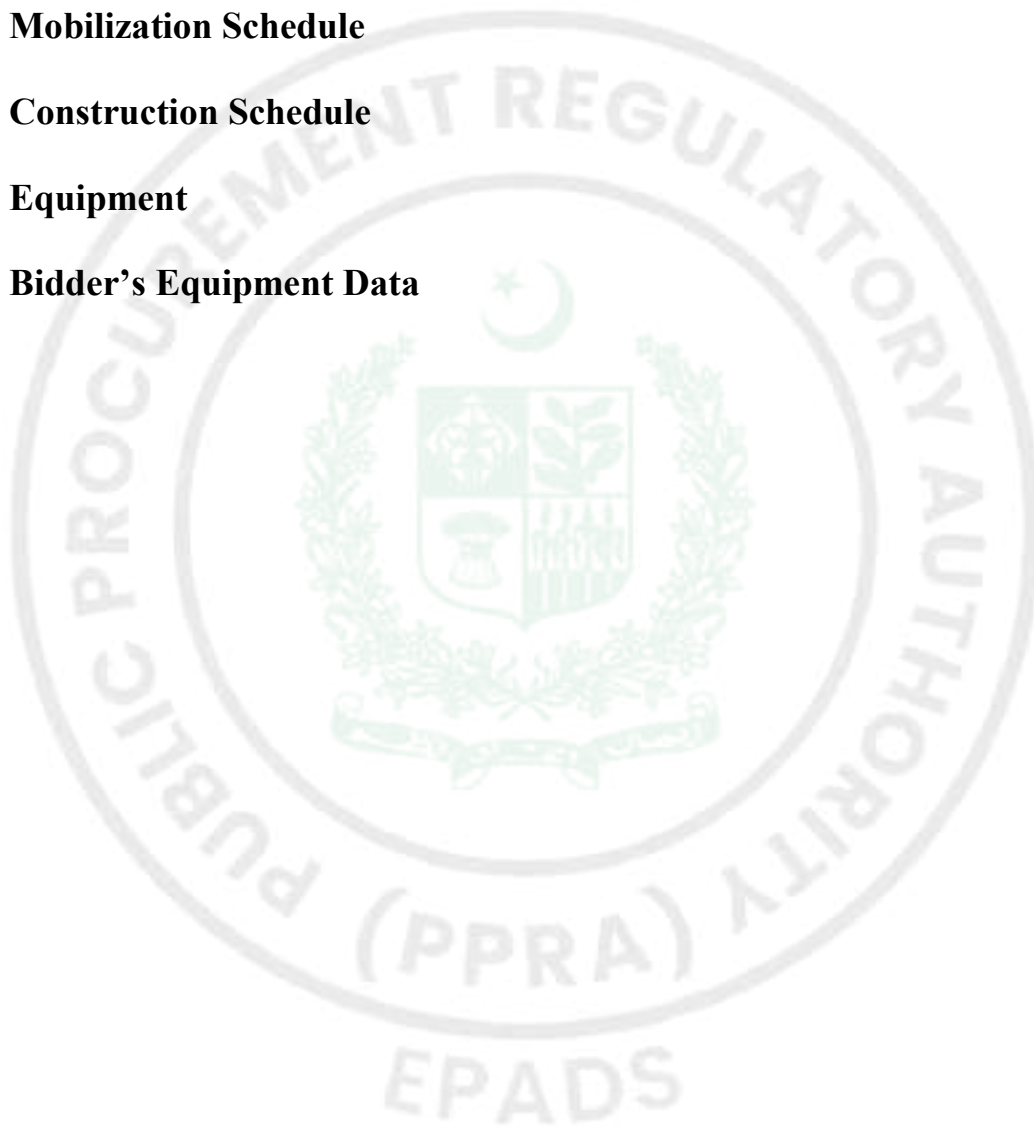
No claim, additional payment, extension of time, or other compensation arising from or related to the topography, subsurface conditions, geological strata, groundwater level, seismic parameters, or any other physical or environmental conditions of the Site shall be entertained, except as otherwise expressly provided under the Conditions of Contract.

Download Link:



Technical Proposal

- **Site Organization**
- **Method Statement**
- **Mobilization Schedule**
- **Construction Schedule**
- **Equipment**
- **Bidder's Equipment Data**



Site Organization

The Bidder is required to submit an organization proposed for the Works, together with their names, qualifications, experience, positions held and their nationalities.

Designation	Name	Summary of Qualifications Experience, Present, Position and Nationality
-------------	------	--

- **Head Office:**

- **Site Office:**

Contractor's Representative

Site Superintendent

Supervising Engineer

Plant Erectors

Construction Supervisors

Other Key Staff

Method Statement

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

- The sequence and methods in which he proposes to carry out the Works, including the number of shifts per day and hours per shift, he expects to work.
- A list of all major items of constructional and erection plant, tools and vehicles proposed to be used in carrying out the Works at Site, including number of each kind, make, type, capacity of all equipment, working condition, which shall be deployed by him for Civil Work and Erection, Testing and Commissioning of the Works, in sufficient detail to demonstrate fully that the equipment will meet all the requirements of the Technical Provisions.
- The procedure for installation of equipment and transportation of equipment and materials to the site.
- Details regarding 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.

Mobilization Schedule

The Bidder is required to submit a narrative outlining the method for mobilization of works and arrangement of preliminaries.

In accordance with the Particular Conditions, Sub-Clause 4.1, the Contractor shall not carry out mobilization to Site unless the Engineer gives consent.



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)
Whole Works	1,645 days

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.

Form EQU: 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 Section V, Evaluation and Qualification Criteria. A separate Form shall be prepared for each item of equipment listed, or for alternative equipment proposed by the Bidder.

Item of equipment		
Equipment information	Name of manufacturer	Model and power rating
	Capacity	Year of manufacture
Current status	Current location	
	Details of current commitments	
Source	Indicate source of the equipment ☐ Owned ☐ Rented ☐ Leased ☐ Specially manufactured	

Omit the following information 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	

Bidder's Equipment Data

1. HEATING VENTILATION & AIR CONDITIONING (HVAC)

Data provided hereunder will be assessed for general conformity with requirements of Bidding Document. Acceptance of Bid will not mean acceptance of these data. The Contractor will have to submit detailed equipment submittals for approval of the Engineer in accordance with Special Provisions of Specifications later on after award of the Contract.

Technical catalogues are required only to substantiate the data provided in these forms. Catalogues of equipment not listed in these forms shall not be submitted and if submitted, will be ignored. Acceptance of Bid will not mean the acceptance of information given in those catalogues.

A. CHILLERS (AHRI CERTIFIED)

1. Make/Brand: _____
2. Country of Manufacture/Origin: _____
3. Authorized Distributor in Pakistan: _____
4. Nominal Capacity (TR): _____
5. Capacity at Scheduled Condition (TR): _____
6. AHRI Certification No: _____
7. EER/COP (Cooling) @ AHRI Conditions: _____

B. HOT WATER GENERATORS

1. Make/Brand: _____
2. Country of Manufacture/Origin: _____
3. Authorized Distributor in Pakistan: _____
4. Nominal Capacity (MBH): _____
5. Capacity at Scheduled Condition (MBH): _____

C. COOLING TOWERS (CTI CERTIFIED)

1. Make/Brand: _____
2. Country of Manufacture/Origin: _____
3. Authorized Distributor in Pakistan: _____
4. Nominal Capacity (US GPM): _____
5. Capacity at Scheduled Condition (US GPM): _____

6. CTI Certification No: _____
7. Motor's Make: _____
8. Motor's Origin: _____
9. Motor's Ambient Temperature Rating (°F): _____
10. Motor's Efficiency Class: _____
11. Motor's Protection Class: _____
12. Motor's Insulation Class: _____

D. PUMPS

1. Make/Brand: _____
2. Country of Manufacture/Origin: _____
3. Authorized Distributor in Pakistan: _____
4. Motor's Make: _____
5. Motor's Origin: _____
6. Motor's Ambient Temperature Rating (°F): _____
7. Motor's Efficiency Class: _____
8. Motor's Protection Class: _____
9. Motor's Insulation Class: _____

E. FANS

1. Make/Brand: _____
2. Country of Manufacture/Origin: _____
3. Authorized Distributor in Pakistan: _____
4. Motor's Make: _____
5. Motor's Origin: _____
6. Motor's Ambient Temperature Rating (°F): _____
7. Motor's Efficiency Class: _____
8. Motor's Protection Class: _____
9. Motor's Insulation Class: _____

F. AIR HANDLING UNITS (EUROVENT CERTIFIED)

1. Make/Brand: _____

2. Country of Manufacture/Origin: _____
3. Authorized Distributor in Pakistan: _____
4. Component Origin (Imported)
- Fan's Impeller _____
 - Fan's Motor _____
5. Dimensions of proposed
AHU has been checked suitability YES / NO
As per the space available at site
6. EUROVENT Certification No: _____

G. FAN COIL UNITS

1. Make/Brand: _____
2. Country of Manufacture/Origin: _____
3. Authorized Distributor in Pakistan: _____

2. INTEGRATED BUILDING MANAGEMENT SYSTEM (IBMS)

Data provided hereunder will be assessed for general conformity with requirements of Bidding Document. Acceptance of Bid will not mean acceptance of these data. The Contractor will have to submit detailed equipment submittals for approval of the Engineer in accordance with Special Provisions of Specifications later on after award of the Contract.

Technical catalogues are required only to substantiate the data provided in these forms. Catalogues of equipment not listed in these forms shall not be submitted and if submitted, will be ignored. Acceptance of Bid will not mean the acceptance of information given in those catalogues.

A. INTEGRATED BUILDING MANAGEMENT SYSTEM (CONTROLLERS)

1. Make/Brand: _____
2. Country of Manufacture/Origin: _____
3. Authorized Distributor in Pakistan: _____

B. INTEGRATED IBMS SOFTWARE

1. Make/Brand _____
2. Version & Part No: _____
3. Authorized Distributor in Pakistan: _____

C. SERVER & COMPUTER HARDWARE

1. Make Model / Part No: _____
2. Country of Manufacture/Origin: _____
3. Authorized Distributor in Pakistan: _____

3. ELEVATORS & ESCALATORS

Data provided hereunder will be assessed for general conformity with requirements of Bidding Document. Acceptance of Bid will not mean acceptance of these data. The Contractor will have to submit detailed equipment submittals for approval of the Engineer in accordance with Special Provisions of Specifications later on after award of the Contract.

Technical catalogues are required only to substantiate the data provided in these forms. Catalogues of equipment not listed in these forms shall not be submitted and if submitted, will be ignored. Acceptance of Bid will not mean the acceptance of information given in those catalogues.

A. PASSENGER ELEVATORS

1. Make/Brand: _____
2. Country of Manufacture: _____
3. Model - Series: _____
4. Heavy Duty Passenger Lifts Model: (Y/N) _____
5. Offered Model is latest and available on the Manufacture's Official Website/Catalogue: (Y/N) _____
6. Complete elevator parts are being supplied through the Main Principal Manufacturer: (Y/N) _____
7. All passenger elevator/equipment to be supplied shall be EN 81-20, 50 & 70 Complied: (Y/N) _____
8. All offered model catalogues, specifications/ Attributes/material are not modified for subject Project (Y/N) _____

Note:

Confirmation required against Items A (4, 5, 6, 7 & 8) mentioned here above in "Y". Failure to comply the said data can lead to rejection of Bidder's Technical Bid.

Major Elevator Parts Compliance Sheet:

Following elevator parts shall be supplied by elevator manufacturer and supplied from the same manufacturing facility of the offered brand. Following table shall be separately filled for each type of elevator(s) as per project requirements. This shall be filled/complied by all the recommended manufacturers or approved equivalent brands.

No.	Description	Model No.	Manufacturer/ Supplier Name With Country of Origin	EU Type Examination Certificate No.	Supplying Through the main Elevator Brand Factory (Y/N)
1	Machine/Motor				
2	Main Elevator Controller/ PCB Card				
3	Over Speed Governor (Bidirectional)				
4	Safety Gear				
5	Electric Safeties				
6	Door Operator				
7	Car Door/ Locking Devices				
8	Landing Doors/ Locking Devices				
9	Door Protection Device				
10	Traction Belt				
11	Car\Call Operation Panel				
12	Car cabin				
13	CWT filler (50% Cast Iron & 50% Concrete with Cast Iron Frame)				
14	Car Guide Rail				
15	CWT Guide Rail				
16	Travelling Cable				
17	Buffers				
18	Halogen Free Cables				
19	Emergency Rescue Device				
20	Seismic Sensor				
21	Ropes\Belts				
22	PCB Card for Remote Monitoring				
23	Ascending Car Movement Protection				
24	Unintended Car Movement Protection (UCMP)				

Note: Confirmation and details required against mentioned items here above in “Y” and EU type examination certificates shall be online verifiable. Failure to comply the said data can lead to rejection of Bidder’s Technical Bid.

B. FIRE ELEVATORS

1. Make/Brand: _____
2. Country of Manufacture: _____
3. Model - Series: _____
4. Heavy Duty Fire/Passenger Lifts Model: (Y/N) _____
5. Offered Model is latest and available on the Manufacture's Official Website/Catalogue: (Y/N) _____
6. Complete elevator parts are being supplied through the Main Principal Manufacturer: (Y/N) _____
7. All passenger elevator/equipment to be supplied shall be EN 81-20, 50, 70 & 72 Complied: (Y/N) _____
8. All offered model catalogues, specifications/ Attributes/material are not modified for subject Project (Y/N) _____

Note:

Confirmation required against Items A (4, 5, 6, 7 & 8) mentioned here above in "Y". Failure to comply the said data can lead to rejection of Bidder's Technical Bid.

Major Elevator Parts Compliance Sheet

Following elevator parts shall be supplied by elevator manufacturer and supplied from the same manufacturing facility of the offered brand. Following table shall be separately filled for each type of elevator(s) as per project requirements. This shall be filled/complied by all the recommended manufacturers or approved equivalent brands.

No.	Description	Model No.	Manufacturer/ Supplier Name With Country of Origin	EU Type Examination Certificate No.	Supplying Through the main Elevator Brand Factory (Y/N)
1	Machine/Motor				
2	Main Elevator Controller/ PCB Card				
3	Over Speed Governor (Bidirectional)				
4	Safety Gear				
5	Electric Safeties				
6	Door Operator				

No.	Description	Model No.	Manufacturer/ Supplier Name With Country of Origin	EU Type Examination Certificate No.	Supplying Through the main Elevator Brand Factory (Y/N)
7	Car Door/ Locking Devices				
8	Landing Doors/ Locking Devices				
9	Door Protection Device				
10	Traction Belt				
11	Car\Call Operation Panel				
12	Car cabin				
13	CWT filler (50% Cast Iron & 50% Concrete with Cast Iron Frame)				
14	Car Guide Rail				
15	CWT Guide Rail				
16	Travelling Cable				
17	Buffers				
18	Halogen Free Cables				
19	Emergency Rescue Device				
20	Seismic Sensor				
21	Ropes\Belts				
22	PCB Card for Remote Monitoring				
23	Ascending Car Movement Protection				
24	Unintended Car Movement Protection (UCMP)				

Note:

Confirmation and details required against mentioned items here above in “Y” and EU type examination certificates shall be online verifiable. Failure to comply the said data can lead to rejection of Bidder’s Technical Bid.

C. CARGO ELEVATORS

1. Make/Brand: _____

2. Country of Manufacture: _____
3. Model - Series: _____
4. Heavy Duty Cargo\Passenger Lifts Model: (Y/N) _____
5. Offered Model is latest and available on the
Manufacture's Official Website/Catalogue: (Y/N) _____
6. Complete elevator parts are being supplied through the
Main Principal Manufacturer: (Y/N) _____
7. All passenger elevator/equipment to be
supplied shall be EN 81-20, 50 & 70 Complied:
(Y/N) _____
8. All offered model catalogues, specifications/
Attributes/material are not modified for subject
Project (Y/N) _____

Note:

Confirmation required against Items A (4, 5, 6, 7 & 8) mentioned here above in "Y". Failure to comply the said data can lead to rejection of Bidder's Technical Bid.

Major Elevator Parts Compliance Sheet

Following elevator parts shall be supplied by elevator manufacturer and supplied from the same manufacturing facility of the offered brand. Following table shall be separately filled for each type of elevator(s) as per project requirements. This shall be filled/complied by all the recommended manufacturers or approved equivalent brands.

No.	Description	Model No.	Manufacturer/ Supplier Name With Country of Origin	EU Type Examination Certificate No.	Supplying Through the main Elevator Brand Factory (Y/N)
1	Machine/Motor				
2	Main Elevator Controller/ PCB Card				
3	Over Speed Governor (Bidirectional)				
4	Safety Gear				
5	Electric Safeties				
6	Door Operator				
7	Car Door/ Locking Devices				

No.	Description	Model No.	Manufacturer/ Supplier Name With Country of Origin	EU Type Examination Certificate No.	Supplying Through the main Elevator Brand Factory (Y/N)
8	Landing Doors/ Locking Devices				
9	Door Protection Device				
10	Traction Belt				
11	Car\ Call Operation Panel				
12	Car cabin				
13	CWT filler (50% Cast Iron & 50% Concrete with Cast Iron Frame)				
14	Car Guide Rail				
15	CWT Guide Rail				
16	Travelling Cable				
17	Buffers				
18	Halogen Free Cables				
19	Emergency Rescue Device				
20	Seismic Sensor				
21	Ropes\Belts				
22	PCB Card for Remote Monitoring				
23	Ascending Car Movement Protection				
24	Unintended Car Movement Protection (UCMP)				

Note:

Confirmation and details required against mentioned items here above in “Y” and EU type examination certificates shall be online verifiable. Failure to comply the said data can lead to rejection of Bidder’s Technical Bid.

D. ESCALATORS (6000 PERSON PER HOUR)

1. Make/Brand: _____
2. Country of Manufacture: _____

3. Model - Series: _____
4. Heavy Duty
Public Use Escalator Model: (Y/N) _____
5. Offered Model is latest and available on the
Manufacture's Official Website/Catalogue: (Y/N) _____
6. Complete escalator parts are being supplied through
the Main Principal Manufacturer: (Y/N) _____
7. Escalator/equipment to be supplied shall be
EN 115 Complied: (Y/N) _____
8. All offered model catalogues, specifications/
Attributes/material are not modified for subject
Project (Y/N) _____

Note:

Confirmation required against Items A (4, 5, 6, 7 & 8) mentioned here above in "Y". Failure to comply the said data can lead to rejection of Bidder's Technical Bid.

Major Escalator Parts Compliance Sheet

Following escalator parts shall be supplied by escalator's manufacturer and supplied from the same manufacturing facility of the offered brand. Following Table shall be separately filled for each type of escalators as per project requirements. This shall be filled/complied by all recommended manufacturer or approved equal brands.

No.	Description	Model No.	Manufacturer/ Supplier Name with Country of Origin	EU Type Examination Certificate No.	Supplying Through the main Escalator Brand Factory (Y/N)
1	Machine/Motor				
2	Main Escalator Controller/ PCB Card				
3	Over Speed Protection				
4	Safety Gear				
5	Electric Safeties				
6	Car Guide Rail				
7	Motion Sensors				
8	Halogen Free Cables				
9	Seismic Sensor				
10	Step Chain				

No.	Description	Model No.	Manufacturer/ Supplier Name with Country of Origin	EU Type Examination Certificate No.	Supplying Through the main Escalator Brand Factory (Y/N)
11	PCB Card for Remote Monitoring				

Note:

Confirmation and details required against mentioned items here above in “Y” and EU type examination certificates shall be online verifiable. Failure to comply the said data can lead to rejection of Bidder’s Technical Bid.



SECTION VII: STANDARD BIDDING FORMS



Letter of Bid – Technical Proposal

INSTRUCTIONS TO BIDDERS: DELETE THIS BOX ONCE YOU HAVE COMPLETED THE DOCUMENT

Place this Letter of Bid in the first envelope “TECHNICAL PROPOSAL”.

The Bidder must prepare the Letter of Bid on stationery with its letterhead clearly showing the Bidder’s complete name and business address.

Note: All italicized text in black font is to help Bidders in preparing this form and Bidders shall delete it from the final document.

Date of this Bid submission: [insert date (as day, month and year) of Bid submission]

RFB No.: Aviation Complex-01

To: Pakistan Airports Authority (PAA)

We, the undersigned Bidder, hereby submit the first part of our Bid, the Technical Proposal

In submitting our Bid we make the following declarations:

- (a) **No reservations:** We have examined and have no reservations to the bidding document, including addenda issued in accordance with Instructions to Bidders **(ITB 9)**;
- (b) **Eligibility:** We meet the eligibility requirements and have no conflict of interest in accordance with ITB 3;
- (c) **Bid/Proposal-Securing Declaration:** We have not been suspended nor declared ineligible by the Procuring agency/Employer based on execution of a Bid Securing Declaration or Bid Securing Declaration in the Procuring agency/Employer’s country in accordance with **ITB 3**;
- (d) **Conformity:** We offer to execute works in conformity with the bidding document and in accordance with the works requirements: [insert a brief description of the WORKS];
- (e) **Bid Validity Period:** Our Bid shall be valid for the period specified in **BDS 18.1** (as amended, if applicable) from the date fixed for the Bid submission deadline specified in **BDS 24.1** (as amended, if applicable), and it shall remain binding upon us, and may be accepted at any time before the expiration of that period;
- (f) **Performance Security:** If our Bid is accepted, we commit to obtain a performance security in accordance with the bidding document;
- (g) **One Bid per Bidder:** We are not submitting any other Bid(s) as an individual Bidder, and we are not participating in any other bid(s) as a Joint Venture member or as a subcontractor, and meet the requirements, other than Alternative Bids submitted in accordance with **ITB 20**;
- (h) **Suspension and Debarment:** We, along with any of our subcontractors, suppliers, consultants, manufacturers, or service providers for any part of the contract, are not subject to, and not controlled by any entity or individual that is subject to, a temporary suspension or a debarment imposed by the Procuring agency/Employer. Further, we are not ineligible under Pakistan laws;

- (i) **State-owned enterprise or institution:** *[select the appropriate option and delete the other]*
[We are not a state-owned enterprise or institution] / [We are a state-owned enterprise or institution];
- (j) **Binding Contract:** We understand that this Bid, together with your written acceptance thereof included in your Letter of Acceptance, shall constitute a binding contract between us, until a formal contract is prepared and executed;
- (k) **Not Bound to Accept:** We understand that you are not bound to accept the Most Advantageous Bid or any other Bid that you may receive; and
- (l) **Fraud and Corruption:** We hereby certify that we have taken steps to ensure that no person acting for us, or on our behalf, engages in any type of Fraud and Corruption.

Name of the Bidder: **[insert complete name of Bidder]*

Country of Origin of the Bidder: *[insert country of origin, in case of JV country of origin of lead member]*

Name of the person duly authorized to sign the Bid on behalf of the Bidder: *** [insert complete name of person duly authorized to sign the Bid]*

Title of the person signing the Bid: *[insert complete title of the person signing the Bid]*

Signature of the person named above: *[insert signature of person whose name and capacity are shown above]*

Date signed *[insert date of signing]* **day of** *[insert month]*, *[insert year]*

*: In the case of the Bid submitted by a Joint Venture specify the name of the Joint Venture as Bidder.

**: Person signing the Bid shall have the power of attorney given by the Bidder. The power of attorney shall be attached with the Bid Schedules.

Form ELI 1 - Bidder Information Form

[The Bidder shall fill in this Form in accordance with the instructions indicated below. No alterations to its format shall be permitted and no substitutions shall be accepted.]

Date: *[insert date (as day, month and year) of Bid submission]*

RFB No.: *Aviation Complex-01*

Page _____ of _____ pages

1. Bidder's Name <i>[insert Bidder's legal name]</i>
2. In case of JV, legal name of each member : <i>[insert legal name of each member in JV]</i>
3. Bidder's actual or intended country of registration: <i>[insert actual or intended country of registration]</i>
4. Bidder's year of registration: <i>[insert Bidder's year of registration]</i>
5. Bidder's Address in country of registration: <i>[insert Bidder's legal address in country of registration]</i>
6. Bidder's Authorized Representative Information Name: <i>[insert Authorized Representative's name]</i> Address: <i>[insert Authorized Representative's Address]</i> Telephone/Fax numbers: <i>[insert Authorized Representative's telephone/fax numbers]</i> Email Address: <i>[insert Authorized Representative's email address]</i>
7. Attached are copies of original documents of <i>[check the box(es) of the attached original documents]</i> ☐ Articles of Incorporation (or equivalent documents of constitution or association), and/or documents of registration of the legal entity named above. ☐ In case of JV, JV agreement, in accordance with ITB 3.3. ☐ Establishing that the Bidder is not under the supervision of the Procuring agency/Employer[in case of subsidiaries]
8. Included are the organizational chart, a list of Board of Directors, and the beneficial ownership.

Form ELI 2 - Bidder's JV Members Information Form

[The Bidder shall fill in this Form in accordance with the instructions indicated below. The following table shall be filled in for the Bidder and for each member of a Joint Venture]].

Date: *[insert date (as day, month and year) of Bid submission]*

RFB No.: *Aviation Complex-01*

Page _____ of _____ pages

1. Bidder's Name: <i>[insert Bidder's legal name]</i>
2. Bidder's JV Member's name: <i>[insert JV's Member legal name]</i>
3. Bidder's JV Member's country of registration: <i>[insert JV's Member country of registration]</i>
4. Bidder's JV Member's year of registration: <i>[insert JV's Member year of registration]</i>
5. Bidder's JV Member's legal address in country of registration: <i>[insert JV's Member legal address in country of registration]</i>
6. Bidder's JV Member's authorized representative information Name: <i>[insert name of JV's Member authorized representative]</i> Address: <i>[insert address of JV's Member authorized representative]</i> Telephone/Fax numbers: <i>[insert telephone/fax numbers of JV's Member authorized representative]</i> Email Address: <i>[insert email address of JV's Member authorized representative]</i>
7. Attached are copies of original documents of <i>[check the box(es) of the attached original documents]</i> ☐ Articles of Incorporation (or equivalent documents of constitution or association), and/or registration documents of the legal entity named above.
8. Included are the organizational chart, a list of Board of Directors, and the beneficial ownership.

PERSONNEL

Form PER 1 – Contractor’s Representative and Key Personnel Schedule

Bidders should provide the names and details of the suitably qualified Contractor’s Representative and Key Personnel to perform the Contract. The data on their experience should be supplied using the Form PER-2 below for each candidate.

Contractor’ Representative and Key Personnel

1.	Title of position:	
	Name of candidate:	
	Duration of appointment:	<i>[insert the whole period (start and end dates) for which this position will be engaged]</i>
	Time commitment for this position:	<i>[insert the number of days/week/months/ that has been scheduled for this position]</i>
	Expected time schedule for this position:	<i>[insert the expected time schedule for this position (e.g. attach high level Gantt chart)]</i>
2.	Title of position:	
	Name of candidate:	
	Duration of appointment:	<i>[insert the whole period (start and end dates) for which this position will be engaged]</i>
	Time commitment for this position:	<i>[insert the number of days/week/months/ that has been scheduled for this position]</i>
	Expected time schedule for this position:	<i>[insert the expected time schedule for this position (e.g. attach high level Gantt chart)]</i>
3.	Title of position:	
	Name of candidate:	
	Duration of appointment:	<i>[insert the whole period (start and end dates) for which this position will be engaged]</i>
	Time commitment for this position:	<i>[insert the number of days/week/months/ that has been scheduled for this position]</i>
	Expected time schedule for this position:	<i>[insert the expected time schedule for this position (e.g. attach high level Gantt chart)]</i>
4.	Title of position:	
	Name of candidate:	
	Duration of appointment:	<i>[insert the whole period (start and end dates) for which this position will be engaged]</i>
	Time commitment for this position:	<i>[insert the number of days/week/months/ that has been scheduled for this position]</i>
	Expected time schedule for this position:	<i>[insert the expected time schedule for this position (e.g. attach high level Gantt chart)]</i>

	Expected time schedule for this position:	<i>[insert the expected time schedule for this position (e.g. attach high level Gantt chart)]</i>
5.	Title of position:	
	Name of candidate	
	Duration of appointment:	<i>[insert the whole period (start and end dates) for which this position will be engaged]</i>
	Time commitment for this position:	<i>[insert the number of days/week/months/ that has been scheduled for this position]</i>
	Expected time schedule for this position:	<i>[insert the expected time schedule for this position (e.g. attach high level Gantt chart)]</i>
6.	Title of position: <i>[insert title]</i>	
	Name of candidate	
	Duration of appointment:	<i>[insert the whole period (start and end dates) for which this position will be engaged]</i>
	Time commitment for this position:	<i>[insert the number of days/week/months/ that has been scheduled for this position]</i>
	Expected time schedule for this position:	<i>[insert the expected time schedule for this position (e.g. attach high level Gantt chart)]</i>

Form PER-2: Resume and Declaration

Contractor's Representative and Key Personnel

Name of Bidder		
Position [#1]: [title of position from Form PER-1]		
Personnel information	Name:	Date of birth:
	Address:	E-mail:
	Professional qualifications:	
	Academic qualifications:	
	Language proficiency:[language and levels of speaking, reading and writing skills]	
details	Address of Procuring agency/Employer:	
	Telephone:	Contact (manager / personnel officer):
	Fax:	
	Job title:	Years with present Procuring agency/Employer:

Summarize professional experience in reverse chronological order. Indicate particular technical and managerial experience relevant to the project.

Project	Role	Duration of involvement	Relevant experience
[main project details]	[role and responsibilities on the project]	[time in role]	[describe the experience relevant to this position]

Declaration

I, the undersigned [insert either “Contractor’s Representative” or “Key Personnel” as applicable] , certify that to the best of my knowledge and belief, the information contained in this Form PER-2 correctly describes myself, my qualifications and my experience.

I confirm that I am available as certified in the following table and throughout the expected time schedule for this position as provided in the Bid:

Commitment	Details
Commitment to duration of contract:	[insert period (start and end dates) for which this Contractor’s Representative or Key Personnel is available to work on this contract]
Time commitment:	[insert period (start and end dates) for which this Contractor’s Representative or Key Personnel is available to work on this contract]

I understand that any misrepresentation or omission in this Form may:

- (a) be taken into consideration during Bid evaluation;
- (b) result in my disqualification from participating in the Bid;
- (c) result in my dismissal from the contract.

Name of Contractor’s Representative or Key Personnel: [insert name]

Signature: _____

Date: (day month year): _____

Countersignature of authorized representative of the Bidder:

Signature: _____

Date: (day month year): _____

Form CON – 2: Historical Contract Non-Performance, Pending Litigation and Litigation History

Bidder's Name: _____

Date: _____

JV Member Name _____

ICB/NCB No. and title: _____

Page _____ of _____ pages

Non-Performed Contracts in accordance with Qualification Criteria			
☐ Contract non-performance did not occur January <i>[insert year]</i>			
☐ Contract(s) not performed since <i>[insert year]</i>			
Year	Non-performed portion of contract	Contract Identification	Total Contract Amount (current value, currency, exchange rate and PKR equivalent)
		Contract Identification: Name of Procuring agency/Employer(PA): Address of PA: Reason(s) for nonperformance:	
Pending Litigation, in accordance with Qualification Criteria			
☐ No pending litigation			
☐ Pending litigation			

Year of dispute	Amount in dispute (currency)	Contract Identification	Total Contract Amount
		Contract Identification: _____ Name of PA: _____ Address of PA: _____ Matter in dispute: _____ Party who initiated the dispute: _____ Status of dispute: _____	
Litigation History in accordance with Section III, Evaluation and Qualification Criteria of the Prequalification document			
☐ No Litigation History ☐ Litigation History			
Year of award	Outcome as percentage of Net Worth	Contract Identification	Total Contract Amount (currency), PKR Equivalent (exchange rate)
<i>[insert year]</i>	<i>[insert percentage]</i>	Contract Identification: <i>[indicate complete contract name, number, and any other identification]</i> Name of PA: <i>[insert full name]</i> Address of PA: <i>[insert street/city/country]</i> Matter in dispute: <i>[indicate main issues in dispute]</i> Party who initiated the dispute: <i>[indicate "Procuring agency/Employer" or "Contractor"]</i> Reason(s) for Litigation and award decision <i>[indicate main reason(s)]</i>	<i>[insert amount]</i>

FINANCIAL SITUATION

Form FIN – 3.1: Financial Situation and Performance

Bidder's Name: _____

Date: _____

JV Member's Name _____

ICB No. and title: _____

Page _____ of _____ pages

1. Financial data

Type of Financial information in (currency)	Historic information for previous 2020-21 to 2024-25 years, _____ (amount in currency, currency, exchange rate*, PKR equivalent)				
	2020-21	2021-22	2022-23	2023-24	2024-25
Statement of Financial Position (Information from Balance Sheet)					
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 Information					
Cash Flow from Operating Activities					

*Refer to ITB 16 for the exchange rate

2. Sources of Finance

Specify sources of finance to meet the cash flow requirements on works currently in progress and for future contract commitments.

No.	Source of finance	Amount (PKR)
1		
2		
3		

2. Financial documents

The Bidder and its parties shall provide copies of audited balance sheets for last 05 years pursuant to Evaluation and Qualifications Criteria, Sub-factor B.4. The financial statements shall:

- (a) reflect the financial situation of the Bidder or in case of JV member, and not an affiliated entity (such as parent company or group member).
- (b) be independently audited or certified in accordance with local legislation.
- (c) be complete, including all notes to the financial statements.
- (d) correspond to accounting periods already completed and audited.

☐ Attached are copies of Audited Balance Sheets for the 05 years required above; and complying with the requirements

Form FIN – 3.2: Average Annual Construction Turnover

Bidder's Name: _____

Date: _____

JV Member's Name _____

ICB/NCB No. and title: _____

Page _____ of _____ pages

Annual turnover data (construction only)			
Year	Amount Currency	Exchange rate	PKR equivalent
<i>[indicate year]</i>	<i>[insert amount and indicate currency]</i>		
Average Annual Construction Turnover *			

* See Section V, Evaluation and Qualification Criteria.

Form FIN – 3.3: 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 Section V (Evaluation and Qualification Criteria)

Financial Resources		
No.	Source of financing	Amount
1		
2		
3		

Form FIN – 3.4: 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	Procuring agency/Employer's Contact Address, Tel, Fax	Value of Outstanding Work [PKR Equivalent]	Estimated Completion Date	Average Monthly Invoicing Over Last Six Months [PKR/month]
1					
2					
3		NOT USED			
4					
5					

Form FIN - 5: Self-Assessment Tool for Bidder's Compliance to Financial Resources (Criterion 2.1 of Section 3)

This form requires the same information submitted in Forms FIN – 3.3 and FIN -3.4. All conditions of “Available Financial Resources Net of CCC $\geq$ Requirement for the Subject Contract” must be satisfied to qualify.

Form FIN - 5A: For Single Entities

For Single Entities: (A)	Total Available Financial Resources from FIN – 3.3 (B)	Total Monthly Financial Requirement for Current Contract Commitments (CCC) from FIN – 3.4 (C)	Available Financial Resources Net of CCC $D = (B - C)$	Requirement for the Subject Contract (E)	Results: Yes or No [<i>D must be greater than or equal to E</i>] (F)
_____ (Name of Bidder)				—	

Form FIN - 5B: For Joint Ventures

For Joint Ventures: (A)	Total Available Financial Resources from FIN – 3.3 (B)	Total Monthly Financial Requirement for Current Contract Commitments (CCC) from FIN – 3.4 (C)	Available Financial Resources Net of CCC $D = (B - C)$	Requirement for the Subject Contract (E)	Results: Yes or No [<i>D must be greater than or equal to E</i>] (F)
One Partner:					
_____ (Name of Partner)					
Each Partner:					
_____ (Name of Partner 1)					

— (Name of Partner 2)					
— (Name of Partner 3)					
All partners combined	$\sum D$ = Sum of available financial resources net of current contract commitments for all partners		$\sum D =$ _____		

- Note -

Form FIN – 5 is made available for use by the bidder as a self-assessment tool, and by the employer as an evaluation work sheet, to determine compliance with the financial resources requirement as stated in 2.3.3. Failure to submit Form FIN - 5 by the Bidder shall not lead to bid rejection.

EXPERIENCE

Form EXP - 4.1: General Construction Experience

Bidder's Name: _____

Date: _____

JV Member's Name _____

ICB/NCB No. and title: _____

Page _____ of _____ pages

Starting Year	Ending Year	Contract Identification	Role of Bidder
		Contract name: _____ Brief Description of the Works performed by the Bidder: _____ Amount of contract: _____ Name of PA: _____ Address: _____	
		Contract name: _____ Brief Description of the Works performed by the Bidder: _____ Amount of contract: _____ Name of PA: _____ Address: _____	
		Contract name: _____ Brief Description of the Works performed by the Bidder: _____ Amount of contract: _____ Name of PA: _____ Address: _____	

NOT USED

Form EXP - 4.2(a): Specific Construction Experience

Bidder's Name: _____

Date: _____

JV Member's Name _____

ICB/NCB No. and title: _____

Page _____ of _____ pages

- Attach Taking Over Certificate / Completion Certificate
- Use separate sheet for each project

1.	Name of Contract
2.	Country
3.	Name of Employer
4.	Employer Address
5.	Nature of works and special features relevant to the contract for which the Applicant wishes to prequalify
6.	Contractor Role (Tick One) ☐ Sole Contractor ☐ Sub- Contractor ☐ Partner in a Joint Venture
7.	Value of the total contract (in specified currencies) at completion, or at date of award for current contract Currency.....
8.	Equivalent in Pak/Rs.....
9.	Date of Award
10.	Date of Completion
11.	Contract Duration (Years and Months) _____ Years _____ Months
12.	Scope of Work: ☐ RCC Structural Works ☐ MEP Services ☐ Finishing Works ☐ Façade Works
13.	Number of Super-structure Storeys including Ground Floor

Form EXP - 4.2(b): Ongoing Contracts/ Commitments/ Work in Progress

Bidder and each partner 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 substantial Completion Certificate has yet to be issued.

Name of Project	Value of Outstanding work (Equivalent Pak Rs. million)	Project Scope	No. of Super-structure storeys including ground floor	Estimated Completion Date
		☐ RCC Structural Works ☐ MEP Services ☐ Finishing Works ☐ Façade Works		
		☐ RCC Structural Works ☐ MEP Services ☐ Finishing Works ☐ Façade Works		
		☐ RCC Structural Works ☐ MEP Services ☐ Finishing Works ☐ Façade Works		
		☐ RCC Structural Works ☐ MEP Services ☐ Finishing Works ☐ Façade Works		
		☐ RCC Structural Works ☐ MEP Services ☐ Finishing Works ☐ Façade Works		
		☐ RCC Structural Works ☐ MEP Services ☐ Finishing Works ☐ Façade Works		

*Use Additional Sheet where required

Form EXP - 4.2(c): Construction Experience in Key Activities

Bidder's Name: _____

Date: _____

Bidder's JV Member Name: _____

Sub-contractor's Name¹ (as per ITB 34.2 and 34.3): _____

ICB/NCB No. and title: _____

Page _____ of _____ pages

All Sub-contractors for key activities must complete the information in this form as per ITB 38 and Qualification Criteria and Requirements, Sub-Factor 4.2.

1. Key Activity No One: _____

Information				
Contract Identification				
Award date				
Completion date				
Role in Contract	Prime Contractor ☐	Member in JV ☐	Management Contractor ☐	Sub-contractor ☐
Total Contract Amount	PKR equivalent			
Quantity (Volume, number or rate of production, as applicable) performed under the contract per year or part of the year	Total quantity in the contract (i)	Percentage participation (ii)		Actual Quantity Performed (i) x (ii)
Year 1				
Year 2				
Year 3				
Year 4				
PA's Name:				

¹ If applicable

	Information
Address:	
Telephone/fax number	
E-mail:	

2. Activity No. Two

3.

NOT USED	
Description of the key activities in accordance with Section III:	

Form EXP - 4.2 (d): Specific Experience in Managing ES aspects

[The following table shall be filled in for contracts performed by the Bidder, and each member of a Joint Venture]

Bidder's Name: [insert full name]

Date: [insert day, month, year]

Joint Venture Member Name: [insert full name]

ICB/NCB No. and title: [insert ICB/NCB number and title]

Page [insert page number] of [insert total number] pages

1. Key Requirement no 1 in accordance with 4.2 (c): _____

Contract Identification				
Award date				
Completion date				
Role in Contract	Prime Contractor ☐	Member in JV ☐	Management Contractor ☐	Subcontractor ☐
Total Contract Amount			PKR	
Details of relevant experience				

2. Key Requirement no 2 in accordance with 4.2 (c): _____

3. Key Requirement no 3 in accordance with 4.2 (c): _____

4. ...

PAKISTAN AIRPORTS AUTHORITY



CONSTRUCTION OF AVIATION COMPLEX AT BLUE AREA, ISLAMABAD

FINANCIAL BID

**BIDDING DOCUMENT
VOLUME – IV**

AUGUST, 2026

Clearance Code	:	4526/321/BD/	(26)
Doc No	:	4526-0__	
Rev No.	:	0	



National Engineering Services Pakistan (Pvt.) Limited
NESPAC House Sector G-5/2, Islamabad, Pakistan
Phone: +92-51-9221910 - 13
Fax: +92-51-9221914
Email: Islamabad@nespak.com.pk
<http://www.nespak.com.pk>

Letter of Bid - Financial Proposal

INSTRUCTIONS TO BIDDERS: DELETE THIS BOX ONCE YOU HAVE COMPLETED THE DOCUMENT

Place this Letter of Bid - Financial Proposal in the second envelope marked "FINANCIAL PROPOSAL".

The Bidder must prepare the Letter of Bid - Financial Proposal on stationery with its letterhead clearly showing the Bidder's complete name and business address.

Note: All italicized text is to help Bidders in preparing this form.

Date of this Bid submission: *[insert date (as day, month and year) of Bid submission]*

Request for Bid No.: Aviation Complex-01

Name of Project.: Construction of Aviation Complex at Blue Area Islamabad

To: Pakistan Airports Authority (PAA)

We, the undersigned Bidder, hereby submit the second part of our Bid, the Financial Proposal

In submitting our Financial Proposal we make the following additional declarations:

- (a) **Bid Validity Period:** Our Bid shall be valid for the period specified in **BDS 18.1** (as amended, if applicable) from the date fixed for the bid submission deadline specified in **BDS 24.1** (as amended, if applicable), and it shall remain binding upon us and may be accepted at any time before the expiration of that period;
- (b) **Total Price:** The total price of our Bid is:

In case of only one lot, the total price of the Bid is *[insert the total price of the bid in words and figures, indicating the various amounts and the respective currencies]*;

In case of multiple lots, the total price of each lot is *[insert the total price of each lot in words and figures, indicating the various amounts and the respective currencies]*;

In case of multiple lots, total price of all lots (sum of all lots) *[insert the total price of all lots in words and figures, indicating the various amounts and the respective currencies]*;

- (c) **Commissions, gratuities and fees:** We have paid, or will pay the following commissions, gratuities, or fees with respect to the bidding process or execution of the Contract: *[insert complete name of each Recipient, its full address, the reason for which each commission or gratuity was paid and the amount and currency of each such commission or gratuity]*.

Name of Recipient	Address	Reason	Amount

(If none has been paid or is to be paid, indicate “none.”)

- (d) **Binding Contract:** We understand that this Bid, together with your written acceptance thereof included in your Letter of Acceptance, shall constitute a binding contract between us, until a formal contract is prepared and executed.

Name of the Bidder: *[insert complete name of the Bidder]

Name of the person duly authorized to sign the Bid on behalf of the Bidder: ** [insert complete name of person duly authorized to sign the Bid]

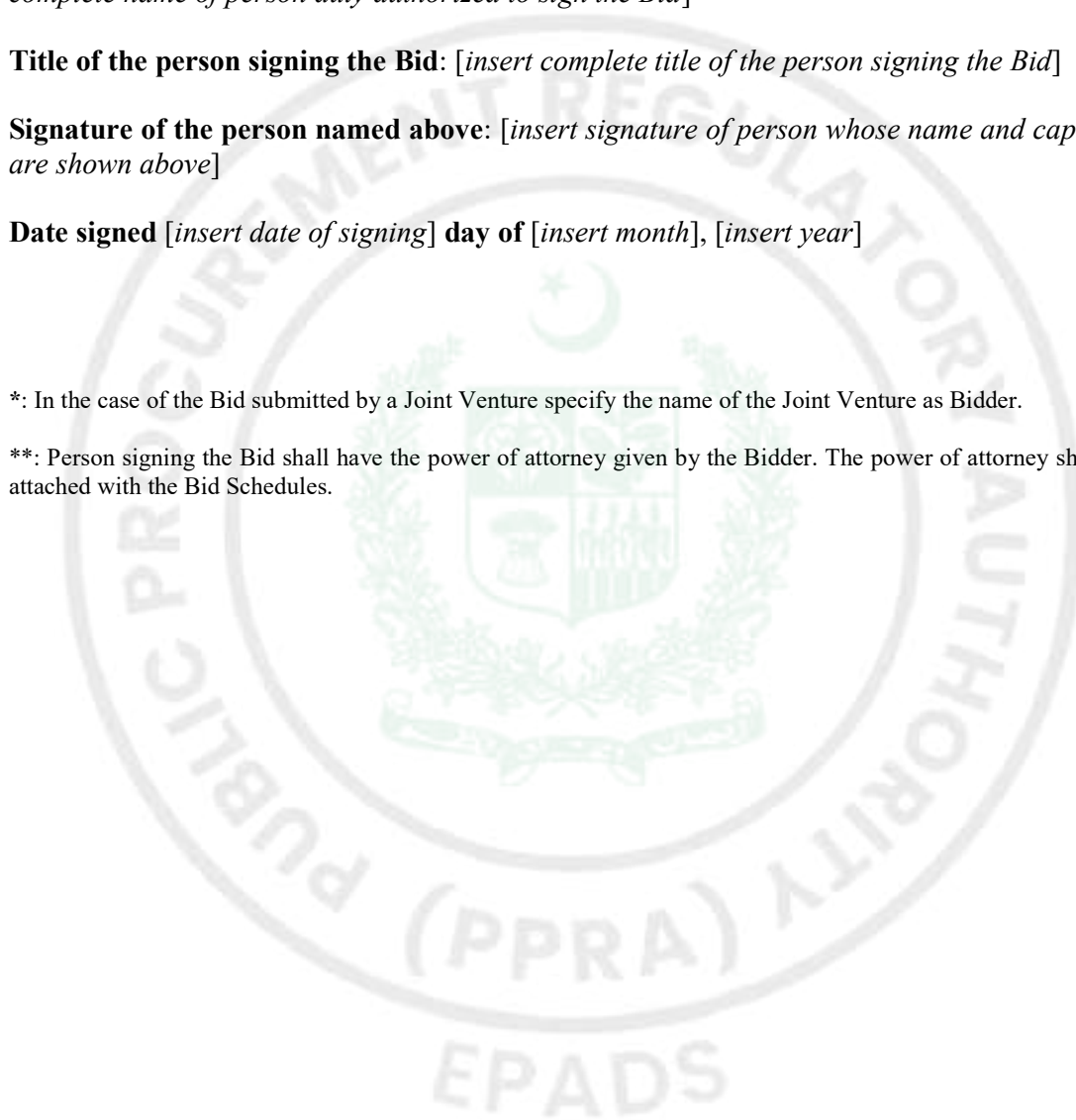
Title of the person signing the Bid: [insert complete title of the person signing the Bid]

Signature of the person named above: [insert signature of person whose name and capacity are shown above]

Date signed [insert date of signing] **day of** [insert month], [insert year]

*: In the case of the Bid submitted by a Joint Venture specify the name of the Joint Venture as Bidder.

**: Person signing the Bid shall have the power of attorney given by the Bidder. The power of attorney shall be attached with the Bid Schedules.



A. Preamble

1. The Bill of Quantities shall be read in conjunction with the Instructions to Bidders, General and Particular Conditions of Contract, Technical Specifications, and Drawings.
2. The Contract shall be for the whole of the Works as described in these Bidding Documents. Bids must be for the complete scope of Work.
3. 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 ordered and carried out, as measured by the Contractor and verified by the Engineer and valued at the rates and prices bid in the priced Bill of Quantities, where applicable, and otherwise at such rates and prices as the Engineer may fix within the terms of the Contract.
4. The rates and prices bid in the priced Bill of Quantities shall, except insofar as it is otherwise provided under the Contract, include all Constructional Plant, labour, supervision, materials, erection, maintenance, insurance, profit, taxes, and duties, together with all general risks, liabilities, and obligations set out or implied in the Contract.
5. 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 has failed to enter a rate or price shall be deemed to be covered by other rates and prices entered in the Bill of Quantities.
6. 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 Work.
7. General directions and descriptions of work and materials are not necessarily repeated nor summarized in the Bill of Quantities. References to the relevant sections of the Contract documentation shall be made before entering prices against each item in the priced Bill of Quantities.
8. 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-Clauses 13.4 and 13.5 of the General Conditions.
9. The method of measurement of completed work for payment shall be in accordance with the Measurement and Payment Clauses given in the relevant Technical Specifications or in accordance with implied meaning of the Specifications. Any special method of measurement stated in the text of Bill of Quantities is limited to the concerned items only.
10. The bidder may ensure himself of the correctness of quantities and application of the individual items of works as per the Drawings, Technical Specifications and Contract Documents.

B. Work Items

1. The Bill of Quantities usually contains the following part Bills, which have been grouped according to the nature or timing of the work:

Bill No. 1	Civil Works
Bill No. 1.A	Retention System
Bill No. 1.B	Structure Works
Bill No. 1.C	Finishes Works
Bill No. 2	Plumbing & Firefighting Works
Bill No. 2.A	Plumbing Works
Bill No. 2.B	Firefighting Works
Bill No. 3	Electrical Works
Bill No. 3.A	Electrification (Internal)
Bill No. 3.B	Energy Monitoring System
Bill No. 3.C	ELV Works
Bill No. 3.D	External Electrical Works
Bill No. 4	Façade Work
Bill No. 5	HVAC Works
Bill No. 6	Elevators
Bill No. 7	Escalators
Bill No. 8	Integrated Building Management System (IBMS)
Bill No. 9	Natural Gas Work
Bill No. 10	External Development Works
Bill No. 10.A	Roads, Walkways & Paved Areas
Bill No. 10.B	Storm Drainage Works

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

Daywork Schedule

Not Used

AVIATION COMPLEX AT BLUE AREA, ISLAMABAD

GRAND SUMMARY OF BILL OF QUANTITIES

Bill No.	Description	Amount (PKR)
Bill No.1	Civil Works	-----
1.A	Retention System	
1.B	Structure Works	
1.C	Finishes Works	
Bill No.2	Plumbing & Firefighting Works	-----
2.A	(a) Plumbing Works	
2.B	(b) Firefighting Works	
Bill No.3	Electrical Works	-----
3.A	Electrification (Internal)	
3.B	Energy Monitoring System	
3.C	ELV Works	
3.D	External Electrical Works	
Bill No.4	Façade Work	
Bill No.5	HVAC Works	
Bill No.6	Elevators	
Bill No.7	Escalators	
Bill No.8	Integrated Building Management System (IBMS)	
Bill No.9	Natural Gas Work	
Bill No.10	External Development Works	-----
10.A	Roads, Walkways & Paved Areas	
10.B	Storm Drainage Works	
	Bid Price (Carried forward to Letter of 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:

Period	Amounts (1,000 PKR)
1	2
1 st Quarter	
2 nd Quarter	
3 rd Quarter	
4 th Quarter	
5 th Quarter	
6 th Quarter	
7 th Quarter	
8 th Quarter	
9 th Quarter	
10 th Quarter	
11 th Quarter	
12 th Quarter	
13 th Quarter	
14 th Quarter	
15 th Quarter	
16 th Quarter	
17 th Quarter	
18 th and Final Quarter	
Bid Price	

Integrity Pact

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

Contract Number: _____

Dated: _____

Contract Value: _____

Contract Title: _____

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

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

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

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

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

[Procuring agency/Employer]

[Contractor]

AVIATION COMPLEX AT BLUE AREA ISLAMABAD

SUMMARY OF BILL OF QUANTITIES

Bill No.	Description	Amount (PKR)
Bill No. 1	Civil Works	----
1.A	Retention System	
1.B	Structural Concrete Works	
1.C	Finishes Works	
Bill No. 2	Plumbing & Firefighting Works	----
2.A	Plumbing Works	
2.B	Firefighting Works	
Bill No. 3	Electrical Works	----
3.A	Electrification (Internal)	
3.B	Energy Monitoring System	
3.C	ELV Works	
3.D	External Electrical Works	
Bill No. 4	Façade Work	
Bill No. 5	HVAC Works	
Bill No. 6	Elevators	
Bill No. 7	Escalators	
Bill No. 8	Integrated Building Management System (IBMS)	
Bill No. 9	Natural Gas Work	
Bill No. 10	External Development Works	----
10.A	Roads, Walkways & Paved Areas	
10.B	Storm Drainage Works	
	Total	

AVIATION COMPLEX AT BLUE AREA, ISLAMABAD

BILL NO. 1.A: TEMPORARY DEEP EXCAVATION SUPPORT SYSTEM
(RCC PILES WITH PRE-STRESSED GROUND ANCHORS)

BILL OF QUANTITIES

Item No.	Item Description	Unit	Qty	Unit Rate (Rs.)	Total Amount (Rs.)
(i)	(ii)	(iii)	(iv)	(v)	(vi)
GENERAL NOTE SCOPE : (Applicable to all sections) The quoted rates shall be inclusive of Contractor's mobilization of all equipment/tools/machines for execution of complete temporary deep excavation support system works, including piling works and pre-stressed ground anchors system at the site and their demobilization upon completion of the work. The price quoted shall include cost of moving the equipment at the site, raising and lowering them and of providing any staging to support them, necessary site preparation/levelling works, etc. It shall also include all transport, damage, depreciation and sundry costs and charges. The contractor shall submit detailed design (calculations and drawings) and construction methodology of temporary deep excavation support system for review and approval of the Engineer before commencement of the works. Construction/Installation of temporary deep excavation support system works shall be carried out as per guidelines provided in relevant American Manuals/Standards. Dewatering of ground anchors system shall be carried out only after construction of floor diaphragms (concrete mat/stair/ramp) to prevent movement of the piles.					
RT-01	Design of temporary deep excavation support system, including secant piles, capping/water beams, and prestressed ground anchors system, movement monitoring system, etc.	LS	1		
RT-02	Boring through all types of soils for 30 to 35 m long secant piles bored cast-in place un-reinforced / reinforced concrete piles of nominal diameter 900 mm. Piling including cost of normal weight plant mixed concrete of 21 / 28 Mpa minimum design compressive cylinder strength at 28 days using Ordinary Portland cement. The rate shall also include all works/supplies involved in preparing boring, cage lowering and concreting complete in all respects (except the cost of steel reinforcement and its labour for bending and laying in position, etc.). Drilled soil to be removed from site by the excavation Contractor / Client.				
	(i) Un-reinforced Piles= Concrete for 910 mm dia pile (36" dia pile) - 21 Mpa	Rft	22,000		
	(ii) Reinforced Piles= Concrete for 910 mm dia pile (36" dia pile) - 28 Mpa	Rft	22,000		
RT-03	Providing, cutting, fabricating, fixing and tie in position etc., deformed steel bars of grade 60 in cages for piles conforming to ASTM A-615 (Fy = 420 MPa (60 ksi)), including cost of binding wire, chairs, wastages, pre-cast o.c. spacers, unspecified laps, etc., complete in all respects as shown on drawings, described in specification and as directed by the Engineer.	Metric Ton	1,190		

**BILL NO. 1.A: TEMPORARY DEEP EXCAVATION SUPPORT SYSTEM
(RCC PILES WITH PRE-STRESSED GROUND ANCHORS)**

BILL OF QUANTITIES

Item No.	Item Description	Unit	Qty	Unit Rate (Rs.)	Total Amount (Rs.)
(i)	(ii)	(iii)	(iv)	(v)	(vi)
RT-04	Providing, mixing, handling and pouring concrete in Cap Beams using Ordinary Portland cement with minimum 28 days cylinder compressive strength, $f_c = 28$ MPa, including formwork, compacting through vibrator, curing and removing of formwork, etc. complete in all respect.	Cft	10,500		
RT-05	Providing, cutting, bending, placing and tie in position etc., deformed steel bars of grade 60 in Cap Beams conforming to ASTM A-615 ($F_y = 420$ MPa (60 ksi)), including cost of binding wire, chairs, wastages, pre-cast c.c. spacers, unspecified laps, etc., complete in all respects as shown on drawings, described in specification and as directed by the Engineer.	Metric Ton	22		
RT-06	Pre-Stressed Ground Anchors , Anchor Holds / Water Beams, including all Material, Equipment and labor. Providing, installing, testing of ground anchors of various dia as given below including drilling and all accessories, strands, grout tubes, centralizers, grout including admixture if any, grout breaking and re-grouting, stressing etc. including iterations to set the grouted length for specified locking load as per drawings and satisfaction of Engineer incharge. Providing and installing Anchor Holds / Water beam (Pre-cast Concrete, in-Situ concrete) or Structural Steel) as per drawing. (Steel Anchor Block / Water Beam after use at site shall remain Contractor's property.) De-stressing of all the Ground Anchors within a period of one year				
(i)	4" dia	No.	204		
(ii)	8" dia	No.	153		
(iii)	12" dia	No.	51		
RT-07	Installation of settlement pins/markers to monitor displacement of the piles, deformation of the ground and displacement of neighbouring structures at and during each construction stage. Preparation of movement monitoring report and its submittal to the Engineer on daily basis until completion of basements construction. A movement monitoring program and method statement should be submitted to the Engineer for review and approval.	L.S	1		
RT-08	Preparation of PCC Guide Beam/Wall including shuttering, and concreting complete in all respect and dismantling of the Guide Wall up to required depth complete in all respect	Rft	1,122		
				Total Amount Rs. =	

AVIATION COMPLEX AT BLUE AREA, ISLAMABAD

BILL NO. 1.B: CIVIL WORKS (STRUCTURAL CONCRETE WORKS)

BILL OF QUANTITIES

Item No.	Item Description	Unit	Qty	Unit Rate (Rs.)	Total Amount (Rs.)
(i)	(ii)	(iii)	(iv)	(v)	(vi)

GENERAL NOTE

SCOPE : (Applicable to all sections)

Providing, supply, fabricating and applying in any floor and at any height or depth except where otherwise stated in the specific item of the Bill of quantities, including all material, labour, all operations related to the items and plant for the following items, complete in all respects as per drawings, approved shop drawings, specifications, miscellaneous details and instructions of the Engineer, etc. complete as directed.

Section A - Earthworks

Ref Specs: 0130, 0150, 1100

C-A-01	Excavation of foundations, basements and trenches in all kind of soil/ rock/ material, dry, wet, slush including boulders, gravels and hard soil/rock etc. up to following depths from NSL, and stacking/ stockpiling of suitable excavated material required for approved use within the Project at locations designated/ approved by the Engineer including all lead and lift:				
(a)	Basement -1 upto level +0' to -9'	Cft	743,520		
(b)	Basement -2 upto level -9' to -19'-6"	Cft	867,440		
(c)	Basement -3 upto level -19'-6" to -30'-0"	Cft	867,440		
(d)	Basement -4 upto level -30'-0" to -40'-6"	Cft	867,440		
(e)	Basement -5 upto level -40'-6" to -51'-0"	Cft	867,440		
(f)	Basement -6 upto level -51'-0" to -61'-6"	Cft	867,440		
(g)	From level -61'-6" to -75'-8" or above depth	Cft	843,460		
C-A-02	Providing for loading, hauling, transportation and disposal of excavated material rendered surplus and not required for filling, backfilling or other approved use within the Project, from the Project site to an disposal location outside the Project premises, including all loading, handling, transportation, unloading, spreading/leveling at disposal area, and all lead and lift, labour, equipment, fuel, access arrangements, permits and all incidental works, complete in all respects as directed and approved by the Engineer. The Contractor shall be fully responsible for identification and arrangement of the disposal location and for obtaining, at his own cost, all necessary approvals, permissions, NOCs, permits and clearances from the concerned departments, authorities or agencies, as may be required for transportation and disposal/dumping of the excavated material. The Contractor shall ensure that the disposal location and method of disposal comply with all applicable statutory, environmental and other requirements. The quantity shall be measured based on the actual quantity of excavated material removed from the Project site as directed and verified by the Engineer. The amount corresponding to the measured quantity under this item, based on the approved unit rate, shall be deducted from the Contract Amount.				
		Cft	(5,739,930)		
C-A-03	Fill & back fill with suitable approved selected material obtained under any item of excavation from site, including hauling up to any lead and lift, placing in layers and compaction etc, as directed by the Engineer.	Cft	10,500		

BILL NO. 1.B: CIVIL WORKS (STRUCTURAL CONCRETE WORKS)**BILL OF QUANTITIES**

Item No.	Item Description	Unit	Qty	Unit Rate (Rs.)	Total Amount (Rs.)
(i)	(ii)	(iii)	(iv)	(v)	(vi)
C-A-04	Providing and laying Select Fill with suitable approved material obtained from outside source including hauling up to any lead and lift, placing in layers and compaction having min. relative density of 75%, as directed by the Engineer.	Cft	8,000		
C-A-05	Providing and filling local sand in foundations, under floor from approved source including leveling, dressing, compacting, consolidating, watering in layers not more than 6" depth complete all as per specifications and instructions of Engineer. All backfill to be approved by the Engineer compacting to 95% modified AASHTO	Cft	204,725		
Section B - Termite Control Treatment					
Ref Specs: 1600					
C-B-01	Spraying of anti-termite treatment using approved chemical, applied as per manufacturer's recommendations at the bottom and sides of foundation trenches, over stockpiled backfill material, under floors. The Contractor shall provide a certificate guaranteeing the treatment for 10 years. The work shall be carried out complete in all respects as per specifications and as directed by the Engineer.	Sq.	91,240		

BILL NO. 1.B: CIVIL WORKS (STRUCTURAL CONCRETE WORKS)

BILL OF QUANTITIES

Item No.	Item Description	Unit	Qty	Unit Rate (Rs.)	Total Amount (Rs.)
(i)	(ii)	(iii)	(iv)	(v)	(vi)

Section C - Reinforcement

Ref Specs: 2200

C-C-01

Providing, fabricating and fixing of deformed steel reinforcement bars of minimum 60,000 Psi yield strength at any floor and any shape as per drawings and instructions of the Engineer including the cost of cutting, bending, placing, and fixing in position, all laps, chairs, spacers, binding wires, supports, hooks, and all other accessories as per drawings and specifications and as directed by the Engineer.

b Building Reinforcement

(i)	Basement -6 upto slab level -51'-0"	M.Ton	1,638
(ii)	Basement -5 upto slab level -40'-6"	M.Ton	388
(iii)	Basement -4 upto slab level -30'-0"	M.Ton	380
(iv)	Basement -3 upto slab level -19'-6"	M.Ton	380
(v)	Basement -2 upto slab level -9'-0"	M.Ton	373
(vi)	Basement -1 upto slab level +4'-0"	M.Ton	430
(vii)	Upto Ground Floor slab level +18'-0"	M.Ton	214
(viii)	Upto 1st Floor slab level +32'-0"	M.Ton	213
(ix)	Upto 2nd Floor slab level +46'-0"	M.Ton	216
(x)	Upto 3rd Floor slab level +60'-0"	M.Ton	208
(xi)	Upto 4th Floor slab level +74'-0"	M.Ton	208
(xii)	Upto 5th Floor slab level +88'-0"	M.Ton	206
(xiii)	Upto 6th Floor slab level +102'-0"	M.Ton	208
(xiv)	Upto 7th Floor slab level +116'-0"	M.Ton	202
(xv)	Upto 8th Floor slab level +130'-0"	M.Ton	196
(xvi)	Upto 9th Floor slab level +144'-0"	M.Ton	196
(xvii)	Upto 10th Floor slab level +158'-0"	M.Ton	201
(xviii)	Upto 11th Floor slab level +172'-0"	M.Ton	196
(xix)	Upto 12th Floor slab level +186'-0"	M.Ton	196
(xx)	Upto 13th Floor slab level +200'-0"	M.Ton	196
(xxi)	Upto 14th Floor slab level +214'-0"	M.Ton	210
(xxii)	Upto 15th Floor slab level +228'-0"	M.Ton	264
(xxiii)	Upto 16th Floor slab level +242'-0"	M.Ton	190
(xxiv)	Upto 17th Floor slab level +256'-0"	M.Ton	190
(xxv)	Upto 18th Floor slab level +270'-0"	M.Ton	190
(xxvi)	Upto 19th Floor slab level +284'-0"	M.Ton	190
(xxvii)	Upto 20th Floor slab level +298'-0"	M.Ton	190
(xxviii)	Upto 21th Floor slab level +312'-0"	M.Ton	190
(xxix)	Upto 22th Floor slab level +326'-0"	M.Ton	190
(xxx)	Upto 23th Floor slab level +340'-0"	M.Ton	190
(xxxi)	Upto 24th Floor slab level +354'-0"	M.Ton	191
(xxxii)	Upto 25th Floor slab level +368'-0"	M.Ton	219
(xxxiii)	Upto 26th Floor slab level +382'-0"	M.Ton	113
(xxxiv)	Upto 27th Floor slab level +412'-0"	M.Ton	39

Section D - Plain & Reinforced Concrete

Ref Specs: 2100, 2200, 2300

C-D-01

Providing and laying Plain Cement Concrete (1:4:8 1200 Psi cylinder) under raft/foundations, walls, plinth beams, steps etc., including leveling, compacting, curing etc., complete in all respects.

Cft 20,895

C-D-02

Providing and laying Concrete (1:3:6 1500 Psi cylinder) in foundations, steps, under floors, ramps etc., including leveling, compacting, curing etc. at any floor and any height as approved and directed by the Engineer, complete in all respects.

(a) Plain Cement Concrete (1:3:6, 1500 Psi cylinder) under raft/foundations

Cft 13,805

BILL NO. 1.B: CIVIL WORKS (STRUCTURAL CONCRETE WORKS)

BILL OF QUANTITIES

Item No.	Item Description	Unit	Qty	Unit Rate (Rs.)	Total Amount (Rs.)
(i)	(ii)	(iii)	(iv)	(v)	(vi)
	(b) Plain Cement Concrete (1:3:6, 1500 Psi cylinder) in steps, under floors & in ramps etc	Cft	5,260		
C-D-03	Providing and laying plain cement Concrete (1:2:4, 2400 Psi cylinder) in ramps, steps, floors etc including leveling, finishing, compacting, curing etc at any floor and any height as approved and directed by the Engineer, complete in all respects.	Cft	5,140		
C-D-04	Providing, laying, compacting and curing pre-mixed Cement Concrete of specified 28 days' cylinder strength (3000 Psi) by using Ordinary Portland Cement of specified ratio including screening, washing of aggregate, mixing of constituents by using batching plant, transported by transit mixer and pouring with pumps, with specified consistency including shuttering/ formwork, compaction with vibrator, admixture Sika or equivalent, at any floor and any height as approved and directed by the Engineer.				
	i) RCC Planter (3,000 Psi cylinder)	Cft	495		
C-D-04	Providing, laying, compacting and curing pre-mixed Cement Concrete of specified 28 days' cylinder strength by using Ordinary Portland Cement of specified ratio including screening, washing of aggregate, mixing of constituents by using batching plant, transported by transit mixer and pouring with pumps, with specified consistency including shuttering/ formwork, compaction with vibrator, admixture Sika or equivalent, at any floor and any height as approved and directed by the Engineer.				
	a) Raft Foundations using crystalline based waterproofing / shrinkage compensating concrete admixture for watertight concrete system (5,000 Psi cylinder)	Cft	545,270		
	b) Retaining Walls & Columns in retaining walls using crystalline based waterproofing / shrinkage compensating concrete admixture for admixture for watertight concrete system (5,000 Psi cylinder)				
	(i) Basement -6 upto slab level -5'1'-0"	Cft	17,665		
	(ii) Basement -5 upto slab level -4'0'-6"	Cft	17,255		
	(iii) Basement -4 upto slab level -3'0'-0"	Cft	14,555		
	(iv) Basement -3 upto slab level -1'9'-6"	Cft	14,565		
	(v) Basement -2 upto slab level -9'-0"	Cft	11,860		
	(vi) Basement -1 upto slab level +4'-0"	Cft	13,295		
	c) Shear Walls (7,000 Psi cylinder)				
	(i) Basement -6 upto slab level -5'1'-0"	Cft	15,395		
	(ii) Basement -5 upto slab level -4'0'-6"	Cft	10,165		
	(iii) Basement -4 upto slab level -3'0'-0"	Cft	10,165		
	(iv) Basement -3 upto slab level -1'9'-6"	Cft	10,165		
	(v) Basement -2 upto slab level -9'-0"	Cft	10,165		
	(vi) Basement -1 upto slab level +4'-0"	Cft	12,695		
	(vii) Upto Ground Floor slab level +18'-0"	Cft	13,730		
	(viii) Upto 1st Floor slab level +32'-0"	Cft	13,730		
	(ix) Upto 2nd Floor slab level +46'-0"	Cft	13,730		
	(x) Upto 3rd Floor slab level +60'-0"	Cft	13,730		
	(xi) Upto 4th Floor slab level +74'-0"	Cft	13,730		
	(xii) Upto 5th Floor slab level +88'-0"	Cft	13,730		
	(xiii) Upto 6th Floor slab level +102'-0"	Cft	13,730		

BILL NO. 1.B: CIVIL WORKS (STRUCTURAL CONCRETE WORKS)

BILL OF QUANTITIES

Item No.	Item Description	Unit	Qty	Unit Rate (Rs.)	Total Amount (Rs.)
(i)	(ii)	(iii)	(iv)	(v)	(vi)
c-1)	Shear Walls (6,000 Psi cylinder)				
(xiv)	Upto 7th Floor slab level +116'-0"	Cft	13,730		
(xv)	Upto 8th Floor slab level +130'-0"	Cft	13,730		
(xvi)	Upto 9th Floor slab level +144'-0"	Cft	13,730		
(xvii)	Upto 10th Floor slab level +158'-0"	Cft	13,730		
(xviii)	Upto 11th Floor slab level +172'-0"	Cft	13,730		
(xix)	Upto 12th Floor slab level +186'-0"	Cft	13,730		
(xx)	Upto 13th Floor slab level +200'-0"	Cft	13,730		
(xxi)	Upto 14th Floor slab level +214'-0"	Cft	13,730		
(xxii)	Upto 15th Floor slab level +234'-0"	Cft	19,920		
(xxiii)	Upto 16th Floor slab level +248'-0"	Cft	13,730		
(xxiv)	Upto 17th Floor slab level +262'-0"	Cft	13,730		
(xxv)	Upto 18th Floor slab level +276'-0"	Cft	13,730		
(xxvi)	Upto 19th Floor slab level +290'-0"	Cft	13,730		
(xxvii)	Upto 20th Floor slab level +304'-0"	Cft	13,730		
(xxviii)	Upto 21th Floor slab level +318'-0"	Cft	13,730		
(xxix)	Upto 22th Floor slab level +332'-0"	Cft	13,730		
(xxx)	Upto 23th Floor slab level +346'-0"	Cft	13,730		
(xxxi)	Upto 24th Floor slab level +360'-0"	Cft	13,730		
(xxxii)	Upto 25th Floor slab level +374'-0"	Cft	13,730		
(xxxiii)	Upto 26th Floor slab level +386'-0"	Cft	10,460		
(xxxiv)	Upto 27th Floor slab level +412'-0"	Cft	3,440		
d)	Columns (7,000 Psi cylinder)				
(i)	Basement -6 upto slab level -51'-0"	Cft	9,170		
(ii)	Basement -5 upto slab level -40'-6"	Cft	9,170		
(iii)	Basement -4 upto slab level -30'-0"	Cft	9,170		
(iv)	Basement -3 upto slab level -19'-6"	Cft	9,170		
(v)	Basement -2 upto slab level -9'-0"	Cft	9,170		
(vi)	Basement -1 upto slab level +4'-0"	Cft	12,570		
(vii)	Upto Ground Floor slab level +18'-0"	Cft	8,880		
(viii)	Upto 1st Floor slab level +32'-0"	Cft	8,880		
(ix)	Upto 2nd Floor slab level +46'-0"	Cft	8,670		
(x)	Upto 3rd Floor slab level +60'-0"	Cft	8,395		
(xi)	Upto 4th Floor slab level +74'-0"	Cft	8,395		
(xii)	Upto 5th Floor slab level +88'-0"	Cft	8,395		
(xiii)	Upto 6th Floor slab level +102'-0"	Cft	8,395		
d-1)	Columns (6,000 Psi cylinder)				
(xiv)	Upto 7th Floor slab level +116'-0"	Cft	8,395		
(xv)	Upto 8th Floor slab level +130'-0"	Cft	7,495		
(xvi)	Upto 9th Floor slab level +144'-0"	Cft	7,495		
(xvii)	Upto 10th Floor slab level +158'-0"	Cft	7,495		
(xviii)	Upto 11th Floor slab level +172'-0"	Cft	7,495		
(xix)	Upto 12th Floor slab level +186'-0"	Cft	7,495		
(xx)	Upto 13th Floor slab level +200'-0"	Cft	7,495		
(xxi)	Upto 14th Floor slab level +214'-0"	Cft	7,495		
(xxii)	Upto 15th Floor slab level +234'-0"	Cft	10,845		
(xxiii)	Upto 16th Floor slab level +248'-0"	Cft	8,595		
(xxiv)	Upto 17th Floor slab level +262'-0"	Cft	8,595		
(xxv)	Upto 18th Floor slab level +276'-0"	Cft	8,595		
(xxvi)	Upto 19th Floor slab level +290'-0"	Cft	8,595		
(xxvii)	Upto 20th Floor slab level +304'-0"	Cft	8,595		
(xxviii)	Upto 21th Floor slab level +318'-0"	Cft	8,595		
(xxix)	Upto 22th Floor slab level +332'-0"	Cft	8,595		
(xxx)	Upto 23th Floor slab level +346'-0"	Cft	8,595		
(xxxi)	Upto 24th Floor slab level +360'-0"	Cft	8,595		
(xxxii)	Upto 25th Floor slab level +374'-0"	Cft	8,595		
(xxxiii)	Upto 26th Floor slab level +386'-0"	Cft	1,270		
(xxxiv)	Upto 27th Floor slab level +412'-0"	Cft	1,515		

BILL NO. 1.B: CIVIL WORKS (STRUCTURAL CONCRETE WORKS)

BILL OF QUANTITIES

Item No.	Item Description	Unit	Qty	Unit Rate (Rs.)	Total Amount (Rs.)
(i)	(ii)	(iii)	(iv)	(v)	(vi)
e) Slabs ,Beams, Ribs, Lintels, Ramp,Parapet, Finns & Shells (5,000 Psi cylinder)					
(i)	Basement -6 upto slab level -51'-0"	Cft	67,005		
(ii)	Basement -5 upto slab level -40'-6"	Cft	69,135		
(iii)	Basement -4 upto slab level -30'-0"	Cft	69,030		
(iv)	Basement -3 upto slab level -19'-6"	Cft	69,030		
(v)	Basement -2 upto slab level -9'-0"	Cft	66,335		
(vi)	Basement -1 upto slab level +4'-0"	Cft	63,890		
(vii)	Upto Ground Floor slab level +18'-0"	Cft	25,120		
(viii)	Upto 1st Floor slab level +32'-0"	Cft	25,005		
(ix)	Upto 2nd Floor slab level +46'-0"	Cft	26,235		
(x)	Upto 3rd Floor slab level +60'-0"	Cft	24,755		
(xi)	Upto 4th Floor slab level +74'-0"	Cft	24,150		
(xii)	Upto 5th Floor slab level +88'-0"	Cft	24,075		
(xiii)	Upto 6th Floor slab level +102'-0"	Cft	25,055		
e-1) Slabs ,Beams,Ribs, Lintels, Ramp, Parapet, Finns & Shells (4,000 Psi cylinder)					
(xiv)	Upto 7th Floor slab level +116'-0"	Cft	23,525		
(xv)	Upto 8th Floor slab level +130'-0"	Cft	23,460		
(xvi)	Upto 9th Floor slab level +144'-0"	Cft	23,410		
(xvii)	Upto 10th Floor slab level +158'-0"	Cft	24,760		
(xviii)	Upto 11th Floor slab level +172'-0"	Cft	23,295		
(xix)	Upto 12th Floor slab level +186'-0"	Cft	23,235		
(xx)	Upto 13th Floor slab level +200'-0"	Cft	23,215		
(xxi)	Upto 14th Floor slab level +214'-0"	Cft	25,920		
(xxii)	Upto 15th Floor slab level +234'-0"	Cft	25,710		
(xxiii)	Upto 16th Floor slab level +248'-0"	Cft	23,245		
(xxiv)	Upto 17th Floor slab level +262'-0"	Cft	23,245		
(xxv)	Upto 18th Floor slab level +276'-0"	Cft	23,245		
(xxvi)	Upto 19th Floor slab level +290'-0"	Cft	23,250		
(xxvii)	Upto 20th Floor slab level +304'-0"	Cft	23,250		
(xxviii)	Upto 21th Floor slab level +318'-0"	Cft	23,275		
(xxix)	Upto 22th Floor slab level +332'-0"	Cft	23,315		
(xxx)	Upto 23th Floor slab level +346'-0"	Cft	23,385		
(xxxi)	Upto 24th Floor slab level +360'-0"	Cft	23,750		
(xxxii)	Upto 25th Floor slab level +374'-0"	Cft	21,670		
(xxxiii)	Upto 26th Floor slab level +388'-0"	Cft	9,590		
(xxxiv)	Upto 27th Floor slab level +412'-0"	Cft	3,945		
e-2) Waffle Slabs ,Beams Ribs, (4,000 Psi cylinder)					
(i)	Upto 25th Floor slab level +374'-0"	Cft	8,055		
f) Stairs (5,000 Psi cylinder)					
(i)	Basement -6 upto slab level -51'-0"	Cft	495		
(ii)	Basement -5 upto slab level -40'-6"	Cft	495		
(iii)	Basement -4 upto slab level -30'-0"	Cft	495		
(iv)	Basement -3 upto slab level -19'-6"	Cft	495		
(v)	Basement -2 upto slab level -9'-0"	Cft	495		
(vi)	Basement -1 upto slab level +4'-0"	Cft	550		
(vii)	Upto Ground Floor slab level +18'-0"	Cft	690		
(viii)	Upto 1st Floor slab level +32'-0"	Cft	615		
(ix)	Upto 2nd Floor slab level +46'-0"	Cft	615		
(x)	Upto 3rd Floor slab level +60'-0"	Cft	615		
(xi)	Upto 4th Floor slab level +74'-0"	Cft	615		
(xii)	Upto 5th Floor slab level +88'-0"	Cft	615		
(xiii)	Upto 6th Floor slab level +102'-0"	Cft	615		

BILL NO. 1.B: CIVIL WORKS (STRUCTURAL CONCRETE WORKS)

BILL OF QUANTITIES

Item No.	Item Description	Unit	Qty	Unit Rate (Rs.)	Total Amount (Rs.)
(i)	(ii)	(iii)	(iv)	(v)	(vi)
f-1)	Stairs (4,000 Psi cylinder)				
(xiv)	Upto 7th Floor slab level +116'-0"	Cft	615		
(xv)	Upto 8th Floor slab level +130'-0"	Cft	615		
(xvi)	Upto 9th Floor slab level +144'-0"	Cft	615		
(xvii)	Upto 10th Floor slab level +158'-0"	Cft	615		
(xviii)	Upto 11th Floor slab level +172'-0"	Cft	615		
(xix)	Upto 12th Floor slab level +186'-0"	Cft	615		
(xx)	Upto 13th Floor slab level +200'-0"	Cft	615		
(xxi)	Upto 14th Floor slab level +214'-0"	Cft	615		
(xxii)	Upto 15th Floor slab level +234'-0"	Cft	655		
(xxiii)	Upto 16th Floor slab level +248'-0"	Cft	615		
(xxiv)	Upto 17th Floor slab level +262'-0"	Cft	615		
(xxv)	Upto 18th Floor slab level +276'-0"	Cft	615		
(xxvi)	Upto 19th Floor slab level +290'-0"	Cft	615		
(xxvii)	Upto 20th Floor slab level +304'-0"	Cft	615		
(xxviii)	Upto 21th Floor slab level +318'-0"	Cft	615		
(xxix)	Upto 22th Floor slab level +332'-0"	Cft	615		
(xxx)	Upto 23th Floor slab level +346'-0"	Cft	615		
(xxxi)	Upto 24th Floor slab level +360'-0"	Cft	615		
(xxxii)	Upto 25th Floor slab level +374'-0"	Cft	350		
g)	Under Ground Water Tanks using high quality water resisting and crystalline waterproofing concrete admixture for watertight concrete system(5,000 Psi cylinder)				
(i)	Tank Bottom & Top Slabs in Basement -1 level +4'-0"	Cft	4,910		
(ii)	Tank Walls in Basement -1 level +4'-0"	Cft	1,310		
h)	Over Head Water Tanks using high quality water resisting and crystalline waterproofing concrete admixture for watertight concrete system(4,000 Psi cylinder)				
(i)	Tank Bottom & Top Slabs in 15th Floor slab level +234'-0"	Cft	7,100		
(ii)	Tank Walls in 15th Floor slab level +234'-0"	Cft	2,500		
(iii)	Tank Bottom & Top Slabs in 26th Floor slab level +386'-0"	Cft	8,895		
(iv)	Tank Walls in 26th Floor slab level +386'-0"	Cft	1,410		

BILL NO. 1.B: CIVIL WORKS (STRUCTURAL CONCRETE WORKS)

BILL OF QUANTITIES

Item No.	Item Description	Unit	Qty	Unit Rate (Rs.)	Total Amount (Rs.)
(i)	(ii)	(iii)	(iv)	(v)	(vi)
Section E-Pile Works					
Ref Specs: 1100, 2100, 2200, 2300					
C-E-01	Boring with temporary casing in gravely subsoil for 3'-3" diameter pile. (Rotary Auger Bucket with Bentonite slurry)	Rft	67,390		
C-E-02	Pile Load test using hydraulic Jack system (700-1000) Tonne (Only Kentledge Load test charges)	Job	2		
C-E-03	Pile Load test using hydraulic Jack system (1,000-1,500) Tonne (Only Kentledge Load test charges)	Job	2		
C-E-04	Providing and laying Reinforced Cement Concrete having a minimum cylinder crushing strength of 4000 psi for bore piles by tremie pipe, using weigh batch, using approved admixture excluding the cost of reinforcement, complete in all respect.	Cft	559,140		
C-E-05	Providing ,fabricating and fixing of deformed steel reinforcement bars of minimum 60,000 Psi yield strength at any floor and any shape as per drawings and instructions of the Engineer including the cost of cutting, bending, placing, and fixing in position , all laps, chairs, spacers, binding wires, supports, hooks, and all other accessories as per drawings and specifications and as directed by the Engineer.				
a	Piles Reinforcement upto required depth	M.Ton	1,522		
Section F- Water Proofing					
Ref Specs: 6411					
C-F-01	Providing and fixing of water stop (Thermoplastic swellable waterstopper (1"x2") at every Construction Joints in walls & raft as shown on drawings and to be applied as per manufacturer's recommendations through manufacturer's authorized applicator, including all accessories required for carrying out the work, complete in all respect.	Rft	15,910		
C-F-02	Providing and applying crystalline Waterproofing slurry @ 1.5 KG/SQM on internal surface of RCC walls / columns / beams as well as on top and side of piles which is embedded into pile cap (as shown on drawings) and to be applied as per manufacturer's recommendations through manufacturer's authorized applicator, including all accessories required for carrying out the work, complete in all respect.	Sft	147,830		
C-F-03	Providing and applying crystalline Waterproofing slurry @ 1.0 KG/SQM on Construction Joints in Raft as well as on top and side of piles which is embedded into pile cap (as shown on drawings) and to be applied as per manufacturer's recommendations through manufacturer's authorized applicator, including all accessories required for carrying out the work, complete in all respect.	Sft	7,650		
C-F-04	Providing and applying 6" wide Joint Tape at outer walls construction joints with highly flexible cementitious coating (as shown on drawings) to be applied as per manufacturer's recommendations through manufacturer's authorized applicator, including all accessories required for carrying out the work, complete in all respect.	Rft	15,910		

BILL NO. 1.B: CIVIL WORKS (STRUCTURAL CONCRETE WORKS)

BILL OF QUANTITIES

Item No.	Item Description	Unit	Qty	Unit Rate (Rs.)	Total Amount (Rs.)
(i)	(ii)	(iii)	(iv)	(v)	(vi)
C-F-05	Providing and applying Polymer Modified High Flexible Cementitious waterproofing coating @ 3.5 KG/SQM with primer, underneath RCC footing (as shown on drawings) and to be applied as per manufacturer's recommendations through manufacturer's authorized applicator, including all accessories required for carrying out the work, complete in all respect.	Sft	82,840		
C-F-06	Providing and applying Polymer Modified High Flexible Cementitious waterproofing coating @ 4 KG/SQM with primer on external surface of RCC walls (as shown on drawings) and to be applied as per manufacturer's recommendations through manufacturer's authorized applicator, including all accessories required for carrying out the work, complete in all respect.	Sft	79,535		
C-F-07	Application of Water Proofing coating on internal surfaces of the water tanks using Non-Toxic chemical to internal face of water tank, as per manufacturer's recommendation Complete in all respect and as approved by The Engineer. (In Tanks)	Sft	17,190		
C-F-08	Providing and fixing of polyvinyl chloride (PVC) water stopper 6" wide, 10mm thick installed in the center of x-section of the concrete structure joint of retaining walls and water tanks complete in all respects as per drawings and/ or as directed by the Engineer.	Rft	940		
	Section-G Dewatering System Ref Specs: 1100				
C-G-01	Providing, installation, operation and maintenance of dewatering system by boring required number of tube wells, furnishing all plant/equipment, pumps, labors, fuel, electricity, suction and delivery water pipes, drains etc. to keep the water table below foundation during the entire construction period of building sub structure by pumping out water caused due to high water table, springs, broken water mains/drains or any other source/seepage, complete in all respects, including submission of design and methodology to the Engineer for review and approval. The work will include but not limited to the following: The Contractor shall make proper arrangement on its own including drilling/installation of sufficient number of tube wells, equipment, material and labour for disposal of water in proper drain and all permission (if required) shall be taken by The Contractor. The Contractor shall arrange to have The entire dewatering system designed in detail, installed, maintained and operated by qualified and experienced personnel throughout The course of The work. The dewatering system shall be designed to operate on a continuous basis so as to keep The water table below foundation level during The building sub-structure works. Any permission or work required for The Identification and Plugging of water source shall be deemed to have been included in The Contractor's scope of work. The Contractor shall arrange dispersal of water by its own sources and shall also take necessary approvals/ clearances from The concerned authorities prior to commencement of dewatering. Removal of all dewatering system from site upon completion of Works including mobilization & demobilization of all dewatering equipment to/ from site, complete in all respects and as directed by The Engineer.	Job	1		

BILL NO. 1.B: CIVIL WORKS (STRUCTURAL CONCRETE WORKS)

BILL OF QUANTITIES

Item No.	Item Description	Unit	Qty	Unit Rate (Rs.)	Total Amount (Rs.)
(i)	(ii)	(iii)	(iv)	(v)	(vi)

Section-H Structural Steel Works

Ref Specs: 3000, 6700

C-H-01

Providing, fabricating, and fixing in position M.S. structural steel sections (6"x6"x1/4" and 3"x3"x1/8") including wire mesh as per the design shown in the drawings, and as directed by the Engineer. The work includes cutting, welding, applying phosphate primer to all steel elements for corrosion protection, and painting with approved colour. The structure comprises M.S. girders/beams, columns, M.S. box pipes, MS Stair, base plates, fixing plates, stiffeners, expansion bolts, anchor bolts, and all other necessary accessories, complete in all respects. (Hellport).

Kg 29,750

C-H-02

Providing, cutting, welding, and fixing in position M.S. steel drain grating as per the design shown on the drawing, including application of red oxide primer and enamel paint, complete in all respects.

Kg 2,000

C-I-01

Section-I Dismantling

Dismantling and removing the existing boundary wall, gates, foundations, and all existing building structures, including masonry, reinforced concrete, steel members, plaster, finishes, and fixtures, complete in all respects as per drawings/specifications and instructions of the Engineer. The work shall include cutting, breaking, dismantling, loading, transportation, and disposal of unserviceable/surplus material to approved dumping locations, while serviceable materials shall be carefully stacked at designated locations as directed by the Engineer. The contractor shall ensure protection of adjoining structures, utilities, pavements, and services during dismantling operations, including provision of all necessary safety measures, barricading, labor, tools, plants, scaffolding, and equipment required for proper execution of the work, complete in all respects."

Job 1

Total Amount Rs. =

AVIATION COMPLEX AT BLUE AREA, ISLAMABAD

BILL NO. 1.C: CIVIL WORKS (FINISHES WORKS)

BILL OF QUANTITIES

Item No.	Item Description	Unit	Qty	Unit Rate (Rs.)	Total Amount (Rs.)
(i)	(ii)	(iii)	(iv)	(v)	(vi)

GENERAL NOTE

SCOPE : (Applicable to all sections)

Providing, supply, fabricating and applying in any floor and at any height or depth except where otherwise stated in the specific item of the Bill, including all material, labour, all operations related to the items and plant for the following items, complete in all respects as per drawings, approved shop drawings, specifications, miscellaneous details and instructions of the Engineer, etc. complete as directed.

SECTION - A**PLAIN AND REINFORCED CONCRETE**

Ref Specs: 2100, 2200, 2300

B-C-	1	Providing and laying reinforcement cement concrete Class 'B' for door window lintels and counter slabs, fuel tank, pre-cast slab etc. including form work, leveling, curing, compacting with smooth finish etc., complete in all respect and as approved by The Engineer.	Cft	5,680
B-C-	2	Supply, cutting, bending, placing, and fixing in position of high yield deformed reinforcement bars of Steel Grade 60, including all laps, chairs, spacers, binding wires, supports, hooks, and all other accessories as per drawings and specifications and as directed by the Engineer.	M.Ton	26

SECTION - B**BRICK MASONARY WORK**

Ref Specs: 4200

B-C-	3	First class burnt brick masonry upto any thickness, depth & height laid and jointed in cement sand mortar 1:4 at any floor and at any height complete in all respects and as directed by the Engineer.	Cft	279,715
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SECTION - C**CEMENT PLASTER**

Ref Specs: 6521

B-C-	4	½" thick 1:4 cement sand plaster in any floor and at any height, complete in all respects.	Sft.	1,193,560
B-C-	5	¾" thick 1:4 cement sand plaster in any floor and at any height, complete in all respects.	Sft.	55,665
B-C-	6	⅜" thick 1:4 cement sand plaster in any floor and at any height, complete in all respects.	Sft.	1,000
B-C-	7	¾" thick 1:3 cement sand plaster including water proofing admixture (Waterproofing Mortars), dosage as per manufacturer recommendation in overhead and underground water tanks complete in all respects.	Sft.	17,900

AVIATION COMPLEX AT BLUE AREA, ISLAMABAD

BILL NO. 1.C: CIVIL WORKS (FINISHES WORKS)

BILL OF QUANTITIES

Item No.	Item Description	Unit	Qty	Unit Rate (Rs.)	Total Amount (Rs.)
(i)	(ii)	(iii)	(iv)	(v)	(vi)

SECTION - D

CARPENTRY AND JOINERY

Ref Specs: 4600, 6250, 6700

B-C- 8	Providing and fixing first class deodar wood flush doors, including MS frames (chowkat) of 16 SWG mild steel sheet, enamel painted with matching color with hold-fasts embedded in adjoining surfaces; 1½" thick single leaf solid flush shutters with partial wood solid core and minimum ½" thick oak veneer plywood hydraulically pressed on both sides; oak veneer edge bending all around, deodar wood architraves, 6" high stainless steel kick plate etc. as shown on the drawings or as approved by the Engineer, imported locks of European origin, all necessary hardware and fittings in stainless steel and as shown on drawings and finishing with matt enamel painting or lacquer polishing, complete in all respects, all in accordance with the drawings, specifications, and directions of the Engineer. (WD1 & WD2)	Sft.	655		
B-C- 9	Providing, making, and fixing kitchen cabinets comprising wall-hung and floor-mounted units, including drawers, partitions, shelves, and shutters made with ¾" thick MDF board of approved make, color and shade as approved by the designer, framing and lipping with first class deodar wood, complete with all necessary hardware fittings including, lock, handle, hydraulic hinges, push catcher, channel, etc. and finished with painting or polishing, all in accordance with the drawings, specifications, and/or as directed by the Engineer, complete in all respects.	Sft.	1,830		
B-C- 10	Providing and fixing WPC door with 1½" (37mm) thick best quality WPC paneled single/ double leaf shutter solid core of approved design, complete with matching WPC frame (chowkat), 12mm thick galss for vision panel (where required), approved stainless steel hardware as mentioned in drawings and all necessary fittings in stainless steel, complete in all respects as required and as directed by the Engineer. (WP1 to WP5)	Sft.	15,240		
B-C- 11	Providing and fixing Heavy Duty Hydraulic door Closers on doors as specified on drawings or as directed by Engineer.	No	153		

AVIATION COMPLEX AT BLUE AREA, ISLAMABAD

BILL NO. 1.C: CIVIL WORKS (FINISHES WORKS)

BILL OF QUANTITIES

Item No.	Item Description	Unit	Qty	Unit Rate (Rs.)	Total Amount (Rs.)
(i)	(ii)	(iii)	(iv)	(v)	(vi)

SECTION - E**ALUMINUM WORKS**

Ref Specs: 4600, 6220, 6250, 6700

B-C- 12	Providing, Fabricating and Installing 8mm Thick Tempered Glass with Single/Double Leaf Double Action Swing Door with aluminum top and bottom rails of size 75 mm × 2 mm thick in approved powder coated finish, floor spring/ hinged machine, SS handles, locks, center locks, patch fittings, silicone sealants, frosted film and all necessary accessories, fittings and hardware complete in all respects, including fixing to floor, wall or structural supports as required, in accordance with approved drawings and Engineer's instructions. (MDF 3,4,7)	Sft.	6,050		
B-C- 13	Providing, supplying, and installing frameless full-height glass partition system up to false ceiling level, comprising 12 mm thick clear tempered safety glass, fixed in position with approved patch fittings, SS grade 316 brackets, and high grade aluminum channels. The top channel shall be structurally anchored to the slab/beam above the false ceiling with suitable supports, hangers, or framework to ensure rigidity and stability of the partition independent of the false ceiling system. All glass panels shall have machine-polished edges with smooth, safe finishes, and joints shall be sealed with clear structural silicone to provide a neat, dust-free and seamless appearance. The partition shall include a double-leaf openable glass door fabricated from 12 mm thick tempered glass, complete with heavy-duty stainless steel patch fittings, top and bottom pivots, imported floor spring for both leaf of adequate capacity, SS handles, locks, and door stoppers, all in approved satin/matte finish. The scope shall also include providing and fixing imported frosted film/paper of approved design and pattern at locations as indicated in the drawings, properly aligned and bubble-free. The work includes all necessary cutouts, notches, alignment, leveling, anchoring, sealing, and provision of all accessories required to complete the installation in accordance with drawings, specifications and as directed by the Engineer. (Type P1 and P3)	Sft.	13,590		

AVIATION COMPLEX AT BLUE AREA, ISLAMABAD

BILL NO. 1.C: CIVIL WORKS (FINISHES WORKS)

BILL OF QUANTITIES

Item No.	Item Description	Unit	Qty	Unit Rate (Rs.)	Total Amount (Rs.)
(i)	(ii)	(iii)	(iv)	(v)	(vi)
B-C- 14	Providing, supplying, and installing frameless full-height glass partition system up to false ceiling level, comprising 12 mm thick clear tempered safety glass, fixed in position with approved patch fittings, SS grade 316 brackets, and aluminum bottom channel. The top channel shall be structurally anchored to the slab/beam above the false ceiling with suitable supports, hangers, or framework to ensure rigidity and stability of the partition independent of the false ceiling system. All glass panels shall have machine-polished edges with smooth and safe finishes, and joints shall be sealed with clear structural silicone to provide a neat, dust-free, and seamless appearance. The scope shall also include providing and fixing imported frosted film/paper of approved design and pattern at locations as indicated in the drawings, properly aligned and free from bubbles or wrinkles. The work includes all necessary cutouts, notches, alignment, leveling, anchoring, sealing, and provision of all accessories required to complete the installation in accordance with drawings, specifications and as directed by the Engineer. (Type P2)	Sft.	103,025		
B-C- 15	Providing, supplying, and installing frameless full-height glass partition system up to false ceiling level, comprising 12 mm thick clear tempered safety glass, fixed in position with approved patch fittings, SS grade 316 brackets, and high grade aluminum channels. The top channel shall be structurally anchored to the slab/beam above the false ceiling with suitable supports, hangers, or framework to ensure rigidity and stability of the partition independent of the false ceiling system. All glass panels shall have machine-polished edges with smooth, safe finishes, and joints shall be sealed with clear structural silicone to provide a neat, dust-free and seamless appearance. The partition shall include a single leaf openable glass door fabricated from 12 mm thick tempered glass, complete with heavy-duty stainless steel patch fittings, top and bottom pivots, imported floor spring of adequate capacity, SS handles, locks, and door stoppers, all in approved satin/matte finish. The scope shall also include providing and fixing imported frosted film/paper of approved design and pattern at locations as indicated in the drawings, properly aligned and bubble-free. The work includes all necessary cutouts, notches, alignment, leveling, anchoring, sealing, and provision of all accessories required to complete the installation in accordance with drawings, specifications and as directed by the Engineer. (Type P4)	Sft.	315		

AVIATION COMPLEX AT BLUE AREA, ISLAMABAD

BILL NO. 1.C: CIVIL WORKS (FINISHES WORKS)

BILL OF QUANTITIES

Item No.	Item Description	Unit	Qty	Unit Rate (Rs.)	Total Amount (Rs.)
(i)	(ii)	(iii)	(iv)	(v)	(vi)
B-C- 16	Providing and installing an aluminum-framed revolving door system of approx. 8'-0" diameter with four-wing arrangement, complete with central shaft, bearings, and safety sensor system (anti-tailgating/anti-piggyback), ensuring smooth and safe operation. The revolving door shall be flanked on both sides by double leaf swing glass doors of 12mm thick tempered glass, complete with floor springs, fittings, and locking arrangements. The entire assembly shall be integrated with a glazed partition wall of 12 mm clear tempered glass doors, fixed in anodized aluminum framework. The work shall include all necessary cutting, drilling, alignment, hardwares, sealants, gaskets, safety features, and other accessories, complete in all respects as per approved design, specifications, and the directions of the Engineer.	Sft.	840		
B-C- 17	Providing and fixing skylight consists of a unitized/semi-unitized system featuring high-performance insulated laminated glazing composed of a 6mm low-e outer pane, a 12mm air gap, and a 6mm clear glass inner pane bonded by a Polyvinyl Butyral (PVB) interlayer for enhanced safety and thermal efficiency. The assembly is supported by a structural framework of powder-coated extruded aluminum main and intermediate frames, reinforced internally with concealed galvanized steel stiffeners to manage structural spans and wind loading. The system is finished with 6mm thick aluminum cladding covers at joints and transitions, integrated with weather-grade silicone sealants and EPDM gaskets to ensure a watertight interface with the concrete curb and specified roofing detail providing complete fixing arrangements as per manufacturer's recommendations. The work shall include all necessary cutting, drilling, alignment, and adjustments, as well as protection of adjacent finishes and making good any damages caused during installation. Complete in all respects as per approved design, specifications, and the directions of the Engineer	Sft	3,210		

AVIATION COMPLEX AT BLUE AREA, ISLAMABAD

BILL NO. 1.C: CIVIL WORKS (FINISHES WORKS)

BILL OF QUANTITIES

Item No.	Item Description	Unit	Qty	Unit Rate (Rs.)	Total Amount (Rs.)
(i)	(ii)	(iii)	(iv)	(v)	(vi)
B-C- 18	Supply, fabrication, and installation of aluminum acoustic louvered door of size as shown on drawing, made out of 150 mm thick aluminium framed door section comprising 2.0 mm thick extruded aluminium blade profiles arranged in a fixed louver configuration as per approved shop drawings. The louver blades shall be infilled with high-performance mineral wool insulation to achieve acoustic attenuation and thermal resistance, and shall be non-combustible, 1 hour fire-retardant compliant material. The door frame shall be fabricated from heavy-duty aluminium sections with reinforced joints, concealed mechanical fasteners, and provision for structural rigidity to prevent vibration and deflection under service conditions. All hardware including heavy-duty hinges, handles, locking arrangement, fasteners, and accessories shall be of corrosion-resistant finish. The complete assembly shall be factory-finished with approved powder coating finish, including necessary gaskets and sealing arrangements to ensure acoustic integrity and air-control performance. Installation shall include proper alignment, fixing to prepared openings, sealing, leveling, and testing for smooth operation and durability as per specifications and approved shop drawings and instructions of the Engineer. (ALD1 & ALD5)	Sft	7,810		
B-C- 19	Supply, fabrication, and installation of aluminum louvered door of size as shown on drawing, comprising 2.0 mm thick extruded aluminium section as per approved shop drawings. The door frame shall be fabricated from heavy-duty aluminium sections with reinforced joints, concealed mechanical fasteners, and provision for structural rigidity to prevent vibration and deflection under service conditions. All hardware including hinges, handles, locking arrangement, fasteners, and accessories shall be of corrosion-resistant finish. The complete assembly shall be factory-finished with approved powder coating finish, including necessary gaskets and sealing arrangements. Installation shall include proper alignment, fixing to prepared openings, sealing, leveling, and testing for smooth operation and durability as per specifications and approved shop drawings and instructions of the Engineer (ALD2, ALD3 & ALD4)	Sft	10,230		

AVIATION COMPLEX AT BLUE AREA, ISLAMABAD

BILL NO. 1.C: CIVIL WORKS (FINISHES WORKS)

BILL OF QUANTITIES

Item No.	Item Description	Unit	Qty	Unit Rate (Rs.)	Total Amount (Rs.)
(i)	(ii)	(iii)	(iv)	(v)	(vi)
SECTION - F					
FLOOR & WALL FINISHES					
Ref Specs: 6531, 6533, 6600					
B-C- 20	Providing and fixing full body porcelain wall tiles (imported) of approved colour, shade, and texture, in sizes not exceeding 2 sq.ft., fixed in the specified pattern over a ½" (12 mm) thick cement-sand plaster (1:4), including laser cutting for precise alignment and grouting with matching colour epoxy grout to match the tile shade. Work to be executed at any height and at any floor, complete in all respects, in accordance with the approved design, specifications, and as directed by the Engineer.	Sft	123,330		
B-C- 21	Providing and laying full body porcelain floor tiles (imported) of approved colour, shade, and texture, in sizes exceeding 2 sq.ft and upto 8 sq.ft., laid in the specified pattern over a 2" (50 mm) thick cement-sand mortar (1:3) base, including laser cutting for precise alignment, jointing with cement-sand mortar (1:3), matching colour epoxy grout to match the tile shade, at any floor and any height, complete in all respects and in accordance with the approved design, specifications, and as directed by the Engineer.	Sft	384,810		
B-C- 22	Providing and fixing full body porcelain tile (imported) in skirting of approved colour, shade, and texture, with matching colour mortar in joints set over 1/2" thick rough cast 1:4 cement sand plaster, at any height and at any floor, complete in all respects, as per specifications and instructions of the Engineer.	Sft	10,630		
B-C- 23	Providing and laying Pre-Polished supreme quality Granite floor (minimum thickness ¾") of approved shade/ colour and having minimum size up to 8 Sft to specified surfaces of floors laid in approved design/pattern, including 1-1/4" thick cement sand 1:3 mortar base, grouted with epoxy grout with matching colour, complete in all respects, as per specifications and instructions of the Engineer.	Sft	130,830		
B-C- 24	Providing and laying Pre-Polished supreme quality Granite Slab (minimum thickness ¾") of approved shade, colour and size to specified surfaces of counter & vanity top laid in approved design/pattern, including 3/4" thick cement sand 1:3 mortar base, grouted with epoxy grout with matching colour, complete in all respects, as per specifications and instructions of the Engineer.	Sft	4,470		

AVIATION COMPLEX AT BLUE AREA, ISLAMABAD

BILL NO. 1.C: CIVIL WORKS (FINISHES WORKS)

BILL OF QUANTITIES

Item No.	Item Description	Unit	Qty	Unit Rate (Rs.)	Total Amount (Rs.)
(i)	(ii)	(iii)	(iv)	(v)	(vi)
B-C- 25	Providing and laying Pre-Polished supreme quality Granite slab of 3/4" thickness on entrance steps with 2 Nos. of stainless steel anti slip strips anchored with minimum 2 Nos of S.S dowels and 3/4" thickness on riser of approved color, shade and pattern to specified surfaces laid in approved color, design and pattern, including 1" thick cement sand 1:3 mortar base, grouted with epoxy grout with matching colour, complete in all respects, as per specifications and instructions of the Engineer.	Sft	1,790		
B-C- 26	Providing and laying Matt Polished supreme quality Granite Effect Tiles of size 600 mm x 600 mm (24" x 24") and thickness 3/4", of approved shade and colour, on prepared floor surfaces, laid in approved pattern/design, true to line, level and slope as required. The work shall include providing and laying 32 mm (1-1/4") thick cement sand mortar (1:3) as bedding, properly compacted and leveled, including slurry bond coat where required. Tiles shall be laid with uniform joints and proper alignment. All joints shall be filled with approved epoxy grout of matching colour, including cleaning of joints and surface finishing to achieve a smooth, even and stain-free appearance, complete in all respects, as per drawings, specifications and as directed by the Engineer.	Sft	16,970		
B-C- 27	Providing, cutting, dressing and fixing 19 mm (3/4") thick pre-polished supreme quality granite stone (supreme quality Black galaxy granite imported) of approved color, texture and pattern for dado/cladding on walls, in approved design and layout, including edge finishing, grooves, cut-outs, and matching as per drawings. The work shall include surface preparation, application of approved bonding material, and fixing with stainless steel mechanical anchors (pins/clamps/holdfasts) of appropriate size and spacing, embedded in wall with non-shrink grout/epoxy, ensuring proper alignment, level, plumb and true surface. Joints shall be filled with approved color-matching epoxy, including provision of backing rods, sealants where required, and proper finishing to achieve a uniform appearance. at any floor and at any height, complete in all respects, as per drawings, specifications and as directed by the Engineer.	Sft	94,490		
B-C- 28	Supply and installation of MDF wooden wall paneling including 19mm thick MDF panels fixed over a deodar wood backing frame (minimum section 2"x1" or as approved), complete with vertical and/or horizontal decorative grooves as per design drawings. All joints, edges, and surfaces shall be properly sanded, filled, and prepared to receive decorative paint finish (Decopaint), including application of primer, base coats, and final finish coats in approved color/shade. All materials, accessories, surface preparation, cutting, jointing, and finishing shall be included, complete in all respects as per drawings, specifications, and as approved by the Engineer.	Sft	39,780		

AVIATION COMPLEX AT BLUE AREA, ISLAMABAD

BILL NO. 1.C: CIVIL WORKS (FINISHES WORKS)

BILL OF QUANTITIES

Item No.	Item Description	Unit	Qty	Unit Rate (Rs.)	Total Amount (Rs.)
(i)	(ii)	(iii)	(iv)	(v)	(vi)
B-C- 29	Providing and Fixing approved quality WPC (Wood Plastic Composite) wall cladding panels of min thickness 23mm of approved shade, texture and pattern on walls including required GI/MS/Aluminum base framework, backing battens, screws, clips, adhesives, trims, corner beads and all necessary accessories, fixed in proper line and level as per approved drawings and manufacturer recommendations, including cutting, wastage, lifting at all heights and complete finishing, complete in all respects as directed by the Engineer.	Sft	31,600		
B-C- 30	Providing and Fixing approved quality Acoustic Wall Panels of specified thickness, texture and finish on walls, comprising acoustic core with fabric/polyester/perforated finish as approved, including wooden base framework, acoustic insulation backing, screws, clips, adhesives, trims, edge finishing and all necessary accessories, fixed in proper alignment and level as per approved drawings and manufacturer recommendations, including cutting, wastage, lifting at all heights and complete finishing, complete in all respects as directed by the Engineer.	Sft	3,670		
B-C- 31	Providing and laying 3/4" thick pre-polished granite slab for staircase treads and landings of approved color, shade, and texture, machine-cut, free from cracks, cavities, or other defects, including a half-round bullnose edge profile as per the architectural drawing. The granite shall be set over 1" (25 mm) thick cement-sand mortar (1:3) bedding with neat cement slurry. The tread shall feature three rows of abrasive inserts (anti-slip grooves) near the leading edge to ensure pedestrian safety. The scope of work includes supply, precise cutting to size, edge molding, polishing, and fixing the stone, including jointing with matching color epoxy grout, to provide a seamless finish, complete in all respects, as per drawings, specifications, and instructions of the Engineer.	Sft	35,030		
B-C- 32	Providing and laying 1/2" thick pre-polished granite slab for staircase risers/ skirting of approved color, shade, and texture, free from cracks, cavities, or other defects, fixed vertically over a cement mortar bed. The riser shall be accurately cut to match the height of the step and aligned perfectly with the tread. The scope of work includes supply, precise cutting to size, polishing, and fixing the stone, including jointing with matching color epoxy grout, to provide a seamless finish, complete in all respects, as per drawings, specifications, and instructions of the Engineer.	Sft	7,590		
B-C- 33	Providing and fixing Pre-Polished Granite 1/2" thick in skirting, grouted with white/coloured cement using imported pigments, including laser cutting, over and including 1/2" thick 1:4 cement sand base plaster, complete in all respects as per specifications and instructions of the Engineer.	Sft	1,320		

AVIATION COMPLEX AT BLUE AREA, ISLAMABAD

BILL NO. 1.C: CIVIL WORKS (FINISHES WORKS)

BILL OF QUANTITIES

Item No.	Item Description	Unit	Qty	Unit Rate (Rs.)	Total Amount (Rs.)
(i)	(ii)	(iii)	(iv)	(v)	(vi)
B-C- 34	Providing and fixing Pre-Polished Granite Effect tiles (4" wide and 24" long) 1/2" thick in skirting, grouted with white/coloured cement using imported pigments, including laser cutting, over and including 1/2" thick 1:4 cement sand base plaster, complete in all respects as per specifications and instructions of the Engineer.	Sft	1,490		
B-C- 35	Providing and laying approved quality 3mm thick self-leveling epoxy flooring system over prepared 2" thick Class 'C' concrete floor laid in panels, including surface grinding, primer coat, epoxy base coat, self-leveling epoxy layer, top protective coat, panel joints, and epoxy skirting extending up to 6" high on walls, complete with all accessories, consumables, curing and protection, in proper line and level as per specifications, approved drawings and manufacturer's recommendations, complete in all respects as directed by the Engineer.	Sft	14,770		
B-C- 36	Providing and laying 3" thick Class 'C' concrete floors using hardonate, laid in panels using marble strip of size 8mm x 40mm complete in all respects, as per specifications and instructions of the Engineer.	Sft	175,470		
B-C- 37	Providing and laying 2" thick Class 'C' concrete floors using hardonate, laid in panels complete in all respects, as per specifications and instructions of the Engineer.	Sft	426,070		
B-C- 38	Providing and laying 3mm epoxy floor over 2" thick Class 'C' concrete floors, laid in panels complete in all respects, epoxy extend to wall upto 6" high. as per specifications and as per instructions of the Engineer.	Sft	33,950		
B-C- 39	Providing and laying skirting with 1/2" (13 mm) thick cement plaster 1:3 in ground floor including finishing smooth with a floating coat of neat cement, rounding corners and curing etc. complete in all respects as per specifications and instructions of the Engineer.	Sft	5,325		
B-C- 40	Providing & fixing of 2mm thick Rubber floor including 4mm thick underlay on specified floor area, colour, quality & design as approved and set with adhesive chemical as per manufacturer recommendation, as shown on drawing, complete in all respects and as directed by the Engineer.	Sft	5,685		
B-C- 41	Providing & fixing of Carpet Tile on specified floor area, colour, quality & design as approved by the designer and set with adhesive chemical as per manufacturer recommendation, as shown on drawing, complete in all respects and as directed by the Engineer.	Sft	37,970		

AVIATION COMPLEX AT BLUE AREA, ISLAMABAD

BILL NO. 1.C: CIVIL WORKS (FINISHES WORKS)

BILL OF QUANTITIES

Item No.	Item Description	Unit	Qty	Unit Rate (Rs.)	Total Amount (Rs.)
(i)	(ii)	(iii)	(iv)	(v)	(vi)
B-C- 42	Providing & fixing of 12mm Laminated Wooden floor, colour, quality & design as approved by the designer and set with adhesive chemical as per manufacturer recommendation, as shown on drawing, complete in all respects and as directed by the Engineer.	Sft	2,400		
B-C- 43	Providing, fabricating and installing MDF 4" thick partition wall , finish with paint, color as approved by the Engineer, fixed in true line, level and plumb with necessary brackets, U channel anchors, screws, The partition shall be consisting of fix glass with aluminum section, complete fittings , Glass shall be 8mm thick tempered glass, including clear as shown on drawings. The work shall include all necessary accessories, glazing beads, rubber gaskets, sealants, fittings and hardware, complete with cutting, fabrication, installation, finishing, cleaning and making good of adjacent surfaces, complete in all respects as per drawings and instructions of the Engineer. Partition wall (Type MD-1)	Sft.	12,130		
B-C- 44	Providing, fabricating and installing MDF 4" thick partition wall, finish with paint, color as approved by the Engineer, fixed in true line, level and plumb with necessary brackets, U channel anchors, screws, The partition shall be consisting of fix glass with aluminum section, complete fittings , Glass shall be 8mm thick tempered glass, including clear as shown on drawings. The work shall include all necessary accessories, glazing beads, rubber gaskets, sealants, fittings and hardware, complete with cutting, fabrication, installation, finishing, cleaning and making good of adjacent surfaces, complete in all respects as per drawings and instructions of the Engineer. Partition wall (Type MD-2)	Sft.	1,020		
B-C- 45	Providing, fabricating and installing MDF 4" thick partition wall , finish with paint, color as approved by the Engineer, fixed in true line, level and plumb with necessary brackets, U channel anchors, screws, The partition shall be consisting of fix glass with aluminum section, complete fittings , Glass shall be 8mm thick tempered glass, as shown on drawings. The work shall include all necessary accessories, glazing beads, rubber gaskets, sealants, fittings and hardware, complete with cutting, fabrication, installation, finishing, cleaning and making good of adjacent surfaces, complete in all respects as per drawings and instructions of the Engineer. Partition wall (Type MD-3,4,5 & 7)	Sft.	74,355		

AVIATION COMPLEX AT BLUE AREA, ISLAMABAD

BILL NO. 1.C: CIVIL WORKS (FINISHES WORKS)

BILL OF QUANTITIES

Item No.	Item Description	Unit	Qty	Unit Rate (Rs.)	Total Amount (Rs.)
(i)	(ii)	(iii)	(iv)	(v)	(vi)

B-C- 46 Providing, fabricating and installing MDF 4" thick partition wall , finish with paint, color as approved by the Engineer, fixed in true line, level and plumb with necessary brackets, U channel anchors, screws, The partition shall be consisting of complete fittings , including clear as shown on drawings. The work shall include all necessary accessories, glazing beads, rubber gaskets, sealants, fittings and hardware, complete with cutting, fabrication, installation, finishing, cleaning and making good of adjacent surfaces, complete in all respects as per drawings and instructions of the Engineer.
Partition wall (Type MD-6)

Sft. 110

AVIATION COMPLEX AT BLUE AREA, ISLAMABAD

BILL NO. 1.C: CIVIL WORKS (FINISHES WORKS)

BILL OF QUANTITIES

Item No.	Item Description	Unit	Qty	Unit Rate (Rs.)	Total Amount (Rs.)
(i)	(ii)	(iii)	(iv)	(v)	(vi)
SECTION - G					
PAINTING					
Ref Specs: 6700					
B-C- 47	03 coats of vinyl emulsion paint including surface preparation by provision of a film with Alkali resisting primer on plastered ceiling to form smooth base for paint, including sanding, filling where required, etc. at any floor, complete in all respect, as per specifications and instructions of the Engineer.	Sft	100		
B-C- 48	03 coats of spotless matt emulsion paint including surface preparation by provision of a film with Alkali resisting primer on plastered ceiling to form smooth base for paint, including sanding, filling where required, etc. at any floor, complete in all respect, as per specifications and instructions of the Engineer.	Sft	1,370		
B-C- 49	03 coats with Weather shield paint make of approved shade on plaster surface and including the cost of cleaning the surface, sand papering etc.at any height in any floor, complete in all respect, as per specifications and instructions of the Engineer.	Sft	50,440		
B-C- 50	02 coats of satin acrylic paint over prepared surface, including necessary surface preparation such as cleaning, sanding, and application of suitable primer/undercoat as required to achieve a smooth and uniform finish etc. at any floor, complete in all respect, as per specifications and instructions of the Engineer.	Sft	611,820		
B-C- 51	Providing and applying approved quality epoxy paint system comprising complete surface preparation including cleaning, removal of dust, grease, laitance and loose particles, filling of minor surface imperfections with approved fillers, application of compatible epoxy primer, epoxy putty/skim coat where required, followed by two coats of epoxy paint of approved shade and finish, applied strictly in accordance with manufacturer's recommendations, including all tools, consumables, scaffolding, protection and curing, at any floor and at any height, complete in all respects as per drawings, specifications and instructions of the Engineer.	Sft	9,120		
B-C- 52	3 coats of matt enamel paint including surface preparation by provision of a film with Alkali resisting primer on plastered wall to form smooth base for plastic emulsion paint, including sanding, filling where required, etc. at any floor, complete in all respect, as per specifications and instructions of the Engineer.	Sft	949,560		

AVIATION COMPLEX AT BLUE AREA, ISLAMABAD

BILL NO. 1.C: CIVIL WORKS (FINISHES WORKS)

BILL OF QUANTITIES

Item No.	Item Description	Unit	Qty	Unit Rate (Rs.)	Total Amount (Rs.)
(i)	(ii)	(iii)	(iv)	(v)	(vi)
B-C- 53	Providing and applying approved quality stone finish texture coating on external plastered surfaces as specified. The work shall include surface preparation by cleaning, removing laitance, dust, and loose particles; application of primer/sealer coat; followed by one or more coats of texture finish of approved shade, make, and texture pattern to achieve uniform coverage and decorative appearance. The coating shall be applied strictly in accordance with the manufacturer's specifications, using approved tools and techniques to ensure durability, adhesion, and aesthetic quality, complete in all respects and as directed by the Engineer.	Sft	32,140		
SECTION - H FALSE CEILING Ref Specs: 6560					
B-C- 54	Providing and fixing 600mmx600mm, 9mm thick imported brand water resistant gypsum board ceiling, fixed to G.I. suspension system comprising main runners, Imported cross tees, hangers, and perimeter channels, complete with all necessary hardware, hangers, and fasteners, in accordance with approved shop drawings. All boards shall be accurately cut, aligned, and securely fixed, with joints properly taped, filled, and finished using approved jointing compound to achieve a smooth, seamless surface ready for final finishing. The ceiling shall be finished with three (03) coats of enamel paint of approved colour and shade, including surface preparation. The work shall include all necessary supports, edge trims, access panels (if required), and allowances for openings for light fixtures, diffusers, or other services. Installation shall be carried out at any floor level, in compliance with the specifications, manufacturer's recommendations and instructions of the Engineer	Sft	26,520		
B-C- 55	Providing and fixing gypsum ceiling 12mm thick 1200mmx2400mm, fixed to G.I. suspension system comprising main runners, cross tees, hangers, and perimeter channels, complete with all necessary hardware, hangers, and fasteners, in accordance with approved shop drawings. All boards shall be accurately cut, aligned, and securely fixed, with joints properly taped, filled, and finished using approved jointing compound to achieve a smooth, seamless surface ready for final finishing. The ceiling shall be finished with three (03) coats of enamel paint of approved colour and shade, including surface preparation. The work shall include all necessary supports, edge trims, access panels (if required), and allowances for openings for light fixtures, diffusers, or other services. Installation shall be carried out at any floor level, in compliance with the specifications, manufacturer's recommendations and instructions of the Engineer	Sft	39,470		

AVIATION COMPLEX AT BLUE AREA, ISLAMABAD

BILL NO. 1.C: CIVIL WORKS (FINISHES WORKS)

BILL OF QUANTITIES

Item No.	Item Description	Unit	Qty	Unit Rate (Rs.)	Total Amount (Rs.)
(i)	(ii)	(iii)	(iv)	(v)	(vi)
B-C- 56	Providing and fixing 600mm x 2600mm modular plain colour aluminum false ceiling tiles of approved make, manufactured from high-quality aluminum alloy with a factory-applied powder-coated finish in approved colour and shade. Installed on an approved aluminum adjustable suspension system comprising main tees, cross tees, wall angles, hangers, and all necessary accessories. The suspension grid shall be fire-rated, corrosion-resistant, accurately leveled, and securely fixed to the structural soffit with appropriate fasteners and hangers. Tiles shall be neatly cut and fitted around columns, walls, light fixtures, and service openings to achieve a clean, seamless appearance. The entire installation shall conform to the approved shop drawings, manufacturer's installation guidelines, and project specifications, at any floor and complete in all respects to the satisfaction of the Engineer.	Sft	53,240		
B-C- 57	Providing and fixing 600mm x 600mm modular plain aluminum acoustic false ceiling tiles approved make, manufactured from high-quality aluminum alloy with a factory-applied powder-coated finish in approved colour and shade. Installed on an approved aluminum adjustable suspension system comprising main tees, cross tees, wall angles, hangers, and all necessary accessories. The suspension grid shall be fire-rated, corrosion-resistant, accurately leveled, and securely fixed to the structural soffit with appropriate fasteners and hangers. Tiles shall be neatly cut and fitted around columns, walls, light fixtures, and service openings to achieve a clean, seamless appearance. The entire installation shall conform to the approved shop drawings, manufacturer's installation guidelines, and project specifications, at any floor and complete in all respects to the satisfaction of the Engineer.	Sft	3,490		
B-C- 58	Providing and installing 1200mmx 300mm aluminum strip false ceiling of approved make, roll-formed from high-quality aluminum alloy with a factory-applied powder-coated finish in approved wooden texture. Strips shall be plain (non-perforated) hygienic type, resistant to corrosion, moisture, and fungal growth, ensuring durability and ease of maintenance. Each strip shall be fixed to an approved concealed aluminum suspension system, including carriers, hangers, wall angles, and all necessary accessories, to achieve a perfectly level and aligned ceiling surface. Suspension system shall be securely anchored to the structural soffit using appropriate fasteners at specified spacing, with provisions for accommodating light fixtures, diffusers, and other ceiling-mounted services. The installation shall be carried out in accordance with the manufacturer's recommendations, approved shop drawings, and specifications, at any floor, complete in all respects to the satisfaction of the Engineer.	Sft	3,070		

AVIATION COMPLEX AT BLUE AREA, ISLAMABAD

BILL NO. 1.C: CIVIL WORKS (FINISHES WORKS)

BILL OF QUANTITIES

Item No.	Item Description	Unit	Qty	Unit Rate (Rs.)	Total Amount (Rs.)
(i)	(ii)	(iii)	(iv)	(v)	(vi)
B-C- 59	Providing and fixing modular aluminum perforated acoustic false ceiling panels 600mmx600mm of approved size, design and make. Manufactured from high-quality aluminum alloy with a factory-applied powder-coated finish in approved colour and shade and ensure ease of cleaning. Installed on an approved aluminum adjustable suspension system comprising main tees, cross tees, wall angles, hangers, and all necessary accessories. The suspension grid shall be fire-rated, corrosion-resistant, accurately leveled, and securely fixed to the structural soffit with appropriate fasteners and hangers. Tiles shall be neatly cut and fitted around columns, walls, light fixtures, and service openings to achieve a clean, seamless appearance. The entire installation shall conform to the approved shop drawings, manufacturer's installation guidelines, and project specifications, at any floor and complete in all respects to the satisfaction of the Engineer.	Sft	283,170		
B-C- 60	Providing and fixing gypsum board false ceiling with decorative wooden (veneer) strips, of approved make, design and pattern, comprising 12 mm thick gypsum board fixed to a G.I. suspension system (main runners, cross tees, hangers, and perimeter channels) suspended from the structural soffit at required spacing, complete with all necessary fixtures and accessories. The gypsum boards shall be properly cut, aligned, and fixed, with joints treated using approved tape and jointing compound to achieve a smooth finish. The decorative wooden/veneered strips shall be of approved veneer finish, size, spacing, and pattern, securely fixed over the gypsum surface, including necessary backing supports. The veneer surface shall be finished with lacquer polish to the approved shade and gloss level. The work shall include cutting at edges, forming openings for services (light fixtures, diffusers, sprinklers, etc.), providing edge trims, and making good at all junctions. The entire installation shall conform to the approved shop drawings, manufacturer's installation guidelines, and project specifications, at any floor and complete in all respects to the satisfaction of the Engineer.	Sft	153,100		

SECTION - I

STEEL WORKS

Ref Specs: 3000, 6700

AVIATION COMPLEX AT BLUE AREA, ISLAMABAD

BILL NO. 1.C: CIVIL WORKS (FINISHES WORKS)

BILL OF QUANTITIES

Item No.	Item Description	Unit	Qty	Unit Rate (Rs.)	Total Amount (Rs.)
(i)	(ii)	(iii)	(iv)	(v)	(vi)
B-C- 61	Providing, fabricating, and installing MS doors and frame (chowkat), single leaf as shown on drawings, comprising frame (chowkat) fabricated from 16 SWG mild steel sheet as per approved design, with 44 mm thick hollow metal seamless door shutter, clad on both faces with 18 SWG mild steel sheets, continuously welded to an internal framework of channels and angles to ensure strength and durability. The scope of work shall include all necessary cutting, welding, grinding, and surface finishing, along with supply and installation of approved quality panic bar, door closers, hinges, handles and all required hardware fittings in accordance with approved shop drawings. All steel surfaces shall be thoroughly cleaned and properly prepared, followed by application of one coat of red oxide zinc chromate primer and two coats of high-quality epoxy paint of approved shade. The item shall include fixing of frame, grouting, making good of adjoining surfaces, and all incidental works, complete in all respects as per specifications and to the satisfaction of the Engineer (SD1)	Sft	60		
B-C- 62	Providing and fixing 2" thick minimum 2 hour fire resistant doors, UL listed fabricated from 16SWG MS sheet and the core filled with heavy density foam injected polyurethane of low U factor (≤ 0.069) and full width door frame fabricated from 14 SWG M.S sheet including epoxy painting, 12mm thick fire-rated galss for vision panel, panic bar, hinges, and all other hardwares fittings in accordance with the approved shop drawings, etc. complete in all respects as per manufacturer design, approved shop drawings/mock-up samples of the FDR1.	Sft	5,350		

AVIATION COMPLEX AT BLUE AREA, ISLAMABAD

BILL NO. 1.C: CIVIL WORKS (FINISHES WORKS)

BILL OF QUANTITIES

Item No.	Item Description	Unit	Qty	Unit Rate (Rs.)	Total Amount (Rs.)
(i)	(ii)	(iii)	(iv)	(v)	(vi)
B-C- 63	Providing, fabricating, and installing MS doors and frame (chowkat), single or double leaf as shown on drawings, comprising frame (chowkat) fabricated from 16 SWG mild steel sheet as per approved design, with 44 mm thick hollow metal seamless door shutter, clad on both faces with 18 SWG mild steel sheets, continuously welded to an internal framework of channels and angles to ensure strength and durability, and filled with approved density rockwool insulation. The door assembly shall have a minimum 120 minutes fire rating, duly tested and certified as per relevant standards. The scope of work shall include all necessary cutting, welding, grinding, and surface finishing, along with supply and installation of approved quality locks, door closers, hinges, handles, fire-rated seals, optional vision panel (where specified) with 12mm thick fire-rated glass, approved beading, MS grill (where required) as shown in drawings and all required hardware fittings in accordance with approved shop drawings. All steel surfaces shall be thoroughly cleaned and properly prepared, followed by application of one coat of red oxide zinc chromate primer and two coats of high-quality epoxy paint of approved shade. The item shall include fixing of frame, grouting, making good of adjoining surfaces, and all incidental works, complete in all respects as per specifications and to the satisfaction of the Engineer. (SD2 to SD6)	Sft	4,430		
B-C- 64	Providing, fabricating, and installing MS sliding door, comprising a 44 mm thick hollow metal seamless door shutter, fabricated from mild steel sections and clad on both faces with sheets of 18 SWG, and filled with polyurethane insulation, complete in all respects. The door shall be mounted on a mechanically operated sliding system consisting of heavy-duty MS channel track with rollers/wheels, ensuring smooth and noiseless operation, including all necessary brackets, guides, stoppers, and suspension arrangements. The shutter shall be provided with MS door grille(s) at designated locations for ventilation, properly fabricated and securely fixed, and the entire assembly shall be finished with approved epoxy paint over properly prepared surfaces. The work shall include provision of middle and bottom sliding bolts, manual locking arrangement, handles, and all required hardware fittings. All steel surfaces shall be thoroughly cleaned, treated, and coated as per specifications, and the complete installation shall be executed in accordance with approved shop drawings and as per the instruction of the Engineer. (SD7)	Sft	70		

AVIATION COMPLEX AT BLUE AREA, ISLAMABAD

BILL NO. 1.C: CIVIL WORKS (FINISHES WORKS)

BILL OF QUANTITIES

Item No.	Item Description	Unit	Qty	Unit Rate (Rs.)	Total Amount (Rs.)
(i)	(ii)	(iii)	(iv)	(v)	(vi)
B-C- 65	Providing, fabricating, and installing MS sliding door, comprising a 44 mm thick hollow metal seamless door shutter, fabricated from mild steel sections and clad on both faces with sheets of 18 SWG, and filled with approved density rockwool insulation, complete in all respects. The door shall be mounted on a mechanically operated sliding system consisting of heavy-duty MS channel track with rollers/wheels, ensuring smooth and noiseless operation, including all necessary brackets, guides, stoppers, and suspension arrangements. The shutter shall be provided with MS door grille(s) at designated locations for ventilation, properly fabricated and securely fixed, and the entire assembly shall be finished with approved epoxy paint over properly prepared surfaces. The work shall include provision of middle and bottom sliding bolts, manual locking arrangement, handles, and all required hardware fittings. All steel surfaces shall be thoroughly cleaned, treated, and coated as per specifications, and the complete installation shall be executed in accordance with approved shop drawings and as per the instruction of the Engineer. (SD8).	Sft	50		
B-C- 66	Providing, fabricating, and installing Sand Trap MS louvered door (single/ double leaf), comprising a 44 mm thick hollow metal door shutter with frame (chowkat) fabricated from 16 SWG mild steel sheet as per approved design. The door leaves shall be sandwiched (sand-trapped) construction, incorporating fixed MS louvers of approved size and spacing to ensure adequate ventilation, and provided with GI/insect mesh on the face. The shutters shall be reinforced with internal stiffeners to ensure rigidity and durability, and hung on heavy-duty hinges fixed to the MS frame. Also include approved quality handles, tower bolts, locking arrangement, stoppers, and all necessary hardware fittings. All steel surfaces shall be thoroughly cleaned, properly prepared, and finished with approved epoxy paint system, including primer and finish coats, to achieve a uniform and durable surface. The frame shall be properly aligned, fixed, and grouted in position, including making good of adjoining civil works. The complete work shall be executed in accordance with approved shop drawings, specifications, and to the instructions of the Engineer. (SLD1 to SLD3)	Sft	775		

AVIATION COMPLEX AT BLUE AREA, ISLAMABAD

BILL NO. 1.C: CIVIL WORKS (FINISHES WORKS)

BILL OF QUANTITIES

Item No.	Item Description	Unit	Qty	Unit Rate (Rs.)	Total Amount (Rs.)
(i)	(ii)	(iii)	(iv)	(v)	(vi)
B-C- 67	Providing, fabricating, and installing Sand Trap MS louvered Window & Ventilators (double leaf), comprising a 44 mm thick hollow metal shutter with frame (chowkat) fabricated from 16 SWG mild steel sheet as per approved design. The door leaves shall be sandwiched (sand-trapped) construction, incorporating fixed MS louvers of approved size and spacing to ensure adequate ventilation, and provided with GI/insect mesh on the face. The shutters shall be reinforced with internal stiffeners to ensure rigidity and durability, and hung on heavy-duty hinges fixed to the MS frame. Also include approved quality handles, tower bolts, locking arrangement, stoppers, and all necessary hardware fittings. All steel surfaces shall be thoroughly cleaned, properly prepared, and finished with approved epoxy paint system, including primer and finish coats, to achieve a uniform and durable surface. The frame shall be properly aligned, fixed, and grouted in position, including making good of adjoining civil works. The complete work shall be executed in accordance with approved shop drawings, specifications, and to the instructions of the Engineer.	Sft	400		
B-C- 68	Providing, fabricating and fixing stainless steel stair railing (Grade 304) comprising 2" diameter (18-gauge) S.S. main handrail, three (03) parallel horizontal pipes of ¾" diameter, supported on vertical S.S. posts of 1½" diameter at an average spacing of 2'-0" c/c, and 2" diameter vertical posts at start, turning, and end points, including all necessary fittings, welding, grinding, polishing, making hole in tread granite, MS sleeves in stair, and anchoring in stair steps and walls, with all accessories, complete in all respects, and as per drawings, specifications. and directions of the Engineer.	Rft	67,135		
B-C- 69	Providing & Fixing M.S Ladder including, welding, epoxy paint complete in all respects as shown drawing or as approved by the Engineer.	Rft	140		
B-C- 70	Providing, fabricating and fixing MS railing as per approved drawings and specifications, comprising 2" diameter (18-gauge) M.S. main handrail, three (03) parallel horizontal pipes of ¾" diameter, supported on vertical S.S. bluster of 1½" diameter at every alternate step, finish with epoxy paint including all necessary fittings, welding, grinding, polishing, MS anchor plate, MS sleeve, and anchoring in floor and walls, with all accessories, complete in all respects, and as per drawings, specifications. and directions of the Engineer.	Sft	1,870		

SECTION - J

ROOF TREATMENT / EXPANSION JOINT FILLING

Ref Specs: 2100, 2300, 6411

AVIATION COMPLEX AT BLUE AREA, ISLAMABAD

BILL NO. 1.C: CIVIL WORKS (FINISHES WORKS)

BILL OF QUANTITIES

Item No.	Item Description	Unit	Qty	Unit Rate (Rs.)	Total Amount (Rs.)
(i)	(ii)	(iii)	(iv)	(v)	(vi)
B-C- 71	Providing and installation of water proofing treatment on roof slabs comprising: a) Minimum 2.5" thick PCC screed b) Primer for waterproofing membrane. c) 4mm thick Torch waterproofing membrane. d) Polythene sheet 150 micron e) 2" TH. Polystyrene rigid insulation f) Polythene sheet 150 micron g) 2" thick (1:2:4) PCC laid in panels h) 12"x12"x1" insulated concrete tile with PU core fixed with cement sand mortar 1:3. All work shall comply with drawings, specification and as per the direction of the Engineer.	Sft.	50,600		
B-C- 72	Supply & installation of Rubber Column Guard of Size (40" x 4" x 4") including Diamond Garde Micro Prismatic Sheeting Reflective Tape water resistance of color and design as approved by the Engineer with fixing arrangements, complete in all respects .	No.	450		
B-C- 73	Providing and applying pavement marking lines 150 mm wide using approved quality non-reflective chlorinated rubber (CR) paint on prepared pavement surface, including cleaning, surface preparation, layout marking, masking, application by approved method/equipment and all necessary labor, tools, traffic management and consumables, complete in all respects as per drawings, specifications and directions of the Engineer.	Rft	42,210		
B-C- 74	Providing and applying pavement directional arrow markings of 4.0 meter size as per drawings using approved quality non-reflective chlorinated rubber (CR) paint on prepared pavement surface, including cleaning, layout marking, masking/stenciling, application by approved method/equipment and all necessary labor, tools, traffic management and consumables, complete in all respects as per approved drawings, specifications and directions of the Engineer.	Each	140		
B-C- 75	Supply & installation of Rubber Wheel stopper; Size: 48" x 6" x 4" including Diamond Garde Micro Prismatic Sheeting Reflective Tape water resistance of color and design as approved by the Engineer with fixing arrangements, complete in all respects .	No.	42		
B-C- 76	Supply & installation of Rubber Speed Hump; Size: 20" x 14" x 2" including Diamond Garde Micro Prismatic Sheeting Reflective Tape water resistance of color and design as approved by the Engineer with fixing arrangements, complete in all respects .	Rft	710		

AVIATION COMPLEX AT BLUE AREA, ISLAMABAD

BILL NO. 1.C: CIVIL WORKS (FINISHES WORKS)

BILL OF QUANTITIES

Item No.	Item Description	Unit	Qty	Unit Rate (Rs.)	Total Amount (Rs.)
(i)	(ii)	(iii)	(iv)	(v)	(vi)

SECTION - K
MISCELLANEOUS

B-C- 77 MAIN EMBLEM OF PAA

Supply, fabrication and installation of illuminated "PAA" as crown sign to be mounted at the top of building, as per approved design, drawings and Specifications. The work shall include fabrication of sign in approved size and proportions, complete with LED illumination system to achieve uniform backlit/front-lit effect, including diffusers, wiring, drivers and power supply units, structural supporting frame, base plates, brackets, anchor bolts (chemical/mechanical), and all necessary fixing arrangements designed to withstand wind loads and external environmental conditions at height, anti-corrosion treatment (primer, paint or powder coating), weatherproofing, sealing, and finishing and all incidental works shall be included, complete in all respects, as per approved shop drawings and as directed by the Engineer.

Technical Specification

3d fabricated in stainless steel sheet, coated with approved colors, Illuminated with led's mounted on elevation with Stainless Steel special attachments prepared ON Leath machine measuring size 15ft width x 8.8ft height x 0.5ft depth 0.2ft elevated from surface.

Each 2

B-C- 78 Supply, fabrication and installation of illuminated "PAA" as crown sign to be mounted at the top of building, as per approved design, drawings and Specifications. The work shall include fabrication of sign in approved size and proportions, complete with LED illumination system to achieve uniform backlit/front-lit effect, including diffusers, wiring, drivers and power supply units, structural supporting frame, base plates, brackets, anchor bolts (chemical/mechanical), and all necessary fixing arrangements designed to withstand wind loads and external environmental conditions at height, anti-corrosion treatment (primer, paint or powder coating), weatherproofing, sealing, and finishing and all incidental works shall be included, complete in all respects, as per approved shop drawings and as directed by the Engineer.

Technical Specification

3d fabricated in stainless steel sheet coated with approved colors, Illuminated with led's mounted on elevation with Stainless Steel special attachments prepared ON Leath machine, Measuring size 7.5ft width x 4.4ft height x 0.25ft depth, 0.1ft elevated from surface.

Each 1

AVIATION COMPLEX AT BLUE AREA, ISLAMABAD

BILL NO. 1.C: CIVIL WORKS (FINISHES WORKS)

BILL OF QUANTITIES

Item No.	Item Description	Unit	Qty	Unit Rate (Rs.)	Total Amount (Rs.)
(i)	(ii)	(iii)	(iv)	(v)	(vi)
B-C- 79	Providing, fabricating, transporting, and installing PAA Monument / Pylon Sign at the designated visible highlighted location, comprising standalone 3D fabricated structure made of approved quality ACP sheets over complete internal mild steel supporting framework, duly mounted on RCC footing with required mild steel base plates, anchor bolts, and attachments. The work shall include fabrication and fixing of PAA emblem and wording in 3D raised letters, internally illuminated with LED lighting system including drivers, wiring, power accessories, and all allied works. The monument shall be complete with weather-resistant paint/coating, finishing, testing, commissioning, and all accessories as per approved drawings and instructions of the Engineer. Overall size of monument shall be 8'-0" width × 8'-0" height with 6" depth/elevated projection, complete in all respects.	No.	1		
B-C- 80	Providing, fabricating, transporting, and installing On-Road Directional Pylon Sign for building entrance, parking area, exit, and other directional guidance, comprising standalone 3D fabricated structure made of approved quality ACP sheets over complete internal mild steel supporting framework, duly mounted on RCC footing with required mild steel base plates, anchor bolts, and attachments. The work shall include fabrication and fixing of emblem, directional arrows, and wording in 3D raised letters, internally illuminated with LED lighting system including drivers, wiring, control gear, and all allied electrical accessories. The pylon sign shall be installed over 0.6 ft high RCC fair-face pedestal/elevated base above finished ground level, complete with smooth exposed concrete finish. Overall size of pylon sign shall be 6'-0" width × 15'-0" height with 1'-3" depth/elevated projection, including weatherproof coating, finishing, testing, commissioning, and all incidental works, complete in all respects as per approved drawings and instructions of the Engineer.	No.	8		

AVIATION COMPLEX AT BLUE AREA, ISLAMABAD

BILL NO. 1.C: CIVIL WORKS (FINISHES WORKS)

BILL OF QUANTITIES

Item No.	Item Description	Unit	Qty	Unit Rate (Rs.)	Total Amount (Rs.)
(i)	(ii)	(iii)	(iv)	(v)	(vi)
B-C- 81	Providing, fabricating, transporting, and installing Parking Lot Directional Pylon Sign for building entrance, parking area, exit, and other directional guidance, comprising standalone 3D fabricated structure made of approved quality ACP sheets over complete internal mild steel supporting framework, duly mounted on RCC footing with required mild steel base plates, anchor bolts, and attachments. The work shall include fabrication and fixing of symbols, directional arrows, and wording in 3D raised letters, internally illuminated with LED lighting system including drivers, wiring, control gear, and all allied electrical accessories. The pylon sign shall be installed over 0.6 ft high RCC fair-face pedestal/elevated base above finished ground level, complete with exposed concrete fair-face finish. Overall size of pylon sign shall be 1'-6" width × 10'-0" height with 1'-0" depth/elevated projection, including weatherproof coating, finishing, testing, commissioning, and all incidental works, complete in all respects as per approved drawings and instructions of the Engineer.	No.	16		
B-C- 82	Providing, fabricating, and fixing Parking Signage at parking levels, wall-mounted type, designated for offices, visitors, staff, and other parking guidance, comprising signage fabricated from approved quality 304 Grade stainless steel sheet (1/16" thick) with required pictographs, symbols, and text finished in approved Pantone colours. The sign shall be fixed over 4 mm thick acrylic backing/support sheet, properly counter-sunk and secured with stainless steel screws to the surface, while the main stainless steel sign face shall be mounted using approved silicone adhesive as faceplate signage. Overall size of signage shall be 0.5 ft width × 0.9 ft height with 6 mm depth in contact with surface, including complete fixing accessories, finishing, alignment, and installation, complete in all respects as per approved drawings and instructions of the Engineer.	No.	1,000		
B-C- 83	Providing, fabricating, and installing Double-Sided Hanging Signage at parking levels, designated for offices, visitors, staff, and other directional guidance, comprising signage fabricated from approved quality 304 Grade stainless steel sheet (1/16" thick) with required pictographs, symbols, and text finished in approved Pantone colours. The signage shall be mounted on ACP fabricated box with complete internal mild steel supporting framework and suspended from ceiling through stainless steel hangers/supports. The sign shall be backlit illuminated with LED lighting system including drivers, wiring, and all necessary electrical accessories. Overall size of signage shall be 4'-0" width × 1'-0" height with 0.25 ft depth, suspended 1'-0" below ceiling level, including complete fixing arrangement, finishing, testing, commissioning, and installation, complete in all respects as per approved drawings and instructions of the Engineer.	No.	95		

AVIATION COMPLEX AT BLUE AREA, ISLAMABAD

BILL NO. 1.C: CIVIL WORKS (FINISHES WORKS)

BILL OF QUANTITIES

Item No.	Item Description	Unit	Qty	Unit Rate (Rs.)	Total Amount (Rs.)
(i)	(ii)	(iii)	(iv)	(v)	(vi)
B-C- 84	Providing and applying Pillar Wrap Parking Signage at internal parking levels, including surface preparation and wrapping of structural RCC/steel columns with high-quality matte waterproof vinyl wrap film of approved make and durability. The work shall include design, printing, and installation of directional signage, symbols, and text using white reflective vinyl lettering and graphics, applied over the base vinyl wrap in approved theme colours. The system shall be UV resistant, weatherproof, scratch resistant, and suitable for indoor parking environment, ensuring long-term adhesion without peeling or fading. Work shall include cleaning, surface preparation, primer (if required), precise alignment, bubble-free application, edge sealing, finishing, and all related accessories and labour, complete in all respects as per approved design, theme, drawings, and instructions of the Engineer.	No.	350		
B-C- 85	Providing, fabricating, transporting, and installing 3D Wall Mural at Entrance Lobby featuring Arabic calligraphy script "Allah Hu Noor-us-Samawati Wal Arz", comprising standalone 3D fabricated lettering made from approved quality Grade 304 stainless steel sheet, precision cut, shaped, and finished with premium surface treatment as per approved design intent. The work shall include complete structural backing, concealed stainless steel supports, spacers, and wall mounting accessories ensuring rigid and durable fixation on wall surface. The mural shall be installed with a 0.15 ft depth raised 3D profile and 0.10 ft stand-off elevation from finished wall surface, achieving a layered floating effect as per architectural design requirements. Overall size shall be 16'-0" width x 11'-0" height, including accurate alignment, spacing, finishing, polishing, protective coating (if required), installation, testing, and all incidental works complete in all respects as per approved drawings, calligraphy artwork, and instructions of the Engineer.	No.	1		
B-C- 86	Providing, fabricating, and fixing Typical Room & Authorized Signage as wall-mounted signage system, comprising signage fabricated from approved quality 304 Grade stainless steel sheet (1/16" thick) with pictographs, symbols, and text finished in approved Pantone colours. The signage shall be fixed over 4 mm thick acrylic backing/support plate, properly counter-sunk and secured with stainless steel screws to the wall surface, while the main stainless steel sign face shall be mounted using approved silicone adhesive as faceplate signage. The work shall include provision of set of 3 plates combined in one assembly measuring 6" width x 6.5" height with 6 mm depth, including precise alignment, surface preparation, drilling, fixing accessories, installation, finishing, and all incidental works complete in all respects as per approved design drawings and instructions of the Engineer.	No.	1,467		

AVIATION COMPLEX AT BLUE AREA, ISLAMABAD

BILL NO. 1.C: CIVIL WORKS (FINISHES WORKS)

BILL OF QUANTITIES

Item No.	Item Description	Unit	Qty	Unit Rate (Rs.)	Total Amount (Rs.)
(i)	(ii)	(iii)	(iv)	(v)	(vi)

- B-C- 87 Providing, fabricating, and fixing Area/Department Signage as wall-mounted signage system, comprising signage fabricated from approved quality 304 Grade stainless steel sheet (1/16" thick) with required pictographs, symbols, and text finished in approved Pantone colours. The signage shall be fixed over 4 mm thick acrylic backing/support sheet, properly counterered and secured with stainless steel screws to the wall surface, while the main stainless steel sign face shall be mounted using approved silicone adhesive as faceplate signage.

The work shall include complete surface preparation, precise alignment, drilling, fixing accessories, installation, finishing, and all necessary incidental works. Overall size of signage shall be 18 inches width × 4 inches height × 6 mm depth (flush contact with surface), complete in all respects as per approved drawings, design intent, and instructions of the Engineer.

No. 200

- B-C- 88 Providing, fabricating, and fixing Typical Door Plates & Directional Signage as wall-mounted signage system, comprising signage fabricated from approved quality 304 Grade stainless steel sheet (1/16" thick) with pictographs, symbols, and text finished in approved Pantone colours. The signage shall be fixed over 4 mm thick acrylic backing/support sheet, properly counterered and secured with stainless steel screws to the wall surface, while the main stainless steel sign face shall be mounted using approved silicone adhesive as faceplate signage.

The work shall include complete surface preparation, precise alignment, drilling, fixing accessories, installation, finishing, and all necessary incidental works. Overall size of signage shall be 6 inches width × 6 inches height × 6 mm depth (flush contact with surface), complete in all respects as per approved drawings, signage schedule, and instructions of the Engineer.

No. 390

AVIATION COMPLEX AT BLUE AREA, ISLAMABAD

BILL NO. 1.C: CIVIL WORKS (FINISHES WORKS)

BILL OF QUANTITIES

Item No.	Item Description	Unit	Qty	Unit Rate (Rs.)	Total Amount (Rs.)
(i)	(ii)	(iii)	(iv)	(v)	(vi)
B-C- 89	Providing, fabricating, and fixing Services Signage as wall-mounted signage system, comprising signage fabricated from approved quality 304 Grade stainless steel sheet (1/16" thick) with required pictographs, symbols, and text finished in approved Pantone colours. The signage shall be fixed over 4 mm thick acrylic backing/support sheet, properly countered and secured with stainless steel screws to the wall surface, while the main stainless steel sign face shall be mounted using approved silicone adhesive as faceplate signage. The work shall include complete surface preparation, precise alignment, drilling, fixing accessories, installation, finishing, and all necessary incidental works. Overall size of signage shall be 6 inches width × 6 inches height × 6 mm depth (flush contact with surface), complete in all respects as per approved drawings, signage schedule, and instructions of the Engineer.	No.	390		
B-C- 90	Providing, fabricating, and installing Services Signage at office and amenity levels, comprising double-sided hanging signage for identification of office floors, gym, recreational areas, auditorium, and other facilities, as per approved signage schedule. The signage shall be fabricated from approved quality 304 Grade stainless steel sheet (1/16" thick) with pictographs, symbols, and text finished in approved Pantone colours. The signage shall be mounted on 6 mm thick crystal clear acrylic panel, suspended from ceiling using approved stainless steel hangers, rods, and accessories ensuring rigid and stable installation. The system shall be suitable for double-sided visibility and shall include all necessary supports, fasteners, and fixing arrangements. Overall size of signage shall be 3.5 ft width × 1.25 ft height × 8 mm depth, suspended 1 ft below ceiling level, complete with all fabrication, finishing, alignment, installation, testing, and all incidental works, complete in all respects as per approved drawings, specifications, and instructions of the Engineer.	No.	312		

AVIATION COMPLEX AT BLUE AREA, ISLAMABAD

BILL NO. 1.C: CIVIL WORKS (FINISHES WORKS)

BILL OF QUANTITIES

Item No.	Item Description	Unit	Qty	Unit Rate (Rs.)	Total Amount (Rs.)
(i)	(ii)	(iii)	(iv)	(v)	(vi)
B-C- 91	Providing, fabricating, and installing Way Finding Directional Signage at office and amenity levels, comprising double-sided hanging signage for wayfinding to office floors, gym, recreational areas, auditorium, and other facility spaces as per approved signage strategy and drawings. The signage shall be fabricated from approved quality 304 Grade stainless steel sheet (1/16" thick) with pictographs, symbols, and text finished in approved Pantone colours. The signage system shall be mounted on 6 mm thick crystal clear acrylic panel, suspended from ceiling using approved stainless steel hangers, rods, and accessories ensuring rigid, stable, and vibration-free installation. Each sign shall incorporate modular directional slots for changeable information. Each signage unit shall comprise single slot size 4 inches × 48 inches, with provision of maximum 4 slots per sign, arranged as per approved layout. The complete signage shall be suspended 1 ft below ceiling level, suitable for double-sided visibility. Work shall include design coordination, fabrication, edge finishing, drilling, fixing accessories, installation, alignment, testing, and all necessary incidental works complete in all respects as per approved drawings, signage system standards, and instructions of the Engineer.	No.	520		
B-C- 92	Providing, fabricating, transporting, and installing 3D Wall Mural at Male Prayer Area, featuring Arabic calligraphy script "Fabi bi ayyi aala'i rabbikuma tukazziban", comprising standalone 3D fabricated lettering made from approved quality Grade 304 stainless steel sheet, precision cut, shaped, and finished as per approved calligraphic design. The mural shall be securely fixed on wall using concealed stainless steel spacers, brackets, and approved fasteners ensuring firm and durable installation. The lettering shall be installed with 1 inch raised 3D projection (depth) directly in contact configuration with wall surface, maintaining precise alignment and spacing as per architectural intent. Overall size of mural shall be 1.7 ft width × 4 ft height, complete with surface finishing, polishing, protective coating (if required), installation, alignment, testing, and all incidental works, complete in all respects as per approved drawings, artwork and instructions of the Engineer.	No.	1		

AVIATION COMPLEX AT BLUE AREA, ISLAMABAD

BILL NO. 1.C: CIVIL WORKS (FINISHES WORKS)

BILL OF QUANTITIES

Item No.	Item Description	Unit	Qty	Unit Rate (Rs.)	Total Amount (Rs.)
(i)	(ii)	(iii)	(iv)	(v)	(vi)
B-C- 93	Providing, fabricating, transporting, and installing 3D Wall Mural at Male Prayer Area, featuring Arabic calligraphy script "Hasbunallahu wa ni'mal wakeel", comprising standalone 3D fabricated lettering made from approved quality Grade 304 stainless steel sheet, precision cut, shaped, and finished as per approved calligraphic design. The mural shall be securely fixed on wall using concealed stainless steel spacers, brackets, and approved fasteners ensuring rigid and durable installation. The lettering shall be installed with 1 inch raised 3D projection (depth) in contact with wall surface, ensuring proper alignment, spacing, and aesthetic integration with the prayer area interior. Overall size of mural shall be 4 ft width × 1.64 ft height, complete with surface finishing, polishing, protective coating (if required), installation, alignment, testing, and all incidental works, complete in all respects as per approved drawings, artwork, and instructions of the Engineer.	No.	1		
B-C- 94	Providing, fabricating, and fixing Warning, Hazard, and Public Services Messages Signage as wall-mounted signage system, comprising signage fabricated from approved quality 304 Grade stainless steel sheet (1/16" thick) with pictographs, hazard symbols, and text finished in approved Pantone colours for clear visibility and safety communication. The signage shall be fixed over 4 mm thick acrylic backing/support sheet, properly countered and secured with stainless steel screws to the wall surface, while the main stainless steel sign face shall be mounted using approved silicone adhesive as faceplate signage. The work shall include complete surface preparation, precise alignment, drilling, fixing accessories, installation, finishing, and all necessary incidental works. Overall size of signage shall be 1 ft width × 1 ft height × 6 mm depth (flush contact with surface), complete in all respects as per approved drawings, safety standards, and instructions of the Engineer	No.	125		

AVIATION COMPLEX AT BLUE AREA, ISLAMABAD

BILL NO. 1.C: CIVIL WORKS (FINISHES WORKS)

BILL OF QUANTITIES

Item No.	Item Description	Unit	Qty	Unit Rate (Rs.)	Total Amount (Rs.)
(i)	(ii)	(iii)	(iv)	(v)	(vi)
B-C- 95	Providing, fabricating, and fixing Emergency Evacuation Plan Signage as wall-mounted signage system, comprising signage fabricated from approved quality 304 Grade stainless steel sheet (1/16" thick) with required pictographs, evacuation route diagram, safety symbols, and text finished in approved Pantone colours for high visibility and compliance with emergency safety standards. The signage shall be fixed over 4 mm thick acrylic backing/support sheet, properly countered and secured with stainless steel screws to the wall surface, while the main stainless steel sign face shall be mounted using approved silicone adhesive as faceplate signage. The work shall include complete design integration of evacuation plan layout, surface preparation, precise alignment, fixing accessories, installation, finishing, and all necessary incidental works. Overall size of signage shall be 2.5 ft width × 2.5 ft height × 6 mm depth (flush contact with surface), complete in all respects as per approved drawings, safety regulations, and instructions of the Engineer.	No.	104		
B-C- 96	Providing, fabricating, and fixing Floor Number Signage at emergency staircases and lift lobbies, comprising wall-mounted 3D fabricated numerals made from approved quality 304 Grade stainless steel sheet (1/16" thick), precision cut, formed, and finished as per approved design intent. The signage shall be securely fixed to the wall using concealed stainless steel attachments, spacers, and fasteners ensuring firm and durable installation with proper alignment and leveling. The lettering shall be installed in raised 3D form with 0.5 inch projection depth, maintaining direct contact configuration with the wall surface. Overall size of each floor number signage shall be 9 inches width × 0.5 inch depth, complete with surface finishing, polishing, installation, alignment, and all necessary incidental works, complete in all respects as per approved drawings, signage standards, and instructions of the Engineer.	No.	208		

AVIATION COMPLEX AT BLUE AREA, ISLAMABAD

BILL NO. 1.C: CIVIL WORKS (FINISHES WORKS)

BILL OF QUANTITIES

Item No.	Item Description	Unit	Qty	Unit Rate (Rs.)	Total Amount (Rs.)
(i)	(ii)	(iii)	(iv)	(v)	(vi)

SECTION - L
MISCELLANEOUS

- B-C- 97 The supply, fabrication, and installation of a complete garbage chute system shall consist of a main vertical duct with an 800mm internal diameter manufactured from 2mm thick Stainless Steel Grade 304, featuring factory-welded longitudinal seams for a smooth, snag-free internal surface. Each floor level shall be equipped with 500mm x 700mm intake hopper door that is self-closing, self-sealing, and 2-hour fire-rated, complete with a dedicated door lock device and floor indicators. Hygiene maintenance is ensured through the provision of a cleaning outlet at each floor, integrated with an automated sanitation system at the top level comprising a disinfectant tank and high-pressure scouring nozzles. The installation includes the provision of aluminum trolley guards and rubber guard rails as per approved details to protect the structure, alongside a 2.5 cubic meter (Cum) garbage container. Safety and environmental controls include an automatic fire discharge shutter at the base held by a 79°C fusible link, a roof-mounted ventilation system with a weather-proof cowl and exhaust fan, and internal fire sprinklers. The entire chute shall be coated externally with a 2mm sound-dampening, anti-vibration material and securely anchored at each floor slab using galvanized steel support frames.

Job 1

BOUNDARY WALLS & MAIN GATE

SECTION - A
EARTH WORKS

(Ref. Specs: 0130, 0150, 1100)

- B-C- 1 Excavation in all kinds of soil / materials, disposal of unsuitable material outside the Project limits and stacking of suitable material as designated/ approved by the Engineer including all lead and lift.

Cft 4,495

SECTION - B
PLAIN AND REINFORCED CONCRETE

Ref Specs: 2100, 2200, 2300

- B-C- 2 Providing and laying Plain Cement Concrete Class "E" under foundations, walls, plinth beams, steps etc., including leveling, compacting, curing etc., complete in all respects.

Cft 605

- B-C- 3 Providing and laying reinforcement cement concrete Class 'B' for footing, columns and plinth beams etc. including form work, leveling, curing, compacting with smooth finish etc., complete in all respect and as approved by The Engineer.

Cft 2,990

AVIATION COMPLEX AT BLUE AREA, ISLAMABAD

BILL NO. 1.C: CIVIL WORKS (FINISHES WORKS)

BILL OF QUANTITIES

Item No.	Item Description	Unit	Qty	Unit Rate (Rs.)	Total Amount (Rs.)
(i)	(ii)	(iii)	(iv)	(v)	(vi)
B-C- 4	Supply, cutting, bending, placing, and fixing in position of high yield deformed reinforcement bars of Steel Grade 60, including all laps, chairs, spacers, binding wires, supports, hooks, and all other accessories as per drawings and specifications and as directed by the Engineer.	M.Ton	12		
SECTION - C CEMENT PLASTER Ref Specs: 6521					
B-C- 5	½" thick 1:4 cement sand plaster in any floor and at any height, complete in all respects.	Sft.	6,120		
SECTION - D PAINTING Ref Specs: 6700					
B-C- 6	Providing and applying approved quality stone finish texture coating on external plastered surfaces as specified. The work shall include surface preparation by cleaning, removing laitance, dust, and loose particles; application of primer/sealer coat; followed by one or more coats of texture finish of approved shade, make, and texture pattern to achieve uniform coverage and decorative appearance. The coating shall be applied strictly in accordance with the manufacturer's specifications, using approved tools and techniques to ensure durability, adhesion, and aesthetic quality, complete in all respects and as directed by the Engineer.	Sft	6,120		
B-C- 7	Two Coats of Bitumen (10/20 Grade) applied at the rate of 0.49 kg/Sqm per coat, complete in all respects and as directed by the Engineer.	Sft.	7,360		
SECTION - E STEEL WORKS Ref Specs: 3000, 6700					
B-C- 8	Providing & Fixing M.S Solid Square bars Boundary wall fencing (1"x1" ,3/4"x3/4' & 1/2" x1/2") M.S Solid square bars including Welding, Painting & Installation on Site, complete in all respects as shown drawing or as approved by The Engineer.	Rft	1,015		
B-C- 9	Provide, Fabricate & Install of Main Entrance Gate, Comprising of M.S Square Box Section Frame of 4"x4"x12SWG Size & 1-1/2"x4"x14SWG MS Box Section Including Including Hold Fast, Ear Lock, Cutting, Jointing, Bending , Welding with Red Oxide Primer & Enamel Painting etc, As shown on Drawings or as Directed by the Engineer, Complete in all Respects.	Sft	570		

AVIATION COMPLEX AT BLUE AREA, ISLAMABAD

BILL NO. 1.C: CIVIL WORKS (FINISHES WORKS)

BILL OF QUANTITIES

Item No.	Item Description	Unit	Qty	Unit Rate (Rs.)	Total Amount (Rs.)
(i)	(ii)	(iii)	(iv)	(v)	(vi)
Total Amount (Rs.)					



AVIATION COMPLEX AT BLUE AREA, ISLAMABAD

BIL NO. 2.A: PLUMBING WORKS

BILL OF QUANTITIES

Item No.	Item Description	Unit	Qty	Unit Rate (Rs.)	Total Amount (Rs.)
(i)	(ii)	(iii)	(iv)	(v)	(vi)

GENERAL NOTE

Supply, installation, testing and commissioning of the following items of work, including all labour, tools, plant, accessories, etc. required for completion of each item as per drawings, specifications and as approved by the Engineer.

A. SANITARY FIXTURES AND FITTINGS

(Ref. Specs 5100)

BP-01	Wall hung water closet vitreous china including hydraulic seat & cover with concealed flushing cistern, water saving dual flush button plate, concealed drain bend and all other accessories, etc. complete in all respects, imported of approved make, model & size fixed to concrete, brick or stone work. (for executive toilets)	Each	34
BP-02	European water closet with flushing cistern water saving dual flush type (one piece set), vitreous china, including hydraulic seat & cover, CP tee stop cock, flexible connection etc. complete in all respects, of approved make, model & size fixed to concrete, brick or stone work.	Each	238
BP-03	European water closet with flushing cistern water saving dual flush type (one piece set), vitreous china, including hydraulic seat & cover, CP tee stop cock, flexible connection etc. complete in all respects, of approved make, model & size fixed to concrete, brick or stone work. (for Handicapped Toilet)	Each	51
BP-04	Water closet Asiatic pattern, vitreous china, with integral foot rest, including uPVC P-trap, flushing cistern, CP tee stop cock, flexible connection, flush pipe etc. complete in all respects, of approved make, model & size fixed to concrete, brick or stone work.	Each	154
BP-05	Vanity type wash hand basin (undercounter), vitreous china, including CP lever type hot & cold water mixer, CP 1.25" waste, CP bottle trap with union 1.25", CP Tee stop cocks, flexible connections, jointing and sealing material, etc. complete in all respects, of approved make, model & size fixed to concrete, brick or stone work.	Each	349

Item No.	Item Description	Unit	Qty	Unit Rate (Rs.)	Total Amount (Rs.)
(i)	(ii)	(iii)	(iv)	(v)	(vi)
BP-06	Vanity type wash hand basin (undercounter), vitreous china, including CP sensor type hot & cold water mixer, CP 1.25" waste, CP bottle trap with union 1.25", CP Tee stop cocks, flexible connections, jointing and sealing material, etc.complete in all respects, imported of approved make, model & size fixed to concrete, brick or stone work. (for executive toilets)	Each	42		
BP-07	Wash hand basin with half pedestal, vitreous china, including CP lever type hot & cold water mixer, CP 1.25" waste, CP bottle trap with union 1.25", CP Tee stop cocks, flexible connections, jointing and sealing material, etc.complete in all respects, of approved make, model & size fixed to concrete, brick or stone work. (for Handicapped Toilet)	Each	51		
BP-08	Providing and fixing CP Lever type Bath shower of open wall installation style of approved make jointing and sealing material, fixed to concrete, brick, stone or wood work complete in all respects.	Each	1		
BP-09	Providing and fixing CP Lever type Bath shower of open wall installation style imported of approved make jointing and sealing material, fixed to concrete, brick, stone or wood work complete in all respects. (for executive toilets)	Each	14		
BP-10	Stainless Steel Kitchen sink single bowl including swan neck CP sink mixer, CP waste 1-1/2" dia., heavy duty MS painted brackets etc., of approved make, model & size complete in all respects fixed to concrete, brick or stone work.	Each	51		
BP-11	CP Muslim shower combined with double bib cock including all fittings.	Each.	431		
BP-12	CP Muslim shower combined with double bib cock imported of approved make including all fittings. (for executive toilets)	Each.	46		
BP-13	Providing and fixing CP Ablution Mixer of approved make jointing and sealing material, fixed to concrete, brick, stone or wood work complete in all respects.	Each.	24		
BP-14	Grab Bars set (02 folding) with WC, of non slip finish for handicapped toilet of approved make, size & shap with all fittings for complete installation.	Each.	51		
BP-15	Grab Bars set (02No.fixed) with wash hand basin, of non slip finish for handicapped toilet of approved make, size & shap with all fittings for complete installation.	Each.	51		
BP-16	CP Bib cock including all fittings for complete installation.	Each.	208		
BP-17	CP Bib cock with locking arrangement including all fittings for complete installation.	Each.	10		

Item No.	Item Description	Unit	Qty	Unit Rate (Rs.)	Total Amount (Rs.)
(i)	(ii)	(iii)	(iv)	(v)	(vi)
BP-18	Providing and fixing 05 piece CP Bath Accessories set comprising CP toilet paper holder, CP Soap dish, CP towel rail, CP towel ring and CP robe hook with brackets, fixing plugs and screws etc. imported of approved make fixed to concrete, brick, stone or wood work, complete in all respects. (for executive toilets)	Each	14		
BP-19	Providing and fixing glass cosmetic shelf with brackets, fixing plugs and screws etc. of approved make fixed to concrete, brick, stone or wood work, complete in all respects.	Each	51		
BP-20	Providing and fixing CP Towel Rail 600mm long, with fixing plugs and screws etc. of approved make fixed to concrete, brick, stone or wood work, complete in all respects.	Each	167		
BP-21	CP Toilet paper holder of any shape, pattern and size, of approved make, complete with plugs, screws etc., fixed to concrete, brick, stone or wood work, complete in all respects.	Each	232		
BP-22	CP Soap Dispenser of any shape, pattern and size having capacity of 0.5Liter, of approved make, complete with plugs, screws etc., fixed to concrete, brick, stone or wood work, complete in all respects.	Each	277		
BP-23	CP Soap Dish of any shape, pattern and size, of approved make, complete with plugs, screws etc., fixed to concrete, brick, stone or wood work, complete in all respects .	Each	436		
BP-24	Small hook complete of any size and shape, of approved make, with plugs and screws, fixed to concrete, brick stone or wood work, complete in all respects.	Each	477		
BP-25	05mm thick Glass mirror Belgium make or approved equivalent including hard board behind it, approved bedding around it and all other fittings for complete installation	Sft	4,200		
BP-26	Electric water heater of 30liters capacity, including tee stop cocks on inlet/outlet connections and all other accessories for complete installation.	Each.	1		
BP-27	Electric Hand Dryer (automatic) with easy to mount kit of approved make & model and all required accessories complete.	Each.	111		
BP-28	Electric water coolers of 40Gallons capacity, minimum two taps, including Tee stop cock on inlet, and all other accessories for complete installation.	Each.	102		
BP-29	Triple water filter (10") including inlet and outlet connections, power supply, and all accessories for complete installation	Each.	1		

Item No.	Item Description	Unit	Qty	Unit Rate (Rs.)	Total Amount (Rs.)
(i)	(ii)	(iii)	(iv)	(v)	(vi)

B. WATER SUPPLY PIPES AND FITTINGS

(Ref. Specs 5100, 5220)

G.I. water pipes conforming to BS-1387, Medium Grade, l/c all fittings, wrapping polythene tape, giving anticorrosion treatment, 25mm thick glass wool thermal insulation, aluminium vapour barrier, 28swg GI cladding, applying protective painting, clamps, hangers & supports, making holes in concrete or masonry and then repairing holes, flushing, disinfecting, testing and commissioning etc. of approved make, of the following diameters complete in all respects.

BP-30	(a) 3/4 inch	Rft	10
BP-31	(b) 1 inches	Rft	315
BP-32	(c) 1-1/4 inches	Rft	340
BP-33	(d) 1-1/2 inches	Rft	10
BP-34	(e) 2 inches	Rft	580
BP-35	(f) 2-1/2 inches	Rft	105
BP-36	(g) 3 inches	Rft	35
BP-37	(h) 4 inches	Rft	270
BP-38	(i) 6 inches	Rft	10

G.I. water pipes conforming to BS-1387, Medium Grade, l/c all fittings, wrapping polythene tape, giving anticorrosion treatment, applying protective painting, clamps, hangers & supports, making holes in concrete or masonry and then repairing holes, flushing, disinfecting, testing and commissioning etc. of approved make, of the following diameters, complete in all respects.

BP-39	(a) 3/4 inch	Rft	10
BP-40	(b) 1 inches	Rft	15
BP-41	(c) 1-1/4 inches	Rft	175
BP-42	(d) 1-1/2 inches	Rft	80
BP-43	(e) 2 inches	Rft	15
BP-44	(f) 2-1/2 inches	Rft	10
BP-45	(g) 3 inches	Rft	190
BP-46	(h) 4 inches	Rft	1,260
BP-47	(i) 6 inches	Rft	25

Item No.	Item Description	Unit	Qty	Unit Rate (Rs.)	Total Amount (Rs.)
(i)	(ii)	(iii)	(iv)	(v)	(vi)
	PPR water pipes PN-20 (for Drinking water supply), inside building (un-exposed to sunlight conditions) conforming to DIN 8077-78, I/c all fittings (PN-25), clamps, hangers & supports, cutting, jointing, making holes in concrete or masonry and then repairing holes, supports and hangers etc. of approved make of the following diameters.				
BP-48	(a) 25mm	Rft	4,770		
BP-49	(b) 32mm	Rft	180		
BP-50	(c) 40mm	Rft	515		
BP-51	(d) 50mm	Rft	10		
	PPR water pipes PN-20 (for Drinking water supply), inside building (on roof) conforming to DIN 8077-78, I/c all fittings (PN-25), with 25mm thick glass wool thermal insulation, aluminium vapour barrier, 28swg GI cladding, clamps, hangers & supports, cutting, jointing, making holes in concrete or masonry and then repairing holes, supports and hangers etc. of approved make of the following diameters.				
BP-52	(a) 40mm	Rft	10		
BP-53	(b) 50mm	Rft	335		
	PPR water pipes PN-20 (for cold water supply), inside building (un-exposed to sunlight conditions) conforming to DIN 8077-78, I/c all fittings (PN-25), clamps, hangers & supports, cutting, jointing, making holes in concrete or masonry and then repairing holes, supports and hangers etc. of approved make of the following diameters.				
BP-54	(a) 25mm	Rft	15,500		
BP-55	(b) 32mm	Rft	7,410		
BP-56	(c) 40mm	Rft	4,555		
BP-57	(d) 50mm	Rft	2,565		
BP-58	(e) 63mm	Rft	1,240		
BP-59	(f) 75mm	Rft	180		
BP-60	(g) 90mm	Rft	120		
BP-61	(h) 110mm	Rft	355		

Item No.	Item Description	Unit	Qty	Unit Rate (Rs.)	Total Amount (Rs.)
(i)	(ii)	(iii)	(iv)	(v)	(vi)

PPR water pipes PN-20 (for hot water and hot water return), inside building (un-exposed to sunlight conditions) conforming to DIN 8077-78, l/c all fittings (PN-25), 25mm thick glass wool thermal insulation, aluminium vapour barrier, clamps, hangers & supports, cutting, jointing, making holes in concrete or masonry and then repairing holes, supports and hangers etc. of approved make of the following diameters.

BP-62	(a) 20mm	Rft	3,800
BP-63	(b) 25mm	Rft	7,500
BP-64	(c) 32mm	Rft	2,155
BP-65	(d) 40mm	Rft	2,540
BP-66	(e) 50mm	Rft	2,260
BP-67	(f) 63mm	Rft	120
BP-68	(g) 75mm	Rft	415
BP-69	(h) 90mm	Rft	10

G.I. pipes with specials and clamps etc, conforming to ASTM A-106 A53 Sch: 40, Grade-B including fittings & specials, fixing, cutting, welding, fixing & support systems; and other fittings complete with and including the cost of breaking, through walls and slabs, making walls & slabs good thereafter, etc, painting with two coats of approved enamel paint after cleaning the pipe.

BP-70	(a) 1-1/2 inches	Rft	10
BP-71	(b) 2 inches	Rft	10
BP-72	(c) 3 inches	Rft	10
BP-73	(e) 4 inches	Rft	1,430
BP-74	(f) 6 inches	Rft	1,865

Item No.	Item Description	Unit	Qty	Unit Rate (Rs.)	Total Amount (Rs.)
(i)	(ii)	(iii)	(iv)	(v)	(vi)

C. SOIL, WASTE AND VENT PIPES & FITTINGS

(Ref. Specs 5100)

Toilet & Kitchen Drainage

uPVC Soil, Waste and vent pipes conforming to ISO:3633 type "B" or BS-4514/5255 class "A" of the following diameters, including imported rubber ring/solvent cement fittings, jointing, cutting, breaking concrete/masonry and then making it good, core cutting & filling with non shrink grout of approved manufacturer wherever required and applying painting, cleaning and testing etc. complete in all respects.

BP-75	(a) 1-1/2 inches	Rft	5,130
BP-76	(b) 2 inches	Rft	10,260
BP-77	(c) 3 inches	Rft	28,570
BP-78	(d) 4 inches	Rft	18,220
BP-79	(e) 6 inches	Rft	6,395

25mm thick glass wool insulation with aluminium vapour barrier for Sanitary & Storm drainage pipes soundproofing inside the building including taping/wrapping all related works for complete installation, of approved manufacturer of the following pipe diameters:

BP-80	(a) 2 inches	Rft	10
BP-81	(b) 3 inches	Rft	250
BP-82	(c) 4 inches	Rft	250
BP-83	(d) 6 inches	Rft	500

BP-84	uPVC Multi Floor Trap (110x75mm) with CP Push fit Top Tile strainer; supports; making required number of connections; breaking concrete or masonry work & then making it good; etc.	Each	282
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BP-85	3"dia uPVC Floor Trap with CP Push fit Top Tile strainer; supports; making required number of connections; breaking concrete or masonry work & then making it good; etc.	Each	640
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uPVC Cleanout plugs of the following diameter, including access plug, transition pipe, breaking concrete or masonry work & then making it good, etc. complete in all respects.

BP-86	(a) 3 inches	Each	255
BP-87	(b) 4 inches	Each	205
BP-88	(c) 6 inches	Each	15

Item No.	Item Description	Unit	Qty	Unit Rate (Rs.)	Total Amount (Rs.)
(i)	(ii)	(iii)	(iv)	(v)	(vi)
	uPVC floor Cleanout of the following diameter, including screw type Stainless Steel/CP top tile access plug, transition pipe, breaking concrete or masonry work & then making it good, etc. complete in all respects.				
BP-89	(a) 3 inches	Each	1		
BP-90	(b) 4 inches	Each	1		
	Cawal on vent pipes of the following diameter.				
BP-91	(a) 3 inches	Each	1		
BP-92	(b) 4 inches	Each	18		
BP-93	(c) 6 inches	Each	4		
	<u>Basement Drainage</u>				
	uPVC Basement parking drainage pipes conforming to ISO:3633 type "B" or BS-4514/5255 class "A" of the following diameters, including imported rubber ring/solvent cement fittings, jointing, cutting, breaking concrete/masonry and then making it good, core cutting & filling with non shrink grout of approved manufacturer wherever required and applying painting, cleaning and testing etc. complete in all respects.				
BP-94	(a) 3 inches	Rft	10		
BP-95	(b) 4 inches	Rft	960		
BP-96	(c) 6 inches	Rft	8,385		
BP-97	04inches diameter Cast Iron Parking Drain with SS Top strainer of approved size, shape & make; supports; making required number of connections; breaking concrete or masonry work & then making it good; etc.	Each	190		
	uPVC Cleanout plugs of the following diameter, including access plug, transition pipe, breaking concrete or masonry work & then making it good, etc. complete in all respects.				
BP-98	(a) 6 inches	Each	90		
	G.I. pipes with specials and clamps etc, conforming to ASTM A-106 A53 Sch: 40, Grade-B including fittings & specials , fixing, cutting, welding, fixing & support systems; and other fittings complete with and including the cost of breaking, through walls and slabs, making walls & slabs good thereafter, etc, painting with two coats of approved enamel paint after cleaning the pipe.				
BP-99	(a) 2 inches	Rft	10		
BP-100	(b) 3 inches	Rft	2,660		

Item No.	Item Description	Unit	Qty	Unit Rate (Rs.)	Total Amount (Rs.)
(i)	(ii)	(iii)	(iv)	(v)	(vi)

Storm drainage

uPVC storm drainage pipes conforming to ISO:3633 type "B" or BS-4514/5255 class "A" of the following diameters, including imported rubber ring/solvent cement fittings, jointing, cutting, breaking concrete/masonry and then making it good, core cutting & filling with non shrink grout of approved manufacturer wherever required and applying painting, cleaning and testing etc. complete in all respects.

BP-101	(a) 3 inches	Rft	120
BP-102	(b) 4 inches	Rft	140
BP-103	(c) 6 inches	Rft	5,865

Cast Iron roof drain, Angle type, of approved shape & make of following diameters, including Stainless steel/Brass strainer, flushing material, and all accessories for complete installation, as per specifications.

BP-104	(a) 3 inches	Each	1
BP-105	(b) 4 inches	Each	6
BP-106	(c) 6 inches	Each	4

Cast Iron roof drain, Globe type, of approved shape & make of following diameters, including strainer, flushing material, and all accessories for complete installation, as per specifications.

BP-107	(a) 3 inches	Each	10
BP-108	(b) 4 inches	Each	1
BP-109	(c) 6 inches	Each	12

BP-110	Construction of Gully Trap Chamber (12" x12" clear) including supply & fixing of 4" deep seal C.I. gully trap, construction of 4-1/2" thick brick masonry in 1:4 c/s mortar, 3" thick 1:4:8 P.C.C at bottom, 1:3:6 P.C.C around trap, (12" x 12") CI cover with frame (7 Kg), 1/2" thick 1:3 c/s plaster on inner face, etc complete in all respects as shown in drawings or as directed.	Each	8
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BP-111	Stainless Steel SS-304 Grease interceptor of 10gpm capacity with dia 2" inlet & outlet connections, complete unit of approved make, complete in all respects.	Each	1
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D. VALVES AND FITTINGS

(Ref. Specs 5100, 5220)

Item No.	Item Description	Unit	Qty	Unit Rate (Rs.)	Total Amount (Rs.)
(i)	(ii)	(iii)	(iv)	(v)	(vi)

Brass gate valves, PN-16 conforming to BS standards of approved make or equivalent, including unions and jointing arrangement of pipes on both ends of valves; nuts, bolts etc. complete in all respects, of following internal diameters.

BP-112	(a) 1/2 inch	Each	5		
BP-113	(b) 3/4 inch	Each	835		
BP-114	(c) 1 inch	Each	65		
BP-115	(d) 1-1/4 inch	Each	116		
BP-116	(e) 1-1/2 inch	Each	53		
BP-117	(f) 2 inch	Each	6		

Ductile Iron gate valves metal seated for potable water supply pipes conforming to BS-5163 (PN-16) including Adapters, flanges, nuts & bolts, transition pipe pieces with flanges, rubber seal, making required type of joints on both ends complete in all respect as shown on drawings or as directed by the Engineer of following diameters.

BP-118	(a) 2-1/2 inches	Each	4		
BP-119	(b) 03 inches	Each	22		
BP-120	(c) 04 inches	Each	26		
BP-121	(d) 06 inches	Each	10		

Item No.	Item Description	Unit	Qty	Unit Rate (Rs.)	Total Amount (Rs.)
(i)	(ii)	(iii)	(iv)	(v)	(vi)
	Brass swing type check valve, PN-16, conforming to BS standards of approved make or equivalent, including jointing arrangement of pipes on both ends of valves; nuts, bolts etc. complete in all respects, of following internal diameters.				
BP-122	(a) 01 inch	Each	1		
BP-123	(b) 1-1/4 inches	Each	2		
BP-124	(c) 1-1/2 inches	Each	1		
BP-125	(d) 02 inches	Each	1		
	Ductile Iron check valves metal seated for potable water supply pipes conforming to BS-5153 (PN-16) including Adapters, flanges, nuts & bolts, transition pipe pieces with flanges, rubber seal, making required type of joints on both ends complete in all respect as shown on drawings or as directed by the Engineer of following diameters.				
BP-126	(a) 03 inches	Each	10		
BP-127	(b) 04 inches	Each	1		
BP-128	(c) 06 inches	Each	1		
	Ductile Iron Flexible rubber joint (flanged) for potable water supply pipes conforming to BS standards (PN-16) including Adapters, flanges, nuts & bolts, transition pipe pieces with flanges, rubber seal, making required type of joints on both ends complete in all respect as shown on drawings or as directed by the Engineer of following diameters.				
BP-129	(a) 06 inches	Each	3		
	Ductile Iron Y-strainer with drain valve for potable water supply pipes conforming to BS standards (PN-16) including Adapters, flanges, nuts & bolts, transition pipe pieces with flanges, rubber seal, making required type of joints on both ends complete in all respect as shown on drawings or as directed by the Engineer of following diameters.				
BP-130	(a) 06 inches	Each	3		

Item No.	Item Description	Unit	Qty	Unit Rate (Rs.)	Total Amount (Rs.)
(i)	(ii)	(iii)	(iv)	(v)	(vi)
	Pressure reducing valve (PRV) arrangement/ station on water supply line comprising 01No. Brass/bronze pressure reducing valve and 03No. brass/bronze gate valves of PN16 pressure rating including fittings/unions, specials, jointing arrangement of pipes on both ends of valves, etc complete in all respects as per drawing of followings internal diameters:				
BP-131	(a) 3/4 inch	Each	4		
BP-132	(b) 1 inch	Each	6		
BP-133	(c) 1-1/4 inch	Each	32		
BP-134	(d) 1-1/2 inch	Each	32		
BP-135	(e) 2 inch	Each	1		
	Automatic Air relief valves, conforming to BS standards, PN-16, of approved make, including jointing arrangement of pipes on both ends of valves; nuts, bolts etc. complete in all respects..				
BP-136	(a) 3/4 inch	Each	16		
	Providing and Fixing Heavy duty uPVC, ball float valve set including 02number float valves (one working 2nd standby) with flanges and jointing arrangement with pipe; etc. complete in all respects.				
BP-137	(a) 03 inch	Each	4		

E. PLUMBING EQUIPMENT

SPECIAL NOTE

All jobs under this Section-E will include system control unit integration requirements with BMS. This integration shall be done over industry standard BACNet over IP Protocol and respective equipment suppliers are required to provide communication interfaces/cards supporting said Protocol, including providing, installing, testing & commissioning all required equipment/accessories for completion of each item, as per BMS specifications and as approved by the Engineer.

Item No.	Item Description	Unit	Qty	Unit Rate (Rs.)	Total Amount (Rs.)
(i)	(ii)	(iii)	(iv)	(v)	(vi)
PUMPING MACHINERY (Ref. Specs 5240)					
BP-138	Automatically operated skid mounted horizontal centrifugal pump set (in pump room with UGWT) for lifting water from Underground water tank to Service floor water tank for potable water , comprising two (02) number pumps with electric motors (one working second standby), Each of Head=10Bars and discharge=500gpm, including all accessories, level switches to be installed in service floor tank & under ground water tank for automatic operation of pumps at set levels, dry running protection, combined motor control unit with automatic electronic duty cycle relay, check/test return line with flow meter, pressure gauges, Gate valves, check valves, flexible joints, Strainers, etc all of PN-16 pressure rating, manual tools, spare parts etc, complete in all respects as shown in drawings and as directed by the Engineer,	Job	1		
BP-139	Automatically operated skid mounted vertical centrifugal pump set (in service floor pump room) for lifting water from Service floor water tank to Overhead water tank for potable water , comprising two (02) number pumps with electric motors (one working second standby), Each of Head=08Bars and discharge=250gpm, including all accessories, level switches to be installed in service floor tank & under ground water tank for automatic operation of pumps at set levels, dry running protection, combined motor control unit with automatic electronic duty cycle relay, check/test return line with flow meter, pressure gauges, Gate valves, check valves, flexible joints, Strainers, etc all of PN-16 pressure rating, manual tools, spare parts etc, complete in all respects as shown in drawings and as directed by the Engineer,	Job	1		
BP-140	Automatically operated skid mounted vertical centrifugal pump set (in service floor pump room) for lifting water from Service floor water tank to Overhead water tank for HVAC water , comprising two (02) number pumps with electric motors (one working second standby), Each of Head=08Bars and discharge=250gpm, including all accessories, level switches to be installed in service floor tank & under ground water tank for automatic operation of pumps at set levels, dry running protection, combined motor control unit with automatic electronic duty cycle relay, check/test return line with flow meter, pressure gauges, Gate valves, check valves, flexible joints, Strainers, etc all of PN-16 pressure rating, manual tools, spare parts etc, complete in all respects as shown in drawings and as directed by the Engineer,	Job	1		

Item No.	Item Description	Unit	Qty	Unit Rate (Rs.)	Total Amount (Rs.)
(i)	(ii)	(iii)	(iv)	(v)	(vi)
BP-141	Automatically operated submersible drainage pump set to be installed in Basement-06 Sump pits , comprising 02No. pumps both working (lead & Lag) (minimum particle passage : 50mm) including all accessories, duct foot bend, guide rail ,pulling chain, Combined Motor Control panel, level switches, automatic electronic duty cycle relay manual tools spare parts, complete in all respects as per drawings and specs of approved make, Each pump of the following capacity and pumping head. Capacity = 100 gpm Head =3.5Bars	Job	4		
BP-142	Automatically operated submersible drainage pump to be installed in Basement-06 Lift pits , comprising 01No. pump with motor (minimum particle passage : 25mm) including all accessories, Motor Control panel, level switches, manual tools spare parts, complete in all respects as per drawings and specs of approved make, Each pump of the following capacity and pumping head. Capacity = 20 gpm Head =01 Bar	Job	8		
BP-143	Skid mounted, automatically operated fully integrated self priming Pressure Booster pump set for potable water supply comprising 04 pumps (03 working & 01 standby) with electric motors and integrated parts (intelligent controller, speed-controlled drive (VFD), integrated pressure tank, sensors, gate valves, non return valves, strainer etc) including all accessories, Motor control unit, Pressure switches, pressure guages, manual, tools, spare parts etc, Ech pump of the following Capacity and Pumping head. Capacity = 100 US gpm Head =02-03 Bars	Job	2		
BP-144	Hot water In-Line recirculation pump set comprising 02 pumps (01 working, 01 standby) with electric motor, including temperature sensor to automatically start & stop the pump to maintain desired temperature level, stainless stell impeller and shaft, gate valves, check valve and all other accessories for complete installation, manual, tools, spare parts etc.each pump of the following tentative Capacity and Pumping head. Capacity = 30 US gpm Head = 01 Bar	Job	2		

Item No.	Item Description	Unit	Qty	Unit Rate (Rs.)	Total Amount (Rs.)
(i)	(ii)	(iii)	(iv)	(v)	(vi)

DRINKING WATER FILTERATION PLANT

- BP-145 Skid mounted Reverse Osmosis (RO) 3000 US Gallons Per Day Water Desalination / Reverse Osmosis System/plant complete for Drinking water supply, including treated water storage tanks 02No. each of 500gallons capacity, pressure pump with pressure tank and pressure sensors for auto operation, gate & check valves, inlet outlet connections, and all other accessories (all imported) complete unit for installation, of approved make.

Major components:

- Pressure booster feed pump set
- Silica sand filter
- Activated carbon filter
- Jumbo cartridge filters 05 micron
- Anti scalant dosing
- RO unit
- Treated water storage tank
- Booster Supply pump set
- Granular Activated Carbon Filter
- Jumbo cartridge filters 01 micron
- UV Sterilizer tubes.
- pressure pipes and guages.

Each 1

WATER SOFTNER PLANT

- BP-146 Automatically operated Water Softener unit with backwashing and regeneration operations for potable water, to be installed on cold water supply line to hot water boiler; including sand filter, softener, control panel, multiport valve, gate & check valves, level switches, pressure guages, strainer, inlet & outlet connections, and all other accessories & equipment for complete installation as per water quality to be treated, uPVC pipes and fittings, installation, testing and commissioning, complete in all respects; of following capacity.

Capacity = 50 USgpm

Each 2

HOT WATER SUPPLY BOILERS

Lower Zone (basements to Service floor)

- BP-147 Supply, installation, testing and commissioning of Hot Water Boiler plant to deliver hot water from 40°F to 140°F to plumbing system; comprising of the following components complete in all respects:

Job 1

- (a) Dual Fuel Burner (Gas and Diesel) Hot Water Boiler, boiler unit shall have **tentative output capacity of 425KW** with minimum working pressure of 03 bar, minimum efficiency 90%. The boiler shall be imported of European origin and constructed to CE Certified to the PED (Pressure Equipment Directive). The burner safety and operating controls shall incorporate the following:

1. Boiler on/off Switch

Item No.	Item Description	Unit	Qty	Unit Rate (Rs.)	Total Amount (Rs.)
(i)	(ii)	(iii)	(iv)	(v)	(vi)
	2. Power ON indication light 3. Burner Control Programmer 4. Regulation thermostat 5. Safety Hi-limit thermostat 6. Water thermometer 0-120°C 7. Gas burner complete with gas train & control box 8. Electronic ignition controller 9. Ignition electrode 10. Ignition transformer 11. Gas Pressure switch 12. Working regulation gas valve 13. Safety gas valve The burner, ancillary equipment and controls shall all be assembled at the factory. The boiler control panel incorporating the electrical safety and operating controls shall be pre-wired and fully tested. (b) Two (02) Hot water storage calorifiers, each of 2500 liters capacity (Total capacity 5000 liters), constructed with high quality steel, built-in coil heat exchanger, working pressure minimum 10Bars, working temperature upto 95°C, High quality enamel coated from inside in accordance with DIN 4753-3, 18kg/m³ soft PU/Sponge foam insulation, Artificial Leather outer coating, , Auto air vent, Pressure gauge, Tank water thermometer bi-metal type, Valve drain at bottom of tank, In/Out/re-circulation connection sockets, Magnesium Anode protection, maximum legionella protection. Tank shall conform to TS 736 and TS EN 13445-3 standards or equivalent. (c) Diaphragm type expansion tank capacity 200-300 liters each, temperature range from -10°C to +100°C, design pressure 10 bars, food graded odourless EPDM membrane, air charging/relief valve. (d) Inline hot water circulation pump between storage tanks/calorifiers and hot water boilers, with VFD control and LCD display for water circulation from Boiler to Storage tank/calorifier coil with three operation modes i) Constant pressure operating mode ii) Variable pressure operating mode iii) Manual operating mode (e) Automatic control panel for temperature control and safety of system; comprising circuit breakers, overload relays, phase sequence relays, phase failures, temperature control and low water cut-off devices (f) Oil/Diesel tank of capacity 2000 liters, with level and allied connections, vent and overflow, made of high quality steel. (g) Skid, interconnection pipe work with insulation & cladding, fittings, pressure relief valve, pressure switches with all necessary gauges, valves and safety devices etc.; complete in all respects.				

Item No.	Item Description	Unit	Qty	Unit Rate (Rs.)	Total Amount (Rs.)
(i)	(ii)	(iii)	(iv)	(v)	(vi)

Upper Zone (Service floor to 26th floor)

BP-148 Supply, installation, testing and commissioning of Hot Water Boiler plant to deliver hot water from 40°F to 140°F to plumbing system; comprising of the following components complete in all respects:

Job 1

- (a) Dual Fuel Burner (Gas and Diesel) Hot Water Boiler, boiler unit shall have **tentative output capacity of 250KW** with minimum working pressure of 03 bar, minimum efficiency 90%. The boiler shall be imported of European origin and constructed to CE Certified to the PED (Pressure Equipment Directive). The burner safety and operating controls shall incorporate the following:

1. Boiler on/off Switch
2. Power ON indication light
3. Burner Control Programmer
4. Regulation thermostat
5. Safety Hi-limit thermostat
6. Water thermometer 0-120°C
7. Gas burner complete with gas train & control box
8. Electronic ignition controller
9. Ignition electrode
10. Ignition transformer
11. Gas Pressure switch
12. Working regulation gas valve
13. Safety gas valve

The burner, ancillary equipment and controls shall all be assembled at the factory. The boiler control panel incorporating the electrical safety and operating controls shall be pre-wired and fully tested.

- (b) Two (02) Hot water storage calorifiers, each of 2000 liters capacity (Total capacity 4000 liters), constructed with high quality steel, built-in coil heat exchanger, working pressure minimum 10Bars, working temperature upto 95°C, High quality enamel coated from inside in accordance with DIN 4753-3, 18kg/m³ soft PU/Sponge foam insulation, Artificial Leather outer coating, , Auto air vent, Pressure gauge, Tank water thermometer bi-metal type, Valve drain at bottom of tank, In/Out/re-circulation connection sockets, Magnesium Anode protection, maximum legionella protection. Tank shall conform to TS 736 and TS EN 13445-3 standards or equivalent.

- (c) Diaphragm type expansion tank capacity 200-300 liters each, temperature range from -10°C to +100°C, design pressure 10 bars, food graded odourless EPDM membrane, air charging/relief valve.

Item No.	Item Description	Unit	Qty	Unit Rate (Rs.)	Total Amount (Rs.)
(i)	(ii)	(iii)	(iv)	(v)	(vi)
	(d) Inline hot water circulation pump between storage tanks/calorifiers and hot water boilers, with VFD control and LCD display for water circulation from Boiler to Storage tank/calorifier coil with three operation modes i) Constant pressure operating mode ii) Variable pressure operating mode iii) Manual operating mode				
	(e) Automatic control panel for temperature control and safety of system; comprising circuit breakers, overload relays, phase sequence relays, phase failures, temperature control and low water cut-off devices				
	(f) Oil/Diesel tank of capacity 2000 liters, with level and allied connections, vent and overflow, made of high quality steel.				
	(g) Skid, interconnection pipe work with insulation & cladding, fittings, pressure relief valve, pressure switches with all necessary gauges, valves and safety devices etc.; complete in all respects.				
	F. MISCELLANEOUS ITEMS (Ref. Specs 5100, 5230)				
BP-149	Dia 2" u-turned G.I. vent pipes, puddle plate, with insect proof mesh at open end etc., complete in all respects.	Job	10		
BP-150	Dia 4" u-turned G.I. vent pipes, puddle plate, with insect proof mesh at open end etc., complete in all respects.	Job	14		
BP-151	3/4" diameter Galvanised MS ladder rungs for underground and overhead water tanks; each rung of 18" width, 6" projected outside the wall and 6" embedded in RCC on both ends; including all necessary works for complete installation.	Each	220		
	Heavy duty MS grating cover & frame on drain in 36inches openable panels as per drawings including coats of Red oxide/ enamel paint, including all fittings for complete installation.				
BP-152	(a) 12" wide	Rft	948		
BP-153	(b) 18" wide	Rft	300		
BP-154	(c) 24" wide	Rft	5		
	Cast Iron manhole cover & frame conforming to BS-497 including coats of Red oxide/ enamel paint, including all fittings for complete installation.				
BP-155	(a) 24" x 24" (70kg $\pm 5\%$)	Each	12		
BP-156	(b) 36" x 36" (150kg $\pm 5\%$)	Each	10		

Item No.	Item Description	Unit	Qty	Unit Rate (Rs.)	Total Amount (Rs.)
(i)	(ii)	(iii)	(iv)	(v)	(vi)
BP-157	(c) 36" x 36" (250kg $\pm$ 5%)	Each	8		
	Cast Iron grating cover & frame conforming to BS-497 including coats of Red oxide/ enamel paint, including all fittings for complete installation.				
BP-158	(a) 24" x 24" (70kg $\pm$ 5%)	Each	10		
G. EXTERNAL WORKS					
(Ref. Specs 5100, 5216, 5220, 5230)					
G.I. water pipes conforming to BS-1387/BS EN- 10255, Medium Grade, l/c all fittings, wrapping polythene tape, giving anticorrosion treatment, applying protective painting, clamps, hangers & supports where required, making holes in concrete or masonry and then repairing holes, flushing, disinfecting, testing and commissioning etc. of approved make, of the following diameters, complete in all respects.					
BP-159	(a) 03 inches	Rft	200		
BP-160	(b) 04 inches	Rft	100		
uPVC non-pressure pipes for sanitary & storm drainage conforming to BS-5481/BS-4660 (SN8) with rubber ring fittings and specials compatible with pipe material as per manufacturer's recommendations, complete in all respects, flushing cleaning and disinfecting as per specifications and as directed by the Engineer of following diameters.					
BP-161	(a) 08 inches	Rft	50		
BP-162	(b) 10 inches	Rft	790		
BP-163	(c) 12 inches	Rft	210		
BP-164	(d) 18 inches	Rft	840		

Total Amount Rs.

AVIATION COMPLEX At BLUE AREA, ISLAMABAD

BILL NO. 2.B: FIREFIGHTING SYSTEM

BILL OF QUANTITIES

ITEM NO.	DESCRIPTION	UNIT	QTY	UNIT RATE (Rs.)	TOTAL AMOUNT (Rs.)
(a)	(b)	(c)	(d)	(e)	(f)

GENERAL NOTE

Supply, installation, testing and commissioning of the following items of work, including all labour, tools, plant, accessories, etc. required for completion of each item as per drawings, specifications and as approved by the Engineer.

FIREFIGHTING

(Ref. Specs 5150)

MS seamless pipes with specials and clamps etc. conforming to ASTM A-106 / A-53 Sch-40 Grade-B, including malleable iron threaded fittings, FM approved/UL listed, Class-150 for pipes upto 02 inches diameter and welded fittings for above 02 inches diameter pipes, fixing, cutting, welding, fixing & support, seismic supports & bracing systems; and other fittings complete with and including the cost of breaking through walls and slabs, making walls & slabs good thereafter, etc, painting with two coats of approved enamel paint after cleaning the pipe.

FF-01	(a) 1 inches	Rft	63,700		
FF-02	(b) 1.25 inches	Rft	17,400		
FF-03	(c) 1.5 inches	Rft	19,600		
FF-04	(d) 2 inches	Rft	13,700		
FF-05	(e) 2.5 inches	Rft	10,800		
FF-06	(f) 3 inches	Rft	5,600		
FF-07	(g) 4 inches	Rft	9,800		
FF-08	(h) 6 inches	Rft	17,500		
FF-09	(j) 8 inches	Rft	1,500		
FF-10	Steel fire hose cabinet, double compartment, recessed mounted, comprising FM approved/UL listed accessories, including fire hose reel, 1"diax100feet long fire hose, automatic operation, swinging type with pressure gauge and pressure reducing valve, 1" hydrant valve, adjustable type hose nozzle (multispray) in upper compartment; and 2.5 inches pressure restricting landing valve, 2.5"diax100feet long fire hose with spray nozzle and couplings in lower compartment; with all accessories for complete installation.	Each	150		

BILL NO. 2.B: FIREFIGHTING SYSTEM

BILL OF QUANTITIES

ITEM NO.	DESCRIPTION	UNIT	QTY	UNIT RATE (Rs.)	TOTAL AMOUNT (Rs.)
(a)	(b)	(c)	(d)	(e)	(f)
FF-11	Steel fire hose cabinet, double compartment, recessed mounted, comprising FM approved/UL listed accessories, including fire hose reel, 1"diax100feet long fire hose, automatic operation, swinging type with pressure gauge and pressure reducing valve, 1" hydrant valve, adjustable type hose nozzle (multispray) in upper compartment; and fire extinguisher to be placed in lower compartment; with all accessories for complete installation.	Each	1		
FF-12	Single Compartment Steel Fire Extinguisher Cabinet, to accommodate two fire extinguishers with all accessories for complete installation.	Each	24		
	Fire Extinguisher, Certified, of following types.				
FF-13 (a)	Dry Chemical Powder (DCP) Fire Extinguisher 6Kg Capacity.	Each	280		
FF-14 (b)	CO ₂ Type Fire Extinguisher 05kg Capacity.	Each	262		
FF-15 (c)	Foam Type Fire Extinguisher 09 litres Capacity.	Each	4		
FF-16 (d)	Wet Chemical Fire extinguisher 06 litres Capacity.	Each	8		
	Ceiling Hung Automatic Fire extinguisher, Certified, of following types.				
FF-17 (a)	DCP type ceiling hung automatic fire extinguisher 15Kg Capacity	Each	330		
	Trolley type Fire extinguisher, Certified, of following types.				
FF-18 (a)	DCP Trolley Type Fire Extinguisher of 50kg Capacity	Each	17		
FF-19 (b)	Foam Trolley Type Fire Extinguisher of 50 Liter Capacity	Each	17		
FF-20 (c)	CO ₂ Trolley Type Fire Extinguisher of 25kg Capacity	Each	2		
FF-21	Certified, 04 ways breeching inlet with Stainless steel cabinet for fire pumper connection of minimum 20Bars test pressure with integral check valve & drain valve with all accessories for complete installation.	Each	2		
FF-22	Certified, 02 ways breeching inlet with Stainless steel cabinet for fire pumper connection of minimum 20Bars test pressure with integral check valve & drain valve with all accessories for complete installation.	Each	1		

BILL NO. 2.B: FIREFIGHTING SYSTEM

BILL OF QUANTITIES

ITEM NO.	DESCRIPTION	UNIT	QTY	UNIT RATE (Rs.)	TOTAL AMOUNT (Rs.)
(a)	(b)	(c)	(d)	(e)	(f)
FF-23	Wet Fire pillar Hydrant of dia 06" barrel with 02 outlets of dia 2.5" with pressure regulating/ restricting type control valves with outlet pressure setting at 07bars & female 2.5" instantaneous coupling; including stand pipe, Adapter, transition pipe pieces with flanges, nuts & bolts, making required type of joints; complete in all respects.	Each	6		
FF-24	Fire hydrant cabinet, floor mounted, including 02 Nos. 2-1/2" dia x 100 feet long fire hoses with 02 Nos. spray nozzles with all accessories for complete installation.	Each	6		
FF-25	FM Approved /UL Listed Alarm Check valve assembly 06inches diameter including alarm check valve, retard chamber, alarm, pressure switch and all other installation accessories, complete in all respects. NOTE: This item will include integration requirements with BMS. This integration shall be done over industry standard BACNet over IP Protocol and respective equipment suppliers are required to provide communication interfaces/cards supporting said Protocol, including providing, installing, testing & commissioning all required equipment/accessories for completion of each item, as per BMS specifications and as approved by the Engineer.	Job	2		
FF-26	FM approved/UL listed, Floor Control Valve Assembly (FCVA), Class 300, on dia 04 inches fire main for sprinkler network including Butterfly valve with supervisory switch, check valve, Pressure reducing valve, flow sensors switch, 01" inspector Test & drain valve with sight glass, 02No.pressure gauges, drain valve etc complete in all respect. NOTE: This item will include integration requirements with BMS. This integration shall be done over industry standard BACNet over IP Protocol and respective equipment suppliers are required to provide communication interfaces/cards supporting said Protocol, including providing, installing, testing & commissioning all required equipment/accessories for completion of each item, as per BMS specifications and as approved by the Engineer.	Each	52		

BILL NO. 2.B: FIREFIGHTING SYSTEM

BILL OF QUANTITIES

ITEM NO.	DESCRIPTION	UNIT	QTY	UNIT RATE (Rs.)	TOTAL AMOUNT (Rs.)
(a)	(b)	(c)	(d)	(e)	(f)
FF-27	FM approved/UL listed, Floor Control Valve Assembly (FCVA), Class 300, on dia 06 inches fire main for sprinkler network including Butterfly valve with supervisory switch, check valve, Pressure reducing valve, flow sensors switch, 01" inspector Test & drain valve with sight glass, 02No.pressure gauges, drain valve etc complete in all respect. NOTE: This item will include integration requirements with BMS. This integration shall be done over industry standard BACNet over IP Protocol and respective equipment suppliers are required to provide communication interfaces/cards supporting said Protocol, including providing, installing, testing & commissioning all required equipment/accessories for completion of each item, as per BMS specifications and as approved by the Engineer. FM Approved/ UL listed fire Sprinklers and accessories of following types.	Each	24		
FF-28 (a)	FM Approved/ UL listed Concealed Pendent fire Sprinkler, Standard response, 5.6 K factor, Ordinary temperature range (68°C)	Each	5,720		
FF-29 (b)	FM Approved/ UL listed Recessed Pendent fire Sprinkler with Escutcheon plate, Standard response, 5.6 K factor, Ordinary temperature range (68°C)	Each	150		
FF-30 (c)	FM Approved/ UL listed Pendent fire Sprinkler, Standard response, 5.6 K factor, Ordinary tempersture range (68°C)	Each	20		
FF-31 (d)	FM Approved/ UL listed Upright fire Sprinkler, Standard response, 5.6 K factor, Ordinary temperature range (68°C)	Each	4,470		
FF-32 (e)	FM Approved/ UL listed Sidewall fire Sprinkler with Escutcheon plate, Standard response, 5.6 K factor, Ordinary temperature range (68°C)	Each	280		
FF-33 (f)	FM Approved/ UL listed Upright fire Sprinkler, Standard response, 5.6 K factor, Intermediate temperature range	Each	10		
FF-34 (g)	FM approved/UL listed stainless steel flexible sprinkler hose/drop, braided type, of required outlet size and length.	Each	5,820		
FF-35 (h)	Sprinkler Guard for pendent, upright and side wall sprinkler	Each	270		

BILL NO. 2.B: FIREFIGHTING SYSTEM

BILL OF QUANTITIES

ITEM NO.	DESCRIPTION	UNIT	QTY	UNIT RATE (Rs.)	TOTAL AMOUNT (Rs.)
(a)	(b)	(c)	(d)	(e)	(f)
	FM approved/UL listed, Ductile Iron gate valves, class 300, including Adapters, flanges, nuts & bolts, transition pipe pieces with flanges, rubber seal, making required type of joints on both ends complete in all respect; of following diameters.				
FF-36 (a)	Dia 8 inches	Each	6		
FF-37 (b)	Dia 6 inches	Each	24		
FF-38 (c)	Dia 4 inches	Each	2		
	FM approved/UL listed, Ductile Iron check valves, class 300, including Adapters, flanges, nuts & bolts, transition pipe pieces with flanges, rubber seal, making required type of joints on both ends complete in all respect; of following diameters.				
FF-39 (b)	Dia 6 inches	Each	6		
	FM Approved / UL listed Pressure reducing arrangement, class 300; comprising pressure reducing valve (PRV), 03 nos. gate valves, 02 nos. pressure gauge, including Adapters, flanges, nuts & bolts, transition pipe pieces with flanges, rubber seal, making required type of joints on both ends complete in all respect; of following diameters.				
FF-40 (a)	Dia 8 inches	Each	2		
FF-41 (b)	Dia 6 inches	Each	44		
FF-42 (c)	Dia 4 inches	Each	22		
FF-43	FM approved/UL listed 01 inch diameter Inspectors test and drain valve with sight glass, on sprinkler main line, including jointing arrangement, complete installation in all respect.	Each	76		
FF-44	FM approved/UL listed, dia 1" air release valve on fire risers with isolation valve, including Adapters, flanges, nuts & bolts, transition pipe pieces with flanges, rubber seal, making required type of joints with pipe complete in all respect.	Job	12		
FF-45	Sprinkler Cabinet for placing stock of 24 nos. spare sprinklers along with appropriate size wrench and tools	Job	2		

PUMPING MACHINERY**SPECIAL NOTE**

BILL NO. 2.B: FIREFIGHTING SYSTEM

BILL OF QUANTITIES

ITEM NO.	DESCRIPTION	UNIT	QTY	UNIT RATE (Rs.)	TOTAL AMOUNT (Rs.)
(a)	(b)	(c)	(d)	(e)	(f)

All jobs under this section will include system control unit integration requirements with BMS. This integration shall be done over industry standard BACNet over IP Protocol and respective equipment suppliers are required to provide communication interfaces/cards supporting said Protocol, including providing, installing, testing & commissioning all required equipment/accessories for completion of each item, as per BMS specifications and as approved by the Engineer.

FF-46 FM Approved/UL Listed, Firefighting pumping unit consisting 01 No. Main Split Case Electric Driven Fire Pump of Q=1000 USgpm & H=13Bars, 01 No. Main Split case Diesel Engine Driven Fire Pump of Q=1000 USgpm & H=13Bars, 01 No. Jockey Vertical Centrifugal Pump of Q=25 USgpm & H=13 Bars with electric motor, including motor control units, diesel day tank of capacity as per NFPA requirements, pressure tank, gate valves, check valves, return line with automatic recirculation valve/pressure relief valve, check line with flow meter and 02 gate valves, pressure switches, pressure gauges, flexible joints, strainers, anti vortex plate at suction ends, exhaust flue upto ground level from diesel engine and all other accessories, manual, tools, spare parts; unit complete in all respects

Job 2

FF-47 Automatically operated 01 No. Horizontal centrifugal pump with electric motor, Q=500 USgpm & H=10 Bars; for lifting water from Underground water tank to Service floor fire water tank, including motor control unit, level switches to be installed in over head & underground water tank for automatic operation of pumps at set levels, dry running protection, gate valves, check valves, flexible joints, check line with flow meter and 02 gate valves, pressure gauges, strainers and all other accessories, manual, tools, spare parts; unit complete in all respects.

Job 1

FF-48 FM Approved/UL Listed 01 No. Diesel Engine Driven Fire Pump of Q=500 USgpm & H=10 Bars; for lifting water from Underground fire water tank to Service floor fire water tank, including motor control unit, diesel day tank of capacity as per NFPA requirements, level switches to be installed in over head & underground water tank for automatic operation of pump at set levels, gate valves, check valves, return line with automatic recirculation valve/pressure relief valve, check line with flow meter and 02 gate valves, pressure gauges, flexible joints, strainers, exhaust flue upto ground level from diesel engine and all other accessories, manual, tools, spare parts; unit complete in all respects

Job 1

BILL NO. 2.B: FIREFIGHTING SYSTEM

BILL OF QUANTITIES

ITEM NO.	DESCRIPTION	UNIT	QTY	UNIT RATE (Rs.)	TOTAL AMOUNT (Rs.)
(a)	(b)	(c)	(d)	(e)	(f)

CLEAN AGENT FK-5-1-12 FIRE FIGHTING SYSTEM**SPECIAL NOTE**

All jobs under this section will include system control unit integration requirements with BMS. This integration shall be done over industry standard BACNet over IP Protocol and respective equipment suppliers are required to provide communication interfaces/cards supporting said Protocol, including providing, installing, testing & commissioning all required equipment/accessories for completion of each item, as per BMS specifications and as approved by the Engineer.

FM Approved/ UL Listed **CLEAN AGENT FK-5-1-12** Fire Extinguishing and Detection system comprising of the following components:

Storage cylinder (01 working & 01 standby) with filled FK-5-1-12 clean agent gas; quantity of which is based on Manufacturer's flow calculations as per NFPA standard; Control panel, solenoid electric actuator, manual actuator, pressure supervisory switch, abort switch, smoke detectors, discharge nozzles, pull station, warning sign, remote indicator, pipes & fittings, fire resistance cables and all other components & their associated accessories, complete in all respects as per standard; of the following rooms.

FF-49	(a) BMS & CCTV Room (20'-4" x 29'-0" x 19'-6")	Job	1
FF-50	(b) Internet Service Provider Room (20'-4" x 13'-0" x 12'-6")	Job	1
FF-51	(c) Communication Room (Type-I) (9'-6" x 9'-6" x 10'-0")	Job	10
FF-52	(d) Communication Room (Type-II) (9'-6" x 9'-6" x 13'-6")	Job	54
FF-53	(e) Communication Room (Type-III) (9'-6" x 9'-6" x 19'-6")	Job	2

Total Amount (Rs.)

AVIATION COMPLEX BLUE AREA, ISLAMABAD

BILL NO. 3.A: ELECTRICAL WORKS (INTERNAL)

BILL OF QUANTITIES

Item No.	Item Description	Unit	Qty	Unit Rate (Rs.)	Total Amount (Rs.)
(i)	(ii)	(iii)	(iv)	(v)	(vi)

GENERAL NOTE.

SCOPE : (Applicable to all sections)

Supply, installation, testing and commissioning of the following items of work, including all labour, tools, plant, accessories, etc. required for completion of each item as per specifications and as approved by the Engineer.

HT SYSTEM**(Ref. Specification Section-8001 8131)**

E-B-01	Providing , fixing testing and commissioning of HT 11 KV 630 A VCB Wapda Industrial / Metering Panel as per Latest Wapda specifications complete in all respect as approved by the Engineer incharge	Each	2		
E-B-02	Providing , fixing testing and commissioning of HT 11 KV 630 A VCB (three Incoming and 1 out going) 11 KV sync. Panel as per Latest IEC specifications complete in all respect as approved by the Engineer incharge.	Each	2		
E-B-03	Providing , fixing testing and commissioning of HT 11 KV 630 A VCB (Two Incoming and 3 out going) 11 KV ATS. Panel as per Latest IEC specifications complete in all respect as approved by the Engineer incharge.	Each	2		

HT CABLES & SYSTEM (8.7/15 kV)**(Ref. Specification Section-8001 8211)**

E-B-04	Supply & Installation of 1 core, 240 mm ² 8.7/15 kV aluminum unarmored conductors, XLPE cable laid in appropriate size uPVC conduits/Cable Tray as per requirements of the MV distribution system as per WAPDA standards complete in all respect.	Rft	9,500		
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TRANSFORMERS**(Ref. Specification Section-8001 8121)**

E-B-05	Supply & Installation Testing and comissioning of 2500kVA Dry Type Transformer (Al Winding) Indoor Type (IP-31) Enclosure for Dry Type Transformer complete in all respect including testing at factory Permisses expenditure as mentioned in Clause 13 of Section 8001 as approved by the Engineer.	Job	3		
E-B-06	Supply & Installation Testing and comissioning of 3500kVA Dry Type Transformer (Al Winding) Indoor Type (IP-31) Enclosure for Dry Type Transformer complete in all respect including testing at factory Permisses expenditure as mentioned in Clause 13 of Section 8001 as approved by the Engineer.	Job	1		

BILL NO. 3.A: ELECTRICAL WORKS (INTERNAL)

BILL OF QUANTITIES

Item No.	Item Description	Unit	Qty	Unit Rate (Rs.)	Total Amount (Rs.)
(i)	(ii)	(iii)	(iv)	(v)	(vi)
E-B-07	Earth Electrode for earthing of DBs shall comprise of 75 mm x 4877 mm x 6 mm thick copper plate with 4 Nos. 6 mm dia brass nuts, bolts and washers 70 sqmm HDHC Copper wire as earthing leads. A 100 mm dia Medium Duty GI pipe shall be used with 10 mm dia holes @500 mm c-c. The total length of this GI pipe should be 45 ft. A 150 mm dia 60 ft long hole should be drilled in ground by percussion method and above mentioned 100 mm dia medium duty GI pipe should be fixed in this hole simultaneously up to the depth of 45 ft from NSL. When the drilling up to 60 ft depth is complete, The above mentioned earth electrode shall be drop down to the bottom of the hole with the help of 2 Nos 70 sqmm earth leads. Once the plate is in place fill in the hole with moisture retaining bentonite slurry with tremie method up to the top. When the bentonite settle down cast a (1:4:8) concrete manhole 700 mm x 700 mm & 500 mm deep as shown in the drawing. Place a medium duty CI cover as shown in the drawing.	Job	30		
E-B-08	305 mm long, 50 mm wide and 6mm thick copper busbar as ECP (Earth Connecting Point) complete with insulators, washers, nuts, bolts mounting installation and operational accessories as per site requirements.	Job	30		
<u>BUS BAR TRUNKING SYSTEM</u>					
Ref. Sec. 8213, 8132, 8240					
E-B-09	Supply, installation, testing and commissioning of Bus Bar trunking system, Bi-Metal Copper Contact Aluminum CONDUCTOR; 5000A rated, Class H 4(R, Y, B, N) + 1/2(E) conductors including testing at factory Permisses expenditure as mentioned in Clause 13 of Section 8001 as approved by the Engineer. Note: The All mounting accessories, Tees and bends, hangers are included in this cost. (T/F to PANEL)	RFT	3500		
E-B-10	Supply, installation, testing and commissioning of Bus Bar trunking system, Bi-Metal Copper Contact Aluminum CONDUCTOR; 2000A rated, Class H 4(R, Y, B, N) + 1/2(E) conductors including testing at factory Permisses expenditure as mentioned in Clause 13 of Section 8001 as approved by the Engineer. Note: The All mounting accessories, Tees and bends, hangers are included in this cost.	RFT	2500		
E-B-11	Supply, installation, testing and commissioning of Bus Bar trunking system, Bi-Metal Copper Contact Aluminum CONDUCTOR; 3200A rated, Class H 4(R, Y, B, N) + 1/2(E) conductors including testing at factory Permisses expenditure as mentioned in Clause 13 of Section 8001 as approved by the Engineer. Note: The All mounting accessories, Tees and bends, hangers are included in this cost.	RFT	4000		
E-B-12	Supply, installation, testing and commissioning of Bus Bar trunking system, Bi-Metal Copper Contact Aluminum CONDUCTOR; 1600A rated, Class H 4(R, Y, B, N) + 1/2(E) conductors including testing at factory Permisses expenditure as mentioned in Clause 13 of Section 8001 as approved by the Engineer. Note: The All mounting accessories, Tees and bends, hangers are included in this cost.	RFT	1200		
E-B-13	Supply, installation, testing and commissioning of Bus Bar trunking system, Bi-Metal Copper Contact Aluminum CONDUCTOR; 1000A rated, Class H 4(R, Y, B, N) + 1/2(E) conductors including testing at factory Permisses expenditure as mentioned in Clause 13 of Section 8001 as approved by the Engineer. Note: The All mounting accessories, Tees and bends, hangers are included in this cost.	RFT	1000		

BILL NO. 3.A: ELECTRICAL WORKS (INTERNAL)

BILL OF QUANTITIES

Item No.	Item Description	Unit	Qty	Unit Rate (Rs.)	Total Amount (Rs.)
(i)	(ii)	(iii)	(iv)	(v)	(vi)
E-B-14	Supply, Installation ,Testing and comisioning of TAP OFF UNIT (250 AMPS 415 V) Class H IP 55 protection class with Plug in holes complete in all respect as approved by the Engineer.	Job.	100		
E-B-15	150 sqmm, 4 core CU/PVC/PVC stranded copper conductor cable, 600/1000V grade in already installed conduit/on cable tray.	Rft	3000		
E-B-16	Supply, Installation ,Testing and comisioning of TAP OFF UNIT (160 AMPS 415 V) Class H IP 55 protection class with Plug in holes complete in all respect as approved by the Engineer.	Job.	100		
E-B-17	70 sqmm, 4 core CU/PVC/PVC stranded copper conductor cable, 600/1000V grade in already installed conduit/on cable tray.	Rft	3000		
	D.G. SET Ref. Spec. Sec. 8001, 8111, 8240.				
E-B-18	Supply, installation , testing and commissioning of 1000 kVA, Prime Rating 415 volt D.G. Set skid mounted including control / Instrument Panels, generator Panel, fuel day tank and all accessories along with Sound proof Canopy, manufactured for 1000 kVA Prime D.G. Set. etc. complete in all respect including testing at factory Permisses expenditure as mentioned in Clause 13 of Section 8001 as approved by the Engineer.(LIGHTS , POWER & EMERGENCY)	Job.	1		
E-B-19	Supply, installation , testing and commissioning of 2000 kVA, Prime Rating 11000 volt D.G. Set skid mounted including control / Instrument Panels, generator Panel, fuel day tank and all accessories along with Sound proof Canopy, manufactured for 2000 kVA Prime D.G. Set. etc. complete in all respect including testing at factory Permisses expenditure as mentioned in Clause 13 of Section 8001 as approved by the Engineer.	Job.	5		
E-B-20	Supply and installation of bulk fuel tank capable of storing 25,000 Litres diesel including all accessories , Piping from bulk fuel tank to day fuel tank of generators for Auto fueling system , Fuel Transfer pump, NRV's, strainers, ball valves, solenoid valves, level switches Including , Control Cables Motor Control Panel For Auto Fuel Filling System including Control Cables complete in all respects.	Job.	1		
E-B-21	400 sqmm, 1 core CU/PVC/PVC stranded copper conductor cable, 600/1000V grade in already installed conduit/on cable tray.	Rft.	9,000		
E-B-304	70 sqmm, 1 core CU/PVC/PVC stranded copper conductor cable, 600/1000V grade in already installed conduit/on cable tray.	Rft	3,000		
E-B-23	Earth Electrode for earthing of DBs shall comprise of 75 mm x 4877 mm x 6 mm thick copper plate with 4 Nos. 6 mm dia brass nuts, bolts and washers 70 sqmm HDHC Copper wire as earthing leads. A 100 mm dia Medium Duty GI pipe shall be used with 10 mm dia holes @500 mm c-c. The total lenght of this GI pipe should be 45 ft.A 150 mm dia 60 ft long hole should be drilled in ground by percussion method and above mentioned 100 mm dia medium duty GI pipe should be fixed in this hole simultaneously up to the depth of 45 ft from NSL. When the drilling up to 60 ft depth is complete, The above mentioned earth electrode shall be drop down to the bottom of the hole with the help of 2 Nos 70 sqmm earth leads.Once the plate is in place fill in the hole with moisture retaining bentonite slurry with tremie method up to the top. When the bentonite settle down cast a (1:4:8) concrete manhole 700 mm x 700 mm & 500 mm deep as shown in the drawing. Place a medium duty CI cover as shown in the drawing.	Job	30		

BILL NO. 3.A: ELECTRICAL WORKS (INTERNAL)

BILL OF QUANTITIES

Item No.	Item Description	Unit	Qty	Unit Rate (Rs.)	Total Amount (Rs.)
(i)	(ii)	(iii)	(iv)	(v)	(vi)
E-B-24	305 mm long, 50 mm wide and 6mm thick copper busbar as ECP (Earth Connecting Point) complete with insulators, washers, nuts, bolts mounting installation and operational accessories as per site requirements.	Job	30		
LT DISTRIBUTION BOARD (Ref. Spec. 8001 , 8133) LT 415V AC weather proof DBs shall be made from 14 SWG sheet steel and LT 415V AC indoor DBs shall be made from 16 SWG sheet steel. These shall be designed, fabricated and manufactured as a free standing floor type and recessed / surface mounted on wall (as per single line diagram shown on drawings). The sheet metal work shall be cleaned down to bare shining metal degreased, derusted and painted with TWO base coats of antirust RED paint. The sheet metal work shall be finished in TWO coats of powder paint. The color and shade shall be as approved by the Engineer. The distribution Board shall be complete with all internal wirings, tags, identification labels, TPN and E copper busbars, Energy analyzer accessories etc. The DB should be provided with the armored glands. The bus-bars shall be insulated in RED, YELLOW, BLUE and BLACK insulations. The insulation shall be heat shrinkable type or as directed by the Engineer.					
E-B-25	PHASE REVERSAL PANEL-1	Job	2		
E-B-26	PHASE REVERSAL PANEL-2	Job	2		
E-B-27	ATS PANEL WITH MOR FOR EMERGENCY PANEL	Job	1		
E-B-28	EMERGENCY PANEL	Job	1		
E-B-29	SMDB-BF6.(A)	Job	1		
E-B-30	SMDB-BF6.(B)	Job	1		
E-B-31	SMDB-BF5.(A)	Job	1		
E-B-32	SMDB-BF5.(B)	Job	1		
E-B-33	SMDB-BF4.(A)	Job	1		
E-B-34	SMDB-BF4.(B)	Job	1		
E-B-35	SMDB-BF3.(A)	Job	1		
E-B-36	SMDB-BF3.(B)	Job	1		
E-B-37	SMDB-BF2.(A)	Job	1		
E-B-38	SMDB-BF2.(B)	Job	1		
E-B-39	SMDB-BF1.(A)	Job	1		
E-B-40	SMDB-BF1.(B)	Job	1		
E-B-41	SMDB-GF.(A)	Job	1		
E-B-42	SMDB-GF.(B)	Job	1		
E-B-43	SMDB-1st.(A)	Job	1		
E-B-44	SMDB-1st.(B)	Job	1		
E-B-45	SMDB-2nd.(A)	Job	1		

BILL NO. 3.A: ELECTRICAL WORKS (INTERNAL)

BILL OF QUANTITIES

Item No.	Item Description	Unit	Qty	Unit Rate (Rs.)	Total Amount (Rs.)
(i)	(ii)	(iii)	(iv)	(v)	(vi)
E-B-46	SMDB-2nd.(B)	Job	1		
E-B-47	SMDB-3rd.(A)	Job	1		
E-B-48	SMDB-3rd.(B)	Job	1		
E-B-49	SMDB-4th.(A)	Job	1		
E-B-50	SMDB-4th.(B)	Job	1		
E-B-51	SMDB-5th.(A)	Job	1		
E-B-52	SMDB-5th.(B)	Job	1		
E-B-53	SMDB-6th.(A)	Job	1		
E-B-54	SMDB-6th.(B)	Job	1		
E-B-55	SMDB-7th.(A)	Job	1		
E-B-56	SMDB-7th.(B)	Job	1		
E-B-57	SMDB-8th.(A)	Job	1		
E-B-58	SMDB-8th.(B)	Job	1		
E-B-59	SMDB-9th.(A)	Job	1		
E-B-60	SMDB-9th.(B)	Job	1		
E-B-61	SMDB-10th.(A)	Job	1		
E-B-62	SMDB-10th.(B)	Job	1		
E-B-63	SMDB-11th.(A)	Job	1		
E-B-64	SMDB-11th.(B)	Job	1		
E-B-65	SMDB-12th.(A)	Job	1		
E-B-66	SMDB-12th.(B)	Job	1		
E-B-67	SMDB-13th.(A)	Job	1		
E-B-68	SMDB-13th.(B)	Job	1		
E-B-69	SMDB-14th.(A)	Job	1		
E-B-70	SMDB-14th.(B)	Job	1		
E-B-71	SMDB-15th.(A)	Job	1		
E-B-72	SMDB-15th.(B)	Job	1		
E-B-73	SMDB-16th.(A)	Job	1		
E-B-74	SMDB-16th.(B)	Job	1		
E-B-75	SMDB-17th.(A)	Job	1		
E-B-76	SMDB-17th.(B)	Job	1		
E-B-77	SMDB-18th.(A)	Job	1		
E-B-78	SMDB-18th.(B)	Job	1		

BILL NO. 3.A: ELECTRICAL WORKS (INTERNAL)

BILL OF QUANTITIES

Item No.	Item Description	Unit	Qty	Unit Rate (Rs.)	Total Amount (Rs.)
(i)	(ii)	(iii)	(iv)	(v)	(vi)
E-B-79	SMDB-19th.(A)	Job	1		
E-B-80	SMDB-19th.(B)	Job	1		
E-B-81	SMDB-20th.(A)	Job	1		
E-B-82	SMDB-20th.(B)	Job	1		
E-B-83	SMDB-21st.(A)	Job	1		
E-B-84	SMDB-21st.(B)	Job	1		
E-B-85	SMDB-22nd.(A)	Job	1		
E-B-86	SMDB-22nd.(B)	Job	1		
E-B-87	SMDB-23rd.(A)	Job	1		
E-B-88	SMDB-23rd.(B)	Job	1		
E-B-89	SMDB-24th.(A)	Job	1		
E-B-90	SMDB-24th.(B)	Job	1		
E-B-91	SMDB-25th.(A)	Job	1		
E-B-92	SMDB-25th.(B)	Job	1		
E-B-93	SMDB-26th.(A)	Job	1		
E-B-94	SMDB-26th.(B)	Job	1		
E-B-95	SMDB-Roof.(A)	Job	1		
E-B-96	SMDB-Roof.(B)	Job	1		
E-B-97	LDB-GF.(A)	Job	1		
E-B-98	PDB-GF.(A)	Job	1		
E-B-99	UDB-GF.(A)	Job	2		
E-B-100	LDB-GF.(B)	Job	2		
E-B-101	PDB-GF.(B)	Job	2		
E-B-102	UDB-GF.(B)	Job	2		
E-B-103	LDB-1st.(A)	Job	2		
E-B-104	PDB-1st..(A)	Job	2		
E-B-105	UDB-1st..(A)	Job	2		
E-B-106	LDB-1st.(B)	Job	2		
E-B-107	PDB-1st.(B)	Job	2		
E-B-108	UDB-1st.(B)	Job	2		
E-B-109	LDB-2nd.(A)	Job	2		
E-B-110	PDB-2nd..(A)	Job	2		
E-B-111	UDB-2nd..(A)	Job	2		

BILL NO. 3.A: ELECTRICAL WORKS (INTERNAL)

BILL OF QUANTITIES

Item No.	Item Description	Unit	Qty	Unit Rate (Rs.)	Total Amount (Rs.)
(i)	(ii)	(iii)	(iv)	(v)	(vi)
E-B-112	LDB-2nd..(B)	Job	2		
E-B-113	PDB-2nd..(B)	Job	2		
E-B-114	UDB-2nd.(B)	Job	2		
E-B-115	LDB-3rd.(A)	Job	2		
E-B-116	PDB-3rd.(A)	Job	2		
E-B-117	UDB-3rd(A)	Job	2		
E-B-118	LDB-3rd.(B)	Job	2		
E-B-119	PDB-3rd.(B)	Job	2		
E-B-120	UDB-3rd(B)	Job	2		
E-B-121	LDB-4th.(A)	Job	2		
E-B-122	PDB-4th.(A)	Job	2		
E-B-123	UDB-4th.(A)	Job	2		
E-B-124	LDB-4th.(B)	Job	2		
E-B-125	PDB-4th.(B)	Job	2		
E-B-126	UDB-4th.(B)	Job	2		
E-B-127	LDB-5th.(A)	Job	2		
E-B-128	PDB-5th.(A)	Job	2		
E-B-129	UDB-5th.(A)	Job	2		
E-B-130	LDB-5th.(B)	Job	2		
E-B-131	PDB-5th.(B)	Job	2		
E-B-132	UDB-5th.(B)	Job	2		
E-B-133	LDB-6th.(A)	Job	2		
E-B-134	PDB-6th.(A)	Job	2		
E-B-135	UDB-6th.(A)	Job	2		
E-B-136	LDB-6th.(B)	Job	2		
E-B-137	PDB-6th.(B)	Job	2		
E-B-138	UDB-6th.(B)	Job	2		
E-B-139	LDB-7th.(A)	Job	2		
E-B-140	PDB-7th.(A)	Job	2		
E-B-141	UDB-7th.(A)	Job	2		
E-B-142	LDB-7th.(B)	Job	2		
E-B-143	PDB-7th.(B)	Job	2		
E-B-144	UDB-7th.(B)	Job	2		

BILL NO. 3.A: ELECTRICAL WORKS (INTERNAL)

BILL OF QUANTITIES

Item No.	Item Description	Unit	Qty	Unit Rate (Rs.)	Total Amount (Rs.)
(i)	(ii)	(iii)	(iv)	(v)	(vi)
E-B-145	LDB-8th.(A)	Job	2		
E-B-146	PDB-8th.(A)	Job	2		
E-B-147	UDB-8th.(A)	Job	2		
E-B-148	LDB-8th.(B)	Job	2		
E-B-149	PDB-8th.(B)	Job	2		
E-B-150	UDB-8th.(B)	Job	2		
E-B-151	LDB-9th.(A)	Job	2		
E-B-152	PDB-9th.(A)	Job	2		
E-B-153	UDB-9th.(A)	Job	2		
E-B-154	LDB-9th.(B)	Job	2		
E-B-155	PDB-9th.(B)	Job	2		
E-B-156	UDB-9th.(B)	Job	2		
E-B-157	LDB-10th.(A)	Job	2		
E-B-158	PDB-10th.(A)	Job	2		
E-B-159	UDB-10th.(A)	Job	2		
E-B-160	LDB-10th.(B)	Job	2		
E-B-161	PDB-10th.(B)	Job	2		
E-B-162	UDB-10th.(B)	Job	2		
E-B-163	LDB-11th.(A)	Job	2		
E-B-164	PDB-11th.(A)	Job	2		
E-B-165	UDB-11th.(A)	Job	2		
E-B-166	LDB-11th.(B)	Job	2		
E-B-167	PDB-11th.(B)	Job	2		
E-B-168	UDB-11th.(B)	Job	2		
E-B-169	LDB-12th.(A)	Job	2		
E-B-170	PDB-12th.(A)	Job	2		
E-B-171	UDB-12th.(A)	Job	2		
E-B-172	LDB-12th.(B)	Job	2		
E-B-173	PDB-12th.(B)	Job	2		
E-B-174	UDB-12th.(B)	Job	2		
E-B-175	LDB-13th.(A)	Job	2		
E-B-176	PDB-13th.(A)	Job	2		
E-B-177	UDB-13th.(A)	Job	2		

BILL NO. 3.A: ELECTRICAL WORKS (INTERNAL)

BILL OF QUANTITIES

Item No.	Item Description	Unit	Qty	Unit Rate (Rs.)	Total Amount (Rs.)
(i)	(ii)	(iii)	(iv)	(v)	(vi)
E-B-178	LDB-13th.(B)	Job	2		
E-B-179	PDB-13th.(B)	Job	2		
E-B-180	UDB-13th.(B)	Job	2		
E-B-181	LDB-14th.(A)	Job	1		
E-B-182	PDB-14th.(A)	Job	2		
E-B-183	UDB-14th.(A)	Job	2		
E-B-184	LDB-14th.(B)	Job	2		
E-B-185	PDB-14th.(B)	Job	2		
E-B-186	UDB-14th.(B)	Job	2		
E-B-187	LDB-15th.(A)	Job	2		
E-B-188	PDB-15th.(A)	Job	2		
E-B-189	UDB-15th.(A)	Job	2		
E-B-190	LDB-15th.(B)	Job	2		
E-B-191	PDB-15th.(B)	Job	2		
E-B-192	UDB-15th.(B)	Job	2		
E-B-193	LDB-16th.(A)	Job	2		
E-B-194	PDB-16th.(A)	Job	2		
E-B-195	UDB-16th.(A)	Job	2		
E-B-196	LDB-16th.(B)	Job	2		
E-B-197	PDB-16th.(B)	Job	2		
E-B-198	UDB-16th.(B)	Job	2		
E-B-199	LDB-17th.(A)	Job	2		
E-B-200	PDB-17th.(A)	Job	2		
E-B-201	UDB-17th.(A)	Job	2		
E-B-202	LDB-17th.(B)	Job	2		
E-B-203	PDB-17th.(B)	Job	2		
E-B-204	UDB-17th.(B)	Job	2		
E-B-205	LDB-18th.(A)	Job	2		
E-B-206	PDB-18th.(A)	Job	2		
E-B-207	UDB-18th.(A)	Job	2		
E-B-208	LDB-18th.(B)	Job	2		
E-B-209	PDB-18th.(B)	Job	2		
E-B-210	UDB-18th.(B)	Job	2		

BILL NO. 3.A: ELECTRICAL WORKS (INTERNAL)

BILL OF QUANTITIES

Item No.	Item Description	Unit	Qty	Unit Rate (Rs.)	Total Amount (Rs.)
(i)	(ii)	(iii)	(iv)	(v)	(vi)
E-B-211	LDB-19th.(A)	Job	2		
E-B-212	PDB-19th.(A)	Job	2		
E-B-213	UDB-19th.(A)	Job	2		
E-B-214	LDB-19th.(B)	Job	2		
E-B-215	PDB-19th.(B)	Job	2		
E-B-216	UDB-19th.(B)	Job	2		
E-B-217	LDB-20th.(A)	Job	2		
E-B-218	PDB-20th.(A)	Job	2		
E-B-219	UDB-20th.(A)	Job	2		
E-B-220	LDB-20th.(B)	Job	2		
E-B-221	PDB-20th.(B)	Job	2		
E-B-222	UDB-20th.(B)	Job	2		
E-B-223	LDB-21st.(A)	Job	2		
E-B-224	PDB-21st.(A)	Job	2		
E-B-225	UDB-21st.(A)	Job	2		
E-B-226	LDB-21st.(B)	Job	2		
E-B-227	PDB-21st.(B)	Job	2		
E-B-228	UDB-21st.(B)	Job	2		
E-B-229	LDB-22nd.(A)	Job	2		
E-B-230	PDB-22nd..(A)	Job	2		
E-B-231	UDB-22nd.(A)	Job	2		
E-B-232	LDB-22nd.(B)	Job	2		
E-B-233	PDB-22nd.(B)	Job	2		
E-B-234	UDB-22nd.(B)	Job	2		
E-B-235	LDB-23rd.(A)	Job	2		
E-B-236	PDB-23rd.(A)	Job	2		
E-B-237	UDB-23rd..(A)	Job	2		
E-B-238	LDB-23rd.(B)	Job	2		
E-B-239	PDB-23rd.(B)	Job	2		
E-B-240	UDB-23rd.(B)	Job	2		
E-B-241	LDB-24th.(A)	Job	2		
E-B-242	PDB-24th.(A)	Job	2		
E-B-243	UDB-24th.(A)	Job	2		

BILL NO. 3.A: ELECTRICAL WORKS (INTERNAL)

BILL OF QUANTITIES

Item No.	Item Description	Unit	Qty	Unit Rate (Rs.)	Total Amount (Rs.)
(i)	(ii)	(iii)	(iv)	(v)	(vi)
E-B-244	LDB-24th.(B)	Job	2		
E-B-245	PDB-24th.(B)	Job	2		
E-B-246	UDB-24th.(B)	Job	2		
E-B-247	LDB-25th.(A)	Job	2		
E-B-248	PDB-25th.(A)	Job	2		
E-B-249	UDB-25th.(A)	Job	2		
E-B-250	LDB-25th.(B)	Job	2		
E-B-251	PDB-25th.(B)	Job	2		
E-B-252	UDB-25th.(B)	Job	2		
E-B-253	LDB-26th.(A)	Job	2		
E-B-254	PDB-26th.(A)	Job	2		
E-B-255	UDB-26th.(A)	Job	2		
E-B-256	LDB-26th.(B)	Job	2		
E-B-257	PDB-26th.(B)	Job	2		
E-B-258	UDB-26th.(B)	Job	2		
E-B-259	LDB-27th.(A)	Job	2		
E-B-260	PDB-27th.(A)	Job	2		
E-B-261	UDB-27th.(A)	Job	2		
E-B-262	LDB-27th.(B)	Job	2		
E-B-263	PDB-27th.(B)	Job	2		
E-B-264	UDB-27th.(B)	Job	2		
E-B-265	LDB-BF1.(A)	Job	2		
E-B-266	PDB-BF1.(A)	Job	2		
E-B-267	UDB-BF1.(A)	Job	2		
E-B-268	LDB--BF1.(B)	Job	2		
E-B-269	PDB-BF1.(B)	Job	2		
E-B-270	UDB-BF1.(B)	Job	2		
E-B-271	LDB-BF2.(A)	Job	2		
E-B-272	PDB-BF2.(A)	Job	2		
E-B-273	UDB-BF2.(A)	Job	2		
E-B-274	LDB--BF2.(B)	Job	2		
E-B-275	PDB-BF2.(B)	Job	2		
E-B-276	UDB-BF2.(B)	Job	2		

BILL NO. 3.A: ELECTRICAL WORKS (INTERNAL)

BILL OF QUANTITIES

Item No.	Item Description	Unit	Qty	Unit Rate (Rs.)	Total Amount (Rs.)
(i)	(ii)	(iii)	(iv)	(v)	(vi)
E-B-277	LDB-BF3.(A)	Job	2		
E-B-278	PDB-BF3.(A)	Job	2		
E-B-279	UDB-BF3.(A)	Job	2		
E-B-280	LDB--BF3.(B)	Job	2		
E-B-281	PDB-BF3.(B)	Job	2		
E-B-282	UDB-BF3.(B)	Job	2		
E-B-283	LDB-BF4.(A)	Job	2		
E-B-284	PDB-BF4.(A)	Job	2		
E-B-285	UDB-BF4.(A)	Job	2		
E-B-286	LDB--BF4.(B)	Job	2		
E-B-287	PDB-BF4.(B)	Job	2		
E-B-288	UDB-BF4.(B)	Job	2		
E-B-289	LDB-BF5.(A)	Job	2		
E-B-290	PDB-BF5.(A)	Job	2		
E-B-291	UDB-BF5.(A)	Job	2		
E-B-292	LDB--BF5.(B)	Job	2		
E-B-293	PDB-BF5.(B)	Job	2		
E-B-294	UDB-BF5.(B)	Job	2		
E-B-295	LDB-BF6.(A)	Job	2		
E-B-296	PDB-BF6.(A)	Job	2		
E-B-297	UDB-BF6.(A)	Job	2		
E-B-298	LDB--BF6.(B)	Job	2		
E-B-299	PDB-BF6.(B)	Job	2		
E-B-300	UDB-BF6.(B)	Job	2		
E-B-301	DB-Ser.	Job	60		
E-B-302	DB-EXT	Job	4		
E-B-303	DB-Pumps	Job	4		
E-B-304	DB-Server room	Job	4		
LT CABLES					
(Ref. Spec. 8001, 8212)					
Supply, install, testing and commissioning of low voltage power cables, 600/1000V, copper, as per drawings and specifications. The cost includes cable terminations, splices and all necessary materials and accessories needed to complete the work.					
E-B-305	300 sqmm, 1 core CU/PVC/PVC stranded copper conductor cable, 600/1000V grade in already installed conduit/on cable tray.	Rft.	500		

BILL NO. 3.A: ELECTRICAL WORKS (INTERNAL)

BILL OF QUANTITIES

Item No.	Item Description	Unit	Qty	Unit Rate (Rs.)	Total Amount (Rs.)
(i)	(ii)	(iii)	(iv)	(v)	(vi)
E-B-306	240 sqmm, 1 core CU/PVC/PVC stranded copper conductor cable, 600/1000V grade in already installed conduit/on cable tray.	Rft.	1,200		
E-B-307	95 sqmm, 1 core CU/PVC/PVC stranded copper conductor cable, 600/1000V grade in already installed conduit/on cable tray.	Rft	500		
E-B-308	35 sqmm, 1 core CU/PVC/PVC stranded copper conductor cable, 600/1000V grade in already installed conduit/on cable tray.	Rft	3,500		
E-B-309	25 sqmm, 1 core CU/PVC/PVC stranded copper conductor cable, 600/1000V grade in already installed conduit/on cable tray.	Rft	500		
E-B-310	16 sqmm, 1 core CU/PVC/PVC stranded copper conductor cable, 600/1000V grade in already installed conduit/on cable tray.	Rft	1,000		
E-B-311	10 sqmm, 1 core CU/PVC/PVC stranded copper conductor cable, 600/1000V grade in already installed conduit/on cable tray.	Rft	50,000		
E-B-312	10 sqmm, 4 core CU/PVC/PVC stranded copper conductor cable, 600/1000V grade in already installed conduit/on cable tray.(ESCLATORS	Rft	8,000		
E-B-313	16 sqmm, 4 core CU/PVC/PVC stranded copper conductor cable, 600/1000V grade in already installed conduit/on cable tray.(LIGHTS , UPS , SER)	Rft	35,000		
E-B-314	25 sqmm, 4 core CU/PVC/PVC stranded copper conductor cable, 600/1000V grade in already installed conduit/on cable tray.	Rft	7,000		
E-B-315	35 sqmm, 4 core CU/PVC/PVC stranded copper conductor cable, 600/1000V grade in already installed conduit/on cable tray.(ACP)(HVAC)	Rft	7,000		
E-B-316	70 sqmm, 1 core CU/PVC/PVC stranded copper conductor cable, 600/1000V grade in already installed conduit/on cable tray.	Rft	5,000		
E-B-317	16 sqmm, 1 core CU/PVC/PVC stranded copper conductor cable, 600/1000V grade in already installed conduit/on cable tray.(ACP)(HVAC)	Rft	7,000		
E-B-318	50 sqmm, 4 core CU/PVC/PVC stranded copper conductor cable, 600/1000V grade in already installed conduit/on cable tray.	Rft	500		
E-B-319	50 mm sq 4/c Cu.Mica Tape/Xlpe/LSZH/.6/1kv in already installed conduit/on cable tray.	Rft	500		
E-B-320	70 sqmm, 4 core CU/PVC/PVC stranded copper conductor cable, 600/1000V grade in already installed conduit/on cable tray.	Rft	500		
E-B-321	95 sqmm, 4 core CU/PVC/PVC stranded copper conductor cable, 600/1000V grade in already installed conduit/on cable tray.	Rft	1,000		
E-B-322	120 sqmm, 4 core CU/PVC/PVC stranded copper conductor cable, 600/1000V grade in already installed conduit/on cable tray.	Rft	300		
<u>POWER CABLES (FR)</u>					
NS-00	400 mm sq 1/c Cu.Mica Tape/Xlpe/LSZH/.6/1kv (FWP)	Rft	2200		
NS-00	35 mm sq 4/c Cu.Mica Tape/Xlpe/LSZH/.6/1kv (PWP)	Rft	2100		

BILL NO. 3.A: ELECTRICAL WORKS (INTERNAL)

BILL OF QUANTITIES

Item No.	Item Description	Unit	Qty	Unit Rate (Rs.)	Total Amount (Rs.)
(i)	(ii)	(iii)	(iv)	(v)	(vi)
LIGHT FIXTURES					
(Ref. Spec. 8001, 8150)					
Supply, installation, testing & commissioning of the following types of professional light fixtures including LED Light with driver, internal wiring complete with all mounting accessories as per architectural arrangements/ requirements, dust & moisture protected and corrosion proof and suitable for this area as acceptably supplied and installed and as approved by the Engineer.					
E-B-325	Recessed LED light fixture (600mm by 600 mm), 4500 lumens minimum, suitable for gypsum board or aluminium panel/dampa false ceiling, IP20 rated, PF=.95 , (130 Lumen per watt) complete in all respects	No.	5,500		
E-B-326	(14-16) watt Surface mounted LED batten Light Fixture (1200mm) , fixed output LED driver, IP44 rated, complete in all respects.	No.	300		
E-B-327	(7-8) watt Surface mounted LED batten Light Fixture (600mm) , fixed output LED driver, IP44 rated, complete in all respects.	No.	400		
E-B-328	(15-17)W Recessed/Celing Mounted Round/square shape LED downlightwith integrated driver and frosted glass diffuser PF=.95	No.	4,500		
E-B-329	36/40 W LED Damp proof light of with integrated driver and frosted glass diffuser. IP20 rated, PF=.95 , (130 Lumen per watt) complete in all respects	No.	3,200		
E-B-330	10 W Recessed/Celing Mounted LED downlight of warm white color with integrated driver and frosted glass diffuser IP20 rated, PF=.95 , (130 Lumen per watt) complete in all respects	No.	2,500		
E-B-331	35/40W LED spot light with integrated driver and frosted glass diffuser IP20 rated, PF=.95 , (130 Lumen per watt) complete in all respects	No.	1,500		
E-B-332	(30-40) watt (0.5/0.6 ft x 4') Linear LED light Fixture IP20 rated, PF=.95 , (130 Lumen per watt) complete in all respects	No.	400		
E-B-333	LED RGB ROPE NEON/ , IP-20 rated for Indoor use with driver Complete in all respect as approved by the Engineer.	Rft	24,000		
E-B-334	Outdoor type LED bulkhead wall light of minimum 1200 lumens light output, IP-55 or better rated	No.	50		
E-B-335	200 watt led flood lights along with their fixing arrangments for the outdoor entrance Area.	No.	50		
E-B-336	100 watt led High bay along with their fixing arrangments	No.	100		
Helipad Lights					
E-B-337	Heliport Control Panel out door type IP66 as per requirement complete in all respect.	No.	1		
E-B-338	Heliport Beacon high-intensity, red flashing light Effective Intensity:>2500cd Input voltage:AC220V IP66 30FPM LED Color:White Power :30W LED Lifespan:100,000 Hours	No.	8		

BILL NO. 3.A: ELECTRICAL WORKS (INTERNAL)

BILL OF QUANTITIES

Item No.	Item Description	Unit	Qty	Unit Rate (Rs.)	Total Amount (Rs.)
(i)	(ii)	(iii)	(iv)	(v)	(vi)
E-B-339	(Internally Illuminated Wind Cone (2.4m)) Input Voltage:AC220V,50/60Hz, power:20 Watt, Ingress Protection:IP65, Life expectancy:100.000+ hours, Light Color:Red/White, Obstruction light:Low Intensity 32 cd, Height:2.4m	No.	1		
E-B-340	Inset Heliport Perimeter Light Max Intensity:≥30cd, Optional voltage:AC220V, Average Power Consumption:10W, Supply Frequency:50HZ~60HZ, Working Mode:Steady-burning, Emitting Color:Green, IP Protection:IP68, Light Source:100,000hours	No.	12		
E-B-341	(Inset (FATO) Final Approach & Takeoff Light) Max Intensity:≥100cd Optional voltage:AC220V, Average Power Consumption:10W, Supply Frequency:50HZ~60HZ, Working Mode:Steady-burning, Emitting Color:White, IP Protection:IP68, Light Source:100,000hours	No.	20		
E-B-342	Led flood light 45W 5700K 100° 50000 Hrs IP66	No.	24		
	CENTRAL BATTERY SYSTEM FOR EMERGENCY LIGHTS Supply, Installation, Testing & Commissioning of Addressable Central Battery System wall mounted unit, with 60 mins battery backup sealed leak proof, lead acid batteries, including all accessories, complete in all respect as shown in the drawings.				
E-B-343	Central Battery Unit 220VAC/216VDC (24 Circuits) with Imported built-in UI charger and Dry Batteries for 60 mins power backup. Maintained addressable CBU supplied emergency exit signs including all required suspension and mounting accessories with self-adhesive pictograms as follows	No.	4		
E-B-344	Exit Luminaire, Ceiling mounted IP-41 rated, 30 mtr viewing distance (with double sided directional arrow)	No.	140		
E-B-345	Exit Luminaire, Surface mounted IP-41 rated, 30mtr viewing distance (with single sided Down Arrow) Non-maintained addressable CBU supplied emergency escape/route lights including all required suspension and mounting accessories as follows:	No.	170		
E-B-346	4W Wall/surface mounted emergency LED light having 300 above lumens, IP65 rated complete in all respect.	No.	1,200		
E-B-347	Web-based client/server architecture: Use of standard web browser on the client PC for monitoring of CBS panels, with the required license	No.	1		
E-B-348	Work Station (Core i5 Ultra Slim Desktop PC 3.4GHZ, 8GB DDR3 RAM, Windows 11 Prof 64bit, 1-TB HDD) including all necessary licenses, with keyboard and mouse.	No.	1		
E-B-349	2 core 2.5 mmsq Fire Resistant cable LPCB certified in appropriate size conduit for wiring of emergency and exit lights with CBS.	Rft	32,000		
E-B-350	Programming, testing and commissioning of complete system including on site demonstration and training of client's representative upto the entire satisfaction of consultant/client	No.	1		
	WIRING IN CONCEALED CONDUITS (Ref. Spec. Sec. 8001, 8220, 8230)				

BILL NO. 3.A: ELECTRICAL WORKS (INTERNAL)

BILL OF QUANTITIES

Item No.	Item Description	Unit	Qty	Unit Rate (Rs.)	Total Amount (Rs.)
(i)	(ii)	(iii)	(iv)	(v)	(vi)
E-B-351	Wiring of light circuit from Distribution Board to switch, including circuit wiring between switches on the same circuit with Two nos. single core 2.5 Sqmm and One no.1.5 sq mm PVC insulated 450/750 Volts grade stranded copper conductor cables LSZH in concealed 3/4 " PVC conduits including PVC conduit, conduit accessories (junction box, pull box, fan box etc) complete in all respects.	No.	2040		
E-B-352	Wiring from switch to light or fan point with 3 Nos. single core 1.5 Sqmm PVC insulated 300/500 Volts grade stranded copper conductor cables LSZH in concealed 3/4" PVC conduit including PVC conduit, conduit accessories (junction box, pull box, fan box etc) complete in all respects.	No.	15000		
E-B-353	Wiring from light to light with 3 Nos. single core 1.5 Sqmm PVC insulated 300/500 Volts grade stranded copper conductor cables LSZH in concealed 3/4" PVC conduit including PVC conduit, conduit accessories (junction box, pull box, fan box etc) complete in all respects.	No.	5000		
E-B-354	Wiring of circuit from Distribution Board to 13/15 A , 230 Volts, 3 pin switched socket outlet with Two nos. single core 4 sqmm and One no. 2.5 sqmm PVC insulated 300/500 Volts grade stranded copper conductor cables in 3/4" dia concealed PVC conduit laid underfloor including PVC conduit, conduit accessories, etc. complete in all respects.	No.	1500		
E-B-355	Wiring from 13 Amps, 3 pin socket to socket with Two nos. single core 2.5 Sqmm and One no. 1.5 sq mm PVC insulated 300/500 Volts grade stranded copper conductor cables LSZH in concealed 3/4" PVC conduit laid underfloor including PVC conduit, conduit accessories, etc.complete in all respects.	No.	8500		
E-B-356	Wiring of circuit from distribution board to 20A, 230 Volts, 3 Pin switched socket outlet with 2 Nos. one core 4 Sqmm and One no. 2.5 sq mm PVC insulated 300/500 Volts grade stranded copper conductor cables LSZH in concealed 3/4" PVC conduit laid underfloor including PVC conduit, conduit accessories, etc. complete in all respects (FOR AC and WATER GEYSERS)	No.	10		
WIRING ACCESSORIES (Ref. Spec. Sec. 8001, 8220)					
E-B-357	10 Amps, 250 Volts one way, ONE gang light control switches including appropriate size powder coated metallic concealed back box.	No.	400		
E-B-358	10 Amps, 250 Volts Two way, ONE gang light control switches including appropriate size powder coated metallic concealed back box.	No.	60		
E-B-359	10 Amps, 250 Volts one way, TWO gang light control switches including appropriate size powder coated metallic concealed back box.	No.	800		
E-B-360	10 Amps, 250 Volts one way, THREE gang light control switches including appropriate size powder coated metallic concealed back box.	No.	250		
E-B-361	10 Amps, 250 Volts one way, FOUR gang light control switches including appropriate size powder coated metallic concealed back box.	No.	600		
E-B-362	10 Amps, 250 Volts one way, FIVE gang light control switches including appropriate size powder coated metallic concealed back box.	No.	200		

BILL NO. 3.A: ELECTRICAL WORKS (INTERNAL)

BILL OF QUANTITIES

Item No.	Item Description	Unit	Qty	Unit Rate (Rs.)	Total Amount (Rs.)
(i)	(ii)	(iii)	(iv)	(v)	(vi)
E-B-363	10 Amps, 250 Volts one way, SIX gang light control switches including appropriate size powder coated metallic concealed back box.	No.	170		
E-B-364	Universal Switch outlet with switch 13/15 A, 230V. Mounting Height as per site including appropriate size powder coated metallic back box.	No.	9,600		
E-B-365	20 Amps, 250 Volts flex outlet with double pole switch & neon indication lamp including appropriate size steel back box & fuse protection	No.	100		
E-B-366	16 Amps, 400 Volts TP isolator	No.	50		
MISCELLANEOUS ITEMS					
Ref. Spec. Sec. 8001, 8290					
E-B-367	Supply, installation, testing & commissioning of 56 inch (1400 mm) dia Ceiling fan NEECA Approved. The 56" dia ceiling fan shall be suitable to give an air displacement of minimum 11700 Cu. Ft/min. The ceiling fan shall comprise circular fan body metallic fan blades, down rod of suitable dia and length, AC capacitor, internal wiring, terminals all installation & operational accessories as per tender specifications, as per site requirements and as directed by the Engineer.	No.	5		
E-B-368	Supply, installation, testing & commissioning of 12 inches dia exhaust fan including back draft dampers and all accessories.	No.	5		
E-B-369	Supply & installation of 18" sweep wall bracket fan complete with pulling cord switch, fitted on wall or column with GI clip including connection arrangement as required.	No.	10		
E-B-370	Supply of Plastic body Pedestal Fan (24") with all accessories.	No.	5		
	Following sizes of Ladder G.I. sheet powder coated cable trays with cover including joints, bend, mounting brackets hanger complete with all accessories.				
E-B-371	300mm x 75mm	Rft.	1000		
E-B-372	150mm x 75mm	Rft.	1000		

BILL NO. 3.A: ELECTRICAL WORKS (INTERNAL)

BILL OF QUANTITIES

Item No.	Item Description	Unit	Qty	Unit Rate (Rs.)	Total Amount (Rs.)
(i)	(ii)	(iii)	(iv)	(v)	(vi)
	Following sizes of perforated G.I. sheet powder coated cable trays with cover including joints, bend, mounting brackets hanger complete with all accessories.				
E-B-373	600 mm x 150mm	Rft.	1000		
E-B-374	450mm x 100mm	Rft.	1000		
E-B-375	300mm x 75mm	Rft.	1000		
E-B-376	300mm x 100mm	Rft.	12000		
E-B-377	150mm x 75mm	Rft.	3000		
E-B-378	Supply and Installation of Powder Coated G I Floor Box for four face plate for data / power. As approved by the Engineer.	No.	1,250		
E-B-379	Wiring of HDMI Cable 1 Meter Ultra High Speed 8K including appropriate size concealed or surface PVC conduit or PVC channel and all accessories with cutting/making holes in walls making surface good complete in all respect.	Rft	25,000		
	PVC PIPES & DUCTS (Ref. Spec. Sec. 8001 8230)				
E-B-380	Supply and Installation of 6" dia PVC Class 'D' pipe including excavation , backfilling complete in all respect.	Rft	1,500		
E-B-381	Supply and Installation of 4" dia PVC Class 'D' pipe including excavation , backfilling complete in all respect.	Rft	1,200		
E-B-382	Supply and Installation of 3" dia PVC Class 'D' pipe including excavation , backfilling complete in all respect.	Rft	1,100		
E-B-383	Supply and Installation of 2" dia PVC Class 'D' pipe including excavation , backfilling complete in all respect.	Rft	1,250		
E-B-384	Supply and Installation of 1-1/2" dia PVC Class 'D' pipe including excavation , backfilling complete in all respect.	Rft	1,950		
	UNINTERRUPTED POWER SUPPLY (UPS) Ref.Spec.Sec. 8001, 8300				
E-B-385	Supply, installation, testing & commissioning of UPS System of rating 50 KVA three phase 400 V 50 Hz with 30 minutes back up time with lead acid batteries (VRLA) 05 years life, CD with Software, Network Management Card, power module UPS Cable Rs 232 Fabricated according to IP 51 for industrial environment complete in all respect as per technical specifications.	Job	10		
	ELECTRIC VEHICLE CHARGER Ref.Spec.Sec. 8001, 8290				
E-B-386	Supply, Installation, testing , Commissioning, of Single Phase Ev charger up to 7.4 KW/32 A (110....240)V Over current , over voltage under voltage ground fault including integrated surge protection , interlocking, user interface(wifi, blue tooth, charger cab be tun on/off from mobile , real time monitoring) IP 54 , IK 10 . As per All Latest IEC Standards complete in all respect. It shall also include the cost of mounting and installation material.	Job	40		
	<u>LIGHTNING PROTECTION SYSTEM</u> (Ref. Specification Section-8250)				

BILL NO. 3.A: ELECTRICAL WORKS (INTERNAL)

BILL OF QUANTITIES

Item No.	Item Description	Unit	Qty	Unit Rate (Rs.)	Total Amount (Rs.)
(i)	(ii)	(iii)	(iv)	(v)	(vi)
	Supply and installtion of LPS with product compliance as per NFC 17 102 standard.				
E-B-387	Early Streamer Emission (ESE) stainless steel AIR TERMINAL with 79 mtr protection radius at level 1 including Navar Brass adpater and lightning Event Counter as well complete in all respect.	Job	1		
E-B-388	5 meter high Mast consisting of Galvanized steel pipe in three sections, vertically oriented wall mounting bolted GS brackets for installation of ESE Air Terminal OR Floor stand as per site condtions complete with stay wires and accessories including stainless steel mast collars for down conductor.	Job	1		
E-B-389	High conductivity Tinned Bare Copper Tape 25x3mm for Down Conductor Copper with clamps and Square Tape clamps with appropriate fixing distance as per NFC 17 102 standard.	Mtr	1,200		
E-B-390	Galvanized steel guard tube for Copper Tape protection, length 2m with fixing collars. Make: Local	Job	1		
E-B-391	Polypropylene Earth Pit, 4" dia 11ft depth including copper bonded earth rod, 2m length, cable clamp, backfill material Bentonite	Job	8		
E-B-392	Earth Test Link. Test clamp for Copper tape conductor	Job	4		
E-B-393	Lightning event Counter	Job	4		
E-B-394	Testing of ESE Air terminal at site by authorized distributor of Pakistan with letter confirming after-sales-service.	Job	1		
				Total Amount (Rs.) =	

AVIATION COMPLEX BLUE AREA, ISLAMABAD

BILL NO. 3.B: ELECTRICAL WORKS (ENERGY MONITORING SYSTEM)

BILL OF QUANTITIES

Item No.	Item Description	Unit	Qty	Unit Rate (Rs.)	Total Amount (Rs.)
(i)	(ii)	(iii)	(iv)	(v)	(vi)

GENERAL NOTE.

SCOPE : (Applicable to all sections)

Supply, installation, testing and commissioning of the following items of work, including all labour, tools, plant, accessories, etc. required for completion of each item as per specifications and as approved by the Engineer.

ENERGY MONITORING SYSTEM

(Ref. Specs: 8001, 8400)

Supply Installation Testing and commissioning of Energy

Monitoring Systems as per latest IEC Standards standards.

EM-B-01	Supply Installation Testing and commissioning of IEC , UL & MID CERTIFIED Dual Trif 3 phase Energy Meter, built in RS 485 Communication port including CT's complete in all Respect.	Job	800		
EM-B-02	Supply Installation Testing and commissioning of Master data logging device with memory , transient recording , with Bachel connectivity, ethernet , minimum class accuracy 0.2 s , harmonis up to 63 , transient , sag , swell complete in all respect.	Job	40		
EM-B-03	Supply Installation Testing and commissioning of RS485 Cable in appropriate size conduits Slave Devices with master data logging devices	Mtr	8,100		
EM-B-04	Supply Installation Testing and commissioning of CAT-6a Cable in appropriate size conduits	MTR	3,000		
EM-B-05	Supply Installation Testing and commissioning of Energy Management Software Along with Computer(core i7 latest generation 32 GB ram & 1 T SSD	Job	1		
EM-B-06	Supply Installation Testing and commissioning of NETWORKING SWITCH 8 PORT Complete In All Respect	Job	10		
EM-B-07	Supply Installation Testing and commissioning of NETWORKING SWITCH 24 PORT Complete In All Respect	Job	2		
EM-B-08	Installation, Testing, Training & Commissioning Of Complete Energy System Complete In All Respect	Job	1		

Total Amount (Rs.) = _____

AVIATION COMPLEX AT BLUE AREA, ISLAMABAD

BILL NO. 3.C: ELV WORKS

BILL OF QUANTITIES

Item No.	Item Description	Unit	Qty	Unit Rate (Rs.)	Total Amount (Rs.)
(i)	(ii)	(iii)	(iv)	(v)	(vi)
GENERAL NOTE. SCOPE : <i>(Applicable to all sections)</i> Supply, installation, testing and commissioning of the following items of work, including all labour, tools, plant, accessories, etc. required for completion of each item as per specifications and as approved by the Engineer.					
STRUCTURED CABLING NETWORK Ref.Spec.Sec. 8212, 8230, 8240, 8290, 8312					
ELV-01	Wiring of CAT-6A, F/UTP Cable from Telecommunication RJ45 outlet point to relevant Floor distributor including appropriate size concealed or surface PVC conduit or PVC channel and all accessories with cutting/making holes in walls making surface good complete in all respect.	Rft.	900,000		
ELV-02	150mm x 75mm of G I sheets of 16 SWG sheet steel Powder coated trunking with cover including joints bends mounting brackets joints bends mounting Brackets hanger complete with all accessories	Rft.	3,000		
Following type CAT-6A, F/UTP Giga Speed patch cord with required connector at both ends:					
ELV-03	1 metre (3 ft.) long	No.	4,500		
ELV-04	3 metre (10 ft.) long	No.	4,500		
ELV-05	Installation of Data Point with Single shutter face plate, F/UTP Cat-6A Keystone Jack, including I/O Complete in all respect, as per drawing and specifications.	No.	4,500		
ELV-06	24 port Cat-6A F/UTP Giga Speed modular loaded (RJ45) jack Loaded patch panel compatible with 19" rack installed in floor/wall mounted cabinet including built-in rear cable management with all mounting accessories.	No.	500		
ELV-07	19" Rack mounted Front Cable Management.	No.	500		
Following sizes Rack with Plexiglass door including Hoops, side management, cable trays, fan tray and required number of power sockets including all mounting accessories.					
ELV-08	Server Rack 42 U	No.	70		
ELV-09	27 U	No.	35		
ELV-10	12 core, 9/125 um, Dielectric optical fibre (MM) 10G Supported back bone cable in already installed conduit / trunking.(Back Bone)	Mtr	20,000		
ELV-11	12 port optical fibre patch panel MULTIMODE LC type including pigtails and splice tray with all installation accessories.	No.	9		

AVIATION COMPLEX AT BLUE AREA, ISLAMABAD

BILL NO. 3.C: ELV WORKS

BILL OF QUANTITIES

Item No.	Item Description	Unit	Qty	Unit Rate (Rs.)	Total Amount (Rs.)
(i)	(ii)	(iii)	(iv)	(v)	(vi)
Layer-3 Network Core Switch					
ELV-12	Core Fiber Switch, 1RU, 10GE L3 Routing, fixed chassis with 20 SFP+ ports, one optional module slot, Switching Capacity 220 Gbps, Front to back cooling. Includes AC power supply and cord. Ships with user manuals access card, rack mounts, and USB to RJ-45 adaptor, license included, with all accessories, complete in all aspects. (Huawei Core Switch - 24-ports S6730-H24X6CV2 x 1 Huawei Distribution Switches - 48-ports S6730-H48X6CV2 x 3)	No.	9		
PoE Switch Layer-2					
Layer-2 PoE Gigabit Ethernet switches 1RU chassis, 24/48 (10/100/1000) BaseT, 2 fixed SFP+ 1G/10G ports, 1 expansion slot. 10G uplink speed enabled by default. Switching Capacity 128 Gbps, Basic Layer-3 Routing, Includes internal AC PSU, power cord, manuals access card, rack mounts, RJ45 to DB9 adaptor, including all accessories complete in all respects.					
ELV-13	24 Port PoE switch	No	500		
ELV-14	48 Port PoE switch	No	50		
ELV-15	WIFI device (11ax indoor, 2+2 dual bands, smart antenna	No	216		
OFDF-48 Ports (Optical Fiber Distribution Frame)					
ELV-16	48 Ports 19" Rack Mounted Fiber Optic distribution frame (1U) with Multimode Couplers, Pigtails, Fiber Patch Cords, including cost of fiber splicing charges, Complete in all respect.	No	70		
OFDF-96 Ports (Optical Fiber Distribution Frame)					
ELV-17	96 Ports 19" Rack Mounted Fiber Optic distribution frame (1U) with Multimode Couplers, Pigtails, Fiber Patch Cords, including cost of fiber splicing charges, Complete in all respect.	No	10		
ELV-18	Fiber Patch Cord LC/LC Duplex MM/SM 3 Meter	No	600		
SFP Transceivers - 10 Giga.					
ELV-19	10 Gigabit optical transceiver SFP+). Supports multimode fiber over 850nm wavelength nominal) with an LC connector. Typical reach of 300m.	No	600		
ELV-20	PDU,6 Way With Main Switch, 3.0M Cord And Plug	No.	148		

AVIATION COMPLEX AT BLUE AREA, ISLAMABAD

BILL NO. 3.C: ELV WORKS

BILL OF QUANTITIES

Item No.	Item Description	Unit	Qty	Unit Rate (Rs.)	Total Amount (Rs.)
(i)	(ii)	(iii)	(iv)	(v)	(vi)
ELV-21	Digital Telephone Exchange having Oxo Connect PCX Office with latest release 12.3, ISDN PRI Circuit : 01, with CLI Facility support 50 incoming lines, PRI Card, 1000 IP Extension Licenses, Analog Extension Interfaces with CLI Facility 10 Nos expandable up to 500 analog extensions, Digital Premium Desk phone for Operator Console 01 No, Voice Mail (2 ports,1 hour), Automated Attendant, Call Logging Software (Vista 8770), Battery Backup with Maintenance free Batteries for 2 Hours Autonomy, Music on Hold (external calls only), Call Forwarding - Call Pickup (Direct and Group), Voice Mail - Speed Dialing - Call by name - Appointment Reminder, Call Back - Call Parking - Intrusion - Automatic Route Selection, Call Restriction - Call Routing - Time Ranges - Outgoing call duration classes, VoIP (SIP/H.323) Support, Set Locking - Call Broadcast on Executive Sets - Hunt Groups, Tele-Maintenance Access to remotely maintain the system, including cost of Core i7 Computer with 25mm diaTB Hard Drive, Keyboard, Mouse. complete in all respects with accessories.	No	1		
ELV-22	IP Phone (16 lines, 4.3" 480x272 color LCD, 10 DSS keys, PoE, GE) For Operator	No	10		
ELV-23	Executive IP Telephone Set with CLI facility, Complete in all respects.	No	40		
ELV-24	IP Telephone Set with CLI facility, Complete in all respects.	No	400		
FIRE ALARM SYSTEM					
Ref.Spec.Sec. 8230, 8331					
ELV-25	Supply , Installation , Testing and commissioning of Intelligent Addressable , Networkable Fire Alarm Control Panel (12-Loop), Wall Mount, Microprocessor Based, Lcd Display, Multi-Function Status Leds, 127 Devices / Elements Per Loop , Network Able Via 2-Core Copper Cable & Cat-VI Cable Simultaneously Upto A Range Of 40 Km on Single Mode Optical Fiber, Graphical User Interface Support, Remotely Programmable, Free Of Cost Programming Software, Input/Output Interfacing, Multi Configuration Level, 24 Hours Back Up Time & 30 Minutes Alarm Time Compatible with Building Management system complete in all respect as approved by the Engineer.	No.	4		
ELV-26	2 Loop Addressable Network Fire Alarm Control Panel	No.	16		
ELV-27	Supply , Installation , Testing and commissioning of Addressable Photo electric Smoke Detector with Base including all installation accessories complete in all respect.	No.	1,500		
ELV-28	Supply , Installation , Testing and commissioning of Addressable heat detector with base including all installation accessories complete in all respect.	No.	200		
ELV-29	Supply , Installation , Testing and commissioning of Addressable Multi detector with base including all installation accessories complete in all respect.	No.	500		
ELV-30	Supply , Installation , Testing and commissioning of I/O module to connect fire alarm system with access control devices including all installation accessories complete in all respect.	No.	80		

AVIATION COMPLEX AT BLUE AREA, ISLAMABAD

BILL NO. 3.C: ELV WORKS

BILL OF QUANTITIES

Item No.	Item Description	Unit	Qty	Unit Rate (Rs.)	Total Amount (Rs.)
(i)	(ii)	(iii)	(iv)	(v)	(vi)
ELV-31	Supply , Installation , Testing and commisioning of Addressable sounder with Flasher, with base including all installation accessories complete in all respect.	No.	300		
ELV-32	Supply , Installation , Testing and commisioning of Addressable Manual Call Point, with base including all installation accessories complete in all respect.	No.	300		
ELV-33	2 x 2.5 sq.mm twin + earth fire resistant cable 1" inch dia pvc conduit complete in all respect.	Rft.	200,000		
ELV-34	CLSS Module/CLSS Gate Way for multiple fire control panels to communicate on network	Job	1		
ELV-35	BACnet Module for BMS Integration	Job	1		
ELV-36	Smoke Testing Spray For Testing of Smoke & Multi Detectors	Job	1		
ELV-37	Programming Testing & Commissioning of Fire Alarm System	Job	1		
ELV-38	Programming Testing & Commissioning of CLSS & BacNet	Job	1		
IP CCTV SYSTEM (Ref. Spec. Sec. 8001, 8335)					
ELV-39	Wiring of CAT-6, F/UTP Cable from Telecommunication RJ45 outlet point to relevant Floor distributor including appropriate size concealed or surface PVC conduit or PVC channel and all accessories with cutting/making holes in walls making surface good complete in all respect.	Rft	200,000		
ELV-40	Supply, Installation ,Testing and comisioning of 4 Megapixel Full HD Network IR Bullet/Dome Cameras with Motorized Varifocal Lens. 4MP resolution, Up to 30fps Color : 0.1Lux (F1.6, 1/30sec), B/W : 0Lux (IR LED On) 2 ~ 10mm (3.1x) motorized varifocal, IR viewable length: 30m (98.42ft) Day & Night (ICR), WDR (120dB) H.265, H.264, MJPEG, Multiple streaming supported Defocus detection, Directional detection, Motion detection, Enter/Exit, Tampering Hallway view (90°/270°), Digital Noise Reduction SSNR, Motion Detection 4ea, polygonal zones, Audio Compression G.711 u-law / G.726 Selectable G.726(ADPCM) 8KHz, G.711 8KHz, G.726 16Kbps, 24Kbps, 32Kbps, 40Kbps, Application Programming Interface ONVIF Profile S/G/T, SUNAPI (HTTP API), LDC support (Lens Distortion Correction) , Micro SD/SDHC/SDXC memory slot (Max. 128GB) IP66, IK10 complete in all respect as approved by the Engineer.	Job.	800		

AVIATION COMPLEX AT BLUE AREA, ISLAMABAD

BILL NO. 3.C: ELV WORKS

BILL OF QUANTITIES

Item No.	Item Description	Unit	Qty	Unit Rate (Rs.)	Total Amount (Rs.)
(i)	(ii)	(iii)	(iv)	(v)	(vi)
ELV-41	Supply, Installation ,Testing and comisioning of 4K 30x Network IR Wiper PTZ Dome Camera • 4K resolution • IR viewable length : 200m (656ft) • 30x optical zoom lens (5mm ~150mm) (57.42° ~ 2.19°) • -20° tilt look-up capability to see above the horizon • H.265, H.264, MJPEG triple codec support • Multiple streaming, support • Day & Night (ICR), extreme WDR • DIS with Built-in Gyro sensor • Azimuth display (Cardinal & intermediate directions) • AI-based Object Auto tracking (Person, Vehicle), target lock tracking, Intelligent video analytics • Dual Memory slots (Maximum 512GB x 2) • IP66, IK10, NEMA4X, NEMA TS-2 2.2.8 (Vibration) & 2.2.9 (Shock) • HPoE (IEEE802.3bt, Class6, Type3, Injector included) • UL CAP Cybersecurity certified Brand: Hanwa /SAMSUNG, SONY, BOSCH, PELCO, AXIS and Avigilon. complete in all respect as approved by the Engineer.	Job.	4		
ELV-42	Supply, Installation ,Testing and comisioning of Network Controller for PTZ Speed Dome Camera Specifications: • Compatible with PTZ Cameras • Superior system compatibility by CMS • NET-i-viewer Support • 3D Joystick control for Zoom • USB Interface • Easy Firmware Upgrade , Galvanized Poles for CCTUp to 10 feet complete in all respect as approved by the Engineer.	Job.	4		
ELV-43	24 port Cat-6 FTP shielded Giga Speed modular loaded (RJ45) jack patch panels compatible with 19" rack installed in floor/wall mounted cabinet including built-in rear cable management with all mounting accessories.	Job.	70		
ELV-44	19" Rack mounted Front Cable Management with all installation accessories.	Job.	70		

AVIATION COMPLEX AT BLUE AREA, ISLAMABAD

BILL NO. 3.C: ELV WORKS

BILL OF QUANTITIES

Item No.	Item Description	Unit	Qty	Unit Rate (Rs.)	Total Amount (Rs.)
(i)	(ii)	(iii)	(iv)	(v)	(vi)
ELV-45	Supply, Installation ,Testing and comisioning of 256 CH• Up to 256CH, 32MP Resolution Max. 400Mbps network camera recording , HDMI out, User friendly UI / UX , AI search support when working with AI camera , Dynamic Event support , New event function of cameras is available without software update , Bookmark management (Up to 100 set) H.265, H.264, MJPEG compression support SATA 8ea (Up to 80TB, Non-RAID mode) RAID 5/6 support 8K NVR, up to 256channels, License-free recording Decoding > Multi Screen Display [Local Monitor] - Dynamic layout, Virtual channel view - Clone Mode : Up to 36 Division - Expand Mode : HDMI1 up to 36 Div. HDMI2 up to 16 Div. [Web] 1/ 2H/ 2V/ 3V/ 4/ 6/ 8/ 9 Supports H.265, H.264, & MJPEG CODECs, Up to 16 fixed internal SATA HDDs (10TB max per HDD), RAID 5 & 6 recording , Hot swap ARB (Automatic Recovery Backup) & Failover(N+1) support 400 Mbps recording / up to 32 Mbps playback Dual stream recording, WiseStream technology HDMI/VGA dual display, max. resolution of 32MP recording/display Add AI search capabilities to select Cameras AI search (Wisenet AI cameras only) web UI 2.0 (no plugins required) P2P / QR Code for easy connection to t Viewer / Mobile NDAA & FCC Compliant complete in all respect as approved by the Engineer.	Job.	4		
ELV-46	Storage capacity 10 TB (Enterprise grade HDD) Interface SAS, Security SE, Disk Speed (RPM) 7200rpm , Cache Size 256MB , Transfer Rate Up to 250MB/s complete in all respect as approved by the Engineer.	Job.	100		
ELV-47	75" LED TV for CCTV video viewing & along with vedio controller including all mounting accessories for wall mounting or hanging from ceiling. Following type of Gigabit Network POE Switches, stackable with modular OS and AV input output.	Job.	18		
ELV-48	24-Port Industrial Grade Gigabit Poe+ Managed Ethernet Switch Supports 24*10/100/1000Tx IEEE 802.3 af/at PoE+ Gigabit Ports (PSE: 30W/Port) + 4*Gigabit Copper/SFP Combo Ports (4*10/100/1000Tx RJ45 + 4*100/1000 SFP Slots) , SFP Socket for Easy and Flexible Fiber Expansion , Management: SNMP v1/v2c/v3, WEB, Telnet, Standard MIB , Security: 802.1x (Port-Based, MD5/TLS/TTLS/PEAP Encryption), HTTPS, SSH and SNMPv3 , Redundancy: Proprietary Ring (Ultra-High-Speed Recovery Time < 20 ms), RSTP/STP (802.1w/1D), MSTP Does not support ERPS 48VDC Power Input (46-57 VDC for PoE af, 53-57 VDC is Recommended for PoE at) & 2 Relay Outputs Extended Operating Temperature: -40°~75°C , Power Polarity Reverse Protection, Overload Current Protection, 1U Rackmount Design , IP30 Protection , 5-Year Warranty 240 Watt Industrial Single Output DIN Rail Power Supply - 48 VDC / 5.0 Amp for LNP-2804GN-SFP-T Network Switch 240 Watt Industrial Single Output DIN Rail Power Supply - 48 VDC / 5.0 Amps complete in all respect as approved by the Engineer.	Job.	70		
ELV-49	10-Meter-High Quality HDMI Cable complete in all respect as approved by the Engineer.	Job.	40		

AVIATION COMPLEX AT BLUE AREA, ISLAMABAD

BILL NO. 3.C: ELV WORKS

BILL OF QUANTITIES

Item No.	Item Description	Unit	Qty	Unit Rate (Rs.)	Total Amount (Rs.)
(i)	(ii)	(iii)	(iv)	(v)	(vi)
ELV-50	PC for Cameras Monitoring and Management. • 12th Generation Intel Core i9-12900/or latest (16 Cores/30MB/32T/2.4GHz to 5.1GHz/65W) • 32GB DDR5 Non-ECC Memory • 1 TB SSD 7200 RPM • 8x DVD+/-RW 9.5mm Slim line Optical Disk Drive • Intel Integrated Graphics, RTX 3080 • Dell USB Optical Mouse-MS116 (EPEAT) – Black • Dell Wired Keyboard KB216 Black (English) • Pro Support and Next Business Day Onsite Service-ACDTS Initial, 36 Month(s) complete in all respect as approved by the Engineer.	Job.	4		
ELV-51	NVR Management Software • Multiple OS support (Windows, macOS) • Easy and intuitive UI • Flexible channel division and custom layout • Playback speed 1x, 2x, 4x, 8x, 16x, 32x, 64x, 128x, 256x • Search and play recorded video • AI search (Person, Face, Vehicle, LPR) • Fisheye dewarping • Multiple applications on multiple monitors • Display web pages (ex. NVR web-viewer) • Media files play in the layout • Event trigger and action rule management • Log search (Event, System, and Audit) • Remote connection (DDNS/P2P*) • User permission management Device analytics events. • Motion detection, Video analytics (Passing, Intrusion, Entering, Exiting, Appearing, Disappearing, Loitering), Tampering detection, Face detection, Defocus detection, Fog detection, Audio detection, Audio analytics (Scream, Gunshot, Explosion, Crashing), Auto tracking, Video loss, Alarm in, Dynamic event. Device system events Power status, Fan status, recording status, setting change, System status complete in all respect as approved by the Engineer.	Job.	1		

AVIATION COMPLEX AT BLUE AREA, ISLAMABAD

BILL NO. 3.C: ELV WORKS

BILL OF QUANTITIES

Item No.	Item Description	Unit	Qty	Unit Rate (Rs.)	Total Amount (Rs.)
(i)	(ii)	(iii)	(iv)	(v)	(vi)
ELV-52	20-Port Industrial Grade Gigabit Managed Ethernet Switch Supports 8*10/100/1000Tx Gigabit Ethernet with IEEE 802.3af/at Compliant PoE+ (30W/Port) and 12*100/1000 SFP Slots , Network Redundancy Support: STP/RSTP/MSTP, and G.8032 ERPS (Recovery Time <50ms) , Supports IPv4/IPv6, and DHCP Option 66/67/82 , Supports Modbus/TCP Protocol for Device Management and Monitoring , IGMP v1/v2 for Multicast Traffic Filtering , QoS (IEEE 802.1p/1Q), CoS/ToS to Increase Determinism , IEEE802.1Q VLAN for Easy Network Planning , Enhanced Network Security with IEEE802.1X, SNMP v1/v2c/v3, HTTPS, and SSH/SSL , Auto Warning by Exception through Relay Output , Operating Temperature Range – EOT: -40°C to 75°C ,5-Year Warranty , 45 Watt Series Industrial Single Output DIN Rail Power Supply - 24 VDC / 2.0 Amps for LNX-2012GN-SFP-T Network Switch complete in all respect.	Job.	4		
ELV-53	SFP MODULE Extended Operating Temperature 1310nm FP LD Data Rate: 1.25Gbps, NRZ Single +3.3V Power Supply RoHS Compliant and Lead-free AC/AC Differential Electrical Interface Compliant with Multi-Source Agreement (MSA) Small Form Factor Pluggable (SFP) Duplex LC Connector Compliance with specifications for IEEE-802.3z Gigabit Ethernet at 1.25 Gbps Compliance with ANSI specifications for Fiber Channel applications at 1.06 Gbps Eye Safety (Designed to meet Laser Class 1, complies with EN60825-1)	Job.	150		
ELV-54	Single-Mode Duplex Fiber Patch Cord	Job.	70		
ELV-55	Single-Mode Fiber Pigtail	Job.	70		
ELV-56	1METER CAT-6A, S/FTP LSZH Giga Speed patch cord with required connector at both ends:	Job.	800		
ELV-57	Supply ,Installation of 42U 800X1000mm Imported,Perforated Cabinet with two vertically mounted PDU 32A,220V in Rear and 2 Vertical Cable Managers in Front ,Including Fan Units Ip-20 Rated , Cold Rolled Steel Cabinet complete in all respect.	No.	4		
ELV-58	Supply ,Installation of 9U Imported,Perforated Cabinet with two vertically mounted PDU 32A,220V in Rear and 2 Vertical Cable Managers in Front ,Including Fan Units Ip-20 Rated , Cold Rolled Steel Cabinet complete in all respect.	No.	70		
ELV-59	12 port optical fibre patch panel MULTIMODE SC type including pigtails and splice tray with all installation accessories.	Job.	70		
ELV-60	6 core, 50/125 um, optical fibre multimode (SM) back bone cable in already installed conduit / trunking.	Rft.	10,000		

AVIATION COMPLEX AT BLUE AREA, ISLAMABAD

BILL NO. 3.C: ELV WORKS

BILL OF QUANTITIES

Item No.	Item Description	Unit	Qty	Unit Rate (Rs.)	Total Amount (Rs.)
(i)	(ii)	(iii)	(iv)	(v)	(vi)
ELV-61	SC-LC MULTI MODE 3 metre (10 ft.) longFibre Optic Patch Cord.	Job.	70		
PUBLIC ADDRESS SYSTEM (Ref. Spec. Sec. 8001, 8341)					
ELV-62	Supply, installation and commissioning of speakers wiring,to be wired with PVC insulated,PVC sheathed twin core 2.5mm ² flexible shielded control wire in already laid 3/4" dia PVC conduit with all necessary fitting accessories,pull boxes,steel pull wires,complete in all respects.	Rft	130,000		
ELV-63	Supply, installation and commissioning of Table Top Digital Microphone, Uni-directional, condensor microphone with PTT (Push to Talk) and Status LED complete in all respect.	No.	4		
ELV-64	Supply,installation and commissioning of Premium-sound Cabinet Loudspeaker 30 Watt ABS enclosure,	No.	220		
ELV-65	Supply,installation and commissioning of CEILING LOUD SPEAKER	No.	1,600		
ELV-66	Supply,installation and commissioning of Digital Mixer Amplifier builtin 240W,	No.	100		
ELV-67	Supply,installation and commissioning of Digital Mixer Amplifier builtin 120W,	No.	30		
ELV-68	Supply,installation and commissioning of Call Station	No.	4		
ELV-69	Supply, installation and commissioning of Controller	No.	4		
ACCESS CONTROL SYSTEM (Ref. Spec. Sec. 8001, 8341)					
ELV-70	Supply, installation, testing & Commissioning of Access Modular Door controller, Networkable type, 32 bit processor with following capacities - 04 Access Points/ Entrances - 04 Readers - Cardholder Capacity 100,000 - Event Capacity 100,000 including power supply, Maintanance Free Dry Battery & MS Enclosure with Mounting Plates complete in all respects as per the requirements as Approved By the Engineer.	Job	60		
ELV-71	Supply, installation, testing & Commissioning of Mifare Reader (ISO 14443 Type A) Read range 2" - 3" Dimension 57"L x 17"W x 09"D Back color bezel 32 bit CSN Wiegand Output complete in all respects as per the requirements as Approved By the Engineer.	Job	120		
ELV-72	Supply, installation, testing & Commissioning of Mifare DesFire EV2 8K, Card 38bit-OmniAssure and LuminAXS, Gloss white, Printable complete in all respects as per the requirements as Approved By the Engineer.	No.	2000		
ELV-73	Supply, installation, testing & Commissioning of Exit push buttons complete in all respects as per the requirements as Approved By the Engineer.	No.	100		

AVIATION COMPLEX AT BLUE AREA, ISLAMABAD

BILL NO. 3.C: ELV WORKS

BILL OF QUANTITIES

Item No.	Item Description	Unit	Qty	Unit Rate (Rs.)	Total Amount (Rs.)
(i)	(ii)	(iii)	(iv)	(v)	(vi)
ELV-74	Supply, installation, testing & Commissioning of Electromagnetic Locks for Access Control System with necessary hardware as specified for centralized security monitoring. - suitable for double door complete in all respects as per the requirements as Approved By the Engineer.	Job	100		
ELV-75	Supply, installation, testing & Commissioning of Magnetic Contact for Access Control System with necessary hardware as specified for centralized security monitoring. - suitable for single door complete in all respects as per the requirements as Approved By the Engineer.	Job	20		
ELV-76	Supply, installation, testing & Commissioning of Door Contacts for access Doors for monitoring door status with necessary hardware as specified for centralized security monitoring complete in all respects as per the requirements as Approved By the Engineer.	No.	130		
ELV-77	Supply, installation, testing & Commissioning of Manual Emergency Override key Switch complete in all respects as per the requirements as Approved By the Engineer.	No.	130		
ELV-78	Supply, installation, testing & Commissioning of High-security card printer with software and license including all components and accessories complete in all respects as per the requirements as Approved By the Engineer.	Job	1		
ELV-79	Supply & wiring of 02 No.s of Cat-6 cable for Access Control System in 25mm dia PVC conduit as per drawings including termination and tagging at both ends(controller to Reader & Lock complete in all respects as per the requirements as Approved By the Engineer.	Job	60		
ELV-80	Supply Installation Testing & Commissioning of Access Control Management Software with licenses for Server , Access Control System , Alarm Management , Operator Client , 2000 cards , required number of doors , along with Security Control system features a password protected user logon system suitable to interface with CCTV and Fire Alarm/ BMS of the building including all licensing and security requirements complete in all respects as per the requirements as Approved By the Engineer.	Job	1		
ELV-81	Supply Installation Testing & Commissioning of Separate machine as per the requirements of customized software/controller with following minimum specifications Intel Desktop Board , CPU Core i9 4.3 Ghz 11th generation , Intel based graphics card , 64GB RAM , SSD , Super Drive , Keyboard , Mouse , LED Screen , Operating System , Minimum 04 USB ports , 10/100/1000 Mbps LAN Card , CUP Core i52 complete in all respects as per the requirements as Approved By the Engineer.	Nos.	1		
ELV-82	Supply Installation Testing & Commissioning of latest generation Server with MS Win-Server Pre-Installed with latest specifications License & Media Kit, 3 Year Official Warranty & NBD Support with all necessary accessories & Monitor complete in all respects	Job	1		
ELV-83	Programming, Testing, Commissioning and Training of complete system Complete in all respect.	Job	1		

AVIATION COMPLEX AT BLUE AREA, ISLAMABAD

BILL NO. 3.C: ELV WORKS

BILL OF QUANTITIES

Item No.	Item Description	Unit	Qty	Unit Rate (Rs.)	Total Amount (Rs.)
(i)	(ii)	(iii)	(iv)	(v)	(vi)
VIDEO WALL					
B-ELV-84	Supply Installation, Testing & Commissioning of 55" FHD Video Wall Display Unit Narrow Bezel 0.44mm + 0.44mm = 0.84mm, 700Nits Brightness with Push and Pull Bracket for Video Wall including local base Structure and back Wall/ Entrance Aluminum Back Bracket for Each Screen				
	Specifications: 55", 0.88mm Bezel, 24/7 use, 700nits Brightness, Depth 69.9mm,Razor-thin 0.44mm even bezel design delivers one immersive, seamless image, Wide viewing angles enable clear image presentation for more viewers in large spaces,700 nit brightness and non-glare panel provide high visibility 24/7,Picture enhancement technology delivers optimized visuals, Slim design creates neat environment and saves space, Color Expert Pro Mobile provides quick and easy video wall calibration using a mobile device, Multi-step factory calibration delivers content with near-perfect uniformity ,Meets industry standards, EMC class B compliant and ISTA-6 certified , Daisy-chain enables easy UHD content presentation without external equipment complete in all respects as per the requirements as Approved By the Engineer.	No.	18		
B-ELV-85	Supply Installation, Testing & Commissioning of Video Wall Multi-Screen Controller with 24 output Ports and 06 Input Ports complete in all respects as per the requirements as Approved By the Engineer.	Job	1		
B-ELV-86	Supply Installation, Testing & Commissioning of High Speed HDMI Cable(10 Meter) complete in all respects as per the requirements.	No.	40		
B-ELV-87	Supply Installation, Testing & Commissioning of Core i-9 16 Cores/30MB/32T/2.4GHz to 5.1GHz/65W) Computer System, 12th Generation,1 TB SSD 7200 RPM Hard Drive, 32GB DDR5 RAM, with Window-10 Pro Operating System with Intel UHD Graphic 630, all for Video Wall complete in all respects as per the requirements.	No.	1		
ELV-88	Integrated Audio & Video Conferencing with DSP and Audio System. Interactive Screen with Mic Tracking PTZ cameras for 20 persons including Touch Screen MultiMedia Audio Conference unit , System controller and Audio Processor with Basic software speakers with 120 Watts Amplifier for the Audience on the Back Seat , Wireless Hand held Microphone with reciver , Interactive Screen with WIFI connectivity for the Laptop/PC , PTZ Camera with al acceriors complete in al respect	Job	10		

Total Amount (Rs.) =

AVIATION COMPLEX AT BLUE AREA, ISLAMABAD

BNILL NO. 3.D: EXTERNAL ELECTRICAL WORKS

BILL OF QUANTITIES

Item No.	Item Description	Unit	Qty	Unit Rate (Rs.)	Total Amount (Rs.)
(i)	(ii)	(iii)	(iv)	(v)	(vi)

PARKING GUIDENCE AND PARKING MANAGEMENT SYSTEM**ENTRY / EXIT EQUIPMENT**

Supply, installation and commissioning of entry/exit equipment with high speed automatic barrier, including RFID tickets, by any European manufacturing company including all accessories as per requirements or as per drawings complete in all respect.

Entrance Terminal with 7" Display

- EX-E-01 • TCP / IP interface for communication. –
 • Embedded card reader RFID 125 Khz EM or (Mifare optional).
 • Printer to issue a bar code ticket 1D/2D.
 • Sending a signal to the barrier after issuing a ticket.
 • Cassette capacity about up to 8000pcs. of tickets.
 • Preview in the monitoring software module for the exact amount of remaining tickets.
 • Emergency opening of the barriers.
 • 7" TFT LCD color display 800x480.
 • 1CH inductive detector.
 • Power consumptions: maximum 80 W
 • heating with fan and thermostat (optional) - 200 W.
 • Voltage/ Frequency: 230VAC/50HZ
 • Operating temperature: -10°C to +50°C
 • Operating temperature: with additional heater -25°C
 • Body: Stainless steel painted - Color of the base: RAL 7016
 • Color of the front panel: RAL 2000
 • Dimensions: 350/350/1250
 • Weight: 50 kg.
 • Complies with European standards. EC

No. 2

BILL OF QUANTITIES

Item No.	Item Description	Unit	Qty	Unit Rate (Rs.)	Total Amount (Rs.)
(i)	(ii)	(iii)	(iv)	(v)	(vi)
	Electromechanical Barrier Qntra Parking PRO Lane width max. 3.5 m.				
EX-E-02	• Opening / Closing, 1.3 S • Power consumption max. 95 W • Duty cycle 100% • Wide supply voltage range voltage 85-264 V AC (also available as 24V DC version) • Frequency 50-60 Hz • Drive system MHTM[™] MicroDrive - Housing dimensions (WxDxH) 315 x 360 x 915 mm • Weight (without boom) 40 kg • The design of the housing powder-coated aluminum • Base frame powder-coated stainless steel • Class of protection IP 54 • Compatible with 2004/108 / EC, 2006/42 / EC, 305/2011, CE, UL 325 • Temperature range -30 to +55 ° C. - • Colour on the body: RAL 7016 Dark Grey • Colour on the front and back dors: RAL 2000 orange.	No.	4		
	Parking Guidance system				
EX-E-03	Ticket dispenser machine for printing tickets	No.	2		
EX-E-04	Bar code scanner machine for scanning of the individual tickets	No.	2		
EX-E-05	Operator payment station +Monitor 23"+ WIN10Pro	No.	2		
EX-E-06	Supply of ultrasonic (sensor+ indicator) in same unit with base by Parksol Lithuania, detecting distance 0.7-4.0m, each detector for each parking space	No.	884		
EX-E-07	Supply of indoor parking data display showing the number of empty parking spaces at each side	No.	46		
EX-E-08	Supply of zone control unit with IP 54 enclosure supporting 128 devices and RS485 communication port, which sends collector's data to parking displayer.	No.	12		
EX-E-09	Supply of Central Control unit 24-Port Gigabit Ethernet Switch with IP 54 enclosure, complete with all accessories.	No.	1		
EX-E-10	Outdoor Parking Display Unit (1200x600) mm showing number of available parking spaces at main entrance. 1 Each 1,450,000 1,450,000.00 *Designs can be customized as per requirement	No.	1		
EX-E-11	Supply & Installation of Ticket kiosk with RFID card scanner complete in all respects as per drawings and specifications.	No.	2		
EX-E-12	Supply & Installation of Car barrier integration with Parking management system including all accessories necessary for the complete installation in all respect.	No.	2		

BILL OF QUANTITIES

Item No.	Item Description	Unit	Qty	Unit Rate (Rs.)	Total Amount (Rs.)
(i)	(ii)	(iii)	(iv)	(v)	(vi)
EX-E-13	Supply of ANPR cameras installed at the entrance and exit of a car park detect and read the license plate passing in front of them. It generates a transit containing all the metadata related to the vehicle, including plate, date, time etc	No.	1		
EX-E-14	ParkSol Monitoring software (maps, monitoring and 1 control)				
EX-E-15	Dell PC for software monitoring of system with licensed windows	No.	1		
EX-E-16	Supply of telemetry cable 2x1.5+2x1, blue, for communication of sensors in already laid 25mm dia PVC conduit and cable tray complete with all respect.	Mtr	6,000		
EX-E-17	Supply of CAT 6 cable for communication of directional signs with zone controllers and communication of zone controllers with main controllers.	Mtr	1,000		
EX-E-18	Installation and connection of ultrasonic sensors, zone controllers and CCU.	job	1		
Security Items					
EX-E-19	Supply, Installation, Testing and Commissioning of X-ray Baggage and Parcel Scanning Machine with - Tunnel Opening 65.0 cm x 45.1 cm (W x H) minimum - Multiple Color Imaging - 160kV X-ray Generator - Computer with Core i5 Processor, 4Gb RAM, 1TB HDD and 240GB SSD, 1GB Dual Digital Display Video Card, Registered Windows OS - UPS Backup (for Computer - 20 minutes) - 19" LCD Display, 1280 x 1024; 24 Bit/Pixel Color - Compliant with USFDA, Center for Devices and Radiation Health Standards for Cabinet X-Ray Systems (21-CFR 1020.40) - Typical radiation leakage less than 0.1 mR/hr (Leakage less than 0.5 mR/hr permitted by the Federal Standards. - 2 x Entry Roller Extensions 0.5 meter - Operator Training including installation accessories complete in all respects.	Job.	2		
EX-E-20	Supply, Installation, Testing and Commissioning of Multi Zone Walk Through Gate with - High Performance Pin Point WTG Metal Detection - Up to 200 distinct sensitivity levels - Passageway Interior Size: Width 30", Height 80" and Depth 23" - Operating: -4° F (-20° C) to +122° F (50° C) including all accessories complete in all respects.	Job.	10		

LIGHT POLES

BILL OF QUANTITIES

Item No.	Item Description	Unit	Qty	Unit Rate (Rs.)	Total Amount (Rs.)
(i)	(ii)	(iii)	(iv)	(v)	(vi)

(Ref. Specification Section-8001, 8260)

EX-E-21 Supply & Erection of Double arm GI round conical pole, hot dipped galvanized (80 microns) 10 meters long overall thickness 4 mm, base dia 180mm and top dia 62 with plate arrangement 450mmx 450mm x 25mm, complete in all respects.

No 20

EX-E-22 Supply, installation, testing & commissioning of Lightning Protection System (for poles)

No 20

LT CABLES

EX-E-23 Supply at site, installation, testing and commissioning of PVC insulated un-armoured copper conductor cable 600 / 1000 Volt grade (or otherwise mentioned in cable description) in prelaidd 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.
(16 sqmm, 4 core)

Rft. 1,000

EX-E-24 Providing, laying, cutting, jointing, testing and disinfecting UPVC pressure pipeline in trenches (conforming to BS 3505 manufactured) jointed with socket, elbow, tee, bend and plug bend etc.manufactured by the respective manufacturer complete as per specifications. uPVC Pressure Pipes Class D (12 Bar) 3" Nominal Pipe Size (NPS)

Rft. 1,000

WIRING IN CONCEALED CONDUITS

EX-E-25 Supply and Erection 3 core PVC insulated+sheathed copper conductor 250/440 V grade cable : 3/0.029*(1.5mm²).

Rft 3,000

BILL OF QUANTITIES

Item No.	Item Description	Unit	Qty	Unit Rate (Rs.)	Total Amount (Rs.)
(i)	(ii)	(iii)	(iv)	(v)	(vi)

LIGHT FIXTURES

(Ref. Specification Section-8001, 8150)

Following light fixtures installed on surface or wall or floor or false ceiling or columns or masts complete with all accessories such as lamps, lamp holders, ballasts, starters, ignitors, capacitors, LED drivers as applicable, etc. including all relevant installation material as required and approved by the Engineer. (Note: The contractor shall be responsible for compatibility of recessed mounted light fixtures with gypsum / aluminium / damp etc., false ceiling types in coordination with architectural design.)

EX-E-26	Supply and Fixing SMD Type LED Road light Fixture (120-130 watts) 130 lumens per watt IP 66 rated	No.	40
EX-E-27	Supply and Installation of 5 Meter Decorative Pole along with 60 watt LED Light IP65, Die-Cast Aluminum	No.	20
EX-E-28	Outdoor type Die-Cast Aluminum LED bulkhead wall light of minimum 2000 lumens light output, IP-55 or better rated	No.	40
EX-E-29	200 watt led flood lights along with their fixing arrangements for the outdoor entrance Area.	No.	20
EX-E-30	Planter light Outdoor type Die-Cast Aluminum LED light of minimum 200 lumens light output, IP-55 or better rated	No.	40

Total Amount (Rs.) =

AVIATION COMPLEX AT BLUE AREA, ISLAMABAD

BILL NO. 4: FAÇADE WORK

BILL OF QUANTITIES

Item No.	Item Description	Unit	Qty	Unit Rate (Rs.)	Total Amount (Rs.)
(i)	(ii)	(iii)	(iv)	(v)	(vi)

GENERAL NOTE

SCOPE : (Applicable to all sections)

Providing, supply, fabricating and applying in any floor and at any height or depth except where otherwise stated in the specific item of the Bill, including all material, labour, all operations related to the items and plant for the following items, complete in all respects as per drawings, approved shop drawings, specifications, miscellaneous details and instructions of the Engineer. etc. complete as directed.

Ref Specs: 6220, 6250, 8001, 8150, 8220

Façade 1 Providing, Design, Fabricating and Installing Thermally Broken Aluminum Curtain Wall / Façade System comprising extruded Aluminum Alloy 6063-T5/T6 mullions and transoms with minimum 2.2 mm wall thickness, pressure plates, cover caps, brackets, anchors and all fixing accessories complete, designed to withstand required design pressure, including PA66 GF25 thermal break strips, double EPDM/Neoprene gaskets, integrated drainage system, weather sealing, concealed SS-304/GI hardware, operable vents with approved accessories, powder coating 70-80 microns or anodizing 15-18 microns finish, floor-to-floor fire barrier system, adding safety in case of fire exposure, sealants and all related works complete in accordance with approved shop drawings and international standards for air permeability, water tightness and thermal performance ($U_f \leq 1.5 \text{ W/m}^2\text{K}$), as approved by the Engineer.

Sft. 285,320

Façade 2 Providing, design and Installing High-Performance Double Glazed Glass Units (DGU) on pre-installed aluminum curtain wall/stick system, comprising 6 mm tempered Grey 40T Clear glass + 16 mm argon filled gap + 6 mm clear tempered glass, including high-performance ceramic fritted spandrel glass panels where required, complete with structural silicone, approved weather sealants, setting blocks, spacers, gaskets and all necessary accessories. The glazing system shall achieve U-Value of $1.310 \text{ W/m}^2\text{K}$ and shading coefficient (SC) of 0.24, ensuring compliance with specified thermal, acoustic, air infiltration and water tightness performance standards, complete in all respects as per approved shop drawings and as per Engineer's instructions.

Sft. 250,320

AVIATION COMPLEX AT BLUE AREA, ISLAMABAD

BILL NO. 4: FAÇADE WORK

BILL OF QUANTITIES

Item No.	Item Description	Unit	Qty	Unit Rate (Rs.)	Total Amount (Rs.)
(i)	(ii)	(iii)	(iv)	(v)	(vi)
Façade 3	Providing, designing, fabricating, supplying, installing, testing and commissioning of Semi-Transparent Building Integrated Photovoltaic (BiPV) Curtain Wall System comprising thermally broken aluminum curtain wall framing integrated with CdTe Thin Film Semi-Transparent Insulated Solar Glass Units (IGUs), complete with mullions, transoms, pressure plates, cover caps, structural silicone, EPDM gaskets, aluminum brackets, galvanized steel support system, anchor bolts, DC/AC cabling, combiner boxes, string inverters, AC distribution panels, monitoring system, earthing, lightning protection system and all associated electrical and mechanical accessories. The BiPV IGUs shall comprise 8 mm heat-strengthened/fully tempered semi-transparent CdTe thin-film solar glass, 24 mm argon-filled cavity with warm-edge spacer and dual-seal system, and 6 mm clear tempered safety glass (overall thickness 38 mm). The complete system shall include detailed engineering, structural and electrical design, fabrication, transportation, installation, testing, commissioning, performance verification and all necessary accessories, complete in accordance with approved shop drawings, structural and electrical calculations, project specifications, applicable IEC/ASTM standards and as per Engineer's instructions.	Sft.	35,000		
Façade 4	Providing, Design, Fabricating and Installing Custom Extruded Aluminum Diamond Lattice Skin Façade System comprising specially designed aluminum extruded profiles forming variable perforation diamond geometry panels, fixed over secondary MS/Aluminum support framework with all node joints, connectors, brackets, anchors, alignment systems, edge trims and SS-304 fasteners complete. The system shall include powder coated/PVDF coated aluminum finish (minimum 60-80 microns) suitable for exterior application, integrated provision for LED lighting including conduits, fixing arrangements and maintenance access cavity between curtain wall and perforated façade for cleaning and servicing operations. The façade system shall be structurally engineered to withstand wind load, dead load, thermal movement and deflection requirements, including custom dies, EPDM separators, Hilti/Fischer or approved equivalent anchor systems, and all accessories complete in accordance with approved shop drawings and as per Engineer's instructions.	Sft.	228,805		

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BILL NO. 4: FAÇADE WORK

BILL OF QUANTITIES

Item No.	Item Description	Unit	Qty	Unit Rate (Rs.)	Total Amount (Rs.)
(i)	(ii)	(iii)	(iv)	(v)	(vi)
Façade 5	Providing, Fabricating and Installing Aluminum Storm Water Louver Panels on Aluminum Curtain Wall Stick System (W-Type) comprising extruded aluminum "W" type fins/louvers of approved profile and configuration, designed for effective storm water management and drainage, including supporting aluminum framework, brackets, anchors, sealants, gaskets, fixing accessories and all necessary hardware complete. The louvers shall be installed in required shapes, sizes and elevations within the curtain wall system, ensuring proper alignment, structural stability, weather resistance and secure fixing, complete in accordance with approved shop drawings, performance specifications and as per Engineer's instructions.	Sft.	18,078		
Façade 6	Design, supply, fabrication, transportation and installation of free-form curved canopy system for drop-off area, comprising structural steel framework and aluminum composite panel (ACP) cladding, forming wave-like architectural geometry, as per approved drawings and specifications. The work shall include MS structural steel frame (beams, curved members, base plates, anchor bolts, connections), designed to withstand all applicable loads (dead, live, wind), including cutting, bending, welding, erection, alignment and complete structural stability. Cladding shall consist of fire-retardant ACP panels 4mm thick with 0.5/0.5mm skin thickness with PVDF coating, fixed over GI sheet backing with Rockwool insulation, including fabrication of single/double curved panels, edge profiles, soffit finishing, and all necessary brackets, cleats and connectors, anti-corrosion treatment (primer/paint or galvanizing), sealants, joints treatment, and finishing works. Provision for integrated LED lighting (concealed strip lights and downlights) along edges and soffit, including conduits and fixing arrangements, shall be incorporated (lighting fixtures payable separately unless specified). The system shall include integrated rainwater drainage through gutters and concealed downpipes within the structure, complete the in all respect and as directed by the Engineer.	Sft.	44,000		

AVIATION COMPLEX AT BLUE AREA, ISLAMABAD

BILL NO. 4: FAÇADE WORK

BILL OF QUANTITIES

Item No.	Item Description	Unit	Qty	Unit Rate (Rs.)	Total Amount (Rs.)
(i)	(ii)	(iii)	(iv)	(v)	(vi)
	Pixel Façade Lighting				
Façade 7	ST Lighting model High-intensity LED Pixel Light, outdoor rated, individually addressable, suitable for façade/media lighting applications. Each fixture shall be capable of RGBW color mixing with DMX512 control protocol compatibility. Fixture housing to be weatherproof (minimum IP66/IP67) with robust construction for long-term outdoor use. Lights shall be installed at 7 ft center-to-center spacing, ensuring uniform illumination and consistent pixel mapping across the façade. Each pixel to deliver high lumen output with appropriate beam angle (typically 10°–30° as per design) to achieve focused projection and minimal spill	Set	5,050		
	IP Rated Silicon rope light				
Façade 8	ST Lighting Silicone Neon Flex RGBW Profile Light, 24V DC, 15 W/m, DMX512 controllable with full RGBW color mixing. High-quality diffused output with dot-free illumination, 120° beam angle. Minimum IP-66/ IP67 rated, UV-resistant silicone body for outdoor use. Complete with mounting accessories, connectors, and compatible DMX control integration.	Rft	5,000		
Façade 9	ST Lighting Silicone Neon Flex RGBW Profile Light, 24V DC, 15 W/m, DMX512 controllable with full RGBW color mixing. High-quality diffused output with dot-free illumination, 120° beam angle. Minimum IP-66/ IP67 rated, UV-resistant silicone body for outdoor use. Complete with mounting accessories, connectors, and compatible DMX control integration.	Rft	1,200		
	DMX Controller				
Façade 10	Providing, Supplying, Installing, Testing and Commissioning DMX Master Controller compatible with RGBW pixel façade lighting system, capable of programmable lighting control, sequencing and synchronization, complete with all required interfaces, software integration, wiring and accessories for complete operation as per approved specifications.	No	2		
	DMX Sub Controller				
Façade 11	Providing, Supplying, Installing, Testing and Commissioning DMX Sub Controller compatible with RGBW pixel façade lighting system, including communication interfaces, control modules, power connectivity and all associated accessories required for proper integration and operation of the lighting control system, complete in all respects as per approved specifications.	No	9		
				Total Amount (Rs.) =	

AVIATION COMPLEX AT BLUE AREA, ISLAMABAD

BILL NO. 5: HEATING VENTILATION & AIR CONDITIONING (HVAC) WORKS

BILL OF QUANTITIES

Item No.	Item Description	Unit	Qty	Unit Rate (Rs.)	Total Amount (Rs.)
(i)	(ii)	(iii)	(iv)	(v)	(vi)
HVAC Works					
Ref Specs: HVAC-SP, 9000					
HVAC-01	Supply, installation, testing & commissioning of Variable Speed/Frequency Drive Water Cooled Centrifugal Electric Type Chiller (CH) including performance testing at manufacturer's production facility, transportation, insurance, unloading, storage, lifting, placing, fixing at foundations, insulation complete in all respects as per specifications and drawings with all taxes and duties.				
a) CH-1		Each	4		
b) Essential Spare Parts for Chillers		Lot	1		
HVAC-02	Supply, installation, testing & commissioning of Dual Fuel Direct Fired Hot Water Generator (HWG) including including preshipment inspection at manufacturer's production facility, transportation, insurance, unloading, storage, lifting, placing at foundations, insulation complete in all respects as per specifications and drawings with all taxes and duties.				
a) HWG-1		Each	2		
b) Essential Spare Parts for Hot Water Generators		Lot	1		
HVAC-03	Supply, installation, testing & commissioning of Packaged Type Cross Flow Induced Draft Top Air Discharge Cooling Towers (CT) including preshipment inspection at manufacturer's production facility, transportation, insurance, unloading, storage, lifting, placing at foundation including all taxes and duties.				
a) CT-1		Each	4		
b) Essential Spare Parts for Cooling Towers		Lot	1		
HVAC-04	Supply, installation, testing & commissioning of Air Handling Units (AHU) with variable frequency/speed drives including preshipment inspection at manufacturer's production facility, transportation, insurance, un-loading, storage, lifting, placing at foundations complete in all respects as per specifications and drawings with all taxes and duties.				
a) AHU-1		Each	81		
b) AHU-2		Each	16		
c) AHU-3		Each	1		
d) AHU-4		Each	1		
e) Essential Spare Parts for Air Handling Units		Lot	1		
HVAC-05	Supply, installation, testing & commissioning of Fan Coil Units (FCU) thermostatic controllers etc including preshipment inspection at manufacturer's production facility, transportation, insurance, un-loading, storage, lifting, hanging and fixing at locations complete in all respects as per specifications and drawings with all taxes and duties.				
a) FCU-1		Each	80		
b) FCU-2		Each	20		
c) FCU-3		Each	8		
d) FCU-4		Each	21		
e) FCU-5		Each	22		
f) FCU-6		Each	38		
g) FCU-7		Each	11		

AVIATION COMPLEX AT BLUE AREA, ISLAMABAD

BILL NO. 5: HEATING VENTILATION & AIR CONDITIONING (HVAC) WORKS

BILL OF QUANTITIES

Item No.	Item Description	Unit	Qty	Unit Rate (Rs.)	Total Amount (Rs.)
(i)	(ii)	(iii)	(iv)	(v)	(vi)
	h) FCU-8	Each	14		
	i) FCU-9	Each	17		
	j) FCU-10	Each	14		
	k) Essential Spare Parts for Fan Coil Units	Lot	1		
HVAC-06	Supply, installation, testing & commissioning of Chemical Feeders and Chemicals including transportation, un-loading and storage complete in all respects as per specifications and drawings with all taxes and duties.				
	a) Chemical Feeder for Chilled & Hot Water System	Each	1		
	b) Chemical Dosing Pump & Storage Tank for Condenser Water System	Each	1		
	c) Chemicals for Condenser Water System & Cooling Towers	Lot	1		
	d) Chemicals for Chilled & Hot Water System	Lot	1		
HVAC-07	Supply, installation, testing & commissioning of Expansion Tank (ET) including unloading, transportation, insurance, storage, lifting, hanging, and insulation at the location complete in all respects as per specifications and drawings with all taxes and duties.				
	a) ET-01	Each	1		
HVAC-08	Supply, installation, testing & commissioning of Air Separator (AS) including unloading, transportation, insurance, storage, lifting, hanging, and insulation at the location complete in all respects as per specifications and drawings with all taxes and duties.				
	a) AS-01	Each	1		
HVAC-09	Supply, installation, testing & commissioning of End Suction Centrifugal Water Pumps with bronze impeller, stainless steel shaft, mechanical seal, variable frequency/speed drives as scheduled including performance testing at manufacturer's production facility, transportation, insurance, unloading, storage, lifting, and fixing at locations complete in all respects as per specifications and drawings with all taxes and duties.				
	a) CHP-1	Each	4		
	b) CP-1	Each	4		
	c) CHSP-1	Each	2		
	d) CHSP-2	Each	2		
	e) CHSP-3	Each	2		
	f) CHSP-4	Each	2		
	g) CHSP-5	Each	2		
	h) OLP-1	Each	2		
	i) Essential Spare Parts for Pumps	Lot	1		
HVAC-10	Supply, installation, testing & commissioning of Ventilation Fans with variable frequency/speed drives as scheduled including transportation, insurance, unloading, storage, lifting, and fixing at locations complete in all respects as per specifications and drawings with all taxes and duties.				
	a) EF-1	Each	17		
	b) EF-2	Each	51		
	c) EF-3	Each	1		
	d) EF-4	Each	2		
	e) EF-5	Each	17		
	f) EF-6	Each	51		

AVIATION COMPLEX AT BLUE AREA, ISLAMABAD

BILL NO. 5: HEATING VENTILATION & AIR CONDITIONING (HVAC) WORKS

BILL OF QUANTITIES

Item No.	Item Description	Unit	Qty	Unit Rate (Rs.)	Total Amount (Rs.)
(i)	(ii)	(iii)	(iv)	(v)	(vi)
g) EF-7		Each	2		
h) EF-8		Each	1		
i) EF-9		Each	1		
j) EF-10		Each	1		
k) EF-11		Each	4		
l) EF-12		Each	7		
m) SF-1		Each	1		
n) SF-2		Each	1		
o) SF-3		Each	2		
p) SF-4		Each	2		
q) SF-5		Each	6		
r) SF-6		Each	1		
s) JF-1		Each	54		
t) Essential Spare Parts for Fans		Lot	1		
HVAC-11	Supply, installation, testing & commissioning of Decorative Cooling/Heating High Ambient DC Inverter Type Direct Expansion Split Air Conditioners with precharged outdoor condensing Units including distributors, thermostats, expansion valves, hangers, controllers, spare parts etc. complete in all respects as per specifications and drawings with all taxes and duties.				
a) FSU-IU-1/FSU-CU-1 (Minimum Unit Capacity = 24 MBH)		Each	12		
b) FSU-IU-2/FSU-CU-2 (Minimum Unit Capacity = 96 MBH)		Each	4		
c) Essential Spare Parts as specified in Technical Provisions		Lot	1		
HVAC-12	Supply, installation, testing & commissioning of Steel Tanks including transportation, unloading, storage, lifting, and fixing at locations complete in all respects as per specifications and drawings with all taxes and duties. Main Oil Storage Tank (MST-1) with complete accessories				
a) including ultrasonic level sensor, essential accessories and supports.		Each	1		
Day Oil Storage Tank (DT-1) with complete accessories including					
b) ultrasonic level sensor, essential accessories and supports.		Each	1		
HVAC-13	Supply, installation, testing & commissioning of Filters (Code H) other than installed in filter boxes of Air Handling Units including transportation, unloading, storage, lifting, and fixing at locations complete in all respects as per specifications and drawings with all taxes and duties.	Sft	770		
HVAC-14	Supply, fabrication, testing, installation & commissioning of Galvanized Iron Sheet Metal Duct works including anchor bolts, studs, hangers, channels, supports, splitter dampers, bracings etc. complete in all respects as per specifications and drawings with all taxes and duties.				
a) US Gauge 26		Sft	7293		
b) US Gauge 24		Sft	160871		
c) US Gauge 22		Sft	192757		
d) US Gauge 20		Sft	157978		
e) US Gauge 18		Sft	103683		

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BILL NO. 5: HEATING VENTILATION & AIR CONDITIONING (HVAC) WORKS

BILL OF QUANTITIES

Item No.	Item Description	Unit	Qty	Unit Rate (Rs.)	Total Amount (Rs.)
(i)	(ii)	(iii)	(iv)	(v)	(vi)
HVAC-15	Supply, fabrication, testing, installation & commissioning of Volume Control Dampers including transportation, unloading, storage, lifting, and fixing at locations complete in all respects as per specifications and drawings with all taxes and duties.				
a)	Volume Dampers (VD)	Sft	3900		
b)	Motorized Volume Dampers (MVD)	Sft	4110		
HVAC-16	Supply, fabrication, installation, testing & commissioning of Galvanized Iron Sheet Metal Fire Dampers including transportation, unloading, storage, lifting, and fixing at locations complete in all respects as per specifications and drawings with all taxes and duties.				
a)	Fire Dampers (FD)	Sft	4930		
HVAC-17	Supply, fabrication, installation, testing & commissioning of pre assembled Flexible Duct Connectors with coated woven fabric, galvanized iron collars both by means of double lock seam on each side including transportation, unloading, storage, lifting, and fixing at locations complete in all respects as per specifications and drawings with all taxes and duties.				
a)	Flexible Duct Connectors (Rectangular)	Rft	6130		
b)	Duct Flexible Connection where duct crosses building joints(Construction Joints)	Lot	1		
HVAC-18	Supply, fabrication, installation, testing & commissioning of Breaching/Flue Stack including transportation, unloading, storage, lifting, and fixing at locations complete in all respects as per specifications and drawings with all taxes and duties.				
a)	Dia 16"	Sft	120		
b)	Dia 20"	Sft	1230		
HVAC-19	Supply, fabrication, installation, testing & commissioning of pipes & fittings including hangers, anchor bolts, rubber vibration mounts, transportation, unloading, storage, lifting, and fixing at locations complete in all respects as per specifications and drawings with all taxes and duties.				
a)	Mild Steel (MS) Seamless Pipes & Fittings (ASTM A106, API 5L, Grade B, Schedule 40)				
a-1)	Dia 3/4"	Rft	3003		
a-2)	Dia 1"	Rft	825		
a-3)	Dia 1-1/4"	Rft	1386		
a-4)	Dia 1-1/2"	Rft	1430		
a-5)	Dia 2"	Rft	1562		
a-6)	Dia 2-1/2"	Rft	1980		
a-7)	Dia 3"	Rft	3522		
a-8)	Dia 4"	Rft	748		
a-9)	Dia 5"	Rft	422		
a-10)	Dia 6"	Rft	972		
a-11)	Dia 8"	Rft	3660		
a-12)	Dia 10"	Rft	739		
a-13)	Dia 12"	Rft	286		
a-14)	Dia 14"	Rft	400		
a-15)	Dia 16"	Rft	1025		
a-16)	Dia 18"	Rft	933		
a-17)	Dia 20"	Rft	55		
b)	Polypropylene Random Copolymer (PPRC) Pipes & Fittings (DIN 8077-8078, PN 20)				

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Item No.	Item Description	Unit	Qty	Unit Rate (Rs.)	Total Amount (Rs.)
(i)	(ii)	(iii)	(iv)	(v)	(vi)
b-1)	Dia 3/4"	Rt	350		
b-2)	Dia 1"	Rt	175		
b-3)	Dia 1-1/4"	Rt	125		
b-4)	Dia 1-1/2"	Rt	100		
b-5)	Dia 2"	Rt	75		
b-6)	Dia 2-1/2"	Rt	75		
b-7)	Dia 3"	Rt	75		
c)	Unplasticized Poly Vinyl Chloride (uPVC) Pipes & Fittings Class D and or Class E)				
c-1)	Dia 3/4"	Rt	350		
c-2)	Dia 1"	Rt	175		
c-3)	Dia 1-1/4"	Rt	125		
c-4)	Dia 1-1/2"	Rt	100		
c-5)	Dia 2"	Rt	75		
c-6)	Dia 3"	Rt	75		
c-7)	Dia 4"	Rt	50		
c-8)	Dia 6"	Rt	50		
HVAC-20	Supply, installation, testing & commissioning of Valves, Strainers and Specialties including transportation, unloading, storage, lifting, and fixing at locations complete in all respects as per specifications and drawings with all taxes and duties.				
a)	Gate Valve				
a-1)	Dia 3/4"	Each	296		
a-2)	Dia 1"	Each	134		
a-3)	Dia 1-1/2"	Each	132		
a-4)	Dia 2"	Each	495		
a-5)	Dia 2-1/2"	Each	13		
a-6)	Dia 3"	Each	111		
a-7)	Dia 4"	Each	6		
a-8)	Dia 5"	Each	18		
a-9)	Dia 6"	Each	6		
a-10)	Dia 8"	Each	40		
a-11)	Dia 10"	Each	18		
a-12)	Dia 12"	Each	20		
a-13)	Dia 14"	Each	6		
a-14)	Dia 16"	Each	4		
a-15)	Dia 18"	Each	3		
b)	Globe Valve				
b-1)	Dia 3/4"	Each	148		
b-2)	Dia 1"	Each	67		
b-3)	Dia 1-1/2"	Each	63		
b-4)	Dia 2"	Each	8		
b-5)	Dia 2-1/2"	Each	4		
b-6)	Dia 3"	Each	53		
b-7)	Dia 4"	Each	2		
b-8)	Dia 5"	Each	24		
b-9)	Dia 6"	Each	18		
b-10)	Dia 8"	Each	16		
b-11)	Dia 10"	Each	4		
b-12)	Dia 12"	Each	4		
b-13)	Dia 16"	Each	2		
c)	Pressure Reducing Valve				
c-1)	Dia 2"	Each	1		
d)	Pressure Relief Valve				
d-1)	Dia 2"	Each	1		
e)	Check Valve				

AVIATION COMPLEX AT BLUE AREA, ISLAMABAD

BILL NO. 5: HEATING VENTILATION & AIR CONDITIONING (HVAC) WORKS

BILL OF QUANTITIES

Item No.	Item Description	Unit	Qty	Unit Rate (Rs.)	Total Amount (Rs.)
(i)	(ii)	(iii)	(iv)	(v)	(vi)
e-1)	Dia 1-1/2"	Each	2		
e-2)	Dia 2"	Each	3		
e-3)	Dia 8"	Each	16		
e-4)	Dia 10"	Each	8		
e-5)	Dia 12"	Each	8		
e-6)	Dia 18"	Each	1		
f)	Balancing Valve				
f-1)	Dia 2"	Each	93		
f-2)	Dia 2-1/2"	Each	1		
f-3)	Dia 3"	Each	1		
f-4)	Dia 8"	Each	7		
f-5)	Dia 10"	Each	4		
f-6)	Dia 12"	Each	4		
g)	Drain Cock				
g-1)	Dia 1-1/2"	Each	62		
h)	Automatic Air Vent + Stop Cock				
h-1)	Dia 1"	Each	20		
i)	Strainer				
i-1)	Dia 3/4"	Each	148		
i-2)	Dia 1"	Each	55		
i-3)	Dia 1-1/2"	Each	65		
i-4)	Dia 2"	Each	93		
i-5)	Dia 2-1/2"	Each	1		
i-6)	Dia 3"	Each	1		
i-7)	Dia 8"	Each	10		
i-8)	Dia 10"	Each	10		
i-9)	Dia 14"	Each	4		
j)	Flexible Pipe Connector				
j-1)	Dia 1-1/2"	Each	4		
j-2)	Dia 8"	Each	20		
j-3)	Dia 10"	Each	8		
j-4)	Dia 12"	Each	4		
j-5)	Dia 14"	Each	4		
k)	Manual Air Vent				
k-1)	Dia 3/4"	Each	148		
k-2)	Dia 1"	Each	215		
l)	2 Way Control Valves				
l-1)	Dia 3/4"	Each	148		
l-2)	Dia 1"	Each	55		
l-3)	Dia 1-1/2"	Each	63		
HVAC-21 Supply, installation, testing & commissioning of insulation including transportation, unloading, storage, lifting, and fixing at locations complete in all respects as per specifications and drawings with all taxes and duties.					
a)	Indoor Supply/Return Air Duct Concealed to Vision	Sft	460812		
b)	Indoor Supply/Return Air Duct in AHU Rooms	Sft	24909		
c)	Indoor Supply/Return Air Duct Exposed to Vision & Outdoor	Sft	12454		
d)	Acoustic Liner on Supply Air Ducts and Sheet Metal Air Plenums	Sft	37530		
e)	Insulation for Breeching Flue Stacks	Sft	1350		
f)	Insulation for Indoor Chilled & Hot Water Pipes, Valves, Fittings & Accessories				
g-1)	Dia 3/4"	Rft	3003		
g-2)	Dia 1"	Rft	825		
g-3)	Dia 1-1/4"	Rft	1386		
g-4)	Dia 1-1/2"	Rft	1320		

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BILL NO. 5: HEATING VENTILATION & AIR CONDITIONING (HVAC) WORKS

BILL OF QUANTITIES

Item No.	Item Description	Unit	Qty	Unit Rate (Rs.)	Total Amount (Rs.)
(i)	(ii)	(iii)	(iv)	(v)	(vi)
g-5) Dia 2"		Rt	1320		
g-6) Dia 2-1/2"		Rt	1980		
g-7) Dia 3"		Rt	3346		
g-8) Dia 4"		Rt	528		
g-9) Dia 5"		Rt	422		
g-10) Dia 6"		Rt	739		
g-11) Dia 8"		Rt	1102		
	Insulation for CPR/Outdoor Chilled & Hot Water Piping, Fittings, Accessories & Valves including transportation, unloading, storage, lifting, and fixing at locations complete in all respects as per specifications and drawings with all taxes and duties.				
h-1) Dia 1-1/2"		Rt	110		
h-2) Dia 8"		Rt	2492		
h-3) Dia 10"		Rt	739		
h-4) Dia 14"		Rt	330		
h-5) Dia 18"		Rt	244		
	Insulation for cooling Coil Condensate Drain Piping including Fittings, Accessories & Valves including transportation, unloading, storage, lifting, and fixing at locations complete in all respects as per specifications and drawings with all taxes and duties.				
i-1) Dia 3/4"		Rt	2925		
i-2) Dia 1"		Rt	1375		
i-3) Dia 1-1/4"		Rt	980		
i-4) Dia 1-1/2"		Rt	1225		
i-5) Dia 2"		Rt	1980		
i-6) Dia 2-1/2"		Rt	25		
i-7) Dia 3"		Rt	50		
i-8) Dia 4"		Rt	15		
	Insulation for Central Plant Room Equipment including transportation, unloading, storage, lifting, and fixing at locations complete in all respects as per specifications and drawings with all taxes and duties.				
j-1) Insulation for Expansion Tanks		Lot	1		
j-2) Insulation for Air Separators		Lot	1		
j-3) Insulation for Pumps		Lot	1		
j-4) Insulation for Hot Water Generators		Lot	1		
j-5) Insulation for Chillers		Lot	1		
HVAC-22	Supply, installation, testing & commissioning of complete electrical equipment, material, controls and accessories including transportation, unloading, storage, lifting, and fixing at locations complete in all respects as per specifications and drawings with all taxes and duties.				
a) Apparatus Control Panels (ACP)		Lot	1		
b) Motor Control Center (MCC)		Lot	1		
c) Actuators for Fire & Motorized Dampers		Lot	1		
d) All electrical/control works as specified except MCC and ACP mentioned under item (a) & (b) here above including entire HVAC equipment, power/control wiring works etc.		Lot	1		

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BILL OF QUANTITIES

Item No.	Item Description	Unit	Qty	Unit Rate (Rs.)	Total Amount (Rs.)
(i)	(ii)	(iii)	(iv)	(v)	(vi)
HVAC-23	Supply, installation, testing & commissioning of Gas Pipes, Fittings, Valves, Regulators & Accessories including anchor bolts, studs, hangers, supports, channels, rubber vibration mounts etc. including transportation, unloading, storage, lifting, and fixing at locations complete in all respects as per specifications and drawings with all taxes and duties.	Lot	1		
HVAC-24	Supply, installation, testing & commissioning of Oil Pipes, Fittings, Valves, Regulators & Accessories including anchor bolts, studs, hangers, supports, channels, rubber vibration mounts etc. including transportation, unloading, storage, lifting, and fixing at locations complete in all respects as per specifications and drawings with all taxes and duties.	Lot	1		
HVAC-25	Supply, installation, testing & commissioning of Air Inlets & Outlets including transportation, unloading, storage, lifting, and fixing at locations complete in all respects as per specifications and drawings with all taxes and duties.				
a)	Code A: Supply Air Diffuser Square Face Rectangular Neck	Sft	5560		
b)	Code B: Return Air Diffuser Square Face Rectangular Neck	Sft	5560		
c)	Code C: Supply Air Grill Side Wall Double Deflection Adjustable	Sft	2600		
d)	Code D: Return Air Grill Side Wall Double Deflection Adjustable Bars	Sft	1910		
e)	Code E: Exhaust Air Sand Trap Anti Vermin Bird Mesh Louvers	Sft	1310		
f)	Code F: Fresh Air Sand Trap Anti Vermin Bird Mesh Louvers	Sft	1220		
g)	Code G: Jet Flow Ceiling Supply Air Diffuser Eye Ball Round Neck	Each	20		
HVAC-26	Supply, installation, testing & commissioning of instruments and gauges including transportation, unloading, storage, lifting, and fixing at locations complete in all respects as per specifications and drawings with all taxes and duties.				
a)	Pipeline Pressure Gauges including stop cock & siphon	Each	252		
b)	Pipeline Thermometers including wells	Each	218		
c)	Oil Filters (Dia 2")	Each	1		
HVAC-27	Painting & Identification	Lot	1		
HVAC-28	Relevant civil works required to complete the system including equipment foundations, drain channels, cutting, patching, repairing, boxing, sealing, plastering, painting etc. including transportation, unloading, storage, lifting, and fixing at locations complete in all respects as per specifications and drawings with all taxes and duties.	Lot	1		
HVAC-29	Startup, Testing, Adjustment, Balancing & Commissioning of overall HVAC system.	Lot	1		
				Total Cost (Rs.)	

AVIATION COMPLEX AT BLUE AREA, ISLAMABAD

BILL NO. 6: ELEVATOR WORKS

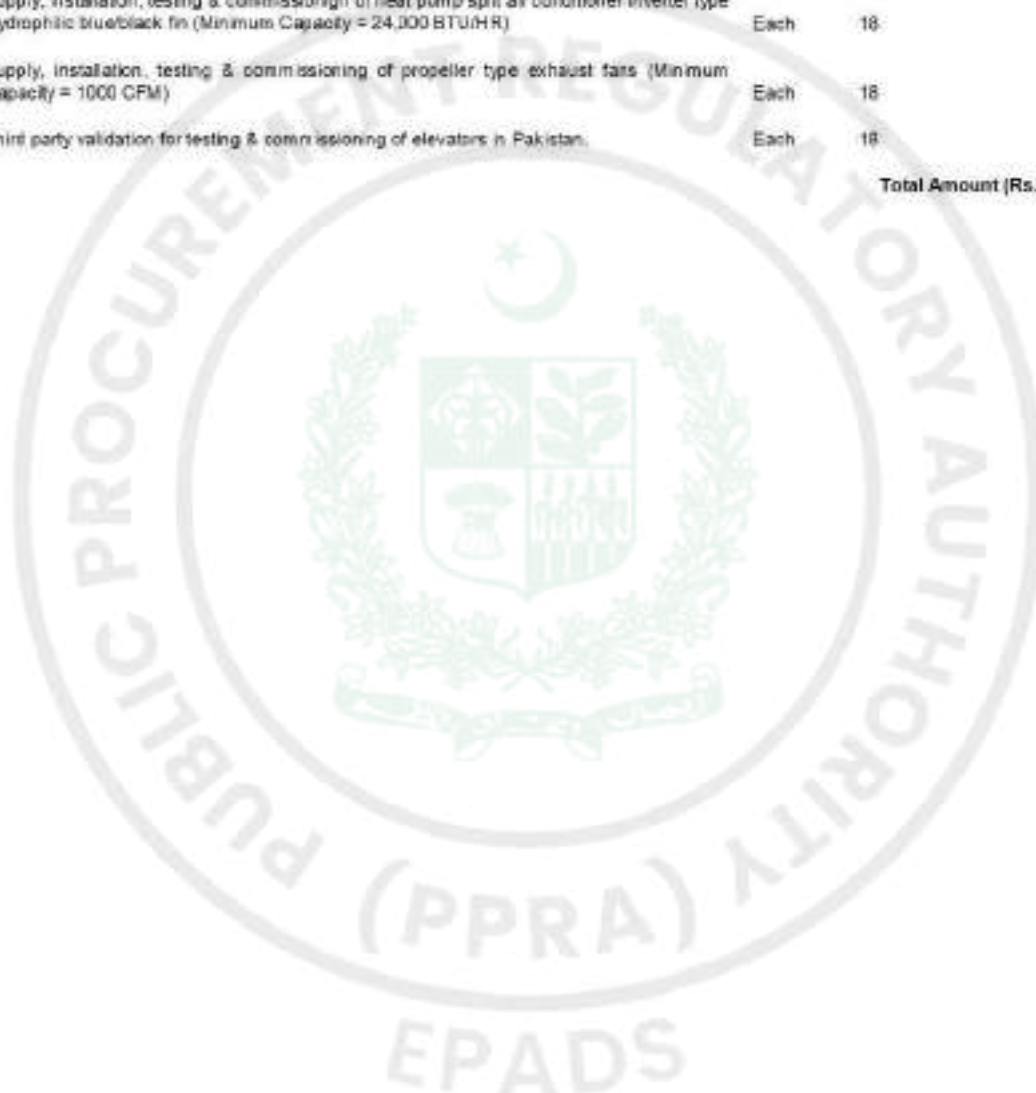
BILL OF QUANTITIES

Item No.	Item Description	Unit	Qty	Unit Rate (Rs.)	Total Amount (Rs.)
(i)	(ii)	(iii)	(iv)	(v)	(vi)
ELEVATORS					
Ref Specs: Elevator-SP, 9100					
Elevator-01	Supply, installation, testing & commissioning of imported brand new Passenger/Observation Elevator, Machine Room (MR), Destination Control with Group Control System, heavy duty fully complied and certified by EN 81-20, EN 81-50 and EN 81-70 standards (EU-Type Examination Certificate-Module-B with Annexures) with minimum features including but not limited to VVVF high efficiency motor, two sides complete inside back painted glass/stainless steel hairline finish and Rear Side wall (2100*2400mm) of minimum 12mm double galvanized tempered glass, or as approved by the Engineer, indoor type for ambient condition of 0-40 °C, capacity of 1,600 kg, Cabin Size W 2,100 mm x D 1,600 mm x H 2,400 mm, speed 3.0 m/s, 32 stops/32 openings, approximate total travel height 135 m, entrance W 1200 mm x H 2,100 mm. Lift shall minimum include car, hoisting machinery, counter weights, supports, brackets, TFT/LED displays in Call Operating Panel and Landing Indicators, automatic controls, embedded parts, access ladder, separator screen & trap door, electric overload, shaft lightening, intercom system, gong, emergency operation for cabin/door, emergency rescue device (ups/battery), Energy Regeneration drive system, RFID Interface provision, Access Control system (Biometric/Bar Code), Bi-directional speed governor (Up & Down), Unintended Car Movement Protection, Ascending Car Movement Protection, Communication/Interface Card and software to integrate with BMS, safety devices, manual emergency operation lever and all the essential spare parts as per Appendix-III Essential and Recommended Spare Parts for One (01) year use during defects liability period and FAT for two (02) persons complete in all respect as per specification, drawings and according to EN 81 standard compliance, including all taxes and duties.	Each	14		
Elevator-02	Supply, installation, testing & commissioning of imported brand new Fire & Evacuation Elevator, Machine Room (MR), Simplex Control System, heavy duty fully complied and certified by EN 81-20, EN 81-50, EN 81-70, EN 81-72 and EN 81-76 standards (EU-Type Examination Certificate-Module-B with Annexures) with minimum features including but not limited to VVVF high efficiency motor, complete inside stainless steel hairline finish or as approved by the Engineer, indoor type for ambient condition of 0-40 °C, capacity of 1,600 kg, Cabin Size W 1,400 mm x D 2,400 mm x H 2,400 mm, speed 3.0 m/s, 33 stops/33 openings, approximate total travel height 135 m, entrance W 1200 mm x H 2,100 mm. Lift shall minimum include car, hoisting machinery, counter weights, supports, brackets, TFT/LED displays in Call Operating Panel and Landing Indicators, automatic controls, embedded parts, access ladder, separator screen & trap door, electric overload, shaft lightening, intercom system, gong, emergency operation for cabin/door, emergency rescue device (ups/battery), Energy Regeneration drive system, RFID Interface provision, Access Control system (Biometric/Bar Code), Bi-directional speed governor (Up & Down), Unintended Car Movement Protection, Ascending Car Movement Protection, Communication/Interface Card and software to integrate with BMS, safety devices, manual emergency operation lever and all the essential spare parts as per Appendix-III Essential and Recommended Spare Parts for One (01) year use during defects liability period and FAT for two (02) persons complete in all respect as per specification, drawings and according to EN 81 standard compliance, including all taxes and duties.	Each	2		
Elevator-03	Supply, installation, testing & commissioning of imported brand new Cargo Elevator, Machine Room (MR), Simplex Control System, heavy duty fully complied and certified by EN 81-20, EN 81-50 and EN 81-70 standards with minimum features including but not limited to VVVF high efficiency motor, complete inside stainless steel hairline finish or as approved by the Engineer, indoor type for ambient condition of 0-40 °C, capacity of 2,500 kg, Cabin Size W 1,800 mm x D 2,700 mm x H 2,400 mm, speed 1.5-1.75 m/s, 33 stops/33 openings, approximate total travel height 135 m, entrance W 1400 mm x H 2,200 mm. Lift shall minimum include car, hoisting machinery, counter weights, supports, brackets, TFT/LED displays in Call Operating Panel and Landing Indicators, automatic controls, embedded parts, access ladder, separator screen & trap door, electric overload, shaft lightening, intercom system, gong, emergency operation for cabin/door, emergency rescue device (ups/battery), Energy Regeneration drive system, RFID Interface provision, Access Control system (Biometric/Bar Code), Bi-directional speed governor (Up & Down), Unintended Car Movement Protection, Ascending Car Movement Protection, Communication/Interface Card and software to integrate with BMS, safety devices, manual emergency operation lever and all the essential spare parts as per Appendix-III Essential and Recommended Spare Parts for One (01) year use during defects liability period and FAT for two (02) persons complete in all respect as per specification, drawings and according to EN 81 standard compliance, including all taxes and duties.	Each	2		

BILL NO. 6: ELEVATOR WORKS

BILL OF QUANTITIES

Item No.	Item Description	Unit	Qty	Unit Rate (Rs.)	Total Amount (Rs.)
(i)	(ii)	(iii)	(iv)	(v)	(vi)
Elevator-04	Relevant civil & allied works including but not limited to cutting, patching, H/I beams (supply & installation), dismantling and revamping of floor/surrounding effected areas and all works required for necessary adjustments during installation of new equipment complete in all respects. All taxes, levies & duties shall be included.	Lot	1		
Elevator-05	Electrical & ancillary works for elevators, fans & air conditioners including outside distribution board with elevator, circuit breakers cables and other essential accessories etc. complete in all respects. All taxes, levies & duties shall be included.	Lot	1		
Elevator-06	Supply, installation, testing & commissioning of heat pump split air conditioner inverter type Hydrophilic blue/black fin (Minimum Capacity = 24,000 BTU/HR)	Each	18		
Elevator-07	Supply, installation, testing & commissioning of propeller type exhaust fans (Minimum Capacity = 1000 CFM)	Each	18		
Elevator-08	Third party validation for testing & commissioning of elevators in Pakistan.	Each	18		
Total Amount (Rs.)					



AVIATION COMPLEX AT BLUE AREA, ISLAMABAD

BILL NO. 7: ESCALATOR WORKS

BILL OF QUANTITIES

Item No.	Item Description	Unit	Qty	Unit Rate (Rs.)	Total Amount (Rs.)
(i)	(ii)	(iii)	(iv)	(v)	(vi)
Escalators					
Ref Specs: Escalator-SP, 9200					
Escalator-01	Supply, installation, testing & commissioning of Indoor Escalators able to move 6000 persons/hr complying all EN-115 standards minimum but not limited to VVVF controller, tempered glass balustrade, handrail, intermediate support not required, floor cover switch, float switch, antistatic brushes, handrail entrance protection, step anti upthrust protection, communication/interface card with software to integrate with BMS including relevant electrical works, one (01) year manufacturer warranty, One (01) years of defect liability period, FAT for two (02) persons complete in all respect as per specification including all taxes & duties (complete in all respect) ES-1= 4.267 meter approx.	Each	8		
Escalator-02	Relevant civil & allied works including but not limited to cutting, patching, H/I beams (supply & installation), dismantling and revamping of floor/surrounding effected areas and all works required for necessary adjustments during installation of new equipment complete in all respects. All taxes, levies & duties shall be included.	Lot	1		
Escalator-03	Electrical & ancillary works for escalators including cables and other essential accessories etc. complete in all respects. All taxes, levies & duties shall be included.	Lot	1		
Escalator-04	Third party validation for testing & commissioning of escalators in Pakistan.	Each	8		
				Total Amount (Rs.)	<u> </u>

AVIATION COMPLEX AT BLUE AREA, ISLAMABAD

BILL NO. 8: INTEGRATED BUILDING MANAGEMENT SYSTEM (IBMS)

BILL OF QUANTITIES

Item No.	Item Description	Unit	Qty	Unit Rate (Rs.)	Total Amount (Rs.)
(i)	(ii)	(iii)	(iv)	(v)	(vi)
IBMS Works					
Ref Specs: 9300					
IBMS-01	Controls for HVAC Central Plant Room Supply, installation, Testing and Commissioning of Automatic Controls for HVAC Plant Room Equipment including Electric Chillers (4nos.), 2-Cell Cooling Towers (4nos.), Chilled Water Primary Pumps (4nos.), Chilled Water Secondary Pumps (10nos.), Condenser Water Pumps (4nos.), and Hot Water Generators (2nos.), Oil Lift Pumps (02 Nos.), HWG Flue Gas Exhaust fan (01 No.), Including all field devices/Sensors (Temperature Sensors, Humidity Sensors, Differential Pressure Switches, Pressure Sensors, Current Transducers, Flow Switches etc.), 05 Nos. Water Flow Meters (08 inch line size), DDC Controllers, Pre-wired Control Panel with Transformers, Control/Data Cabling along with all required Accessories and complete in all respects, in accordance with Tender Specifications & Drawings. Supply, Installation, Testing and Commissioning of 08 Nos. 2-way Control Valves with Actuators for Cooling Towers (12 inch line size). Supply, Installation, Testing and Commissioning of 08 Nos. 2-way Control Valves with Actuators for Chillers (12 inch Condenser Water Line size and 10 inch Chilled Water Line). Complete integration of Chillers, Hot Water Generators, Water Flow Meters and VFDs with BMS through Communication Interfaces including any Gateway/Controller required for interfacing on BACnet/IP.	Job	1		
IBMS-02	Controls for Air Handling Units (99 Nos.) Supply, installation, testing and commissioning of Controls for AHUs, including Humidity Sensors, Duct Temperature Sensors, Immersion Temperature Sensors, Differential Pressure Switches, Modulating Damper Actuators, Duct-type CO2 Sensors, Duct-type Smoke Detectors, DDC Controllers, Pre-wired Control Panel with Transformer, Control/Data Cabling along with all required Accessories and complete in all respects, in accordance with Tender Specifications & Drawings. Supply, Installation, Testing and Commissioning of 2-way modulating Control Valves of AHUs having chilled water line sizes of 3 inch for 01 AHU, 2.5 inch for 01 AHU and 2 inch for 97 AHUs.	Job	1		
IBMS-03	Controls for Basement Parking Ventilation System (66 Nos. Fans) Supply, installation, testing and commissioning of Controls for Parking Ventilation System (consisting of 06 Nos. Supply Fans, 06 Nos. Exhaust Fans and 54 Nos. Jet Fans) including all required field devices/ Sensors (CO Sensors, Differential Pressure Switches etc.), DDC Controllers, Pre-wired Control Panel with Transformers, along with all required Accessories and complete in all respects, in accordance with Tender Specifications & Drawings and Project's Requirements.	Job	1		
IBMS-04	Controls for Pressurization fans of Emergency Staircases (02 Nos. Fans located at Rooftop) Supply, installation, testing and commissioning of Controls for Pressurization of Emergency Staircases (02 Nos.) including all field devices/ Sensors (Differential Pressure Switches, Pressure Sensors etc.), DDC Controllers, Pre-wired Control Panel with Transformer, along with all required Accessories and complete in all respects, in accordance with Tender Specifications & Drawings, as specified and in accordance with Project's Requirements	Job	1		
IBMS-05	Integration of FCUs (266 Nos.) Integration of FCUs for status & parameter monitoring (On/Off), complete in all respects, including control/data cabling in accordance with Tender Specifications and Drawings. Control Valves and Thermostats/Controllers shall be provided by FCU Supplier.	Job	1		

AVIATION COMPLEX AT BLUE AREA, ISLAMABAD

BILL NO. 8: INTEGRATED BUILDING MANAGEMENT SYSTEM (IBMS)

BILL OF QUANTITIES

Item No.	Item Description	Unit	Qty	Unit Rate (Rs.)	Total Amount (Rs.)
IBMS-06	Integration of Elevators (18 Nos.) Protocol level integration with BMS through Elevator Controller/Communication Interface (Controller/Communication Interface will be provided by Elevator supplier), complete in all respects and in accordance with Tender Specifications and Drawings	Job	1		
IBMS-07	Integration of Escalators (10 Nos.) Protocol level integration with BMS through Escalator Controller/Communication Interface (Controller/Communication Interface will be provided by Elevator supplier), complete in all respects and in accordance with Tender Specifications and Drawings	Job	1		
IBMS-08	Integration of Fire Alarm System (FAS) Protocol level integration with BMS through Main Fire Alarm Control Panel (Communication Interface will be provided by FACP Supplier), complete in all respects and in accordance with Tender Specifications and Drawings	Job	1		
IBMS-09	Integration of Firefighting Pumps (02 Nos. Pump Sets) Protocol level integration with BMS through Firefighting Pumps Controller (Communication Interface will be provided by Fire Fighting Pump supplier), complete in all respects and in accordance with Tender Specifications and Drawings	Job	1		
IBMS-10	Integration of Water Supply, Booster & Drainage System (14 Nos. Pumps) Protocol level integration of Water Supply System with IBMS. (Communication Interface/module will be provided by Pump supplier), complete in all respects and in accordance with Tender Specifications and Drawings	Job	1		
IBMS-11	Integration of Diesel Generators (07 Nos.) Protocol level integration with BMS through Generator's Controller/Communication Interface (Communication Interface will be provided by Generator supplier), complete in all respects and in accordance with Tender Specifications and Drawings	Job	1		
IBMS-12	Integration of Energy Monitoring System Server level integration of Energy Monitoring System with BMS through standard communication protocols, complete in all respects and in accordance with Tender Specifications and Drawings	Job	1		
IBMS-13	Integration of Access Control System Server level integration of Access Control System with BMS through standard communication protocols, complete in all respects and in accordance with Tender Specifications and Drawings	Job	1		
IBMS-14	Integration of Surveillance System Server level integration of Surveillance with BMS through standard communication protocols, complete in all respects and in accordance with Tender Specifications and Drawings	Job	1		
IBMS-15	IBMS Computer Supply and installation of BMS Computer as specified in Tender Documents, complete with licensed Windows 11 Professional or better OS, Mouse and Keyboard, 27" LED Monitors (04 Nos.), Color Printer Size A3, BMS Software with license for upto atleast 06 concurrent users, Master Controller/Automation Server (if required) and UPS of 1.0 kVA rating.	Job	1		

AVIATION COMPLEX AT BLUE AREA, ISLAMABAD

BILL NO. 8: INTEGRATED BUILDING MANAGEMENT SYSTEM (IBMS)

BILL OF QUANTITIES

Item No.	Item Description	Unit	Qty	Unit Rate (Rs.)	Total Amount (Rs.)
IBMS-16	UPS and Power Cabling Supply, installation, testing and commissioning of UPS system and associated power supply system including cabling/conduiting and accessories for BMS Computer and associated LED Screens (04 Nos.), all LAN switches, all DDCs, all Gateways and Master Controller(s) etc., as specified in Tender Documents & Drawings, complete in all respects. UPS sizing shall be ensure at least One (01) hour backup to all connected equipment.	Job	1		
IBMS-17	LAN Equipment for BMS (Approx. LAN Nodes: 150) Supply, installation, testing and commissioning of LAN equipment including Network Switches, Data Cabinets, Patch Panels, Patch Cords, Back Boxes with Face Plates and I/Os etc. complete in all respects, in accordance with Tender Specifications & Drawings, complete in all respects.	Job	1		
IBMS-18	Control and Communication Cabling Supply & installation of communication/Data cables including cable laying and termination, conduiting & ducting etc. complete in all respects in accordance with Tender Specifications & Drawings.	Job	1		
IBMS-19	Supply & installation of control cables including laying, termination, conduiting & ducting etc. complete in all respects in accordance with Tender Specifications & Drawings.	Job	1		
IBMS-20	Testing & Commissioning - Building Management System (BMS) Testing & Commissioning of complete Building Management System (BMS) including integration and interfacing with all systems as per Technical Specifications & Drawings.	Job	1		
				Total Amount (Rs.) =	

AVIATION COMPLEX BLUE AREA, ISLAMABAD

BILL NO. 9: NATURAL GAS SUPPLY

BILL OF QUANTITIES

Item No.	Item Description	Unit	Qty	Unit Rate (Rs.)	Total Amount (Rs.)
(i)	(ii)	(iii)	(iv)	(v)	(vi)

F. MECHANICAL WORKS
(INTERNAL GAS PIPING)

(Entire under mentioned work will be executed by SNGPL or their approved Contractors)

Ref Specs: 8460

01-1M Supply, Installation, testing and Commissioning of Galvanized Steel Pipes, medium grade conforming to BS 1387 with all fittings sockets, bends, tees, elbows, where required) fixed to walls, ceilings and floors etc. including caps and plugs as per specifications and drawings.

a) ¾ inch dia. (20 mm) Rft. 420

01-2M Providing and fixing ball valves in gas piping network as per specifications and drawings of following diameter:

a) ¾ inch dia. (20 mm) Nos. 3

Total Amount (Rs.) = _____

AVIATION COMPLEX AT BLUE AREA, ISLAMABAD

BILL NO. 10.A: ROADS, WALKWAYS & PAVED AREAS

BILL OF QUANTITIES

Item No.	Item Description	Unit	Qty	Unit Rate (Rs.)	Total Amount (Rs.)
(i)	(ii)	(iii)	(iv)	(v)	(vi)

GENERAL NOTE

Supply, installation, testing and commissioning of the following items of work, including all labour, tools, plant, accessories, etc. required for completion of each item as per specifications and as approved by the Engineer.

Ref Specs: 0120,0150,1100,1200,1510,1520,1530,2650

A. EARTH WORK

RD-01	Clearing and Grubbing disposal of surplus/rubbish excavated material at designated locations as directed by the Engineer.	Sft	2,100
RD-02	Compaction of Natural Ground	Sft	2,100
RD-03	Roadway excavation in Surplus common soil/material wet or dry, including lead & lift and disposal of surplus excavated material at designated locations as directed by the Engineer.	Cft	88,934
RD-04	Roadway excavation in Unsuitable common soil/material wet or dry, including lead & lift and disposal of surplus excavated material at designated locations as directed by the Engineer.	Cft	8,893
RD-05	Sub-grade preparation in earth cut including excavation of 6" depth below sub-grade elevation and re-compaction upto 95% modified AASHTO density as per cross slope/camber as shown on drawings or as directed by Engineer.	Sft	25,895
RD-06	Structural and trench excavation in common soil/material wet or dry including disposal of surplus excavated material at designated locations as directed by the Engineer.	Cft	2,520
RD-07	Compacted Backfilling with Common material as shown on drawings or as directed by the Engineer.	Cft	16,800
RD-08	Formation of embankment from road Way excavation material including hauling up-to any lead and lift, placing in layers, compaction upto 95% modified AASHTO dry density, dressing top and side slopes as per specifications and drawings or as directed by the Engineer.	Cft	1,000

B. SUB BASE

RD-09	Providing & laying Aggregate sub-base course including compaction up to 98% of modified AASHTO dry density as specified or as directed by the Engineer.	Cft	10,600
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BILL NO. 10.A: ROADS, WALKWAYS & PAVED AREAS

BILL OF QUANTITIES

Item No.	Item Description	Unit	Qty	Unit Rate (Rs.)	Total Amount (Rs.)
(i)	(ii)	(iii)	(iv)	(v)	(vi)
C. CONCRETE WORK					
RD-10	Provide and laying Class 'E' (1:4:8) concrete in foundations including placing compacting, finishing and curing complete (including screening and washing of aggregates) as shown on drawings or as directed by the Engineer.	Cft	12,335		
RD-11	Providing and laying PCC with 3000 psi compressive cylindrical strength all as specified in slabs for roads, hard standings, etc., of any thickness, using Crushed stone, including use and waste of form work (steel) and finishing surface even and fair (not smooth).	Cft	14,460		
D. ANCILLARY / MISCELLANEOUS WORKS					
RD-12	Providing and laying Concrete tuff paver 60mm thick of approved design and colour, pattern laid on sand cushion filling of joint with sand etc. complete as per direction of Engineer incharge. (the cost of sand cushion is included) a) Average strength 7000 psi	Sft	4,316		
RD-13	Providing and fixing kerb stone (12"x12"x6") in (1:3) cement sand mortar including Haunching with CR Paint etc at locations mentioned in drawings or as directed by the engineer	Rft	3,035		
RD-14	Pavement marking 6" wide Reflective TP Paint strips using approved paint as per specifications of NHA (yellow continuous paint on pavement edges and white broken center line) on pavement surface, after cleaning the dry surface complete in all respects as per standard practice and as directed by the Engineer.	Rft	2,360		
RD-15	Providing and fixing informatory sign boards including all civil works (excavation, foundation, backfilling) and steel/pipe works as shown on drawings and as per specifications complete in all respects.	No	1		
RD-16	Supplying and stacking and Spreading in uniform thickness including mixing and breaking clods and dressing fine for grassing approved garden soil (sweet earth) free from salts, pebbles and grass roots etc. including all leads and lifts.	Cft	14,280		
RD-17	Supplying and Laying live (Daoca) grass in slabs with earth intact including all lead and lifts.	Sft	28,560		

BILL NO. 10.A: ROADS, WALKWAYS & PAVED AREAS

BILL OF QUANTITIES

Item No.	Item Description	Unit	Qty	Unit Rate (Rs.)	Total Amount (Rs.)
(i)	(ii)	(iii)	(iv)	(v)	(vi)

RD-18 Providing R.C.C. pipes and collars of class 'B' and fixing in trench including cutting, fitting and jointing with maxphalt composition and cement mortar (1:1) and back filling the excavated material in trench including testing with water to a pressure head of 50 feet (15.24m) and cartage within 10 miles (16.09 km), for the following pipes:

12 inches dia. pipe.

Rft

100

Total Amount (Rs.) =

AVIATION COMPLEX AT BLUE AREA, ISLAMABAD

BILL NO. 10.B: STORM DRAINAGE

BILL OF QUANTITIES

Item No.	Item Description	Unit	Qty	Unit Rate (Rs.)	Total Amount (Rs.)
(i)	(ii)	(iii)	(iv)	(v)	(vi)

GENERAL NOTE

Supply, installation, testing and commissioning of the following items of work, including all labour, tools, plant, accessories, etc. required for completion of each item as per specifications and as approved by the Engineer.

Ref Specs: 0120,0150,1100,1200,1510,1520,1530,2650

A. EARTH WORK

- | | | | |
|---|--|-----|-------|
| 1 | Structural and trench excavation in common soil/material wet or dry including disposal of surplus excavated material at designated locations as directed by the Engineer. | Cft | 1,176 |
| 2 | Compacted Backfilling with Common material as shown on drawings or as directed by the Engineer. | Cft | 53 |
| 3 | Formation of embankment from road Way excavation material including hauling up-to any lead and lift, placing in layers, compaction upto 95% modified AASHTO dry density, dressing top and side slopes as per specifications and drawings or as directed by the Engineer. | Cft | 1,000 |

B. CONCRETE WORK

- | | | | |
|---|--|-----|-------|
| 4 | Provide and laying Class 'E' (1:4:8) concrete in foundations including placing compacting, finishing and curing complete (including screening and washing of aggregates) as shown on drawings or as directed by the Engineer. | Cft | 228 |
| 5 | Providing and laying RCC with 3000 psi compressive cylindrical strength all as specified in drain bed/wall and slabs etc., of any thickness, using Crushed stone, including use and waste of form work (steel) and finishing surface.. | Cft | 1,050 |
| 6 | Supply and fix, bars round, using deformed bars Grade-40 incl cutting, bending, binding and placing reinforcement in position. | Kg | 2,380 |

Total Amount (Rs.) = _____



SECTION VIII. GENERAL CONDITIONS (GC)

Section VIII. General Conditions (GC)

Red Book:

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The Conditions of Contract are the “General Conditions” which form part of the “Conditions of Contract for Construction for Building and Engineering Works Designed by the Employer (“Red book”) Second edition 2017, Reprinted 2022 with amendments” published by the Federation Internationale Des Ingenieurs – Conseils (FIDIC) and the following “Particular Conditions” which shall complement the General Conditions of the Contract.

The Contractor shall arrange and provide three (3) originals of the above FIDIC publication directly from FIDIC and shall also submit the original purchase receipts as documentary evidence to the Engineer.

International Federation of Consulting Engineers (FIDIC)

FIDIC Bookshop – Box- 311 – CH – 1215 Geneva 15 Switzerland

Fax: +41 22 799 49 054

Telephone: +41 22 799 49 01

E-mail: fidic@fidic.org

www.fidic.org

FIDIC code: ISBN13: 978-2-88432-084-9

The Successful bidder after award of Works shall have to provide two (02) of such original FIDIC books to the Employer, of above said “General Conditions” for incorporation in the Contract, at his own expense

SECTION IX. SPECIAL CONDITIONS OF THE CONTRACT

Special Conditions of the Contract

The Special Conditions of Contract (SCC) complement the General Conditions of Contract (GCC) to specify data and contractual requirements of the Procuring agency/ Employer/ Employer, the engineer, the sector, the overall project, and the works. In the event of a conflict, the provisions herein shall prevail over those in the GCC.

Part A – Contract Data

Contract data of the SCC, includes data to complement the GCC in a manner similar to the way in which the Bid Data Sheet complements the Instructions to Bidders.

SCC Clause Number	GCC Clause Number	Amendments of, and Supplements to, Clauses in the GCC
General Provision (GCC 1)		
1.	1.1.27	728 days
2.	1.1.31	Employer's Representative name and address: Project Director Aviation Complex Pakistan Airports Authority (PAA)
3.	1.1.84	1,645 days for the whole Works
4.	1.3	For notices Procuring agency/Employer Authorized representatives name and address: Director P&D Pakistan Airports Authority (PAA) Terminal-1, Head Quarter PAA, JIAP Karachi, Pakistan Engineer's Authorized representatives name and address: National Engineering Services Pakistan (Pvt.) Limited – NESPAK NESPAK House, 5 th Floor, Sector G-5/2, Islamabad Contractors Authorized representatives name and address: <i>To be nominated later</i>
5.	1.4	Governing Law; The Applicable Law shall be: Laws of the Islamic Republic of Pakistan
3.	1.4	Communication Language:

		The Communication Language shall be: English
The Employer/ Procuring agency/Employer (GCC Clause 2)		
5.	2.1	Time for access to the Site: 03 days after Commencement Date
The Engineer (GCC Clause 3)		
6.	3.2	Engineer's Duties and Authority: Variations resulting in an increase of the Accepted Contract Amount in excess of 1% shall require approval of the Procuring agency/ Employer.
The Contractor (GCC Clause 4)		
7.	4.2	Performance guarantee/ security will be in the form of an unconditional and irrevocable bank guarantee from a scheduled bank in Pakistan in the amount of 10% as a percentage of the Contract Price. In case of a foreign bank, the guarantee shall be counter-signed and counter-guaranteed by a scheduled bank in Pakistan. The list of approved Scheduled Bank is attached with the Bidding Documents.
8.	4.7.2(a)	Clause 4.7 Setting out Period for notification of errors in the items of reference: <i>28 (twenty eight) days</i>
Sub-Contracting (GCC Clause 5)		
9.	5.1(a)	Maximum allowable accumulated value of work subcontracted (as a percentage of the Accepted Contract Amount): thirty percent (30%)
10.	5.1 (b)	Works for which sub-contracting is not permitted.: None
Staff and Labour (GCC Clause 6)		
11.	6.5	Normal working hours 08 (<i>eight</i>) hours.
Plant, Material and Workmanship (GCC Clause 7)		
12.	7.2	Samples as required by the Engineer.
Commencement, Delays and Suspension (GCC Clause 8)		
13.	8.3	Number of additional paper copies of program: 03 copies
14.	8.5	In the fifth line of 3 rd last paragraph the words 'ten percent (10%)' is replaced with "twenty-five percent (25%)".
15.	8.8	Delay damages shall be payable for each day of delay shall be 0.01% of the Contract Price per day, in the currency and proportions in which the Contract Price is payable. Maximum amount of delay damages is 10% of the Accepted Contract Price
16.	8.14	Clause 8.14 Applicability of Incentives for Early Completion

		Maximum 2.5% of the Contract Price.
Measurement and Valuation (GCC Clause 12)		
17.	12.2	Method of measurement shall be in accordance with the reference Technical Specifications, Bill of Quantities and/ or other applicable Schedule(s) for relevant BOQ item of work.
18.	12.3	Percentage profit, overhead and taxes: 25%
Variations and Adjustments (GCC Clause 13)		
19.	13.4 (b)(ii)	Not Applicable
20.	13.7	Adjustments for Changes in Cost: The Contract Price shall be adjustable during Contract Execution as per Appendix-C.
Contract Price and Payment (GCC Clause 14)		
21.	14.2	Total advance payment shall be 15% (fifteen percent) of the Accepted Contract Amount, excluding Provisional Sums. The advance payment shall be payable in the currency of the contract, in two equal parts. Advance Payment Guarantee shall remain valid one month beyond the stipulated date of completion of Project. The Advance Payment Guarantee shall be progressively reduced to the balance amount of Advance indicated in the IPCs certified by the Engineer. 1. First part within twenty (21) days after the Procuring agency/ Employer receives the Advance Payment Certificates from the Engineer; and 2. Second part within forty-two (42) days from the date of payment of the first part, subject to the satisfaction of the Engineer as to the state of mobilization of the Contractor, payable in the currency and proportion of the contract.
22.	14.2.3	Repayment of 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 3 rd IPC after making second part of advance payment, provided that the advance payment shall be completely repaid prior to the time when 90% of the Accepted Contract Amount has been certified for payment. It may be more than 17.5% in the last instalment to ensure full repayment.
23.	14.3(iii)	Percentage of retention: 7% (seven percent) Limit of Retention Money: 5% (five percent)
24.	14.4	The Schedule of Payments under Sub-Clause 14.4 shall apply to the

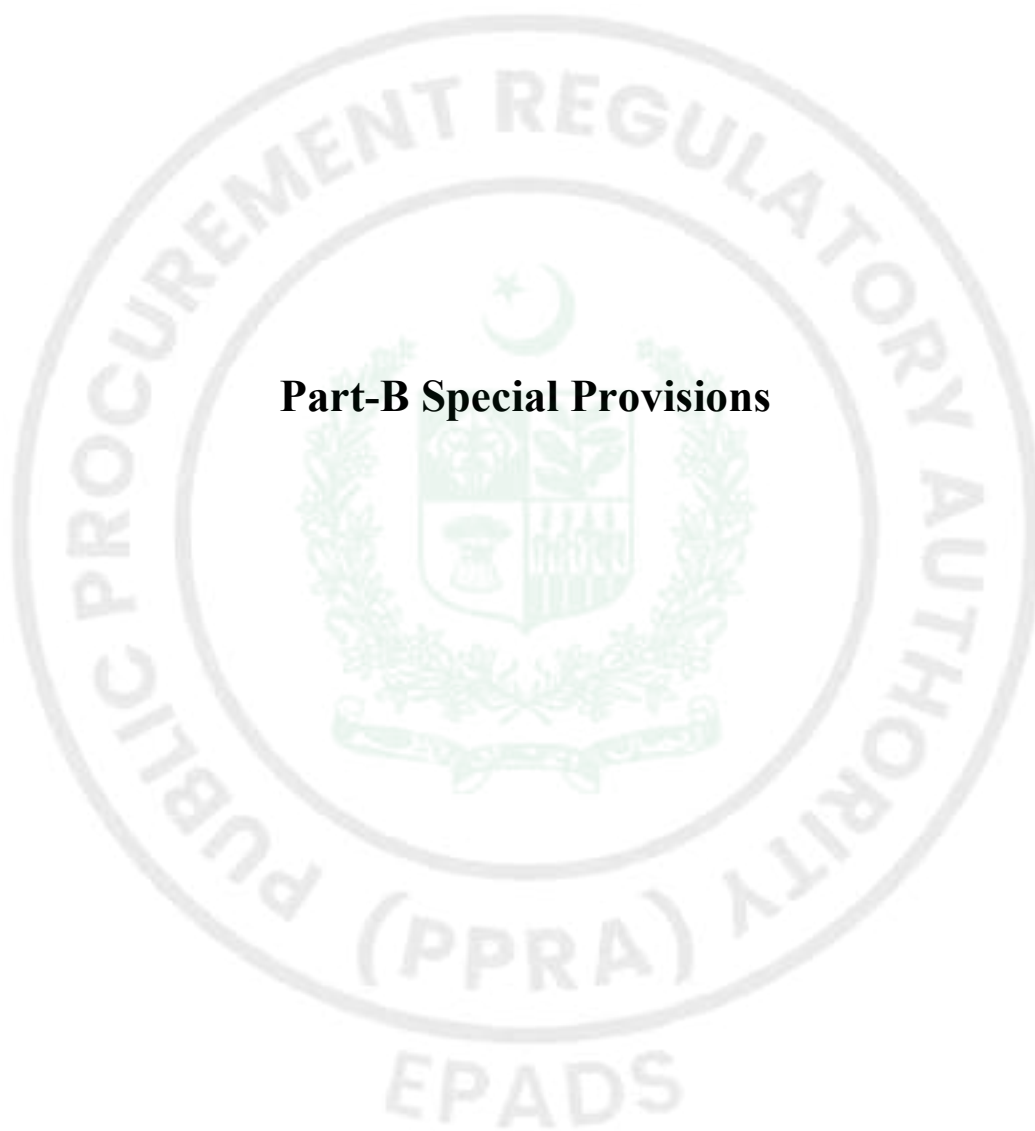
		following Imported Plant and/ or Materials: 1. Building-Integrated Photovoltaics (BIPV) System 2. Fire-fighting Pumping Unit 3. Clean Agent 4. DG Set 5. Chiller 6. Hot Water Generator 7. Cooling Tower 8. Air Handling Unit 9. Fan Coil Unit 10. Elevator 11. Escalator The instalments for the above Plant and/ or Materials shall be in accordance with the Schedule of Payments stated in the Particular Conditions. The Contractor shall not be entitled to payment for any milestone unless all supporting documents specified in the Particular Conditions have been submitted and accepted by the Engineer.
25.	14.5(c)(i)	Plant and Materials: Plant and Materials for payment when delivered to the Site: 1. Steel Reinforcement 2. Glass 3. Doors 4. False Ceiling 5. Tile, Marble and Granite 6. Aluminum 7. Plumbing Fittings and Fixtures 8. Pipes and Conduits 9. Pumps except Fire-Fighting Pumping Set 10. Electric Cables 11. Electric Panels 12. Transformers 13. CCTV Cameras The Contractor may be certified for an advance payment of up to seventy-five percent (75%) of the Contract rate of the relevant Bill of Quantities (BoQ) item, in respect of above identified materials delivered to the Site for incorporation into the Permanent Works but not yet so incorporated. The Contractor shall seek prior approval of the Engineer for the delivery of listed items, for which the payment is to be claimed by the Contractor under this Sub-Clause. Such payment shall be certified only where the Engineer is satisfied that: (a) the materials have been delivered to the Site and are intended solely for incorporation into the Permanent Works in accordance with the Contract; (b) the quantity, quality and condition of the materials have been

		verified by the Engineer, and a Material Inspection Report (MIR) and Material Receipt Certificate have been issued accordingly; (c) the materials are properly stored and adequately protected against loss, damage, deterioration and weather, and are clearly identified and segregated, to the satisfaction of the Engineer; (d) the Contractor maintains records of the requirement, procurement, receipt and use of such materials, identifies their cost and value in its accounting system, and makes such records available for inspection by the Engineer on request; and (e) the Contractor has submitted invoices, delivery challans, manufacturer's certificates and such other documents as the Engineer may reasonably require to establish ownership and value of the materials. Title to materials so certified shall vest in the Employer in accordance with Sub-Clause 7.7 [<i>Ownership of Plant and Materials</i>], without prejudice to the Contractor's continuing responsibility for their care under Clause 17 [<i>Care of the Works and Indemnities</i>]. The Contractor shall remain solely responsible for the custody, security, preservation, and insurance of all such materials, at its own cost, until they are incorporated into the Permanent Works and taken over in accordance with relevant provision of the Contract Certification of payment under this Sub-Clause shall not constitute acceptance of the materials, nor relieve the Contractor of any obligation, liability or responsibility under the Contract, and is without prejudice to the Employer's rights under Clause 11 [<i>Defects after Taking Over</i>]. No further advance shall be certified under this Sub-Clause in respect of any material for which an advance previously certified remains outstanding, unless and until that material has been incorporated into the Permanent Works and certified as such by the Engineer. Employer's Lien: Until the advance has been fully recovered or the Plant and Materials have been incorporated into the Permanent Works, whichever occurs first, the Employer shall have a first contractual lien over the Plant and Materials to the extent of the outstanding advance. The Contractor shall not sell, remove, transfer pledge, charge or otherwise dispose of or encumber such Plant and Materials without the prior written approval of the Engineer.
26.	14.6.2	Withholding (amounts in) an IPC: 1% of the Accepted Contract Amount.
27.	14.7(a)	Period of payment of Advance Payment to the Contractor: 28 days

28.	14.7b(i)	Period for the Procuring agency/Employer to make interim payments to the Contractor under Sub-Clause 14.6 (interim Payment): 21 days
29.	14.7b(ii)	Period for the Procuring agency/Employer to make interim payments to the Contractor under Sub-Clause 14.13 (Final Payment): 56 days
30.	14.7(c)	Period for the Procuring agency/Employer to make final payment to the Contractor: 56 days
31.	14.8	financing charges for delayed payment: 5% simple interest per annum.
32.	14.11.1(b)	Number of additional paper copies of draft Final Statement: 06 copies
33.	14.15	Currencies of Payment The Contract Price shall be paid in Pakistani Rupees (PKR).
34.	14.15 (a)(i)	Local Currency: 100% Foreign Currency: 0%
35.	14.15 (c)	Local Currency: 100% Foreign Currency: 0%
36.	14.15 (f)	Local Currency: 1.00
37.	17.2 (d)	Liability for Care of the Works Nil
Insurance (GCC Clause 19)		
38.	19.1	Permitted deductible limits insurance required for the Works: 10% of the loss amount on each and every loss. insurance required for Goods: Nil insurance required for liability for breach of professional duty: Nil insurance required against liability for fitness for purpose (if any is required): Nil insurance required for injury to persons and damage to property: Nil insurance required for injury to employees: Nil other insurances required by Laws and by local practice: Nil
39.	19.2.1(b)	Additional amount to be insured: 15% of Accepted Contract Amount

40.	19.2.1(iv)	List of Exceptional Risks which shall not be excluded from the insurance cover for the Works: Nil
41.	19.2.2	Extent of insurance required for Goods: from Ex-Works to delivery at the Site Amount of insurance required for Goods: Full Replacement Value
42.	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
43.	19.2.3(b)	Insurance required against liability for fitness for purpose: Yes
44.	19.2.3	Period of insurance required for liability for breach of professional duty: Until the date of issuance of Performance Certificate
45.	19.2.4	Amount of insurance required for injury to persons and damage to property: Injury to person and Fata case: in accordance with Workmen Compensation Act Damage to Property: PKR 50 million without limit to the number of incidents
46.	19.2.6	Insurance <u>Other insurances required by Laws and by local practice</u> All insurances as applicable to the extent of execution of the project, under Federal and Provincial laws of Islamic Republic of Pakistan.
Dispute Avoidance/ Adjudication Board (GCC Clause 21)		
47.	21.1	Time for appointment of DAAB: Within 28 days form the Commencement Date
48.	21.1	The DAAB shall comprise <i>03 members</i>
49.	21.1	List of proposed members of DAAB [to be inserted at the time of signing of the Contract] - Proposed by Employer/ Procuring agency/Employer 1. 2. 3. - Proposed by Contractor 1. 2.

		3.
50.	21.2	Appointing entity (official) for DAAB members: Chairman Pakistan Engineering Council (PEC) from the list of PEC approved arbitrators published at its website.
51.	21.6	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: Islamabad, Pakistan



Part-B Special Provisions

PARTICULAR CONDITIONS

Part B - Special Provisions

1.1	Definitions	<u>1.1.76 “Specification”</u> Following is added at the end: “and consists of two parts i.e., i) “Part A - Specific Provisions”; and ii) “Part B - Technical Provisions
1.1.31	Employer	Add the following at the end of Sub-Clause 1.1.31: “Employer's Representative" means Project Director Aviation Complex, Pakistan Airports Authority, or any other person duly appointed by the Employer from time to time and notified in writing to the Contractor and the Engineer. Employer's Representative, without prejudice to his authority, may delegate and distribute any or all his duties and powers to some or any officer(s) of Pakistan Airports Authority, for the convenience of the day-to-day required monitoring, administration and management of the Project and fulfilling the obligation of the Employer wherever and whenever deemed necessary under the Contract.”
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 Documents of	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 Special Conditions of the Contract 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) Technical Proposal (j) Bill of Quantities; (k) the Drawings; (l) 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 1 st 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 [<i>Subcontractors</i>] (b) Any action under Sub-Clauses 8.9 [<i>Employer’s Suspension</i>] and 8.12 [<i>Prolonged Suspension</i>] (c) Issuance of “Taking Over Certificate” under Sub-Clause 10.1 [<i>Taking Over the Works and Sections</i>]. (d) Issuing the “Performance Certificate” under Sub-Clause 11.9 [<i>Performance Certificate</i>]. (e) Sub-Clause 13.1 [<i>Right to Vary</i>]: 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 [<i>Variation Procedure</i>]: approving a proposal for Variation submitted by the Contractor in accordance with Sub-Clause 13.3.2 [<i>Variation by Request for</i>

		Proposal] or 13.2 [<i>Value Engineering</i>]. (g) Certifying release of second half of the Retention Money under Sub-Clause 14.9 [<i>Release of Retention Money</i>]. (h) Issuing Final Payment Certificate under Sub-Clause 14.13 [<i>Issue of FPC</i>]. (i) Any Change in the ratio of Contract currency proportions and payment thereof under Clause 13.6 [<i>Adjustment for Changes in Law</i>]. (j) Extra payment as a result of Contractor's claims under Clause 20 [<i>Employer's and Contractor's Claim</i>]. Any such requirement shall not be applied to any action by the Engineer under Sub-Clause 3.7 [<i>Agreement or Determination</i>], as stated in Sub-Clause 3.2 [<i>Engineer's Duties and Authority</i>] 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".
4.2	Performance Security	<u>4.2.1 Contractor's Obligations</u> The entity issuing the Performance Security and its form shall be as under: The Performance Security shall be, in the form of bank guarantee confirmed by a reputable local bank or, in the case of successful foreign bidder, bonded by a foreign bank as per the prescribed form included in the Bidding Documents. 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.”
4.3	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”.
4.4	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 (Auto CAD Drawings as well as BIM-Revit Model) of all Drawings amended to conform to the Works as built. The price of such Drawings and BIM-Revit Model 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 14 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. The Contractor shall comply with the HSE manual available at the Employer's website.
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 summary 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
		The following Sub-Clause 4.24 is added after Sub-Clause 4.23:
4.24	Building Information Modelling	Autodesk Revit based Building Information Model (BIM) of the architectural building form shall be shared with the Contractor at the time of award of work. The Contractor will be responsible for submission of combined services BIM-Revit Model (minimum LOD 300) within 04 months of award of work for the review of the Engineer. The Contractor will ensure and submit fortnightly updated As-Built condition on BIM Model for progress monitoring and tracking duly vetted and approved by the Engineer. In case of failure of the Contractor to submit the fortnightly updated As-Built Conditions on BIM Model, minimum amount of Rs. 100,000/- (Pak rupees one hundred thousand) will be deducted from the Contractor's invoice for each fortnight. The Contractor will ensure and submit final As-Built BIM-Revit Model along with As-Built drawings generated from BIM-Revit Model for whole of the Works for approval of the Engineer.

		Following are the requirements in general but not limited to, which are required to be fulfilled by the Contractor all throughout the duration of the Contract: 1. Storage and File Naming Conventions a. All issued files to be stored in a cloud storage location with write access to BIM Engineer of the Contractor for progress models folder. b. A consistent naming convention must be followed to avoid any confusion as suggested/ approved by the Engineer. 2. Progress Update Mechanism i. Updation of Revit Model for inclusion of missing elements or change/ variation orders, subject to the approval of the Engineer. ii. To be used for tracking construction progress in terms of accurate quantities at fixed time intervals iii. Using phases (constructed, under construction and to be constructed) for marking the state of elements inside BIM model iv. Making a new progress model for each submission for keeping record of progress v. Frequency of update and submission = after every fortnight 3. Progress Reports a. Progress reports must be generated based on the progress BIM models (using latest Revit data) b. Include the necessary data as required by the Engineer in the progress report 4. Facility Management Data Actual product data from the vendor to be filled in corresponding generic BIM elements, wherever applicable. Preferably generic models be replaced with vendor specific BIM model, wherever available, complying to
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		COBIE requirements.
5.1	Subcontractors	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 [<i>After Termination</i>]. 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. Notwithstanding any other provision of the Contract, the Contractor shall obtain the prior written approval of the Engineer before appointing any Subcontractor for specialty works, including but not limited to HVAC, elevators, escalators, fire detection and firefighting systems, Integrated Building Management System (IBMS), ICT systems, façade and glazing systems, specialized finishes, and any other works identified by the Engineer. The Contractor shall submit the proposed Subcontractor's qualifications, relevant experience, technical capability, financial capacity, and any other information reasonably required by the Engineer. The approval shall not relieve the Contractor of any of its obligations, responsibilities, or liabilities under the Contract. All approved Subcontractors shall remain fully under the direction and responsibility of the Contractor. The Engineer reserves the right to reject any proposed Subcontractor on reasonable grounds related to technical competence, past performance, financial capability, or failure to meet the requirements of the Contract. The Contractor shall not engage such Subcontractor until written approval has been obtained.”
5.2	Nominated Subcontractors	<u>5.2.2 Objection to Nomination</u> 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 [<i>Payment to nominated Subcontractors</i>].”
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	The Contractor shall not give, barter, or otherwise

	Ammunition	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 [<i>Contractor's Records</i>].
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 non-discrimination 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".
8.3	Programme	(a) Submission of the Programme of Works on Primavera P6 for the Engineer's approval, covering all activities including mobilization, identifying the Critical Path, revised monthly, and forming the basis for Delay Damages (8.8) and Bonus (8.14), supported by cash-flow/overdraft arrangements; Contractor to supply and maintain a licensed Primavera P6 copy for its own and the Engineer's use, with manuals/training for the Contract duration; (b) two-weekly cost/quantity/progress data in computer-processable format; (c) a CPM-based, computerised programme including temporary works, with monthly progress reporting on critical/near-critical items and mitigation proposals.
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 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/ Bill of Quantities, 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 Bill of Quantities 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; “Price Bill of Quantity”, “Quantity Executed To-date”, “Quantity Certified Previously” and “Net Quantity Executed under this Certificate”.
12.3	Valuation of the Works	In sub-paragraph (b)(i), the percentage ‘10%’ is replaced with “15%” In sub-paragraph (b)(ii), the percentage ‘0.01%’ is replaced with “2%”. The following text is added at the end of fifth paragraph of the Sub-Clause: “Sum of overhead charges, profit and taxes for sub-paragraph (a) shall be twenty-five percent (25%). If the valuation will be carried out on the basis of actual with the application of current market rates for labour, material etc. No Price Adjustment on account of material, labour, POL etc. shall be allowed on such items if the valuation is carried out on the basis of current market rates”
13.4	Provisional Sums	Delete this Sub-Clause in its entirety.
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].”
14.2	Advance Payment	<u>14.2.1 Advance Payment Guarantee.</u> The entity issuing the interest free 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. The Advance Payment shall be paid by the Employer to the Contractor in two equal parts upon submission by the Contractor of Advance Payment Guarantee for the full amount of the Advance in the specified form. Advance Payment Guarantee shall remain valid one month beyond the stipulated date of completion of project. The Advance Payment Guarantee shall be progressively reduced to the balance amount of Advance indicated in the IPCs certified by the Engineer. 1) First part within twenty (21) days after the Procuring agency/ Employer receives the Advance Payment Certificates from the Engineer; and 2) Second part within forty-two (42) days from the date of payment of the first part, subject to the satisfaction of the Engineer as to the state of mobilization of the Contractor.
14.4	Schedule Payments	of “Schedule of Payments: The provisions of this Sub-Clause shall apply to the imported Plant and Equipment as mentioned in Contract Data. Unless otherwise agreed, the Contractor shall be paid against Imported Items mentioned in Contract Data in the following schedule/ milestone upon submission of

		invoice by the Contractor duly certified by the Engineer: (a) Twenty-five percent (25%) of the Contract Price for the relevant imported equipment and/or materials shall be certified for payment upon: - approval of the technical submittal of relevant equipment and materials by the Engineer in accordance with the Contract; and - submission by the Contractor of an unconditional, irrevocable, on-demand Bank Guarantee for an equivalent amount issued by a Scheduled Bank in Pakistan acceptable to the Employer (List of approved banks provided in the Contract). The Bank Guarantee shall be valid for a period extending not less than ninety (90) days beyond the anticipated date of shipment, and renewable by the Contractor if that date is delayed. (b) Thirty-five percent (35%) of the Contract Price for the relevant imported equipment and/or materials shall be certified for payment upon submission to the Engineer of satisfactory documentary evidence that the goods have been shipped , including, as applicable: - negotiable Bill of Lading or Air Waybill; - commercial invoice; - packing list; - certificate of origin; - insurance certificate; - manufacturer's inspection or factory acceptance certificates, where specified; and - any other documents required under the Contract. Prior to certification of this payment, the Contractor shall furnish an additional unconditional, irrevocable Bank Guarantee for the amount payable under this Sub-Clause, issued by a Scheduled Bank in Pakistan acceptable to the Employer as provided in the
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		Contract. The Bank Guarantee shall be valid for a period extending not less than ninety (90) days beyond the anticipated date of delivery at site, and renewable by the Contractor if that date is delayed. (c) Fifteen percent (15%) of the Contract Price for the relevant imported equipment and/or materials shall be certified for payment upon delivery to the Site, verification by the Engineer that the equipment and materials conform to the Contract requirements, and issuance of the Engineer's inspection and acceptance certificate. Upon certification of this payment, the Bank Guarantees submitted under Sub-Clauses (a) and (b) shall be released, provided that all obligations secured thereby have been fulfilled. (d) Twenty percent (20%) of the Contract Price shall be certified for payment upon complete installation of the relevant equipment and materials in accordance with the Contract and after inspection and acceptance by the Engineer. (e) The remaining five percent (5%) of the Contract Price shall be certified for payment upon successful completion of testing and commissioning achievement of the specified performance requirements, rectification of all deficiencies identified during commissioning, and issuance of the Taking-Over Certificate by the Engineer in accordance with the Contract. Payment under this Clause shall not constitute acceptance of the equipment or materials, nor relieve the Contractor of any obligation, responsibility, warranty or liability under the Contract. All payments shall be included in Interim Payment Certificates issued by the Engineer and shall be made by the Employer within the period stipulated in the Particular Conditions of Contract. Unless otherwise provided in the Particular Conditions, all certified amounts shall be subject to retention in accordance with the Contract. Ownership, care of the Works, allocation of risk, insurance obligations, certification procedures, time for payment, and all other matters relating to payment
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		shall be governed by the applicable provisions of the Conditions of Contract, except as expressly modified by this Clause.
14.6	Issue of IPC	<u>14.6.1 The IPC</u> 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.”
14.16	Adjustment for Seriously Unbalanced Bid (Front Loaded)	Where the Contractor's Bid is found seriously unbalanced/front-loaded relative to the average of other evaluated substantially responsive bids, the Employer shall pay against measured quantities of significantly higher quoted line items at the average rate of the other lowest two evaluated substantially responsive bids for the same items; the balance to be paid against the same measured quantities at issuance of the Taking Over Certificate. The list of such line items to be stated in the Letter of Acceptance. In case the bidder is the only technically qualified bidder, in such case, the Engineer Estimate shall govern for the above purpose.
15.2	Termination for Contractor' Default	<u>15.2.1 Notice</u> Following text is added at the end of sub-paragraph (b) of this Sub-Clause: “and/or despite previous warning from the Engineer, in writing, is otherwise persistently or flagrantly neglecting to comply with any of his obligations under the Contract”. 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.” <u>15.2.3 After Termination</u> 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 [<i>Employer-Supplied Materials and Employer's Equipment</i>], and”
15.4	Payment after Termination for Contractor's Default	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	<u>16.2.1 Notice</u> 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 [<i>Employer-Supplied Materials and Employer's Equipment</i>]; 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 [<i>Insurance to be provided by the Contractor</i>]."
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	<u>19.2.5 Injury to employees</u> The words "sickness, disease" are deleted in the third line of first paragraph. The following Sub-Clause is added after Sub-Clause <u>19.2.6: 19.2.7 Insurance Company</u> "The Contractor shall be obliged to place all insurances described in this Clause with insurers listed in the Contract Data with min. rating of AA by PACRA/VIS.
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;"

		Following text is added at the end of third paragraph (b) before word ‘and’: “The arbitrators appointed shall preferably be retired judges of the Supreme Court.”
	The following Clauses are added after Clause 21	
22	Custom Duty	The Contractor shall be liable to pay custom duty arising out of the Contract. The rates and prices as stated in the contract shall be deemed to cover all such duties.
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.



SECTION X: CONTRACT FORMS

Notification of Award

(On Procuring agency/Employer's letterhead)

Letter of Acceptance

[Date].

To: [Name and address of the contractor]

Subject: [Notification of Award Contract No.]

This is to notify you that your Bid dated [date]. for execution of the [name of the contract and identification number, as given in the Bid Data Sheet] for the Accepted Contract Amount of the equivalent of [amount in words and figures and name of currency]. . . . , as corrected and modified in accordance with the Instructions to Bidders, is hereby accepted by our Agency.

You are requested to furnish the Performance Security within 28 days in accordance with the Conditions of Contract, using for that purpose the Performance Security Form included in Section 9 (Contract Forms) of the Bidding Document.

Authorized Signature:

Name and Title of Signatory:

Name of Agency:

Attachment: Contract Agreement

Form of Contract

THIS AGREEMENT made the _____ day of _____ 20____ between *[name and address of Procuring agency/Employer]* of Pakistan (hereinafter called “the Procuring agency/Employer”) of the one part and *[name of Contractor]* of *[city and country of Contractor]* (hereinafter called “the ”) of Contractor other part:

WHEREAS the Procuring agency/Employer desired that the works *[brief description of works]* should be executed by the contractor, and has accepted a Bid by the contractor for the execution and completion of these works and remedying of any defects therein, in the sum of *[contract price in words and figures]* (hereinafter called “the Contract Price”).

NOW THIS CONTRACT WITNESSETH AS FOLLOWS:

1. In this Contract words and expressions shall have the same meanings as are respectively assigned to them in the Conditions of Contract referred to.
2. The following documents shall be deemed to form and be read and construed as part of this Contract, In the event of any ambiguity or conflict between the Contract Documents listed below, the order of precedence shall be the order in which the Contract Documents are listed below:-
 - (a) This form of Contract;
 - (b) Letter of Acceptance;
 - (c) the Form of Bid and the Price Schedule submitted by the Bidder;
 - (d) the Works Requirements;
 - (e) the Technical Specifications;
 - (f) the Drawings;
 - (g) the General Conditions of the Contract
 - (h) the Special Conditions of Contract,
 - (i) the completed schedule including Bill of Quantities; and
 - (j) *[add here: any other documents]*
3. In consideration of the payments to be made by the Procuring agency/Employer to the contractor as mentioned in this contract, the contractor hereby covenants with Procuring agency/Employer to execute the works to remedy defects therein in conformity in all respects with the provisions of the Contract.
4. The Procuring agency/Employer hereby covenants to pay the Contractor in consideration of the execution and completion of the Works and the remedying of defects therein, the Contract Price or such other sum as may become payable under the provisions of the Contract at the times and in the manner prescribed by the Contract.

IN WITNESS whereof the parties hereto have caused this Contract to be executed in accordance with their respective laws the day and year first above written.

Signed, sealed, delivered by the _____	Signed, sealed, delivered by the _____
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(for the Procuring agency/Employer)	(for the Contractor)
Witness to the signatures of the Procuring agency/Employer	Witness to the signatures of the Contractor



Performance Guarantee Form

To: *[name of Procuring agency/Employer]*

WHEREAS *[name of Contractor]* (hereinafter called “the contractor”) has undertaken, in pursuance of Contract No. *[reference number of the contract]* dated *[insert date]* for the execution of *[insert name of the works and its brief description]* (hereinafter called “the Contract”).

AND WHEREAS it has been stipulated by you in the said Contract that the contractor shall furnish you with a Bank Guarantee by a reputable bank for the sum specified therein as security for compliance with the Contractor’s performance obligations in accordance with the Contract.

AND WHEREAS we have agreed to give the Contractor a guarantee:

THEREFORE, WE hereby affirm that we are Guarantors and responsible to you, on behalf of the Contractor, up to a total of *[amount of the guarantee in words and figures]*, and we undertake to pay you, upon your first written demand declaring the Contractor to be in default under the Contract and without cavil or argument, any sum or sums within the limits of *[amount of guarantee]* as aforesaid, without your needing to prove or to show grounds or reasons for your demand or the sum specified therein.

This guarantee is valid until the: *[insert date]*

Signature and seal of the Guarantors

[name of bank or financial institution]

[address]

[date]

Advance Payment Security

Demand Guarantee

Beneficiary: _____

Date: _____

ADVANCE PAYMENT GUARANTEE No.: _____

Guarantor: _____

We have been informed that [Inset name of the Contractor] (hereinafter called “the Contractor”) has entered into Contract No. _____ dated _____ with the [insert name of the Procuring agency/Employer] (hereinafter called “the Procuring agency/Employer”) for the execution of _____ (hereinafter called "the Contract").

Furthermore, we understand that, according to the conditions of the Contract, an advance payment in the sum _____ (_____) is to be made against an advance payment guarantee.

At the request of the Contractor, we as Guarantor, hereby irrevocably undertake to pay the Procuring agency/Employer any sum or sums not exceeding in total an amount of _____ upon receipt by us of the Procuring agency/Employer’s complying demand supported by the Procuring agency/Employer’s statement, whether in the demand itself or in a separate signed document accompanying or identifying the demand, stating either that the Applicant:

- (a) has used the advance payment for purposes other than the costs of mobilization in respect of the Works; or
- (b) has failed to repay the advance payment in accordance with the Contract conditions, specifying the amount which the Contractor has failed to repay.

A demand under this guarantee may be presented as from the presentation to the Guarantor of a certificate from the Procuring agency/Employer’s bank stating that the advance payment referred to above has been credited to the Contractor on its account number _____ at _____.

The maximum amount of this guarantee shall be progressively reduced by the amount of the advance payment repaid by the Contractor as specified in copies of interim statements or payment certificates which shall be presented to us.

The Guarantee shall remain valid up to the aforesaid date and shall be null and void after the aforesaid date or earlier if the advance made to the Contractor is fully adjusted against payments from Interim Payment Certificates of the Contractor provided that the Guarantor agrees that the

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

[signature(s)]

Note: All italicized text is for use in preparing this form and shall be deleted from the final product.



Retention Money Security Demand Guarantee

_____ [Guarantor letterhead or SWIFT identifier code]
Beneficiary: _____ [Insert name and Address of Procuring agency/Employer]
Date: _____ [Insert date of issue]
RETENTION MONEY GUARANTEE No.: _____ [Insert guarantee reference number]
Guarantor: [Insert name and address of place of issue, unless indicated in the letterhead]

We have been informed that _____ [insert name of Contractor, which in the case of a joint venture shall be the name of the joint venture] (hereinafter called "the Contractor") has entered into Contract No. _____ [insert reference number of the contract] dated _____ with the Procuring agency/Employer, for the execution of _____ [insert name of contract and brief description of Works] (hereinafter called "the Contract").

Furthermore, we understand that, according to the conditions of the Contract, the Procuring agency/Employer retains moneys up to the limit set forth in the Contract ("the Retention Money"), and that when the Taking-Over Certificate has been issued under the Contract and the first half of the Retention Money has been certified for payment, payment of [insert the second half of the Retention Money or if the amount guaranteed under the Performance Guarantee when the Taking-Over Certificate is issued is less than half of the Retention Money, the difference between half of the Retention Money and the amount guaranteed under the Performance Security and, if required, the ES Performance Security] is to be made against a Retention Money guarantee.

At the request of the Applicant, we, as Guarantor, hereby irrevocably undertake to pay the Beneficiary any sum or sums not exceeding in total an amount of _____ [insert amount in figures] (_____) [amount in words] upon receipt by us of the Procuring agency/Employer's complying demand supported by the Beneficiary's statement, whether in the demand itself or in a separate signed document accompanying or identifying the demand, stating that the Applicant is in breach of its obligation(s) under the Contract, without your needing to prove or show grounds for your demand or the sum specified therein.

A demand under this guarantee may be presented as from the presentation to the Guarantor of a certificate from the Procuring agency/Employer's bank stating that the second half of the Retention Money as referred to above has been credited to the contractor on its account number _____ at _____ [insert name and address of Contractor's bank].

This guarantee shall expire no later than the day of, 2..., and any demand for payment under it must be received by us at the office indicated above on or before that date.

[signature(s)]

Note: All italicized text (including footnotes) is for use in preparing this form and shall be deleted from the final product.

SECTION XI: SPECIFIC PROVISIONS

SPECIFIC PROVISIONS

1. GENERAL

- 1.1 Specific Provisions shall form an integral part of Bid and the Contract Documents.
- 1.2 The Contractor shall notify all sub-contractors of the provisions of these Special Provisions.
- 1.3 All the items under Special Provisions are to be provided/ arranged by the Contractor within one (1) month after award of works (during mobilization period) without any additional cost to the Employer. No payment shall be made to the Contractor for the provision of these items, and the cost shall be deemed to have been included in the quoted rates and prices of other items of BOQ.

2. DESCRIPTION OF PROJECT, WORKS INVOLVED AND SITE

The scope of work primarily includes the construction of the Aviation Complex at Blue Area Islamabad. The scope of work for the high-rise building (6 basements, ground plus 26 storeys) includes Piling and Earth Retention Works, Civil Works, Architectural finishes works, HVAC, Elevators, Escalators, Electrical, ELV Systems, Plumbing, Fire Fighting, Building Management System, Façade System, BIPV System, Metering and HT Room and infrastructure development works. Infrastructure works include PCC roads, concrete paver parking, storm water drainage, sewerage networks and fire-fighting etc. lying within the boundaries and limits shown on the Drawings and any such additional areas adjacent thereto as may be designated by the Engineer from time for the construction to be performed under the Contract, and all such areas and additional areas shall comprise the Site.

3. CODES, STANDARDS AND CERTIFICATES

A. Applicable Standards

Except as otherwise provided by these Specifications or the Drawings, all materials, equipment and fabrication and testing thereof shall conform to the latest applicable standards and codes referred in the Specifications by use of the abbreviations explained below:

ASCE	American Society of Civil Engineers
ASA	American Standard Association
ACI	- American Concrete Institute (USA)
AISI	- American Iron and Steel Institute (USA)
AISC	- American Institute of Steel Construction (USA)
ANSI	- American National Standard Institute (USA)
ASTM	- American Society for Testing and Materials (USA)

AASHTO	- American Association of State Highway & Transportation Officials.
AWS	- American Welding Society (USA)
BS	- British Standards (UK)
CP	- Codes of Practice (UK)
ICAO	International Civil Aviation Organization
BSICP	British Standard Institute Code of Practice
PS	- Pakistan Standards (Pak)
PCA	Portland Cement Association
PSI	Pakistan Standard Institute
SSPC	- Steel Structures Painting Council (USA)
UBC	- Uniform Building Code (USA)
USBR	- United States Bureau of Reclamation (USA)

If the Contractor, at any time and for any reason, wishes to deviate from the above standards or desires to use material or equipment not covered by the above standards, he shall state the exact nature of the changes, the reason for making the change and shall submit complete specifications of the materials and equipment to the Engineer for approval.

B. Standards other than those Specified

Where requirements for materials or equipment are specified by reference to a standard which has its origin in one country, it is not the intention to restrict the requirements solely to that standard and that country. Other standards, including standards of other countries, will be accepted provided the requirements thereof, in the sole opinion of the Engineer, are at least equal to the requirements of the standard specified. The Contractor may propose to the Engineer an equivalent standard other than that specified, in which case he shall submit the proposed standard and all other information required and shall submit written proof that his proposed standard is equivalent in all significant respects to the standard specified. All submissions must be made in the English language.

C. Codes and Standards at Site

The Contractor shall supply and have at his site office:-

- a) Copies of all latest editions of codes and standards referred to in these Specifications or equivalent codes and standards as approved by the Engineer.
- b) Catalogues and published recommendations from manufacturers supplying products and materials for the project.
- c) The Contractor shall provide manufacturer's or supplier's materials which must meet the requirements of a specific code or standard as stated in these Specifications.

4. MANUFACTURER'S RECOMMENDATIONS

Installation of manufactured items shall be in accordance with procedures recommended by the manufacturer or as approved by the Engineer.

5. UNITS OF MEASUREMENTS

The FPS System of Units shall be used throughout the Project.

6. EXISTING CONDITION AT SITE

Drawings and information pertaining to existing project conditions are furnished for reference.

Neither the Employer nor the Engineer warrants the adequacy or correctness of these. The Contractor's are encouraged to visit the project site to assess the existing site conditions.

7. PROTECTION AND PRECAUTIONS

The Contractor and his sub-contractors shall afford all necessary protection to existing structures and will be required to make good at his own expense any damage done to such structures through his own or his representatives or subcontractors' fault and negligence.

The Contractor and his sub-contractors shall afford all necessary protection to existing roads in the area. He will clear and make good at his own expense any damage to or debris on these roads through his own fault and negligence. He must at all-time ensure the free and normal flow of traffic and shall not cause obstruction to the traffic system. The Contractor and his sub-contractors shall provide and maintain necessary protection and precautionary measures to properly cordon off the worksite using barricades, fencing, warning signs, and other suitable protective measures to prevent unauthorized access, accidents and ensure public safety. The following requirements shall be adhered to:

- a) **Barricading and Signage:** The worksite shall be enclosed with durable barricades or fencing of sufficient height and strength to prevent unauthorized entry. Clear warning signs, including hazard notifications and restricted area markers, shall be placed at strategic locations.
- b) **Lighting and Visibility:** Adequate lighting shall be provided around the worksite, especially in low-visibility areas, to prevent accidents. Reflective markers and warning tape shall be used as necessary.
- c) **Access Control:** Entry to the worksite shall be restricted to authorized personnel only. The Contractor shall implement a controlled access system to monitor entry and exit points.

- d) Protection of Pedestrians and Traffic:** If construction activities affect pedestrian walkways or roads, appropriate diversions, temporary walkways, and traffic management measures shall be implemented to ensure safe movement.
- e) Regular Inspection and Maintenance:** The Contractor shall inspect and maintain all safety and protective measures regularly to ensure their effectiveness. Any damaged barricades, signage, or protective elements shall be immediately repaired or replaced.

The Contractor shall promptly correct all such damage to original condition at no additional expense to the Employer.

The Contractor shall cooperate with trades performing work under other Contracts as necessary for completion.

8. SEQUENCE OF CONSTRUCTION

The Contractor shall submit his proposal for approval of the Engineer the sequence of Construction, prior to starting the works. The works shall be executed as per approved sequence of construction.

9. LINES AND LEVELS

Survey control points will be established by the Engineer. The Contractor shall be responsible for verifying these and shall be responsible for all requirements necessary for the execution of any work to the locations, lines, and levels specified or shown on the drawings, subject to such modifications as the Engineer may require as work progresses.

10. PLANT, EQUIPMENT AND TOOLS

The Contractor shall provide at his cost modern plant, equipment and tools, adequate and befitting to the nature, magnitude and size of this Contract, in strict compliance with the requirements of the General Conditions of Contract, Conditions of Particular Applications and Technical Specifications.

11. PARTIAL POSSESSION

Whenever, as determined by the Employer any portion of work performed by the Contractor is in a condition suitable for use, the Employer may take possession of or use such portion.

Such use by the Employer shall in no instance be construed as constituting final acceptance, and shall neither relieve the Contractor of any of his responsibilities under the Contract, nor acts a waiver by the Employer of any of the conditions thereof, provided that the Contractor shall not be liable for the cost of repairs, re-work, or renewals which may be required due to ordinary wear and tear resulting from such use.

However, if such use increases the cost or delays to the completion of remaining portions of work, the Contractor will be entitled to an equitable adjustment.

If, as a result of the Contractor's failure to comply with the provision of the Contract, such use proves to be unsatisfactory, the Employer will have the right to continue such use until such portion of the work can, without injury to the Employer, be taken out of service for correction of defects, errors, omissions, or replacement of unsatisfactory materials or equipment, as necessary for such work to comply with the Contract; provided that the period of such operation or use pending completion of appropriate remedial action shall not exceed twelve months unless otherwise mutually agreed upon in writing between the parties.

12. EXISTING SERVICES

The Contractor shall search for, find, locate and protect any wiring, cable, duct, pipework, etc., within or immediately adjoining the site area.

The Contractor shall take full responsibility for safety of existing service lines, utilities and utility structures uncovered or encountered during excavation and construction operations.

The Contractor shall take full responsibility for damaging any such service lines, utility/utility structure and any cost and/or expense that arises or issues from any such damage shall be borne directly by himself. Should any damage to any such service occur the Contractor shall forthwith take remedial action, initiate safety precautions, install temporary services and carryout repair all at his own cost and expense and inform the Engineer and notify all relevant authorities.

Existing utilities which are to remain in service for or after the works are to be determined by the Contractor. If any existing service lines, utilities and utility structures which are to remain in service are uncovered or encountered during these operations, they shall be safeguarded, protected from damage, and supported. The Contractor shall preserve, maintain and keep in perfect working conditions, any existing facilities required to be preserved by the Employer/the Engineer.

13. CONSTRUCTION AREA AND ACCESS

The Employer will provide the Contractor possible space within or nearby the area of site of works for the storage of plant, equipment and materials and for Contractor's temporary office, during the currency of the Contract. In case the adjacent area as required by the Contractor is not available within the Project boundary for storage of plant, equipment and machines then the Contractor shall arrange at his own expense possible space for storage of plant, equipment and machines at his own cost and expense. On no account shall such temporary installations conflict/interfere with any of the permanent installations, services and any operational function of Employer. The handling and

storage of all plants, equipment and materials at site shall be the sole responsibility of the Contractor and at no risk and cost to the Employer.

The Contractor shall protect all material against corrosion, mechanical damage or deterioration during storage and erection on site. The protection methods shall be to the approval of the Engineer

14. CONSTRUCTION & CHECKING AT SITE

The Contractor shall submit to the Engineer in due time for approval and discussion, his proposals and plans as to the method and procedure to be adopted for the temporary and permanent works involved.

The submitting to these suggestions and arrangements, and the approval thereof by the Engineer shall not relieve the Contractor of his responsibilities and duties under the Contract.

The carrying out of all work included in the Contract is to be supervised by a sufficient number of qualified representatives of the Contractor and full facilities and assistance are to be afforded by the Contractor for the Engineer or his Representative to check & examine the execution of the work.

The Engineer reserves the right to inspect all parts of the works but may at his discretion waive inspection on certain items. This shall in no way absolve the Contractor from his responsibilities. This particularly applies to the checking of materials, the accurate setting out of foundations, and to the leveling, setting and aligning of the various parts, and to the proper fitting and adjustment of manufactured and finished materials and fixtures in position.

If the Engineer or his Representative find that the work progress is slow in such a way that the works or parts thereof will not be completed in the time specified, then he shall order the Contractor to work overtime or in shifts and the Contractor shall comply. These arrangements will be free of all financial encumbrances and at no additional costs to the Employer.

In the event of night work, the Contractor shall provide sufficient and adequate lighting to the satisfaction of the Engineer or his Representative and shall supply the necessary manpower for satisfactory continuation of the work after normal hours.

15. STORAGE & HANDLING FACILITIES

The Contractor shall make his own arrangements for providing the necessary space for the storage of plant, equipment and materials and for Contractor's temporary office, in and around the site of works, during the currency of the Contract.

16. PRODUCT DATA

Manufacturer's standard schematic drawings shall be modified or deleted to indicate only information which is applicable to the project. Such standard information shall be supplemented to provide all additional applicable information.

Manufacturer's catalogue sheets, brochures, diagrams, schedules, performance charts, illustrations and other standard descriptive literature shall be clearly marked to identify pertinent materials products or models. Dimensions and required clearances shall be indicated. Shop performance characteristics and capacities shall be noted.

The Contractor shall ensure that all technical submittals are complete, accurate, and in full compliance with the Contract Documents prior to initial submission. Re-submissions shall be limited strictly to incorporating comments issued by the Engineer on the preceding submission.

The Contractor shall not make unnecessary, repetitive re-submissions of previously reviewed and accepted or rejected submittals without valid justification. Any re-submission that does not adequately address prior comments, or includes unjustified revisions, shall be liable for rejection without review.

In the event of excessive or unjustified re-submissions, the Engineer reserves the right to:

- (a) return such submittals without review; and/or
- (b) recover any additional administrative or review costs incurred.

17. PRODUCT QUALITY AND HANDLING

Suppliers of local and foreign products and installations specified shall have been regularly engaged in the business of manufacturing, fabricating, installing and / or servicing work required for a period not less than 5 years. In addition, the Engineer may request as appropriate a:

- list of similar installations that describes project, scope and date of completion.
- complete literature, performance data, and technical data.
- list of services record within Pakistan.
- location of service office from which this installation could be maintained.

For the actual fabrication, installation and testing of the specified work use only thoroughly trained and experienced workmen completely familiar with the items required and with the manufacturers recommended methods of installation. In acceptance or rejection, no allowance will be made for the lack of skill on the part of workmen.

Use all means necessary to protect materials before, during and after installation and to protect the installed work and materials of all other trades. In the event of damage, immediately make all repairs and replacement necessary for approval and at no additional cost to the Employer.

18. INSPECTION & TESTS REPORTS

All equipment and materials furnished under these specifications and all work performed in connection therewith will be subject to rigid inspection by the Engineer or the Engineer's Representative. Acceptance of equipment and material or the waiving off inspection thereof shall in no way relieve the Contractor of his responsibility for meeting the requirements of the Contract.

The Contractor shall furnish the Engineer with certified true copies of test reports of all materials used in the manufacture and fabrication of all equipment and material including metal work, steel pipes, fire bricks etc. The result of these test shall be in such form as to show compliance with the applicable Specifications, standards and codes for the material used.

19. FIELD LABORATORY AND TESTING

19.1 General

The Contractor shall provide and maintain a field laboratory equipped with approved equipment to perform all the tests required by the Engineer. The quality control testing shall be performed by the Contractor's competent personnel in accordance with a site testing and quality control programme to be established by the Contractor and approved by the Engineer. The Engineer may however, require certain tests to be performed in any other laboratory designated by him.

The Contractor shall provide laboratory helpers to the Engineer for testing. The laboratory shall be run by a qualified material Engineer and Laboratory Technician to be employed by the Contractor.

The Field Laboratory, including all equipment and staff shall be placed at the disposal and direction of the Engineer during the Contract.

The Contractor shall keep a complete record of all quality tests performed on site.

All quality control and tests shall be carried out in accordance with applicable standards and codes. In addition to routine field testing, the contractor shall undertake soil studies for water storage structures etc as directed by the engineer, and furnish a report for evaluation of structural designs of hydraulic and retaining structures where applicable with no additional payment to contractor.

19.2. Field Laboratory Equipment Requirements

The Laboratory shall be equipped with new unused and latest Equipment to perform tests as per Technical Specifications and General Conditions of Contract. Additional equipment/materials shall be supplied by the Contractor as and when required by the Engineer to perform any specified test, at no additional cost to the Employer.

The laboratory shall also be equipped with new unused furniture, fittings and fixtures. If any equipment, furniture, fitting or fixture becomes unserviceable for any reason what so ever, the Contractor shall promptly replace the same as and when directed by the Engineer.

19.3. Testing Laboratory Certificates

The Engineer may accept a certificate from a commercial testing laboratory, satisfactory to him, certifying that the product has been tested within a period acceptable to the Engineer and that it conforms to the requirements of these specifications.

19.4. Method of Payment

The cost of providing running and maintenance of the laboratory, equipment, materials and staff, testing charges for materials supplied by the Employer and all other tests to be performed in any other laboratory designated by the Engineer shall be deemed to be included in the price quoted by the Contractor and no separate claim for payment on this account shall be entertained by the Engineer. Furthermore, the cost of any additional laboratory, field and shop tests required through the resubmission of samples because of failure of compliance with Specifications shall be borne by the Contractor.

In case the Contractor does not provide the specified equipment and testing facility, cost of testing plus 100 percent overheads shall be recovered from his bills.

20. SURVEYING INSTRUMENTS

20.1 General

The minimum quantity of survey equipment is stated below which shall be available with the Contractor at site of Works along with qualified Surveyors and Survey Helpers. The equipment shall be maintained throughout the Contract Period and replaced by the Contractor in case of damage or loss. The survey equipment shall be made available to the Engineer when requested. All surveying equipment shall be in good working condition.

20.2 Surveying Equipment Required

The Contractor shall provide and maintain the following surveying equipment at site.

- a) Total Station with staff 02 No.
- b) Automatic Levels with tripods & staff 02 No.
- c) All other miscellaneous tools, equipment and materials required in surveying.

21. APPROVAL OF MATERIALS AND PLANT

21.1 Quality of Materials

All materials, fixtures, fittings, supplies and plant furnished under the Contract shall be new and unused, standard first grade quality and of the best workmanship and design. No inferior or low-grade materials, supplies or articles will be either approved or accepted, and all work of assembly and construction shall be done in a first-class and workmanlike manner. In asking for prices for materials intended for delivery to the Site and incorporation in the Works under any portion of these Specifications, the Contractor shall provide the manufacturer or supplier with complete information as may be necessary to secure compliance to this Clause and, in every case, he shall quote this Clause in full to each such manufacturer or supplier.

21.2 Submission of Samples and Data

- 21.2.1 The Contractor shall furnish for approval of the Engineer with reasonable promptness all samples as directed by the Engineer or specifically called for in the Specifications and in accordance with the time schedule provided in the schedule of submittals. The Engineer shall check and approve such samples with reasonable promptness only for conformance with the design concept of the Works and for compliance with the information given in the Contract Documents. All work shall be in accordance with approved samples.
- 21.2.2 Samples shall be furnished so as not to delay fabrication, allowing the Engineer reasonable time for consideration of the sample submitted.
- 21.2.3 Each sample shall be properly labeled with the name and quality of the material, manufacturer's name, name of the project, the Contractor's name and the date of submission, and the Specifications Article number to which the sample refers.
- 21.2.4 The manufacturer's installation directions shall be provided with each sample. The Contractor shall pay all transportation costs and deliver samples to the Engineer's office, Site or testing laboratory as directed by the Engineer.

- 21.2.5 Samples shall be of adequate size to permit proper evaluation of the material by the Engineer. Where variations in colour, texture, dimensions or other characteristics are to be expected, the Contractor shall submit samples showing the maximum range of variation. Materials exceeding the range of variation of the approved samples shall not be used on the Work.
- 21.2.6 In order to permit coordinated selection of colours and finishes, the Contractor shall deliver samples of all related items to the Engineer at one time. Samples of such materials will not be approved until all related samples have been submitted.
- 21.2.7 If both Shop Drawings and samples are required for the same item, the Engineer may require both to be submitted before approving either.
- 21.2.8 The Contractor shall erect Mock-up samples of finished items where specifically called for in the documents or as directed by the Engineer.
- The Mock-up samples shall be preserved/protected by the Contractor till the end of the project or as directed by the Engineer.
- 21.2.9 No acceptance or approval of any Shop Drawings or sample, or any indication or request by the Engineer on any Shop Drawings shall constitute an authorization for any increase in the Contract Sum.

21.3 Inspection

All material and Plant furnished and all work performed under this Contract will be subject to inspection by the Engineer at all times and in all states of completion both off-Site and on-Site. The Contractor shall furnish promptly without additional charge, all facilities, labour and materials reasonably needed for performing such inspection and testing as may be required by the Engineer.

21.4 Approved Sample at Site

The Contractor shall, at all times, keep on the Site approved samples. All such samples shall be made available to the Engineer as and when required.

22. BAR BENDING SCHEDULE

Bar bending (reinforcement bars) schedule of all structural drawings shall be prepared by the Contractor and submitted in triplicate to the Engineer for approval.

23. DRAWINGS

23.1 Bid Drawings

Bid Drawings issued with the Bid Documents, called the Bid Drawings, show scope of the work to be performed by the Contractor. The Drawings are generally in sufficient detail so as to be used as a basis for construction, fabrication and for placing orders for materials subject to corrections based on the future issue of supplementary Drawings as provided under Sub-Clause 23.2 hereof.

23.2 Construction Drawings, Supplementary Drawings

Upon commencement of the works and furnishing by the Contractor stake out survey plan & natural ground levels, the Engineer shall issue Construction Drawings to the Contractor. The Construction drawings may be issued in stages, where necessary.

The Engineer shall have authority to issue to the Contractor, from time to time, such supplementary Drawings and instructions as shall be necessary for the purpose of the proper and adequate execution and completion of the Works and the remedying of any defects therein. The Contractor shall follow these drawings.

When additional information regarding the geological formations or other conditions becomes available, the Engineer may find it desirable to change dimensions or design of one or more of the features of the Works to conform to the newly disclosed conditions. The Engineer reserves the right to make such reasonable changes, and the Contractor's operations shall be conducted so as to accommodate any such reasonable changes in the Works.

23.3 Definition of Term Drawings

The term Drawings as used in the Specifications means the Drawings referred in Clauses 23.1 and 23.2 above.

23.4 Checking of Drawings

The Contractor shall check all Drawings carefully as soon as practicable after receipt thereof, and shall promptly notify the Engineer of any errors discovered.

23.5 Copies of Drawings

Drawings will be issued to the Contractor as described below:

23.5.1 Construction Drawings

Two (2) sets of the Construction Drawings will be issued to the Contractor as stated above, free of charge. Additional sets will be provided at cost of reproduction upon written request of the Contractor.

23.5.2 Supplementary Drawings

Two (2) prints of each supplementary Drawing will be issued to the Contractor free of charge. Additional sets will be provided at cost of reproduction upon written request of the Contractor.

23.6 Drawings to Be Furnished by the Contractor

The Contractor shall submit to the Engineer for review, such drawings as are required under the Contract, sufficiently in advance of the work intended to be executed.

23.6.1 Reinforcement Drawings

Reinforcement placement drawings and bar bending schedules (to be provided by the Contractor as per Clause 22 above) of all RCC work shall be prepared by the Contractor and submitted in triplicate to the Engineer for approval, sufficiently in advance of the works in which they are intended to be used.

23.6.2 Shop Drawings

- (a) The Contractor shall submit to the Engineer for review three (3) copies of all drawings to be issued for setting out, fabrication, supply order and construction; based on data, requirements, dimensions, details, codes, standards and design provided in the drawings issued by the Engineer. Such drawings shall be submitted at least twenty-eight (28) days before they are required for use. If within a period of fourteen (14) days after submission, the Engineer notifies the Contractor that a drawing fails to comply with the relevant requirement of the Contract, it shall be rectified and resubmitted for approval at the Contractor's cost. Fabrication or construction shall not commence on any part of the Works until the shop drawings or construction drawings for that part of the Works have been approved by the Engineer.

The Works shall be executed in accordance with the drawings as approved by the Engineer. If the Contractor wishes to modify any approved drawings, he shall immediately notify the Engineer and submit revised drawings for approval. If the Engineer instructs that

further drawings are necessary for executing the Works, the Contractor shall prepare such drawings and submit them for approval.

The Contractor at his cost shall rectify errors, omission, ambiguities, inadequacies and other defects.

Approval by the Engineer, in accordance with this paragraph, shall not relieve the Contractor of any of his responsibilities under the Contract.

- (b) The shop drawings shall be properly identified indicating the part of the Works, the name of the contractor / supplier etc., the date of preparation and the dates of all revisions. The Shop Drawings shall be complete and shall show the design dimensions, proposed materials to be used, finishes, type of shop paint and all other details in connection thereto.
- (c) Where adjoining work requires shop drawings, the Contractor shall prepare and submit composite shop drawings, which shall show and define the work under all affected trades. If the Contractor executes work before coordinating with other trades so as to cause interference with work of those trades, he shall make changes necessary to correct the conditions without extra cost to the Employer.
- (d) No changes shall be made by the Contractor in the resubmitted shop drawings in excess of the corrections spelled out by the Engineer and in a separate note on the shop drawings.
- (e) No work in the shop shall be started and no material or plant ordered until the Engineer has approved the shop drawings. It shall be the responsibility of the Contractor to submit the shop drawings on a schedule that allows reasonable time for checking and approval and subsequent fabrication. Failure to submit shop drawings in ample time for checking, correcting, and rechecking will not justify extension of time for completion of the Works.
- (f) The Contractor shall also check and verify all site measurements whenever requested by other Specialist Contractors or by other Sub-Contractors to enable them to prepare their own shop drawings and pass on the information with sufficient promptness, so as not to delay the work in any way. A copy of all such information passed on shall be given to the Engineer.

23.6.3 As-Built Drawings

The Contractor shall, at all times, keep on Site a separate set of prints of all drawings on which all significant changes between the work shown on the Drawings and that which is actually constructed, shall be noted neatly, accurately and promptly as the work progresses. The Contractor shall also regularly update BIM-Revit Model and share with the Engineer. Such drawings shall show the exact physical location and configuration of the works as actually installed.

The Contractor shall, within fourteen (14) days of issuance of Taking-Over Certificate for whole of the Works, furnish to the Engineer for his approval two (2) copies of such marked up drawings along with BIM-Revit Model. One (1) copy of each of the marked up drawings approved by the Engineer shall be returned to the Contractor by the Engineer and these shall be used for the preparation of the As - Built Drawings.

The Contractor shall furnish to the Engineer six (6) complete sets and one reproducible copy of all As -Built Drawings (Auto CAD Drawings as well as BIM-Revit Model of all services) within twenty-eight (28) days of receipt of drawings stated above, from the Engineer.

24. PROTECTION OF THE WORKS

The Contractor shall whenever necessary cover up and protect the works from weather and damage by his own or other workmen performing subsequent operation. The Contractor shall provide all necessary dustsheets, barriers and guard rails and clear away the same at completion.

25. RESTORATION AND CLEANING

Upon completion of the works the Contractor shall restore all items covered by the Contract to the satisfaction of the Engineer.

The Contractor shall do regular cleaning and clear away all rubbish and excess materials that may accumulate from time to time on completion and before handing over. Upon completion of the works he shall obliterate all signs of temporary construction facilities such as work areas, structures, foundations of temporary structures, stock piles of excess or waste materials, or any other vestiges of construction, as directed by the Engineer. All buildings shall be cleaned; floors and paving scrubbed and the works and site shall be left in a clean and satisfactory state for immediate use and occupation. Care shall be taken not to use any cleaning materials, which may cause damage to the surface to be cleaned.

The Contractor shall also take all necessary precautions to keep the works and site free from vermin during construction and he shall leave the works vermin free on completion.

Application of pest control agents shall not commence until the specific product, name, method and extent of application have been submitted to and approved of by the Engineer.

26. SITE OFFICE AND TEMPORARY FACILITIES TO BE PROVIDED BY THE CONTRACTOR

26.1 Contractor's Office, Facilities Etc.

The Contractor shall establish and maintain a Site office. The Contractor shall provide all facilities in connection with the execution, completion, of the Works, remedying defects therein and maintenance of the utilities services. The facilities shall not be limited to the Contractor's Site Office, labour camps, work yard and storage areas, temporary water supply, waste water disposal, temporary electricity, medical unit, temporary roads, fire protection and firefighting equipment etc. The Contractor shall be solely responsible for arranging all utilities and the Contractor shall setup, maintain and operate an architectural and engineering facility at site with adequate number of technical and support staff as well as equipment required for particular nature of job covered under the Contract to prepare drawings/shop drawings for approval of the Engineer.

The Contractor shall arrange his labour camp, work yard, storage area and site office.

26.2 Temporary Roads

The Contractor shall prepare and maintain such temporary roads as may be necessary, from the site to the nearest road and also within the plot. Such roads shall be positioned strictly in accordance with the Engineer's instructions and the Contractor shall reduce or control any dust nuisance by regularly spraying water and compaction as directed.

26.3 Temporary Services

26.3.1 Temporary Water Supply

The Contractor shall supply in sufficient quantity all necessary potable and other water for construction purposes for all trades at points within a reasonable distance of any building being constructed. The Contractor shall make arrangements and pay charges for water service installation, maintenance and removal thereof, and pay the costs of water for all trades.

At completion of the work, the temporary water services equipment and piping shall be removed by the Contractor at his own expense.

26.3.2 Temporary Electricity

The Contractor shall make all the necessary arrangements for a temporary electricity service, pay all expense in connection with the installation, operation and removal thereof and pay the costs of electricity consumed by all trades. The Contractor shall arrange and furnish an Electric Power Generating set at site and maintain the generating set in perfect working condition through-out the duration of Contract. The generating power of the set shall be sufficient to operate all plant and equipment as well as the camps and offices of the Contractor and the offices of the Engineer/Employer, during construction at site. Should the set fail to meet the required demand at site or fail to function or operate, the Contractor shall immediately replace the same with other generating set/s to the satisfaction of the Employer as well as the Engineer.

A temporary lighting system shall be furnished, installed and maintained by the Contractor as required to satisfy the minimum requirements for safety and security and to the satisfaction of the Engineer.

When the permanent electrical power and lighting systems are in an operating condition, they may be used for temporary power and lighting for construction purposes provided that the Contractor obtains the written approval of the Engineer and the Employer and assumes full responsibility for the entire power and lighting system and pays all costs for operation and maintenance of the system.

At completion of construction work, or at such time as the Contractor makes use of permanent electrical equipment and devices, temporary electricity services shall be removed by the Contractor at his own expense.

26.3.3 Waste Disposal

The Contractor shall make such temporary provisions as may be required in order to dispose of any chemicals, fuels, oils, grease, bituminous materials, waste and soil waste and the like without causing pollution to either the site or the environment. Disposal of any materials, wastes, effluent, garbage, oil, grease, chemicals and the like shall be in areas specified by the concerned local authority proposed by the Contractor and subject to the approval of the Engineer. If any waste material is dumped in unauthorized areas the Contractor shall remove the material and restore the area to the condition of the adjacent undisturbed area. If necessary, contaminated ground shall be excavated, disposed off as directed by the Engineer and replaced with suitable fill material compacted and finished with topsoil all at the expense of the Contractor.

26.3.4 Fire Protection

The Contractor shall provide and maintain adequate fire protection in the form of barrels of water with buckets, fire bucket tanks, fire extinguisher, or other effective means ready for instant use, distributed around the project and in and about temporary inflammable structures during construction of the works.

Gasoline and other flammable liquids shall be stored in and dispensed from safety containers approved by the Engineer and storage shall not be within building.

Torch-cutting and welding operations performed by the Contractor shall have the approval of the Engineer before such work is started and a chemical extinguisher is to be available at the location where such work is in progress.

The Contractor shall follow the instructions and specifications of the Civil Defense Department or any other local department concerned with such activities.

27 CONSTRUCTION SCHEDULE

A Construction schedule shall be maintained in accordance with the provisions of the General Conditions of Contract.

The schedule shall be accompanied with sufficient data and information including all necessary particulars of constructional plant, equipment machinery, temporary Works, arrival of plant, equipment at site and their installation, method of operation, work forces employed, etc., for an activities of the Works.

Should the Engineer consider any alteration or addition in the programme and time schedule, the Contractor shall conform thereto without any cost to the Employer.

Whenever necessary and wherever the progress of the actual work shows departure, the programme and time schedule shall be undated and submitted to the Engineer for his approval.

28 SUBMISSION REQUIREMENTS

28.1 Schedule submission at least sixty days before the dates when reviewed submittals will be needed.

28.2 Submit Shop Drawings as per provision given in Sub-Clause 23.6.2 and number of copies of Product Data which the Contractor requires for distribution plus four copies which will be retained by the Engineer.

28.3 Submit three samples unless otherwise specified.

28.4 Accompany submittals with transmittal letter, in duplicate, containing:

- Date
- Project title and number
- Contractor's name and address
- The number of each Shop Drawing, Product Data and the Sample submitted.
- Notification of deviations from Contract Documents.
- Other pertinent data.

29 RESUBMISSION REQUIREMENTS

Shop Drawings:

- Revise initial drawings as required and resubmit as specified for initial submittal.
- Indicate on drawings any changes which have been made by the Engineer.
- Product Data and Samples: Submit new data and samples as required for initial submittal.

30 MONTHLY PROGRESS REPORT AND PHOTOGRAPHS

30.1 During the continuance of the Contract, the Contractor shall submit monthly progress on forms as approved by the Engineer.

Such monthly reports shall show the actual progress completed as of date of the report plotted against the schedule as given by the Contractor at the start of work and shall be broken down so as to indicate status of all activities associated with mobilization design, material procurement, manufacture, surveys works, tests with regard to the agreed contract programme.

30.2 The Employer and the Engineer reserve the right to coordinate the schedules of this Contractor and other Contractors working at the Site, and to adjust and/or change any and all such schedules as required during the course of construction in order to achieve a coordinated project in harmony with the Employer's completion date.

- 30.3 Commencing after the first month of construction, and continuing every month until completion, the Contractor shall take and submit photographs to the Engineer's Representative, to show progress of his work and completion of each structure or major feature.

31 CONTRACTOR TO NOTIFY DELAYS ETC.

Any delay which will affect the completion of Works shall be detailed by the Contractor who shall state the action he is taking for effective completion of the Contract programme.

The Contractor shall submit a report in respect of the various sections of the Works, the equipment in use or held in readiness, a return of labour and supervisory staff, and details of any matters arising which may generally affect the progress of the work.

The Contractor shall give a summary of the detailed progress report giving the position with regard to the agreed Contract programme.

The progress reports shall be set out in a format to the approval of the Engineer, and forwarded promptly so that on receipt the information contained therein is not more than 21 days out of date.

If during execution of the Contract, the Employer considers the progress position of any section of the work to be unsatisfactory, or for any other reason relating to the Contract, he will be at liberty to convene a meeting and the Contractor's Representatives are to attend such meeting.

The Contractor's Site Office shall prepare and submit 6 copies of a weekly progress report to the Employer and Engineer's Site Office. This report shall summarize site activities and record and details where difficulties in maintaining the agreed programme are being experienced or are likely to cause subsequent delay.

The Contractor's Site Office shall also prepare and submit to the Engineer's Site Office 2 copies of Daily Activity Report summarizing the main activities to be undertaken each day, noting special activities such as tests, alignment checks, etc. The Contractor shall be responsible for expediting the delivery of all material and equipment to be provided by him and his subcontractors.

32 PHOTOGRAPHS

As soon as work commences on Site, the Contractor shall provide at least 10 to 12 photographs (along with soft copy) of the works from positions to be selected by the Engineer. Each photographic print shall not be less than 10x8 inch and shall bear a printed description, a serial number and the date when taken.

The soft copy of all photographs shall be held at the Contractor's Site Office, numbered and handed over to the Employer at the completion of the Contract.

33 SIGN BOARD

The Contractor shall erect and maintain at the Site in a location to be approved by the Engineer three (3) Sign Boards of dimensions approved by the Employer. The Sign Boards shall be made of metal. It shall be mounted on steel posts securely anchored and braced. The Contractor shall paint on the Sign Boards, the name of the Works, and the names of the Employer, Engineer and the Contractor both in English and Urdu Language.

34 SITE OFFICE FOR ENGINEER'S STAFF/ EMPLOYER STAFF

34 SITE OFFICE FOR ENGINEER/ ENGINEER'S STAFF

The Contractor within 30 days after signing of Contract Agreement or Notice to Commence, whichever is earlier shall provide furnished, equipped and serviced site offices as per the following.

34.1 Site Offices:

- (a) Four (04) new Containers / porta-cabins forty (40) feet long, adequately furnished as mentioned below, air-conditioned (heating & cooling) office facility for Engineer's personnel at the site in the form of portable-cabins having roof and walls duly insulated. The porta-cabins shall have the provision of electrical sockets and its individual distribution boards (including associated cabling), including a backup generator set to support full electric load:

1.	Wooden office table 4'x6' including filing rack with drawers and side racks (standard size).	12 (twelve) Nos.
2.	Officer's revolving Chairs	12 (twelve) Nos.
3.	Wooden sitting visitors' chairs with arms (standard size)	12 (twelve) Nos.
4.	Wooden Table 3'x5' with revolving chairs and side racks & wooden racks behind each table	6 (six) Nos.
5.	Steel filing cabinet (standard size)	2 (two) Nos.

- (b) One (01) new Container / Porta cabin for toilets having roof and wall insulated each including WC, washbasin, sanitary fitting & fixtures with standard sanitary and its associated soaking pit and lighting, exhaust fans.
- (c) One (01) new forty (40) feet long Container / Porta cabin for record keeping, air-conditioned (heating & cooling) office facility at the site in the form of portable-cabins having roof and walls duly insulated. The porta-cabin shall have the provision of electrical sockets and its individual distribution boards (including associated cabling) including a backup generator set with one wooden table and

chair and racks/ cabinets for record keeping purpose as per the design approved by the Engineer.

- (d) Contractor shall undertake grading and preparation of the area (hard & soft landscaping) in and around the site offices.
- (e) Contractor shall maintain the Engineer site office including the repair and/or replacement of and in addition, shall supply all office supplies, including consumables/ replacements; office stationery, documents file cabinets, consumable and Petrol, Oil and Lubricants (POL) for gensets.
- (f) Contractor shall hire and maintain staff for cleaning of offices and security of office blocks.
- (g) Contractor shall provide drinking water (cold), supply of potable water for sanitation purposes, electricity power, internet facility and telephone connections (landline) including payment of utility bills of site offices.

The Contractor shall obtain approval of layout and inventory/ details of office facilities/ furniture from the Engineer. The facilities shall be provided & maintained by the Contractor till the issuance of the Performance Certificate.

Thereafter, the above containers shall become the property of the Contractor. However, the furniture and items installed therein shall become the property of the Employer and shall be handed over in serviceable condition.

34.2 Office Equipment:

The Contractor shall provide the following office equipment/ system for use of the Engineer within 30 days from the signing of the Contract Agreement. All the equipment shall be new and shall be maintained (incl. supply of consumables i.e. printer cartridges, paper and toner) up to successful expiry of Defect Notification Period:

S. No.	Description	Quantity
a)	Laptop Core i7, 15 th Gen, 16GB RAM, 1 TB SSD, Intel Graphics, Fingerprint Reader, Windows 11, 15" FHD, Genuine Windows. HP or Dell or approved equivalent.	03
b)	Desktop Computer core i7 13th Gen, 2.8GHz – 4.0GHz, 08 GB Ram, 1 TB SSD, DVD/RW, incl. 17 inch branded monitor, keyboard, mouse & original windows	10
c)	Laser Printer 3 in 1 (copier + scanner + printer) HP MFP M725 or approved equivalent. All the computers and laptops shall be connected to the printer through networking.	03

S. No.	Description	Quantity
d)	Epson Work Force DS-60000 A3 Flatbed Document Scanner with Duplex ADF or approved equivalent	01
e)	Commercial use Photocopier machine Canon Dx 6860i or approved equivalent. All the computers and laptops shall be connected with the machine through networking.	01

After Completion of the Defect Notification Period, the equipment shall become the property of Employer and shall be handed over in serviceable condition.

34.3 Transport:

The Contractor shall provide within 30 days from the signing of the Contract Agreement, the following brand new vehicles of the latest model for the exclusive use of the Employer with drivers:

Description	Quantity
a) Jetour T2 i-DM or approved equivalent	01
b) Toyota Yaris GLI CVT 1.3 (A/T) or approved equivalent	02
c) Min. 13 seater Toyota Hi-ace 2.8 Deluxe or approved equivalent	01

The Contractor shall bear all costs relating to providing, registration, tax/ duties, comprehensive insurance, petrol, oil, lubricants, maintenance/ repair (from only authorized service centers as per OEM recommended frequency) and drivers' pay throughout the Construction Period and up to issuance of the Performance Certificate. If any of the above-mentioned vehicles remain out of service for a continuous period exceeding one (01) week due to repair, maintenance, or any other reason, the Contractor shall, at its own cost and without any additional liability to the Employer, immediately provide an equivalent replacement vehicle of similar type, capacity, and condition for the exclusive use of the Engineer and Engineer's staff until the original vehicle is restored to service.

Thereafter, the above vehicles shall become the property of the Contractor after issuance of Performance Certificate.

34.4 Mess Bachelor Accommodation for Engineer and Engineer staff:

The Contractor shall provide one (01) unit of 8-Beds rented housing accommodation with household appliances and furniture for the Engineer personnel near the site (preferably in Sectors F-6,7,8 or G-6,7,8 or any other appropriate location as approved by the Engineer, as described below:

Minimum 500 sq. yards (8 to 10 rooms) fully air-conditioned (heating & cooling) accommodation shall be fully furnished and equipped, including, beds, sofas, dining

tables, chairs, curtains, linen, blankets, glassware, cutlery, crockery and kitchen utensil/ household appliances. The accommodation shall have provision for efficient drainage, sanitation, potable water, gas, internet and electricity on 24 hours basis including backup generator(s) with POL for complete electric load.

The Contractor shall bear the cost of providing four cooks, three sweepers, four helpers and six security guards. Furniture and appliances provided for the housing facility shall remain property of the Contractor

The stated facilities including payments of utility bills and rent, shall be maintained by the Contractor till completion of the Defects Notification Period.

34.5 Measurement and Payment

The cost of providing and maintenance of above facilities during the construction period and Defects Notification Period shall not be paid separately to the Contractor and all costs shall be deemed to have been included by the Contractor in rates/ amounts of other items of BOQ.

If the aforementioned facilities are not provided within the time specified above, then the Contractor shall bear all expenses, such as rents incurred by the Engineer/ Employer due to the failure of the Contractor to complete and handover the said facilities and any of their fittings, furniture, equipment and associated hiring of staff/ drivers etc.

35 Facilities for Employer/ Employer's Staff

35.1 Project Director Office

The Contractor, within 30 days after signing of the Contract Agreement or Notice to commence, whichever is earlier, shall provide furnished, equipped and serviced site offices as per the following:

- i. The Contractor shall hire/ acquire a building in the nearest possible vicinity of the project site (preferably in Sectors F-6,7,8 or G-6,7,8 or any other suitable place as approved by the Employer/ Project Director. The Project Office area shall not be less than (500 Sq. Yards/ 1 Kanal approximately), containing 6 to 7 Rooms for the Employer's personnel, adequately furnished as mentioned below, air-conditioned (heating & cooling) facility. The project office shall have the provision of electrical sockets and its individual distribution boards (including associated cabling), including a backup generator set and systems connected to UPS.

S. No.	Description	Quantity
1.	Wooden office table 4'x6' including filing rack withdrawers and side racks (standard size).	12 (twelve) Nos.
2.	Officer's revolving Chairs	12 (twelve) Nos.
3.	Wooden sitting visitors' chairs with arms (standard	24 (twenty-four) Nos.

S. No.	Description	Quantity
	size)	
4.	Wooden Table 3'x5' with revolving chairs and side racks & wooden racks behind each table	24 (twenty-four) Nos.
5.	Steel filing Almirah (Two Doors)	10 (Ten) Nos.

- ii. Contractor shall maintain the Project Office, including the repair and/or replacement of, and in addition, shall supply all office supplies, including consumables/replacements; office stationery, document file cabinets, consumables and POL for gensets/ solar system.
- iii. Contractor shall hire and maintain staff for cleaning of offices and security of office block.
- iv. Contractor shall provide drinking water (cold), supply of potable water for sanitation purposes, electricity power, internet facility and telephone connections (landline) including payment of utility bills of project offices.

The Contractor shall obtain approval of the project office facility and inventory, details of office facilities/ furniture from the Employer. The facilities shall be provided & maintained by the Contractor till issuance of Performance Certificate.

Thereafter, the above-said supplies/ office furniture provided for the Project Office, after completion of the Defects Notification Period, shall become the property of the Employer and shall be handed over in serviceable condition.

35.2 Site Office:

The Contractor, within 30 days after signing of the Contract Agreement or Notice to commence, whichever is earlier, shall provide furnished, equipped and serviced site offices as per the following:

- (a) Three (03) new Containers/ Porta cabins forty (40) feet long, adequately furnished as mentioned below, air-conditioned (heating & cooling) office facility for the Employer's personnel at the site in the form of portable-cabins having roof and walls duly insulated. The porta-cabins shall have the provision of electrical sockets and its individual distribution boards (including associated cabling) including a backup generator set/ Solar System.

S. No.	Description	Quantity
1.	Wooden office table 4'x6' including filing rack with drawers and side racks (standard size).	12 (twelve) Nos.
2.	Officer's revolving Chairs	12 (twelve) Nos.
3.	Wooden sitting visitors' chairs with arms (standard size)	12 (twelve) Nos.

S. No.	Description	Quantity
4.	Wooden Table 3'x5' with revolving chairs and side racks & wooden racks behind each table	6 (six) Nos.
5.	Steel filing Cabinet (Standard Size)	3 (three) Nos.

- (b) One (01) new Containers / Porta cabin for toilets having roof and wall insulated, each including WC, washbasin, sanitary fitting & fixtures with standard sanitary and its associated soaking pit and lighting, exhaust fans.
- (c) One (01) new Container / Porta cabin for combined conference room forty (40) feet long, air-conditioned (heating & cooling) office facility at the site in the form of portable cabins having roof and walls duly insulated. The porta-cabin shall have the provision of electrical sockets and its individual distribution boards (including associated cabling), including a backup generator set with one wooden conference table (12 to 15 members) and chairs, as per the design approved by the Employer.
- (d) Contractor shall undertake grading and preparation of the area (hard & soft landscaping) in and around the site offices.
- (e) The Contractor shall maintain the Employer site office, including the repair and/or replacement of, and in addition, shall supply all office supplies, including consumables/ replacements; office stationery, documents file cabinets, consumables and POL for gensets.
- (f) Contractor shall hire and maintain staff for cleaning of offices and security of office block.
- (g) Contractor shall provide drinking water (cold), supply of potable water for sanitation purposes, electricity power, internet facility and telephone connections (landline) including payment of utility bills of site offices.

The contractor shall obtain approval of layout and inventory/ details of office facilities/ furniture from the Employer. The facilities shall be provided & maintained by the Contractor till issuance of the Performance Certificate.

Thereafter, the above containers shall become the property of the contractor after the expiry of the Defects Notification Period. However, the furniture and items installed in the containers shall become the property of the Employer and shall be handed over in serviceable condition.

35.3 Office Equipment:

The Contractor shall provide the following office equipment/ system for use of the Employer within 30 days from the signing of the Contract Agreement. All the equipment shall be new and shall be maintained (including supply of consumables i.e. printer

cartridges, paper and toner etc.) throughout the Construction period and issuance of Performance Certificate:

S. No.	Description	Quantity
a)	Laptop Core i7, 15 Gen, 16GB RAM, 1 TB SSD, Intel Graphics, Fingerprint Reader, Windows 11, 15" FHD Genuine Windows or equivalent. HP or Dell or approved equivalent.	10
b)	Desktop Computer core i7 13th Gen, 2.8GHz – 4.0GHz, 08 GB Ram, 1 TB SSD, DVD/RW, incl. 17 inch branded monitor, keyboard, mouse & original windows.	05
c)	Laser Printer 3 in 1 (copier +scanner +printer) HP MFP M725 or approved equivalent. All the computers and laptops shall be connected with the printer through networking.	08
d)	Commercial use Photocopier machine Canon Dx 6860i or approved equivalent. All the computers and laptops shall be connected with the machine through networking.	01
e)	Commercial use Photocopier machine Canon Dx C3926i or approved equivalent. All the computers and laptops shall be connected with the machine through networking	01
f)	Epson Work Force DS-60000 A3 Flatbed Document Scanner with Duplex ADF or approved equivalent	02
g)	Apple iPad Pro 13 Apple M5 Chip 13-Inch, Apple Pencil Pro & Magic Keyboard, 512GB Space black, including charger & cable) or equivalent	02

After issuance of the Performance Certificate, the above equipment shall become the property of the Employer and shall be handed over in serviceable condition.

35.4 Transport:

The Contractor shall provide within 30 days from the signing of the Contract Agreement, the following brand new vehicles of the latest model for the exclusive use of the Employer with drivers:

Description	Quantity
a) Toyota Hilux- Revo Double Cabin 4x4 (GR) or approved equivalent	02
b) Jetour T2 i-DM or approved equivalent	02
c) Toyota Yaris GLI CVT 1.3 (A/T) or approved equivalent	05
d) Toyota Hi-ace 2.8 Deluxe or approved equivalent	01

The Contractor shall bear all costs relating to providing, registration, tax/ duties, comprehensive insurance, fuel, maintenance/ repair (from only authorized service centers

as per OEM recommended frequency) and drivers' pay throughout the Construction Period and till the issuance of Performance Certificate. If any of the above-mentioned vehicles remain out of service for a continuous period exceeding one (01) week due to repair, maintenance, or any other reason, the Contractor shall, at its own cost and without any additional liability to the Employer, immediately provide an equivalent replacement vehicle of similar type, capacity, and condition for the exclusive use of the Employer until the original vehicle is restored to service.

The above vehicles shall remain the property of the Contractor after issuance of Performance Certificate.

35.5 Mess Bachelor Accommodation for Employer:

The Contractor shall arrange, on a rental basis or any other suitable arrangements, and fully furnish two (02) accommodation units/ messes in Islamabad, minimum 500 Sq. Yards (8 to 10 rooms), in close proximity to the Project Site (preferably in Sectors F-6,7,8 or G-6,7,8 or any other suitable place as approved by the Employer/Project Director), for the exclusive use of the Employer's officers and staff. The accommodation shall be provided with all necessary furniture, fixtures, and fittings, including but not limited to beds, mattresses, wardrobes, sofas, dining tables and chairs, study tables, office furniture, curtains, carpets/rugs, linen, blankets, pillows, towels, air conditioners, refrigerators, microwave ovens, cooking ranges, washing machines, water dispensers, televisions, kitchen and household appliances, as well as complete sets of glassware, cutlery, crockery, kitchen utensils, and any other household items required to ensure that the accommodation is fully functional and ready for immediate occupancy. The Contractor shall bear the cost of providing four cooks, three sweepers, four helpers and six security guards

Each mess shall be provided with an uninterrupted power supply through a dedicated 25 kVA generator or appropriate capacity Solar System, including all associated accessories. The Contractor shall be solely responsible for the payment of monthly rent and all recurring utility charges, including but not limited to electricity, potable and drinking water, LPG/gas, internet services, and any other applicable utility charges. The Contractor shall also be responsible for providing the required POL (Petrol, Oil and Lubricants) for the generators and carrying out their operation, maintenance, and repair throughout the Contract Period till issuance of the Performance Certificate on a 24-hour basis.

Prior to installation, the Contractor shall submit the complete furnishing inventory, including details of all furniture, fixtures, appliances, equipment, and other usable items proposed to be provided in both messes, for the Employer's review and approval.

Upon issuance of the Performance Certificate, all furniture, fixtures, equipment, appliances, generators, and other items installed under this provision shall remain the property of the Contractor.

35.6 Measurement and Payment

The cost of providing and maintenance of above facilities during the construction period and Defects Notification Period shall not be paid separately to the Contractor and all costs shall be deemed to have been included by the Contractor in rates/ amounts of other items of BOQ.

If the aforementioned facilities are not provided within the time specified above, then the Contractor shall bear all expenses, such as rents incurred by the Engineer/ Employer due to the failure of the Contractor to complete and handover the said facilities and any of their fittings, furniture, equipment and associated hiring of staff/ drivers etc.

36 COORDINATION OF WORK AT SITE

The Contractor shall take cognizance that during the execution of the project, other Contractor will be working concurrently on this site.

All works of his responsibility shall be coordinated by the Contractor so as to give the necessary facilities to other Contractor or their workman or any other employ, who execute or supervise any work on the site.

The Contractor shall ensure that the necessary safety precaution will be observed and interferences shall be avoided specially for the works executed side by side by different Contractors.

Due consideration must be given to permit access to sections of the work as required by other Contractors for the extension of their works. With a view to coordinate the works, the Engineer may from time to time direct the order of the works to be carried out.

No payment shall be made to the Contractor for the works involved under this sub clause.

37 SITE FACILITIES TO BE PROVIDED BY THE CONTRACTOR

37.1 General

Without prejudice to the generality of the various clauses of the Contract, particular attention is drawn to the obligation of the Contractor to make his own arrangement at his own expense for the following.

37.2 Labour Camps and Staff Residences

The Contractor shall provide, operate and maintain labour camps and staff residences and are required for the proper and efficient progress of the work to house his own employees. For the purposes of operation and maintenance of the

Camps and Residences, the Contractor shall comply with the rules of Pakistan Labour Camp Rules 1960 and all other applicable provisions of the Pakistan Labour Laws.

37.3 Administrative and Field Office

The Contractor shall provide, operate and maintain administrative and field offices required for his staff and would be responsible for Operation and Maintenance, furniture, equipment, appliances, janitor services and security of the same.

37.4 Work yards and Storage Areas

The Contractor shall provide, operate and maintain all sheds, fencing, foundations and all above ground structures required to store material or equipment brought on to the site by him. The Contractor shall be responsible for the security of his entire camps, residence, site and field offices work yard and storage area.

37.5 Water Supply, Sewerage System and Electricity

The Contractor shall make his own arrangement, at his own expense for provision, operation and maintenance of electric supply, reasonable supplies of raw and potable water and sewerage system at the site of works and his labour camps, staff residences and offices. The Contractor shall pay all fees, and charges (including bills) of whatsoever nature to the concerned departments (if any) in order to procure connections of the above facilities and thereafter using these facilities.

37.6 Medical Care

The Contractor shall arrange provision of adequate medical facilities for his employees.

Adequately equipped and properly staffed first aid stations or dispensaries shall be provided by the Contractor at camps and other strategic locations, to administer first aid treatment at all times free of charge to all persons on the Site, including personnel of the Engineer and the Employer. The nature, number and location of facilities furnished and the Contractor's staff for administering first-aid treatment shall meet the requirements of the Health Services of the Government of Pakistan and of Section III of the Manual "Safety Requirements for Construction by Contract", published by the Employer, and shall be subject to approval by the Engineer.

37.7 Other Facilities

The Contractor shall also be responsible for providing at his own cost other facilities for his own staff and labour such as educational, recreational, transport, telephone and catering if required.

38. CONSTRUCTION PROCEDURES

The Contractor shall advise the Engineer of proposed construction procedures in accordance with the General Conditions of Contract.

If the Engineer shall see that the work progress is slow in such a way that the work will not be completed in the time specified, then he shall order the Contractor to work overtime or in more shifts and the Contractor shall obey these orders without any additional payments and without any objections or request for compensation.

39. NOTIFICATION TO ENGINEER

The Engineer shall be notified daily in writing of the nature and location of the Works the Contractor intends to perform the next day so as to enable necessary inspection and measurement to be carried out. The Engineer may, if necessary, direct that longer notice be given of certain operations.

40. NIGHT WORK

When work is done at night the Contractor shall maintain from sunset to sunrise such lights on or about his work and plant as the Engineer may deem necessary for the proper observations of the work and the efficient execution thereof.

41. WEATHER

No work is to be undertaken when, in the opinion of the Engineer, the weather is so unsuitable that proper protection of the work cannot be ensured.

42. CO-ORDINATION WITH OTHER CONTRACTORS

It shall be the responsibility of the Contractor to keep-up good relations with other Contractors employed on site by the Employer. The Contractor shall cooperate and coordinate his work with that of the other Contractors working at the Site, to whatever extent may be necessary to complete the Project in accordance with the approved programme of the Works and in accordance with the Engineer's instructions. Should a disagreement or dispute arise between the Contractor and other contractors, the same shall be referred without delay to the Engineer for his decision. Upon such decision, the Contractor shall proceed with the work in accordance therewith. In case the access to the

works of other contractors is through the Site area of the Contractor, the Contractor shall coordinate with and permit all reasonable access to other Contractors.

43. ACCIDENT PREVENTION, SAFETY MEASURES AND PROTECTIVE EQUIPMENT

Contractor must plan, manage and monitor all work carried out taking into account the risks to anyone who might be affected by it (including members of the public) and the measures needed to protect them. The Contractor shall check that all workers he employs or appoints have the skills, knowledge, training and experience to carry out the work. Make sure that all workers under their control have a suitable, site-specific induction, unless this has already been provided by the Contractor. Provide appropriate supervision, information and instructions to workers under their control. Ensure they do not start work on sites unless reasonable steps have been taken to prevent unauthorized access. Ensure suitable welfare facilities are provided from the start for workers under their control, and maintain them throughout the work.

43.1 Submission of SAFETY PLANS and HSE POLICY

Contractor shall submit the following Safety Plans and Contractor HSE Policy within 7 (seven) Calendar days of the notice of commencement of Work.

- i. Fire Management Plan
- ii. Traffic Management Plan
- iii. Waste Management Plan
- iv. Occupational Health & Safety Plan
- v. Spill Response Plan

43.1.1 HSE Plan

Contractor shall submit HSE Plan in which HSE Policy, management commitment statement towards the good safety practices and compliance of HSE policy and procedures shall be adhered.

43.1.2 Procedure and Guidelines

Contractor shall provide procedures and guidelines including (Excavation work, Work at height, Façade work, Scaffolding, Electrical and Mechanical log out and tag out (LOTO), Plant and Equipment, Emergency response procedure, Adverse weather, Demolition work, Lifting operation, Hot work, Confined space work, Accident incident investigation, Welding cutting and grinding activities) and other related activities at site.

43.2 RISK Assessment:

Contractor shall conduct task-based Risk assessment for each working activity, the associated hazards and risks shall be conveyed to all workforce and mitigation process shall be in place and understood to workforce and staff.

43.3 PPE Requirements:

Contractor shall also be responsible for providing all the mandatory Personnel Protective Equipment (PPE) and necessary stock shall be maintained.

Following is minimum PPE requirement for various types of activities as per compliance of BS standard.

43.3.1 General Duties

Safety Glasses, Hard Hat, High visibility Coveralls and Vest, Safety footwear.

Note. Clear safety glasses shall be utilized for Indoor activities and Black/ white safety glasses with UV protection shall be utilized for outdoor activities.

43.3.2 Welding Activity

Goggles, Welding Hood, Hard Hat, Respiratory Mask, Flame Retardant high visibility Coveralls / use leather apron Shoulder / Arm if fire retardant coverall is not available, Welders Gloves, Safety Footwear.

43.3.3 Cutting / Grinding Activity

Goggles, Face Shield, Ear Plugs, Hard Hat, Flame Retardant high visibility Coveralls, Safety Footwear, Work Gloves, and Respiratory Protection will require where Cutting/ Grinding/ Chipping activity will be carried out in a restricted space.

43.3.4 Chemical Handling and Hazardous material handling activities

Full Face Visor or Mask with appropriate Cartridge, Hard Hat Full Chemical Suit, Chemical Handling Gloves, and Rubber type Boots (safety toe cap).

43.3.5 Working in and close to water, rainfall/ Wet Weather PPE

A supply of wet weather PPE shall be made available throughout the Project duration i.e. for predicted and unpredicted wet weather conditions. All foul weather gear shall be provided to the work force at no cost to the individual.

Wet weather PPE shall include, but is not limited to: - Waterproof storm jackets, trousers and safety gloves.

43.3.6 Any other as appropriate for required work

43.4 Continuous Improvement of Safety Culture:

Contractor shall also provide appropriate level of awareness, knowledge, education and training programs, refresher courses to improve safety culture in the workforce.

- i. Site orientation / induction training and keep evidence record for audit.
- ii. Work related indoor trainings
- iii. Safety seminars
- iv. Refresher courses
- v. Third party trainings including work at height, confined space, scaffolding, fire warden, first aid, Heat stress and other training related to work activities of the site.
- vi. Incentive programs

43.5 Emergency response plan

Contractor shall provide Emergency response plan for sites and site offices which includes Emergency on scene commander and its team, Emergency contact list, provision of firefighting equipment nearest Hospital, police, Civil defense, Fire warden, Building emergency evacuation plan with arrows leads to assembly point. Exit, Emergency Exit signs shall be posted. Availability of fire wardens with at least 3 days training course with a minimum 1 year experience and appropriate arrangements for ambulance. A drill shall be carried out quarterly. Contractor shall provide First aid facilities with clinic and nurses. For 50 or more labors, 1 first aider shall be available at day and night time if the workforce increase to 200 or more an additional nurse will be required.

43.6 Plant and Machinery

Contractor shall provide and ensure all plant machinery and equipment is fit for the purpose, adequately inspected tested and maintained.

- Ensure safe maneuvering of machineries, vehicles, workers in a busy construction site by Route Maneuvering plan for site where a designated separate routes for vehicles, pedestrian walkways for workers shall be marked signs shall be posted for clear understanding of office site and construction site. All construction vehicles shall be facilitated with yellow indicators on, reverse alarm in the construction vehicle shall be installed, used and maintained.
- Color coding of lifting gears and plant shall be followed and maintained.
- Contractor shall provide Rigging loft where all lifting gears slings, shackles, spreader beams, master link, lifting hooks etc. shall be stored.
- A quarantine area shall provide where all damaged lifting gears shall be accumulated.
- Forms and checklist shall be filled and maintained for Audit purpose.

- 3rd party Certified Tower/ mobile cranes and machinery shall be utilized.

43.7 Appointment of HSE personnel

Contractor shall get approval of Safety Officer, Engineer or Manager from the Engineer during appointment process. Minimum qualification for safety officer is OSHA/ IOSH/ NEBOSH with minimum 5 years of experience and HSE Manager with 10 years or more. Submission of CVs shall be made within 14 days of LOA.

Contractor shall deploy one safety officer over 50 workers and 2 safety officers over 100 workers and so on. (for each 50 workers 1 additional safety officer is required) and a qualified HSE Manager required for a construction site throughout the construction period.

43.8 Appointment of Environmental Officer

Contractor shall get approval of Environmental Officer or Engineer from the Engineer during appointment process. Minimum qualification for environmental officer is BS/MS in Environmental Engineering with minimum 5 years of experience or more. Submission of CVs shall be made within 14 days of LOA.

Contractor shall deploy environmental officer at construction site throughout the construction period.

43.9 Appointment of Community Liaison Officer

Contractor shall get approval of Community Liaison Officer from the Engineer during appointment process. Minimum qualification for Liaison officer is BSc Engineering with minimum 5 years of relevant experience or more. Submission of CVs shall be made within 14 days of LOA.

Contractor shall deploy liaison officer at construction site throughout the construction period.

43.10 Statistics and Reporting

Contractor shall ensure implementation of incident investigation process including near miss report, property damage report, and incident accident notification. Initial notification shall be submitted within 24 hours and full and final incident accident report shall be submitted to the Engineer within 72 hours of the incident.

Weekly and Monthly HSE reports shall be submitted to the Engineer on regular basis to evaluate HSE performance.

43.11 Electrical safety

Contractor shall ensure adequate electrical safety including

1. PDP (Power Distribution Panel) Control and earthing.
2. Safety device (ELCB, Insulation, Guard etc.)
3. Cable / Plug / Socket protection (U/G & O/H)
4. Color coding of power hand tools
5. Electric power shall be distributed through circuit breaker (ELCB), (PVC) cables and (RCD's) (30m A on each circuit).

43.12 Working at height

The Contractor is responsible for providing safe work place for work at height above (1.2) meters and needs to provide:

- i. Safety harness, life line, nets
- ii. Static working platform or mobile elevated working platform (MEWP) working platform
- iii. Access and egress (Ladder).
- iv. Tagging system and inspection.
- v. Methodology and Risk assessment
- vi. Trainings to workers for work at height
- vii. Cradle safety

43.13 Scaffolding safety

Contractor is responsible for providing safe scaffolding according to its engineering design for work at height above (1.2) meters and needs to provide:

- i. Standard tube, Aluminum tube, fittings, boards, ledgers, standards, decking, proper thickness of boards between transoms, platform, Guard rails and toe boards, bracing, ties, base plate, couplers, protection from dropped objects, access ladders, independent Tie scaffolding, Free standing scaffolding, provision of mobile scaffold, suspended scaffold, Scaffolding material storage, proper transportation of scaffolding materials, Housekeeping.
- ii. All the above materials shall be free from damage and rust.
- iii. Static working platform or mobile elevated working platform (MEWP) working platform
- iv. Access and egress (Ladder).
- v. Tagging system and inspection.
- vi. Methodology and Risk assessment
- vii. Provide training to scaffolders
- viii. Scaffolding Engineer / Supervisor

43.14 Excavation

Contractor is responsible for providing safe excavation at site. If the excavation is below 1.5 meters deep then proper benching or shoring are required. If the excavation is 1.5 meters or more deep and the contractor doesn't provide benching or shoring then Geotech sign off required. The Contractor shall ensure the following:

- i. Safe slope, Hard Barricade 2 meters away from the edge required around the excavation.
- ii. Proper Access and egress required to excavation.
- iii. Ensure underground utility services protection
- iv. Inspection (Testing & monitoring)
- v. Permit to work for excavation required.
- vi. No materials shall be stored nor vehicle be parked near the edge of the excavation.
- vii. Procedure or method statement with risk assessment shall be submitted prior to excavation.
- viii. Certified machinery shall be utilized for excavation process.
- ix. Trenches and pits shall be covered during or after excavation completed.
- x. All the trenches and pits shall be backfilled.
- xi. Access, roads shall be cleaned from dust and mud on regular basis.

43.15 Confined Space

Contractor is responsible to provide a safe workplace to workers. The space where there is a risk of serious injury or death due to the size, access to, and content of the space including dangerous conditions such as a lack of oxygen, or gas from hazardous substances. Working in excessively hot (or sometimes excessively cold) temperatures can cause physical and mental stress, as well as dangerous changes in body temperature, and so requires a strict health and safety provision. The working temperatures need to be monitored at all times with adequate thermometers to ensure safe working environments. The management must make sure that all staff wear any necessary safety protection when it comes to clothing and equipment, such as breathing apparatus. The length of time a worker can continually work within the confined space must also be managed properly, so in order to prevent problems like heat exhaustion, job rotation may be required. If the excavation, trench or pit is below 1.2 meters it will be consider as confined space if to avoid it then proper benching or shoring are required. If the excavation is 1.2 meters deep then Contractor shall ensure the following:

1. Certified and trained entrant to confined space.
2. Permit to work is required for confined space.
3. Gas test.AGI 1 to detect the LEL/UEL i.e O₂ (18.5- 23.5) H₂S Hydrogen Sulfide and Carbon monoxide

- Toxic effects of Hydrogen Sulfide H₂S:

- H2S Concentration Effect
 - 1 PPM Smell (Rotten eggs)
 - 10 PPM 8 hr. TWA (Time weighted Average)
 - 15 PPM 15 min. STEL (short term exposure limit).
 - 100 PPM Loss of smell
 - 300 PPM Loss of consciousness with time (~ 30 min.)
 - 1000 PPM Immediate respiratory arrest, loss of consciousness, followed by death
 - Toxic effects of carbon monoxide exposure:
 - Concentration Effect
 - PPM 8 hr. TWA (Time weighted Average)
 - 200 PPM Ceiling
 - 600 PPM Headache, discomfort (1 hr.)
 - 2500 PPM Unconsciousness (30 min)
 - 4000 PPM Quickly fatal
- (a) CS standby, Rescue team and supervisor should be stand and monitor the activity.
 - (b) Record all the interval of time and keep it as a record.
 - (c) Ambulance for emergency.

43.16 Welfare Facility

Contractor shall provide welfare facilities to workforce,

- i. Worker medical fitness
- ii. Smoking zones, Shaded rest areas,
- iii. Portable drinking water
- iv. Sanitation
- v. Working hours during Ramadan shall follow according to Federal Government notification

43.17 Lighting and Ventilation

1. Contractor shall provide adequate lighting and ventilation at site as necessary for safe work practices.
2. Corridors, stairs at the basement shall be lit up in day time to clear visibility.
3. Adequate lighting is required during night shift.

43.18 Lifting operation

Contractor is to ensure lifting operations are carried out in a safe manner, all associated lifting equipment is maintained, inspected and certified to the required standard and that all personnel involved in any of these activities are trained and qualified in accordance with the project requirements suitable for the tasks to which they are assigned. The Contractor shall ensure the following;

- i. Safe Lifting Plan

- ii. Lifting gears and appliances (web slings, chain slings, Shackles, slugs, spreader beams, master link etc and rigging appliances chain block, jacks and lever block etc shall be 3rd party certified (1 year) prior to use at site.
- iii. Prior to lifting operation, Contractor to ensure planning of lift, ground condition, wind speed, use of tag lines to control the lift and adverse weather conditions. No lift shall be taken in a wind speed 12.8 m/s and above. Ensure color coding of the lifting gears after 3 months to check wear and tear.
- iv. Tagging system and inspection.
- v. Risk assessment to be carried out prior to lift.
- vi. Contractor shall ensure certified riggers, banksman and operator of mobile or tower cranes
- vii. Contractor shall ensure pre use checks of lifting gears and appliances.
- viii. Monthly and Daily Crane and other Mobile Equipment Checks.

43.19 Hot Work

Contractor shall ensure to make procedures and take adequate precautions necessary to ensure that hazards and risks associated with Hot Work Activities are either eliminated or mitigated to ensure safe operations and safety of personnel, plant and equipment. Additionally Contractor shall ensure the followings;

- i. Permit to work to be open for the activity
- ii. Competent welder shall be provided for the activity
- iii. Mandatory personal protective equipment including hood or welding mask, face mask, apron, safety shoes, fire retardant gloves to be provided.
- iv. Fire extinguisher and Fire watcher must be deployed to control emergency situation.
- v. Barricade/ isolation to be provided
- vi. No chemical or flammable material shall be placed or stored near to welding activity.
- vii. Test to be provided prior to welding incase toxic gases or fumes presence (confined space)

43.20 Permit to Work

Contractor shall ensure Permit to work system at site. Permit to work shall be obtained prior to working activities below,

- 1. Hot works
- 2. Work at height
- 3. Excavation
- 4. Scaffolding and working platforms
- 5. Confined space Entry
- 6. Lifting operations
- 7. Electrical Shutdown works/ Lock out /Tag out

43.21 Environmental Protection

43.21.1 Contractor's Responsibilities

43.21.1.1 Contractor shall record the condition of roads, agricultural land and other infrastructure prior to transport of materials required for the contract works and commencement of construction. Contractor shall fully reinstate pathways, other local infrastructures and agricultural lands to at least their original conditions upon construction completion.

43.21.1.2 Protection of the environment

Contractor shall comply with all applicable national and local environmental regulations and guidelines as well as the conditions enlisted by Pak-EPA while issuing NOC/ Approval for the projects and all Environmental safeguards requirements provided in the EIA or due diligence reports.

Contractor shall (a) establish an operational system for managing environmental impacts, (b) carry out all the monitoring and mitigation measures, allocate the budget required to ensure that such measures are carried out. The Contractor shall submit to the Employer/ Engineer quarterly reports on the carrying out of such measures.

43.21.1.3 Dust control

Contractor shall take adequate measures to control Dust at construction site. Its surrounding access and road are clear from dust and mud. Contractor shall ensure proper housekeeping at daily basis.

43.21.2 Environmental Protection and Miscellaneous

43.21.2.1 Environmental Management

The Contractor shall comply with all legal duties and obligations regarding the protection of the environment as laid down Laws and Regulation of Governments of Pakistan.

43.21.2.1.1 Water Quality

The Contractor shall submit proposals for the Employer's approval for all waste water and foul effluent from offices, workshops and site accommodation to be collected and treated at a waste treatment plant prior to discharge into open water courses into ground water. Where construction methods involve pumping of ground water, the Contractor shall submit proposals for monitoring and the disposal of water discharges.

43.21.2.1.2 Waste Management

The Contractor is fully responsible for the day-to day management on waste collection & disposal. The Contractor must make arrangements for waste management for the collection and the disposal of domestic and industrial refuse, by handling, transport or storage of scheduled wastes outside the premises and its safe disposal at a location approved by the Employer.

The Contractor must ensure that all the necessary utensils such as proper storage containers or bins for refuse and kitchen wastes, special storage containers for scheduled wastes, temporary sewerage plants or toilet facilities are provided at the premises.

The Contractor must also comply with the following environmental conditions throughout the construction stage:

All effluents produced must be treated to comply Law and Regulation of Government of Pakistan before discharge into area approved by the Employer. The effluent shall never be discharged into canal without treatment;

Temporary sewage treatment for toilet facilities in accordance with the specifications as prescribe by the Law and Regulation must be provided at the Contractor's site office and worker's camps before the commencement of any works;

Open burning of solid wastes including biomass waste and construction debris is strictly not permitted;

Handling and disposal of scheduled wastes must comply with the requirements of the Law and Regulations of Government of Pakistan;

Waste oil and grease arising from the earthworks and construction activities must not be disposed into any nearby watercourse. These wastes must be stored in proper drums/containers and either reused or disposed at the site as approved/ licensed by the Director General of Environmental Quality.

43.21.2.1.3 Site Waste Management Plan and Hygiene

Contractor shall ensure safe disposal of waste by preparing site waste management plan SWMP shall be submitted 14 days prior to commencement of work for approval, maintain housekeeping, and removal, discharge of sewage water, follow environment friendly activities and avoidance of activities detriment to environment.

i. Drinking water control

- ii. Kitchen hygiene (test, cleaning, fire blanket, storage,)
- iii. Accommodation Hygiene (Fumigation, pest control, inspection)
- iv. Classification and segregation of waste
- v. Disposal of waste and records (Agent, Quantity, cost)
- vi. Housekeeping operations and others

43.21.2.1.4 Avoidance of Nuisance

The Contractor shall take all reasonable precautions to avoid causing a nuisance with dust noise or vibrations arising from his operations during execution of any works. The patients and routine operations of hospital should not be adversely impacted in any case. This provision is in addition to but not in substitution for the provisions of the Conditions of Contract.

Contractor shall not obstruct, as far as possible, the normal rights of way of the pedestrians, patients and other users of the public pathways/roads and where this is necessary and unavoidable during any works, he shall provide barriers (hard/soft barricading), safety signs, warning lights, etc. required for proper traffic safety.

contractor shall, before entering to the project site for works, will clearly mention the area required for works, demark the possessed area through hard or soft barricading (as, when & where needed) and will segregate the work area from general public using the facility to avoid any kind of disturbance, harm or risk to general public.

Contractor shall be responsible for clearing and cleaning all existing streets, roads, drains, etc. at regular intervals, or when directed by the Employer and keep the approaches to the site clear of mud and obstruction.

Contractor shall be liable and shall indemnify the Employer in respect of any claims or proceedings arising out of his neglect in taking care to avoid creating a nuisance when carrying out the Works.

43.21.3 Borrow and Disposal of Materials

43.21.3.1 Surplus Suitable Materials

Contractor shall dispose-off all surplus suitable materials to areas designated by the Employer/ Engineer. The surplus suitable materials shall be compacted to the requirements for earthworks Specification.

43.21.3.2 Borrow Pits and Stockpiles

Contractor shall submit proposals to the Employer/ Engineer approval giving the location of borrow pits and stockpiles and proposals for their management to ensure acceptability of the materials.

Contractor shall be responsible for locating borrow pits and stockpiles, in addition to, designated borrow pits and stockpiles. Whether the Contractor obtains materials from the designated or his own borrow pit, it shall be the responsibility of the Contractor to ascertain the suitability of the pit with respect to the quantity and quality of the materials, which shall be acceptable to the Engineer. The Contractor shall pay all necessary leases, fees, taxes, levies or royalties to the appropriate authorities and observe all relevant regulations. The Contractor shall keep the borrow pits free from ponding water and the excavation neat and tidy and shall carry out necessary erosion protection and other mitigation measures as acceptable to the Engineer.

Where suitable material is stockpiled for later use the Contractor shall ensure that the formation is cleared of all vegetation unless otherwise approved by the Engineer. Stockpiled material shall be finished with a sloping, compacted surface to ensure run-off to keep the stockpile free of ponding water. Where required the Contractor shall provide a drainage ditch around the stockpile to prevent the ingress of water or other measures acceptable to the Engineer. The Contractor shall also be responsible for disposal of surplus materials to designated places as approved by Engineer.

43.21.4 Utilities and other Services

Contractor shall be responsible for locating the position of all utilities, including mains, overhead and underground cables, pipes, sewers and drains, and where necessary shall adopt such methods of excavation as may be required by the appropriate authorities or the Engineer to ensure that no damage is caused to them.

Contractor shall make good, at his own expense, any damage whatever to existing utilities to the complete satisfaction of and in accordance with the instructions of the relevant authority or Owner concerned, and shall keep the Employer indemnified at all times from all claims, costs and expenses which may be brought against or incurred by the Employer for or on account of any damage (whether permanent, temporary or recurring) to the said utilities. All utilities, which are encountered in the course of the Works, shall be adequately supported, slung up, struted or otherwise protected from damage to the satisfaction of the persons or authority in which they may be vested.

Due allowance shall be made by the Contractor for the effect on the phasing of the Works of relocations to existing public and private mains and utilities necessitated by the Works. The Contractor shall ensure that such existing mains and utilities are not interrupted without the written consent of the relevant authority or the owner of the utilities concerned.

If any privately owned utilities for water, electricity, telephone, drainage. etc., passing through the Site are affected by the Works, the Contractor shall provide an approved equivalent alternative service in full working order to the satisfaction of

the Employer of the utility and the Employer's Representative, before the cutting of the existing utility, and until the completion of the permanent replacement of the utility.

43.21.5 Prohibition of Advertising

The Contractor shall treat the Contract and everything written as private and confidential. In particular, the Contractor shall not publish any information, advertisement, drawing or photograph relating to the Works and shall not use the site for advertising purposes, except with the written consent of the Employer and subject to such conditions as he may prescribe.

43.21.6 Explosives

The Employer shall have the power to regulate, restrict or prohibit the use of explosives, explosive powered tools, or the like in the Works if in his opinion it is necessary to do so for the safety of persons or property or to safeguard the Works.

44. SETTING OUT OF WORK AND SURVEY

44.1 Reference Points, Lines

The Contractor shall establish benchmarks and / or reference line at the Site in accordance with the instructions of the Engineer. The Contractor shall set out its work from these benchmarks and lines. The Contractor shall supply plant, equipment, materials and labour for checking if required of the survey control by the Engineer. Slope stakes will be set by the Contractor before commencement of excavation and will be re-established as required during progress of work using established bench-marks and reference points.

44.2 Verification

The Engineer may make checks as the work progress to verify lines and grades established by the Contractor and to determine the conformance of the work as it progresses with the requirements of the Drawings and Specifications. Such checking by the Engineer shall not relieve the Contractor of his responsibility to perform all work in accordance with the Drawings and Specifications and the lines and grades given therein.

Based upon the basic control, the Contractor shall provide his own primary control points, as needed for the Works, and shall preserve and maintain them until otherwise authorized.

The Contractor shall be responsible for maintaining all survey markers/monuments, and property corners. If any markers/monuments are destroyed by the Contractor, the Contractor shall arrange, at his own cost, to

retrace and replace them to the entire satisfaction of the Engineer. If a monument cannot be replaced in its original position, the Contractor shall install a witness corner. The Contractor shall complete and file monument reference cards on all monuments as per instructions of the Engineer.

The Contractor shall provide experienced construction surveyors with adequate experience in the construction surveys similar in nature as required by this Contract.

Based upon established basic control monuments the Contractor shall establish all lines and grades necessary to control the Works, and shall be responsible for all measurements that may be required for execution of the Works to the tolerance prescribed below.

The Contractor shall perform such surveys and computations as are necessary to determine quantities of work performed or placed during each progress payment period, and shall also perform all surveys necessary for the Engineer to determine final quantities of work in place. The Engineer will determine final quantities based on original ground levels determined by the Contractor and agreed by the Engineer.

The Contractor shall notify the Engineer at least 24 hours before performing a quantity survey and, unless specifically waived, quantity surveys shall be performed in the presence of an authorized representative of the Engineer.

Degree of accuracy for the survey works shall satisfy the following specified tolerances:

- (a) Structure points shall be set within 0.01 foot accuracy from point to point, except where tighter tolerances are required.
- (b) Cross-section points shall be located within 0.10 foot, horizontally and 0.01 foot vertically.
- (c) Permissible closing error for a levelling line meant for establishing Temporary Bench Mark (TBMs) shall not exceed $0.045 \times \sqrt{M}$ foot, where M is in miles. The permissible closing error shall be duly adjusted.

The Contractor shall provide all materials, equipment and labour required for surveying work, including, but not limited to, instruments, stakes, spikes, steel pins, templates, platforms, and tools, and except as required to be incorporated in the work or left in place, all such materials and equipment, shall remain the property of the Contractor. Surveying instruments shall be in perfect working condition and shall be subject to rigid inspection for proper operation at least after every two weeks of use. Defective instruments shall be promptly replaced or repaired and adjusted to the satisfaction of the Engineer.

Survey data shall be recorded in accordance with recognized professional surveying standards. Original field notes, computations, and other surveying data shall be recorded in the Contractor furnished field books. Notes or data not in accordance with standard formats will be rejected. Illegible notes or data, or use of erasures on any page of a field book will be considered sufficient cause for rejection of part or the entire field book. Copied notes or data will not be permitted; therefore, rejection of part or all of a field book may necessitate re-surveying. Corrections by ruling or lining out errors will be satisfactory.

45. WITNESSING OF FACTORY ACCEPTANCE TESTS

Factory acceptance tests of Plant and/ or Material procured either within or outside the country shall be witnessed by the Employer's and the Engineer's personnel. All costs in connection with witnessing of the factory acceptance tests by the Employer and the Engineer shall be borne by the Contractor. These shall include the costs of inland transportation, visa, air travel from Pakistan to place of inspection/ testing and back, hotel accommodation, boarding, lodging (as per actuals), and daily allowance @ Rs. 15,000/- per day person for inspection/ testing to be conducted within Pakistan and @ US Dollars 200 per day per person for inspection/ testing to be conducted outside Pakistan for each visit of every person to witness these tests.

46. NON-COMPLIANCE TO THE SPECIFIC PROVISIONS AND PENALTIES

If the Contractor fails to provide any facilities, services, or tests required for quality control, supervision, or contract administration as specified in the relevant Clauses of the Specific Provisions, within the period notified by the Employer or the Engineer, the Employer may arrange for such facilities, services, or tests at the Contractor's risk and expense. The costs incurred by the Employer shall be deducted from the Contractor's payments, along with 10% handling and overhead charges, without the Contractor having any claim in this regard. Such arrangements shall not absolve the Contractor of their obligations under the Contract.

In addition, failure to comply with safety and site protection requirements, including proper cordoning off of the worksite, provision of safety equipment, or implementation of protective measures, may result in penalties, suspension of work, or other remedial actions as deemed necessary by the Employer. The Employer reserves the right to conduct inspections at any stage of the project to verify compliance to Health, Safety and Environmental Standards.

This Clause shall be binding on the Contractor and all subcontractors engaged in the execution of the Works, without prejudice to any other rights or remedies available to the Employer under the Contract.

47. PAYMENT OF WORK

No payment shall be made for the works involved within the scope of this section of specification unless otherwise specifically stated in the Bills of Quantities or herein.

The cost thereof shall be deemed to have been included in the total price quoted by the Contractor.

